

### 3 Publication List of Lamont-Doherty Earth Observatory (1949-Jan. 2001)

(Prepared under the direction of Paul Richards)

1. Hersey, J.B. and F. Press. Seismic studies of geologic structure of the ocean floor. *Am. Geophys. Union Trans.*; 1949; v. 30: p. 171.
2. Hersey, J.B. and M. Ewing. Seismic reflections from beneath the ocean floor. *Am. Geophys. Union Trans.*; 1949; v.30: p. 5-14.
3. Ewing, M. and F. Press. Notes on surface waves. *Ann. NY Acad. Sci.*; 1949; v. 51: p. 453-462.
4. Dobrin, M.B., B. Perkins, Jr., and B.I. Snively. Sub-surface constitution of Bikini Atoll as indicated by a seismic-refraction survey. *Geol. Soc. Am. Bull.*; 1949; v. 60: p. 807-829.
5. S. Katz. Brief review and study of the micro-seismic storm of September 30 - October 1, 1947. *Bull. Seismol. Soc.Am.*; 1949; v. 39: p. 181-186.
6. Tolstoy, I. and M. Ewing. North Atlantic hydrography and the Mid-Atlantic Ridge. *Geol. Soc. Am. Bull.*; 1949; v. 60: p. 1527-1540.
7. Ewing, M., J.L. Worzel, N.C. Steenland, and F. Press. Geophysical investigations in the emerged and submerged Atlantic coastal plain, Part V: Woods Hole, New York and Cape May Sections. *Geol. Soc. Am. Bull.*; 1950; v. 61: p. 877-892.
8. Press, F., M. Ewing, and I. Tolstoy. The Airy phase of shallow-focus submarine earthquakes. *Bull. Seismol. Soc. Am.*; 1950; v. 40: p. 111-148.
9. Ewing, M. and F. Press. Crustal structure and surface-wave dispersion. *Bull. Seismol. Soc. Am.*; 1950; v. 40: p. 271-280.
10. Ewing, M., J.L. Worzel, J.B. Hersey, F. Press, and G.R. Hamilton. Seismic refraction measurements in the Atlantic Ocean Basin, Part I. *Bull. Seismol. Soc. Am.*; 1950; v. 40: p. 233-242.
11. Press, F. and M. Ewing. Propagation of explosive sound in a liquid layer overlying a semi-infinite solid. *Geophysics*; 1950; v. 15: p. 426-446.

12. Kulp, J.L. Origin of the hydrosphere. *Geol. Soc. Am. Bull.*; 1951; v. 62: p. 326-329.
13. Kulp, J.L., H.D. Holland, and H.L. Volchok. Scintillation alpha counting of rocks and minerals. *Am. Geophys. Union Trans.*; 1952; v. 33: p. 101-113.
14. Kulp, J.L. and D.R. Carr. Surface area of deep-sea sediments. *J. Geol.*; 1952; v. 60: p. 148-159.
15. Holland, H.D. and J.L. Kulp. Geologic age from etamict minerals. *Science*; 1950; v. 111: p. 312.
16. Tolstoy, I. and M. Ewing. The T phase of shallow-focus earthquakes. *Bull. Seismol. Soc. Am.*; 1950; v. 40: p. 25-51.
17. Ewing, M., I. Tolstoy, and F. Press. Proposed use of the T phase in tsunami warning systems. *Bull. Seismol. Soc. Am.*; 1950; v. 40: p. 53-58.
18. Worzel, J.L. and M. Ewing. Gravity measurements at sea, 1947. *Am. Geophys. Union Trans.*; 1950; v. 31: p. 917-923.
19. Tolstoy, I. Submarine topography in the North Atlantic. *Geol. Soc. Am. Bull.*; 1951; v. 62: p. 441-450.
20. Northrop, J. and B.C. Heezen. An outcrop of Eocene sediment on the continental slope. *J. Geol.*; 1951; v. 59: p. 396-399.
21. Press, F. A. P. Crary, J. Oliver, and S. Katz. Air-coupled flexural waves in floating ice. *Am. Geophys. Union Trans.*; 1951; v. 32: p. 166-172.
22. Press, F. and M. Ewing. Theory of air-coupled flexural waves. *J. Appl. Phys.*; 1951; v. 22: p. 892-899.
23. Thorndike, E.M. A wide-angle, underwater camera lens. *J. Opt. Soc. Am.*; 1950; v. 40: p. 823-824.
24. Officer, C.G., Jr. On the existence of Uller's waves. *Bull. Seismol. Soc. Am.*; 1951; v. 41: p. 307-311.

26. Officer, C.B., Jr. Normal mode propagation in three layered liquid half-space by ray theory. *Geophysics*; 1951; v. 16: p. 207-212.
27. Dobrin, M.B. Submarine geology of Bikini Lagoon as indicated by dispersion of water-borne explosion waves. *Geol. Soc. Am. Bull.*; 1950; v. 61: p. 1091-1117.
28. Owen, H. and F. Press. *Seismological Bulletin* . Lamont Geological Observatory; 1951: Sept. 1 - Dec. 31, 1950.
29. Officer, C.B., Jr., M. Ewing, and P.C. Wuenschel. Seismic refraction measurements in the Atlantic Ocean basin, Part IV: Bermuda, Bermuda Rise, and Nares Basin. *Geol. Soc. Am. Bull.*; 1952; v. 63: p. 777-808.
30. Vacquier, V., N.C. Steenland, R.G. Henderson, and I. Zietz. Interpretation of aeromagnetic maps. *Geol. Soc. Am. Memoir* 47; 1951: p. 151.
31. Owen, H. and F. Press. *Seismological Bulletin* . Lamont Geological Observatory; 1951: Jan. 12 - Apr. 30, 1951.
32. Press, F. and M. Ewing. Ground roll coupling to atmospheric compressional waves. *Geophysics*; 1951; v. 16: p. 416-430.
33. Ericson, D.B., M. Ewing, and B.C. Heezen. Deep-sea sandstone submarine canyons. *Geol. Soc. Am. Bull.*; 1951; v. 62: p. 961-965.
34. Burg, K.E., M. Ewing, F. Press, and E.J. Stulken. A seismic wave guide phenomenon. *Geophysics*; 1951; v. 16: p. 594-612.
35. Benioff, H., M. Ewing, and F. Press. Sound waves in the atmosphere generated by a small earthquake. *Proc. Nat. Acad. Sci.*; 1951; v. 37: p. 600-603.
36. Northrop, J. Ocean bottom photographs of the neritic and bathyal environment south of Cape Cod, Massachusetts. *Geol. Soc. Am. Bull.*; 1951; v. 62: p. 1381-1384.
37. Kulp, J.L., P. Kent, and P.F. Kerr. Thermal study of the Ca-Mg-Fe carbonate minerals. *Am. Mineral.*; 1951; v. 36: p. 643-670.
38. Press, F. and M. Ewing. Propagation of elastic waves in a floating ice sheet. *Am. Geophys. Union Trans.*; 1951; v. 32: p. 673-678.

39. Oliver, J.E. and C.L. Drake. Geophysical investigations in the emerged and submerged Atlantic coastal plain: Part VI, Long Island area. *Geol. Soc. Am. Bull.*; 1951; v. 62: p.1287-1296.
40. Heezen, B.C., M. Ewing, and D.B. Ericson. Submarine topography in the North Atlantic. *Geol. Soc. Am. Bull.*; 1951; v. 62: p. 1407-1417.
41. Press, F. and L. McGinnis. *Seismological Bulletin . Lamont Geological Observatory*; 1951: May 1 - Sept. 30, 1950.
42. Crary, A.P. and M. Ewing. On a barometric disturbance recorded on a vertical long-period seismograph. *Am. Geophys. Union Trans.*; 1952; v. 33: p. 499-501.
43. Donn, W.L. Frontal microseisms generated in the western North Atlantic. *J. Meteor.*; 1951; v. 8: p. 406-415.
44. Donn, W.L. Cyclonic microseisms generated in the western North Atlantic Ocean. *J. Meteor.* ; 1952; v. 9: p. 61-71.
45. Kulp, J.L., H.L. Volchok, H.D. Holland, and D.B. Ericson. Thick source alpha activity of some North Atlantic cores. *J. Mar. Res.*; 1952; v. XI: p. 19-28.
46. Press, F. and M. Ewing. Surface waves as aids in epicenter location. *Earthquake Notes*; 1951; v. XXII: p. 33.
47. Ericson, D.B., M. Ewing, and B. C. Heezen. Turbidity currents and sediments in North Atlantic. *Am. Petrol. Geol. Bull.*; 1952; v. 36: p. 489-511.
49. Kulp, J.L., H.W. Feely, and L.E. Tryon. Lamont natural radiocarbon measurements: No. I. *Science*; 1951; v. 114: p.565-568.
50. Kulp, J.L. and L.E. Tryon. Extension of the Carbon 14 age method. *Rev. Sci. Instr.*; 1952; v. 23: p. 296-297.
51. Ewing, M., F. Press, and J.L. Worzel. Further study of the T phase. *Seismol. Soc. Am. Bull.*; 1952; v. 42: p. 37-51.

52. Press, F. and L. McGinnis. Seismological Bulletin . Lamont Geological Observatory; 1952: Sept. 1 - Dec. 31, 1951.
53. Kulp, J.L., L.E. Tyron, and H.W. Feely. Techniques of natural Carbon-14 determination. Am. Geophys. Union Trans.; 1952; v. 33: p. 183-192.
54. Jardetzky, W.S. and F. Press. Rayleigh-wave coupling to atmospheric compression waves. Bull. Seismol. Soc. Am.; 1952; v. 42: p. 135-144.
55. Ewing, M. The Atlantic Ocean basin. Bull. Am. Mus. Nat. Hist.; 1952; v. 99(art. 3): p. 87-91.
56. Donn, W.L. An investigation of swell and microseisms from the hurricane of Sept. 13-16, 1946. Am. Geophys. Union Trans.; 1952; v. 33: p. 341-344.
57. Press, F. and M. Ewing. Magnetic anomalies over oceanic structures. Am. Geophys. Union Trans.; 1952; v. 33: p. 349-355.
58. Worzel, J.L. and M. Ewing. Gravity measurements at sea. Am. Geophys. Union Trans.; 1952; v. 63: p. 701-716.
59. Kulp, J.L., K. Turekian, and D.W. Boyd. Strontium content of limestones and fossils. Geol. Soc. Am. Bull.; 1952; v. 63: p. 701-716.
60. Kulp, J.L. Climatic changes and radioisotope dating. in:H. Shapley, Ed. Climatic Change: Harvard Univ. Press; 1953: p. 201-208.
61. Press, F. and M. Ewing. Two slow surface waves across North America. Seismol. Soc. Am. Bull.; 1952; v. 43: p. 219-228.
62. Kulp, J.L., H.L. Volchok, and H.D. Holland. Age from metamict minerals. Am. Mineral. ; 1952; v. 37: p. 709-718.
63. Luskin, B., M. Landisman, G.B. Tirey, and G.R. Hamilton. Submarine topographic echoes from explosive sound. Geol. Soc. Am. Bull.; 1952; v. 63: p. 1053-1068.
64. Kulp, J.L., L.E. Tryon, W.R. Eckelmann, and W.A. Snell. Lamont natural radiocarbon measurements, II. Science; 1952; v. 116: p. 409-414.

65. Heezen, B.C. and M. Ewing. Turbidity currents and submarine slumps, and the 1929 Grand Banks earthquake. *Am. J. Sci.*; 1952; v. 250: p. 849-873.
66. Ewing, M. and F. Press. Crustal structure and surface-wave dispersion, Part II: Solomon Islands earthquake of July 29, 1950. *Bull. Seismol. Soc. Am.*; 1952; v. 42: p. 315-325.
67. Shurbet, D.H. Bermuda—Columbia University Seismograph Station. *Seismol. Bull.*; 1953: June 1, 1951-May 31, 1952.
68. Holland, H.D. and J.L. Kulp. The transport and distribution of uranium, ionium and radium in rivers, oceans and ocean sediments. *Geochim. Cosmochim. Acta*; 1954; v. 5: p. 197-213.
69. Kulp, J.L. Dating with Carbon 14. *J. Chem. Educ.*; 1953; v. 30: p. 432-435.
70. Kulp, J.L. The Carbon 14 method of age determination. *Sci. Monthly*; 1952; v. LXXV: p. 259-267.
71. Ewing, M. and F. Press. Propagation of earthquake waves along oceanic paths. *Trav. Sci. du Bur. Centr. Seismol. Int.*; 1953; v. 18: p. 41-46.
72. Ewing, M. Seismic investigations in great ocean depths. *Assoc. Oceanogr. Phys., Proc.-Verb.*; 1952; v. 5: p. 135-136.
73. Lehmann, I. On the short period surface wave "Lg" and crustal structure. *l'Union Geodes. et Geophys. Int. Bull.*; 1953: p. 248-250.
74. Katz, S., R.S. Edwards, and F. Press. Seismic refraction profile across the Gulf of Maine. *Geol. Soc. Am. Bull.*; 1953; v. 64: p. 249-252.
75. Press, F. and M. Ewing. The ocean as an acoustic system. *Symposium on microseisms*; 1954; (Nat. Res. Council Pub. 306): p. 109-111.
76. Carr, D.R. and J.L. Kulp. Age of Mid-Atlantic Ridge basalt boulder. *Geol. Soc. Am. Bull.*; 1953; v. 64: p. 253-254.
77. Ewing, M. and F. Press. Further study of atmospheric pressure fluctuations recorded on seismographs. *Am. Geophys. Union Trans.*; 1953; v. 34: p. 95-100.

78. Ericson, D.B. North Atlantic deep-sea sediments and submarine canyons. *Trans. N.Y. Acad. Sci.*; 1952; v. 15(Ser. II): p. 50-53.
79. Tolstoy, I., R.S. Edwards, and M. Ewing. Seismic refraction measurements in the Atlantic Ocean: Part 3. *Bull. Seismol. Soc. Am.*; 1953; v. 43: p. 35-48.
80. Donn, W.L. and V.E. Jennenmann. A critical review of the microseisms reported from hurricanes "Easy" and "How" of 1951. *Earthqu. Notes*; 1953; v. XXIV: p. 1-4.
81. Kulp, J.L. and H.L. Volchok. Constancy of cosmic-ray flux over the past 30,000 years. *Phys. Rev.* ; 1953; v. 90: p. 713-714.
82. Kulp, J.L. Carbon-14 measurements on geological samples. *Atomics*; 1953; v. 4: p. 96-98.
83. Ewing, M. and F. Press. Mechanisms of T wave propagation. *Ann. Geophys.*; 1953; v. 9: p. 248-249.
84. Jardetzky, W.S. and F. Press. Crustal structure and surface-wave dispersion, part III: theoretical dispersion curves for sub-oceanic Rayleigh waves. *Bull. Seismol. Soc. Am.*; 1953; v. 43: p. 137-144.
85. Donn, W.L. A discussion of amplitude studies and mechanisms of microseisms; symposium on microseisms. *Nat. Res. Council Pub. 306*; 1954: p. 41-55.
86. Donn, W.L. A comparison of microseisms and ocean waves recorded in southern New England. *Am. Geophys. Union Trans.*; 1953; v. 34: p. 471-476.
87. Ewing, M., B.C. Heezen, D.B. Ericson, J. Northrop, and J. Dorman. Exploration of the northwest Atlantic mid-ocean canyon. *Geol. Soc. Am. Bull.*; 1953; v. 64: p. 865-868.
88. Donn, W.L. and M. Blaik. A study and evaluation of the tripartite seismic method of locating hurricanes. *Bull. Seismol. Soc. Am.*; 1953; v. 43: p. 311-329.
89. Kulp, J.L., W.S. Broecker, and W.R. Eckelmann. Age determination of uranium minerals by the Pb-210 method. *Nucleonics*; 1953; v., 11: p. 19-21.
90. Shurbet, D.H. Bermuda-Columbia University Seismograph Station. *Seismological Bull.*; 1953; (June 1, 1952-May 31, 1953).

91. Heezen, B.C., M. Ewing, and E.T. Miller. Trans-Atlantic profile of total magnetic intensity and topography, Dakar to Barbados. *Deep-Sea Res.*; 1953; v. 1: p. 25-33.
92. Ewing, M., G.H. Sutton, and C.B. Officer, Jr. Seismic refraction measurements in the Atlantic Ocean, part VI: typical deep stations, North America basin. *Seismol. Soc. Am. Bull.*; 1954; v. 44: p. 21-38.
93. Donn, W.L. The relationship between microseism period and storm position. *Science*; 1954; v. 119: p. 55-77.
94. Worzel, J.L. Discussion of Geophysical Measurements by Russell W. Raitt. *Oceanographic Instrumentation: Nat. Res. Council Pub. 309*; 1954: p. 80-82.
95. Press, F. Discussion of Geophysical Measurements by Russell W. Raitt. *Oceanographic Instrumentation: Nat. Res. Council Pub. 309*; 1954: p. 79-80.
96. Press, F. and W. Beckmann. Geophysical investigations in the emerged and submerged Atlantic coastal plain, Part VIII: Grand Banks and adjacent shelves. *Geol. Soc. Am. Bull.*; 1954; v. 65: p. 299-314.
97. Kulp, J.L., G.L. Bate, and W.S. Broecker. Present status of the lead method of age determination. *Am. J. Sci.*; 1954; v. 252: p. 345-365.
98. Heezen, B.C. Discussion of Methods of exploring the ocean floor by Robert S. Dietz. *Oceanographic Instrumentation: Nat. Res. Coun. Pub. 309*; 1954: p. 200-205.
99. Ewing, M. and J.L. Worzel. Gravity anomalies and structure of the West Indies, Part I. *Geol. Soc. Am. Bull.*; 1954; v. 65: p. 165-174.
100. Oliver, J., F. Press, and M. Ewing. Two-dimensional model seismology. *Geophysics*; 1954; v. XIX: p. 202-219.
101. Bate, G.L., H.L. Volchok, and J.L. Kulp. A low-level radon counting system. *Rev. Sci. Instr.*; 1954; v. 25: p. 153-157.
102. Ewing, M. and J.L. Worzel. Gravity anomalies and structure of the West Indies, Part II. *Geol. Soc. Am. Bull.*; 1954; v. 65: p. 195-200.



103. Luskin, B., B.C. Heezen, M. Ewing, and M. Landisman. Precision measurement of ocean depth. *Deep-Sea Res.*; 1954; v. 1: p. 131-140.
104. Kulp, J.L., G.L. Bate, and B. Giletti. New age determinations by the lead method. *Proc. Geol. Assn. Canada*; 1955; v. 7(n. II): p. 15-24.
105. Oliver, J., A.P. Crary, and R. Cotell. Elastic waves in Arctic pack ice. *Am. Geophys. Union Trans.*; 1954; v. 35: p.282-292.
106. Brilliant, R.M. and M. Ewing. Dispersion of Rayleigh waves across the U.S. *Seismol. Soc. Am. Bull.*; 1954; v. 44: p. 149-158.
107. Ewing, M. and F. Press. An investigation of mantle Rayleigh waves. *Seismol. Soc. Am. Bull.*; 1954; v. 44: p. 127-147.
108. Holland, H.D. and J.L. Kulp. The mechanism of removal of ionium and radium from the oceans. *Geochim. Cosmochim. Acta*; 1954; v. 5: p. 214-224.
109. Heezen, B.C., D.B. Ericson, and M. Ewing. Further evidence for turbidity current following the 1929 Grand Banks earthquake. *Deep-Sea Res.*; 1954; v. 1: p. 193-202.
110. Grosse, A.V., A.D. Kirshenbaum, J.L. Kulp, and W. S. Broecker. The natural tritium content of atmospheric hydrogen. *Phys. Rev.*; 1954; v. 93: p. 250-251.
111. Kulp, J.L. and D.A. Brobst. Notes on the dunite and the geochemistry of vermiculite at the Day Book dunite deposit, Yancey County, North Carolina. *Econ. Geol.*; 1954; v. 49: p.211-220.
112. Officer, C.B. and M. Ewing. Geophysical investigations in the emerged and submerged Atlantic coastal plain, Part VII: continental shelf, continental slope, and continental rise south of Nova Scotia. *Geol. Soc. Am. Bull.*; 1954; v. 65: 653-670.
113. Press, F., J. Oliver, and M. Ewing. Seismic model study of refractions from a layer of finite thickness. *Geophysics*; 1954; v. XIX: p. 388-401.
114. Drake, C.L., J.L. Worzel, and W.C. Beckmann. Geophysical investigations in the emerged and submerged Atlantic coastal plain: Part IV, Gulf of Maine. *Geol. Soc. Am. Bull.*; 1954; v. 65: p. 957-970.

115. Carr, D.R. and J.L. Kulp. Dating with natural radioactive carbon. *Trans. N.Y. Acad. Sci.*; 1954; v. 16(Ser.II): p. 175-180.
116. Ewing, M. and F. Press. Mantle Rayleigh waves from the Kamchatka earthquake of November 4, 1952. *Bull. Seismol. Soc. Am.*; 1954; v. 44: p. 471-479.
117. Donn, W.L., R. Rommer, F. Press, and M. Ewing. Atmospheric oscillations and related synoptic patterns. *Am. Meteorol. Soc. Bull.*; 1954; v. 35: p. 301-309.
118. Ewing, M., D.B. Ericson, A.W. Bally, and G. Wollin. The deep sea and early man. *Quaternaria*; 1954; v. I: p. 17-28.
119. Ewing, M., D.B. Ericson, B.C. Heezen, J.L. Worzel, and G. Wollin. Exploration of the deep sea floor. *Quaternaria*; 1954; v. I: p. 145-168.
120. Donn, W.L. Direction studies using microseism ground-particle motion. *Am. Geophys. Union Trans.*; 1954; v. 35: p. 821-832.
121. Turekian, K. Paleoecological significance of the strontium-calcium ratio in fossils and sediments. *Geol. Soc. Am. Bull.*; 1955; v. 66: p. 155-158.
122. Ewing, M. and F. Press. Propagation of elastic waves in the ocean with reference to microseisms. *Pont. Acad. Scient. Scripta Varia*; 1954; v. 12: p. 121-127.
123. Ewing, M., F. Press, and W.L. Donn. An explanation of the Lake Michigan wave of 26 June 1954. *Science*; 1954; v. 120: p. 684-686.
124. Ewing, M. and W.L. Donn. Studies of microseisms from selected areas. *Pont. Acad. Scient. Scripta Varia*; 1954; v. 12: p. 351-360.
125. Kulp, J.L. Geological chronometry by radioactive methods. *Advances in Geophysics*. NY: Academic Press Inc.; 1955: p. 179-217.
126. Volchok, H.L. and J.L. Kulp. Half-life of yttrium-90. *Phys. Rev.*; 1955; v. 97: p. 102.
127. Donn, W.L., M. Ewing, and F. Press. Performance of resonant seismometers. *Geophysics*; 1954; v. XIX: p. 802-819.

128. Heezen, B.C., M. Ewing, and D.B. Ericson. Reconnaissance survey of the abyssal plain south of Newfoundland. *Deep Sea Res.*; 1954; v. 2: p. 122-133.

129. Blaik, M. and W.L. Donn. Microseism ground motion at Palisades and Weston. *Bull. Seismol. Soc. Am.*; 1954; v. 44: p. 597-612.

130. Ericson, D.B., M. Ewing, B.C. Heezen, and G. Wollin. Sediment deposition in deep Atlantic. *Geol. Soc. Am. Spec. Paper 62*; 1955: p. 205-220.

131. Press, F. and M. Ewing. Waves with Pn and Sn velocity at great distances. *Proc. Nat. Acad. Sci.*; 1955; v. 41: p. 24-27.

132. Worzel, J.L. and G. L. Shurbet. Gravity anomalies at continental margins. *Proc. Nat. Acad. Sci.*; 1955; v. 41: p.458-469.

133. Kulp, J.L. Isotopic dating and the geologic time scale. *Geol. Soc. Am. Apec. Paper 62*; 1955: p. 609-630.

134. Ewing, M., J.L. Worzel, D.B. Ericson, and B.C. Heezen. Geophysical and geological investigations in the Gulf of Mexico, Part I. Geophysics; 1955; v. XX: p. 1-18.

135. Ewing, M. and B.C. Heezen. Puerto Rico Trench topographic and geophysical data. *Geol. Soc. Am. Spec. Paper62*; 1955: p. 255-268.

136. Press, F. and J. Oliver. Model study of air-coupled surface waves. *J. Acoust. Soc. Am.*; 1955; v. 27: p. 43-46.

137. Ericson, D.B., G. Wollin, and J. Wollin. Coiling directions of Globorotalia truncatulinoides in deep-sea cores. *Deep-Sea Res.*; 1954; v. 2: p. 152-158.

138. Ewing, M. and F. Press. Geophysical contrasts between continents and ocean basins. *Geol. Soc. Am. Spec. Paper 62*; 1955: p. 1-6.

139. Shurbet, D.H. Bermuda T phases with large continental paths. *Bull. Seismol. Soc. Am.*; 1955; v. 45( ): p. 23-35.

140. Berckhemer, H. Rayleigh-wave dispersion and crustal structure in the East Atlantic Ocean basin. *Bull. Seismol. Soc. Am.* ; 1956; v. 46: p. 83-86.

141. Kulp, J.L., and A. Poldervaart. The metamorphic history of the Spruce Pine District. *Am. J. Sci.*; 1956; v. 254: p. 393-403.
142. Ewing, M. and F. Press. Surface waves and guided waves. *Encyc. Phys. Berlin*: Springer-Verlag; 1956; v. XLVII: p. 119-139.
143. Ewing, M. and F. Press. Structure of the earth's crust. *Encyc. Phys. Berlin*: Springer-Verlag; 1956: p. 246-257.
144. Worzel, J.L. and G.L. Shurbet. The Toro Seamount. *Geol.Soc.Am. Bull.*; 1955; v. 66: p. 465-466.
145. Kulp, J.L. Advances in radiocarbon dating. *Nucleonics*; 1954; v. 12: p. 19-21.
146. Ewing, M. and F. Press. Tide-gage disturbances from the great eruption of Krakatoa. *Am. Geophys. Union Trans.*; 1955;v. 36: p. 53-60.
147. Heacock, J.G., Jr. and J.L. Worzel. Submarine topography west of Mexico and Central America. *Geol. Soc. Am. Bull.*; 1955; v. 66( ): p. 773-776.
148. Ewing, M. and F. Press. Seismic measurements in ocean basins. *J. Mar. Res.*; 1955; v. 14: p. 417-422.
149. Ewing, M. and F. Press. Seismic prospecting. *Encyc. Phys. Berlin*: Springer-Verlag; 1956; v. XLVII: p. 153-168.
150. Worzel, J.L., G.L. Shurbet, and M. Ewing. Gravity measurements at sea, 1950-1951. *Am. Geophys. Union. Trans.*; 1955; v. 36: p. 335-338.
151. Worzel, J.L., G.L. Shurbet, and M. Ewing. Gravity measurements at sea, 1952-1953. *Am. Geophys. Union Trans.*; 1955; v. 36: p. 326-334.
152. Shurbet, G.L. and J.L. Worzel. Gravity anomalies associated with seamounts. *Geol. Soc. Am. Bull.*; 1955; v. 66: p. 777-782.
153. Carr, D.R. and J.L. Kulp. Use of A37 to determine argon behavior in vacuum systems. *Rev. Sci. Instr.*; 1955; v. 26: p. 379-381.

154. Worzel, J.L. and G.L. Shurbet. Gravity interpretations from standard oceanic and continental crustal sections. *Geol. Soc. Am. Spec. Paper 62*; 1955: p. 87-100.
155. Press, F. and M. Ewing. Earthquake surface waves and crustal structure. *Geol. Soc. Am. Spec. Paper 62*; 1955: p. 51-60.
156. Kulp, J.L. and W. Eckelmann. Anomalous uranium-lead ages. *Geol. Soc. Am. Bull.*; 1955; v. 66: p. 767-768.
157. Drake, C.L. Dispersion of explosive sound on Georges Bank. *Earthquake Notes*; 1955; v. XXVI: p. 5.
158. Thronkike, E.M. Color-correcting lens for underwater photography. *J. Opt. Soc. Am.*; 1955; v. 45: p. 584-585.
159. Press, F. and M. Dobrin. Seismic wave studies over a high-speed surface layer. *Geophysics*; 1956; v. XXI: p. 285-298.
160. Volchok, H.L. and J.L. Kulp. Low-level beta counter for routine radiochemical measurements. *Nucleonics*; 1955; v. 13: p. 49-50.
161. Richards, H.G. and J.L. Ruhle. Mollusks from a sediment core from the Hudson submarine canyon. *Proc. Penn. Acad. Sci.*; 1955; v. XXIX: p. 186-190.
162. Giletti, B. and J.L. Kulp. Radon leakage from radioactive minerals. *Am. Mineral.*; 1955; v. 40: p. 481-496.
163. Oliver, J., M. Ewing, and F. Press. Crustal structure and surface-wave dispersion, Part IV: Atlantic and Pacific Ocean basins. *Geol. Soc. Am. Bull.*; 1955; v. 66: p. 913-946.
164. Bate, G.L. and J.L. Kulp. Isotopic composition of common lead from southern Africa. *Science*; 1955; v. 122: p. 970-971.
165. Oliver, J., M. Ewing, and F. Press. Crustal structure of the Arctic regions from the Lg phase. *Geol. Soc. Am. Bull.*; 1955; v. 66: p. 1063-1074.
166. Donn, W.L. Waves in the atmosphere. *Weatherwise*; 1955; v. 8: p. 98-106.

167. Ericson, D.B. and G. Wollin. Correlation of six cores from equatorial Atlantic and the Caribbean. *Deep-Sea Res.*; 1956; v. 3: p. 104-125.

168. Gast, P.W. Abundance of Sr87 during geologic time. *Geol. Soc. Am. Bull.*; 1955; v. 66( ): p. 1149-1154.

169. Bentley, C.R. and J.L. Worzel. Geophysical investigations in the emerged and submerged Atlantic coastal plain, part X; continental slope and continental rise south of the Grand Banks. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 1-18.

170. Eckelmann, W.R. and J.L. Kulp. Uranium-lead method of age determination, Part I: Lake Athabasca problem. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 35-54.

171. Oliver, J. Rayleigh waves on a cylindrical curved surface. *Earthqu. Notes*; 1955; v. XXVI: p. 24-25.

172. Heezen, B.C. and M. Ewing. Orleansville earthquake and turbidity currents. *Am. Assoc. Pet. Geol. Bull.*; 1955; v. 39: p. 2505-2514.

173. Kulp, J.L., G. Bate, H. Feely, and W. Ault. Lead and sulphur isotopic abundances in Mississippi Valley galenas. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 123-124.

174. Katz, S. Seismic study of crustal structure in Pennsylvania and New York. *Bull. Seismol. Soc. Am.*; 1955; v.45: p. 303-325.

175. Kulp, J.L., W.U. Ault, and H.W. Feely. Sulfur isotope abundances in sulfide minerals. *Econ. Geol.*; 1956; v. 51: p. 139-149.

176. Crary, A.P., J.L. Kulp, and E.W. Marshall. Evidence of climatic changes from ice island studies. *Science*; 1955; v. 122: p. 1171-1173.

177. Berckhemer, H. and J. Oliver. Zur Deutung seismischer Einsätze mit parallelen Laufzeitkurven. *Zeitschr. f. Geophys.*; 1956; v. 20: p. 152-164.

178. Shurbet, G.L. and M. Ewing. Gravity reconnaissance survey of Puerto Rico. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 511-534.

179. Eckelmann, F.D. and J.L. Kulp. The sedimentary origin and stratigraphic equivalence of the so-called Cranberry and Henderson granites in western North Carolina. *Am. J. Sci.*; 1956; v. 254(): p. 288-315.

180. Miller, E.T. and M. Ewing. Geomagnetic measurements in the Gulf of Mexico and in the vicinity of Caryn Peak. *Geophysics*; 1956; v. XXI: p. 406-432.

181. Ewing, M. and F. Press. Rayleigh wave dispersion in the period range 10 to 500 seconds. *Am. Geophys. Union Trans.*; 1956; v. 37: p. 213-215.

182. Jones, G.E., R.L. Starkey, H.W. Feely, and J.L. Kulp. Biological origin of native sulfur in salt domes of Texas and Louisiana. *Science*; 1956; v. 123: p. 1124-1125.

183. Heezen, B.C., M. Ewing, and R.J. Menzies. The influence of submarine turbidity currents on abyssal productivity. *Oikos*; 1955; v. 6: p. 170-182.

184. Katz, S. and M. Ewing. Seismic-refraction measurements in the Atlantic Ocean, Part VII: Atlantic Ocean basin, west of Bermuda. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 475-510.

185. Bieri, R. A method for the microscopic examination and manipulation of plankton on board ship. *J. du Conseil Intern. pour l'Exploration de la Mer*; 1956; v. XXII: p. 38-41.

186. Ewing, M., J.L. Worzel, and G.L. Shubert. Gravity observations at sea in U.S. submarines Barracuda, Tusk, Conger, Argonaut and Medregal. *Gedenkboek, F.A. Vening Meinesz: 'S-Gravenhage, Koninkl. Ned. Geol.-Mijnbwwk, Gen. Verh.*; 1957; *Geol. Ser.(Part 18)*: p. 49-115.

187. Ewing, M. and W.L. Donn. A theory of ice ages. *Science*; 1956; 123: p. 1061-1066.

188. Donn, W.L. and M. Ewing. Stokes' edge waves in Lake Michigan. *Science*; 1956; v. 124: p. 1238-1242.

189. Ewing, M., W.S. Jardetsky, and F. Press. *Elastic waves in layered media*. NY: McGraw-Hill Book Co., Inc.; 1957: 380p.

190. Ericson, D.B. and G. Wollin. Micropaleontological and isotopic determinations of Pleistocene climates. *Micropaleontology*; 1956; v. 2: p. 257-270.

191. Press, F., M. Ewing, and J. Oliver. Crustal structure and surface-wave dispersion in Africa. *Seismol. Soc. Am. Bull.*; 1956; v. 46: p. 97-103.
192. Broecker, W.S. and J.L. Kulp. The radio-carbon method of age determination. *Am. Antiquity*; 1956; v. XXII: p. 1-11.
193. Milic, P.L. Criteria for vertical transfer of energy. *J. Meteor.*; 1956; v. 13: p. 410-412.
194. Donn, W.L., P.L. Milic, and R. Brilliant. Gravity waves and the tropical sea breeze. *J. Meteor.*; 1956; v. 13: p. 356-361.
195. Turekian, K.K. and M.D. Kleinkopf. Estimates of the average abundance of Cu, Mn, Pb, Ti, Ni, and Cr in surface waters of Maine. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 1129-1132.
196. Shurbet, G.L. and J.L. Worzel. Gravity measurements in Oriente Province, Cuba. *Geol. Soc. Am. Bull.*; 1957; v. 68: p. 119-124.
197. Broecker, W.S., J.L. Kulp, and C.S. Tucek. Lamont natural radiocarbon measurements III. *Science*; 1956; v. 124: p. 154-165.
198. Menzies, R.J. and J. Pettit. A new genus and species of marine asellote isopod, *Caecianiropsis psammophila*, from California. *Proc. U.S. Nat. Mus.*; 1956; v. 106: p. 441-446.
199. Menzies, R.J. New abyssal tropical Atlantic isopods, with observations on their biology. *Am. Mus. Novitates*; 1956; v. 1798: p. 1-16.
200. Heezen, B.C. The origin of submarine canyons. *Sci. Am.*; 1956; v. 195: p. 36-41.
201. Turekian, K.K. and J.L. Kulp. The geochemistry of strontium. *Geochim. et Cosmochim. Acta*; 1956; v. 10: p. 245-296.
202. Kulp, J.L., W.R. Eckelmann, P.W. Gast, and D.S. Miller. Age of the Black Hills gold mineralization. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 1557-1558.
203. Ewing, M. and B.C. Heezen. Oceanographic research programs of the Lamont Geological Observatory. *Geol. Rev.*; 1956; v. XLVI: p. 508-535.



204. Shurbet, G.L., J.L. Worzel, and M. Ewing. Gravity measurements in the Virgin Islands. *Geol. Soc. Am. Bull.*; 1956; v. 67: p. 1529-1536.
205. Turekian, K.K. and J.L. Kulp. Strontium content of human bones. *Science*; 1956; v. 124: p. 405-407.
206. Sutton, G.H. Gravity bases in central Africa. *Nature*; 1956; v. 178: p. 435-436.
207. Ericson, D.B., W.S. Broecker, J.L. Kulp, and G. Wollin. Late-Pleistocene climates and deep-sea sediments. *Science*; 1956; v. 124: p. 385-389.
208. Ewing, M. and B.C. Heezen. Some problems of Antarctic submarine geology: Antarctica in the I.G.Y. *Am. Geophys. Union Geophys. Mon.*; 1956; NAS-NRC Pub. 462(n. 1): p. 75-81.
209. Heezen, B.C. Corrientes de turbidez del Rio Magdalena, Colombia. *Bol. Soc. Geog. de Colombia*; 1956; (n. 51 & 52): p. 135-143.
210. Kovach, R. and P.W. Pomeroy. *Seismological Bull. Lamont Geological Observatory*; 1956; (1 Sept. - 31 Dec. 1955).
211. Shurbet, G.L. and J.L. Worzel. Gravity anomalies and structure of the West Indies, Part III. *Bull. Seismol. Soc. Am.*; 1957; v. 68: p. 263-266.
212. Carr, D.R. and J.L. Kulp. Potassium-argon method of geochronometry. *Bull. Seismol. Soc. Am.*; 1957; v. 68: p. 763-784.
213. Bate, G.L., D.S. Miller, and J.L. Kulp. Isotopic analysis of tetramethyllead. *Anal. Chem.*; 1957; v. 29: p. 84-88.
214. Worzel, J.L. Gravity at sea (abstract). *Pub. Inst. Geodesy, Photogrammetry & Cartography: Ohio State Univ.*; 1957; (n. 7).
215. Turekian, K.K. Rapid technique for determination of carbonate content of deep-sea cores. *Am. Assoc. Pet. Geol. Bull.*; 1956; v. 40: p. 2507-2509.
216. Schubert, D.H. and M. Ewing. Microseisms with periods of seven to ten seconds recorded at Bermuda. *Am. Geophys. Union Trans.*; 1956; v. 37: p. 619-627.

217. Volchok, H.L. and J.L. Kulp. The ionium method of age determination. *Geochim. et Cosmochim. Acta*; 1957; v. 11 : p. 219-246.
218. Menzies, R.J. A study of the microscopic structure of the isopod setae. *Ann. & Mag. Nat. Hist. London*; 1956; v. 9(Series 12): p. 698-700.
219. Menzies, R.J. New bathyal isopoda from the Caribbean with observations on their nutrition. *Breviora, Mus. Comp. Zool.*; 1956; (n. 63): p. 1-10.
220. Shurbet, G.L. and J.L. Worzel. Gravity observations at sea in USS Conger, Cruise III. *Am. Geophys. Union Trans.*; 1957; v. 38: p. 1-7.
221. Gray, G.W. The Lamont Geological Observatory. *Sci. Am.*; 1956: p. 83-94.
222. Lehman, I. On Lg as read in North American records. *Ann. Geofis.*; 1957; v. X(): p. 1-21.
223. Menzies, R.J. The tanaidacean *Leptognathia hastata* from abyssal depth in the Atlantic. *Ann. & Mag. Nat. Hist. London*; 1957; v. 10(Ser. 12): p. 68-69.
224. Oliver, J. Elastic wave dispersion in a cylindrical rod by a wide-band short-duration pulse technique. *J. Acoust. Soc. Am.*; 1957; v. 29: p. 189-194.
225. Turekian, K.K. Salinity variations in sea water in the vicinity of Bimini, Bahamas, British West Indies. *Am. Mus. Novitates*; 1957; (n. 1822): p. 1-12.
226. Shurbet, G.L. and J.L. Worzel. Gravity observations at sea in USS Diablo. *Bull. Geodesique*; 1956; (n. 42): p. 51-60.
227. Oliver, J. Body waves in layered seismic models. *Earthquake Notes*; 1956; v. XXVII: p. 29-38.
228. Menzies, R.J. and G. Becker. Holzzerstorende Limnoria-Arten (Crustacea, Isopoda) aus dem Mittelmeer mit Neubeschreibung von *L. carinata*. *Zeitschr. fur Angewandte Zool*; 1957; v. 44: p. 85-92.
229. Damon, P.E. Terrestrial helium. *Geochim. et Cosmochim. Acta*; 1957; v. 11: p. 200-201.

230. Turekian, K.K., P. Gast, and J.L. Kulp. Emission-spectrographic method for the determination of strontium in silicate materials. *Spectrochim. Acta*; 1957; v. 9: p. 40-46.
231. Kulp, J.L., W.E. Eckelmann, and A.R. Schulert. Strontium-90 in Man. *Science*; 1957; v. 125: p. 219-225.
232. Menzies, R.J. and R. Turner. The distribution and importance of marine wood borers in the United States. *Am. Soc. for Testing Materials*; 1957; (Tech. Pub. No. 200): p. 3-21.
233. Officer, C.B., J.I. Ewing, R.S. Edwards, and H.R. Johnson. Geophysical investigations in the eastern Caribbean: Venezuelan basin, Antilles island arc, and Puerto Rico trench. *Geol. Soc. Am. Bull.*; 1957; v. 68: p. 359-378.
234. Heezen, B.C. . Whales entangled in deep sea cables. *Deep-Sea Res.*; 1957; v. 4: p. 105-115.
235. Oliver, J. and M. Ewing. Microseisms in the 11-to 18-second period range. *Bull. Seismol. Soc. Am.*; 1957; v. 47: p. 111-127.
236. Kulp, J.L. and W.R. Eckelmann. Discordant Upb ages and mineral type. *Amer. Mineral*; 1957; v. 42: p. 154-164.
237. Worzel, J.L. and G.L. Shurbet. Gravity observations at sea in USS Corsair. *Am. Geophys. Union Trans. (AGU)*; 1957; v. 38: p. 292-296.
238. Ewing, M. and F. Press. Determination of crustal structure from phase velocity of Rayleigh waves, Part III: the United States. *Geol. Am. Soc. Bull.*; 1959; v. 70: p. 229-244.
239. Menzies, R.J. The marine borer family Limnoridae (crustacea, isopoda) Parts I and II. *Bull. Mar. Sci.*; 1957; v. 7: p. 101-200.
240. Sutton, G.H. and R.B. Simon. *Seismological Bulletin . Lamont Geological Observatory*; 1957: Jan. 1 - Apr. 30, 1956.
241. Gilletti, B. and W.S. Broecker. A new look at the oceans. *Yale Sci. Mag.*; 1957; (May 1957): p. 1-6.
242. Donn, W.L. A case study bearing on the origin and propagation of 2-to 6-second microseisms. *Am. Geophys. Union Trans.*; 1957; v. 38: p. 354-359.

243. Bieri, R. The chaetognath fauna off Peru in 1941. *Pacific Science*; 1957; v. XI: p. 255-264.

244. Nafe, J.E. reflection and transmission coefficients at a solid-solid interface of high velocity contrast. *Bull. Seismol. Soc. Am.*; 1957; v. 47: p. 205-219.

245. Oliver, J. and M. Ewing. Higher modes of continental Rayleigh waves. *Bull. Seismol. Soc. Am.*; 1957; v. 47: p. 187-204.

246. Pimentel, G. Bermuda-Columbia University Seismograph Station. *Seismological Bulletin Lamont Geological Observatory*; 1957; (Oct 1 - Dec. 31, 1956): 10 p.

247. Shurbet, D.H. and M. Ewing. T phases at Bermuda and transformation of elastic waves. *Bull. Seismol. Soc. Am.*; 1957; v. 47: p. 251-262.

248. Volchok, H.L., J.L. Kulp, W.R. Eckelmann, and J.E. Gaetjen. Determination of SR90 and BA140 in bone, dairy products, vegetation, and soil. *Ann. NY Acad. Sci.*; 1957; (Art. 2): p. 293-304.

249. Nafe, J. E. and C. L. Drake. Variation with depth in shallow and deep water marine sediments of porosity, density and the velocities of compressional and shear waves. *Geophysics*; 1957; v. xxii: p. 423-552.

250. Ewing, J. I., C. B. Officer, H. R. Johnson, and R. S. Edwards. Geophysical investigations in the eastern Caribbean; Trinidad Shelf, Tobago Trough, Barbados Ridge, Atlantic Ocean. *Bull. Geol. Soc. Am.* ; 1957; v. 68: p. 897-912.

251. Elmendorf, C.H. and B.C. Heezen. Oceanographic information for engineering submarine cable systems. *Bell Systems Tech. J.* ; 1957; v. XXXVI: p. 1047-1093.

252. Feely, H.W., J.L. Kulp, and W.U. Ault. Sulfur isotopes: a reply to Professor McKinstry. *Econ. Geol.*; 1957; v. 52: p. 713-715.

253. Simon, R.B. *Seismological Bulletin. Lamont Geological Observatory*; 1957; (1 May 1956-31 August 1956): 24 p.

254. Lapp, R.E., J.L. Kulp, W.R. Eckelmann, and A.R. Schulert. Strontium-90 in man. *Science*; 1957; v. 125: p. 933-934.

255. Oliver, J. Seismology and the IGY; Geophysics and the IGY. Am. Geophys. Union Geophys. Mon.; 1958; NAS-NRC Pub. 590(n. 2): p. 190-197.
256. Menzies, R.J. Bibliography, Marine borers. Geol. Soc. Am. Bull.; 1957; v. 1(Memoir 67): p. 1029-1034.
257. Eckelmann, W.R. and J.L. Kulp. Uranium-lead method of age determination Part II: North American localities. Geol.Soc. Am. Bull.; 1957; v. 68: p. 1117-1140.
258. Feely, H.W. and J.L. Kulp. Origin of Gulf Coast salt-dome sulphur deposits. Am. Assoc. Pet. Geol. Bull.; 1957; v. 41: p. 1802-1853.
259. Eckelmann, W.R., J.L. Kulp, and A.R. Schulert. Strontium-90 in man, II. Science; 1958; v. 127: p. 266-274.
260. Sutton, G.H., H. Berckhemer, and J.E. Nafe. Physical analysis of deep sea sediments. Geophysics; 1957; v. XXII: p. 779-812.
261. Damon, P.E. and J.L. Kulp. Determination of radiogenic helium in zircon by stable isotope dilution technique. Am. Geophys. Union Trans.; 1957; v. 38: p. 945-953.
262. Broecker, W.S. and J.L. Kulp. Lamont natural radiocarbon measurements, IV. Science; 1957; v. 126: p. 1324-1334.
263. Simon, R.B. . Seismological Bulletin . Lamont Geological Observatory, Columbia University ; 1957; (1 September - 31 December 1956).
264. Press, F., M. Ewing, and F. Lehner. A long-period seismograph system. Trans. Am. Geophys. Un. ; 1958; v. 39: p. 106-108.
265. Oliver, J. and M. Ewing. Normal modes of continental surface waves. Bull. Seismol. Soc. Am. ; 1958; v. 48: p. 33-49.
266. Kulp, J. L., G. C. Amstutz, and F. D. Eckelmann. Lead isotope composition of Peruvian Galenas. Econ. Geol.; 1957; v. 52: p. 914-922.
267. Ewing, M. and R. D. Gerard. Radiological studies in the investigation of ocean circulation. Aspects of Deep Sea Research; 1957; NAS-NRC Pub. 473: p. 58-66.

268. Donn, W. L. . Microseisms: their nature and geologic application. *Trans. NY Acad. Sci.*; 1957; v. 20(Ser. II): p. 152-153.

269. Damon, P. E. and J. L. Kulp. Argon in mica and the age of the Beryl Mountain, NH. , pegamite. *Am. J. Sci.* ; 1957; v. 255: p. 697-704.

270. Bentley, C. R., P. W. Pomeroy, and H. J. Dorman. Seismic measurements on the Greenland Ice Cap. *Ann. de Geophys.*; 1957; Tome 13: p. 253-285.

271. Damon, P. E. and J. L. Kulp. Excess helium and argon in beryl and other minerals. *Am. Mineral.* ; 1958; v. 43: p. 433-459.

272. Dow, T. G. and R. J. Menzies. The pelagic isopod *Idotea metallica* in the Mediterranean. *Pub. Staz. Zool. di Napoli*; 1957; v. xxx(n. 2): p. 330-336.

273. Menzies, R. J. . Occurrence of *Limnoria tripunctata* at the Cape Cod Peninsula. *Ecology*; 1958; v. 39(n. 1).

274. Sutton, G. H. and E. Berg. Seismological studies of the western rift valley of Africa. *Trans. Am. Geophys. Un.* ; 1958; v. 39: p. 474-481.

275. Ewing, M., D. B. Ericson, and B. C. Heezen. Sediments and topography of the Gulf of Mexico. in : L. Weeks, Ed. . *Habitat of Oil: Am. Assoc. Pet. Geol.* ; 1958: p. 995-1058.

276. Jardetzky, W. S. . Polar wandering, shifting of earth's axis and dipole variations. *Ann. de Geophys.* ; 1958; v. 14: p. 502-505.

277. Damon, P. E. and J. L. Kulp . Inert gases and the evolution of the atmosphere. *Geochim. Cosmochim. Acta*; 1958;v. 13: p. 280-292.

278. Sutton, G. H. and E. Berg. Direction of faulting from first-motion studies. *Bull. Seismol. Soc. Am.* ; 1958; v. 48:p. 117-128.

279. Worzel, J. L. and A. Graf. Comparison of the Graf sea gravimeter with the Vening Meinesz apparatus on board the submarine U.S.S. *Becuna*. *Bull. Geodesique*; 1957; (n. 45): p.38-53.

280. Gast, P. W., J. L. Kulp, and L. E. Long. Absolute age of early Precambrian rocks in the Bighorn Basin of Wyoming and Montana, and Southeastern Manitoba. *Trans. Am. Geophys. Un.*; 1958; v. 39: p. 322-334.

281. de Bremaecker, J. L. Transmission and reflection of Rayleigh waves at corners. *Geophysics*; 1958; v. xxiii(n. 2):p. 253-266.

282. Donn, W. L. . An empirical basis for forecasting storm tides. *Am. Meteorol. Soc. Bull.*; 1958; v. 39: p. 640-647.

283. Long, L. E. and J. L. Kulp. Age of the metamorphism of the rocks of the Manhattan prong. *Geol. Soc. Am. Bull.*; 1958; v. 69: p. 603-606.

284. Menzies, R. J. . The distribution of woodboring *Limnoria* in California. *Proc. Calif. Acad. Sci.* ; 1958; v. xxix: p. 267-272.

285. Kulp, J. L. . Geologia isotopica del Azufre. *Acta Cien.Venezolana*; 1957; v. 8: p. 126-128.

286. Peets, E. A., A. R. Schulert, J. Skok, and W. Chorney. Biosynthesis of C14-reserpine by *Rauwolfia* plants. *J. Am. Phar. Assoc., Scien. Ed.* ; 1958; v. xlvii: p. 280-281.

287. Simon, R. B. . Seismological Bulletin. Lamont Geological Observatory, Columbia University; 1958; 1 January- 30 April 1957.

288. Ewing, M. and W. L. Donn. A theory of ice ages II. *Science*; 1958; v. 127: p. 1159-1162.

289. Olson, E. A. and W. S. Broecker. Sample contamination and reliability of radiocarbon dates. *Trans. NY Acad. Sci.*; 1958; v. 20(Ser. II ): p. 593-604.

290. Oliver, J. and M. Ewing. Short-period oceanic surface waves of the Rayleigh and first shear modes. *Trans. Am. Geophys. Un.*; 1958; v. 39: p. 482-485.

291. Worzel, J.L. and C.L. Drake. Structure section across the Hudson River at Nyack, New York, from seismic observations. *Ann. NY Acad. Sci.* ; 1959; v. 80: p. 1092-1105.

292. Giletti, B. J., F. Bazan, and J. L. Kulp. The geochemistry of tritium. *Trans. Am. Geophys. Un.* ; 1958; v. 39: p. 807-818.

293. Sato, Y. . Attenuation, dispersion and the wave guide of the G wave. *Bull. Seismol. Soc. Am.* ; 1958; v. 48: p. 231-251.

294. Broecker, W. S., K. K. Turekian, and B. C. Heezen. The relation of deep-sea sedimentation rates to variations in climate. *Am. J. Sci.*; 1958; v. 256: p. 503-517.

295. Menzies, R. J. and T. Dow. The largest known bathypelagic isopod, *Anuropus bathypelagicus*. in : *Ann. & Mag. Nat. Hist. London*; 1958; Ser. 13(V. 1): p. 1-6.

296. Pimental, G. Bermuda-Columbia University Seismograph Station. *Seismological Bulletin*; 1958; 1 January - 31 March 1957.

297. Broecker, W. S. and P. C. Orr. Radiocarbon chronology of Lake Lahontan and Lake Bonneville. *Geol. Soc. Am. Bull.*; 1958; v. 69: p. 1009-1032.

298. Brune, J. N. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University; 1958; 1 January- 30 April 1955.

299. Kulp, J. L. . World-wide distribution of strontium-90 and its uptake in man. *Bull. Swiss Acad. Med. Sci.* ; 1958; v. 14: p. 419-433.

300. Ewing, M. The crust and mantle of the earth. *AGU Geophys. Mon. No. 2*; 1958; NAS-NRC Pub. 590: p. 186-189.

301. Oliver, J. and M. Ewing. Seismic surface waves at Palisades from explosions in Nevada and the Marshall Islands. *Proc. Nat. Acad. Sci.* ; 1958; v. 44: p. 780-785.

302. Kulp, J. L. and R. Slakter. Current strontium-90 level in diet in United States. *Science*; 1958; v. 128: p. 85-86.

303. Dow, T. . Description of a new isopod from California, *Exosphaeroma inornata*. *Bull. S. Calif. Acad. Sci.*; 1958; v. 57: p. 93-97.

304. Thurber, D. L., J. L. Kulp, E. Hodges, P. W. Gast, and J. M. Wampler. Common strontium content of the human skeleton. *Science*; 1958; v. 128: p. 256-257.

305. Menzies, R. J. . Shell-bearing pteropod gastropods from Mediterranean plankton (*Cavoliniidae*). *Pub. Staz. Zool. Napoli*; 1958; v. xxx/3: p. 381-401.



306. Oliver, J. and M. Ewing. The effect of surficial sedimentary layers on continental surface waves. *Bull. Seismol. Soc. Am.* ; 1958; v. 48: p. 339-354.
307. Bé , A.W.H. . Ecology of recent planktonic foraminifera: Part 1 - Areal distribution in the western North Atlantic. *Micropaleontology*; 1959; v. 5: p. 77-100.
308. Heezen, B. C., M. Tharp, and M. Ewing. The floors of the oceans: I. The North Atlantic. *Geol. Soc. Am. Spec. Paper 65*; 1959: p. 122 .
309. Kornicker, L. S. . Distribution of the Ostracode suborder Cladocopa, and a new species from the Bahamas. *Micropaleontology*; 1959; v. 5: p. 69-75.
310. Miller, D. S. and J. L. Kulp. Isotopic study of some Colorado Plateau ores. *Econ. Geol.* ; 1958; v. 53: p. 937-948.
311. Menzies, R. J. and J. Imbrie. On the antiquity of the deep sea bottom fauna. *Oikos*; 1958; v. 9: p. 192-210.
312. Schulert, A., E. A. Peets, D. Laszlo, H. Spencer, M. Charles, and J. Samachson. Comparative metabolism of strontium and calcium in man. *Int. J. Appl. Rad. and Isotopes*; 1959; v. 4: p. 144-153.
313. Menzies, R. J. . The identification and distribution of the species of *Limnoria*. in: *Marine Boring and Fouling Organisms*: U. Washington Press; 1959: p. 10-13.
314. Officer, C. B., J. I. Ewing, J. F. Hennion, D. G. Harkrider, and D. E. Miller. Geophysical investigations in the eastern Caribbean: summary of 1955 and 1956 cruises. in: *Physics and Chemistry of the Earth*. London: Pergamon Press; 1959; V. 3: p. 17-109.
315. Drake, C. L., M. Ewing, and G. H. Sutton. Continental margins and geosynclines: the east coast of North America north of Cape Hatteras. in : *Physics and Chemistry of the Earth*. London: Pergamon Press; 1959; V. 3: p. 110-198.
316. Simon, R. B. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University; 1958; 1 May - 31 August 1957.
317. Sato, Y. . Numerical integration of the equation of motion for surface waves in a medium with arbitrary variation of material constants. *Bull. Seismol. Soc. Am.* ; 1959; v. 49: p. 57-77.

318. Talwani, M., J. L. Worzel, and M. Landisman. Rapid gravity computations for two-dimensional bodies with application to the Mendocino submarine fracture zone. *J. Geophys. Res.* ; 1959; v. 64: p. 49-59.
319. Lehmann, I. . On amplitudes of P near the shadow zone. *Ann. Geofis.*; 1958; v. XI: p. 153-156.
320. Thorndike, E.M. . Deep-sea cameras of the Lamont Observatory. *Deep-Sea Res.* ; 1959; v. 5: p. 234-237.
321. Olson, E. A. and W. S. Broecker. Lamont natural radio carbon measurements V. *Am. J. Sci. Radiocarbon Suppl.* ; 1959; v. 1: p. 1-28.
322. Dorman, J. . Numerical solutions for Love wave dispersion on a half-space with double surface layer. *Geophysics*; 1959; v. xxiv: p. 12-29.
323. Walton, A., R. Kologrivov, and J. L. Kulp. The concentration and distribution of radium in the normal humanskeleton. *Health Phys.* ; 1959; v. 1: p. 409-416.
324. Heezen, B. C. . Geologie sous-marine et déplacements des continents. *Centre Nat. de la Rech. Sci. Colloq. Intern.*; 1959; v. LXXXIII: P. 295-304.
325. Broecker, W. S. and A. Walton. The geochemistry of C14 in fresh-water systems. *Geochim. Cosmochim. Acta*; 1959; v. 16: p. 15-38.
326. Donn, W. L. . The Great Lakes storm surge of May 5, 1952. *J. Geophys. Res.* ; 1959; v. 64: p. 191-198.
327. Ewing, J. and M. Ewing. Seismic-refraction measurements in the Atlantic Ocean basins, in the Mediterranean Sea, on the Mid-Atlantic Ridge, and in the Norwegian Sea. *Geol. Soc. Am. Bull.* ; 1959; v. 70: p. 291-318.
328. Drake, C. L., C. Gaibar-Puertas, J. E. Nafe, and M. Langseth. Estudios de prospeccion sismica por refraccion en el Golfo de Cadiz. *Talleres del Inst. Geogr. y Catastral, Madrid*; 1959: p. 1-20.
329. Sutton, G. and J. Oliver. Seismographs of high magnification at long periods. *Ann. Geophys.* ; 1959; v. 15: p. 423-433.

330. Ault, W. U. and J. L. Kulp. Isotopic geochemistry of sulphur. *Geochim. Cosmochim. Acta*; 1959; v. 16: p. 201-235.
331. Ewing, M. and W. L. Donn. Reply to "Criticism of the theory of ice ages". *Science*; 1959; v. 129: p. 463-465.
332. Broecker, W. S., E. A. Olson, and J. Bird. Radiocarbon measurements on samples of known age. *Nature*; 1959; v. 183: p. 1582-1584.
333. Major, M. W. and R. E. Houtz. Geological Survey of Fiji. IGY Seismological Bulletin, Lamont Geol. Obs.; 1959; 6 December 1957-24 June 1958.
334. Pomeroy, P.W. Royal Observatory, Hong Kong, China. I.G.Y. Seismological Bulletin, Lamont Geol. Obs. ; 1959; 8 August 1957 - 30 August 1958.
335. Ewing, M., B. C. Heezen, and D. B. Ericson. Significance of the Worzel deep sea ash. *Proc. Nat. Acad. Sci.* ; 1959; v. 45: p. 355-361.
336. Broecker, W. S. and A. F. Walton. Reevaluation of the salt chronology of several Great Basin lakes. *Geol. Soc. Am.Bull.*; 1959; v. 70: p. 601-618.
337. Worzel, J. L. . Extensive deep sea sub-bottom reflections identified as white ash. *Proc. Nat. Acad. Sci.*; 1959; v. 45: p. 349-355.
338. Schulert, A. R., E. J. Hodges, E. S. Lenhoff, and J. L.Kulp. Strontium-90 distribution in the human skeleton. *Health Phys.*; 1959; v. 2: p. 62-68.
339. Landisman, M., Y. Sato, and M. Ewing. The distortion of pulse-like earthquake signals by seismographs. *Geophys. J. R. astr. Soc.*; 1959; v. 2: p. 101-115.
340. Giletti, B. J. and J. L. Kulp. Tritium tracer in Arctic problems. *Science*; 1959; v. 129: p. 901-903.
341. Clarke, A. H. Jr. and R. J. Menzies. *Neopilina (Vema) ewingi*, a second living species of the Paleozoic class Monoplacophora. *Science*; 1959; v. 129: p. 1026-1027.
342. Broecker, W. S. and E. A. Olson. Lamont radiocarbon measurements VI. *Am. J. Sci. Radiocarbon Suppl.*; 1959; v. 1:p. 111-132.

343. Brown, J. S. and J. L. Kulp. Lead isotopes from Balmat area, New York. *Econ. Geol.* ; 1959; v. 54: p. 137-139.
344. Kulp, J. L., R. Slakter, and A. R. Schulert. Strontium-90 in food. *Agric. and Food Chem.* ; 1959; v. 7: p.466-469.
345. Heezen, B. C. . Dynamic processes of abyssal sedimentation: erosion, transportation, and redeposition on the deep-sea floor. *Geophys. J. R. astr. Soc.*; 1959; v. 2: p. 142-163.
346. Ericson, D. B. and G. Wollin. Micropaleontology and lithology of Arctic sediment cores. *Terrestrial Sci. Lab AirForce Cambridge Res. Ctr.*; 1959; *Geophys. Res. Paper No. 63*:p. 50-58.
347. Kulp, J. L., A. R. Schulert, and E. J. Hodges. Strontium-90 in man III. *Science*; 1959; v. 129: p. 1249-1255.
348. Heezen, B. C. Modern turbidity currents. *Eclogae geol. Helvetiae*; 1958; v. 51: p. 521-522.
349. Long, L. E., J. L. Kulp, and F. D. Eckelmann. Chronology of major metamorphic events in the southeastern United States. *Am. J. Sci.* ; 1959; v. 257: p. 583-603.
350. Kovach, R. L. . Surface wave dispersion for an Asio-African and a Eurasian path. *J. Geophys. Res.*; 1959; v.64: p. 805-813.
351. Squires, D. F. . Deep sea corals collected by the Lamont Geological Observatory. 1. Atlantic Corals. *Am. Mus. Novitates*; 1959; (n. 1965): p. 1-42.
352. Broecker, W. S., A. Schulert, and E. A. Olson. Bomb carbon-14 in human beings. *Science*; 1959; v. 130(n. 3371): p. 331-332.
353. Heezen, B. C. . Some problems of Caribbean submarine geology. in : *Trans. Second Caribbean Geol. Conf. Mayaguez: Univ. Puerto Rico*; 1960: p. 13-16.
354. Talwani, M., J. L. Worzel, and M. Ewing. Gravity anomalies and structure of the Bahamas. in : *Trans. Second Caribbean Geol. Conf. Mayaguez: Univ. Puerto Rico*; 1960: p. 156-161.

355. Ericson, D. B. . Coiling direction of *Globigerina pachyderma* as a climatic index. *Science*; 1959; v. 130: p. 219-220.
356. Broecker, W. S. and A. Walton. Radiocarbon from nuclear tests. *Science*; 1959; v. 130: p. 309-314.
357. Ewing, M., J. L. Worzel, and M. Talwani. Some aspects of physical geodesy. *AGU Mon. No. 4, NAS-NRC Pub. 708*; 1959;p. 7-21.
358. Long, L. E., J. C. Cobb, and J. L. Kulp. Isotopic ages on some igneous and metamorphic rocks in the vicinity of New York City. *Ann. NY Acad. Sci.*; 1959; v. 80: p. 1140-1147.
359. Broecker, W. S., C. S. Tucek, and E. A. Olson. Radiocarbon analysis of oceanic CO<sub>2</sub>. *International J. Appl. Rad. and Isotopes*; 1959; v. 7: p. 1-18.
360. Worzel, J. L. . Continuous gravity measurements on a surface ship with the Graf sea gravimeter. *J. Geophys. Res.* ; 1959; v. 64: p. 1299-1315.
361. Beckmann, W. C., A. C. Roberts, and B. Luskin. Subbottom depth recorder. *Geophysics*; 1959; v. xxiv: p. 749-760.
362. Gast, P. W., J. L. Kulp, and L. E. Long. Reply to Osterwald's discussion of "Absolute age of early pre-Cambrian rocks in the Bighorn Basin of Wyoming and Montana and southwestern Manitoba. *J. Geophys. Res.* ; 1959; v. 64: p. 1344-1345.
363. Mead, G. W. . *Bathypterols pectinatus*, a new bathyal iniomous fish from the eastern Pacific. *J. Wash. Acad. Sci.*;1959; v. 49: p. 290-292.
364. Bé , A.W.H. . A method for rapid sorting of foraminifera from marine plankton samples. *J. Paleontol.*; 1959; v. 33: p.846-848.
365. Talwani, M. and M. Ewing. Rapid computation of gravitational attraction of three-dimensional bodies of arbitrary shape. *Geophysics*; 1960; v. xxv: p. 203-225.
366. Ault, W. U. and J. L. Kulp. Sulfur isotopes and ore deposits. *Econ. Geol.* ; 1960; v. 55: p. 73-100.
367. Oliver, J., J. Dorman, and G. Sutton. The second shear mode of continental Rayleigh waves. *Bull. Seismol. Soc. Am.* ; 1959; v. 49: p. 379-389.

368. Brune, J. N. and J. Oliver. The seismic noise of the earth's surface. *Bull. Seismol. Soc. Am.* ; 1959; v. 49: p. 349-353.

369. Bé , A. W. H., M. Ewing, and L. W. Linton. A quantitative multiple opening-and-closing plankton sampler for vertical towing. *J. du Con. Inter. pour l'Explor. de la Mer*; 1959; v. xxv: p. 36-46.

370. Simon, R. B. . *Seismological Bulletin. Lamont Geological Observatory, Columbia University*; 1959; 1 January- 30 April 1959.

371. Kulp, J. L., J. C. Cobb, L. E. Long, and D. S. Miller. The geological time scale. *Nature*; 1959; v. 184: p. B.A. 62-B.A. 63.

372. Kulp, J. L., A. R. Schulert, and E. J. Hodges. Strontium-90 levels and wheat. *Science*; 1959; v. 130: p. 733-734.

373. Simon, R. B. . *Seismological Bulletin. Lamont Geological Observatory, Columbia University*; 1959; 1 September - 31 December 1957.

374. Talwani, M., G. H. Sutton, and J. L. Worzel. A crustal section across the Puerto Rico Trench. *J. Geophys. Res.* ; 1959; v. 64: p. 1545-1555.

375. Catanzaro, E. J. and P. W. Gast. Isotopic composition of lead in pegmatitic feldspars. *Geochim. Cosmochim. Acta*; 1960; v. 19: p. 113-126.

376. Menzies, R. J., M. Ewing, J. L. Worzel, and A. H. Clarke, Jr. . Ecology of the Recent monoplacophora. *Oikos*; 1959; v. 10: p. 168-182.

377. Giletti, B. J. and J. L. Kulp. Reply to criticism of "Tritium tracer in Arctic problems". *Science*; 1959; v. 130: p. 273-274.

378. Heezen, B. C. . Deep-sea erosion and unconformities. *J. Geol.*; 1959; v. 67: p. 713-714.

379. Barnard, J. L. . The common Pardaliscid amphipoda of southern California, with a revision of the family. *Pacific Naturalist*; 1959; v. 1: p. 36-44.

380. Latham, G. V. . *Seismological Bulletin. Lamont Geological Observatory, Columbia University*; 1959; 1 January 1958 - 30 April 1958.

381. Clarke, A. H. Jr. New abyssal molluscs from off Bermuda collected by the Lamont Geological Observatory. *Proc. Malacological Soc.*, London; 1959; v. 33: p. 231-238.
382. Gast, P. W. Alkali metals in stone meteorites. *Geochim. Cosmochim. Acta*; 1960; v. 19: p. 1-4.
383. Ewing, M., S. Mueller, M. Landisman, and Y. Sato. Transient analysis of earthquake and explosion arrivals. *Geofis. Pura e Appl.* ; 1959; v. 44: p. 83-118.
384. Simon, R. B. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University ; 1959; 1 May - 31 August 1959.
385. Donn, W. L. and W. T. McGuinness. Barbados storm swell. *J. Geophys. Res.*; 1959; v. 64: p. 2341-2349.
386. Giletti, B. J. and J. L. Kulp. Reply to criticism of "Tritium tracer in Arctic problems". *Science*; 1959; v. 130: p. 1606.
387. Menzies, R. J. . *Priapulus abyssorum*, new species, the first abyssal priapulid. *Nature*; 1959; v. 184: p. 1585-1586.
388. Brune, J. N., J. E. Nafe, and J. E. Oliver. A simplified method for the analysis and synthesis of dispersed wave trains. *J. Geophys. Res.* ; 1960; v. 65: p. 287-304.
389. Pomeroy, P. W. and G. H. Sutton. The use of galvanometers as band-rejection filters in electromagnetic seismographs. *Bull. Seismol. Soc. Am.* ; 1960; v. 50: p. 135-151.
390. Dorman, J., M. Ewing, and J. Oliver. Study of shear-velocity distribution in the upper mantle by mantle Rayleigh waves. *Bull. Seismol. Soc. Am.* ; 1960; v. 50: p. 87-115.
391. Broecker, W. S. and E. A. Olson. Radiocarbon measurements and annual rings in cave formations. *Nature*; 1960; v. 185: p. 93-94.
392. Ewing, M. and W. L. Donn. On Pleistocene surface temperatures of the North Atlantic and Arctic Oceans. *Science*; 1960; v. 131: p. 99.
393. Cobb, J. C. and J. L. Kulp. U-Pb age of the Chattanooga Shale. *Geol. Soc. Am. Bull.* ; 1960; v. 71: p. 223-224.

394. Giffin, C. E. and J. L. Kulp. Potassium-argon ages in the Precambrian basement of Colorado. *Geol. Soc. Am. Bull.*; 1960; v. 71: p. 219-222.
395. Beckman, C. and R. Menzies. The relationship of reproductive temperature and the geographical range of the marine woodborer *Limnoria tripunctata*. *Biol. Bull.* ; 1960; v. 119: p. 9-16.
396. Drake, C. L. and W. C. Beckmann. Transistorized Raydist as used in geological surveys. *J. Geophys. Res.* ; 1960; v. 65: p. 525-528.
397. Heezen, B. C. . The relationship between paleotemperatures and calcium carbonate content in a deep-sea core: a discussion. *J. Geol.* ; 1960; v. 68: p. 345.
398. Kulp, J. L., L. E. Long, C. E. Giffin, A. A. Mills, R. St. J. Lambert, B. J. Giletti, and R. K. Webster. Potassium-argon and rubidium-strontium ages of some granites from Britain and Eire. *Nature*; 1960; v. 185: p. 495-497.
399. Isacks, B. L. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University; 1960; 1 May - 31 August 1958.
400. Simon, R. B. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University ; 1960; September - 31 December 1959.
401. Nesteroff, W. D. and B. C. Heezen. Les depots de courants de turbidite, le flysch et leur signification tectonique. *Acad. des Sci.*; 1960; v. 250: p. 3690-3692.
402. Broecker, W. S., M. Ewing, and B. C. Heezen. Evidence for an abrupt change in climate close to 11,000 years ago. *Am. J. Sci.* ; 1960; v. 258: p. 429-448.
403. Gast, P. W. . Limitations on the composition of the upper mantle. *J. Geophys. Res.* ; 1960; v. 65: p. 1287-1297.
404. Miller, H. J., S.J. *Seismological Bulletin*. Lamont Geological Observatory, Columbia University; 1960; 1 May - 31 August 1955.
405. Menzies, R. J. and M. Tinker. *Haplomisiscus robinsoni*, a new species of asellote deep sea isopod from the eastern tropical Pacific Ocean. *Pacific Naturalist*; 1960; v. 1: p. 1-4.



406. Eckelmann, W. R., W. S. Broecker, and J. L. Kulp. Half-life of Pb210. *Phys. Rev.* ; 1960; v. 118(n. 3): p. 698-701.
407. Oliver, J. and M. Major. Leaking modes and the PL phase. *Bull. Seismol. Soc. Am.* ; 1960; v. 50: p. 165-180.
408. Bé , A.W.H. . Some observations on Arctic planktonic foraminifers. *Cushman Fdn. Foram. Res.*; 1960; v. xi: p. 64-68.
409. Long, A., A. J. Silverman, and J. L. Kulp. Isotopic composition of lead and Precambrian mineralization of the Coeur d'Alene district, Idaho. *Econ. Geol.* ; 1960; v. 55: p. 645-658.
410. Donn, W. L. . Pleistocene climate. *Trans. NY Acad. Sci.*; 1960; v. 22(n. 7): p. 491-493.
411. Hunkins, K. L., M. Ewing, B. C. Heezen, and R. J. Menzies. Biological and geological observations on the first photographs of the Arctic Ocean deep-sea floor. *Limnol. Oceanogr.*; 1960; v. 5: p. 154-161.
412. Clarke, A. H. Jr. . A giant ultra-abysal Cocculina (Mollusca, gastropoda) from the Argentine basin. *Nat. Hist. Papers, Nat. Mus. Canada*; 1960; (n. 7): p. 1-4.
413. Ewing, M. and W. L. Donn. Pleistocene climate changes. in : *Geology of the Arctic*: Univ. Toronto Press; 1961: p. 931-941.
414. Silverman, A., A. Long, and J. L. Kulp. Age of Coeur d'Alene mineralization: an isotopic study. *Mining Eng.* ; 1960; v. 12: p. 470-471.
415. Ewing, M. and B. C. Heezen. Continuity of mid-oceanic ridge and rift valley in the southwestern Indian Ocean confirmed. *Science*; 1960; v. 131: p. 1677-1679.
416. Kulp, J. L. . Strontium-90 in man. *IXth International Congr. Radiology, 1959, Munchen*; 1960: p. 1246-1251.
417. Beckmann, W. C., C. L. Drake, and G. H. Sutton. SDR survey for proposed Chesapeake Bay crossing. *J. Survey and Mapping Div., Proc. Am. Soc. Civ. Eng.*; 1960; v. 86(SU 2): p. 19-31.

418. Bé , A.W.H. . Ecology of Recent planktonic foraminifera: Part 2 - Bathymetric and seasonal distributions in the Sargasso Sea off Bermuda. *Micropaleontology*; 1960; v. 6: p. 373-392.
419. Oliver, J., P. Pomeroy, and M. Ewing. Long-period seismic waves from nuclear explosions in various environments. *Science*; 1960; v. 131: p. 1804-1805.
420. Beckmann, W. C., C. L. Drake, and J. L. Worzel. R/V Vema deep-sea winch. *Deep-Sea Res.* ; 1960; v. 7: p. 48-52.
421. Ewing, M. . The ice ages—theory. *J. Alberta Soc. Pet. Geol.* ; 1960; v. 8: p. 191-201.
422. Su, S. S. and R. E. Houtz. IGY Seismological Bulletin. Geological Survey of Fiji, 25 June 1958 - 31 December 1958; 1960; *Lamont Geol. Obs.* .
423. Broecker, W. S. and E. A. Olson. Radiocarbon from nuclear tests, II. *Science*; 1960; v. 132: p. 712-721.
424. Sato, Y. . Synthesis of dispersed surface waves by means of Fourier transform. *Bull. Seismol. Soc. Am.* ; 1960; v. 50: p. 417-426.
425. Heirtzler, J. R. and J. Hirshman. Measurements of the geomagnetic field near Capetown. *J. Geophys. Res.* ; 1960; v. 65: p. 3016-3018.
426. Nafe, J. E. and J. N. Brune. Observations of phase velocity for Rayleigh waves in the period range 100 to 400 seconds. *Bull. Seismol. Soc. Am.* ; 1960; v. 50: p. 427-439.
427. Sato, Y., M. Landisman, and M. Ewing. Love waves in a heterogenous, spherical earth; Part 1. Theoretical periods for the fundamental and higher torsional modes. *J. Geophys. Res.* ; 1960; v. 65: p. 2395-2398.
428. Sato, Y., M. Landisman, and M. Ewing. Love waves in a heterogeneous, spherical earth; Part 2. Theoretical phase and group velocities. *J. Geophys. Res.* ; 1960; v. 65: p. 2399-2404.
429. Donn, W. L. and W. T. McGuinness. Air-coupled long waves in the ocean. *J. Meteorol.*; 1960; v. 17: p. 515-521.
430. Kulp, J. L., A. R. Schulert, and E. J. Hodges. Strontium-90 in man IV. *Science*; 1960; V. 132: p. 448-454.

431. Menzies, R. J. . The zoogeography, ecology, and systematics of the Chilean marine isopods. *Lund. Univ. Arssk. N.F. Avd 2*; 1961; Bd 57 (nr 11): p. 1-162.
432. Ewing, J., B. Luskin, A. Roberts, and J. Hirshman. Sub-bottom reflection measurements on the continental shelf, Bermuda Banks, West Indies Arc, and in the West Atlantic Basins. *J. Geophys. Res.*; 1960; v. 65: p. 2849-2859.
433. Kulp, J. L. . Strontium 90 in man. *Sonderausschluss Radioaktivitat - Symp. uber Radistrontium*; 1961; v. 18: p. 3-14.
434. Broecker, W. S., R. Gerard, M. Ewing, and B. C. Heezen. Natural radiocarbon in the Atlantic Ocean. *J. Geophys. Res.* ; 1960; v. 65: p. 2903-2931.
435. Simon, R. B. . *Seismological Bulletin. Lamont Geological Observatory Columbia University*; 1960; 1 January 1960 - April 1960.
436. Kulp, J. L. and J. L. Dick. The radiation hazard from contaminated aircraft. *Health Physics*; 1960; v. 4: p. 133-156.
437. Girdler, R. W. and G. Peter. An example of the importance of natural remanent magnetization in the interpretation of magnetic anomalies. *Geophys. Prospecting*; 1960; v. viii: p. 474-483.
438. Hunkins, K. . Seismic studies of sea ice. *J. Geophys. Res.* ; 1960; v. 65: p. 3459-3472.
439. Pomeroy, P. and J. Oliver. Seismic waves from high-altitude nuclear explosions. *J. Geophys. Res.* ; 1960; v. 65: p. 3445-3457.
440. Broecker, W. S., R. D. Gerard, M. Ewing, and B. C. Heezen. Geochemistry and physics of ocean circulation. in : *Oceanography: Am. Assoc. Adv. Sci.* ; 1961: p. 301-322.
441. Heezen, B. C. . The rift in the ocean floor. *Sci. Am.* ; 1960; v. 203(n. 4): p. 98-110.
442. Bolt, B. A. . The revision of earthquake epicentres, focal depths and origin-times using a high-speed computer. *Geophys. J. R. astr. Soc.* ; 1960; v. 3: p. 433-440.
443. Dorman, J. and D. Prentiss. Particle amplitude profiles for Rayleigh waves on a heterogeneous earth. *J. Geophys. Res.* ; 1960; v. 65: p. 3805-3816.

444. Ewing, M. and M. Landisman. Shape and structure of ocean basins. in : *Oceanography: Am. Assoc. Adv. Sci.* ; 1961: p. 3-38.

445. Pimental, G. . *Seismological Bulletin. Bermuda-Columbia University Seismograph Station*; 1960; 1 April 1957 - 31 March 1958.

446. Heezen, B. C., W. D. Nesteroff, and G. Sabatier. Repartition des mineraux argileux dans les sediments profonds de l'Atlantique nord et equatorial. *Acad. des Sci.*; 1960; t. 251: p. 410-412.

447. Ewing, M., S. Mueller, M. Landisman, and Y. Sato. Transient phenomena in explosive sound. *Proc. 3rd International Congr. on Acoustics*; 1961: p. 274-276.

448. Ewing, M., S. Mueller, M. Landisman, and Y. Sato. Dispersive transients in earthquake signals. *Proc. 3rd International Congr. on Acoustics*; 1961: p. 426-428.

449. Lehmann, I. . S and the structure of the upper mantle. *Geophys. J. R. astr. Soc.* ; 1961; v. 4: p. 124-138.

450. Oliver, J. . On the long period character of shear waves. *Bull. Seismol. Soc. Am.* ; 1961; v. 51: p. 1-12.

451. Kulp, J. L. and H. Neumann. some potassium-argon ages on rocks from the Norwegian basement. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 469-473.

452. Rusnak, G. A., Tj.H. Van Andel, B. C. Heezen, J. E. Nafe, and D. B. Ericson. Marine sediments . in : *McGraw-Hill Encyclopedia Sci. and Technol.* ; 1960: p. 132-147.

453. Heezen, C. B., W. M. Ewing, and J. I. Ewing, Submarine topography. in : *McGraw-Hill Encyclopedia Sci. and Technol.* ; 1960: p. 216-223.

454. Heezen, B. C. . Turbidity currents. in : *McGraw-Hill Encyclopedia Sci. and Technol.* ; 1960: p. 146-147.

455. LePichon, X. The deep water circulation in the southwest Indian Ocean. *J. Geophys. Res.* ; 1960; v. 65: p. 4061-4074.

456. Ewing, J., J. Antoine, and M. Ewing. Geophysical measurements in the western Caribbean Sea and in the Gulf of Mexico. *J. Geophys. Res.* ; 1960; v. 65: p. 4087-4126.

457. Kuovo, O. and J. L. Kulp. Isotopic composition of Finnish galenas. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 476-491.
458. Giletti, B. J. and P. W. Gast. Absolute age of Precambrian rocks in Wyoming and Montana. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 454-458.
459. Damon, P. E. and B. J. Giletti. The age of the basement rocks of the Colorado plateau and adjacent areas. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 443-453.
460. Broecker, W. Radiocarbon dating of Late Quaternary deposits, South Louisiana: a discussion. *Geol. Soc. Am. Bull.* ; 1961; v. 72: p. 159-162.
461. Cobb, J. C. . Dating of black shales. *Ann. NY Acad. Sci.*; 1961; v. 91: p. 311-316.
462. Long, L. E. . Isotopic ages from northern New Jersey and southeastern New York. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 400-407.
463. Ericson, G. P. and J. L. Kulp. Potassium-argon dates on basaltic rock. *Ann. NY Acad. Sci.*; 1961; v. 91: p. 321-323.
464. Kulp, J. L. and F. D. Eckelmann. Potassium-argon isotopic ages on micas from the southern Appalachians. *Ann. NY Acad. Sci.* ; 1961; v. 91: p. 408-419.
465. Oliver, J., R. Kovach, and J. Dorman. Crustal structure of the New York-Pennsylvania area. *J. Geophys. Res.*; 1961; v. 66: p. 215-225.
466. Bolt, B. A. . Spheroidal oscillations of the moon. *Nature*; 1960; v. 188: p. 1176-1177.
467. Ericson, D. B., M. Ewing, G. Wollin, and B. C. Heezen. Atlantic deep-sea sediment cores. *Geol. Soc. Am. Bull.* ; 1961; v. 72: p. 193-285.
468. Menzies, R. J., J. Imbrie, and B. C. Heezen. Further considerations regarding the antiquity of the abyssal fauna with evidence for a changing abyssal environment. *Deep-Sea Res.* ; 1961; v. 8: p. 79-94.
469. Simon, R. B. . *Seismological Bulletin*. Lamont Geological Observatory, Columbia University; 1961; 1 May 1960 - 31 August 1960.

470. Takahashi, T. . Carbon dioxide in the atmosphere and in Atlantic Ocean water. *J. Geophys. Res.*; 1961; v. 66: p. 477-494.
471. Alsop, L. E., G. H. Sutton, and M. Ewing. Free oscillations of the earth observed on strain and pendulum seismographs. *J. Geophys. Res.* ; 1961; v. 66: p. 631-641.
472. Ewing, M. and W. L. Donn. Polar wandering and climate. in : *Polar Wandering and Continental Drift: Soc. Econ. Paleontol. and Mineral.*; 1963: p. 94-99.
473. Sato, Y. . Normal mode interpretation of the sound propagation in whispering galleries. *Nature*; 1961; v. 189: p. 475-476.
474. Talwani, M., B. C. Hezen, and J. L. Worzel. Gravity anomalies, physiography, and crustal structure of the Mid-Atlantic Ridge. *Pub. Bur. Cen. Seismol. International Serie A Trav. Sci.*; 1961; Fasc. 22: p. 81-111.
475. Fanale, F. and J. L. Kulp. Helium in limestone and marble. *Am. Mineral.*; 1961; v. 46: p. 155-167.
476. Simon, R. B. . *Seismological Bulletin. Lamont Geological Observatory, Columbia University*; 1961; 1 September - 31 December 1960.
477. Schulert, A. R. . Assessment of dietary strontium -90 through urine assay. *Nature*; 1961; v. 189: p. 933-934.
478. Brune, J.N. Radiation pattern of Rayleigh waves from the southeast Alaska earthquake of July 10, 1958. "A Symposium on Earthquake Mechanism": *Pub. Domin. Observ.*; 1961; v. xxiv: p. 373-383.
479. Kulp, J. L. . Radionuclides in man from nuclear tests. *Agriculture and Food Chem.* ; 1961; v. 9: p. 122-126.
480. Farrand, W. R. . Frozen mammoths and modern geology. *Science*; 1961; v. 133: p. 729-735.
481. Pfeffer, R. L. . Results of recent research in meteorology at the Lamont Geological Observatory. in : *Proc. International Symp. on Num. Weather Prediction. Tokyo: Meteorol. Soc. Japan*; 1962: p. 249-263.

482. Brune, J., M. Ewing, and J. Kuo. Group and phase velocities for Rayleigh waves of period greater than 380 seconds. *Science*; 1961; v. 133: p. 757.
483. Talwani, M., J. L. Worzel, and M. Ewing. Gravity anomalies and crustal section across the Tonga Trench. *J. Geophys. Res.* ; 1961; v. 66: p. 1265-1278.
484. Erickson, G. P. and J. L. Kulp. Potassium-argon measurements on the Palisades sill, New Jersey. *Geol. Soc. Am. Bull.* ; 1961; v. 72: p. 649-652.
485. Cobb, J. C. and J. L. Kulp. Isotopic geochemistry of uranium and lead in the Swedish kolm and its associated shale. *Geochim. Cosmochim. Acta*; 1961; v. 24: p. 226-249.
486. Kulp, J. L. . Geologic time scale. *Science*; 1961; v. 133: p. 1105-1114.
487. Kulp, J. L. , A. R. Schulert, E. J. Hodges, E. C. Anderson, and W. H. Langham. Strontium-90 and cesium-137 in North American milk. *Science*; 1961; v. 133: p. 1768-1770.
488. Brune, J. N., J. E. Nafe, and L. E. Alsop. The polar phase shift of surface waves on a sphere. *Bull. Seism. Soc. Am.* ; 1961; v. 51: p. 247-257.
489. Hunkins, K. Seismic studies of the Arctic Ocean floor. in: "Geology of the Arctic": Univ. Toronto Press; 1961: p. 645-665.
490. Schwarzacher, W. and K. Hunkins. Dredged gravels from the central Arctic Ocean. in: "Geology of the Arctic": Univ. Toronto Press; 1961: p. 666-677.
491. Bolt, B.A. Machine processing of seismic travel-time data. *Bull. Seismol. Soc. Am.* ; 1961; v. 51: p. 259-267.
492. Squires, D.F. Deep sea corals collected by the Lamont Geological Observatory. 2. Scotia Sea corals. *Am. Mus. Novitates*; 1961; (n. 2046): p. 1-48.
493. Walters, V. Winter abundance of *Arctogadus glacialis* in the Polar Basin. *Copeia*; 1961; (n. 2): p. 236-237.
494. Heezen, B.C. and M. Ewing. The mid-oceanic ridge and its extension through the Arctic Basin. in: "Geology of the Arctic": Univ. Toronto Press; 1961: p. 622-642.

495. Broecker, W.S. and E.A. Olson. Lamont radiocarbon measurements VIII. Radiocarbon; 1961; v. 3: p. 176-204.

496. Donn, W.L. Past ice ages: IUGG Triennial Rep. Am. Geophys. Union Trans.; 1960; v. 41: p. 213-215.

497. Sato, Y. and T. Matumoto. Vibration of an elastic globe with a homogeneous mantle over a homogeneous core. Vibrations of the first class. J. Phys. Earth; 1961; v. 9(n. 1): p. 1-16.

498. Olson, E.A. and W.S. Broecker. Lamont natural radiocarbon measurements VII. Radiocarbon; 1961; v. 3: p. 141-175.

499. Ericson, D.B. Pleistocene climatic record in some deep-sea sediment cores. Annals NY Acad. Sci.; 1961; v. 95: p. 537-541.

500. Kutschale, H. Long-range sound transmission in the Arctic Ocean. J. Geophys. Res.; 1961; v. 66: p. 2189-2198.

501. Oliver, J. and J. Dorman. On the nature of oceanic seismic surface waves with predominant periods of 6 to 8 seconds. Bull. Seismol. Soc. Am.; 1961; v. 51(n. 3): p. 437-455.

502. Simon, R.B. Seismological Bulletin. Lamont Geological Observatory, Columbia University; 1961: 1 January 1961-30 April 1961.

503. Clarke, Jr., A.H. Abyssal mollusks from the South Atlantic Ocean. Bull. Mus. Comp. Zoology; 1961; v. 125(n. 12): p. 345-387.

504. Alsop, L.E., G.H. Sutton, and M. Ewing. Measurements of Q for very long period free oscillations. J. Geophys. Res.; 1961; v. 66(n. 9): p. 2911-2915.

505. Bolt, B.A. and J. Dorman. Phase and group velocities of Rayleigh waves in a spherical, gravitating earth. J. Geophys. Res.; 1961; v. 66(n. 9): p. 2965-2981.

506. Ewing, J.I. and G.B. Tirey. Seismic profiler. J. Geophys. Res.; 1961; v. 66(n. 9): p. 2917-2927.



507. Brune, J.N., H. Benioff, and M. Ewing. Long-period surface waves from the Chilean earthquake of May 22, 1960, recorded on linear strain seismographs. *J. Geophys. Res.*; 1961; v. 66(n. 9): p. 2895-2910.
508. Robinson, D.J. and R.J. Menzies. *Munna spinifera*, a new species of isopod crustacean from bathyal regions in the Gulf of Aden. *Crustaceana*; 1961; v. 2(pt. 2): p. 110-114.
509. Wüst, G. On the vertical circulation of the Mediterranean Sea. *J. Geophys. Res.*; 1961; v. 66(n. 10): p. 3261-3271.
510. Worzel, J.L. and M. Talwani. Latest results of gravity observations at sea from surface ships. *Pub. Inst. Geodesy, Photogram. and Cartog.*; 1961; v. 15: p. 116-126.
511. Ewing, J. and M. Ewing. A telemetering ocean-bottom seismograph. *J. Geophys. Res.*; 1961; v. 66(n. 11): p. 3863-3878.
512. Cromie, W.J. Preliminary results of investigations on Arctic Drift Station Charlie. in: "Geology of the Arctic": Univ. Toronto Press; 1961: p. 690-708.
513. Gerard, R. and M. Ewing. A large-volume water sampler. *Deep-Sea Res.*; 1961; v. 8(n. 3/4): p. 298-301.
514. Hunkins, K., T. Herron, H. Kutschale, and G. Peter. Geophysical studies of the Chukchi Cap, Arctic Ocean. *J. Geophys. Res.*; 1962; v. 67(n. 1): p. 235-247.
515. Heezen, B.C. and M. Tharp. Physiographic diagram of the South Atlantic Ocean, the Caribbean Sea, the Scotia Sea, and the eastern margin of the South Pacific Ocean. *Geol. Soc. Am. Bull.*; 1961.
516. Brune, J.N. Attenuation of dispersed wave trains. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 109-112.
517. Oliver, J. A summary of observed seismic surface wave dispersion. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 81-86.
518. Rexin, E.E., J. Oliver, and D. Prentiss. Seismically-induced fluctuations of the water level in the Nunn-Bush well in Milwaukee. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 17-25.

519. Wüst, G. Das bodenwasser und die vertikalzirkulation des Mittelländischen Meeres. *Deutsch. Hydrogr. Zeitsch.*; 1961; band 14(heft 3): p. 81-92.
520. Schulert, A.R., R. Slakter Hirshman, and K.E. Bartelesen. Fallout SR90 in four staple U.S. foods, 1959 and 1960. *Health Phys.*; 1962; v. 8: p. 73-80.
521. Gerard, R., M. G. Langseth, Jr., and M. Ewing. Thermal gradient measurements in the water and bottom sediment of the western Atlantic. *Geophys. Res.*; 1962; v. 67(n. 2): p. 785-803.
522. Squires, D.F. Deep sea corals collected by the Lamont Geological Observatory. 3. Larvae of the Argentine scleractinian coral *Flabellum curvatum* Moseley. *Am. Mus. Novitates*; 1962; (n. 2078): p. 1-11.
523. Nesteroff, W.D. and B.C. Heezen. Essais de comparaison entre les turbidites modernes et le flysch. *Revue de Geographie Phys. et de Geologie Dynam.*; 1963; v. v(fasc. 2): p. 113-125.
524. Donn, W.L., W.R. Farrana, and M. Ewing. Pleistocene ice volumes and sea-level lowering. *J. Geol.*; 1962; v. 70: p. 206-214.
525. Dorman, J. Period equation for waves of Rayleigh type on a layered, liquid-solid half space. *Geol. Am. Soc. Bull.*; 1962; v. 260: p. 389-397.
526. Farrand, W.R. . Postglacial uplift in North America. *Am. J. Sci.*; 1962; v. 260: p. 181-199.
527. Hubert, J.F. Dispersal patterns of Pleistocene sands on the North Atlantic deep-sea floor. *Science*; 1962; v. 136: p. 383-384.
528. Drake, C. L. . Geophysics and engineering. *Geophysics*; 1962; v. xxvii(n. 2): p. 193-197.
529. Pfeffer, R. L. . A multi-layer model for the study of acoustic-gravity wave propagation in the earth's atmosphere. *J. Atmos. Sci.*; 1962; v. 19(n. 3): p. 251-255.
530. Heezen, B. C. . The deep-sea floor. in : *Continental Drift*. New York: Academic Press; 1962; V. 3: 338 pp.
531. Simon, R. B. . *Seismological Bulletin* . Lamont Geological Observatory, Columbia University, ; 1962; 1 May 1961 - 31 August 1961.

532. Clarke, A. H. Jr. Annotated list and bibliography of the abyssal marine molluscs of the world. National Mus. Canada; 1962; Bull. 181(Series N. 67): p. 1-114.

533. Pfeffer, R. L. and J. Zarichny. Acoustic-gravity wave propagation from nuclear explosions in the earth's atmosphere. J. Atmos. Sci.; 1962; v. 19(n. 3): p. 256-263.

534. Kuo, J., J. Brune, and M. Major. Rayleigh wave dispersion in the Pacific Ocean for the period range 20 to 140 seconds. Bull. Seismol. Soc. Am. ; 1962; v. 52: p. 333-357.

535. Sutton, G. H. . Note on long-period noise in seismographs. J. Geophys. Res. ; 1962; v. 67(n. 5): p. 2082-2084.

536. Long, L. E. . Isotopic age study, Dutchess County, New York. Geol. Soc. Am. Bull. ; 1962; v. 73: p. 997-1006.

537. Schulert, A. R. Strontium-90 in Alaska. Science; 1962; v. 136: p. 146-148.

538. Donn, W. L. and M. Ewing. Atmospheric waves from nuclear explosions. J. Geophys. Res. ; 1962; v. 67(n. 5): p. 1855-1866.

539. Kulp, J.L. and A.R. Schulert. Strontium-90 in man V. Science; 1962; v. 136: p. 619-632.

540. Simon, R.B. Seismological Bulletin. Lamont Geological Observatory, Columbia University, ; 1962; 1 September - 31 December, 1961.

541. Sato, Y. and T. Usami. Basic study on the oscillation of homogeneous elastic sphere. I. Frequency of the free oscillations. Geophys. Mag.; 1962; v. 31: p. 15-24.

542. Sato, Y. and T. Usami. Basic study on the oscillation of a homogeneous elastic sphere. II. Distribution of displacement. Geophys. Mag.; 1962; v. 31: p. 25-47.

543. Sato, Y. and T. Usami. Basic study on the oscillation of a homogeneous elastic sphere. III. Boundary conditions and the generation of elastic waves. Geophys. Mag.; 1962; v. 31: p. 49-62.

544. Long, L.E. and J.L. Kulp. Isotopic age study of the metamorphic history of the Manhattan and Reading prongs. Bull. Seismol. Soc. Am.; 1962; v. 73: p. 969-995.

545. Donn, W.L. and M. Ewing. Atmospheric waves from nuclear explosions--Part II: The Soviet test of 30 October 1961. *J. Atmos. Sci.*; 1962; v. 19(n. 3): p. 264-273.
546. Ewing, J.I., J.L. Worzel, and M. Ewing. Sediments and oceanic structural history of the Gulf of Mexico. *J. Geophys. Res.*; 1962; v. 67(n. 6): p. 2509-2527.
547. Hunkins, K. Waves on the Arctic Ocean. *J. Geophys. Res.*; 1962; v. 67(n. 6): p. 2477-2489.
548. Fanale, F.P. and J.L. Kulp. The helium method and the age of the Cornwall, Pennsylvania magnetite ore. *Econ. Geol.*; 1962; v. 57: p. 735-746.
549. Ewing, M. and L. Engel. Seismic shooting at sea. *Scientific American*; 1962; v. 206(n. 5): p. 116-126.
550. Kulp, J.L. Prediction of the SR90 concentration in the world population. in: "Radioactive Fallout from Nuclear Weapons Tests," Proc. Conf. at Germantown, MD, Nov. 1961: U.S. Atomic Energy Comm., Div. Tech. Info.; 1962; (Book 2): p. 457-476.
551. Usami, L. and Y. Sato. Torsional oscillation of a homogeneous elastic spheroid. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 469-484.
552. Oliver, J. A worldwide storm of microseisms with periods of about 27 seconds. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 507-517.
553. Barnard, J.L. South Atlantic Abyssal amphipods collected by R.V. Vema. *Vema Res. Series No. 1: Columbia Univ. Press*; 1962: p. 1-78.
554. Kulp, J.L., R. Kologrivov, J. Haller, and L. Koch. Potassium-argon ages on rocks from eastern Greenland. *Nature*; 1962; v. 194: p. 953-955.
555. Ewing, M. and J. Ewing. Rate of salt-dome growth. *Am. Assoc. Pet. Geol. Bull.*; 1962; v. 46: p. 708-709.
556. Oliver, J. and B. Isacks. Seismic waves coupled to sonic booms. *Geophysics*; 1962; v. xxvii(n. 4): p. 528-530.

557. Brune, J.N. Correction of initial phase measurements for the southeast Alaska earthquake of July 10, 1958, and for certain nuclear explosions. *J. Geophys. Res.*; 1962; v. 67(n. 9): p. 3643-3644.

558. Landisman, M., S. Mueller, B. Bolt, and M. Ewing. Transient analysis of seismic core phases. *Geofis. Pura e Appl.*; 1962; v. 52: p. 41-52.

559. Muller, S. and M. Ewing. Synthesis of normally dispersed wave trains by means of linear system theory. *Lamont Geol. Observ.*; 1962: p. 1-230.

560. Menzies, R.J. Abyssal Bryozoa collected by expeditions of the Lamont Geological Observatory. 1. Bicellariellidae (Bugulidae of authors), *Kinetoskias*. *Am. Mus. Novitates*; 1963; (n. 2130): p. 1-8.

561. Bé , A.W.H. Quantitative multiple opening-and-closing plankton samplers. *Deep-Sea Res.*; 1962; v. 9: p. 144-151.

562. Kuo, J.T. and J.E. Nafe. Period equation for Rayleigh waves in a layer overlying a half space with sinusoidal interface. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 807-822.

563. Talwani, M. Gravity measurements on HMS Acheron in South Atlantic and Indian Oceans. *Geol. Soc. Am. Bull.*; 1962; v. 73: p. 1171-1181.

564. Espinosa, A.F., G.H. Sutton, and H.J. Miller, S.J. A transient technique for seismograph calibration. *Bull. Seismol. Soc. Am.*; 1962; v. 52: p. 767-779.

565. Kulp, J.L., A. Kaufman, R. Slakte Hirshman, and A.R. Schulert. Strontium-90 in the soils of the New York City area. *Ann. NY Acad. Sci.*; 1962; v. 93: p. 761-774.

566. Talwani, M. Discussion of "Exact expressions for the gravitational attraction of a circular lamina at all points of space and of a right circular vertical cylinder at points external to it," by Parasnis. *Geophys. Prospecting*; 1962; v. x: p. 177-182.

567. Heezen, B.C. and G.L. Johnson, III. A peel technique for unconsolidated sediments. *J. Sediment. Petrol.*; 1962; v. 32(n. 3): p. 609-613.

568. Kulp, J.L., K. Kologrivov, J. Haller, and L. Koch. Further isotopic age measurements on rocks from northeastern Greenland. *Nature*; 1962; v. 196: p. 160.

569. Thurber, D.L. Anomalous U234/U238 in nature. *J. Geophys. Res.*; 1962; v. 67(n. 11): p. 4518-4520.

570. Sutton, G.H. Geophysical techniques for studying the earth's interior. *Proc. Inst. Radio Eng.*; 1962; v. 50(n. 11): p. 2184-2191.

571. Ewing, J. and M. Ewing. Reflection profiling in and around the Puerto Rico trench. *J. Geophys. Res.*; 1962; v. 67(n. 12): p. 4729-4739.

572. Wampler, J.M. and J.L. Kulp. Isotopic composition and concentration of lead in some carbonate rocks. *Geol. Soc. Am. Petrol. Studies*; 1962: p. 105-114.

573. Broecker, W.S. The contribution of pressure-induced phase changes to glacial rebound. *J. Geophys. Res.*; 1962; v. 67(n. 12): p. 4837-4832.

574. Farrand, W.R. and R.T. Gajda. Isobases on the Wisconsin marine limit in Canada. *Geographical Bull. No. 17*; 1962: p. 5-22.

575. Donn, W. L. and W. T. McGuinness. An investigation of long-period ocean waves. *UGGI Tsunami Comm. 10th Sci. Congress*; 1963: p. 26-35.

576. Farrand, W.R. and R.T. Gajda. Isobases on the marine limit in North America. in: *Report of the VI International Congress on Quaternary Warsaw 1961; 1965; V. 1: Subcommittee on the American Shorelines*: p. 285-297.

577. Heezen, B.C. and M. Tharp. The Atlantic floor. in: *"North Atlantic Biota and their History"*. London: Pergamon Press; 1963: p. 21-27.

578. Sykes, L. and M. Landisman. Mantle shear wave velocities determined from oceanic Love and Rayleigh wave dispersion. *J. Geophys. Res.* ; 1962; v. 67(n. 13): p. 5257-5271.

579. Ewing, M., J. Brune, and J. Kuo. Surface-wave studies of the Pacific crust and mantle. in: *"Crust of the Pacific Basin"*: *Am. Geophys. Union*; 1962; (*Geophys. Mono. No. 6*): p. 30-40.

580. Dorman, J. and M. Ewing. Numerical inversion of seismic surface wave dispersion data and crust-mantle structure in the New York-Pennsylvania area. *J. Geophys. Res.* ; 1962; v. 67(n. 13): p. 5227-5241.

581. Haller, J. and J. L. Kulp. Absolute age determinations in East Greenland. *Medd. om Gronland*; 1962; bd. 171(nr. 1): p. 1-77.
582. Ludwig, W. J., M. Ewing, J. I. Ewing, and C. L. Drake. Discussion of a paper by C. H. Savit, D. M. Blue, and J. G. Smith: 'Exploration seismic techniques applied to oceanic crustal studies'. *J. Geophys. Res.* ; 1962; v. 67 (n. 12): p. 4946-4947.
583. Sato, Y., T. Usami, and M. Ewing. Basic study on the oscillation of a homogeneous elastic sphere. IV. Propagation of disturbances on the sphere. *Geophys. Mag.* ; 1962; v. 31: p. 237-242.
584. Ewing, M. and J. Ewing. Sediments at proposed LOCO drilling sites. *J. Geophys. Res.* ; 1963; v. 68(n. 1): p. 251-256.
585. Kulp, J. L. . Potassium-Argon dating of volcanic rocks. *Bull. Volcanol., Un. Geod. Geophys. International*; 1963; v. xxvi: p. 247-258.
586. Oliver, J. and R. Page. Concurrent storms of long and ultralong period microseisms. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 15-26.
587. Brune, J. and J. Dorman. Seismic waves and earth structure in the Canadian shield. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 167-210.
588. Pomeroy, P. W. . Long period seismic waves from large, near-surface nuclear explosions. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 109-149.
589. Ericson, D.B. Cross-correlation of deep-sea sediment cores and determination of relative rates of sedimentation by micropaleontological techniques. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 832-842.
590. Donn, W. L., R. L. Pfeffer, and M. Ewing. Propagation of air waves from nuclear explosions. *Science*; 1963; v. 139: p. 307-317.
591. Heezen, B.C. and A.S. Laughton. Abyssal plains. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 312-364.
592. Heezen, B.C. and H.W. Menard. Topography of the deep-sea floor. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 233-280.

593. Ewing, J.I. and J.E. Nafe. The unconsolidated sediments. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 73-84.

594. Ewing, J.I. Elementary theory of seismic refraction and reflection measurements. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 3-19.

595. Donn, W. L. , D. M. Shaw, and A. C. Hubbard. The microbarographic detection of nuclear explosions. Trans. Nuclear Sci.; 1963; Inst. Elect. Electron. Eng., V. NS-10(n. 1): p. 285-296.

596. Worzel, J.L. and J.C. Harrison. Gravity at sea. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 134-174.

597. Heezen, B.C. and M. Ewing. The mid-oceanic ridge . in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 388-410.

598. Nafe, J.E. and C.L. Drake. Physical properties of marine sediments. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 794-815.

599. Heezen, B.C. Turbidity currents. in: M.N. Hill, Interscience Pub. "The Sea". NY: Interscience Pub.; 1963; V. 3: p. 742-775.

600. Simon, R.B. Seismological Bulletin. Lamont Geological Observatory, Columbia University, ; 1963; 1 January - 30 June, 1962.

601. Giffin, C., A. Kaufman, and W. Broecker. Delayed coincidence counter for the assay of actinon and thoron. J. Geophys. Res. ; 1963; v. 68(n. 6): p. 1749-1757.

602. Bryan, G. M., M. Truchan, and J. I. Ewing. Long-range SOFAR studies in the south Atlantic Ocean. J. Acoust. Soc. Am. ; 1963; v. 35(n. 3): p. 273-278.

603. Ewing, M., W. J. Ludwig, and J. I. Ewing. Geophysical investigations in the submerged Argentine coastal plain. Geol. Soc. Am. Bull.; 1963; v. 74: p. 275-291.

604. Ericson, D. B., M. Ewing, and G. Wollin. Pliocene-Pleistocene boundary in deep-sea sediments. Science; 1963; v. 139: p. 727-737.

605. Oliver, J. and J. Dorman. Exploration of sub-oceanic structure by the use of seismic surface waves. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; v. 3: p. 110-133.



606. Alsop, L. E. . Free spheroidal vibrations of the earth at very long periods, Part I - Calculation of periods for several earth models. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 483-501.
607. Alsop, L. E. . Free spheroidal vibrations of the earth at very long periods. Part II - Effect of rigidity of the inner core. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 503-515.
608. Oliver, J. . Additional evidence relating to 'A worldwide storm of microseisms with periods of about 27 seconds'. *Bull. Seismol. Soc. Am.* ; 1963; v. 53: p. 681-685.
609. Antoine, J. and J. Ewing. Seismic refraction measurements on the margins of the Gulf of Mexico. *J. Geophys. Res.* ; 1963; v. 68(n. 7): p. 1975-1996.
610. Nesteroff, W. D., G. Sabatier, and B. C. Heezen. Les mineraux argileux dans les sediments du bassin occidental de la Mediterranee. *Comp. Int. Etude Sci. Mer Mediterranean*; 1963; v. xvii(n. 3): p. 1005-1007.
611. Pfeffer, R. L. and J. Zarichny. Acoustic-gravity wave propagation in an atmosphere with two sound channels. *Geofis. Pura e Appl.* ; 1963; v. 55: p. 175-199.
612. Bé , A.W.H. and D.B. Ericson. Aspects of calcification in planktonic foraminifera (Sarcodina). *Ann. NY Acad. Sci.*; 1963; v. 109: p. 65-81.
613. Hunkins, K. and H. Kutschale. Shallow-water propagation in the Arctic Ocean. *J. Acoust. Soc. Am.* ; 1963; v. 35(n. 4): p. 542-551.
614. Squires, D. F. Madreporas rizangidas, fosiles y vivientes de la Argentina. *Neotropica*; 1963; v. 9: p. 9-16.
615. Sutton, G. H. and P. W. Pomeroy. Analog analyses of seismograms recorded on magnetic tape. *J. Geophys. Res.* ; 1963; v. 58: p. 2791-2815.
616. Pimentel, G. . Bermuda-Columbia University Seismograph Station, *Seismological Bulletin*, ; 1963; 1 April 1958 - 31 March 1959.
617. Broecker, W. S. . A preliminary evaluation of uranium series inequilibrium as a tool for absolute age measurement on marine carbonates. *J. Geophys. Res.* ; 1963; v. 68: p. 2817-2834.

618. Thorndike, E.M. . A suspended-drop current meter. *Deep-Sea Res.* ; 1963; v. 10: p. 263-267.

619. Burkholder, P. R. . Drugs from the sea. *Armed Forces Chem. J.*; 1963; v. xvii(n. 1): p. 6-16.

620. Wü st, G. . On the stratification and the circulation in the cold water sphere of the Antillean-Caribbean basins. *Deep-Sea Res.* ; 1963; v. 10: p. 165-187.

621. Talwani, M. and J.R. Heirtzler. Computation of magnetic anomalies caused by two dimensional structures of arbitrary shape. in: "Computers in the Mineral Indust.": Stanford Univ.; 1964: p. 464-480.

622. Talwani, M. Upward and downward continuation of gravity fields on a plane. in: "Computers in the Mineral Indust.": Stanford Univ.; 1964: p. 409-428.

623. Miller, D. S. and J. L. Kulp. Isotopic evidence on the origin of the Colorado Plateau uranium ores. *Geol. Soc. Am. Bull.*; 1963; v. 74: p. 609-629.

624. Kulp, J. L., R. Kologrivov, J. Engels, E. J. Catanzaro, H. Neumann, and B. Nilssen. Age of the Tordal, Norway pegmatite - a correction. *Geochim. Cosmochim. Acta*; 1963; v. 27: p. 847-848.

625. Broecker, W. S. and W. R. Farrand. Radiocarbon age of the Two Creeks forest bed, Wisconsin. *Geol. Soc. Am. Bull.* ; 1963; v. 74: p. 795-802.

626. Burkholder, P. R. . Radioactivity in some aquatic plants. *Nature*; 1963; v. 198(n. 4880): p. 601-603.

627. Brune, J., A. Espinosa, and J. Oliver. Relative excitation of surface waves by earthquakes and underground explosions in the California-Nevada region. *J. Geophys. Res.* ; 1963; v. 68: p. 3501-3513.

628. Ewing, J. I. Oceanic crustal studies. *Trans. Amer. Geophys. Union*; 1963; v. 44(n. 2): p. 341-342.

629. Worzel, J. L. Gravity at sea. *Trans. Amer. Geophys. Union*; 1963; v. 44(n. 2): p. 356-358.

630. Sutton, G. H. . Seismological instrumentation. *Trans. Amer. Geophys. Union*; 1963; v. 44(n. 2): p. 331-332.
631. Ewing, M. . Submarine geophysics. *Trans. Amer. Geophys. Union*; 1963; v. 22(n. 2): p. 351-354.
632. Ewing, M. Sediments of ocean basins. in: "Man, Science, Learning, and Education": William Marsh Rice University; 1963: p. 41-59.
633. Richards, H. G. and J. R. Craig. Pleistocene sedimentation and fauna of the Argentine shelf. II. Pleistocene mollusks from the continental shelf off Argentina. *Acad. Nat. Sci. Phila.*; 1963; v. 115(n. 6): p. 113-152.
634. Pimentel, G. Bermuda-Columbia University Seismograph Station, *Seismological Bulletin*; 1963; 1 April 1959 - 31 March 1960.
635. Sato, Y. and T. Usami. Method of determining the degree of free oscillation of a radially heterogeneous elastic sphere. *Bull. Earthq. Res. Inst.*; 1963; v. 41: p. 331-342.
636. Herman, Y. Cretaceous, Paleocene, and Pleistocene sediments from the Indian Ocean. *Science*; 1963; v. 140(n. 3573): p. 1316-1317.
637. Sutton, G. H., N. S. Neidell, and R. L. Kovach. Theoretical tides on a rigid, spherical moon. *J. Geophys. Res.* ; 1963; v. 68(n. 14): p. 4261-4267.
638. Prentiss, D. D. and J. I. Ewing. The seismic motion of the deep ocean floor. *Bull. Seismol. Soc. Am.*; 1963; v. 53(n. 4): p. 765-781.
639. Oliver, J. . Long period waves and the Lg phase. *Ann. International Geophys. Year*; 1965; v. xxx(*Seismology*): p. 261-280.
640. Rocco, G. G. and W. S. Broecker. The vertical distribution of cesium 137 and strontium 90 in the oceans. *J. Geophys. Res.* ; 1963; v. 68(n. 15): p. 4501-4512.
641. Sato, Y., T. Usami, M. Landisman, and M. Ewing. Basic study on the oscillation of a sphere. Part V: Propagation of torsional disturbances on a radially heterogeneous sphere. Case of a homogeneous mantle with a liquid core. *Geophys. J. R. astr. Soc.*; 1963; v. 8(n. 1): p. 44-63.

642. Sato, Y., T. Usami, and M. Landisman. Spectrum, phase and group velocities of the theoretical seismograms and the idea of the equivalent surface source of disturbance. *Geophys. J. R. astr. Soc.*; 1963; v. 8(n. 1): p. 1-11.

643. Hurley, P. M., B. C. Heezen, W. H. Pinson, and H. W. Fairbairn. K-Ar age values in pelagic sediments of the North Atlantic. *Geochim. Cosmochim. Acta*; 1963; v. 27: p. 393-399.

644. Brune, J. N. and P. W. Pomeroy. Surface wave radiation patterns for underground nuclear explosions and small-magnitude earthquakes. *J. Geophys. Res.* ; 1963; v. 68(n. 17): p. 5005-5028.

645. Groot, J. J. . Palynological investigation of a core from the Biscay abyssal plain. *Science*; 1963; v. 141(n. 3580): p. 522-523.

646. Houtz, R. E. and J. I. Ewing. Detailed sedimentary velocities from seismic refraction profiles in the western North Atlantic. *J. Geophys. Res.* ; 1963; v. 68(n. 18): p. 5233-5258.

647. Hamlin, W. H. Some new Eocene foraminifera from the State of Washington. *Cushman Fdtn. Foraminiferal Res.*; 1963; v. xiv(part 4): p. 153-156.

648. Drake, C. L., J. Heirtzler, and J. Hirshman. Magnetic anomalies off eastern North America. *J. Geophys. Res.* ; 1963; v. 68(n. 18): p. 5259-5275.

649. Kulp, J.L. and J. Engels. Discordances in K-Ar and Rb-Sr isotopic ages. in: "Radioactive Dating". International Atomic Energy Agency: Vienna; 1963; ( ): p. 219-238.

650. Thurber, D.L. Natural variations in the ratio of U234 to U238. in: "Radioactive Dating". Vienna: International Atomic Energy Agency; 1963: p. 113-120.

651. Hamlin, W.H. and A.W.H. Bé . A plankton picker. *Deep-Sea Res.* ; 1963; v. 10: p. 459-461.

652. Richards, H. G. and W. Broecker. Emerged Holocene South American shorelines. *Science*; 1963; v. 141(n. 3585): p. 1044-1045.

653. Groot, J. J. and M. Ewing. Suspended clay in a water sample from the deep ocean. *Science*; 1963; v. 142(n. 3592): p. 579-580.

654. Sato, Y. and T. Usami. Phase angle of waves propagating on a spherical surface with special reference to the polar phase shift and the initial phase. *Bull. Earthq. Res. Inst.*; 1963; v. 41: p. 459-466.
655. Hirshberg, J. . Motions of the magnetospheric boundary and surface magnetic activity during the flight of Explorer 10. *J. Geophys. Res.* ; 1963; v. 68(n. 21): p. 5917-5924.
656. Nesteroff, W. D., B. C. Heezen, and G. Sabatier. Repartition des mineraux argileux dans les sediments profonds de l'ocean Indien. *C. R. Acad. Sci. Paris*; 1963; v. 257: p. 941-943.
657. Sykes, L. R. . Seismicity of the South Pacific Ocean. *J. Geophys. Res.* ; 1963; v. 68(n. 21): p. 5999-6006.
658. Hirshberg, J. Note on ring currents in the absence of sudden commencement storms. *J. Geophys. Res.*; 1963; v. 68(n. 22): p. 6201-6202.
659. Kuo, J. T. and G. A. Thompson. Model studies on the effect of a sloping interface on Rayleigh waves. *J. Geophys. Res.* ; 1963; v. 68(n. 22): p. 6187-6197.
660. Ewing, J., X. LePichon, and M. Ewing. Upper stratification of Hudson apron region. *J. Geophys. Res.*; 1963; v. 68(n. 23): p. 6303-6316.
661. Patterson, B. and G.R. Hamilton. Repetitive 20 cycle per second biological hydroacoustic signals at Bermuda. *Marine Bio-Acoustics. Bahamas: Proc. Symp. Bimini*; 1964: p. 125-145.
662. Catanzaro, E. J. and J. L. Kulp. Discordant zircons from the Little Belt (Montana), Beartooth (Montana) and Santa Catalina (Arizona) Mountains. *Geochim. Cosmochim. Acta*; 1964; v. 28: p. 87-124.
663. Donn, W. L. and D. M. Shaw. Sea level and climate of the past century. *Science*; 1963; v. 142(n. 3596): p. 1166-1167.
664. Heezen, B. C., E. T. Bunce, J. B. Hersey, and M. Tharp. Chain and Romanche fracture zones. *Deep-Sea Res.* ; 1964; v. 11: p. 11-33.
665. Simon, R.B. Lamont Geological Ovservatory, Columbia University. in: "Seismological Bulletin"; 1963; (1 June 1962 - 31 December 1962).

666. Drake, C. L. and H. P. Woodward. Appalachian curvature wrench faulting, and offshore structures. *Trans. NY Acad. Sci.*; 1963; v. 26(n. 1): p. 48-63.

667. Drake, C. L., N. J. Campbell, G. Sander, and J. E. Nafe. A Mid-Labrador sea ridge. *Nature*; 1963; v. 200(n. 4911): p. 1085-1086.

668. Lewis, S. M. and W. A. Corpe. Prodigiosin-producing bacteria from marine sources. *Appl. Microbiol.*; 1964; v. 12(n. 1): p. 13-17.

669. Oliver, J. Propagation of PL waves across the United States. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 1): p. 151-160.

670. I. Lehmann. *Seismological Tables. "International Dictionary of Geophysics"*. Oxford: Pergamon Press; 1967: p. 1-3.

671. Nesteroff, W. D., G. Sabatier, and B. C. Heezen. Les minéraux argileux, le quartz et le calcaire dans quelques sédiments de l'océan Arctique. *C. R. Acad. Sci. Paris*; 1964; v. 258: p. 991-993.

672. Heezen, B. C. and C. Hollister. Turbidity currents and glaciation. in : *Problems in Paleoclimatology*. New York: Interscience Pub.; 1964: p. 99-112.

673. Heezen, B. C. and C. L. Drake. Gravity tectonics, turbidity currents and geosynclinal accumulations in the continental margin of eastern North America. *Univ. Tasmania Symp.*; 1964: p. D1-10.

674. Lehmann, I. On the travel times of P as determined by nuclear explosions. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 1): p. 123-139.

675. Thanos, S. N. A low-noise transistorized seismic amplifier. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 1): p. 347-368.

676. Major, M. W., G. H. Sutton, J. Oliver, and R. Metsger. On elastic strain of the earth in the period range 5 seconds to 100 hours. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 1): p. 295-346.

677. Ewing, M. Marine geology. in: *"Ocean Sciences"*: U.S. Naval Inst.; 1964: p. 157-171.

678. Heezen, B. C. and J. E. Nafe. Vema trench: western Indian Ocean. *Deep-Sea Res.* ; 1964; v. 11: p. 79-84.

679. Wüst, G. The major deep-sea expeditions and research vessels 1873-1960. in: "Progress in Oceanography"; 1964; v. 2: p. 1-52.

680. Hayes, D. E., J. L. Worzel, and H. Karnick. Tests on the 1962 model of the Anschutz gyrotable. *J. Geophys. Res.*; 1964; v. 69(n. 4): p. 749-757.

681. Ewing, M., J. I. Ewing, and M. Talwani. Sediment distribution in the oceans: the Mid-Atlantic Ridge. *Geol. Soc. Am. Bull.* ; 1964; v. 75: p. 17-35.

682. Heezen, B. C., R. D. Gerard, and M. Tharp. The Vema fracture zone in the equatorial Atlantic. *J. Geophys. Res.* ; 1964; v. 69(n. 4): p. 733-739.

683. Metcalf, W. G., B. C. Heezen, and M. C. Stalcup. The sill depth of the Mid-Atlantic Ridge in the equatorial region. *Deep-Sea Res.* ; 1964; v. 11: p. 1-10.

684. Heezen, B. C. and C. L. Drake. Grand Banks slump. *Am. Assoc. Pet. Geol. Bull.*; 1964; v. 48(n. 2): p. 221-225.

685. Acad. Nat. Sci. Phila. Radiocarbon dating: a case against the proposed link between river mollusks and soil humus. *Science*; 1964; v. 143(n. 3606): p. 596-597.

686. Groot, C. R. and J. J. Groot. The pollen flora of quaternary sediments beneath the Nantucket shoals. *Am. J. Sci.*; 1964; v. 262: p. 488-493.

687. Barnard, J.L. Deep-sea Amphipoda (crustacea) collected by the R/V Vema in the eastern Pacific Ocean and the Caribbean and Mediterranean Seas. *Am. Mus. Nat. Hist.: Am. Mus. Nat. Hist.*; 1964; v. 127 (art. 1): p. 3-46.

688. Ewing, J.L. The mantle rocks. in: M.N. Hill, Ed. "The Sea". NY: Interscience Pub.; 1963; v. 3: p. 103-109.

689. Talwani, M. and G. H. Sutton. Comment on 'Seismic delays in the eastern Caribbean' by K. G. Barr and G. R. Robinson. *Geophys. J. R. astr. Soc.* ; 1964; v. 8(n. 4): p. 463-466.

690. Ewing, M. and J. Ewing. Distribution of oceanic sediments. in: "Studies on Oceanography". Japan: Geophys. Inst. Univ. Tokyo; 1964: p. 525-537.

691. Chen, C. and A.W H. Bé . Seasonal distributions of euthecosomatous pteropods in the surface waters of five stations in the western North Atlantic. *Bull. Mar. Sci. Gulf Carrib.*; 1964; v. 14(n. 2): p. 185-220.

692. Alsop, L. E. Spheroidal free periods of the earth observed at eight stations around the world. *Bull. Seismol. Soc. Am.*; 1964; v. 54(n. 2): p. 755-776.

693. Hunkins, K. Submarine structure of the Arctic Ocean from earthquake surface waves. *Proc. Arctic Basin Symp.*, October 1962; 1963; *Arctic Inst. No. Am.*: p. 3-8.

694. Hunkins, K. Arctic submarine acoustics. *Proc. Arctic Basin Symp.*, October 1962; 1963; *Arctic Inst. No. Am.*: p. 197-205.

695. Ichiye, T. An essay on the equatorial current system. in: "Studies on Oceanography". Japan: Geophys. Inst., Univ. Tokyo; 1964: p. 38-46.

696. Sato, Y. Soft core spectrum splitting of the torsional oscillation of an elastic sphere and related problems. *Bull. Earthq. Res. Inst.*; 1964; v. 42: p. 1-10.

697. Gerard, R. D. Taut-line navigation buoys used in the Thresher search. *Trans. 1964 Symp. Supp. Buoy Tech., Mar. Tech. Soc.*; 1964: p. 57-64.

698. Chen, C. Pteropod ooze from Bermuda pedestal. *Science*; 1964; v. 144(n. 3614): p. 60-62.

699. Ewing, M., W. J. Ludwig, and J. I. Ewing. Sediment distribution in the oceans: the Argentine Basin. *J. Geophys. Res.* ; 1964; v. 69(n. 1): p. 2003-2032.

700. Heezen, B. C. and C. Hollister. Deep-sea current evidence from abyssal sediments. *Mar. Geol.* ; 1964; v. 1: p. 141-174.

701. Donn, W.L., J.G. Pattullo, and D.M. Shaw. Sea-level fluctuations and long waves. in: "Research in Geophysics"; 1964; v. 2: p. 243-269.

702. Drake, C. L. and R. W. Girdler. A geophysical study of the Red Sea. *Geophys. J. R. astr. Soc.* ; 1964; v. 8 (n. 5): p. 473-495.

703. Landisman, M., Y Satô, and J. Nafe. Free vibrations of the earth and the properties of its deepest interior regions, Part I: Density; *Geophys. J. R. astr. Soc.*; 1965; v. 9 (n. 5), 439-502.



704. Houtz, R. E. and J. I. Ewing. Sedimentary velocities of the western North Atlantic margin. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 3): p. 867-895.
705. Shaw, D. M. and W. L. Donn. Sea level variations at Iceland and Bermuda. *J. Mar. Res.* ; 1964; v. 22(n. 2): p. 111-122.
706. Balachandran, N. K. and W. L. Donn. Short- and long-period gravity waves over northeastern United States. *Mon. Weather Rev.* ; 1964; v. 92(n. 9): p. 423-426.
707. Heezen, B. C. and G. L. Johnson. A moated knoll in the Canary Passage. *Sonderdruck Deutch. Hydro. Zeits.*; 1963; v. 16(n. 6): p. 269-272.
708. Takahashi, T. Transmission of Love waves in a half-space with a surface layer whose thickness varies hyperbolically. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 2): p. 611-625.
709. Simon, R.B. Lamont Geological Observatory, Columbia University, *Seismological Bulletin*, 1 January 1963-30 June 1963.
710. Ewing, M. Comments on theory of glaciation; in *Problems in Paleoclimatology*". New York: Interscience Pub.; 1965; p. 348-354.
711. Von Herzen, R.P. and M.G. Langseth. Present status of oceanic heatflow measurements. in: *"Physics and Chemistry of the Earth"*. Oxford: Pergamon Press; 1966; V. 6: p. 365-407.
712. Sackett, W. M. Measured deposition rates of marine sediments and implications for accumulation rates of extraterrestrial dust. *Ann. NY Acad. Sci.*; 1964; v. 119(art. 1): p. 339-346.
713. Ericson, D. B., M. Ewing, and G. Wollin. Sediment cores from the Arctic and subarctic seas. *Science*; 1964; v. 144(n. 3623): p. 1183-1192.
714. Cassidy, W. A. Nondestructive neutron-activation analysis of small particles. *Ann. NY Acad. Sci.*; 1964; v. 119: p. 318-338.
715. Pfeffer, R. L. . The global atmospheric circulation. *Trans. NY Acad. Sci.*; 1964; v. 26(n. 8, ser. II): p. 984-997.
716. Ninkovich, D., B. C. Heezen, J. R. Conolly, and L. H. Burckle. South Sandwich tephra in deep-sea sediments. *Deep-Sea Res.* ; 1964; v. 11: p. 605-619.

717. Heezen, B. C., R. J. Menzies, E. D. Schneider, W. M. Ewing, and N. C. L. Granelli. Congo submarine canyon. *Am. Assoc. Pet. Geol. Bull.*; 1964; v. 48(n. 7): p. 1126-1149.
718. Saito, T. and A.W.H. Bé . Planktonic foraminifera from the American Oligocene. *Science*; 1964; v. 145(n. 3633): p. 702-705.
719. Groot, J. J. and C. R. Groot. Quaternary stratigraphy of sediments of the Argentine Basin - a palynological investigation. *Trans. NY Acad. Sci*; 1964; v. 26(n. 7, ser II): p. 881-886.
720. Duplaix, S., W. D. Nesteroff, and B. C. Heezen. Mineralogie comparee des sediments du Tage (Portugal) et de quelques sables profonds de la plaine abyssale correspondante. *Deep-Sea Res.*; 1965; v. 12: p. 211-217.
721. Usami, T. and Y. Sato. Propagation of spheroidal disturbances on a homogeneous elastic sphere. *Bull. Earthq. Res. Inst.*; 1964; v. 42: p. 273-287.
722. Lehmann, I. On the velocity of P in the upper mantle. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 4): p. 1097-1103.
723. Wampler, J. M. and J. L. Kulp. An isotopic study of lead in sedimentary pyrite. *Geochim. Cosmochim. Acta*; 1964; v. 28: p. 1419-1458.
724. Gold, K. . A microbiological assay for vitamin B12 in seawater using radiocarbon. *Limnol. Oceanogr.*; 1964; v. 9(n. 3): p. 343-347.
725. Pratt, R. M. and B. C. Heezen. Topography of the Blake Plateau. *Deep-Sea Res.* ; 1964; v. 11: p. 721-728.
726. Donn, W. L. . Alaskan earthquake of 27 March 1964: remote seiche stimulation. *Science*; 1964; v. 145(n. 3629): p. 261-262.
727. Bé , A.W.H. and L. Lott. Shell growth and structure of planktonic foraminifera. *Science*; 1964; v. 145(n. 3634): p. 823-824.
728. Takeuchi, H., J. Dorman, and M. Saito. Partial derivatives of surface wave phase velocity with respect to physical parameter changes within the earth. *J. Geophys. Res.* ; 1964; v. 69 (n. 16): p. 3429-3441.

729. Alsop, L. E. and J. T. Kuo. The characteristic numbers of semi-diurnal earth tidal components for various earth models. *Ann. de Geophysique*; 1964; v. 20 (n. 3): p. 286-300.
730. Conolly, J. R. Trough cross-stratification in the Hawkesbury sandstone. *Aust. J. Sci.*; 1964; v. 27 (n. 4): p. 113-114.
731. Richards, H. G. and E. Werner. Invertebrate fossils from cores from the continental shelf off New Jersey. *Notulae Naturae*; 1964; (n. 372): p. 1-7.
732. Sutton, G. H. and G. V. Latham. Analysis of a feedback-controlled seismometer. *J. Geophys. Res.* ; 1964; v. 69 (n. 18): p. 3865-3882.
733. Vajk, R. . Correction of gravity anomalies at sea for submarine topography. *J. Geophys. Res.* ; 1964; v. 69 (n. 18): p. 3837-3844.
734. Drake, C. L. World rift system. *Trans. AGU*; 1964; v. 45 (n. 3): p. 435-440.
735. Alsop, L. E. . Excitation of free oscillations of the earth by the Kurile Islands earthquake of 13 October 1963. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 5, part A): p. 1341-1348.
736. Hubert, J. F. Textural evidence for deposition of many western North Atlantic deep-sea sands by ocean-bottom currents rather than turbidity currents. *J. Geol.* ; 1964; v. 72(n. 6): p. 757-785.
737. Heezen, B. C. . Discussion of 'A note on some possible misinformation from cores obtained by piston-coring devices'. *J. Sediment Petrol.* ; 1964; v. 34(n. 3): p. 699.
738. Sykes, L. R. and J. Oliver. The propagation of short-period seismic surface waves across oceanic areas. Part I - Theoretical study. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 5, part A): p. 1349-1372.
739. Jeffreys, H. . Note on Fourier analysis. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 5, part A): p. 1441-1444.
740. Sykes, L. R. and J. Oliver. The propagation of short-period seismic surface waves across oceanic areas. Part II - Analysis of seismograms. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 5, part A): p. 1373-1415.

741. Heirtzler, J.R. A summary of the observed characteristics of geomagnetic micropulsations. in: D.F. Bleil, Ed. "Natural Electromagnetic Phenomena Below 30 kc/s". NY: Plenum Press; 1964: p. 351-372.
742. Bunt, J. S. . Analysis of algal pigments by thin-layer chromatography. *Nature*; 1964; v. 203(n. 4949): p. 1261-1263.
743. Piip, A. T. . Fine structure and stability of the sound channel in the ocean. *J. Acoust. Soc. Am.* ; 1964; v. 36(n. 10): p. 1948-1953.
744. Alsop, L. E. and J. T. Kuo. Semidiurnal earth tidal components for various earth models. Comm. No. 236, Royal Observ. Belgium; 1964; *Geophys. Series No. 69*(Fifth Internat. Symp. on Earth Tides): p. 93-107.
745. Langseth, M. G. and P. J. Grim. New heat-flow measurements in the Caribbean and western Atlantic. *J. Geophys. Res.* ; 1964; v. 69(n. 22): p. 4916-4917.
746. Ewing, J. and R. Zaubere. Seismic profiling with a pneumatic sound source. *J. Geophys. Res.*; 1964; v. 69(n. 22): p. 4913-4915.
747. Thompson, G. A. and M. Talwani. Crustal structure from Pacific Basin to central Nevada. *J. Geophys. Res.* ; 1964; v. 69(n. 22): p. 4813-4837.
748. Krinsley, D. and A.W.H. Bé . Electron microscopy of internal structures of foraminifera. in: B. Kummel and D. Raup, Eds. "Handbook of Paleontological Techniques": W.H. Freeman & Co.; 1965: p. 335-343.
749. Davidson, M. J. . Average diurnal characteristics of geomagnetic power spectrums in the period range 4.5 to 1000 seconds. *J. Geophys. Res.* ; 1964; v. 69(n. 23): p. 5116-5119.
750. Kuo, J. T., K. Hunkins, and M. Ewing. Observations of tidal variations of gravity at Palisades, New York. Comm. No. 126, Royal Observ. Belgium; 1964; *Series No. 69*, Fifth Internat. Sympos. Earth Tides: p. 131-140.
751. Ericson, D. B., M. Ewing, and G. Wollin. The Pleistocene epoch in deep-sea sediments. *Science*; 1964; v. 145(n. 3645): p. 723-732.
752. Shaver, R. and K. Hunkins. Arctic Ocean geophysical studies: Chukchi Cap and Chukchi Abyssal Plain. *Deep-Sea Res.* ; 1964; v. 11: p. 905-916.

753. Talwani, M. . A review of marine geophysics. *Mar. Geol.* ; 1964; v. 2: p. 29-80.
754. Hollister, C. D. and B. C. Heezen. Modern graywacke-type sands. *Science*; 1964; v. 146(n. 3651): p. 1573-1574.
755. Donn, W. L. and E. S. Posmentier. Ground-coupled air waves from the great Alaskan earthquake. *J. Geophys. Res.* ; 1964; v. 69(n. 24): p. 5357-5361.
756. Heirtzler, J. R. Magnetic measurements near the deep ocean floor. *Deep-Sea Res.*; 1964; v. 11: p. 891-898.
757. Pomeroy, P. W. Seismology in the USSR. *Trans. AGU*; 1964; v. 45(n. 4): p. 653-658.
758. Isacks, B. and J. Oliver. Seismic waves with frequencies from 1 to 100 cycles per second recorded in a deep mine in northern New Jersey. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 6): p. 1941-1979.
759. Sykes, L. R. and M. Landisman. The seismicity of East Africa, the Gulf of Aden and the Arabian and Red Seas. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 6): p. 1927-1940.
760. Sykes, L. R. . Deep-focus earthquakes in the New Hebrides region. *J. Geophys. Res.*; 1964; v. 69(n. 24): p. 5353-5355.
761. Lehmann, I. The Hindu Kush earthquake of March 4, 1949 as recorded in Europe. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 6): p. 1915-1925.
762. Moore, W. S. and W. M. Sackett. Uranium and thorium series inequilibrium in sea water. *J. Geophys. Res.*; 1964; v. 69(n. 24): p. 5401-5405.
763. Brune, J. N. Travel times, body waves, and normal modes of the earth. *Bull. Seismol. Soc. Am.* ; 1964; v. 54(n. 6): p. 2099-2128.
764. Olesen, P. E., A. Marezki, and L. A. Almodovar. An investigation of antimicrobial substances from marine algae. *Bot. Marina*; 1964; v. vi(n. 3/4): p. 224-232.
765. Sackett, W. M. . The depositional history and isotopic organic carbon composition of marine sediments. *Mar. Geol.*; 1965; v. 2: p. 173-185.

766. Conolly, J. R. The occurrence of polycrystallinity and undulatory extinction in quartz in sandstones. *J. Sediment. Petrol.* ; 1965; v. 35(n. 1): p. 226-135.
767. Thompson, G. A. and M. Talwani. Geology of the crust and mantle, western United States. *Science*; 1964; v. 146(n. 3651): p. 1539-1549.
768. Donn, W. L. and M. Ewing. Pollen from Alaska and the origin of ice ages. *Science*; 1965; v. 147(n. 3658): p. 632.
769. Burkholder, P.R. A study of the lichens of Tierra del Fuego with special reference to their antibiotic activity. *Centro de Investig. de Biología Marina*; 1965; (n. 21): p. 1-26.
770. LePichon, X., R. E. Houtz, C. L. Drake, and J. E. Nafe. Crustal structure of the mid-ocean ridges. 1. Seismic refraction measurements. *J. Geophys. Res.* ; 1965; v. 70(n. 2): p. 319-339.
771. Talwani, M., X. LePichon, and M. Ewing. Crustal structure of the mid-ocean ridges. 2. Computed model from gravity and seismic refraction data. *J. Geophys. Res.* ; 1965; v. 70(n. 2): p. 341-352.
772. Langseth, M. G., P. J. Grim, and M. Ewing. Heat-flow measurements in the east Pacific Ocean. *J. Geophys. Res.* ; 1965; v. 70(n. 2): p. 367-380.
773. Hunkins, K. and J. T. Kuo. Surface wave dispersion in the Tonga-Fiji region. *Bull. Seismol. Soc. Am.* ; 1965; v. 55(n. 1): p. 135-145.
774. Takeuchi, H. and L. E. Alsop. Comparison of theoretical and observational expressions for elastic strains of the earth. *Bull. Seismol. Soc. Am.* ; 1965; v. 55(n. 1): p. 153-163.
775. Hunkins, K. L. . Tide and storm surge observations in the Chukchi Sea. *Limnol. Oceanogr.*; 1965; v. 10(n. 1): p. 29-39.
776. Heezen, B. C. and G. L. Johnson. The South Sandwich trench. *Deep-Sea Res.*; 1965; v. 12: p. 185-197.
777. McGarr, A. Excitation of seiches in channels by seismic waves. *J. Geophys. Res.* ; 1965; v. 70(n. 4): p. 847-854.

778. Heezen, B. C. and M. Tharp. Descriptive sheet to accompany physiographic diagram of the Indian Ocean. Geol. Soc. Am. Bull.; 1965: one sheet.

779. Donn, W.L. Microseisms; Earth-Science Reviews; 1966; v. 1: 213-230.

780. Bé , A.W.H. The influence of depth on shell growth in *Globigerinoides sacculifer* (Brady). Micropaleontology; 1965; v. 11(n. 1): p. 81-97.

781. Ewing, M. and J. Ewing. The sediments of the Argentine Basin. Acad. Bras. Ciencias.; 1965; v. 37: p. 31-61.

782. LePichon, X. and M. Talwani. Gravity survey of a seamount near 35° N 46° W in the North Atlantic. Mar. Geol. ; 1964; v. 2: p. 262-277.

783. Anderson, O. L. . Conditions for a density minimum in the upper mantle. J. Geophys. Res. ; 1965; v. 70(n. 6): p. 1457-1461.

784. Anderson, O. L. Lattice dynamics in geophysics. Trans. N. Y. Acad. Sci.; 1965; v. 27(n. 3): p. 298-308.

785. Anderson, O. L. and E. Schreiber. The relation between refractive index and density of minerals related to the earth's mantle. J. Geophys. Res.; 1965; v. 70(n. 6): p. 1463-1471.

786. Donn, W. L., B. D. Donn, and W. G. Valentine. On the early history of the earth. Geol. Soc. Am. Bull.; 1965; v. 76: p. 287-306.

787. Ewing, M. and E. M. Thorndike. Suspended matter in deep ocean water. Science; 1965; v. 147(n. 3663): p. 1291-1294.

788. Heezen, B.C. and M. Tharp. Tectonic fabric of the Atlantic and Indian oceans and continental drift. Philosoph. Trans. Royal Soc. Sympos. Continental Drift; 1965; v. 258: p. 90-106.

789. Ludwig, W. J., J. I. Ewing, and M. Ewing. Seismic-refraction measurements in the Magellan Straits. J. Geophys. Res.; 1965; v. 70(n. 8): p. 1855-1876.

790. Sykes, L. R. The seismicity of the Arctic. Bull. Seismol. Soc. Am. ; 1965; v. 55(n. 2): p. 501-518.

791. Buchbinder, G. G. R. . PcP from the nuclear explosion BILBY September 13, 1963. Bull. Seismol. Soc. Am. ; 1965; v. 55(n. 2): p. 441-461.
792. Broecker, W.S. Isotope geochemistry and the Pleistocene climatic record. in: "The Quaternary of the U.S.: Princeton Univ. Press; 1965: p. 737-753.
793. Sackett, W.M., W.R. Eckelmann, M.L. Bender, and A.W.H. Bé . Temperature dependence of carbon isotope composition in marine plankton and sediments. Science; 1965; v. 148(n. 3667): p. 235-237.
794. Aron, W., E. H. Ahlstrom, B. Mck. Bary, A. W. H. Bé , and W. D. Clarke. Towing characteristics of plankton sampling gear. Limnol. Oceanogr.; 1965; v. 10(n. 3): p. 333-340.
795. Nakagawa, I. On the M1-component obtained by gravimetric tidal observation (screening of gravitation forces). Geophys. Inst. Kyoto Univ.; 1964; (n. 4): p. 9-17.
796. Worzel, J. L. Discussion. Phil. Trans. R. Soc. Symp. Continental Drift; 1965; v. 258( ): p. 137-139.
797. Broecker, W. S. and A. Kaufman. Radiocarbon chronology of Lake Lahontan and Lake Bonneville II, Great Basin. Geol. Soc. Am. Bull. ; 1965; v. 76: p. 537-566.
798. Gerard, R. and M. Salkind. A note on the depth stability of deep parachute drogues. Deep-Sea Res. ; 1965; v. 12: p. 377-379.
799. Sackett, W. M. . Deposition rates by the protactinium method. Symp. Mar. Geochem.; 1965; Pub. No. 3: p. 29-40.
800. Anderson, O. L. Lattice dynamics of glass. Proc. Internat. Conf. Phys. Non-Crystalline Solids; 1965: p. 179-188.
801. Chen, C. Acta Geologic Sinica. Geophysics; 1965; v. xxx(n. 1): p. 141-142.
802. Simon, R.B. Lamont Geological Observatory, Columbia University, Seismological Bulletin, 1 July 1963--31 December 1963; 1965.
803. Broecker, W. S. and D. L. Thurber. Uranium-series dating of corals and oolites from Bahaman and Florida Key limestones. Science; 1965; v. 149(n. 3679): p. 58-60.



804. Stearns, C. E. and D. L. Thurber. Th-230 and U-234 dates of Late Pleistocene marine fossils from the Mediterranean and Moroccan littorals. *Quaternaria*; 1965; v. vii: p. 29-42.
805. Thurber, D. L., W. S. Broecker, R. L. Blanchard, and H. A. Potratz. Uranium-series ages of Pacific atoll coral. *Science*; 1965; v. 149(n. 3679): p. 55-58.
806. Langseth, M. G. Techniques of measuring heat flow through the ocean floor. *AGU Geophys. Mono. No. 8*; 1965: p. 58-77.
807. Worzel, J.L. Pendulum gravity measurements at sea, 1936-1959. NY: Interscience Publ.; 1965: 422 pgs.
808. Conolly, J. R. Petrology and origin of the Hervey group, Upper Devonian, central New South Wales. *J. Geol. Soc. Aust.*; 1965; v. 12(pt. 1): p. 123-166.
809. Ku, T. An evaluation of the U234/U238 method as a tool for dating pelagic sediments. *J. Geophys. Res.* ; 1965; v. 70(n. 14): p. 3457-3474.
810. Ewing, M. The sediments of the Argentine basin. *Geophys. J. R. astr. Soc.*; 1965; v. 6: p. 10-27.
811. Soga, N. and O. L. Anderson. Comparison of elastic moduli between the glassy and crystalline state. VII Internat. Congr. Glass Proc.; 1966; V. 1(Sci. & Technol. Art. 37): p. 1-9.
812. Jacobs, M. B. and M. Ewing. Mineralogy of particulate matter suspended in sea water. *Science*; 1965; v. 149(n. 3680): p. 179-180.
813. Hays, J.D. Radiolaria and late tertiary and quaternary history of Antarctic seas. in: "Biology of the Antarctic Seas II": Am. Geophys. Union; 1965: p. 125-184.
814. Dorman, J., J. Ewing, and L. E. Alsop. Oscillations of the earth: new core-mantle boundary model based on low-order free vibrations. *Proc. Nat. Acad. Sci.*; 1965; v. 54(n. 2): p. 364-368.
815. Heirtzler, J. R. and X. LePichon. Crustal structure of the mid-ocean ridges. 3. Magnetic anomalies over the mid-Atlantic ridge. *J. Geophys. Res.* ; 1965; v. 70(n. 16): p. 4013-4033.
816. Donn, W. L. Atmospheric waves from explosions. in: "International Dictionary of Geophysics". Oxford: Pergamon Press; 1965: p. 1-8.

817. Hawkins, L. V., J. F. Hennion, J. E. Nafe, and H. A. Doyle. Marine seismic refraction studies on the continental margin to the south of Australia. *Deep-Sea Res.* ; 1965; v. 12: p. 479-495.

818. Burkholder, P. R. and E. F. Mandelli. Carbon assimilation of marine phytoplankton in Antarctica. *Proc. Nat. Acad. Sci.*; 1965; v. 54(n. 2): p. 437-444.

819. Ninkovich, D. and B. C. Heezen. Santorini tephra. *Proc. 17th Symp. Colston Res. Soc.* ; 1965; v. xvii: p. 413-453.

820. Worzel, J. L. . Deep structure of coastal margins and mid-oceanic ridges. *Proc. 17th Symp. Colston Res. Soc.*; 1965; v. xvii: p. 335-361.

821. Gold, K. . A note on the distribution of luminescent dinoflagellates and water constituents in Phosphorescent Bay, Puerto Rico. *Ocean Sci. Ocean Eng.*; 1965: p. 77-80.

822. Kaufman, A. and W. Broecker. Comparison of Th<sup>230</sup> and C<sup>14</sup> ages for carbonate materials from Lakes Lahontan and Bonneville. *J. Geophys. Res.*; 1965; v. 70(n. 16): p. 4039-4054.

823. Burkholder, P. R., A. Repak, and J. Sibert. Studies on some Long Island littoral communities of microorganisms and their primary productivity. *Bull. Torrey Bot. Club*; 1965; v. 92(n. 5): p. 378-402.

824. Lehmann, I. Core-mantle boundary. in: "International Dictionary of Geophysics". Oxford: Pergamon Press; 1965: p. 1-2.

825. Heirtzler, J. R. Marine geomagnetic anomalies. *J. Geomagn. Geoelectr.*; 1965; v. 17(n. 3-4): p. 227-236.

826. Anderson, O. L. and J. E. Nafe. The bulk modulus-volume relationship for oxide compounds and related geophysical problems. *J. Geophys. Res.* ; 1965; v. 70(n. 16): p. 3951-3963.

827. Herron, T. J. . Phase modulation of geomagnetic micropulsations. *Nature*; 1965; v. 207(n. 4998): p. 699-700.

828. Ewing, M., W. J. Ludwig, and J. Ewing. Oceanic structural history of the Bering Sea. *J. Geophys. Res.* ; 1965; v. 70(n. 18): p. 4593-4600.

829. Ludwig, W. J., B. Gunturi, and M. Ewing. Sub-bottom reflection measurements in the Tyrrhenian and Ionian Seas. *J. Geophys. Res.* ; 1965; v. 70(n. 18): p. 4719-4723.

830. Talwani, M. . Computation with the help of a digital computer of magnetic anomalies caused by bodies of arbitrary shape. *Geophysics*; 1965; v. xxx(n. 5): p. 797-817.

831. Ryan, W. B. F. and B. C. Heezen. Ionian Sea submarine canyons and the 1908 Messian turbidity current. *Geol. Soc. Am. Bull.* ; 1965; v. 76: p. 915-932.

832. Burkholder, P. R. and E. F. Mandelli. Productivity of microalgae in Antarctic Sea ice. *Science*; 1965; v. 149(n. 3686): p. 872-874.

833. Hawkins, L. V., J. F. Hennion, J. E. Nafe, and R. F. Thyer. Geophysical investigations in the area of the Perth Basin, western Australia. *Geophysics*; 1965; v. xxx(n. 6): p. 1026-1052.

834. Ichiye, T. Diffusion experiments in coastal waters using dye techniques. *Symp. on Diff. in Oceans and Fresh Waters*; 1965: p. 54-67.

835. Su, S. S. and J. Dorman. The use of leaking modes in seismogram interpretation and in studies of crust-mantle structure. *Bull. Seismol. Soc. Am.* ; 1965; v. 55(n. 6): p. 989-1021.

836. Broecker, W. S. . An application of natural radon to problems in ocean circulation. *Symp. on Diff. in Oceans and Fresh Waters*; 1965: p. 116-145.

837. Cassidy, W. A., L. M. Villar, T. E. Bunch, T. P. Kohman, and D. J. Milton. Meteorites and craters of Campo del Cielo, Argentina. *Science*; 1965; v. 149(n. 3688): p. 1055-1064.

838. Anderson, O. L. Two methods for estimating compression and sound velocity at very high pressures. *Proc. Nat. Acad. Sci.*; 1965; v. 54(n. 3): p. 667-673.

839. Anderson, O. L. . An approximate method of estimating shear velocity from specific heat. *J. Geophys. Res.*; 1965; v. 70(n. 18): p. 4726-4728.

840. Pfister, R. M. and P. R. Burkholder. Numerical taxonomy of some bacteria isolated from Antarctic and tropical seawaters. *J. Bacteriol.*; 1965; v. 90(n. 4): p. 863-872.

841. Bourne, D. W. and B. C. Heezen. A wandering enteropneust from the abyssal Pacific, and the distribution of "spiral" tracks on the sea floor. *Science*; 1965; v. 150(n. 3692): p. 60-63.

842. Fox, P. F. and B. C. Heezen. Sands of the Mid-Atlantic ridge. *Science*; 1965; v. 149(n. 3690): p. 1367-1370.
843. Sykes, L. R. and M. Ewing. The seismicity of the Caribbean region. *J. Geophys. Res.* ; 1965; v. 70(n. 20): p. 5065-5074.
844. Houtz, R. E. and J. I. Ewing. Comments on letter by W. A. Knox, 'A deep-ocean sedimentary velocity function'. *J. Geophys. Res.* ; 1965; v. 70(n. 20): p. 5330.
845. Chander, R. and J. N. Brune. Radiation pattern of mantle Rayleigh waves and the source mechanism of the Hindu Kush earthquake of July 6, 1962 . *Bull. Seismol. Soc. Am.* ; 1965; v. 55(n. 5): p. 805-819.
846. Shaw, D. . Sunspots and temperatures. *J. Geophys. Res.* ; 1965; v. 70(n. 20): p. 4997-4999.
847. Hunkins, K. . The seasonal variation in the sound-scattering layer observed at Fletcher's Ice Island (T-3) with a 12-kc/s echo sounder. *Deep-Sea Res.* ; 1965; v. 12: p. 879-881.
848. Anderson, O. L. and E. Schreiber. The pressure derivatives of the sound velocities of polycrystalline magnesia. *J. Geophys. Res.*; 1965; v. 70(n. 20): p. 5241-5258.
849. Bunt, J. . Measurements of photosynthesis and respiration in a marine diatom with the mass spectrometer and with carbon-14. *Nature*; 1965; v. 207(n. 5004): p. 1373-1375.
850. Heezen, B. C., W. D. Nesteroff, A. Oberlin, and G. Sabatier. Decouverte d'attapulгите dans les sediments profonds du golfe d'Aden et de la mer Rouge. *C. R. Acad. Sci. Paris.*; 1965; t. 260: p. 5819-5821.
851. Gerard, R. . Some new techniques in parachute drogue technology. *Ocean Sci. Ocean Eng.*; 1965: p. 1088-1094.
852. LePichon, X. La structure de l'ecorce de la dorsale medio-Atlantique. *Bull. Assoc. Fran. l'Etude Grandes Prof. Oceanogr.*; 1965; v. 4: p. 21-34.
853. Gerard, R. and R. Sexton. Parachute drogue measurements in the eastern tropical Atlantic in September 1964. *J. Geophys. Res.* ; 1965; v. 70(n. 22): p. 5696-5698.

854. Conolly, J. R. and M. Ewing. Pleistocene glacial-marine zones in North Atlantic deep-sea sediments. *Nature*; 1965; v. 208(n. 5006): p. 135-138.
855. Katz, B., R. Gerard, and M. Costin. Response of dye tracers to sea surface conditions. *J. Geophys. Res.* ; 1965; v. 70(n. 22): p. 5505-5513.
856. Heezen, B. C. and M. Tharp. Physiography of the Indian Ocean. *Philos. Trans. R. Soc. London*; 1966; v. 259: p. 137-149.
857. JOIDES. Ocean drilling on the continental margin. *Science*; 1965; v. 150(n. 3697): p. 709-716.
858. Alsop, L. E. and J. N. Brune. Observation of free oscillations by a deep earthquake. *J. Geophys. Res.* ; 1965; v. 70(n. 24): p. 6165-6174.
859. Lee, J. L., H. D. Freudenthal, V. Kossov, and A. Bé . Cytological observations on two planktonic foraminifera, *Globigerina bulloides* d'Orbigny, 1826, and *Globigerinoides ruber* (d'Orbigny, 1839) Cushman, 1927. *J. Protozool.* ; 1965; v. 12(n. 4): p. 531-542.
860. Worzel, J. L. . Structure of continental margins and development of ocean trenches. *Geol. Surv. Can.* ; 1966; Paper 66-16: p. 357-375.
861. Talwani, M., X. LePichon, and J. R. Heirtzler. East Pacific Rise: the magnetic pattern and the fracture zones. *Science*; 1965; v. 150(n. 3700): p. 1109-1115.
862. Conolly, J. R. and M. Ewing. Ice-rafted detritus as a climatic indicator in Antarctic deep-sea cores. *Science*; 1965; v. 150(n. 3705): p. 1822-1824.
863. Heirtzler, J. R., L. H. Burckle, and G. Peter. Magnetic anomalies in the Gulf of Mexico. *J. Geophys. Res.* ; 1966; v. 71(n. 2): p. 519-526.
864. Sutton, G. H., W. G. McDonald, D. D. Prentiss, and S. N. Thanos. Ocean-bottom seismic observatories. *Proc. IEEE*; 1965; v. 53(n. 12): p. 1909-1921.
865. Saito, T. and A.W.H. Bé . Paleontology of deep-sea deposits. in: "International Dictionary of Geophysics". Oxford: Pergamon Press; 1966: p. 1-14.
866. Wall, R. E., M. Talwani, and J. L. Worzel. Cross-coupling and off-leveling errors in gravity measurements at sea. *J. Geophys. Res.* ; 1966; v. 71(n. 2): p. 465-485.

867. Bender, M. L., T. L. Ku, and W. S. Broecker. Manganese nodules: their evolution. *Science*; 1966; v. 151(n. 3708): p. 325-328.
868. Ryan, W. B. F., F. Workum, Jr., and J. B. Hersey. Sediments on the Tyrrhenian abyssal plain. *Geol. Soc. Am. Bull.*; 1965; v. 76: p. 1261-1282.
869. Usami, T., Y. Sato, and M. Landisman. Theoretical seismograms of spheroidal type on the surface of a heterogeneous spherical earth. *Bull. Earthq. Res. Inst.*; 1965; v. 43: p. 641-660.
870. Broecker, W. S. Absolute dating and the astronomical theory of glaciation. *Science*; 1966; v. 151(n. 3708): p. 299-304.
871. Herron, T. J. Phase characteristics of geomagnetic micropulsations. *J. Geophys. Res.* ; 1966; v. 71(n. 3): p. 871-889.
872. Asano, S. Reflection and refraction of elastic waves at a corrugated interface. *Bull. Seismol. Soc. Am.* ; 1966; v. 56(n. 1): p. 201-221.
873. Ku, T. L. and W. S. Broecker. Atlantic deep-sea stratigraphy: extension of absolute chronology to 320,000 years. *Science*; 1966; v. 151(n. 3709): p. 448-450.
874. Donn, W. L. and D. M. Shaw. The heat budgets of an ice-free and an ice-covered Arctic Ocean. *J. Geophys. Res.* ; 1966; v. 71(n. 4): p. 1087-1093.
875. Talwani, M. . Some recent developments in gravity measurements aboard surface ships. *AGU, Geophys. Mono. No. 9*; 1966: p. 31-47.
876. Mandelli, E. F. and P. R. Burkholder. Primary productivity in the Gerlache and Bransfield straits of Antarctica. *J. Mar. Res.* ; 1966; v. 24(n. 1): p. 15-27.
877. Tobin, D. G. and L. R. Sykes. Relationship of hypocenters of earthquakes to the geology of Alaska. *J. Geophys. Res.*; 1966; v. 71(n. 6): p. 1659-1667.
878. Ewing, M., X. LePichon, and J. Ewing. Crustal structure of the mid-ocean ridges. 4. Sediment distribution in the South Atlantic Ocean and the Cenozoic history of the Mid-Atlantic Ridge. *J. Geophys. Res.* ; 1966; v. 71(n. 6): p. 1611-1636.

879. Emery, K. O., B. C. Heezen, and T. D. Allan. Bathymetry of the eastern Mediterranean Sea. *Deep-Sea Res.* ; 1966; v. 13: p. 173-192.

880. Broecker, W. S. and T. Takahashi. Calcium carbonate precipitation on the Bahama Banks. *J. Geophys. Res.* ; 1966; v. 71(n. 6): p. 1575-1602.

881. Ewing, M. and J. Antoine. New seismic data concerning sediments and diapiric structures in Sigsbee Deep and upper continental slope, Gulf of Mexico. *Am. Assoc. Pet. Geol. Bull.* ; 1966; v. 50(n. 3): p. 479-504.

882. Ewing, J. and M. Ewing. Marine seismic studies. *Trans. AGU*; 1966; v. 47(n. 1): p. 276-279.

883. Brune, J. N. . The Sa phase from the Hindu Kush earthquake of July 6, 1962. *Pure Appl. Geophys.* ; 1965; v. 62: p. 81-95.

884. Heezen, B. C., B. Glass, and H. W. Menard. The Manihiki Plateau. *Deep-Sea Res.* ; 1966; v. 13: p. 445-458.

885. Ludwig, W. J., J. I. Ewing, M. Ewing, S. Murauchi, N. Den, S. Asano, H. Hotta, M. Hayakawa, T. Asanuma, K. Ichikawa, and I. Noguchi. Sediments and structure of the Japan trench. *J. Geophys. Res.* ; 1966; v. 71(n. 8): p. 2121-2137.

886. Roels, O. A. . Present knowledge of vitamin A. *Nutrition Rev.*; 1966; v. 24(n. 5): p. 129-132.

887. Saito, T., M. Ewing, and L. H. Burckle. Tertiary sediment from the Mid-Atlantic Ridge. *Science*; 1966; v. 151(n. 3714): p. 1075-1079.

888. Broecker, W. S., E. R. Bonebakker, and G. G. Rocco. The vertical distribution of Cesium 137 and Strontium 90 in the oceans, 2. *J. Geophys. Res.* ; 1966; v. 71(n. 8): p. 1999-2003.

889. Gordon, A. L., P. J. Grim, and M. Langseth. Layer of abnormally cold bottom water over southern Aves Ridge. *Science*; 1966; v. 151(n. 3717): p. 1525-1526.

890. Heirtzler, J. R., X. Lepichon, and J. G. Baron. Magnetic anomalies over the Reykjanes Ridge. *Deep-Sea Res.* ; 1966; v. 13: p. 427-443.

891. Talwani, M., W. P. Early, and D. E. Hayes. Continuous analog computation and recording of cross-coupling and off-leveling errors. *J. Geophys. Res.* ; 1966; v. 71(n. 8): p. 2079-2090.
892. Schreiber, E. and O. L. Anderson. Pressure derivatives of the sound velocities of polycrystalline alumina. *J. Am. Ceram. Soc.* ; 1966; v. 49(n. 4): p. 184-190.
893. Usami, T., Y. Sato, and M. Landisman. Preliminary study of the propagation of spheroidal disturbances on the surface of a heterogeneous spherical earth. *Geophys. J. R. astr. Soc.*; 1966; v. 11: p. 243-251.
894. Heezen, B. C., M. Ewing, and G. L. Johnson. The Gulf of Corinth floor. *Deep-Sea Res.* ; 1966; v. 13: p. 381-411.
895. Ewing, M., A.G. Lonardi, and J.I. Ewing. The sediments of the Puerto Rico trench and outer ridge. Fourth Caribbean Geological Conference, Trinidad 1965; 1965: p. 317-324.
896. Ewing, M., A.G. Lonardi, and J.I. Ewing. The sediments of the Puerto Rico trench and outer ridge. Fourth Caribbean Geological Conference, Trinidad 1965; 1965: p. 325-334.
897. Chute, J. L. Jr. Preliminary observations of geomagnetic micropulsations with an array of magnetometers. *J. Atmos. Terr. Phys.*; 1966; v. 28: p. 673-676.
898. Latham, G. V. and G. H. Sutton. Seismic measurements on the ocean floor. *J. Geophys. Res.* ; 1966; v. 71(n. 10): p. 2545-2573.
899. Thanos, S. C. and A. C. Hubbard. Two-way hydroacoustic communications link for an ocean-bottom seismograph. *IEEE Trans. Geosci. Electr.*; 1966; v. GE 4(n. 1): p. 17-24.
900. Heezen, B. C., C. D. Hollister, and W. F. Ruddiman. Shaping of the continental rise by deep geostrophic contour currents. *Science*; 1966; v. 152(n. 3721): p. 502-508.
901. Herron, T. J. and J. R. Heirtzler. Latitude-period dependency of geomagnetic micropulsations. *Nature*; 1966; v. 210(n. 5034): p. 361-363.
902. Broecker, W. S., G. G. Rocco, and H. L. Volchok. Strontium-90 fallout: comparison of rates over ocean and land. *Science*; 1966; v. 152(n. 3722): p. 639-640.



903. Ewing, M., T. Saito, J. I. Ewing, and L. H. Burckle. Lower Cretaceous sediments from the northwest Pacific. *Science*; 1966; v. 152(n. 3723): p. 751-755.

904. Soga, N. and O. L. Anderson. Simplified method for calculating elastic moduli of ceramic powder from compressibility and Debye temperature data. *J. Am. Ceram. Soc.* ; 1966; v. 49(n. 6): p. 318-322.

905. Gold, K. and C. F. Baren. Growth requirements of *Gyrodinium cohnii*. *J. Protozool.* ; 1966; v. 13: p. 255-257.

906. Schreiber, E. and O. L. Anderson. Temperature dependence of the velocity derivatives of periclase. *J. Geophys. Res.* ; 1966; v. 71(n. 12): p. 3007-3012.

907. Ichiye, T. . Turbulent diffusion of suspended particles near the ocean bottom. *Deep-Sea Res.* ; 1966; v. 13: p. 679-685.

908. Opdyke, N. D. and H. Wensink. Paleomagnetism of rocks from the White Mountain plutonic-volcanic series in New Hampshire and Vermont. *J. Geophys. Res.* ; 1966; v. 71(n. 12): p. 3045-3051.

909. Sykes, L. R. The seismicity and deep structure of island arcs. *J. Geophys. Res.* ; 1966; v. 71(n. 12): p. 2981-3006.

910. Schreiber, E. and N. Soga. Elastic constants of silicon carbide. *J. Am. Ceram. Soc.* ; 1966; v. 49(n. 6): p. 342.

911. Hunkins, K. Ekman drift currents in the Arctic Ocean. *Deep-Sea Res.* ; 1966; v. 13: p. 607-620.

912. Richards, H. G. and D. L. Thurber. Pleistocene age determinations from California and Oregon. *Science*; 1966; v. 152(n. 3725): p. 1091.

913. Donn, W. L., B. D. Donn, and W. G. Valentine. On the early history of the earth: reply. *Geol. Soc. Am. Bull.*; 1966; v. 77: p. 561-564.

914. Talwani, M., X. LePichon, M. Ewing, G. H. Sutton, and J. L. Worzel. Comments on paper by W. Jason Morgan, 'Gravity anomalies and convection currents. 2. The Puerto Rico trench and mid-Atlantic rise'. *J. Geophys. Res.* ; 1966; v. 71(n. 14): p. 3602-3606.

915. Anderson, O. L. . Seismic parameter  $\sigma$  : computation at very high pressure from laboratory data. *Bull. Seismol. Soc. Am.* ; 1966; v. 56(n. 3): p. 725-731.
916. Takin, M. and M. Talwani. Rapid computation of the gravitation attraction of topography on a spherical earth. *Geophys. Prosp.*; 1966; v. 2: p. 119-142.
917. Heirtzler, J. R., F. de Mendonca, and H. Montes. Rapid geomagnetic activity at very low latitude conjugate stations. *Ann. de Geophys.* ; 1966; t. 33(n. 3): p. 502-507.
918. Donn, W.L. Atmospheric waves from earthquakes. in: "International Dictionary of Geophysics". Oxford: Pergamon Press; 1967; V. 1: p. 1-3 or 116-118.
919. Burkholder, P. R., R. M. Pfister, and F. H. Leitz. Production of a pyrrole antibiotic by a marine bacterium. *Appl. Microbiol.*; 1966; July: p. 649-653.
920. Donn, W. L. and M. Ewing. A theory of ice ages III. *Science*; 1966; v. 152(n. 3730): p. 1706-1712.
921. Burckle, L. H. and T. Saito. An Eocene dredge haul from the Tuamotu ridge. *Deep-Sea Res.* ; 1966; v. 13: p. 1207-1208.
922. LePichon, X. Etude geophysique de la dorsale medio-Atlantique. *Cahiers Oceanograph.*; 1966; Paris, July and Sept.: p. 551-713.
923. Ichiye, T. and N. B. Plutchak. Photodensitometric measurement of dye concentration in the ocean. *Limnol. Oceanogr.*; 1966; v. 11(n. 3): p. 364-370.
924. Langseth, M.G., Jr. Review of heat flow measurements along the mid-oceanic ridge system. in: *The World Rift System Symposium*, Sept. 1965, Ottawa, Geol. Surv. Canada Paper 66-14; 1966: p. 349-363.
925. Ichiye, T. Some hydrodynamic problems for a nepheloid zone. *Pure Appl. Geophys.*; 1966; v. 63: p. 179-195.
926. Kutschale, H. . Arctic Ocean geophysical studies: the southern half of the Siberia Basin. *Geophysics*; 1966; v. xxxi(n. 4): p. 683-710.
927. Gold, K., O. A. Roels, and H. Bank. Temperature dependent destruction of thiamine in seawater. *Limnol. Oceanogr.*; 1966; v. 11(n. 3): p. 410-413.

928. Dickson, G. O., C. W. F. Everitt, L. G. Parry, and F. D. Stacey. Origin of thermoremanent magnetization. *Earth Planet. Sci. Lett.*; 1966; v. 1: p. 222-224.
929. Alsop, L. E. . Transmission and reflection of Love waves at a vertical discontinuity. *J. Geophys. Res.* ; 1966; v. 71(n. 16): p. 3969-3984.
930. Nesteroff, W. D., B. C. Heezen, and J. R. Conolly. Decouverte de turbidites heterogenes dans le bassin Australien. *Acad. des Sci, Paris*; 1966; t. 263: p. 1052-1054.
931. Oliver, J., A. Ryall, J. N. Brune, and D. B. Slemmons. Microearthquake activity recorded by portable seismographs of high sensitivity. *Bull. Seismol. Soc. Am.* ; 1966; v. 56(n. 4): p. 899-924.
932. Kuo, J. T. and M. Ewing. Spatial variations of tidal gravity. *AGU Geophys. Mono. No. 10*; 1966: p. 595-610.
933. Liebermann, R. C., C. King, J. N. Brune, and P. W. Pomeroy. Excitation of surface waves by the underground nuclear explosion long shot. *J. Geophys. Res.* ; 1966; v. 71(n. 18): p. 4333-4339.
934. Talwani, M. and M. Ewing. A continuous gravity profile over the Sigsbee Knolls. *J. Geophys. Res.*; 1966; v. 71(n. 18): p. 4434-4438.
935. Landisman, M., Y. Sato, and T. Usami. Propagation of disturbances in a Gutenberg-Bullen A' spherical earth model: travel times and amplitudes of S waves. *AGU Geophys. Mono No. 10*; 1966: p. 482-494.
936. Ewing, J., M. Ewing, and R. Leyden. Seismic-profiler survey of Blake Plateau. *Am. Assoc. Pet. Geol. Bull.*; 1966; v. 50(n. 9): p. 1948-1971.
937. Ewing, M., X. LePichon, and M. G. Langseth. Comments on "Age of the Ocean Floor," by E. Orowan. *Science*; 1966; v. 154(n. 3748): p. 416.
938. Sheridan, R. E., C. L. Drake, J. E. Nafe, and J. Hennion. Seismic-refraction study of continental margin east of Florida. *Am. Assoc. Pet. Geol. Bull.*; 1966; v. 50(n. 9): p. 1972-1991.
939. Heezen, B. C., E. D. Schneider, and O. H. Pilkey. Sediment transport by the Antarctic bottom current on the Bermuda Rise. *Nature*; 1966; v. 211(n. 5049): p. 611-612.

940. Gerard, R. D. . Potential freshwater reservoir in the New York area. *Science*; 1966; v. 153(n. 3738): p. 870-871.

941. Nabighian, M. N. . The application of finite forward differences in the resistivity computations over a layered earth. *Geophysics*; 1966; v. xxxi(n. 5): p. 971-980.

942. Burkholder, P. R., L. M. Burkholder, and P. Centeno. Nutritive values of shrimp flour. *Nature*; 1966; v. 211(n. 5051): p. 860-861.

943. Broecker, W. S. . Glacial rebound and the deformation of the shorelines of proglacial lakes. *J. Geophys. Res.* ; 1966; v. 71(n. 20): p. 4777-4783.

944. Sanchez, J. and W. Cassidy. A previously undescribed meteorite crater in Chile. *J. Geophys. Res.* ; 1966; v. 71(n. 20): p. 4891-4895.

945. Anderson, O. L. . A proposed law of corresponding states for oxide compounds. *J. Geophys. Res.* ; 1966; v. 71(n. 20): p. 4963-4971.

946. Piip, A. T. . The sound velocimeter at sea - performance and limitations. *U. S. Navy J. Underwater Acoust.*; 1966; v. 16(n. 4): p. 649-658.

947. Nowroozi, A. A., G. Sutton, and B. Auld. Oceanic tides recorded on the sea floor. *Ann. de Geophys.*; 1966; t. 22(n. 3): p. 512-517.

948. Roels, O.A. Active Compounds and Vitamin A Antagonists. in: "The Vitamins". NY: Academic Press; 1967; V. 1(Second Edition): p. 153-246.

949. Mattaboni, P. and E. Schreiber. Variable air transformer for impedance matching. *Rev. Sci. Instr.*; 1966; v. 37(n. 11): p. 1625-1626.

950. Gabriel, V. G. and J. T. Kuo. High Rayleigh wave phase velocities for the New Delhi, India-Lahore, Pakistan profile. *Bull. Seismol. Soc. Am.*; 1966; v. 56(n. 5): p. 1137-1145.

951. Alsop, L. E. and A. A. Nowroozi. Faster Fourier analysis. *J. Geophys. Res.*; 1966; v. 71(n. 22): p. 5482-5483.

952. Dickson, G. O. and J. H. Foster. The magnetic stratigraphy of a deep sea core from the North Pacific Ocean. *Earth Planet. Sci. Lett.*; 1966; v. 1: p. 458-462.

953. Langseth, M. G. Jr., X. LePichon, and M. Ewing. Crustal structure of the mid-ocean ridges. 5. Heat flow through the Atlantic Ocean floor and convection currents. *J. Geophys. Res.*; 1966; v. 71(n. 22): p. 5321-5355.

954. van Veen, H. J., J. Savino, and L. E. Alsop. An optical maser strain-meter. *J. Geophys. Res.* ; 1966; v. 71(n. 22): p. 5478-5479.

955. Lehmann, I. . On the structure of the upper mantle. *Bull. Seismol. Soc. Am.* ; 1966; v. 56(n. 5): p. 1147-1152.

956. Opdyke, N. D., B. Glass, J. D. Hays, and J. Foster. Paleomagnetic study of antarctic deep-sea cores. *Science*; 1966; v. 154(n. 3748): p. 349-357.

957. Shaw, D. M. . Reply to comment on "Sunspots and Temperatures". *J. Geophys. Res.* ; 1966; v. 71(n. 22): p. 5490-5491.

958. Bé , A W.H., A. McIntyre, and D. L. Breger. Shell microstructure of a planktonic foraminifer, *Globorotalia menardii* (D'Orbigny). *Ecologiae Geol. Helv.*; 1966; v. 59(n. 2): p. 885-896.

959. Donahue, J. G., R. C. Allen, and B. C. Heezen. Sediment size distribution profile on the continental shelf off New Jersey. *Sedimentology*; 1966; v. 7: p. 155-159.

960. Foster, J. H. . A paleomagnetic spinner magnetometer using a fluxgate gradiometer. *Earth Planet. Sci. Lett.*; 1966; v. 1: p. 463-466.

961. McIntyre, A., A.W.H. Bé , and R. Preikstas. Coccoliths and the Pliocene-Pleistocene boundary. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 3-25.

962. Hunkins, K. and H. Kutschale. Quaternary sedimentation in the Arctic Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 89-94.

963. Donn, W.L. and D. M. Shaw. The maintenance of an ice-free Arctic Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 105-113.

964. Ku, T-L and W.S. Broecker. Rates of sedimentation in the Arctic Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 95-104.

965. Thorndike, E. M. and M. Ewing. Light scattering in the sea. Soc. Photo-optical Instr. Eng. ; 1967: p. A-IV 1-7.

966. Gordon, A. L. . Potential temperature, oxygen and circulation of bottom water in the Southern Ocean. Deep-Sea Res. ; 1966; v. 13: p. 1125-1138.

967. Soga, N., E. Schreiber, and O. L. Anderson. Estimation of bulk modulus and sound velocities of oxides at very high temperatures. J. Geophys. Res. ; 1966; v. 71(n. 22): p. 5315-5320.

968. Hayes, D. E. . A geophysical investigation of the Peru-Chile Trench. Mar. Geol. ; 1966; v. 4: p. 309-351.

969. Roels, O.A. and O.R. Anderson. The effects of vitamins A and E on biological membranes. in: Proceedings of the Seventh International Congress of Nutrition (Volume 1-5) Hamburg 1966. Braunschweig/West Germany: Verlag Friedr. Vieweg & Sohn GmbH; 1966; V. 5: p. 606-610.

970. Groot, J.J., C.R. Groot, M. Ewing, L. Burckle, and J.R. Conolly. Spores, pollen, diatoms and provenance of the Argentine Basin sediments. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 179-217.

971. Hunkins, K. . The Arctic continental shelf north of Alaska. Geol. Survey Canada paper 66-15; 1966: p. 197-205.

972. Hays, J.D. Quaternary sediments of the Antarctic Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 117-131.

973. Hayes, D. E. . The Peru-Chile trench. Geol. Survey Canada paper 66-15; 1966: p. 238-243.

974. Donahue, J.G. Diatoms as indicators of Pleistocene climatic fluctuations in the Pacific sectors of the Southern Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Ocean Basins): p. 133-140.

975. Simon, R.B. Lamont Geological Observatory, Columbia University, *Seismological Bull.*, 1 January 1964-30 June 1964; 1966.

976. Wiles, W.W. Pleistocene changes in the pore concentration of a planktonic foraminiferal species from the Pacific Ocean. in: "Progress in Oceanography". Oxford & NY: Pergamon Press; 1967; V. 4 (The Quaternary History of the Oceans Basin): p. 153-160.

977. Goldich, S. S. and P. W. Gast. Effects of weathering on the Rb-Sr and K-Ar ages of biotite from the Morton Gneiss, Minnesota. *Earth Planet. Sci. Lett.*; 1966; v. 1: p. 372-375.

978. Garlick, G. D. . Oxygen isotope fractionation in igneous rocks. *Earth Planet. Sci. Lett.*; 1966; v. 1: p. 361-368.

979. Talwani, M., J. Dorman, J. L. Worzel, and G. M. Bryan. Navigation at sea by satellite. *J. Geophys. Res.* ; 1966; v. 71(n. 24): p. 5891-5902.

980. Broecker, W. S. Radioisotopes and the rate of mixing across the main thermoclines of the ocean. *J. Geophys. Res.* ; 1966; v. 71(n. 24): p. 5827-5836.

981. Pitman, W. C. III and J. R. Heirtzler. Magnetic anomalies over the Pacific Antarctic Ridge. *Science*; 1966; v. 154(n. 3753): p. 1164-1171.

982. Bé , A.W.H. . Foraminifera. Families: Globigerinidae and Globorotaliidae. *Cons. Perm. Internat. L'Explor. de la Mer, Zooplankton Sheet* 108; 1967: p. 1-3.

983. Groot, J. J. and C. R. Groot. Marine palynology: possibilities, limitations, problems. *Mar. Geol.* ; 1966; v. 4: p. 387-395.

984. Drake, C. L. . Recent investigations on the continental margin of the eastern United States. *Geol. Survey Canada Paper* 66-15; 1966: p. 33-47.

985. Nowroozi, A. A. . Terrestrial spectroscopy following the Rat island earthquake. *Bull. Seismol. Soc. Am.* ; 1966; v. 56(n. 6): p. 1269-1288.

986. Chen, C. Calcareous zooplankton in the Scotia Sea and Drake Passage. *Nature*; 1966; v. 212(n. 5063): p. 678-681.

987. Richards, H.G. Pleistocene mollusks from cores taken from the continental shelf of Argentina and Chile. in: "Quaternaria". Roma; 1966; V. VIII: p. 253-258.

988. Pimentel, G. Bermuda-Columbia University Seismograph Station. in: Seismological Bulletin; 1967; 1 April 1960-31 March 1961.

989. Pimental, G. Bermuda-Columbia University Seismograph Station. in: Seismological Bulletin; 1967; 1 April 1962 - 31 March 1963.

990. Ewing, J., J. L. Worzel, M. Ewing, and C. Windisch. Ages of horizon A and the oldest Atlantic sediments. Science; 1966; v. 154(n. 3753): p. 1125-1132.

991. Ninkovich, D., N. Opdyke, B. C. Heezen, and J. H. Foster. Paleomagnetic stratigraphy, rates of deposition and tephrochronology in North Pacific deep-sea sediments. Earth Planet. Sci. Lett.; 1966; v. 1: p. 476-492.

992. Simon, R.B. Lamont Geological Observatory, Columbia University. in: Seismological Bulletin; 1967; 30 June 1964 - 31 December 1964.

993. Roels, O.A. and S. Mahadevan. Vitamin A. in: "The Vitamins,". New York: Academic Press; 1967; V. vi: p. 139-196.

994. Ichiye, T. Annotated bibliography on internal waves. J. Oceanogr. Soc. Japan; 1966; v. 22(n. 5): p. 201-222.

995. Heirtzler, J. R. and M. L. Hadley. Magnetic anomaly over Vema seamount. Nature; 1966; v. 212(n. 5065): p. 912-913.

996. Bé , A W.H. and W. H. Hamlin. Ecology of recent planktonic foraminifera: Part 3-distribution in the North Atlantic during the summer of 1962. Micropaleontology; 1967; v. 13(n. 1): p. 87-106.

997. Saito, T., L. H. Burckle, and M. Ewing. Lithology and paleontology of the reflective layer horizon A. Science; 1966; v. 154(n. 3753): p. 1173-1176.

998. Sutton, G. H. and R. Steinbacher. Surveyor seismograph experiment. J. Geophys. Res. ; 1967; v. 72(n. 2): p. 841-844.

999. Ewing, J., M. Talwani, M. Ewing, and T. Edgar. Sediments of the Caribbean. "Studies in Tropical Oceanography". Miami, FL: Univ. of Miami; 1967; V. 5: p. 88-102.



1000. Cassidy, W. A. Meteorite field studies at Campo del Cielo. *Sky and Telescope*; 1967; v. 34(n. 1): p. 4-10.

1001. Hollister, C.D. and B.C. Heezen. The floor of the Bellingshausen Sea. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 177-189.

1002. Ewing, M., J.L. Worzel, and A.C. Vine. Early development of ocean-bottom photography at Woods Hole Oceanographic Inst. and Lamont Geological Observatory. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 13-41.

1003. Conolly, J. R., H. D. Needham, and B. C. Heezen. Late Pleistocene and Holocene sedimentation in the Laurentian Channel. *J. Geol.*; 1967; v. 75(n. 2): p. 131-147.

1004. Herron, T. J. . An average geomagnetic power spectrum for the period range 4.5 to 12,900 seconds. *J. Geophys. Res.* ; 1967; v. 72(n. 2): p. 759-761.

1005. Schneider, E. D. and B. C. Heezen. Sediments of the Caicos Outer Ridge, The Bahamas. *Geol. Soc. Am. Bull.* ; 1966; v. 77: p. 1381-1398.

1006. Roels, O. A. . Present knowledge of vitamin E. *Nutrition Rev.* ; 1967; v. 25(n. 2): p. 33-37.

1007. Schreiber, E. and O. L. Anderson. Pressure derivatives of the sound velocities of polycrystalline forsterite, with 6% porosity. *J. Geophys. Res.* ; 1967; v. 72(n. 2): p. 762-764.

1008. Groot, J. J. and C. R. Groot. Pollen spectra from deep-sea sediments as indicators of climatic changes in southern South America. *Mar. Geol.* ; 1966; v. 4: p. 525-537.

1009. Heezen, B. C. and R. E. Sheridan. Lower Cretaceous rocks (Neocomian-Albian) dredged from Blake Escarpment. *Science*; 1966; v. 154(n. 3757): p. 1644-1647.

1010. Donn, W. L. and D. M. Shaw. Exploring the atmosphere with nuclear explosions. *Rev. Geophys.* ; 1967; v. 5(n. 1): p. 53-82.

1011. Anderson, O. R., O. A. Roels, and R. M. Pfister. Dietary retinol and alphatocopherol and erythrocyte structure in rats. *Nature*; 1967; v. 213(n. 5071): p. 47-49.

1012. Wall, R. E. and M. Ewing. Tension recorder for deep-sea winches. *Deep-Sea Res.* ; 1967; v. 14: p. 321-324.

1013. Hunkins, K. . Inertial oscillations of Fletcher's Ice Island (T-3). *J. Geophys. Res.*; 1967; v. 72(n. 4): p. 1165-1174.

1014. Sato, R. and A. F. Espinosa. Dissipation factor of the torsional mode  $\sigma T_2$  for a homogeneous-mantle earth with a soft-solid or a viscous-liquid core. *J. Geophys. Res.* ; 1967; v. 72(n. 6): p. 1761-1767.

1015. Clarke, R. H. . Burrow frequency in abyssal sediments. *Deep-Sea Res.* ; 1968; v. 15: p. 397-400.

1016. Pfeffer, R. L. and Y. Chiang. Two kinds of vacillation in rotating laboratory experiments. *Mon. Weather Rev.*; 1967; v. 95(n. 2): p. 75-82.

1017. Ichiye, T. . Vertical currents in the equatorial Pacific Ocean. *J. Oceanogr. Soc. Japan*; 1966; v. 22(n. 6): p. 274-284.

1018. Ewing, M., D. E. Hayes, and E. M. Thorndike. Corehead camera for measurement of currents and core orientation. *Deep-Sea Res.* ; 1967; v. 14: p. 253-258.

1019. Conolly, J. R. and M. Ewing. Sedimentation in the Puerto Rico trench. *J. Sediment. Petrol.* ; 1967; v. 37(n. 1): p. 44-59.

1020. Soga, N. and O. L. Anderson. Elastic properties of tektites measured by resonant sphere technique. *J. Geophys. Res.* ; 1967; v. 72(n. 6): p. 1733-1739.

1021. Ninkovich, D. and B. C. Heezen. Physical and chemical properties of volcanic glass shards from possuolana ash, Thera Island, and from upper and lower ash layers in eastern Mediterranean deep sea sediments. *Nature*; 1967; v. 213(n. 5076): p. 582-584.

1022. Gordon, A. L. . Antarctic Map Folio Series, Folio 6: Structure of Antarctic Waters between 20oW and 170oW. *Am. Geograph. Soc.*; 1967.

1023. Burkholder, P. R., L. M. Burkholder, and L. R. Almodovar. Carbon assimilation of marine flagellate blooms in neritic waters of southern Puerto Rico. *Bull. Mar. Sci.*; 1967; v. 17(n. 1): p. 1-15.

1024. Folger, D. W., L. H. Burckle, and B. C. Heezen. Opal phytoliths in a North Atlantic dust fall. *Science*; 1967; v. 155(n. 3767): p. 1243-1244.

1025. Ward, P. and S. Ward. Volcanic activity in Katmai National Monument in early August, 1965. *Earthq. Notes*; 1966; v. xxxvii: p. 19-34.
1026. Schreiber, E. . Elastic moduli of single-crystal spinel at 25oC and 2 kbar. *J. Appl. Phys.*; 1967; v. 38(n. 6): p. 2508-2511.
1027. Ewing, M., T. Saito, and X. Le Pichon. Reply to 'Comments on mantle convection and mid-ocean ridges' by Peter R. Vogt and Ned A. Ostenso. *J. Geophys. Res.* ; 1967; v. 72(n. 8): p. 2085.
1028. Donn, W. L. and E.S. Posmentier. Infrasonic waves from the marine storm of April 7, 1966. *J. Geophys. Res.*; 1967; v. 72(n. 8): p. 2053-2061.
1029. Opdyke, N. D. and R. Hekinian. Magnetic properties of some igneous rocks from the mid-Atlantic ridge. *J. Geophys. Res.* ; 1967; v. 72(n. 8): p. 2257-2260.
1030. McGarr, A. and L. E. Alsop. Transmission and reflection of Rayleigh waves at vertical boundaries. *J. Geophys. Res.* ; 1967; v. 72(n. 8): p. 2169-2180.
1031. Donn, W. L. . Causes of the ice ages. *Sky and Telescope*; 1967; v. xxxiii(n. 4): p. 3-7.
1032. Sykes, L. R. . Mechanism of earthquakes and nature of faulting on the mid-oceanic ridges. *J. Geophys. Res.* ; 1967; v. 72(n. 8): p. 2131-2153.
1033. Sutton, G. H., W. Mitronovas, and P. W. Pomeroy. Short-period energy radiation patterns from underground nuclear explosions and small-magnitude earthquakes. *Bull. Seismol. Soc. Am.* ; 1967; v. 57(n. 2): p. 249-267.
1034. Roels, O. A. . Present knowledge of coenzyme Q. *Nutrition Rev.*; 1967; v. 25(n. 4): p. 97-100.
1035. McIntyre, A. and A.W.H. Bé . *Coccolithus neohelis* sp. n., a coccolith fossil type in contemporary seas. *Deep-Sea Res.* ; 1967; v. 14: p. 369-371.
1036. Nafe, J.E. and C.L. Drake. The physical properties of rocks of basaltic composition. in: "Basalts: The Poldevaart Treatise on Rocks of Basaltic Composition". NY: Interscience Pub.; 1968; V. 2: p. 483-502.

1037. Bunce, E. T., M. G. Langseth, R. L. Chase, and M. Ewing. Structure of the western Somali Basin. *J. Geophys. Res.* ; 1967; v. 72(n. 10): p. 2547-2555.
1038. Matumoto, T. and P. L. Ward. Microearthquake study of Mount Katmai and vicinity, Alaska. *J. Geophys. Res.* ; 1967; v. 72(n. 10): p. 2557-2568.
1039. Li, Y. H. . Equation of state of water and sea water. *J. Geophys. Res.* ; 1967; v. 72(n. 10): p. 2665-2678.
1040. Soga, N. and O. L. Anderson. High-temperature elasticity and expansivity of forsterite and steatite. *J. Am. Ceramic Soc.* ; 1967; v. 50(n. 5): p. 239-242.
1041. Ku, T. L. and W. S. Broecker. Uranium, thorium, and protactinium in a manganese nodule. *Earth Planet. Sci. Lett.*; 1967; v. 2: p. 317-320.
1042. Sato, R. . Attenuation of the torsional free oscillations in an earth with a dissipative mantle and a dissipative soft-solid core or a viscous-liquid core. *J. Geophys. Res.* ; 1967; v. 72(n. 12): p. 3207-3224.
1043. Bé , A.W.H. *Globorotalia cavarnula*, a new species of planktonic foraminifera from the subantarctic Pacific Ocean. *Cushman Fdn. Foram. Res.* ; 1967; v. xviii(part 3): p. 128-132.
1044. Glass, B. and B. C. Heezen. Tektites and geomagnetic reversals. *Nature*; 1967; v. 214(n. 5086): p. 372-374.
1045. Glass, B. . Microtektites in deep-sea sediments. *Nature*; 1967; v. 214(n. 5086): p. 372-374.
1046. Ward, P. L. and T. Matumoto. a summary of volcanic and seismic activity in Katmai National Monument, Alaska. *Bull. Volcanol.*; 1967; t. xxxi: p. 107-129.
1047. Gerard, R. and J. M. Costin. Underwater dye pumping system. *Deep-Sea Res.* ; 1967; v. 14: p. 479-480.
1048. Conolly, J. R. . Postglacial-glacial change in climate in the Indian ocean. *Nature*; 1967; v. 214(n. 5091): p. 873-875.

1049. Ryan, W.B.F., E.M. Thorndike, M. Ewing, and D.A. Ross. Suspended matter in the Red Sea brines and its detection by light scattering. in: E.T. Degens and D.A. Ross, Eds. "Hot Brines and Recent Metal Deposits in the Red Sea". NY: Springer-Verlag Inc.; 1969: p. 153-157.

1050. Roels, O.A. Occurrence in foods: standardization of vitamin A activity. in: "The Vitamins". NY: Academic Press; 1967; V. 1: p. 113-125.

1051. Liebermann, R. C. and P. W. Pomeroy. Excitation of surface waves by events in southern Algeria. Science; 1967; v. 156(n. 3778): p. 1098-1100.

1052. Ichiye, T. . Occurrence of temperature inversions in the upper layer of the ocean. Pure Appl. Geophys. ; 1967; v. 67: p. 143-155.

1053. Anderson, O. L. . Equation of thermal expansivity in planetary interiors. J. Geophys. Res. ; 1967; v. 72(n. 14): p. 3661-3668.

1054. Abdel-Monem, A. and P. W. Gast. Age of volcanism on St. Helena. Earth Planet. Sci. Lett.; 1967 ; v. 2: p. 415-418.

1055. Donn, W. L. and D. M. Shaw. The generalized temperature curve for the past 425,000 years: a discussion. J. Geol. ; 1967; v. 75(n. 4): p. 497-503.

1056. Ergin, K. . Seismic evidence for a new layered structure of the earth's core. J. Geophys. Res. ; 1967; v. 72(n. 14): p. 3669-3687.

1057. Worzel, J.L. Survey of continental margins. in: "Geology of Shelf Seas". Edinburgh: Oliver and Boyd; 1968: p. 117-154.

1058. Burckle, L. H., T. Saito, and M. Ewing. A Cretaceous (Turonian) core from the Naturaliste Plateau, southeast Indian Ocean. Deep-Sea Res. ; 1967; v. 14: p. 421-426.

1059. Donn, W. L. and D. M. Shaw. Isotopic paleotemperatures: discussion. Science; 1967; v. 157(n. 3789): p. 722-723.

1060. Schneider, E. D., P. J. Fox, C. D. Hollister, H. D. Needham, and B. C. Heezen. Further evidence of contour currents in the western North Atlantic. Earth Planet. Sci. Lett. ; 1967; v. 2: p. 351-359.

1061. Soga, N. and O. L. Anderson. Anomalous behavior of the shear-sound velocity under pressure for polycrystalline ZnO. *J. Appl. Phys.* ; 1967; v. 38(n. 7): p. 2985-2988.

1062. Anderson, O.L. and R.C. Liebermann. Sound velocities in rocks and minerals: Experimental methods, extrapolations to very high pressures, and results. in: "Physical Acoustics". NY: Academic Press; 1968; V. IV part B: p. 329-472.

1063. Ewing, J. and M. Ewing. Sediment distribution on the mid-ocean ridges with respect to spreading of the sea floor. *Science*; 1967; v. 156(n. 3782): p. 1590-1592.

1064. Ichiye, T. and E. J. Zipser. An example of heat transfer at the air-sea boundary over the Gulf Stream during a cold air outbreak. *J. Meteorol. Soc. Japan*; 1967; v. 45(n. 3): p. 261-270.

1065. Burkholder, P. R., E. F. Mandelli, and P. Centeno. some chemical; properties of *Munida gregaria* and *Euphausia superba*. *J. Agriculture and Food Chem.* ; 1967; v. 15(n. 4): p. 718-720.

1066. Gordon, A. L. . Geostrophic transport through the Drake Passage. *Science*; 1967; v. 156(n. 3783): p. 1732-1734.

1067. Sharma, G. M. and P. R. Burkholder. Studies on the antimicrobial substances of sponges. II. Structure and synthesis of a bromine-containing antibacterial compound from a marine sponge . *Tetrahedron Lett.* ; 1967; (n. 42): p. 4147-4150.

1068. Sharma, G. M. and P. R. Burkholder. Studies on antimicrobial substances of sponges. I. Isolation, purification, and properties of a new bromine-containing antibacterial substance. *J. Antibiotics, ser. A*; 1967; v. xx(n. 4): p. 200-203.

1069. Anderson, O. R., O. A. Roels, K. D. Dreher, and J. H. Schulman. The stability and structure of mixed lipid monolayers and bilayers: II. The effect of retinol and  $\alpha$ -tocopherol on the structure and stability of lipid bilayers. *J. Ultrastruct. Res.* ; 1967; v. 19: p. 600-610.

1070. McGarr, A. and R. C. Vorhis. The Alaska earthquake, March 27, 1964: effects on the hydrologic regimen. *Geol. Survey Prof. Paper 544-E*; 1968: p. E1-E43.

1071. Dorman, J. . Seismic surface-wave data on the upper mantle. *AGU, Geophys. Monogr.* n. 13; 1969: p. 257-265.

1072. Dreher, K. D., J. H. Schulman, O. R. Anderson, and O. A. Roels. The stability and structure of mixed lipid monolayers and bilayers. I. Properties of lipid and lipoprotein

monolayers on OsO<sub>4</sub> solutions and the role of cholesterol, retinol, and tocopherol in stabilizing lecithin monolayers. *J. Ultrastruc. Res.* ; 1967; v. 19(n. 5/6): p. 586-599.

1073. Oliver, J. and B. Isacks. Deep earthquake zones, anomalous structures in the upper mantle, and the lithosphere. *J. Geophys. Res.* ; 1967; v. 72(n. 16): p. 4259-4275.

1074. Soga, N. . Elastic constants of garnet under pressure and temperature. *J. Geophys. Res.* ; 1967; v. 72(n. 16): p. 4227-4234.

1075. Heirtzler, J. R. and D. E. Hayes. Magnetic boundaries in the North Atlantic Ocean. *Science*; 1967; v. 157(n. 3785): p. 185-187.

1076. Heirtzler, J. R. . Measurements of the vertical geomagnetic field gradient beneath the surface of the Arctic Ocean. *Geophys. Prospect.* ; 1967; v. xv(n. 2): p. 194-203.

1077. Hunkins, K. . Geomorphic provinces of the Arctic Ocean. *Arctic Drifting Stations*; 1968: p. 365-376.

1078. Ludwig, W. J., D. E. Hayes, and J. I. Ewing. The manila Trench and West Luzon Trough - I. Bathymetry and sediment distribution. *Deep-Sea Res.* ; 1967; v. 14: p. 533-544.

1079. Conolly, J. R. and C. C. Von Der Borch. Sedimentation of physiography of the sea floor south of Australia. *Sediment. Geol.*; 1967; v. 1: p. 181-220.

1080. Burckle, L. H., J. Ewing, T. Saito, and R. Leyden. Tertiary sediment from the East Pacific Rise. *Science*; 1967; v. 157(n. 3788): p. 537-540.

1081. Rona, P. A., E. D. Schneider, and B. C. Heezen. Bathymetry of the continental rise off Cape Hatteras. *Deep-Sea Res.* ; 1967; v. 14: p. 625-633.

1082. Ewing, M. and R.A. Davis. Lebensspuren photographed on the ocean floor. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 259-294.

1083. Kutschale, H. . Long-range sound propagation in the Arctic Ocean. *Arctic Drifting Stations*; 1968: p. 281-295.

1084. Kutschale, H. . Seismic studies on ice island Arlis II. *Arctic Drifting Stations*; 1968: p. 439-458.

1085. Ichiye, T. . Upper ocean boundary-layer flow determined by dye diffusion. *Phys. Fluids Suppl.*; 1967; v. 10: p. S270-S277.

1086. Houtz, R., J. Ewing, M. Ewing, and A. G. Lonardi. Seismic reflection profiles of the New Zealand plateau. *J. Geophys. Res.* ; 1967; v. 72(n. 18): p. 4713-4729.

1087. Hayes, D. E. and W. J. Ludwig. The Manila Trench and West Luzon Trough. II. Gravity and magnetics measurements. *Deep-Sea Res.* ; 1967; v. 14: p. 545-560.

1088. Mandelli, E. F. . Enhanced photosynthetic assimilation ratios in Antarctic polar front (convergence) diatoms. *Limnol. Oceanogr.*; 1967; v. 12(n. 3): p. 484-491.

1089. Glass, B. P. and B. C. Heezen. Tektites and geomagnetic reversals. *Scientific American* ; 1967; v. 217(n. 1): p. 32-38.

1090. Posmentier, E. S. . A theory of microbaroms. *Geophys. J. R. astr. Soc.* ; 1967; v. 13: p. 487-501.

1091. Johnson, G. L. and B. C. Heezen. The Arctic Mid-Oceanic Ridge. *Nature*; 1967; v. 215(n. 5102): p. 724.

1092. Soga, N. . New measurements on the sound velocity of calcium oxide and its relation to Birch's law. *J. Geophys. Res.* ; 1967; v. 72(n. 20): p. 5157-5159.

1093. Roy, J. L., N. D. Opdyke, and E. Irving. Further paleomagnetic results from the Bloomsburg formation. *J. Geophys. Res.* ; 1967; v. 72(n. 20): p. 5075-5086.

1094. Mattaboni, P. and E. Schreiber. Method of pulse transmission measurements for determining sound velocities. *J. Geophys. Res.* ; 1967; v. 72(n. 20): p. 5160-5163.

1095. Anderson, O. R. and O. A. Roels. Myelin-like configurations in *Ochromonas malhamensis*. *J. Ultrastr. Res.* ; 1967; v. 20: p. 127-139.

1096. McIntyre, A. and A.W.H. Bé . Modern Coccolithophoridae of the Atlantic Ocean - I. Placoliths and Cyrotoliths. *Deep-Sea Res.* ; 1967; v. 14: p. 561-597.

1097. Lehmann, I. . On the travel times of P as obtained from nuclear explosions Bilby and Shoal. *Phys. Earth Planet. Inter.*; 1967; v. 1: p. 14-23.



1098. Gerard, R. D. and J. L. Worzel. Condensation of atmospheric moisture from tropical maritime air masses as a freshwater resource. *Science*; 1967; v. 157(n. 3794): p. 1300-1302.

1099. Sato, R. and A. F. Espinosa. Dissipation in the earth's mantle and rigidity and viscosity in the earth's core determined from waves multiply reflected from the mantle-core boundary. *Bull. Seismol. Soc. Am.* ; 1967; v. 57(n. 5): p. 829-856.

1100. Lowrie, A. Jr. and B. C. Heezen. Knoll and sediment drift near Hudson Canyon. *Science*; 1967; v. 157(n. 3796): p. 1552-1553.

1101. Isacks, B. L., L. R. Sykes, and J. Oliver. Spatial and temporal clustering of deep and shallow earthquakes in the Fiji-Tonga-Kermadec region. *Bull. Seismol. Soc. Am.* ; 1967; v. 57(n. 5): p. 935-958.

1102. McDowell, F. W. and J. L. Kulp. Age of intrusion and ore deposition in the Robinson Mining District of Nevada. *Econ. Geol.* ; 1967; v. 62: p. 905-909.

1103. Donn, W. L. . Natural infrasound of five seconds period. *Nature*; 1967; v. 215(n. 5109): p. 1469-1470.

1104. Donn, W. L. and M. Ewing. The theory of an ice-free Arctic Ocean. *Meteorol. Monogr.*; 1968; v. 8(n. 30): p. 100-105.

1105. Manghnani, M. H., E. Schreiber, and N. Soga. Use of ultrasonic interferometry technique for studying elastic properties of rocks. *J. Geophys. Res.* ; 1968; v. 73(n. 2): p. 824-826.

1106. Thomsen, L. . On the distributions of density and temperature in the low-velocity zone. *J. Geophys. Res.*; 1967; v. 72(n. 22): p. 5649-5653.

1107. Latham, G. V., R. S. Anderson, and M. Ewing. Pressure variations produced at the ocean bottom by hurricanes. *J. Geophys. Res.* ; 1967; v. 72(n. 22): p. 5693-5704.

1108. Johnson, G. L. and B. C. Heezen. Morphology and evolution of the Norwegian-Greenland Sea. *Deep-Sea Res.*; 1967; v. 14: p. 755-771.

1109. Ruddiman, W. F. and B. C. Heezen. Differential solution of planktonic Foraminifera. *Deep-Sea Res.* ; 1967; v. 14: p. 801-808.

1110. Dishon, M. and B. C. Heezen. Computerized library of deep sea soundings. *Nature*; 1967; v. 215(n. 5109): p. 1439-1441.
1111. Simpson, E.S.W. and H.D. Needham. The floor of the southeast Atlantic Ocean: a drift. *Conf. on Petrologic Crystal Chemistry: American Geophysical Union*; 1972; v. 53(n. 2): 17 pgs. .
1112. Morgenstein, M. . Authigenic cementation of scoriaceous deep-sea sediments west of the Society Ridge, South Pacific. *Sedimentology*; 1967; v. 9: p. 105-118.
1113. Talwani, M. . Experiences with U. S. Navy's navigation satellite system. *Proc. First Marine Geodesy Symp.*; 1967: p. 225-227.
1114. Anderson, O. L. and N. Soga. A restriction to the law of corresponding states. *J. Geophys. Res.* ; 1967; v. 72(n. 22): p. 5754-5757.
1115. Herron, E. M. and J. R. Heirtzler. Sea-floor spreading near the Galapagos. *Science*; 1967; v. 158(n. 3802): p. 775-780.
1116. Leyden, R., R. Sheridan, and M. Ewing. A seismic refraction section across the equatorial Atlantic. *Conf. on Petrologic Crystal Chemistry: American Geophysical Union*; 1972; v. 53(n. 2): 4 pgs.
1117. Gerard, R. D. and A. F. Amos. A surface-actuated multiple sampler. *4th Natl. ISA Mar. Sci. Instr. Symp.*; 1968; v. 4: p. 682-686.
1118. Saito, T., L. H. Burckle, and D. R. Horn. Paleocene core from the Norwegian basin. *Nature*; 1967; v. 216(n. 5113): p. 357-359.
1119. Heezen, B. C. and G. L. Johnson. Mediterranean undercurrent and microphysiography west of Gibraltar. *Bull. Inst. Oceanogr.*; 1969; v. 67(n. 1382): p. 1-95.
1120. Gordon, A. L. . Circulation of the Caribbean Sea. *J. Geophys. Res.* ; 1967; v. 72(n. 24): p. 6207-6223.
1121. LePichon, X. and M. Langseth. Comments on paper by Francis Birch, 'Low values of oceanic heat flow'. *J. Geophys. Res.* ; 1967; v. 72(n. 24): p. 6377-6378.

1122. Hays, J. D. and N. D. Opdyke. Antarctic Radiolaria, magnetic reversals, and climatic change. *Science*; 1967; v. 158(n. 3804): p. 1001-1011.

1123. Langseth, M. G. Jr. and P. T. Taylor. Recent heat flow measurements in the Indian Ocean. *J. Geophys. Res.*; 1967; v. 72(n. 24): p. 6249-6260.

1124. Broecker, W. S. . In defense of the astronomical theory of glaciation. *Meteorol. Monograph*; 1968; v. 8(n. 30): p. 139-141.

1125. Burkholder, P. R. and L. M. Burkholder. Primary productivity in surface waters of the South Pacific Ocean. *Limnol. Oceanogr.*; 1967; v. 12(n. 4): p. 606-617.

1126. Brune, J. N. and C. Y. King. Excitation of mantle Rayleigh waves of period 100 seconds as a function of magnitude. *Bull. Seismol. Soc. Am.* ; 1967; v. 57(n. 6): p. 1355-1365.

1127. Gordon, A. L. . Comment on the peripheral Antarctic-water discharge. *J. Mar. Res.* ; 1968; v. 26(n. 1): p. 78-79.

1128. Dymond, J. and H. L. Windom. Cretaceous K-Ar ages from Pacific ocean seamounts. *Earth Planet. Sci. Lett.*; 1968; v. 4: p. 47-52.

1129. Broecker, W. S., Y. H. Li, and J. Cromwell. Radium-226 and Radon-222: concentration in Atlantic and Pacific Oceans. *Science*; 1967; v. 158(n. 3806): p. 1307-1310.

1130. Thorndike, E. M. and A. P. Marion. A differential interference refractometer. *Analytical Chem.*; 1968; v. 40: p. 236-238.

1131. McIntyre, A. . Coccoliths as paleo-climatic indicators of Pleistocene glaciation. *Science*; 1967; v. 158(n. 3806): p. 1314-1317.

1132. Burkholder, P. R. and O. A. Roels. Biological oceanology at Lamont Geological Observatory. *NY State Sci. Technol. Fdtn.*; 1968: p. 72-85.

1133. Dickson, G.O., W.C. Pitman III, and J.R. Heirtzler. The age of the South Atlantic floor from an interpretation of the magnetic anomalies. *Conf. on Petrologic Crystal Chemistry: American Geophysical Union*; 1972; v. 53(n. 2): 10 pgs.

1134. Chen, C. . Zoogeography of the cosomatous pteropods in the west Antarctic Ocean. *Nautilus*; 1968; v. 81(n. 3): p. 94-101.

1135. Fisher, R. L., G. L. Johnson, and B. C. Heezen. Mascarene Plateau, western Indian Ocean. *Geol. Soc. Am. Bull.*; 1967; v. 78: p. 1247-1266.

1136. Ewing, M. and J. L. Worzel. Geophysical oceanographic studies at Lamont Geological Observatory. *NY State Sci. & Technol. Fdn.*; 1968: p. 8-35.

1137. Opdyke, N.D. and R. Knowles. Paleomagnetism of cores from the South Atlantic. *Conf. on Petrologic Crystal Chemistry: American Geophysical union*; 1972; v. 53(n. 2): 5 pgs.

1138. Oliver, J. and B. Isacks. Structure and mobility of the crust and mantle in the vicinity of island arcs. *Canadian J. Earth Sci.*; 1968; v. 5: p. 985-991.

1139. Broecker, W. S., D. L. Thurber, J. Goddard, T. L. Ku, R. K. Matthews, K. J. Mesolella. Milankovitch hypothesis supported by precise dating of coral reefs and deep-sea sediments. *Science*; 1968; v. 159(n. 3812): p. 297-300.

1140. Nowroozi, A. A. . Measurement of Q values from the free oscillations of the earth. *J. Geophys. Res.* ; 1968; v. 73(n. 4): p. 1407-1415.

1141. Isacks, B. and R. Page. Comment on paper by C. Lomnitz, 'Statistical prediction of earthquakes'. *Rev. Geophys.*; 1968; v. 6(n. 1): p. 99-100.

1142. Sykes, L. R. . Deep earthquakes and rapidly-running phase changes, a reply to Dennis and Walker. *J. Geophys. Res.* ; 1968; v. 73(n. 4): p. 1508-1510.

1143. Bunch, T.E. and W.A. Cassidy. Impact-induced deformation in the Campo del Cielo meteorite. in: "Shock Metamorphism of Natural Materials". Baltimore, MD: Mono Book Corp.; 1968: p. 601-612.

1144. Sato, Y., T. Usami, and M. Landisman. Theoretical seismograms of torsional disturbances excited at a focus within a heterogeneous spherical earthcase of a Gutenberg-Bullen A' earth model. *Bull. Seismol. Soc. Am.* ; 1968; v. 58(n. 1): p. 133-170.

1145. Heezen, B. C. . The Atlantic continental margin. *Univ. Missouri Rolla J.* ; 1968; (n. 1): p. 5-25.

1146. Wall, R. E. . A sub-bottom reflection survey in the central basin of Lake Erie. *Geol. Soc. Am. Bull.* ; 1968; v. 79: p. 91-106.

1147. Opdyke, N.D. The Jaramillo event as detected in oceanic cores. in: "The Application of Modern Physics to the Earth and Planetary Interiors". London: Wiley-Interscience; 1969: p. 549-552.

1148. LePichon, X. and J. R. Heirtzler. Magnetic anomalies in the Indian Ocean and sea-floor spreading. *J. Geophys. Res.* ; 1968; v. 73(n. 6): p. 2101-2117.

1149. Dickson, G. O., W. C. Pitman III, and J. R. Heirtzler. Magnetic anomalies in the South Atlantic and ocean floor spreading. *J. Geophys. Res.* ; 1968; v. 73(n. 6): p. 2087-2100.

1150. Taddeucci, A., W. S. Broecker, and D. L. Thurber. <sup>230</sup>Th dating of volcanic rocks. *Earth Planet. Sci. Lett.* ; 1967; v. 3: p. 338-342.

1151. Davidson, M.J. and J. R. Heirtzler. Spatial coherence of geomagnetic rapid variations. *J. Geophys. Res.*; 1968; v. 73(n. 6): p. 2143-2162.

1152. Pitman III, W.C., E.M. Herron, and J.R. Heirtzler. Magnetic anomalies in the Pacific and sea floor spreading . *J. Geophys. Res.*; 1968; v. 73(n. 6): p. 2069-2085.

1153. Heirtzler, J.R., G.O. Dickson, E.M. Herron, W.C. Pitman III, and X. Le Pichon. Marine magnetic anomalies, geomagnetic field reversals, and motions of the ocean floor and continents. *J. Geophys. Res.*; 1968; v. 73(n. 6): p. 2119-2136.

1154. Gast, P. W. . Implications of the Surveyor V chemical analysis. *Science*; 1968; v. 159: p. 897.

1155. Horn, D. R., B. M. Horn, and M. N. Delach. Correlation between acoustical and other physical properties of deep-sea cores. *J. Geophys. Res.* ; 1968; v. 73(n. 6): p. 1939-1957.

1156. Cassidy, W.A. Meteorite impact structures at Campo del Cielo, Argentina. in: "Shock Metamorphism of Natural Materials". Baltimore, MD: Mono Book Corp.; 1968: p. 117-128.

1157. Nowroozi, A. A., M. Ewing, J. E. Nafe, and M. Fleigel. Deep ocean current and its correlation with the ocean tide off the coast of northern California. *J. Geophys. Res.* ; 1968; v. 73(n. 6): p. 1921-1932.

1158. Ichiye, T. . Hydrography, tides and tidal flushing of Great South Bay - South Oyster Bay, Long Island. *Trans. Natl. Symp. Mar. Technol. Soc.* ; 1968: p. 15-62.

1159. Ewing, J. I. . History of the ocean basins as recorded in the sediments. N. Y. State Sci. & Technol. Fdtn.; 1968: p. 144-155.

1160. Simon, R.B. Seismological Bulletin, 1 January 1965-30 June 1965. NY: Lamont Geological Observatory of Columbia University; 1968: .

1161. Ewing, M., J.I. Ewing, R.E. Houtz, and R. Leyden. Sediment distribution in the Bellingshausen Basin. Symp. Antarctic Oceanog., 1966; 1968: p. 89-100.

1162. Hekinian, R. . Rocks from the mid-oceanic ridge in the Indian Ocean. Deep-Sea Res.; 1968; v. 15: p. 195-213.

1163. Roels, O.A. Nutritional value of vitamin A: human studies. Assoc. Vitamin Chemists Symp., Chicago; 1968: p. 1-12.

1164. Ruddiman, W.F. Historical stability of the Gulf Stream meander belt: foraminiferal evidence. Deep-Sea Res.; 1968; v. 15: p. 137-148.

1165. Anderson, O.L. On the use of ultrasonic and shock-wave data to estimate compressions at extremely high pressures. Phys. Earth Planet. Interiors; 1968; v. 1(): p. 169-176.

1166. Le Pichon, X., J. Ewing, and R. E. Houtz. Deep-sea sediment velocity determination made while reflection profiling. J. Geophys. Res.; 1968; v. 73( n. 8): p. 2597-2614.

1167. Houtz, R., J. Ewing, and X. Le Pichon. Velocity of deep-sea sediments from sonobuoy data. J. Geophys. Res.; 1968; v. 73(n. 8): p. 2615-2641.

1168. Thorndike, E.M. Physics of underwater photography. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 43-45.

1169. Bruce, J.G. Jr. and E.M. Thorndike. Photographic measurements of bottom currents. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 107-111.

1170. Thorndike, E.M. and M. Ewing. Photographic nephelometers for the deep sea. in: "Deep-Sea Photography". Baltimore, MD: Johns Hopkins Press; 1967: p. 113-116.

1171. Talwani, M. A review of recent geophysical studies on mid-ocean ridges. NY State Sci. & Tech. Fdtn.; 1968: p. 52-71.

1172. Schreiber, E. and O. L. Anderson. Revised data on polycrystalline magnesium oxide. *J. Geophys. Res.* ; 1968; v. 73(n. 8): p. 2837-2838.

1173. Worzel, J. L. . Advances in marine geophysical research of continental margins. *Canadian J. Earth Sci.* ; 1968; v. 5: p. 963-983.

1174. Ku, T. L., W. S. Broecker, and N. Opdyke. Comparison of sedimentation rates measured by paleomagnetic and the ionium methods of age determination. *Earth Planet. Sci. Lett.* ; 1968; v. 4: p. 1-16.

1175. Costin, J.M. Direct current measurements in the Antilles Current. *J. Geophys. Res.*; 1968; v. 73(n. 10): p. 3341-3344.

1176. Page, R.A., P.H. Molnar, and J. Oliver. Seismicity in the vicinity of the Ramapo fault, New Jersey-New York. *Bull. Seism. Soc. Am.*; 1968; v. 58 (n. 2): p. 681-687.

1177. Langseth, M.G., K.A. More, and W.E. Johnson. An experiment to measure heat flow from the interior of the moon. *Bendix Tech. J.*; 1968; v. 1 (n. 1): p. 33-43.

1178. Ninkovich, D. Pleistocene volcanic eruptions in New Zealand recorded in deep-sea sediments. *Earth and Planet. Sci. Lett.*; 1968; v. 4: p. 89-102.

1179. Miyashiro, A. Effect of the high-luminosity stage of the protosun on the composition of planets and meteorites. *Chemie der Erde*; 1968; v. 27(n. 3): p. 1-8.

1180. Murauchi, S., N. Den, S. Asano, H. Hotta, T. Yoshii, T. Asanuma, K. Hagiwara, K. Ichikawa, T. Sato, W.J. Ludwig, J.I. Ewing, N.T. Edgar, and R.E. Houtz. Crustal structure of the Philippine Sea. *J. Geophys. Res.*; 1968; v. 73(n. 10): p. 3143-3171.

1181. Burkholder, P.R. and S. Lewis. Some patterns of B vitamin requirements among neritic marine bacteria. *Can. J. Microbio.*; 1968; v. 14: p. 537-543.

1182. Hargraves, P.E. . Two naturally occurring abnormalities of the diatom *Podocystis adriatica*. *Rhodora*; 1968; v. 70: p. 292-294.

1183. Burkholder, L., P.R. Burkholder, A. Chu, N. Kostyke, and O.A. Roels. Fish fermentation. *Food Technol.*; 1968; v. 22(n. 10): p. 1278-1284.

1184. Lui, N.S.T., O.A. Roels, M.E. Trout, and O.R. Anderson. Subcellular distribution of enzymes in *Ochromonas malhamensis*. *J. Protozool.* ; 1968; v. 15(n. 3): p. 536-542.
1185. Sheridan, R.E. and C.L. Drake. Seaward extension of the Canadian Appalachians. *Can. J. Earth Sci.* ; 1968; v. 5: p. 337-373.
1186. Gast, P.W. . Trace element fractionation and the origin of tholeiitic and alkaline magma types. *Geochim. Cosmochim. Acta*; 1968; v. 32: p. 1057-1086.
1187. Roels, O.A. The influence of vitamins A and E on lysosomes. in: J.T. Dingle and H.B. Fell, Eds. "Lysosomes in Biology and Pathology": North Holland Pub. Co.; 1969; v. 1: p. 254-275.
1188. Fehr, U., B. Ben-Ary, and L. G. Redekopp. Analysis of the electromechanical piston used in calibrating infrasonic sensors and of the modified Moore variometer used in infrasound studies. *J. Acoust. Soc. Am.* ; 1968; v. 43(n. 5): p. 1129-1136.
1189. Posmentier, E. S. . Source size as a theoretical limitation on the determination of wave vectors by detector arrays. *J. Acoust. Soc. Am.*; 1968; v. 43 (n. 5): p. 1055-1061.
1190. Dymond, J. R., N. D. Watkins, and Y. R. Nayudu. Age of the Cobb seamount. *J. Geophys. Res.* ; 1968; v. 73(n. 12): p. 3977-3979.
1191. Page, R. . Focal depths of aftershocks. *J. Geophys. Res.* ; 1968; v. 73 (n. 12): p. 3897-3903.
1192. Heirtzler, J.R. Evidence for ocean floor spreading across the ocean basins. in: R.A. Phinney, Ed. "The History of the Earth's Crust": Princeton Univ. Press; 1968: p. 90-100.
1193. Tobin, D. G. and L. R. Sykes. Seismicity and tectonics of the northeast Pacific Ocean. *J. Geophys. Res.* ; 1968; v. 73 (n. 12): p. 3821-3845.
1194. Opdyke, N.D. The paleomagnetism of oceanic cores. in: R.A. Phinney, Ed. "The History of the Earth's Crust": Princeton Univ. Press; 1968: p. 61-72.
1195. Latham, G. V. and A. A. Nowroozi. Waves, weather, and ocean bottom microseisms. *J. Geophys. Res.* ; 1968; v. 73(n. 12): p. 3945-3956.



1196. Ludwig, W. J., J. E. Nafe, E. S. W. Simpson, and S. Sacks. Seismic-refraction measurements on the southeast African continental margin. *J. Geophys. Res.* ; 1968; v. 73(n. 12): p. 3707-3719.

1197. LePichon, X. Sea-floor spreading and continental drift. *J. Geophys. Res.* ; 1968; v. 73(n. 12): p. 3661-3697.

1198. Page, R. . Aftershocks and micro-aftershocks of the great Alaska earthquake of 1964. *Bull. Seismol. Soc. Am.* ; 1968; v. 58(n. 3): p. 1131-1168.

1199. Sykes, L.R. Seismological evidence for transform faults, sea floor spreading, and continental drift. in: R.A. Phinney, Ed. "The History of the Earth's Crust": Princeton Univ. Press; 1968: p. 120-150.

1200. Bé , A.W.H. Microstructural evidence of the close affinity of *Globigerinella Cushman* to *Hastigerina Thomson*. *Proc. 1967 First Inter. Conf. Plank. Microfossils. Geneva*; 1969; v. 1: p. 89-91.

1201. Simon, R.B. Lamont Geological Observatory. *Seismological Bulletin*; 1968; (30 June 1965 - 31 December 1965).

1202. Fox, P. J., B. C. Heezen, and A. M. Harian. Abyssal anti-dunes. *Nature*; 1968; v. 220(n. 5166): p. 470-472.

1203. Hekinian, R., F. Melieres, W. D. Nesteroff, and L. H. Burckle. Une importante lacune dans les depots profonds au nord des iles Crozet (Indien sud). *Cahiers Oceanographiques*; 1968: p. 29-35.

1204. Boucher, G., T. Matumoto, and J. Oliver. Localized microearthquakes in the Denali fault zone. *J. Geophys. Res.* ; 1968; v. 73(n. 14): p. 4789-4793.

1205. Garlick, D. The stable isotopes of oxygen. in: K.H. Wedepohl, Ed. "Handbook of Geochemistry". NY: Springer-Verlag; 1969; v. II/1(sec. 8B).

1206. Gast, P.W. Upper mantle chemistry and evolution of the earth's crust. in: R.A. Phinney, Ed. "The History of the Earth's Crust": Princeton Univ. Press; 1968: p. 15-27.

1207. Hayes, D. E. and J. R. Heirtzler. Magnetic anomalies and their relation to the Aleutian Island arc. *J. Geophys. Res.* ; 1968; v. 73 (n. 14): p. 4637-4646.

1208. Herron, E. M., J. Dorman, and C. L. Drake. Seismic study of the sediments in the Hudson River. *J. Geophys. Res.* ; 1968; v. 73 (n. 10): p. 4701-4709.
1209. Avery, O. E., G. D. Burton, and J. R. Heirtzler. An aeromagnetic survey of the Norwegian Sea. *J. Geophys. Res.* ; 1968; v. 73 (n. 14): p. 4583-4600.
1210. Drake, C. L. and J. E. Nafe. The transition from ocean to continent from seismic refraction data. *AGU, Geophys. Mono. n. 12*; 1968: p. 174-186.
1211. Ewing, J., M. Ewing, T. Aitken, and W. J. Ludwig. North Pacific sediment layers measured by seismic profiling. *AGU, Geophys. Mono n. 12*; 1968: p. 147-173.
1212. Donn, W. L. and N. K. Balachandran. On continuous nocturnal pressure fluctuations. *Quat. J. R. Meteorol. Soc.*; 1968; v. 94: p. 208-209.
1213. Blow, W. H. and T. Saito. The morphology and taxonomy of *Globigerina mexicana* Cushman, 1925. *Micropaleontology*; 1968; v. 14(n. 3): p. 357-360.
1214. Takahashi, T., W. Broecker, Y. H. Li, and D. Thurber. Chemical and isotopic balances for a meromictic lake. *Limnol. Oceanogr.*; 1968; v. 13 (n. 2): p. 272-292.
1215. Drake, C. L., J. I. Ewing, and H. Stockard. The continental margin of the eastern United States. *Canadian J. Earth Sci.* ; 1968; v. 5: p. 993-1010.
1216. Worzel, J. L., R. Leyden, and M. Ewing. Newly discovered diapirs in Gulf of Mexico. *Bull. Am. Assoc. Pet. Geol.* ; 1968; v. 52(n. 7): p. 1194-1203.
1217. Bryant, W. R., J. Antoine, M. Ewing, and B. Jones. Structure of Mexican continental shelf and slope, Gulf of Mexico. *Bull. Am. Assoc. Pet. Geol.* ; 1968; v. 52(n. 7): p. 1204-1228.
1218. Abdel-Monem, A. A. and J. L. Kulp. Paleogeography and the source of sediments of the Triassic basin, New Jersey, by K-Ar dating. *Geol. Soc. Am. Bull.* ; 1968; v. 79: p. 1231-1241.
1219. Ewing, M., K. Hunkins, and E. M. Thorndike. Some unusual photographs in the Arctic Ocean. *Mar. Technol. Soc. J.* ; 1969; v. 3(n. 1): p. 41-44.
1220. Thorndike, E. M. and M. Ewing. Photographic determination of ocean-bottom current velocity. *Mar. Technol. Soc. J.* ; 1969; v. 3(n. 1): p. 45-50.

1221. Donn, W. L. and E. Posmentier. Infrasonic waves from natural and artificial sources. Proc. Acoustic-Gravity Waves in the Atmosphere; 1968: p. 195-208.

1222. Balachandran, N. K. and W. L. Donn. Dispersion of acoustic-gravity waves in the atmosphere. Proc. Acoustic-Gravity Waves in the Atmosphere; 1968: p. 179-193.

1223. Bé , A.W.H. Planktonic foraminifera. Antarctic Map Folio Series. Folio 11 ed.: Amer. Geogra. Soc.; 1969: p. 9-12.

1224. Soga, N. and E. Schreiber. Porosity dependence of sound velocity and Poisson's ratio for polycrystalline MgO determined by resonant sphere method. J. Am. Ceramic Soc. ; 1968; v. 51(n. 8): p. 465-466.

1225. Fehr, U. . Propagating energy in the upper atmosphere including lower ionosphere generated by artificial sources. Proc. Acoustic-Gravity Waves in the Atmosphere; 1968: p. 87-98.

1226. Bé , A.W.H. . Shell porosity of Recent planktonic foraminifera as a climatic index. Science; 1968; v. 161: p. 881-884.

1227. Burkholder, P.R. and T.E. Doheny. The biology of eelgrass. Dept. Conserv. and Waterways, Town of Hempstead, L.I.; 1968: p. 1-120.

1228. Glass, B. P. . Glassy objects (microtektites?) from deep-sea sediments near the Ivory Coast. Science; 1968; v. 161: p. 891-893.

1229. Hubbard, N. J. . A chemical comparison of oceanic ridge, Hawaiian tholeiitic and Hawaiian alkalid basalts. Earth Planet. Sci. Lett. ; 1969; v. 5: p. 346-352.

1230. Drake, C. L. . Continental margins. AGU, Geophys. Mono n. 13; 1969: p. 549-556.

1231. Oversby, V. M. and P. W. Gast. Lead isotope compositions and uranium decay series disequilibrium in recent volcanic rocks. Earth Planet. Sci. Lett.; 1968; v. 5: p. 199-206.

1232. Sykes, L. R. . Seismicity of the mid-oceanic ridge system. AGU Geophys. Mono. no. 13; 1969: p. 148-153.

1233. Balachandran, N. K. . Acoustic-gravity wave propagation in a temperature- and wind-stratified atmosphere. J. Atmos. Sci.; 1968; v. 25(n. 5): p. 818-826.

1234. Isacks, B., J. Oliver, and L. R. Sykes. Seismology and the new global tectonics. *J. Geophys. Res.* ; 1968; v. 73(n. 18): p. 5855-5899.
1235. Buchbinder, G. G. R. . Properties of the core-mantle boundary and observations of PcP. *J. Geophys. Res.* ; 1968; v. 73(n. 18): p. 5901-5923.
1236. Ewing, J. . Seismic model of the Atlantic Ocean. AGU, *Geophys. Mono. n. 13*; 1969: p. 220-225.
1237. Broecker, W. S., J. Cromwell, and Y. H. Li. Rates of vertical eddy diffusion near the ocean floor based on measurements of the distribution of excess <sup>222</sup>Rn. *Earth Planet. Sci. Lett.*; 1968; v. 5: p. 101-105.
1238. Schreiber, E. . Comment on the elastic modulus-porosity relation. *J. Am. Ceram. Soc.*; 1968; v. 51(n. 9): p. 541-542.
1239. Knowles, R. R. and N. D. Opdyke. Paleomagnetic results from the Mauch Chunk formation: a test of the origin of curvature in the folded Appalachians of Pennsylvania. *J. Geophys. Res.* ; 1968; v. 73(n. 20): p. 6515-6526.
1240. Liebermann, R. C. and E. Schreiber. Elastic constants of polycrystalline hematite as a function of pressure to 3 kilobars. *J. Geophys. Res.* ; 1968; v. 73(n. 20): p. 6585-6590.
1241. Gast, P. W. . The isotopic composition of lead from St. Helena and Ascension Islands. *Earth Planet. Sci. Lett.*; 1969; v. 5: p. 353-359.
1242. Pitman, W. C. III and D. E. Hayes. Sea-floor spreading in the Gulf of Alaska. *J. Geophys. Res.* ; 1968; v. 73(n. 20): p. 6571-6580.
1243. Folger, D. W. . New particulate matter sampling devices and effects of technique on marine suspensate recovery. *Deep-Sea Res.*; 1968; v. 15: p. 657-664.
1244. Chen, C. . Pleistocene pteropods in pelagic sediments. *Nature*; 1968; v. 219(n. 5159): p. 1145-1149.
1245. Posmentier, E. S. and W. L. Donn. Probing the atmosphere with infrasound. in : *Atmospheric Exploration by Remote Probes: Nat. Acad. Sci.*; 1969; V. 2: p. 681-691.

1246. Hade, G., M. Conner, and J. T. Kuo. Laser interferometer calibration system for extensometers. *Bull. Seismol. Soc. Am.* ; 1968; v. 58(n. 5): p. 1379-1383.
1247. Alsop, L. E. and R. Chander. The generation of direct and coupled PLmodes. *Supple. Nuovo Cimento*; 1968; v.6(n. 1, serie 1): p. 7-21.
1248. Nowroozie, A. A. and L. E. Alsop. Torsional free periods of the earth observed at six stations around the earth. *Supple. Nuovo Cimento*; 1968; v. 6(n. 1, serie 1): p. 133-146.
1249. Clark, G. S. and J. L. Kulp. Isotopic age study of metamorphism and intrusion in western Connecticut and southeastern New York. *Am. J. Sci.* ; 1968; v. 266: p. 865-894.
1250. Ichiye, T. . Marine geological research and exploration. *Undersea Technol. Handbook/Dir.* ; 1968: p. A-39-48.
1251. Anderson, T. F. . Surface area measurement in calcite grains by isotopic exchange with C-14 labeled carbon dioxide. *Geochim. Cosmochim. Acta*; 1968; v. 32: p. 1177-1186.
1252. Talwani, M. and X. Le Pichon. Gravity field over the Atlantic Ocean. *Am. Geophys. Union*; 1969; (Geophys. Mono. no. 13): p. 341-351.
1253. Heirtzler, J.R. Geomagnetic studies in the Atlantic Ocean. *Am. Geophys. Union*; 1969; (Geophys. mono. no. 13): p. 430-436.
1254. Anderson, O.L., E. Schreiber, and R. C. Liebermann. Some elastic constant data on minerals relevant to geophysics. *Reviews of Geophysics*; 1968; v. 6(n. 4): p. 491-524.
1255. Ewing, M. and F. Mouzo. Ocean bottom photographs in the area of the oldest known outcrops, North Atlantic Ocean. *Proc. Natl. Acad. Sci.*; 1968; v. 61(n. 3): p. 787-793.
1256. Matumoto, T. and R.A. Page, Jr. Microaftershocks following the Alaska earthquake of March 28, 1964: determination of hypocenters and crustal velocities in the Kenai Peninsula - Prince William Sound area. in: "Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks"; 1969; Publ. 10-3 (C&GS)(Parts B & C): p. 157-173.
1257. Habib, D. Middle Cretaceous palynomorph in a deep-sea core from the seismic reflector horizon A outcrop area. *Micropaleontology*; 1969; v. 15(n. 1): p. 85-101.

1258. Shaw, D.M. and W.L. Donn. Milankovitch radiation variations: A quantitative evaluation. *Science*; 1968; v. 162: p. 1270-1272.
1259. Ludwig, W.J., J.I. Ewing, and M. Ewing. Structure of Argentine continental margin. *Am. Assoc. Pet. Geol. Bull.*; 1968; v. 52(n. 12): p. 2337-2368.
1260. Anderson, O.L. Comments on the negative pressure dependence of the shear modulus found in some oxides. *J. Geophys. Res.*; 1968; v. 73(n. 24): p. 7707-7712.
1261. Fox, P.J., A. Lowrie, Jr., and B.C. Heezen. Oceanographer fracture zone. *Deep-Sea Res.*; 1969; v. 16: p. 59-66.
1262. Habib, D. Spores, pollen, and microplankton from the horizon beta outcrop. *Science*; 1968; v. 162: p. 1480-1481.
1263. Oversby, V.M. and P.W. Gast. Oceanic basalt leads and the age of the earth. *Science*; 1968; v. 162: p. 925-927.
1264. Banghar, A.R. and L.R. Sykes. Focal mechanisms of earthquakes in the Indian Ocean and adjacent regions. *J. Geophys. Res.*; 1969; v. 74(n. 2): p. 632-649.
1265. Donn, W.L., E. Posmentier, U. Fehr, and N.K. Balachandran. Infrasond at long range from Saturn V, 1967. *Science*; 1968; v. 162: p. 1116-1120.
1266. Udell, H.F., J. Zarudsky, T.E. Doheny, and P.R. Burkholder. Productivity and nutrient values of plants growing in the salt marshes of the Town of Hempstead, Long Island. *Bull. Torrey Botan. Club*; 1969; v. 96(n. 1): p. 42-51.
1267. Needham, H.D., D. Habib, and B.C. Heezen. Upper carboniferous palynomorphs as a tracer of red sediment dispersal patterns in the northwest. *J. Geol.*; 1969; v. 77: p. 113-120.
1268. Roels, O.A. and D.O. Shah. Molecular interactions in lecithinretinol monolayers. *J. Colloid and Interf. Sci.*; 1969; v. 29(n. 2): p. 279-287.
1269. Burkholder, P.R. and K. Ruetzler. Antimicrobial activity of some marine sponges. *Nature*; 1969; v. 222(n. 5197): p. 983-984.
1270. Windisch, C.C., R.J. Leyden, J.L. Worzel, T. Saito, and J. Ewing. Investigation of horizon beta. *Science*; 1968; v. 162: p. 1473-1479.

1271. Chander, R., L.E. Alsop, and J. Oliver. On the synthesis of shear-coupled PL waves. *Bull. Seism. Soc. Amer.*; 1968; v. 58(n. 6): p. 1840-1877.
1272. Sharma, G.M., L. Michaels, and P.R. Burkholder. Goniiodomin, a new antibiotic from a dinoflagellate. *J. Antibio.*; 1968; v. xxi(n. 11): p. 659-664.
1273. Alsop, L.E. An orthonormality relation for elastic body waves. *Bull. Seism. Soc. Amer.*; 1968; v. 58(n. 6): p. 1949-1954.
1274. Buchbinder, G.G.R. Amplitude spectra of PcP and P phases. *Bull. Seism. Soc. Amer.*; 1968; v. 58(n. 6): p. 1797-1819.
1275. Bender, M.L. and C. Shultz. The distribution of trace metals in cores from a traverse across the Indian Ocean. *Geochim. et Cosmochim. Acta* ; 1969; v. 33: p. 292-297.
1276. Roels, O.A. Marine proteins. *Nurtition Reviews*; 1969; v. 27(n. 2): p. 35-39.
1277. Hillman, N.S. Halocypridae. *Antarctic Map Folio Series: Amer. Geogr. Soc.*; 1969; (Folio 11): p. 29-30.
1278. Ericson, D.B. and G. Wollin. Pleistocene climates and chronology in deep-sea sediments. *Science*; 1968; v. 162: p. 1227-1234.
1279. Nowroozi, A.A., J. Kuo, and M. Ewing. Solid earth and oceanic tides recorded on the ocean floor off the coast of northern California. *J. Geophys. Res.*; 1969; v. 74(n. 2): p. 605-614.
1280. Moore, W.S. Measurement of Ra228 and Th228 in sea water. *J. Geophys. Res.*; 1969; v. 74(n. 2): p. 694-704.
1281. Ward, P.L., G. Palmason, and C. Drake. Microearthquake survey and the mid-Atlantic ridge in Iceland. *J. Geophys. Res.*; 1969; v. 74(n. 2): p. 665-684.
1282. Warren, N. Elastic constants versus porosity for a highly porous ceramic, perlite. *J. Geophys. Res.*; 1969; v. 74(n. 2): p. 713-719.
1283. Cassidy, W.A., B. Glass, and B.C. Heezen. Physical and chemical properties of Australasian microtektites. *J. Geophys. Res.*; 1969; v. 74(n. 4): p. 1008-1025.

1284. Kaufman, A. The Th<sup>232</sup> concentration of surface ocean water. *Geochim. et Cosmochim. Acta*; 1969; v. 33: p. 717-724.
1285. Fehr, U. and L.C. McGahan. Energy propagation in the lower ionosphere and atmosphere produced by artificial disturbances. *J. Geophys. Res.*; 1969; v. 74(n. 3): p. 868-875.
1286. Jacobs, M.B. and M. Ewing. Suspended particulate matter: concentration in the major oceans. *Science*; 1969; v. 163: p. 380-383.
1287. Ewing, J., R. Leyden, and M. Ewing. Refraction shooting with expendable sonobuoys. *Amer. Assoc. Pet. Geol. Bull.*; 1969; v. 53(n. 1): p. 174-181.
1288. Chen, C. Pteropods in the hot brine sediments of the Red Sea. in: E.T. Degens and D.A. Ross, Eds. "Hot Brines and Recent Metal Deposits in the Red Sea". NY: Springer-Verlag Inc.; 1969: p. 313-316.
1289. Barazangi, M. and J. Dorman. World seismicity maps compiled from ESSA, Coast and Geodetic Survey, epicenter data, 1961-1967. *Bull. Seism. Soc. Amer.*; 1969; v. 59(n. 1): p. 369-380.
1290. Scholz, C.H. Worldwide distribution of earthquakes. *Nature*; 1969; v. 221(n. 5176): p. 165.
1291. Sharma, G.M., B. Vig, and P.R. Burkholder. Studies on the antimicrobial substances of sponges, III. Chemical properties of some antibacterial compounds from marine sponges. *Trans. Drugs from the Sea Sympos.*; 1968; p. 119-126.
1292. Ku, T.L., D.L. Thurber, and G.G. Mathieu. Radiocarbon chronology of Red Sea sediments. in: E.T. Degens and D.A. Ross, Eds. "Hot Brines and Recent Metal Deposits in the Red Sea". NY: Springer-Verlag Inc.; 1969: p. 348-359.
1293. McIntyre, A. The coccolithophorida in Red Sea sediments. in: E.T. Degens and D. A. Ross, Eds. "Hot Brines and Recent Metal Deposits in the Red Sea". NY: Springer-Verlag Inc.; 1969: p. 299-305.
1294. Thomsen, L. and O.L. Anderson. On the high-temperature equation of state of solids. *Jour. Geophys. Res.*; 1969; v. 74 (n. 4): p. 981-991.



1295. Smith, J.D. and J.H. Foster. Geomagnetic reversal in Brunhes normal polarity epoch. *Science*; 1969; v. 163: p. 565-567.

1296. Anderson, O.L. and R.C. Liebermann. Elastic constants for oxide compounds used to estimate the properties of the earth's interior. in: S.K. Runcorn, Ed. "The Application of Modern Physics to the Earth and Planetary Interiors": John Wiley & Sons; 1969: p. 425-448.

1297. Herron, E.M. and D.E. Hayes. A geophysical study of the Chile ridge. *Earth & Planet. Sci. Lett.*; 1969; v. 6: p. 77-83.

1298. Opdyke, N.D. and K.W. Henry. A test of the dipole hypothesis. *Earth & Planet. Sci. Lett.*; 1969; v. 6(): p. 139-151.

1299. Kuo, J.T. Areal strain of solid earth tides observed in Ogdensburg, NJ. *Jour. Geophys. Res.*; 1969; v. 6: p. 1635-1644.

1300. Den, N., W. J. Ludwig, S. Murauchi, J. I. Ewing, H. Hotta, N. T. Edgar, T. Yoshii, T. Asanuma, K. Hagiwara, T. Sato, and S. Ando. Seismic-refraction measurements in the Northwest Pacific basin. *J. Geophys. Res.* ; 1969; v. 74(n. 6): p. 1421-1434.

1301. Talwani, M., J. Dorman, and R. Kittredge. Experiences with computers aboard research vessels Vema and Robert D. Conrad. *Trans. of Symp. on Applications of Sea Going Computers*: p. 17-25.

1302. Jacobs, M. B. and M. Ewing. Mineral source and transport in waters of the Gulf of Mexico and Caribbean Sea. *Science*; 1969; v. 163: p. 805-809.

1303. Conolly, J. R. . Western Tasman sea floor. *New Zealand J. Geol. Geophys.* ; 1969; v. 12(n. 1): p. 310-343.

1304. Opdyke, N. D. and B. P. Glass. The paleomagnetism of sediment cores from the Indian Ocean. *Deep-Sea Res.* ; 1969; v. 16: p. 249-261.

1305. Liebermann, R. C. and P. W. Pomeroy. Relative excitation of surface waves by earthquakes and underground explosions. *J. Geophys. Res.* ; 1969; v. 74(n. 6): p. 1575-1590.

1306. Fitch, T. J. . Microearthquake activity following the Parkfield, California earthquake of June, 1966. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 2): p. 603-613.

1307. Ewing, M., S. Eittreim, M. Truchan, and J. I. Ewing. Sediment distribution in the Indian Ocean. *Deep-Sea Res.* ; 1969; v. 16: p. 231-248.

1308. Le Pichon, X. and M. Talwani. Regional gravity anomalies in the Indian Ocean. *Deep-Sea Res.* ; 1969; v. 16: p. 263-274.

1309. Lehmann, I. . Travel times and amplitudes of the Salmon nuclear explosion. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 2): p. 959-966.

1310. Dymond, J. . Age determination of deep-sea sediments: a comparison of three methods. *Earth Planet. Sci. Lett.* ; 1969; v. 6: p. 9-14.

1311. Nafe, J. E. and C. L. Drake. Floor of the North Atlantic -- summary of geophysical data. *Am. Assoc. Pet. Geol. Mem.* 12; 1969: p. 59-87.

1312. Roels, O. A. . Fish protein. *The Food Scientist*; 1969; v. 6(n. 3): p. 7-15.

1313. Gerard, R. and J. L. Worzel. Utilization of the marine environment in freshwater recovery. *Proc. Fourth Am. Water Res. Conf.* ; 1969: p. 218-226.

1314. Lamont-Doherty Geological Observatory. *Seismological Bulletin, Years 1966 and 1967*; 1969.

1315. Tobin, D. G., P. L. Ward, and C. L. Drake. Microearthquakes in the rift valley of Kenya. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 2043-2046.

1316. Sheridan, R. E., R. E. Houtz, C. L. Drake, and M. Ewing. Structure of continental margin off Sierra Leone, West Africa. *J. Geophys. Res.* ; 1969; v. 74(n. 10): p. 2512-2530.

1317. Isacks, B., J. Oliver, and L. R. Sykes. Reply to comments on "Seismology and the new global tectonics" by C. F. Richter. *J. Geophys. Res.* ; 1969; v. 74(n. 10): p. 2789-2790.

1318. Anderson, R. S. and G. V. Latham. Determination of sediment properties from first shear-mode Rayleigh waves recorded on the ocean bottom. *J. Geophys. Res.* ; 1969; v. 74(n. 10): p. 2747-2757.

1319. Ewing, M., R. Houtz, and J. Ewing. South Pacific sediment distribution. *J. Geophys. Res.* ; 1969; v. 74(n. 10): p. 2477-2493.

1320. Molnar, P. and J. Oliver. Lateral variations of attenuation in the upper mantle and discontinuities in the lithosphere. *J. Geophys. Res.* ; v. 74; n. 10(p. 2648-2682).

1321. Sykes, L. R., B. L. Isacks, and J. Oliver. Spatial distribution of deep and shallow earthquakes of small magnitudes in the Fiji-Tonga region. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 3): p. 1093-1113.

1322. Mitronavas, W., B. Isacks, and L. Seeber. Earthquake locations and seismic wave propagation in the upper 250 km of the Tonga Island arc. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 3): p. 1115-1135.

1323. Garlick, G. D. . Consequences of chemical equilibrium across phase changes in the mantle. *Lithos*; 1969; v. 2(n. 4): p. 325-331.

1324. Kuo, J. T. . Static response of a multilayered medium under inclined surface loads. *J. Geophys. Res.* ; 1969; v. 74(n. 12): p. 3195-3207.

1325. Pomeroy, P. W., G. Hade, J. Savino, and R. Chander. Preliminary results from high-gain wide-band long-period electromagnetic seismograph systems. *J. Geophys. Res.* ; 1969; v. 74(n. 12): p. 3295-3298.

1326. McGarr, A. . Amplitude variations of Rayleigh waves -- propagation across a continental margin. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 3): p. 1281-1305.

1327. McGarr, A. Amplitude variations of Rayleigh waves -- horizontal refraction. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 3): p. 1307-1334.

1328. van Donk, J. and G. Mathieu. Oxygen isotope compositions of foraminifera and water samples from the Arctic Ocean. *J. Geophys. Res.* ; 1969; v. 74(n. 13): p. 3396-3407.

1329. Langseth, M. G. Jr. The flow of heat from the earth and its global distribution at the surface. *AIAA 4th Thermophysics Conf.* ; 1969; N. 69-589: p. 1-10.

1330. Collette, B. J., J. I. Ewing, R. L. Lagaay, and M. Truchan. Sediment distribution in the oceans: the Atlantic between 10° and 19° N. *Mar. Geol.* ; 1969; v. 7: p. 279-345.

1331. Ruddiman, W. F. . Recent planktonic foraminifera: dominance and diversity in North Atlantic surface sediments. *Science*; 1969; v. 164: p. 1164-1167.

1332. Opdyke, N.D. and J.D. Phillips. Paleomagnetic stratigraphy of sites 1-7 (Leg 1), Preliminary report. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; V. 1: p. 501-517.
1333. Nakamura, Y. and G. V. Latham. Internal constitution of the moon: is the lunar interior chemically homogeneous. *J. Geophys. Res.* ; 1969; v. 74 (n. 15): p. 3771-3780.
1334. Roels, O. A. . The fifth decade of vitamin A research. *Am. J. Clinical Nutr.*; 1969; v. 22(n. 7): p. 903-907.
1335. Hays, J. D., T. Saito, N. D. Opdyke, and L. H. Burckle. Plio-Pleistocene sediments of the equatorial Pacific: their paleomagnetic, biostratigraphic, and climate record. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 1481-1513.
1336. Anderson, T. F. . Self-diffusion of carbon and oxygen in calcite by isotope exchange with carbon dioxide. *J. Geophys. Res.* ; 1969; v. 74(n. 15): P. 3918-3932.
1337. Powell, B. N. Petrology and chemistry of mesosiderites -- I. Textures and composition of nickel-iron. *Geochim. Cosmochim. Acta*; 1969; v. 33: p. 789-810.
1338. Isacks, B., L. R. Sykes, and J. Oliver. Focal mechanisms of deep and shallow earthquakes in the Tonga-Kermadec region and the tectonics of island arcs. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 1443-1469.
1339. Miyashiro, A., F. Shido, and M. Ewing. Diversity and origin of abyssal tholeiite from the Mid-Atlantic ridge near 24° and 30° north latitude. *Mineral. Petrol.* ; 1969; v. 23(n. 1): p. 38-52.
1340. Burk, C. A., M. Ewing, J. L. Worzel, A. O. Beall, Jr., W. A. Berggren, D. Bukry, A. G. Fischer, and E. A. Pessagno, Jr. Deep-sea drilling into the Challenger Knoll, central Gulf of Mexico. *Am. Assoc. Pet. Geol.* ; 1969; v. 53(n. 7): p. 1338-1347.
1341. Roels, O. A., O. R. Anderson, N. S. T. Lui, D. O. Shah, and M. E. Trout. Vitamin A and membranes. *Am. J. Clinical Nutr.*; 1969; v. 22(n. 8): p. 1020-1032.
1342. Page, R. . Late Cenozoic movement on the Fairweather fault in southeastern Alaska. *Geol. Soc. Am. Bull.*; 1969; v. 80: p. 1873-1877.
1343. Compston, W. and V. M. Oversby. Lead isotopic analysis using a double spike. *J. Geophys. Res.* ; 1969; v. 74(n. 17): p. 4338-4348.

1344. Gough, D. I. and J. R. Heirtzler. Magnetic anomalies and tectonics of the Cayman Trough. *Geophys. J. R. astr. Soc.*; 1969; v. 18: p. 33-49.
1345. Horn, D. R., M. N. Delach, and B. M. Horn. Distribution of volcanic ash layers and turbidites in the North Pacific. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 1715-1723.
1346. Henry, K.W. and N.D. Opdyke. Paleomagnetism of specimens from the third leg of the JOIDES deep sea drilling project. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1970; V. III: p. 667-698.
1347. Molnar, P. and L. R. Sykes. Tectonics of the Caribbean and Middle America regions from focal mechanisms and seismicity. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 1639-1684.
1348. Hope, W. D. and D. G. Murphy. *Rhaphothyreus typicus* n.g., n.sp. an abyssal marine nematode representing a new family of uncertain taxonomic position. *Proc. Biol. Soc. Wash.*; 1969; v. 82: p. 81-92.
1349. Isacks, B. and P. Molnar. Mantle earthquake mechanisms and the sinking of the lithosphere. *Nature*; 1969; v. 223(n. 5211): p. 1121-1124.
1350. Haubrich, R. A. and K. McCamy. Microseisms: coastal and pelagic sources. *Rev. Geophys.* ; 1969; v. 7(n. 3): p. 539-571.
1351. Fox, P. J., W. C. Pitman, III, and F. Shephard. Crustal plates in the Central Atlantic: evidence for at least two poles of rotation. *Science*; 1969; v. 165: p. 487-489.
1352. Li, Y. H., T. Takahashi, and W. S. Broecker. Degree of saturation of CaCO<sub>3</sub> in the oceans. *J. Geophys. Res.* ; 1969; v. 74(n. 23): p. 5507-5525.
1353. Latham, G., M. Ewing, F. Press, and G. Sutton. The Apollo passive seismic experiment. *Science*; 1969; v. 165: p. 241-250.
1354. Miyashiro, A., F. Shido, and M. Ewing. Composition and origin of serpentinites from the mid-Atlantic ridge near 24° and 30° north latitude. *Contr. Mineral. Petrol.*; 1969; v. 23(n. 2): p. 117-127.
1355. Oliver, J., L. Sykes, and B. Isacks. Seismology and the new global tectonics. *Tectonophysics*; 1969; v. 7(n. 5-6): p. 527-541.

1356. Drake, C. L. and I. P. Kosminskaya. The transition from continental to oceanic crust. *Tectonophysics*; 1969; v. 7(n. 5-6): p. 363-384.

1357. Molnar, P., J. Savino, L. R. Sykes, R. C. Liebermann, G. Hade, and P. W. Pomeroy. Small earthquakes and explosions in western North America recorded by new high gain, long period seismographs. *Nature*; 1969; v. 224(n. 5226): p. 1268-1273.

1358. Oversby, V.M. LEAD (82). in: B. Mason, Ed. "Elemental Abundances in Meteorites". London: Gordon and Breach, Ltd.; 1971: p. 499-510.

1359. Oversby, V. M. . The isotopic composition of lead in iron meteorites. *Geochim. Cosmochim. Acta*; 1970; v. 34: p. 65-75.

1360. Glass, B. P. . Reworking of deep-sea sediments as indicated by the vertical dispersion of the Australasian and Ivory Coast microtektite horizons. *Earth Planet. Sci. Lett.* ; 1969; v. 6: p. 409-415.

1361. Roels, O. A. . Marine proteins. *Chem. Eng. Prog.*; 1969; v. 65(n. 9): p. 27-34.

1362. Ewing, M., J.L. Worzel, and C.A. Burk. Introduction. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; V. 1: p. 3-9.

1363. Ewing, M., J.L. Worzel, A.O. Beall, W.A. Berggren, D. Bukry, C.A. Burk, A.G. Fischer, and E.A. Pessagno, Jr. 1. Site 1. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; V. 1: p. 10-83.

1364. Ewing, M., J.L. Worzel, A.O. Beall, W.A. Berggren, D. Bukry, C.A. Burk, A.G. Fischer, and E.A. Pessagno, Jr. 2. Site 2. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; V. 1: p. 84-111.

1365. Ewing, M., J.L. Worzel, A.O. Beall, W.A. Berggren, D. Bukry, C.A. Burk, A.G. Fischer, and E.A. Pessagno, Jr. 3. Site 3. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. I: p. 112-178.

1366. Ewing, J.I., T. Aitken, D.E. Hayes, W.C. Pitman, V. Renard, M. Talwani, and J.L. Worzel. 4. Site 4. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. 1: p. 179-213.

1367. Ewing, J.I., T. Aitken, D.E. Hayes, W.C. Pitman, V. Renard, M. Talwani and J.L. Worzel. 5. Site 5. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. 1: p. 214-242.

1368. Ewing, J.I., T. Aitken, D.E. Hayes, W.C. Pitman, V. Renard, M. Talwani, and J.L. Worzel. 6. Site 6. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. 1: p. 243-292.

1369. Ewing, J.I., T. Aitken, D.E. Hayes, W.C. Pitman, V. Renard, M. Talwani, and J.L. Worzel. 7. Site 7. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969: p.293-317.

1370. Ewing, M., J.L. Worzel, and C.A. Burk. Regional aspects of deep-water drilling in the Gulf of Mexico, east of the Bahama platform and on the Bermuda Rise. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. 1: p. 624-640.

1371. Auld, B., G. Latham, A. Nowroozi, and L. Seeber. Seismicity off the coast of northern California determined from ocean bottom seismic measurements. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 5): p. 2001-20015.

1372. Bé , A.W.H., W. L. Jongebloed, and A. McIntyre. X-ray microscopy of recent planktonic foraminifera. *J. Paleontol.* ; 1969; v. 43(n. 6): p. 1384-1396.

1373. Fehr, U. and L. C. McGahan. Ultralow frequency waves generated by the Saturn F-1 engine. *J. Acoust. Soc. Am.*; 1969; v. 46(n. 3): p. 485-491.

1374. Schreiber, E. . The effect of solid solutions upon the bulk modulus and its pressure derivative: implications for equations of state. *Earth Planet. Sci. Lett.*; 1969; v. 7: p. 137-140.

1375. Oliver, J. . Structure and evolution of the mobile seismic belts. *Phys. Earth Planet. Inter.* ; 1970; v. 2: p. 350-362.

1376. Oliver, J. . Recent earthquake prediction research in the USA. *Tectonophysics*; 1970; v. 9: p. 283-290.

1377. Ewing, M. and D. Hayes. Some problems of safe navigation of deep draft vessels. *Am. Pet. Inst. 14th Ann. Tanker Conf.* ; 1969: p. 212-335.

1378. Shah, D. O. . Lipid-protein interaction in monolayers. Effect of conformation of poly-L-lysine on stearic acid monolayers. *Biochim. Biophys. Acta*; 1969; v. 193: p. 217-220.

1379. Shah, D.O. Lipid-metal ion interaction in monomolecular films. in: J. Maniloff, Ed. "Effects of Metals on Cells, Sub-cellular Elements and Macromolecules". Springfield, IL: Chas. C. Thomas; 1970: p. 155-189.
1380. Hays, J. D. . Climatic record of Late Cenozoic Antarctic Ocean sediments related to the record of world climate. *Palaeocol. Africa and Antarctica SCAR* 1968; 1970: p. 139-163.
1381. Jones, E. J. W. and J. I. Ewing. Age of the Bay of Biscay: evidence from seismic profiles and bottom samples. *Science*; 1969; v. 166: p. 102-105.
1382. Kumazawa, M. . The elastic constant of polycrystalline rocks and nonelastic behavior inherent to them. *J. Geophys. Res.* ; 1969; v. 74(n. 22): p. 5311-5320.
1383. Donn, W. L. and N. K. Balachandran. Coupling between a moving air-pressure disturbance and the sea surface. *Tellus*; 1969; v. xxi(n. 5): p. 701-706.
1384. Stoll, R. D. . A dynamic penetrometer for investigating sediment properties. *Proc. Civil Eng. in the Oceans, II*; 1970: p. 209-220.
1385. Page, R. . The Fairweather fault ten years after the southeast Alaska earthquake of 1958. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 5): p. 1927-1936.
1386. Roels, O. A. and R. D. Gerard. Artificial upwelling. *Mar. Tech. Soc., Drugs from the Sea*; 1970: p. 103-112.
1387. Piermattei, R. and A. A. Nowroozi. Dispersion of Rayleigh waves for purely oceanic paths in the Pacific. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 5): p. 1905-1925.
1388. Eittreim, S., M. Ewing, and E. M. Thorndike. Suspended matter along the continental margin of the North American Basin. *Deep-Sea Res.* ; 1969; v. 16: p. 613-624.
1389. Stoltze, H. J., N. S. T. Lui, O. R. Anderson, and O. A. Roels. The influence of the mode of nutrition on the digestive system of *Ochromonas malhamensis*. *J. Cell Biol.* ; 1969; v. 43(n. 3): p. 396-409.
1390. McDowell, F. W. and J. L. Kulp. Potassium-argon dating of the Idaho batholith. *Geol. Soc. Am. Bull.* ; 1969; v. 80: p. 2379-2382.



1391. Kumazawa, M. and O. L. Anderson. Elastic moduli, pressure derivatives, and temperature derivatives of single-crystal olivine and single-crystal forsterite. *J. Geophys. Res.* ; 1969; v. 74(n. 25): p. 5961-5972.
1392. Opdyke, N.D. Preliminary report on paleomagnetism of deep sea drilling project leg 2 specimens. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1970: p. 375-385.
1393. Anderson, O. L. and R. C. Liebermann. Equations for the elastic constants and their pressure derivatives for three cubic lattices and some geophysical applications. *Phys. Earth Planet. Int.*; 1970; v. 3: p. 61-85.
1394. Liebermann, R. C. and E. Schreiber. Critical thermal gradients in the mantle. *Earth Planet. Sci. Lett.*; 1969; v. 7: p. 77-81.
1395. Hunkins, K. Arctic geophysics. *Arctic*; 1969; v. 22(n. 3): p. 225-232.
1396. Broecker, W. S. and T. L. Ku. Caribbean cores P6304-8 and P6304-9: new analysis of absolute chronology. *Science*; 1969; v. 166: p. 404-406.
1397. Kutschale, H. . Arctic hydroacoustics. *Arctic*; 1969; v. 22(n. 3): p. 245-264.
1398. Talwani, M. . A system for the reduction, display and storage of marine geophysical data. *Mar. Geodesy*; 1970: p. 169-188.
1399. Bé , A W H. and C. Hemleben. Calcification in a living planktonic foraminifer, *Globigerinoides sacculifer* (Brady). *N. Jahrbuch Geol. Palaeontol. Abh.*; 1970; v. 134: p. 221-234.
1400. Sharma, G. M., B. Vig, and P. R. Burkholder. Antimicrobial substances of marine sponges V. *Food-Drugs from the Sea*; 1970: p. 307-310.
1401. Katsumata, M. and L. R. Sykes. Seismicity and tectonics of the Western Pacific: Izu-Mariana-Caroline and Ryukyu-Taiwan regions. *J. Geophys. Res.* ; 1969; v. 74(n. 25): p. 5923-5948.
1402. Kumazawa, M. . The elastic constants of single-crystal orthopyroxene. *J. Geophys. Res.* ; 1969; v. 74(n. 25): p. 5973-5980.

1403. McGarr, A., G. V. Latham, and D. E. Gault. Meteoroid impacts as sources of seismicity on the moon. *J. Geophys. Res.* ; 1969; v. 74(n. 25): p. 5981-5994.

1404. Shah, D.O. Lipid-polymer interaction in monolayers: Effect of conformation of poly-L-lysine on stearic acid monolayers. in: "Surface Chemistry of Biological Systems": Plenum Press; 1970: p. 101-117.

1405. Galdston, M. and D.O. Shah. Lipid-protein association in lung surfactant. in: "Surface Chemistry of Biological Systems": Plenum Press; 1970; ( ): p. 261-274.

1406. Ku, T. L. and W. S. Broecker. Radiochemical studies on manganese nodules of deep-sea origin. *Deep-Sea Res.* ; 1969; v. 16: p. 625-637.

1407. Gardner, J. V. . Submarine geology of the western Coral Sea. *Geol. Soc. Am. Bull.*; 1970; v. 81: p. 2599-2614.

1408. Ewing, J. and R. Houtz. Mantle reflections in airgun-sonobuoy profiles. *J. Geophys. Res.* ; 1969; v. 74(n. 27): p. 6706-6709.

1409. Molnar, P., K. Jacob and L. R. Sykes. Microearthquake activity in eastern Nevada and Death Valley, California before and after the nuclear explosion Benham. *Bull. Seismol. Soc. Am.* ; 1969; v. 59(n. 6): p. 2177-2184.

1410. Boucher, G. and T. J. Fitch. Microearthquake seismicity of the Denali fault. *J. Geophys. Res.* ; 1969; v. 74(n. 27): p. 6638-6648.

1411. Sheridan, R. E., J. D. Smith, and J. Gardner. Rock dredges from Blake escarpment near Great Abaco Canyon. *Am. Assoc. Pet. Geol. Bull.*; 1969; v. 53(n. 12): p. 2551-2558.

1412. Scholz, C. H. and T. J. Fitch. Strain accumulation along the San Andreas fault. *J. Geophys. Res.* ; 1969; v. 74(n. 27): p. 6649-6666.

1413. Drake, C. L. and H. Delauze. Gravity measurements near Greece from the bathyscaphe Archimede. *Ann. Inst. Oceanogr.*; 1969; t. 46(n. 1): p. 71-77.

1414. Gavasci, A. T. and H. Helmstaedt. A pyroxene-rich garnet-peridotite inclusion in an ultramafic breccia dike at Moses Rock, southeastern Utah. *J. Geophys. Res.* ; 1969; v. 74(n. 27): p. 6691-6695.

1415. Liebermann, R. C. and S. K. Banerjee. Anomalies in the compressional and shear properties of hematite in the region of the Morin transition. *J. Appl. Phys.*; 1970; v. 41(n. 3): p. 1414-1416.

1416. Hunkins, K., E. M. Thorndike, and G. Mathieu. Nepheloid layers and bottom currents in the Arctic Ocean. *J. Geophys. Res.* ; 1969; v. 74(n. 28): p. 6995-7008.

1417. Ruddiman, W.F., D.S. Tolderlund, and A.W.H. Bé . Foraminiferal evidence of a modern warming of the North Atlantic ocean. *Deep-Sea Res.* ; 1970; v. 17: p. 141-155.

1418. Shah, D. O. and C. A. Dysleski. Molecular interactions in monolayers: molecular association and foam stability of fatty acids and alcohols. *J. Am. Oil Chem. Soc.*; 1969; v. 46(n. 12): p. 645-646.

1419. Lehmann, I. . The reading of earthquake diagrams. *Geophys. J. R. astr. Soc.*; 1970; v. 20: p. 391-396.

1420. Damuth, J. E. and R. W. Fairbridge. Equatorial Atlantic deep-sea askosic sands and ice-age aridity in tropical South America. *Geol. Soc. Am. Bull.* ; 1970; v. 81: p. 189-206.

1421. McIntyre, A. . *Gephyrocapsa protohuxleyi* sp. n. a possible phyletic link and index fossil for the Pleistocene. *Deep-Sea Res.* ; 1970; v. 17: p. 187-190.

1422. Miyashiro, A., F. Shido, and M. Ewing. Petrologic models for the Mid-Atlantic Ridge. *Deep-Sea Res.*; 1970; v. 17: p. 109-123.

1423. Miyashiro, A., F. Shido, and M. Ewing. Crystallization and differentiation in abyssal tholeiites and gabbros from mid-oceanic ridges. *Earth Planet. Sci. Lett.* ; 1970; v. 7: p. 361-365.

1424. Thomsen, L. . On the fourth-order anharmonic equation of state of solids. *J. Phys. Chem. Solids*; 1970; v. 31: p. 2003-2016.

1425. LePichon, S., S.L. Eittreim, W.J. Ludwig. Sediment transport and distribution in the Argentine Basin: 1. Antarctic bottom current passage through the Falkland fracture zone. *Physics and Chem. of the Earth*; 1971; v. 8: p. 1-28.

1426. LePichon, X., M. Ewing, and M. Truchan. Sediment transport and distribution in the Argentine Basin: 2. Antarctic bottom current passage into the Brazil Basin. *Physics and Chem. of the Earth*; 1971; v. 8: p. 29-48.

1427. Ewing, M., S.L. Eittreim, J.I. Ewing, and X. LePichon. Sediment transport and distribution in the Argentine Basin: 3. Nepheloid layer and processes of sedimentation. *Physics and Chem. of the Earth*; 1971; v. 8: p. 49-77.

1428. Lonardi, A.G. and M. Ewing. Sediment transport and distribution in the Argentine Basin: 4. Bathymetry of the continental margin, Argentine Basin and other related provinces. Canyons and sources of sediments. *Physics and Chem. of the Earth*; 1971; v. 8: p. 79-121.

1429. Ewing, M. and A.G. Lonardi. Sediment transport and distribution in the Argentine Basin: 5. Sedimentary structure of the Argentine margin, basin, and related provinces. *Physics and Chem. of the Earth*; 1971; v. 8: p. 123-251.

1430. Lonardi, A.G. and M. Ewing. Sediment transport and distribution in the Argentine Basin: 5. Exploration and study of the Argentine Basin. *Physics and Chem. of the Earth*; 1971; v. 8: p. 253-263.

1431. Henry, K.W. and N.D. Opdyke. Preliminary report on paleomagnetism of deep sea drilling project, Leg 4 specimens. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1970; v. IV: p. 439-454.

1432. Gordon, A.L. Some comments on the factors influencing the spread of pollutants in shelf waters. in: "Water Pollution in the Greater New York area"; 1970: p. 13-22.

1433. Riedel, W.R. and J.D. Hays. Cenozoic radiolaria from Leg 1. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1969; v. I: p. 400-402.

1434. Gast, P. W. . Dispersed elements in oceanic volcanic rocks. *Phys. Earth Planet. Int.* ; 1970; v. 3: p. 246.

1435. Nakamura, Y. and G. V. Latham. Travel times of body waves in the moon. *Bull. Seismol. Soc. Am.* ; 1970; v. 60(n. 1): p. 63-78.

1436. Maito, T. and B.M. Funnell. Pre-quaternary sediments and microfossils in the oceans. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part 1): p. 183-204.

1437. Habib, D. . Middle Cretaceous palynomorph assemblages from clays near the horizon beta deep-sea outcrop. *Micropaleontology*; 1970; v. 16(n. 3): p. 345-379.

1438. Opdyke, N.D. Paleomagnetism. in: "The Sea"; 1971; (Part 1): p. 157-182.

1439. Ludwig, W.J., E. Nafe, and C.L. Drake. Seismic refraction. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part 1): p. 53-84.
1440. Broecker, W. S. and R. Gerard. Natural radiocarbon in the Mediterranean Sea. *Limnol. Oceanogr.* ; 1969; v. 14(n. 6): p. 883-888.
1441. Gast, P. W. and N. J. Hubbard. Abundance of alkali metals, alkaline and rare earths, and strontium-87/strontium-86 ratios in lunar samples. *Science*; 1970; v. 167: p. 485-487.
1442. Mayhew, M. A., C. L. Drake, and J. E. Nafe. Marine geophysical measurements on the continental margins of the Labrador Sea. *Can. J. Earth Sci.*; 1970; v. 7(n. 2): p. 199-214.
1443. Schreiber, E., O. L. Anderson, N. Soga, N. Warren, and C. Scholz. Sound velocity and compressibility for lunar rocks 17 and 46 and for glass spheres from the lunar soil. *Science*; 1970; v. 167: p. 732-734.
1444. Ewing, J. and M. Ewing. Seismic reflection. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part I): p. 1-51.
1445. Gordon, A.L. Circumpolar characteristics. in: Antarctic Map Folio Series, Folio 13, The American Geographic Society; 1970.
1446. Christoffel, D. A. and D. I. Ross. A fracture zone in the southwest Pacific basin south of New Zealand and its implications for sea floor spreading. *Earth Planet. Sci. Lett.*; 1970; v. 8: p. 125-130.
1447. Heirlzler, J.R. Magnetic anomalies measured at sea. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part 1): p. 85-128.
1448. Sykes, L.R., J. Oliver, and B. Isacks. Earthquakes and tectonics. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part I): p. 353-420.
1449. Grim, M. S., C. L. Drake, and J. R. Heirtzler. Sub-bottom study of Long Island Sound. *Geol. Soc. Am. Bull.*; 1970; v. 81: p. 649-665.
1450. Latham, G. V., M. Ewing, F. Press, G. Sutton, J. Dorman, Y. Nakamura, N. Toksoz, R. Wiggins, J. Derr, and F. Duennebier. Passive seismic experiment. *Science*; 1970; v. 167: p. 455-457.

1451. Bender, M. L., T. L. Ku, and W. S. Broecker. Accumulation rates of manganese in pelagic sediments and nodules. *Earth Planet. Sci. Lett.* ; 1970; v. 8: p. 143-148.
1452. Stoll, R. D. and G. M. Bryan. Wave attenuation in saturated sediments. *J. Acoust. Soc. Am.* ; 1970; v. 47(n. 5 (Part 2)): p. 1440-1447.
1453. Bryan, G.M. and E.S. W. Simpson. Seismic refraction measurements on the continental shelf between the Orange River and Capetown. in: F.M. Delany, Ed. *Symposium: The Geology of the East Atlantic Continental Margin*; 1971: p. 187-198.
1454. Langseth, Jr., M.G. and R.P. Von Herzen. Heat flow through the floor of the world oceans. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part I): p. 299-352.
1455. Scholz, C.H. Comments on paper by J.S. Savage and B.B. Mohanty, 'Does creep cause fracture in brittle rocks?'; *J. Geophys. Res.*; 1970; v. 75 (n. 11): 2148-2150.
1456. Hayes, D.E. and M. Ewing. Pacific boundary structure. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part I): p. 29-72.
1457. Fitch, T. J. and P. Molnar. Focal mechanisms along inclined earthquake zones in the Indonesia-Philippine region. *J. Geophys. Res.* ; 1970; v. 75(n. 8): p. 1431-1444.
1458. Drake, C.L. *The Geological Revolution. Condon Lectures, Oregon State System of Education: Oregon University Press; 1970: 55 pgs.*
1459. Broecker, W. S. and J. van Donk. Insolation changes, ice volumes, and the 018 record in deep-sea cores. *Rev. Geophys. Space Phys.* ; 1970; v. 8(n. 1): p. 169-198.
1460. Shah, D. O. Molecular interactions in mixed monolayers: existence of a 1:2 molecular association between stearic acid and stearyl alcohol in mixed monolayers. *J. Colloid Int. Sci.* ; 1970; v. 32(n. 4): p. 577-583.
1461. Shah, D. O. The effect of buffer ions on stearic acid monolayers in relation to foam stability. *J. Colloid. Interf. Sci.*; 1970; v. 32(n. 4): p. 570-576.
1462. Oversby, V. M. and P. W. Gast. Isotopic composition of lead from oceanic islands. *J. Geophys. Res.* ; 1970; v. 75(n. 11): p. 2097-2114.

1463. Kay, R, N. J. Hubbard, and P. W. Gast. Chemical characteristics and origin of oceanic ridge volcanic rocks. *J. Geophys. Res.* ; 1970; v. 75(n. 8): p. 1585-1613.

1464. Jones, E. J. W., M. Ewing, J. I. Ewing, and S. L. Eittreim. Influences of Norwegian Sea overflow water on sedimentation in the northern North Atlantic and Labrador Sea. *J. Geophys. Res.*; 1970; v. 75(n. 9): p. 1655-1680.

1465. LePichon, X. and M. G. Langseth, Jr. . Heat flow from the mid-ocean ridges and sea-floor spreading. *Tectonophysics*; 1969; v. 8: p. 319-344.

1466. Roels, O. A., R. D. Gerard, K. C. Haines, and P. Centeno. Artificial upwelling. *Offshore Tech. Conf., Paper OTC-11179* ; 1970: P. 1317-1324.

1467. Talwani, M. Gravity. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part I): p. 251-297.

1468. Fitch, T. J. . Earthquake mechanisms and island arc tectonics in the Indonesian-Philippine region. *Bull. Seismol. Soc. Am.* ; 1970; v. 60(n. 2): p. 565-591.

1469. Ryan, W.B.F., D.J. Stanley, J.B. Hersey, D.A. Fahlquist, and T.D. Allan. The tectonics and geology of the Mediterranean Sea. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part II): p. 387-492.

1470. Folger, D. W. . Wind transport of land-derived mineral, biogenic, and industrial matter over the North Atlantic. *Deep-Sea Res.*; 1970; v. 17: p. 334=352.

1471. Gumper, F. and P. W. Pomeroy. Seismic wave velocities and earth structure on the African continent. *Bull. Seismol. Soc. Am.* ; 1970; v. 60(n. 2): p. 651-668.

1472. Garlick, G. D. and J. R. Dymond. Oxygen isotope exchange between volcanic materials and ocean water. *Geol. Soc. Am. Bull.* ; 1970; v. 81: p. 2137-2141.

1473. Ewing, M., L. V. hawkins, and W. J. Ludwig. Crustal structure of the Coral Sea. *J. Geophys. Res.* ; 1970; v. 75(n. 11): p. 1953-1962.

1474. Ewing, J. I., R. E. Houtz, and W. J. Ludwig. Sediment distribution in the Coral Sea. *J. Geophys. Res.* ; 1970; v. 75(n. 11): p. 1963-1972.

1475. Ericson, D. B. and G. Wollin. Pleistocene climates in the Atlantic and Pacific Oceans: a comparison based on deep-sea sediments. *Science*; 1970; v. 167: p. 1483-1485.

1476. Bé , A.W.H. and A. McIntyre. *Globorotalia menardii flexuosa* (Koch): 'An extinct' foraminiferal subspecies living in the northern Indian Ocean. *Deep-Sea Res.* ; 1970; v. 17: p. 595-601.

1477. Scholz, C. . The role of microfracturing in rock deformation. 2nd Internat. Cong. Rock Mechanics, Belgrade; 1970: p. 1-5.

1478. Ludwig, W. J. . The Manila Trench and West Luzon Trough - III. Seismic-refraction measurements. *Deep-Sea Res.* ; 1970; v. 17: p. 553-571.

1479. Sharma, G. M., B. Vig, and P. R. Burkholder. Studies on the antimicrobial substances of sponges. IV. Structure of a bromine-containing compound from a marine sponge. *J. Organic Chem.*; 1970; v. 35: p. 2823-2826.

1480. Anderson, O. L., C. Sholz, N. Soga, N. Warren, and E. Schreiber. Elastic properties of micro-breccia, igneous rock and lunar fines from Apollo 11 missions. *Proc. Apollo 11 Lunar Sci. Conf.* ; 1970; v. 3: p. 1959-1973.

1481. Embley, R. W., J. I. Ewing, and M. Ewing. The Vidal deep-sea channel and its relationship to the Demarara and Barracuda Abyssal Plains. *Deep-Sea Res.* ; 1970; v. 17: p. 539-552.

1482. Oliver, J., T. Johnson, and J. Dorman. Post-glacial faulting and seismicity in New York and Quebec. *Canadian J. Earth Sci.*; 1970; v. 7(n. 2): p. 579-590.

1483. Horn, D.R., B.M. Horn, and Delach. Sedimentary provinces of the North Pacific. in: "Geological Investigations of the North Pacific". *Geol. Soc. Am. Mem.* 126 ed.; 1970: p. 1-21.

1484. Gordon, A.L. and R.D. Gerard. North Pacific bottom potential temperature. in: "Geological Investigations of the North Pacific". *Geol. Soc. Am. Mem.* 126 ed.; 1970: p. 23-39.

1485. Ewing, M. and S.D. Connary. Nepheloid layer in the North Pacific. IN: "Geological Investigations of the North Pacific": *Geol. Soc. Am. Mem.*; 1970; v. 126: p. 41-82.

1486. Donahue, J.G. . Pleistocene diatoms as climatic indicators in North Pacific sediments. in: "Geological Investigations of the North Pacific": *Geol. Soc. Am. Mem.*; 1970; v. 126: p. 121-138.



1487. Hays, J.D. Stratigraphy and evolutionary trends of radiolaria in North Pacific deep-sea sediments. in: "Geological Investigations of the North Pacific": Geol. Soc. Am. Mem.; 1970; v. 126: p. 185-218.

1488. Conolly, J.R. and M. Ewing. Ice-rafted detritus in northwest Pacific deep-sea sediments. in: "Geological Investigations of the North Pacific": Geol. Soc. Am. Mem.; 1970; v. 126: p. 219-231.

1489. Habib, D., D. Thurber, D. Ross, and J. Donahue. Holocene palynology of the Middle America Trench near Tehuantepec, Mexico. in: "Geological Investigations of the North Pacific". Geol. Soc. Amer. Mem. 126 ed.; 1970: p. 233-261.

1490. Hayes, D.E. and W.C. Pitman, III. Magnetic lineations in the North Pacific. in: "Geological Investigations of the North Pacific". Geol. Soc. Amer. Mem. 126 ed.; 1970: p. 291-314.

1491. Opdyke, N.D. and J.H. Foster. Paleomagnetism of cores from the North Pacific. in: "Geological Investigations of the North Pacific". Geol. Soc. Amer. Mem. 126 ed.; 1970: p. 83-119.

1492. Hays, J.D. and D. Ninkovich. North Pacific deep-sea ash chronology and age of present Aleutian underthrusting. in: "Geological Investigations of the North Pacific". Geol. Soc. Amer. Mem. 126 ed.; 1970: p. 263-290.

1493. Anderson, O. L. . Elastic constants of the central force model for three cubic structures: pressure derivatives and equations of state. J. Geophys. Res. ; 1970; v. 75(n. 14): p. 2719-2740.

1494. Miyashiro, A. and F. Shido. Progressive metamorphism in zeolite assemblages. Lithos; 1970; v. 3: p. 251-260.

1495. Gordon, A. L. . Oceanography of antarctic waters. Antarctic Res. Ser.; 1971; v. 15: p. 169-203.

1496. Molnar, P., J. Savino, L. R. Sykes, R. C. Liebermann, and G. Hade. Reply to Thirlaway. Nature; 1970; v. 225(n. 5239): p. 1238.

1497. Fitch, T. J. . Earthquake mechanisms in the Himalayan, Burmese, and Andaman regions and continental tectonics in central Asia. J. Geophys. Res. ; 1970; v. 75(n. 14): p. 2719-2740.

1498. Wolgemuth, K. and W. S. Broecker. Barium in sea water. *Earth Planet. Sci. Lett.* ; 1970; v. 8: p. 372-378.
1499. Gordon, A. L. . Antarctic polar front zone. *Antarctic Res. Ser.* ; 1971; v. 15: p. 205-221.
1500. Gordon, A.L. Recent physical oceanographic studies of Antarctic waters. "Research in the Antarctic"; 1971: p. 609-629.
1501. Latham, G. V., w. G. McDonald, and H. J. Moore. Missile impacts as sources of seismic energy on the moon. *Science*; 1970; v. 168: p. 242-245.
1502. Langseth, M. G. Jr., A. E. Wechsler, E. M. Drake, G. Simmons, S. P. Clark, Jr. and J. Chute, Jr. . Apollo 13 lunar heat flow experiment. *Science*; 1970; v. 168: p. 211-217.
1503. Roels, O.A. Fish protein: its past, present and future. in: "Nautilus"; 1972: p. 10-11.
1504. Gast, P. W., N. J. Hubbard, and H. Wiesmann. Chemical composition and petrogenesis of basalts from Tranquility Base. *Proc. Apollo 11 Lunar Sci. Conf.* ; 1970; v. 2: p. 1143-1163.
1505. Roels, O. A. . Vitamin A physiology. *J. Am. Medical Assoc.*; 1970; v. 214(n. 6): p. 1097-1102.
1506. Ewing, J.I., N.T. Edgar, and J.W. Antoine. Structure of the Gulf of Mexico and Caribbean Sea. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part II): p. 321-358.
1507. Latham, G.V., M. Ewing, F. Press, G. Sutton, J. Dorman, Y. Nakamura, N. Toksoz, R. Wiggins, J. Derr, and F. Duennebier. Appollo 11 passive seismic experiment. in: *Proceedings of the Appollo 11 Lunar Science Conference*; 1970; v. 3: p. 2309-2320.
1508. Kuo, J. T., R. C. Jachens, M. Ewing, and G. White. Transcontinental tidal gravity profile across the United States. *Science*; 1970; v. 168: p. 968-971.
1509. Gerard, R. D. A problematical measurement of electrical potential in the upoper 300 meters of the central Caribbean. *Mar. Technol. Soc.* ; 1970; v. 2: p. 1433-1444.
1510. Chen, C. and N.S. Hillman. Shell-bearing pteropods as indicators of water masses off Cape Hatteras, North Carolina. *Bull. Mar. Sci.*; 1970; v. 20(n. 2): p. 350-367.

1511. Krause, D.C., W.C. White, D.J.W. Piper, and B.C. Heezen. Turbidity currents and cable breaks in the western New Britain trench. *Geol. Soc. Amer. Bull.*; 1970; v. 81: p. 2153-2160.
1512. Anderson, O.R. and O.L. Anderson. The bulk modulus-volume relationship for oxides. *Jour. Geophys. Res.*; 1970; v. 75(n. 17): p. 3494-3500.
1513. Hayes, D.E. and W.C. Pitman, III. Marine geophysics and sea-floor spreading in the Pacific-Antarctic. *Antarctic Jour.*; 1970; v. V(n. 3): p. 70-77.
1514. Hargraves, P.E., R.W. Brody, and P.R. Burkholder. A study of phytoplankton in the Lesser Antilles region. *Bull. Mar. Sci.*; 1970; v. 20(n. 2): p. 331-349.
1515. Liebermann, R.C. and P.W. Pomeroy. Source dimensions of small earthquakes as determined from the size of the aftershock zone. *Bull. Seism. Soc. Amer.*; 1970; v. 60(n. 3): p. 879-890.
1516. Anderson, O.L. and H.H. Demarest, Jr. Elastic constants of the central force model for cubic structures: polycrystalline aggregates and instabilities. *Jour. Geophys. Res.*; 1971; v. 76(n. 5): p. 1349-1369.
1517. Broecker, W.S. and Y.H. Li. Interchange of water between the major oceans. *Jour. Geophys. Res.*; 1970; v. 75(n. 18): p. 3545-3552.
1518. Broecker, W.S. A boundary condition on the evolution of atmospheric oxygen. *Jour. Geophys. Res.*; 1970; v. 75(n. 18): p. 3553-3557.
1519. Fischer, A.G., B.C. Heezen, R.E. Boyce, D. Bukry, R.G. Douglas, R.E. Garrison, S.A. Kling, V. Krasheninnikov, A.P. Lisitzin, and A.C. Pimm. Geological history of the western North Pacific. *Science*; 1970; v. 168: p. 1210-1214.
1520. Thurber, D.L. and W.S. Broecker. The behavior of radiocarbon in the surface waters of the Great Basin. in: *Nobel Symposium 12: Radiocarbon Variations and Absolute Chronology*. NY: Wiley-Interscience Div.; 1971: p. 379-400.
1521. Lehmann, I. The 400-km discontinuity. *Geophys. Jour. Roy. Astr. Soc.*; 1970; v. 21: p. 359-372.

1522. Houtz, R., J. Ewing, and R. Embley. Profiler data from the Macquarie Ridge area. *Antarctic Res. Series*; 1971; v. 15: p. 239-245.
1523. Kaschak, G., W.L. Donn, and U. Fehr. Longrange infrasound from rockets. *Jour. Acous. Soc. Amer.*; 1970; v. 48(n. 1, Part I): p. 12-20.
1524. Gordon, A.L. Vertical momentum flux accomplished by Langmuir circulation. *Jour. Geophys. Res.*; 1970; v. 75(n. 21): p. 4177-4179.
1525. Balachandran, N.K. Effects of winds on the dispersion of acoustic-gravity waves. *Jour. Acous. Soc. Amer.*; 1970; v. 48(n. 1, Part 2): p. 211-220.
1526. Bé, A.W.H. and D.S. Tolderlund. Distribution and ecology of living planktonic foraminifera in surface waters of the Atlantic and Indian Oceans. in: "Micropaleontology of Oceans". London: Cambridge Univ. Press; 1971: p. 105-149.
1527. Leibermann, R.C. Velocity-density systematics for the olivine and spinel phases of Mg<sub>2</sub>SiO<sub>4</sub>-Fe<sub>2</sub>SiO<sub>4</sub>. *Jour. Geophys. Res.*; 1970; v. 75(n. 20): p. 4029-4034.
1528. Warren, N.W. and G.V. Latham. An experimental study of thermally induced microfracturing and its relation to volcanic seismicity. *Jour. Geophys. Res.*; 1970; v. 75(n. 23): p. 4455-4464.
1529. Knopoff, L., A.K. Mal, L.E. Alsop, and R.A. Phinney. A property of long-period Love waves. *Jour. Geophys. Res.*; 1970; v. 75(n. 20): p. 4084-4086.
1530. Hayes, D.E. and M. Ewing. The Louisville Ridge -- a possible extension of the Eltanin fracture zone. *Antarctic Res. Series*; 1971; v. 15: p. 223-228.
1531. Schreiber, E. and O.L. Anderson. Properties and composition of lunar materials: earth analogies. *Science*; 1970; v. 168: p. 1579-1580.
1532. McIntyre, A. and R. McIntyre. Coccolith concentrations and differential solution in oceanic sediments. in: "Micropaleontology of Oceans". London: Cambridge Univ. Press; 1971: p. 253-261.
1533. Cole, H.P., G.M. Bryon, and A.L. Gordon. The deep scattering layer: patterns across the Gulf Stream and the Sargasso Sea. in: G. Brooke Farquhar, Ed. "Proceedings of an International Symposium on Biological Sound Scattering in the Ocean". Washington, DC: U.S. Government Printing Office; 1970; (MC Report 005): p. 284-293.

1534. T. Watanabe, D. Epp, S. Uyeda, M. Langseth, and M. Yasui. Heat flow in the Philippine Sea. *Tectonophysics*; 1970; v. 10: p. 205-224.
1535. Yasui M., D. Epp, K. Nagasaka, and T. Kishii. Terrestrial heat flow in the seas round the Nansei Shoto (Ryukyu Islands). *Tectonophysics*; 1970; v. 10: p. 225-234.
1536. Wollins, G., D.B. Ericson, and M. Ewing. Late Pleistocene climates recorded in Atlantic and Pacific deep sea sediments. in: K.K. Turekian, Ed. "The Late Cenozoic Glacial Ages": Yale Univ.; 1971: p. 199-214.
1537. Foster, J.H. and N.D. Opdyke. Upper Miocene to Recent magnetic stratigraphy in deep-sea sediments. *Jour. Geophys. Res.*; 1970; v. 75(n. 23): p. 4465-4473.
1538. Scholz, C.H. and T.J. Fitch. Strain and creep in central California. *Jour. Geophys. Res.*; 1970; v. 75(n. 23): p. 4447-4453.
1539. Broecker, W.S. Man's oxygen reserves. *Science*; 1970; v. 168: p. 1537-1538.
1540. Sharma, G.M. and P.R. Burkholder. Structure of dibromophakellin, a new bromine-containing alkaloid from the marine sponge *Phakellia flabellata*. *Chem. Comm.*; 1971: p. 151-152.
1541. Lui, N.S.T. and O.A. Roels. Nitrogen metabolism of aquatic organisms 1. The assimilation and formation of urea in *Ochromonads malhamensis*. *Arch. Biochem. and Biophys.*; 1970; v. 139(n. 2): p. 269-277.
1542. Nowroozi, A.A. spectrum and prediction of tides off the coast of California. *Ann. Geophys.*; 1970; v. 26(n. 2): p. 259-271.
1543. Murphy, A.J., L.R. Sykes, and T.W. Donnelly. Preliminary survey of the microseismicity of the northeastern Caribbean. *Geol. Soc. Amer.*; 1970; v. 81: p. 2459-2463.
1544. Jacobs, M.B. Clay mineral investigations of Cretaceous and Quaternary deep-sea sediments of the North American Basin. *Jour. Sed. Pet.*; 1970; v. 40(n. 3): p. 864-868.
1545. Herron, E.M. Crustal plates and sea floor spreading in the southeastern Pacific. *Antarctic Res. Series*; 1971; v. 15(Am. Geophys. Union): p. 229-237.

1546. Bryan, G.M. Hydrodynamic model of the Blake outer ridge. *Jour. Geophys. Res.*; 1970; v. 75(n. 24): p. 4530-4537.

1547. Markl, R.G., G.M. Bryan, and J.I. Ewing. Structure of the Blake-Bahama outer ridge. *Jour. Geophys. Res.*; 1970; v. 75(n. 24): p. 4539-4555.

1548. Sbar, M.L., J.M.W. Rynn, F.J. Gumper, and J.C. Lahr. An earthquake sequence and focal mechanism solution, Lake Hopatcong, northern New Jersey. *Bull. Seism. Soc. Am.*; 1970; v. 60(n. 4): p. 1231-1243.

1549. Lahr, J. and P.W. Pomeroy. The foreshock sequence of the March 20, 1966 earthquake in the Republic of Congo. *Bull. Seism. Soc. Am.*; 1970; v. 60(n. 4): p. 1245-1258.

1550. Hays, J.D. and W.A. Berggren. Quaternary boundaries and correlations. in: "Micropalaeontology of the Oceans". London: Cambridge Univ. Press; 1971: p. 669-691.

1551. Houtz, R., J. Ewing, and P. Buhl. Seismic data from sonoboy stations in the northern and equatorial Pacific. *Jour. Geophys. Res.*; 1970; v. 75(n. 26): p. 5093-5111.

1552. McKenzie, D. P., D. Davies, and P. Molnar. Plate tectonics of the Red Sea and East Africa. *Nature*; 1970; v. 226: p. 243-248.

1553. Sykes, L. R. . Seismicity of the Indian Ocean and a possible nascent island arc between Ceylon and Australia. *J. Geophys. Res.* ; 1970; v. 75 (n. 26): p. 5041-5055.

1554. Demenitskaya, R.M. and K.L. Hunkins. Shape and structure of the Arctic Ocean. in: "The Sea". NY: Wiley-Interscience; 1971; v. 4(Part II): p. 223-249.

1555. Gerard, R. D. and O. A. Roels. Deep ocean water as a resource for combined mariculture, power and fresh water production. *Mar. Technol. Soc. J.*; 1970; v. 4(n. 5): p. 69-79.

1556. Hunkins, K., A.W.H. Bé , N.D. Opdyke, and G. Mathieu. The Late Cenozoic history of the Arctic Ocean. in: K.K. Turekian, Ed. "The Late Cenozoic Glacial Ages": Yale Univ.; 1971: p. 215-237.

1557. Benson, W.E., R.D. Gerard, and W.W. Hay. Summary and conclusions. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1970; v. IV: p. 659-673.

1558. Gealy, R.L. and R.D. Gerard. In situ petrophysical measurements in the Caribbean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1970; v. IV: p. 267-293.

1559. Vogel, D. E. and G. D. Garlick. Oxygen-isotope ratios in metamorphic eclogites. *Contr. Mineral. Petrol.*; 1970; v. 28: p. 183-191.

1560. Simpson, H. J. . Tritium in Crater lake, Oregon. *J. Geophys. Res.* ; 1970; v. 75(n. 27): p. 5195-5207.

1561. Molnar, P., T. J. Fitch, and L. M. Asfaw. A microearthquake survey in the Ethiopian rift. *Earthquake Notes*; 1970; v. XLI(n. 2): p. 37-44.

1562. Heezen, B. C. . The world rift system: an introduction to the symposium. *Tectonophysics* ; 1969; v. 8: p. 269-279.

1563. Anderson, O. and L. Thomsen. Consistency in the high-temperature equation of state of solids. in: "Accurate Characterization of the High Pressure Environment". National Bur. Standards, Spec. Pub. 326 ed.; 1971: p. 209-217.

1564. Shaw, D. M. and W. L. Donn. A thermodynamic study of Arctic paleoclimatology. *Quat Res.*; 1971; v. 1(n. 2): p. 175-187.

1565. Broecker, W.S. Calcite accumulation rates and glacial to interglacial changes in oceanic mixing. in: K.K. Turekian, Ed. "The Late Cenozoic Glacial Ages": Yale Univ.; 1971: p. 239-265.

1566. Page, R. . Dating episodes of faulting from tree rings; effects of the Fairweather fault on tree growth. *Geol. Soc. Am. Bull.* ; 1970; v. 81: p. 3085-3094.

1567. Kuo, J.T., R.C. Jachens, G. White, and M. Ewing. Tidal gravity measurements along a transcontinental profile across the United States. in: *Sixth Symp. on Earth Tides*; 1970: p. 1-11.

1568. Ewing, J., C. Windisch, and M. Ewing. Correlation of horizon A with Joides bore-hole results. *J. Geophys. Res.* ; 1970; v. 75(n. 29): p. 5645-5653.

1569. Epp, D., P. J. Grim, and M. G. Langseth, Jr. . Heat flow in the Caribbean and Gulf of Mexico. *J. Geophys. Res.* ; 1970; v. 75(n. 29): p. 5655-5669.

1570. Kelleher, J. A. . Space-time seismicity of the Alaska-Aleutian seismic zone. *J. Geophys. Res.* ; 1970; v. 75(n. 29): p. 5745-5756.
1571. Mandelbrot, B. B. and K. McCamy. On the secular pole motion and the Chandler wobble. *Geophys. J. R. astr. Soc.* ; 1970; v. 21: p. 217-232.
1572. Jacobs, S. S., A. F. Amos, and P. M. Bruchhausen. Ross Sea oceanography and Antarctic bottom water formation. *Deep-Sea Res.*; 1970; v. 17: p. 935-962.
1573. Lui, N. S. T. and O. A. Roels. An improved method for determining glyoxlic acid. *Analytical Chem.* ; 1970; v. 38: p. 202-209.
1574. McIntyre, A., A.W.H. Bé , and M. B. Roche. Modern Pacific coccolithophorida: a paleontological thermometer. *Trans. NY Academy Sci., Series II*; 1970; v. 32(n. 6): p. 720-731.
1575. Fliegel, M. and A. A. Nowroozi. Tides and bottom currents off the coast of northern California. *Limnol. Oceanogr.* ; 1970; v. 15(n. 4): p. 615-624.
1576. Barazangi, M. and J. Dorman. Seismicity map of the Arctic compiled from ESSA, Coast and Geodetic Survey, epicenter data January 1961 through September 1969. *Bull. Seismol. Soc. Am.*; 1970; v. 60(n. 5): p. 1741-1743.
1577. Seeber, L., M. Barazangi, and A. Nowroozi. Microearthquake seismicity and tectonics of coastal northern California. *Bull. Seismol. Soc. Am.* ; 1970; v. 60(n. 5): p. 1669-1699.
1578. Sykes, L. R. . Focal mechanism solutions for earthquakes along the world rift system. *Bull. Seismol. Soc. Am.* ; 1970; v. 60(n. 5): p. 1749-1752.
1579. Miyashiro, A., F. Shido, and M. Ewing. Metamorphism in the Mid-Atlantic Ridge near 24o and 30oN. *Philos. Trans. R. Soc. London*; 1971; v. A268: p. 589-603.
1580. Jacob, K. H. . Three-dimensional seismic ray tracing in a laterally heterogeneous spherical earth. *J. Geophys. Res.* ; 1970; v. 75(n. 32): p. 6675-6689.
1581. Hunkins, K., G. Mathieu, S. Teeter, and A. Gill. The floor of the Arctic Ocean in photographs. *Arctic*; 1970; v. 23(n. 3): p. 175-189.
1582. Houtz, R. and R. Meijer. Structure of the Ross Sea shelf from profiler data. *J. Geophys. Res.* ; 1970; v. 75(n. 32): p. 6592-6597.



1583. Sykes, L. R. . Earthquake swarms and sea-floor spreading. *J. Geophys. Res.* ; 1970; v. 75(n. 32): p. 6598-6611.

1584. Bender, M., W. Broecker, V. Gornitz, U. Middel, R. Kay, S-S. Sun, and P. Biscaye. Geochemistry of three cores from the east Pacific Rise. *Earth Planet. Sci. Lett.*; 1971; v. 12: p. 425-433.

1585. Bé , A.W.H., G. Vilks, and L. Lott. Winter distribution of planktonic foraminifera between the Grand Banks and the Caribbean. *Micropaleontology*; 1971; v. 17(n. 1): p. 31-42.

1586. Latham, G., M. Ewing, et al. Seismic data from man-made impacts on the moon. *Science*; 1970; v. 170: 620-626.

1587. Hayes, D. E. and M. Ewing. North Brazilian Ridge and adjacent continental margin. *Am. Assoc. Pet. Geol. Bull.*; 1970; v. 54(n. 11): p. 2120-2150.

1588. Powell, B. N. . Petrology and chemistry of mesosiderites - II. Silicate textures and compositions and metal-silicate relationships. *Geochim. Cosmochim. Acta*; 1971; v. 35: p. 5-34.

1589. Gast, P. W. and N. J. Hubbard. Rare earth abundances in soil and rocks from the ocean of storms. *Earth Planet. Sci. Lett.* ; 1970: p. 94-101.

1590. Mueller, S. and M. Talwanai. A crustal section across the eastern Alps based on gravity and seismic refraction data. *Pure Appl. Geophys.*; 1971; v. 85: p. 226-239.

1591. Amos, A. F., A. L. Gordon, and E. D. Schneider. Water masses and circulation patterns in the region of the Blake-Bahama outer ridge. *Deep-Sea Res.* ; 1971; v. 18: p. 145-165.

1592. Hunkins, K. L. . Sound scattering layers in the Arctic ocean. *U. S. Navy J. Underwater Acoust.*; 1971; v. 21(n. 1): p. 83-89.

1593. Kutschale, H. . The period equation by ray theory for propagation in the Sofar channel. *U. S. Navy Underwater Acoust.* ; 1971; v. 21(n. 1): p. 37-44.

1594. Bott, M.H.P. The mantle transition zone as possible source of global gravity anomalies. *Earth Planet. Sci. Lett.*; 1971; v. 11: p. 28-34.

1595. Demarest, H. H. Jr. Cube-resonance method to determine the elastic constants of solids. *J. Acoust. Soc. Am.*; 1971; v. 49(n. 3): p. 768-775.

1596. Gordon, A.L. Spreading of Antarctic bottom waters II. in: A.L. Gordon, Ed. "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 1-17.

1597. Watkins, N. D. and A. Abdel-Monem. Detection of the Gilsa geomagnetic polarity event on the island of Madeira. *Geol. Soc. Am. Bull.* ; 1971; v. 82: p. 191-198.

1598. Ewing, M. The Late Cenozoic history of the Atlantic Basin and its bearing on the cause of the ice ages. in: K.K. Turekian, Ed. "The Late Cenozoic Glacial Ages": Yale Univ. Press; 1971: p. 565-573.

1599. Fox, P. J., W. F. Ruddiman, W. B. F. Ryan, and B. C. Heezen. The geology of the Caribbean crust, I: Beata Ridge. *Tectonophysics*; 1970; v. 10: p. 495-513.

1600. Heezen, B.C., A.G. Fischer, R.E. Boyce, D. Bukry, R.G. Douglas, R.E. Garrison, S.A. Kling, V. Krasheninnikov, A.P. Lisitzin, and A.C. Pimm. Introduction. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1971; V. VI: p. 3-629 and 691-708.

1601. Eittrheim S., A.L. Gordon, M. Ewing, E.M. Thondike, and P. Bruchhausen. The nepheloid layer of observed bottom currents in the Indian-Pacific Antarctic Sea. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 19-35.

1602. Eittrheim, S. and M. Ewing. Suspended particulate matter in the deep waters of the North American Basin. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 123-167.

1603. Gronlie, G. and I. B. Ramberg. Gravity indications of deep sedimentary basins below the Norwegian continental shelf and the Voring Plateau. *Norsk Geologisk Tidsskr.*; 1970; v. 50: p. 375-391.

1604. Rabinowitz, P. D. and W. B. F. Ryan. Gravity anomalies and crustal shortening in the eastern Mediterranean. *Tectonophysics*; 1970; v. 10: p. 585-608.

1605. Donn, W. L., I. Dalins, V. McCarty, M. Ewing, and G. Kaschak. Air-coupled seismic waves at long range from Apollo landings. *Geophys. J. R. astr. Soc.*; 1971; v. 26: p. 161-171.

1606. Langseth, Jr., M.G. and D. Boyer. The effect of the Reykjanes Ridge on the flow of water above 2000 meters. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 93-114.

1607. Alsop, L. E. . The leaky-mode period equation-a plane-wave approach. Bull. Seismol. Soc. Am. ; 1970; v. 60(n. 6): p. 1989-1998.

1608. Talwani, M., C. C. Windisch, and M. G. Langseth, Jr. . Reykjanes Ridge crest: a detailed geophysical study. J. Geophys. Res. ; 1971; v. 76(n. 2): p. 473-517.

1609. Fox, P. J., B. C. Heezen, and G. L. Johnson. Jurassic sandstone from the tropical Atlantic. Science; 1970; v. 170: p. 1402-1403.

1610. Molnar, P. and L. R. Sykes. Plate tectonics in the Hispaniola area: discussion. Geol. Soc. Am. Bull. ; 1971; v. 82: p. 1123-1126.

1611. Kumazawa, M. and H. Helmstaedt. Elastic properties of eclogite xenoliths from diatremes of the East Colorado plateau and their implication to the upper mantle structures. J. Geophys. Res. ; 1971; v. 76(n. 5): p. 1231-1247.

1612. Molnar, P. and Y. P. Aggarwal. A microearthquake survey in Kenya. Bull. Seismol. Soc. Am. ; 1971; v. 61(n. 1): p. 195-201.

1613. Talwani, M. . Developments in navigation and measurement of gravity at sea. Geoexploration; 1970; v. 8: p. 151-183.

1614. Baker, D. M. and D. E. Cotten. Interpretation of high-frequency Doppler observations of waves from nuclear and natural sources. J. Geophys. Res. ; 1971; v. 76(n. 7): p. 1803-1810.

1615. Isacks, B. and P. Molnar. Distribution of stresses in the descending lithosphere from a global survey of focal-mechanism solutions of mantle earthquakes. Rev. Geophys. Space Phys.; 1971; v. 9(n.1): p. 103-174.

1616. Bé , A.W.H., J.M. Forns, and O.A. Roels. Plankton abundance in the North Atlantic Ocean. in: J.D. Costlow, Ed. "Fertility of the Sea". NY: Gordon and Breach; 1971; V. 1: p. 17-50.

1617. Connary, S.D. and M. Ewing. The nepheloid layer and bottom circulation in the Guinea and Angola basins. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 169-184.

1618. Cotten, D. and W. L. Donn. Sound from Apollo rockets in space. *Science*; 1971; v. 171: p. 565-567.
1619. Stoll, R. D., J. Ewing, and G. M. Bryan. Anomalous wave velocities in sediments containing gas hydrates. *J. Geophys. Res.* ; 1971; v. 76(n. 8): p. 2090-2094.
1620. Broecker, W. S. . A kinetic model for the chemical composition of sea water. *Quat. Res.* ; 1971; v. 1(n. 2): p. 188-207.
1621. Gerard, R.D. Oceanographic measurements from anchored and dynamically-positioned ships in deep water. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 67-79.
1622. Amos, A.F., M.G. Langseth, Jr., and R.G. Markl. Visible oceanic saline fronts. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 49-62.
1623. Rybicki, K. . The elastic residual field of a very long strike-slip fault in the presence of a discontinuity. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 1): p. 79-92.
1624. Biscaye, P. E. . Strontium isotope composition and sediment transport in the Rio de la Plata estuary. *Geol. Soc. Am. Memoir 133*; 1972: p. 349-357.
1625. Christoffel, D. A. . Motion of the New Zealand Alpine fault deduced from the pattern of sea-floor spreading. *Bull. Royal Soc. New Zealand* ; 1971; (n. 9): p. 25-30.
1626. Hubbard, N. J. . Some chemical features of lavas from the Manu's Islands, Samoa. *Pacific Sci.* ; 1971; v. xxv(n. 2): p. 178-187.
1627. Weissel, J. K. and D. E. Hayes. Asymmetric sea floor spreading south of Australia. *Nature*; 1971; v. 231(n. 5304): p. 518-522.
1628. Broecker, W. S. and T. H. Peng. The vertical distribution of radon in the Bomex area. *Earth Planet. Sci. Lett.* ; 1971; v. 11: p. 99-108.
1629. Heezen, B. C., C. Gray, A. G. Segre, and E. F. K. Zarudski. Evidence of foundered continental crust beneath the central Tyrrhenian Sea. *Nature*; 1971; v. 229(n. 5283): p. 327-329.

1630. Scholz, C.H. Microearthquakes on the San Andreas fault and aftershocks of the San Fernando earthquake. in: "The San Fernando, California, Earthquake of February 9, 1971," U.S.C.G.S. Prof. Paper 733; 1971: p. 33-40.

1631. Lahr, J.C., M. Wyss, and J.A. Hileman. Repeated surveys of small scale figures established across surface fault ruptures following the earthquake. in: "The San Fernando, California, Earthquake of February 9, 1971," U.S.C.G.S. Prof. Paper 733; 1971: p. 86-88.

1632. Liebermann, R. C. and S. K. Banerjee. Magnetoelastic interactions in hematite: implications for geophysics. *J. Geophys. Res.*; 1971; v. 76(n. 11): p. 2735-2756.

1633. LePichon, X., S. Eittreim, and J. Ewing. A sedimentary channel along Gibbs fracture zone. *J. Geophys. Res.* ; 1971; v. 76(n. 12): p. 2891-2896.

1634. Oversby, V. M., J. Lancelot, and P. W. Gast. Isotopic composition of lead in volcanic rocks from Tenerife, Canary Islands. *J. Geophys. Res.* ; 1971; v. 76(n. 14): p. 3402-3413.

1635. Ewing, M., G. Latham, F. Press, G. Sutton, J. Dorman, Y. Nakamura, R. Meissner, F. Duennebier, and R. Kovach. Seismology of the moon and implications on internal structure, origin and evolution. in: De Jager, Ed. "Highlights of Astronomy": *Internat. Astro. Union*; 1971; ( ): p. 155-172.

1636. Horn, D. R., M. Ewing, M. N. Delach, and B. M. Horn. Turbidites of the northeast Pacific. *Sedimentology*; 1971; v. 16: p. 55-69.

1637. Leyden, R., M. Ewing, and E. S. W. Simpson. Geophysical reconnaissance on African shelf. 1. Cape Town to East London. *Am. Assoc. Pet. Geol. Bull.* ; 1971; v. 55(n. 5): p. 651-657.

1638. Edgar, N. T., J. I. Ewing, and J. Hennion. Seismic refraction and reflection in Caribbean Sea. *Am. Assoc. Pet. Geol. Bull.* ; 1971; v. 55(n. 6): p. 833-870.

1639. Nowroozi, A. A. . Seismo-tectonics of the Persian Plateau, eastern Turkey, Caucasus, and Hindu-Kush regions. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 2): p. 317-341.

1640. Habib, D. Dinoflagellate stratigraphy across the Miocene-Pliocene boundary, Tabiano stratotype section. *Proc. II Planktonic Conf., Rome, 1970*; 1971: p. 591-598.

1641. Drake, C. L. . Marine geophysics. *EOS*; 1971; v. 52(n. 6): p. 244-249.

1642. Wyss, M. Preliminary source parameter determination of the San Fernando earthquake. in: "The San Fernando, California, Earthquake of February 9, 1971," U.S.C.G.S. Prof. Paper 733; 1971: p. 38-40.

1643. Hays, J.D. and J.G. Donahue. Antarctic quaternary climatic record and radiolarian and diatom extinctions. in: R.J. Adie, Ed. "Antarctic Geology and Geophysics". Oslo: Internat. Union Geol. Sci.; 1972; Series B(N. 1): p. 733-738.

1644. Dasch, E. J. and P. E. Biscaye. Isotopic composition of strontium in Cretaceous-to-Recent pelagic foraminifera. Earth Planet. Sci. Lett. ; 1971; v. 11: p. 201-204.

1645. Garlick, G. D., I. D. MacGregor, and D. E. Vogel. Oxygen isotope ratios in eclogites from kimberlites. Science; 1971; v. 172: p. 1025-1027.

1646. Pitman, W. C. III, M. Talwani, and J. R. Heirtzler. Age of the North Atlantic Ocean from magnetic anomalies. Earth Planet. Sci. Lett.; 1971; v. 11: p. 195-200.

1647. Herron, T. J. . Group velocities of atmospheric gravity waves. J. Atmos. Sci. ; 1971; v. 28(n. 4): p. 598-603.

1648. Hayes, D.E. and W.C. Pitman, III. Review of marine geophysical observations in the Southern Ocean. in: R.J. Adie, Ed. "Geology and Geophysics". Oslo: Internat. Union Geol. Sci.; 1972; Series B(n. 1): p. 725-732.

1649. Hayes, D.E., M. Talwani, and D.A. Christoffel. The Macquarie Ridge complex. in: R.J. Aide, Ed. "Antarctic Geology and Geophysics". Oslo: Internat. Union Geol. Sci.; 1972; Series B(N. 1): p. 767-771.

1650. Balachandran, N. K., W. L. Donn, and G. Kaschak. On the propagation of infrasound from rockets: effects of winds. J. Acoust. Soc. Am. ; 1971; v. 50(n. 2, Part 1): p. 397-404.

1651. Dalziel, I.W.D. Large-scale folding in the Scotia Arc. in: R.J. Adie, Ed. "Antarctic Geology and Geophysics," Internat. Union Geol. Sci., Oslo, Series B, No. 1; 1972: p. 47-55.

1652. Eldholm, O. and J. Ewing. Marine geophysical survey in the southwestern Barents Sea. J. Geophys. Res. ; 1971; v. 76(n. 17): p. 3832-3841.

1653. Shido, F., A. Miyashiro, and M. Ewing. Crystallization of abyssal tholeiites. Contrib. Mineral. Petrol.; 1971; v. 31: p. 251-266.

1654. Ward, P. L. and S. Bjornsson. Microearthquakes, swarms, and the geothermal areas of Iceland. *J. Geophys. Res.* ; 1971; v. 76(n. 17): p. 3953-3982.

1655. Warren, N., E. Schreiber, C. Scholz, J.A. Morrison, P.R. Norton, M. Kumazawa, and O.L. Anderson. Elastic and thermal properties of Apollo 11 and Apollo 12 rocks. in: *Proc. Second Lunar Science Conf.* Cambridge, MA: MIT Press; 1971; v. 3: p. 2345-2360.

1656. Bender, M. L. . Does upward diffusion supply the excess manganese in pelagic sediments? *J. Geophys. Res.* ; 1971; v. 76(n. 18): p. 4212-4215.

1657. Soga, N. . Sound velocity of some germanate compounds and its relation to the law of corresponding states. *J. Geophys. Res.* ; 1971; v. 76(n. 17): p. 3983-3989.

1658. Schreiber, E., P.J. Fox, and J. Peterson. Compressional sound velocities in semi-indurated sediments and basalts from DSDP Leg XI. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; v. XI: p. 723-727.

1659. Roels, O.A., R.D. Gerard, and A.W.H. Bé . Fertilizing the sea by pumping nutrient-rich deep water to the surface. in: J.D. Costlow, Ed. "Fertility of the Sea". NY: Gordon and Breach; 1971; V. 1: p. 401-415.

1660. Den, N., W. J. Ludwig, S. Murauchi, M. Ewing, E. Hotta, T. Asanuma, T. Yoshii, A. Kubotera, and J. Hagiwara. Sediments and structure of the Eauripik-New Guinea rise. *J. Geophys. Res.* ; 1971; v. 76(n. 20): p. 4711-4723.

1661. Kent, D., N. D. Opdyke, and M. Ewing. Climate change in the North Pacific using ice-rafted detritus as a climatic indicator. *Geol. Soc. Am. Bull.* ; 1971; v. 82: p. 2741-2754.

1662. JOIDES. Leg 4 of the Deep Sea Drilling Project. *Science*; 1971; v. 172: p. 1197-1205.

1663. Wollin, G. and D. B. Ericson. Amino-acid synthesis from gases detected in interstellar space. *Nature*; 1971; v. 233(n. 5322): p. 615-616.

1664. Wollin, G., D. B. Ericson, and W. B. F. Ryan. Variations in magnetic intensity and climatic changes. *Nature*; 1971; v. 232(n. 5312): p. 549-550.

1665. Wollin, G., D. B. Ericson, and W. B. F. Ryan. Magnetism of the earth and climatic changes. *Earth Planet. Sci. Lett.* ; 1971; v. 12: p. 175-183.

1666. Wehmiller, J.F. and P.E. Hare. Amino acid content of some samples from the deep sea drilling program. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. IX: p. 903-905.

1667. Biscaye, P. E. and E. J. Dasch. The rubidium, strontium, strontium-isotope in deep-sea sediments: Argentine Basin. *J. Geophys. Res.* ; 1971; v. 76(n. 21): p. 5087-5096.

1668. Ewing, J., L.H. Burckle, T. Saito, and H. Poppe. Geophysical and geological studies of Cantabria seamount and its environs. in: "Histoire Struct. du Golfe de Gascogne," Proc. Symp. on Bay of Biscaye; 1972; V. VI-12-1 to VI-12-13.

1669. Bé , A.W.H. and J. Van Donk. Oxygen-18 studies of Recent planktonic foraminifera. *Science*; 1971; v. 173: p. 167-168.

1670. Alsop, L. E., A. S. Goodman, and E. Ash. Surface wave dispersion in a mass-loaded half-space. *J. Acoust. Soc. Am.* ; 1971; v. 50(n. 1, Part 2): p. 176-180.

1671. Hamada, K. . Mantle-wave analysis by a phase-equilization-and-sum method for the Montana LASA long-period data. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 4): p. 875-892.

1672. Wezel, F. C. and W. B. F. Ryan. Flysch, margini continentali e zolle litosferiche. *Boll. Soc. Geol. It.*; 1971; v. 90: p. 249-270.

1673. Burckle, L. H. . Correlation of Late Cenozoic marine sections in Japan and the equatorial Pacific. *Trans. Proc. Paleontol. Soc. Japan*; 1971; (n. 82): p. 117-128.

1674. Ward, P. L. and K. H. Jacob. Micro-earthquakes in the Ahuachapan geothermal field, El Salvador, Central America. *Science*; 1971; v. 173: p. 328-330.

1675. Molnar, P. . P-wave spectra from underground nuclear explosions. *Geophys. J. R. astr. Soc.* ; 1971; v. 23: p. 273-286.

1676. Oppenheim, A. Bremsstrahlung power density: long-range interactions. *Phys. Rev. Lett.*; 1971; v. 27(n. 1): p. 3-5.

1677. Hays, J. D. . Faunal extinctions and reversals of the earth's magnetic field. *Geol. Soc. Am. Bull.*; 1971; v. 82: p. 2433-2447.



1678. Langseth, Jr., M.G., E.M. Drake, D. Nathanson, and J.A. Fountain. Development of in situ thermal conductivity measurement for the lunar heat flow experiment. in: "Thermo Characteristics of the Moon". Cambridge, MA: MIT Press; 1972: p. 169-204.

1679. Broecker, W.S. and M.L. Bender. Age determination on marine strandline. in: "Calibration of Hominoid Evolution": Scottish Acad. Press; 1972: p. 19-35.

1680. Roels, O.A. and M. Trout. Vitamin A and Carotene. in: "Standard Methods of Clinical Chemistry". NY: Academic Press, Inc.; 1972; V. 7: p. 215-230.

1681. Broecker, W.S., B. Schwartz, N. Sloan, and P. Ancona. Road salt as an urban tracer. in: Proc. Street Salting - Urban Water Quality Workshop: Syracuse University; 1971: p. 24-38.

1682. Scholz, C. H. and T. Fitch. Reply to comments by J. C. Savage and R. O. Burford. J. Geophys. Res. ; 1971; v. 76(n. 26): p. 6480-6484.

1683. Matumoto, T. . Seismic body waves observed in the vicinity of Mount Katmai, Alaska, and evidence for the existence of molten chambers. Geol. Soc. Am. Bull. ; 1971; v. 82: p. 2905-2920.

1684. Tolderlund, D.S. and A.W.H. Bé . Seasonal distribution of planktonic foraminifera in the western North Atlantic. Micropaleontology; 1971; v. 17(n. 3): p. 297-329.

1685. Scholz, C. H., M. Barazangi, and M. L. Sbar. Late Cenozoic evolution of the Great Basin, western United States, as an ensialic interarc basin. Geol. Soc. Am. Bull.; 1971; v. 82: p. 2979-2990.

1686. Wehmiller, J. and P. E. Hare. Racemization of amino acid in marine sediments. Science; 1971; v. 173: p. 907-911.

1687. LePichon, X. and D. E. Hayes. Marginal offsets, fracture zones, and the early opening of the South Atlantic. J. Geophys. Res.; 1971; v. 76(n. 26): p. 6283-6293.

1688. Le Pichon, X. and P. J. Fox. Marginal offsets, fracture zones, and the early opening of the North Atlantic. J. Geophys. Res.; 1971; v. 76(n. 26): p. 6294-6308.

1689. Sykes, L. R. . Seismicity as a guide to global tectonics and earthquake prediction. Tectonophysics; 1972; v. 13((1-4)): p. 393-414.

1690. Kaufman, A. . U-series dating of Dead Sea Basin carbonates. *Geochim. Cosmochim. Acta*; 1971; v. 35: p. 1269-1281.

1691. Kaufman, A., W. S. Broecker, T. L. Ku, and D. L. Thurber. The status of U-series methods of mollusk dating. *Geochim. Cosmochim. Acta*; 1971; v. 35: p. 1155-1183.

1692. Ludwig, W. J., S. Murauchi, N. Den, M. Ewing, H. Hotta, R. E. Houtz, T. Yoshii, T. Asanuma, K. Hagiwara, T. Saito, and S. Ando. Structure of Bowers Ridge, Bering Sea. *J. Geophys. Res.* ; 1971; v. 76(n. 26): p. 6350-6366.

1693. Ludwig, W. J., R. E. Houtz, and M. Ewing. Sediment distribution in the Bering Sea: Bowers Ridge, Shirshov Ridge, and enclosed basins. *J. Geophys. Res.* ; 1971; v. 76(n. 26): p. 6367-6375.

1694. Scholz, C. H. and R. J. Martin III. Crack growth and static fatigue in quartz. *J. Am. Ceram. Soc.* ; 1971; v. 54(n. 9): p. 474.

1695. Assaf, G., R. Gerard, and A. L. Gordon. Some mechanisms of oceanic mixing revealed in aerial photographs. *J. Geophys. Res.* ; 1971; v. 76(n. 27): p. 6550-6572.

1696. Hunkins, K., A.W H. Bé , N. Opdyke, and T. Saito. Arctic paleo-oceanography in Late Cenozoic time. *Science*; 1971; v. 174: p. 962-963.

1697. Le Pichon, X., S. Eittreim, and J. Ewing. Reply to Worthington and Wright. *J. Geophys. Res.* ; 1971; v. 76(n. 27): p. 6609-6612.

1698. Latham, G., M. Ewing, J. Dorman, D. Lammlein, F. Press, N. Toksoz, G. Sutton, F. Duennebier, and Y. Nakamura. Moonquakes. *Science*; 1971; v. 174: p. 687-692.

1699. Horn, D. R., M. Ewing, B. M. Horn, and M. N. Delach. Turbidites of the Hatteras and Sohm abyssal plains, western North Atlantic. *Mar. Geol.* ; 1971; v. 11: p. 287-323.

1700. Venkatarathnam, K., and W. B. F. Ryan. Dispersal patterns of clay minerals in the sediments of the eastern Mediterranean Sea. *Mar. Geol.* ; 1971; v. 11: p. 261-282.

1701. Trifunac, M. D. and D. E. Hudson. Analysis of the Pacoima Dam accelerogram - San Fernando, California, earthquake of 1971. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 5): p. 1393-1411.

1702. Rabinowitz, P. D. . Gravity anomalies across the east African continental margin. *J. Geophys. Res.* ; 1971; v. 76(n. 29): p. 7107-7117.

1703. Ewing, J. I., W. J. Ludwig, M. Ewing, and S. Eittreim. Structure of the Scotia Sea and Falkland Plateau. *J. Geophys. Res.* ; 1971; v. 76(n. 29): p. 7118-7137.

1704. Sbar, M. L., M. Barazangi, J. Dorman, C. H. Scholz, and R. B. Smith. Tectonics of the intermountain seismic belt, western United States: micro-earthquake seismicity and composite fault plane solutions. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 13-28.

1705. Pitman, W. C. III and M. Talwani. Central North Atlantic plate motions. *Science*; 1971; v. 174: p. 845-846.

1706. Mitronovas, W. and B. L. Isacks. Seismic velocity anomalies in the upper mantle beneath the Tonga-Kermadec island arc. *J. Geophys. Res.* ; 1971; v. 76(n. 29): p. 7154-7180.

1707. Fitch, T. J. and C. H. Scholz. Mechanisms of underthrusting in southwest Japan: a model of convergent plate interactions. *J. Geophys. Res.* ; 1971; v. 76(n. 29): p. 7260-7292.

1708. Kienle, J. . Gravity and magnetic measurements over Bowers Ridge and Shirshov Ridge, Bering Sea. *J. Geophys. Res.* ; 1971; v. 76(n. 29): p. 7138-7153.

1709. Ward, P. L. . New interpretation of the geology of Iceland. *Geol. Soc. Am. Bull.* ; 1971; v. 82: p. 2991-3012.

1710. Goll, R.M. Leg 9 Synthesis, Radiolaria. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. IX: p. 947-1058.

1711. Gumper, F. J. and C. Scholz. Microseismicity and tectonics of the Nevada seismic zone. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 5): p. 1413-1432.

1712. Opdyke, N. D., D. Ninkovich, W. Lowrie, and J. D. Hays. The paleomagnetism of two Aegean deep-sea cores. *Earth Planet. Sci. Lett.* ; 1972; v. 14: p. 145-159.

1713. Sbar, M. L. and T. Matumoto. Refraction profiles in the Valley of Ten Thousand Smokes, Katmai, Alaska. *Bull. Volcanologie*; 1972; v. 35(n. 2): p. 335-349.

1714. Dalziel, I. W. D. and D. H. Elliot. Evolution of the Scotia Arc. *Nature*; 1971; v. 233(n. 5317): p. 246-252.

1715. Sykes, L. R. . Aftershock zones of great earthquakes, seismicity gaps, and earthquake prediction for Alaska and the Aleutians. *J. Geophys. Res.* ; 1971; v. 76(n. 32): p. 8021-8041.

1716. Abdel-Monem, A., N. D. Watkins, and P. W. Gast. Potassium-argon ages, volcanic stratigraphy, and geomagnetic polarity history of the Canary Islands: Lanzarote, Fuerteventura, Gran Canaria, and La Gomera. *Am. J. Sci.* ; 1971; v. 271: p. 490-521.

1717. Lammlein, D. R., M. L. Sbar, and J. Dorman. A microearthquake reconnaissance of southeastern Missouri and western Tennessee. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 6): p. 1705-1716.

1718. Leyden, R., W. J. Ludwig, and M. Ewing. Structure of continental margin off Punta del Este, Uruguay, and Rio de Janeiro, Brazil. *Am. Assoc. Pet. Geol. Bull.*; 1971; v. 55(n. 12): p. 2161-2173.

1719. Savino, J., L. R. Sykes, R. C. Liebermann, and P. Molnar. Excitation of seismic surface waves with periods of 15 to 70 seconds for earthquakes and underground explosions. *J. Geophys. Res.* ; 1971; v. 76(n. 32): p. 8003-8020.

1720. Jones, E. J. W., J. Ewing, and M. Truchan. Aleutian plain sediments and lithospheric plate motions. *J. Geophys. Res.* ; 1971; v. 76(n. 33): p. 8121-8127.

1721. Oliver, J. and L. Murphy. WWNSS: seismology's global network of observing stations. *Science*; 1971; v. 174: p. 254-261.

1722. Ninkovich, D. and J.D. Hayes. Tectonic setting of Mediterranean volcanoes. *Acta 1st Internat. Sci. Cong. Volvano of Thera, September, 1969*; 1971: p. 111-135.

1723. Trifunac, M. D. . A method for synthesizing realistic strong ground motion. *Bull. Seismol. Soc. Am.*; 1971; v. 61(n. 6): p. 1739-1753.

1724. Trifunac, M. D. . Surface motion of a semi-cylindrical alluvial valley for incident plane SH waves. *Bull. Seismol. Soc. Am.* ; 1971; v. 61(n. 6): p. 1755-1770 ; ISSN .

1725. Donn, W. L. and D. Rind. Microbaroms and the temperature and wind of the upper atmosphere. *J. Atmos. Sci.* ; 1972; v. 29(n. 1): p. 156-172.

1726. Fox, P. J., E. Schreiber, and B. C. Heezen. The geology of the Caribbean crust: Tertiary sediments, granitic and basic rocks from the Aves ridge. *Tectonophysics*; 1971; v. 12: p. 89-109.

1727. Goll, R. M. and K. R. Bjorklund. Radiolaria in surface sediments of the North Atlantic Ocean. *Micropaleontology*; 1971; v. 17(n. 4): p. 434-454.

1728. Ewing, J.I. and C.D. Hollister. Regional aspects of deep sea drilling in the western North Atlantic. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. XI: p. 951-973.

1729. Wilhelm, O. and M. Ewing. Geology and history of the Gulf of Mexico. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 575-600.

1730. Lowrie, W. and N.D. Opdyke. Paleomagnetism of igneous samples. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. XIV: p. 777-784.

1731. Lowrie, W. and N.D. Opdyke. Paleomagnetism of igneous and sedimentary samples. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XV: p. 1017-1022.

1732. Hays, J.D., H. Cook, G. Jenkins, W. Orr, R. Goll, F. Cook, D. Milow, and J. Fuller. An interpretation of the geologic history of the eastern equatorial Pacific from the drilling results of Glomar Challenger, Leg IX. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. IX: p. 909-931.

1733. Roels, O.A., L. Van Hemelrijck, R.D. Gerard, and J.L. Worzel. Cold, nutrient-rich water: The most abundant resource of the deep sea. *Colloq. Internatl. l'Exploit. Oceans, CNEXO, Bordeaux*; 1971; V. 1: p. 1-23.

1734. Opdyke, N. D. . Paleomagnetism of deep-sea cores. *Rev. Geophys. Space Phys.* ; 1972; v. 10(n. 1): p. 213-249.

1735. Barazangi, M. and B. Isacks. Lateral variations of seismic-wave attenuation in the upper mantle above the inclined earthquake zone of the Tonga Island arc: deep anomaly in the upper mantle. *J. Geophys. Res.* ; 1971; v. 76(n. 35): p. 8493-8516.

1736. Page, R. and J. Lahr. Measurements for fault slip on the Denali, Fairweather, and Castle Mountain faults, Alaska. *J. Geophys. Res.* ; 1971; v. 76(n. 35): p. 8534-8543.

1737. Balachandran, N. K. and W. L. Donn. Characteristics of infrasonic signals from rockets. *Geophys. J. R. astr. Soc.* ; 1971; v. 26: p. 135-148.
1738. Cotten, D. E., W. L. Donn, and A. Oppenheim. On the generation and propagation of shock waves from Apollo rockets at orbital altitudes. *Geophys. J. R. astr. Soc.* ; 1971; v. 26: p. 149-159.
1739. Horn, D. R., M. Ewing, B. M. Horn, and M. N. Delach. World-wide distribution of manganese nodules. *Ocean Industry*; 1972; (January): p. 26-29.
1740. Church, T. M. and K. Wolgemuth. Marine barite saturation. *Earth Planet. Sci. Lett.* ; 1972; v. 15: p. 35-44.
1741. Roels, O.A., A. Chu, and K.D. Lightburn. Invertebrates-A global view. in: "The World's Oceans". NY: New York Inst. Ocean Resources, Inc.; 1972: p. 29-59.
1742. Donn, W. L. and D. Rind. Natural infrasound as an atmospheric probe. *Geophys. J. R. astr. Soc.* ; 1971; v. 26: p. 111-133.
1743. McIntyre, A., W. F. Ruddiman, and R. Jantzen. Southward penetrations of the North Atlantic polar front: faunal and floral evidence of large-scale surface water mass movements over the last 225,000 years. *Deep-Sea Res.* ; 1972; v. 19: p. 61-77.
1744. Dalziel, I.W.D., W. Lowrie, R. Kligfield, and N.D. Opdyke. Paleomagnetic data from the southern-most Andes and the Antarcticandes. in: "Implications of Continental Drift to the Earth Sciences". London: Academic Press; 1973; V. 1: p. 87-101.
1745. Bé , A.W.H., C. MacClintock, and D. C. Currie. Helical shell structure and growth of the pteropod *Cuvierina columnella* (Rang) (Mollusca, Gastropoda). *Biomineralization Res. Reports*; 1972: p. 47-79.
1746. Ewing, M., D. Horn, L. Sullivan, T. Aitken, and E. Thorndike. Photographing manganese nodules on the ocean floor. *Oceanology Inter.*; 1971; (December): p. 26-32.
1747. Savino, J., K. McCamy, and G. Hade. Structures in earth noise beyond twenty seconds-a-window for earthquakes. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 1): p. 141-176.
1748. Trifunac, M. D. . A note on correction of strong-motion accelerograms for instrument response. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 1): p. 401-409.

1749. Rao, G. L. and M. M. Rao. Horizontal drifts in E- and Es- layers for a middle latitude station. *J. Atmos. Terr. Phys.*; 1972; v. 34: p. 537-541.

1750. Nowroozi, A. A. . Long-term measurements of pelagic tidal height off the coast of northern California. *J. Geophys. Res.* ; 1972; v. 77(n. 3): p. 434-443.

1751. Richards, H. G., D. J. Colquhoun, and R. L. Blanchard. Pleistocene mollusks from boreholes in South Carolina. *Notulae Naturae*; 1971; (n. 445): p. 1-11.

1752. Nowroozi, A. A. . Characteristic periods of fundamental and overtone oscillations of the earth following a deep-focus earthquake. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 1): p. 247-274.

1753. Wyss, M. and T. C. Hanks. The source parameters of the San Fernando earthquake inferred from teleseismic body waves. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 2): p. 591-602.

1754. Trifunac, M. D. . Interaction of a shear wall with the soil for incident plane SH waves. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 1): p. 63-83.

1755. Wyss, M. and P. Molnar. Efficiency, stress drop, apparent stress, effective stress, and frictional stress of Denver, Colorado earthquakes. *J. Geophys. Res.* ; 1972; v. 77(n. 8): p. 1433-1438.

1756. Hanks, T. C. and M. Wyss. The use of bodywave spectra in the determination of seismic-source parameters. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 2): p. 561-589.

1757. Demarest, H. H. Jr. Extrapolation of elastic properties to high pressure in the alkali halides. *J. Geophys. Res.* ; 1972; v. 77(n. 5): p. 848-856.

1758. Alvarez, W. . Rotation of the Corsica-Sardinia microplate. *Nature Phys. Sci.*; 1972; v. 235(n. 58): p. 103-105.

1759. Burckle, L.H. Late Cenozoic planktonic diatom zones from the eastern equatorial Pacific. R. Simonsen, Ed. *Nova Hedwigia*, First Symp. Recent and Fossil Marine Diatoms, Bremerhaven, September 1970; 1972; V. 39: p. 217-246.

1760. Pitman, W. C. III and M. Talwani. Sea-floor spreading in the North Atlantic. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 619-646.

1761. Chen, J. C. and C. Chen. Mineralogy, geochemistry and paleontology of shelf sediments of the South China Sea and Taiwan Strait. *Oceanol. Acta Taiwanica*; (n. 1 ): p. 33-54.

1762. Barazangi, M., B. Isacks, and J. Oliver. Propagation of seismic waves through and beneath the lithosphere that descends under the Tonga Island arc. *J. Geophys. Res.* ; 1972; v. 77(n. 5): p. 952-958.

1763. Laughton, A. S., R. B. Whitmarsh, J. S. M. Rusby, M. L. Somers, J. Revie, B. S. McCartney, and J. E. Nafe. A continuous east-west fault on the Azores-Gibraltar Ridge. *Nature*; 1972; v. 237(n. 5352): p. 217-220.

1764. Heezen, B. C. . Inland and marginal seas. *Tectonophysics*; 1972; v. 13((1-40): p. 298-308.

1765. Hollister, C.D. and B.C. Heezen. Geologic effects of ocean bottom currents: Western North Atlantic. in: "Studies in Physical Oceanography". London: Gordon and Breach; 1972: p. 37-66.

1766. Vervoot, W. Hydroids from the THETA, VEMA and YELCHO cruises of Lamont-Doherty Geological Observatory. *Zoologische Verhand*; 1972; v. 120: p. 1-247.

1767. King, K. Jr. and P. E. Hare. Amino acid composition of the test as a taxonomic character for living and fossil planktonic foraminifera. *Micropaleontology*; 1972; v. 18(n. 3): p. 285-293.

1768. Toksoz, M.N., F. Press, K. Anderson, A. Dainty, G. Latham, M. Ewing, J. Dorman, D. Lammlein, Y. Nakamura, G. Sutton, and F. Duennebier. Velocity structure and properties of the lunar crust. in: "The Moon". Holland: D. Reidel Pub. Co.; 1972; V. 4(N. 3/4 June-July): p. 490-504.

1769. Assaf, G. and P. E. Biscaye. Lead-212 in the urban boundary layer of New York City. *Science*; 1972; v. 175: p. 890-894.

1770. Sharma, G. M. and B. Vig. Studies on the antimicrobial substances of sponges. VI. Structures of two antibacterial substances isolated from the marine sponge *Dysidea Herbacea*. *Tetrahedron Lett.*; 1972; (n. 17): p. 1715-1718.

1771. Gordon, A. L. . Introduction: physical oceanography of the southeast Indian Ocean. *Antarctic Res. Ser.* ; 1972; v. 19: p. 3-9.



1772. Eittreim, S., P. M. Bruchausen, and M. Ewing. Vertical distribution of turbidity in the South Indian and South Australian Basins. *Antarctic Res. Ser.*; 1972; v. 19: p. 51-58.

1774. Gordon, A. L. . On the interaction of the Antarctic circumpolar current and the Macquarie Ridge. *Antarctic Res. Ser.* ; 1972; v. 19: p. 71-78.

1775. Hayes, D. E. . Introduction: marine geophysics of the Southeast Indian Ocean. *Antarctic Res. Ser.* ; 1972; v. 19: p. 119-124.

1776. Hayes, D. E. and J. R. Conolly. Morphology of the Southeast Indian Ocean. *Antarctic Res. Ser.* ; 1972; v. 19: p. 125-145.

1777. Hourtz, R. E. and R. G. Markl. Seismic profiler data between Antarctica and Australia. *Antarctic Res. Ser.* ; 1972; v. 19: p. 147-164.

1778. Weissel, J. K. and D. E. Hayes. Magnetic anomalies in the southeast Indian Ocean. *Antarctic Res. Ser.* ; 1972; v. 19: p. 165-196.

1779. Christoffel, D. A. and R. K. H. Falconer. Marine magnetic measurements in the southwest Pacific Ocean and the identification of new tectonic features. *Antarctic Res. Ser.* ; 1972; v. 19: p. 197-209.

1780. Hayes, D. E. and M. Talwani. Geophysical investigaion of the Macquarie Ridge complex. *Antarctic Res. Ser.*; 1972; v. 19: p. 211-234.

1781. Dorman, J., J. L. Worzel, R. Leyden, T. N. Crook, and M. Hatzimmanuel. Crustal section from seismic refraction measurements near Victoria, Texas. *Geophysics*; 1972; v. 37(n. 2): p. 325-336.

1782. Horn, D. R., J. I. Ewing, and M. Ewing. Graded-bed sequences emplaced by turbidity currents north of 20oN in the Pacific, Atlantic and Mediterranean. *Sedimentology*; 1972; v. 18: p. 247-275.

1783. Lovlie, R., W. Lowrie, and M. Jacobs. Magnetic properties and mineralogy of four deep-sea cores. *Earth Planet. Sci. Lett.* ; 1972; v. 15: p. 157-168.

1784. Richards, P. G. . Seismic waves reflected from velocity graident anomalies within the earth's upper mantle. *Zeitschrift fur Geophysik*; 1972; v. 38: p. 517-527.

1785. Leyden, R., G. Bryan, and M. Ewing. Geophysical reconnaissance on African shelf. 2. Margin sediments from Gulf of Guinea to Walvis Ridge. *Am. Assoc. Pet. Geol. Bull.* ; 1972; v. 56(n. 4): p. 682-693.

1786. Alvarez, W. . The Treia Valley north of Rome: volcanic stratigraphy, topographic evolution and geological influences on the human settlement. *Geol. Romana*; 1972; v. xi: p. 153-175.

1787. Scholz, C. H. . Static fatigue of quartz. *J. Geophys. Res.* ; 1972; v. 77(n. 11): p. 2104-2114.

1788. Herron, E. M. . Sea-floor spreading and the Cenozoic history of the East-Central Pacific. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 1671-1692.

1789. Kelleher, J. A. . Rupture zones of large South American earthquakes and some predictions. *J. Geophys. Res.* ; 1972; v. 77(n. 11): p. 2087-2103.

1790. Ward, P. L. . Microearthquakes: prospecting tool and possible hazard in the development of geothermal resources. *Geothermics*; 1972; v. 1(n. 1): p. 3-12.

1791. Fox, P.J., E. Schreiber, and J. Peterson. Compressional wave velocities in basalt and altered basalt recovered during Leg XIV. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. XIV: p. 773-775.

1792. Hays, J.D., H. Cook, G. Jenkins, W. Orr, R. Goll, F. Cook, D. Milow, and J. Fuller. Introduction, and Sites 76 through 84. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. IX: p. 3-615.

1793. Alvarez, W. The application of plate tectonics to the Mediterranean region. in: "Implications of Continental Drift to the Earth Sciences". London: Academic Press; 1973; V. 2: p. 893-908.

1794. Larson, R. L., S. M. Smith, and C. G. Chase. Magnetic lineations of Early Cretaceous age in the western equatorial Pacific Ocean. *Earth Planet. Sci. Lett.*; 1972; v. 15: p. 315-319.

1795. Streeter, S. S. . Living benthonic foraminifera of the Gulf of California, a factor analysis of Phleger's (1974) data. *Micropaleontology*; 1972; v. 18(n. 1): p. 64-73.

1796. King, K. Jr. and P. E. Hare. Amino acid composition of planktonic foraminifera: a paleobiochemical approach to evolution. *Science*; 1972; v. 175: p. 1461-1463.

1797. Jacob, K. H. . Global tectonic implications of anomalous seismic P traveltimes from the nuclear explosion Longshot. *J. Geophys. Res.* ; 1972; v. 77(n. 14): p. 2556-2573.

1798. Dalziel, I. W. D. . K-Ar dating of rocks from Elephant Island, South Scotia Ridge. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 1887-1894.

1799. Balachandran, N.K. Acoustic-gravity waves in the neutral atmosphere and the ionosphere. in: *AGARD Conf. Proc.*; 1972; (N. 115): p. 9-1 to 9-9.

1800. Langseth, Jr., M.G., S.P. Clark, Jr., J.L. Chute, Jr., S.J. Keihm, and A.E. Wechsler. The Apollo 15 lunar heat-flow measurement. in: "The Moon". Holland: D. Reidel Pub. Co.; 1972; V. 4(N. 3/4, June-July): p. 390-410.

1801. Frerichs, W.E., M.E. Heiman, L. E. Borgman, and A.W.H. Bé . Latitudinal variations in planktonic foraminiferal test porosity. Part 1. Optical studies. *J. Foraminiferal Res.*; 1972; v. 2(n. 1): p. 6-13.

1802. Trier, R. M., W. S. Broecker, and H. W. Feely. Radium-228 profile at the Second GEOSECS Intercalibration Station, 1970, in the North Atlantic. *Earth Planet. Sci. Lett.*; 1972; v. 16: p. 141-145.

1803. Abdel-Monem, A., N. D. Watkins, and P. W. Gast. Potassium-argon ages, volcanic stratigraphy, and geomagnetic polarity history of the Canary Islands: Tenerife, La Palma, and Hierro. *Am. J. Sci.*; 1972; v. 272: p. 805-825.

1804. Talwani, M., H.R. Poppe, and P.D. Rabinowitz. Gravimetrically determined geoid in the western North Atlantic. in: "Sea Surface Topography from Space," NOAA Tech. Report ERL-228-AOML 7-2; 1972; V. 2: p. 1-34.

1805. Gedzelman, S. D. On the stability of magnetic baroclinic flow of an unbounded fluid with a linear velocity profile. *J. Atmos. Sci.* ; 1972; v. 29(n. 5): p. 971-976.

1806. Scholz, C. H. . Crustal movements in tectonic areas . *Tectonophysics*; 1972; v. 14(n. 3/4): p. 201-217.

1807. Harrison, S.M. and A.W.H. Bé . A rotary system for calibrating flowmeters used for plankton sampling. *Limnol. Oceanogr.* ; 1972; v. 17(n. 1): p. 152-156.

1808. Ninkovich, D. and J. D. Hays. Mediterranean island arcs and origin of high potash volcanoes. *Earth Planet. Sci. Lett.* ; 1972; v. 16: p. 331-345.
1809. Van Donk, J., T. Saito, and N.J. Shackleton. Oxygen isotopic composition of benthonic and planktonic foraminifera of earliest Pliocene age at site 132-Tyrrhenian basin. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 798-800.
1810. Olson, W.S. and R.J. Leyden. North Atlantic rifting in relation to Permian-Triassic salt deposition. *Intern. Permian-Triassic Conf.*, 1971, Univ. Calgary; 1973: p. 720-732.
1811. Bender, M. T., F. T. Taylor, and R. K. Matthews. Helium-uranium dating of corals from Middle Pleistocene Barbados reef tracts. *Quat. Res.* ; 1973; v. 3(n. 1): p. 142-146.
1812. Latham, G., M. Ewing, J. Dorman, D. Lammlein, F. Press, N. Toksoz, G. Sutton, F. Duennebier, and Y. Kanamura. Moonquakes and lunar tectonism results from the Apollo passive seismic experiment. *Proc. Third. Lunar Sci. Conf.*; 1972; v. 3: p. 2519-2526.
1813. Trifunac, M. D. . Stress estimates for the San Fernando, California, earthquake of February 9, 1971: main event and thirteen aftershocks. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 3): p. 721-750.
1814. Keller, J. and D. Ninkovich. Tephralagen in der Agais. *Z. Deutsch. Geol. Ges.* ; 1972; v. 123: p. 579-588.
1815. Oppenheim, A. . Radiative decay behind strong shocks. *The Physics of Fluids*; 1972; v. 15(n. 12): p. 2153-2154.
1816. Nowroozi, A. A. . Focal mechanism of earthquakes in Persia, Turkey, West Pakistan and Afghanistan and plate tectonics of the Middle East. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 3): p. 825-850.
1817. Embley, R. and D.E. Hayes. Site survey report for Site 142. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. XIV: p. 377-388.
1818. Maurrasse, F. Structures - Deep Sea Drilling Project leg 15 (Carribean). in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XV: p. 833-845.

1819. Keihm, S. J., K. Peters, M. G. Langseth, and J. L. Chute, Jr. . Apollo 15 measurement of lunar surface brightness temperatures: thermal conductivity of the upper 1 1/2 meters of regolith. *Earth Planet. Sci. Lett.* ; 1973; v. 19: p. 337-351.

1820. Toksoz, M. N., F. Press, K. Anderson, A. Dainty, G. Latham, M. Ewing, J. Dorman, D. Lammlein, G. Sutton, F. Duennebier, and Y. Nakamura. Lunar crust: structure and composition. *Science*; 1972; v. 176: p. 1012-1016.

1821. Johnson, T., F. T. Wu, and C. Scholz. Source parameters for stick-slip and for earthquakes. *Science*; 1973; v. 179: p. 278-280.

1822. Pimm, A.C. and D.E. Hayes. General synthesis. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1972; V. XIV: p. 955-975.

1823. Bjorklund, K. R. and D. E. Kellogg. Five new Eocene radiolarian species from the Norwegian Sea. *Micropaleontology*; 1972; v. 18(n. 3): p. 386-396.

1824. Roels, O.A. and N.S.T. Lui. The Vitamins. in: R.S. Goodhart and M.E. Schills, Eds. "Modern Nutrition in Health and Disease". Fifth Edition ed. Philadelphia, PA: Lea and Febiger; 1973: p. 142-157.

1825. Amos, A. F., C. Garside, K. C. Haines, and O. A. Roels. Effects of surface-discharged deep sea mining effluent. *Marine Technol. Soc. J.* ; 1972; v. 6(n. 4): p. 40-46.

1826. Heezen, B. C. and I. D. MacGregor. The evolution of the Pacific. *Sci. Am.*; 1973; v. 229(n. 5): p. 102-112.

1827. Neuman, L. D. and M. Talwani. Accelerations and errors in gravity measurements on surface ships. *J. Geophys. Res.* ; 1972; v. 77(n. 23): p. 4330- 4338.

1828. Roels, O. A. and J. P. Mack. Vitamin A and protein metabolism. *Agricultural and Food Chem.* ; 1972; v. 20(n. 6): p. 1133-1135.

1829. Roels, O. A., A. F. Amos, C. Garside, and T. C. Malone. The environmental impact of deep-sea mining. *Marine Technol. Soc.* ; 1972: p. 369-373.

1830. Fitch, T. J. . Plate convergence, transcurrent faults, and internal deformation adjacent to southeast Asia and the western Pacific. *J. Geophys. Res.* ; 1972; v. 77(n. 23): p. 4432-4460.

1831. Helmstaedt, H., O. L. Anderson, and A. T. Gavasci. Petrofabric studies of eclogite, spinel-websterite, and spinel-lherzolite xenoliths from kimberlite-bearing breccia pipes in southeastern Utah and northeastern Arizona. *J. Geophys. Res.*; 1972; v. 77(n. 23): p. 4350-4365.

1832. Wollin, G., G. J. Kukla, D. B. Ericson, W. B. F. Ryan, and J. Wollin. Magnetic intensity and climatic changes 1925-1970. *Nature*; 1973; v. 242(n. 5392): p. 34-37.

1833. Hammond, D.E., R. Horowitz, W.S. Broecker, and R. Bopp. Interstitial water studies, Leg 15—dissolved gases at Site 147. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XX: p. 765-771.

1834. Hammond, D.E. Interstitial water studies, leg 15—a comparison of the major element and carbonate chemistry data from Sites 147, 148 and 149. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XX: p. 831-850.

1835. Savino, J. M. and J. M. W. Rynn. Quasi-static loading of the earth by propagating air waves. *J. Geophys. Res.* ; 1972; v. 77(n. 26): p. 5033-5041.

1836. Murphy, A. J., J. Savino, J. M. W. Rynn, G. L. Choy, and K. McCamy. Observations of long-period (10-100 sec) seismic noise at several worldwide locations. *J. Geophys. Res.* ; 1972; v. 77(n. 26): p. 5042-5049.

1837. Johnson, T. and P. Molnar. Focal mechanisms and plate tectonics of the southwest Pacific. *J. Geophys. Res.* ; 1972; v. 77(n. 26): p. 5000-5032.

1838. Alvarez, W. . Ancient course of the Tiber River near Rome: an introduction to the Middle Pleistocene volcanic stratigraphy of central Italy. *Geol. Soc. Am. Bull.* ; 1973; v. 84: p. 749-757.

1839. Herron, E. M. and M. Talwani. Magnetic anomalies on the Reykjanes Ridge. *Nature*; 1972; v. 238(n. 5364): p. 390-392.

1840. Aggarwal, Y. P., L. R. Sykes, J. Armbruster, and M. L. Sbar. Premonitory changes in seismic velocities and prediction of earthquakes. *Nature*; 1973; v. 241(n. 5385): p. 101-104.

1841. Simpson, H. J. . Aerosol cations at Mauna Loa Observatory. *J. Geophys. Res.* ; 1972; v. 77(n. 27): p. 5266-5277.

1842. Herron, E. M. . Two small crustal plates in the South Pacific near Easter Island. *Nature Phys. Sci.* ; 1972; v. 240(n. 98): p. 35-37.

1843. Mack, J. P., N. S. T. Lui, O. A. Roels, and O. R. Anderson. The occurrence of vitamin A in biological membranes. *Biochim. Biophys. Acta*; 1972; v. 288: p. 203-219.

1844. Larson, R. L. . Bathymetry, magnetic anomalies, and plate tectonic history of the mouth of the Gulf of California. *Geol. Soc. Am. Bull.*; 1972; v. 83: p. 3345-3359.

1845. Larson, P. A., J. D. Mudie, and R. L. Larson. Magnetic anomalies and fracture-zone trends in the Gulf of California. *Geol. Soc. Am. Bull.*; 1972; v. 83: p. 3361-3368.

1846. Sbar, M. L., J. Armbruster, and Y. P. Aggarwal. The Adirondack, New York, earthquake swarm of 1971 and tectonic implications. *Bull. Seismol. Soc. Am.* ; 1972; v. 62(n. 5): p. 1303-1317.

1847. Schindler, D. W., G. J. Brunskill, S. Emerson, W. S. Broecker, and T. H. Peng. Atmospheric carbon dioxide: its role in maintaining phytoplankton standing crops. *Science*; 1972; v. 177: p. 1192-1194.

1848. Maasha, N. and P. Molnar. Earthquake fault parameters and tectonics in Africa. *J. Geophys. Res.* ; 1972; v. 77(n. 29): p. 5731-5743.

1849. MacDonald, W. D. and N. D. Opdyke. Tectonic rotations suggested by paleomagnetic results from northern Colombia, South America. *J. Geophys. Res.* ; 1972; v. 77(n. 29): p. 5720-5730.

1850. Ewing, M., G. Carpenter, C. Windisch, and J. Ewing. Sediment distribution in the oceans: the Atlantic. *Geol. Soc. Am. Bull.* ; 1973; v. 84: p. 71-87.

1851. Trifunac, M. D. . Scattering of plane SH waves by a semi-cylindrical canyon. *Earthq. Eng. Struct. Dyn.* ; 1973; v. 1: p. 267-281.

1852. Houtz, R., M. Ewing, D. Hayes, and B. Naini. Sediment isopachs in the Indian and Pacific Ocean sectors (105oE to 70oW). Antarctic Map Folio Series, Folio 17: *Am. Geogr. Soc.*; 1973: p. 9-12.

1853. Lu, N. S. T. and O. A. Roels. Nitrogen metabolism of aquatic organisms. II. The assimilation of nitrate, nitrite, and ammonia by *Biddulphia aurita*. *J. Phycology*; 1972; v. 8(n. 3): p. 259-264.

1854. Lowrie, W., R. Lovlie, and N. D. Opdyke. The magnetic properties of deep sea drilling project basalts from the Atlantic Ocean. *Earth Planet. Sci. Lett.* ; 1973; v. 17: p. 338-349.

1855. Ryan, W.B.F. and T.B. Gustafson. Underway geophysical measurements obtained on the GLOMAR CHALLENGER in the eastern North Atlantic and Mediterranean Sea. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 517-580.

1856. Schreiber, E., P.J. Fox, and J.J. Peterson. Compressional wave velocities in selected samples of gabbro, schist, limestone, anhydrite, gypsum and halite. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 595-597.

1857. Ryan, W.B.F. and J.D. Flood. Preliminary paleomagnetic measurements on sediments from the Ionian (site 125) and Tyrrhenian (site 132) basins of the Mediterranean Sea. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 599-603.

1858. Hsu, N.T., W.B.F. Ryan, and B.C. Schreiber. Petrography of a halite sample from hole 134 Balearic abyssal plain. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 708-711.

1859. Ryan, W.B.F., K. Venkatarathanam, and F.C. Wezel. Mineralogical composition of the Nile cone, Mediterranean ridge, and strabo trench sandstones and clays. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 731-746.

1860. Lawrence, J.R. Stable oxygen and carbon isotope variations in bulk carbonates from Late Miocene to Present in Tyrrhenian basin, Site 132. "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. XIII: p. 796-798.

1861. Hsu, K.J., M.B. Cita, and W.B.F. Ryan. The origin of the Mediterranean evaporite. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 1203-1231.

1862. Cita, M.B., M.A. Chierici, G. Ciampo, M. Moncharmont Zei, S. d'Onofrio, and W.B.F. Ryan. The quaternary record of the Tyrrhenian and Ionian basins of the Mediterranean Sea. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 1263-1339.

1863. Truchan, M. and R. L. Larson. Tectonic lineaments on the Cocos plate. *Earth Planet. Sci. Lett.* ; 1973; v. 17: p. 426-432.



1864. Gordon, A. L. and J. A. T. Bye. Surface dynamic topography of Antarctic waters. *J. Geophys. Res.* ; 1972; v. 77(n. 30): p. 5993-5999.

1865. Donn, W.L. and W.D. MacDonald. Ice on the ocean and climate. in: "Beneficial Modifications of the Marine Environment": National Academy of Science; 1972: p. 49-65.

1866. Opdyke, N. D. and W. D. MacDonald. Paleomagnetism of Late Cretaceous Pocos de Caldas alkaline complex, southern Brazil. *Earth Planet. Sci. Lett.* ; 1973; v. 18: p. 37-44.

1867. Horn, D.R., B.M. Horn, and M.N. Delach. Distribution of ferromanganese deposits in the world ocean. in: Conference on Ferromanganese Deposits on the Ocean Floor, Internat. Decade Ocean Explor., National Science Foundation; 1972: p. 9-17.

1868. Bender, M.L. Mechanisms of trace metal removal from the oceans. in: Conference on Ferromanganese Deposits on the Ocean Floor, Internat. Decade Ocean Explor., National Science Foundation; 1972: p. 73-80.

1869. Amos, A.F., C. Garside, K.C. Haines, and O.A. Roels. Effects of surface-discharged deep-sea mining effluent. in: Conference on Ferromanganese Deposits on the Ocean Floor, Internat. Decade Ocean Explor., National Science Foundation; 1972: p. 271-281.

1870. Talwani, M. and O. Eldholm. Continental margin off Norway: a geophysical study. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 3575-3606.

1871. Larson, R. L. and C. G. Chase. Late Mesozoic evolution of the western Pacific ocean. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 3627-3643.

1872. Larson, R. L. and W. C. Pitman, III. World-wide correlation of Mesozoic magnetic anomalies, and its implications. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 3645-3661.

1873. Cita, M.B. , M.A. Chierici, G. Ciampo, M. Moncharmont Zie, S. d'Onofrio, and W.B.F. Ryan. Paleomagnetic stratigraphy. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; V. XIII: p. 1380-1387.

1874. Herron, T. J. . Phase velocity dispersion of F-region waves. *J. Atmos. Terr. Phys.*; 1973; v. 35: p. 101-124.

1875. Krinsley, D., P. E. Biscaye, and K. K. Turekian. Argentine Basin sediment sources as indicated by quartz surface textures. *J. Sediment. Petrol.*; 1973; v. 43(n. 1): p. 251-257.

1876. Donn, W. L. and D. M. Wolf. Seiche and water level fluctuations in Grindavik Harbor, Iceland. *Limnol. Oceanogr.* ; 1972; v. 17(n. 4): p. 639-643.

1877. Aggarwal, Y. P., M. Barazangi, and B. Isacks. P and S traveltimes in the Tonga-Fiji region: a zone of low velocity in the uppermost mantle behind the Tonga Island Arc. *J. Geophys. Res.* ; 1972; v. 77(n. 32): p. 6427-6434.

1878. Jacobs, M. B. and J. D. Hays. Paleoclimatic events indicated by mineralogical changes in deep-sea sediments. *J. Sediment. Petrol.* ; 1972; v. 42(n. 4): p. 889-898.

1879. Eittreim, S. L. and J. Ewing. Mid-plate tectonics in the Indian Ocean. *J. Geophys. Res.* ; 1972; v. 77(n. 32): p. 6413-6421.

1880. Wyss, M. and P. Molnar. Source parameters of intermediate and deep focus earthquakes in the Tonga arc. *Phys. Earth Planet. Inter.* ; 1972; v. 6: p. 279-292.

1881. Rabinowitz, P. D. . Gravity anomalies on the continental margin of Angola, Africa. *J. Geophys. Res.* ; 1972; v. 77(n. 32): P. 6327-6347.

1882. Kukla, G. J., R. K. Matthews, and J. M. Mitchell, Jr. . The end of the present interglacial. *Quat. Res.* ; 1972; v. 2(n. 3): P. 261-269.

1883. Burckle, L. H. . Diatom evidence bearing on the Holocene in the South Atlantic. *Quat. Res.* ; 1972; v. 2(n. 3): p. 323-326.

1884. McIntyre, A. and W. F. Ruddiman. Northeast Atlantic post-Eemian paleoceanography: a predictive analog of the future. *Quat. Res.* ; 1972; v. 2(n. 3): p. 350-354.

1885. Hays, J. D. and A. Perruzza. The significance of calcium carbonate oscillations in eastern equatorial Atlantic deep-sea sediments for the end of the Holocene warm interval. *Quat. Res.* ; 1972; v. 2(n. 3): p. 355-362.

1886. Sancetta, C., J. Imbrie, N. G. Kipp, A. McIntyre, and W. F. Ruddiman. Climatic record in North Atlantic deep-sea core V23-82: comparison of the last and present interglacials based on quantitative time series. *Quat. Res.* ; 1972; v. 2(n. 3): p. 363-367.

1887. Kukla, G. J. and A. Koci. End of the last interglacial in the loess record. *Quat. Res.* ; 1972; v. 2(n. 3): p. 374-383.

1888. Kukla, G. J. and H. J. Kukla. Insolation regime of interglacials. *Quat. Res.* ; 1972; v. 2(n. 3): p. 412-424.
1889. Scholz, C., P. Molnar, and T. Johnson. Detailed studies of frictional sliding of granite and implications for the earthquake mechanism. *J. Geophys. Res.* ; 1972; v. 77(n. 32): p. 6392-6406.
1890. Creer, K.M. A discussion of the arrangement of palaeomagnetic poles on the map of Pangaea for epochs in the Phanerozoic. in: "Implications of Continental Drift to the Earth Sciences". London: Academic Press; 1973: p. 47-76.
1891. Biscaye, P.E., W.B.F. Ryan, and F.C. Wezel. Age and nature of the Pan-Mediterranean subbottom reflector M. in: D.J. Stanley, Ed. "The Mediterranean Sea". Stroudsburg, PA: Dowden, Hutchinson & Ross, Inc.; 1972: p. 83-90.
1892. Molnar, P. and M. Wyss. Moments, source dimensions and stress drops of shallow-focus earthquakes in the Tonga-Kermadec arc. *Phys. Earth Planet. Inter.* ; 1972; v. 6: p. 263-278.
1893. Goll, R. M. . Systematics of eight *Tholospyrix* taxa (Trissocyclidae, Radiolaria). *Micropaleontology*; 1972; v. 18(n. 4): p. 443-475.
1894. Muller, G. and L.E. Alsop. Partial derivative of travel times. *Geophys. J.*; 1974; v. 36: p. 239-243.
1895. Venkatarathnam, K., P.E. Biscaye, and W.B.F. Ryan. Origin and dispersal of Holocene sediments in the eastern Mediterranean Sea. in: D.J. Stanley, Ed. "The Mediterranean Sea". Stroudsburg, PA: Dowden, Hutchinson & Ross, Inc.; 1972: p. 455-469.
1896. Savino, J. M., A. J. Murphy, J. M. W. Rynn, R. Tatham, L. R. Sykes, G. L. Choy, and K. McCamy. Results from the high-gain long-period seismograph experiment. *Geophys. J. R. astr. Soc.* ; 1972; v. 31: p. 179-203.
1897. Donn, W. L. and M. Ewing. Resonant coupling of ocean Rayleigh waves to atmospheric shock waves from Apollo rockets. *J. Geophys. Res.* ; 1972; v. 77(n. 35): p. 7010-7021.
1898. Schouten, H. and K. McCamy. Filtering marine magnetic anomalies. *J. Geophys. Res.* ; 1972; v. 77(n. 35): p. 7089-7099.

1899. Gavasci, A. T. and T. E. Eastler. New apparatus and methodology for thin-section photography. *Geol. Soc. Am. Bull.* ; 1972; v. 83: p. 2843-2851.

1900. Jacob, K. H. and K. Hamada. The upper mantle beneath the Aleutian Island arc from pure-path Rayleigh-wave dispersion data. *Bull. Seismol. Soc. Am.*; 1972; v. 62(n. 6): p. 1439-1453.

1901. Sanfilippo, A., L. H. Burckle, E. Martini, and W. R. Riedel. Radiolarians, diatoms, silicoflagellates and calcareous nannofossils in the Mediterranean Neogene. *Micropaleontology*; 1973; v. 19(n. 2): p. 209-234.

1902. Amos, A.F. The deep STD station: Techniques for making surface-to-bottom STD profiles and some examples of abyssal microstructure. *Proc. Second Plessey Environ, Sys. S/T/D Conf. and Workshop*; 1973: p. 87-101.

1903. van Donk, J. and G. Mathieu. Interstitial water studies, Leg 15--Isotopic measurements on CO<sub>2</sub> gas from gas pockets in deep sea cores, site 147 . in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 775-781.

1904. Lawrence, J.R. Interstitial water studies, Leg 15--Stable oxygen and carbon isotope variations in water, carbonates, and silicates from the Venezuela basin (site 149) and the Aves Rise (site 148). in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 891-899.

1905. Horn, D.R., B. Horn, and M.N. Delach. Worldwide distribution and metal content of deep-sea manganese deposits. in: "Manganese Nodule Deposits in the Pacific," Symposium/Workshop Proc., Honolulu; 1972: p. 46-60.

1906. Hunkins, K. and M. Fliegel. Internal undular surges in Seneca Lake: a natural occurrence of solitons. *J. Geophys. Res.* ; 1973; v. 78(n. 3): p. 535-548.

1907. Simpson, H.J. and T. Takahashi. Interstitial water studies --Leg 15--Chemical model of sea water and saline waters. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 877-886.

1908. Trifunac, M. D., F. E. Udawadia, and A. G. Brady. Analysis of errors in digitized strong-motion accelerograms. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 1): p. 157-187.

1909. Jacobs, M. B., E. M. Thorndike, and M. Ewing. A comparison of suspended particulate matter from nepheloid and clear water. *Mar. Geol.* ; 1973; v. 14: p. 117-128.

1910. Bender, M. L. . Helium-uranium dating of corals. *Geochim. Cosmochim. Acta*; 1973; v. 37: p. 1229-1247.

1911. Tsou, J.L., D. Hammond, and R. Horowitz. Interstitial water studies--Leg 15--Study of CO<sub>2</sub> released from stored deep sea sediments. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 851-863.

1912. Haines, K. C. . A rapid technique for recording sizes of juvenile pelecypod molluscs. *Aquaculture*; 1973; v. 1: p. 433.

1913. Carpenter, G. and J. Ewing. Crustal deformation in the Wharton basin. *J. Geophys. Res.* ; 1973; v. 78(n. 5): p. 846-850.

1914. Scholz, C. H., J. M. W. Rynn, R. W. Weed, and C. Frohlich. Detailed seismicity of the Alpine fault zone and Fiordland region, New Zealand. *Geol. Soc. Am. Bull.* ; 1973; v. 84: p. 3297-3316.

1915. Won, I. J. and J. T. Kuo. Oscillation of the earth's inner core and its relation to the generation of geomagnetic field. *J. Geophys. Res.* ; 1973; v. 78 (n. 5): p. 905-911.

1916. Lowrie, W. . Viscous remanent magnetization in oceanic basalts. *Nature*; 1973; v. 243 (n. 5401): p. 27-30.

1917. Molnar, P., K. H. Jacob, and K. McCamy. Implications of Archambeau's earthquake source theory for slip on faults. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 1): p. 101-104.

1918. Malone, T.C., C. Garside, and O.A. Roels. Potential environmental impact of manganese-nodule mining in the deep sea. *Offshore Tech. Conf., Paper No. OTC-1735*; 1973: p. I-129--I-135.

1919. Baab, J.S., G.L. Hamm, K.C. Haines, A. Chu, and O.A. Roels. Shellfish mariculture in an artificial upwelling system. *Proc. Natl. Shellfish Assoc.*; 1973; v. 63: p. 63-67.

1920. Roels, O.A., J.S. Babb, G.L. Hamm, and K.C. Haines. Mariculture in an artificial upwelling system. *Offshore Tech. Conf., Paper No. OTC-1764*; 1973: p. I-391--I-395.

1921. Takahashi, T., L.A. Prince, and L.J. Felice. Interstitial water studies--Leg 15--dissolved carbon dioxide concentrations. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 865-876.

1922. Hamza, M. S. and W. S. Broecker. Surface effect on the isotopic fractionation between CO<sub>2</sub> and some carbonate minerals. *Geochim. Cosmochim. Acta*; 1974; v. 38: p. 669-681.

1923. Hayes, D. E. and J. Ringis. Seafloor spreading in the Tasman Sea. *Nature*; 1973; v. 243(n. 5407): p. 454-458.

1924. Muller, G. Seismic moment and long-period radiation of underground nuclear explosions. *Bull. Seismol. Soc. Am.*; 1973; v. 63(n. 3): p. 847-857.

1925. Muller, G. . Theoretical body wave seismograms for media with spherical symmetry -- discussion and comparison of approximate methods. *Zeits fur Geophysik*; 1973; v. 39: p. 229-246.

1926. Hamada, K. . Regionalized shear-velocity models for the upper mantle inferred from surface-wave dispersion data. *J. Phys. Earth*; 1972; v. 20: p. 301-326.

1927. Muller, G. . Amplitude studies of core phases. *J. Geophys. Res.* ; 1973; v. 78(n. 17): p. 3469-3490.

1928. McGeary, D. F. R. and J. E. Damuth. Postglacial iron-rich crusts in hemipelagic deep-sea sediment. *Geol. Soc. Am. Bull.*; 1973; v. 84: p. 1201-1212.

1929. Talwani, M. and O. Eldholm. Boundary between continental and oceanic crust at the margin of rifted continents. *Nature*; 1973; v. 241(n. 5388): p. 325-330.

1930. Simpson, H. J. and W. S. Broecker. A new method for determining the total carbonate ion concentration in saline waters. *Limnol. Oceanogr.*; 1973; v. 18(n. 3): p. 426-440.

1931. Sharma, G. M. and O. A. Roels. Detection of protonated aldimine group by proton magnetic resonance spectroscopy. *J. Organic Chem.*; 1973; v. 38: p. 3648-3651.

1932. Duplaix, S., W. D. Nesteroff, and B. C. Heezen. Les provinces petrographiques des turbidites de la mer des Antilles. Etude du triage des mineraux des sables transportes par les courants de turbidite. *Rev. Geograph. Phys. Geol. Dynam.*; 1972; v. xiv(n. 5): p. 485-498.

1933. Oppenheim, A. . Semiclassical Bremsstrahlung calculations. *Phys. Rev.*; 1973; v. 8(n. 2): p. 717-723.

1934. Broecker, W. S., A. Kaufman, and R. M. Trier. The residence time of thorium in surface sea water and its implications regarding the rate of reactive pollutants. *Earth Planet. Sci. Lett.* ; 1973; v. 20: p. 35-44.

1935. Kaufman, A., R. M. Trier, W. S. Broecker, and H. W. Feely. Distribution of <sup>228</sup>Ra in the world oceans. *J. Geophys. Res.*; 1973; v. 78(n. 36): p. 8827-8848.

1936. Roels, O.A., A.F. Amos, C. Garside, K.C. Haines, T.C. Malone, A.Z. Paul, and G.E. Rice. Environmental impact of two manganese nodule mining tests. in: "Manganese Nodule Deposits in the Pacific;" Symposium/Workshop Proc., Honolulu; 1972: p. 129-146.

1937. Alvarez, W., S. G. Franks, and A. E. M. Nairn. Palaeomagnetism of Plio-Pleistocene basalts from northwest Sardinia. *Nature Phys. Sci.*; 1973; v. 243(n. 123): p. 10-11.

1938. Ewing, M., R. W. Embley, and T. H. Shipley. Observations of shallow layering utilizing the Pinger-probe echo-sounding system. *Mar. Geol.* ; 1973; v. 14: p. M55-M63.

1939. Scholz, C. H., L. R. Sykes, and Y. P. Aggarwal. Earthquake prediction: a physical basis. *Science*; 1973; v. 181: p. 803-810.

1940. Ludwig, W. J., N. Den, and S. Murauchi. Seismic reflection measurements of southwest Japan margin. *J. Geophys. Res.* ; 1973; v. 78(n. 14): p. 2508-2516.

1941. Nowroozi, A. A. . Seismicity of the Mendocino escarpment and the aftershock sequence of June 26, 1968: ocean bottom seismic measurements. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 2): p. 441-456.

1942. Addy, S. K. and G. D. Garlick. Oxygen isotope fractionation between rutile and water. *Contrib. Mineral. Petrol.* ; 1974; v. 45: p. 119-121.

1943. Gardiner, L. F. . The systematics, postmarsupial, development, and ecology of the deep-sea family Neotanaididae (Crustacea: Tanaidacea). *Smithsonian Contrib. Zoology*; 1975; (N. 170): p. 1-265.

1944. Ward, P. L. and S. Gregersen. Comparison of earthquake locations determined with data from a network of stations and small tripartite arrays on Kilauea Volcano, Hawaii. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 3): p. 679-711.

1945. Ryan, W.B.F. Stratigraphy of Late Quaternary sediments in the eastern Mediterranean. in: D.J. Stanley, Ed. "The Mediterranean Sea". Stroudsburg, PA: Dowden, Hutchinson & Ross, Inc.; 1972: p. 149-169.
1946. Dalziel, I.W.D. and D.H. Elliot. The Scotia Arc and Antarctic margin. in: "The Ocean Basins and Margins". NY: Plenum Pub. Corp.; 1973; v. 1: p. 171-246.
1947. Heezen, B. C., I. D. MacGregor, H. P. Foreman, G. Forristal, H. Hekel, R. Hesse, R. H. Hoskins, E. J. W. Jones, A. Kaneps, V. A. Krasheninnikov, H. Okada, and M. H. Ruef. Diachronous deposits: a kinematic interpretation of the Post Jurassic sedimentary sequence on the Pacific plate. *Nature*; 1973; v. 241(n. 5384): p. 25-32.
1948. Anderson, T. F., M. L. Bender, and W. S. Broecker. Surface areas of biogenic carbonates and their relation to fossil ultrastructure and diagenesis. *J. Sediment. Petrol.* ; 1973; v. 43(n. 2): p. 471-477.
1949. Stadum, C. J. and L. H. Burckle. A silicoflagellate ooze from the east Falkland plateau. *Micropaleontology*; 1973; v. 19(n. 1): p. 104-109.
1950. Ludwig, W. J., S. Murauchi, N. Den, P. Buhl, H. Hotta, M. Ewing, T. Asanuma, T. Yoshii, and N. Sakajiri. Structure of East China Sea-West Philippine Sea margin off southern Kyushu, Japan. *J. Geophys. Res.* ; 1973; v. 78(n. 14): p. 2526-2536.
1951. Yoshii, T., w. J. Ludwig, N. Den, S. Murauchi, M. Ewing, H. Hotta, P. Buhl, T. Asanuma, and N. Sakajiri. Structure of southwest Japan margin off Shikoku. *J. Geophys. Res.* ; 1973; v. 78(n. 14): p. 2517-2525.
1952. Huestis, S., P. Molnar, and J. Oliver. Regional Sn velocities and shear velocity in the upper mantle. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 2): p. 469-475.
1953. Langseth, Jr. M.G., S.J. Keihm, and J.L. Chute, Jr. Heat flow experiment. Apollo 17 Prelim. Sci. Rep., NASA Sp-330: US Govt. Print. Off.; 1974: p. 9-1 to 9-24.
1954. Sbar, M. L. and L. R. Sykes. Contemporary compressive stress and seismicity in eastern North America: an example of intra-plate tectonics. *Geol. Soc. Am. Bull.*; 1973; v. 84: p. 1861-1882.
1955. Donn, W. L., S. D. Gedzelman, and N. K. Balachandran. Atmospheric gravity waves and the energy of the jet stream. *Am. Meteorol. Soc. Bull.*; 1973; v. 54(n. 7): p. 633-636.



1956. Kelleher, J., L. Sykes, and J. Oliver. Possible criteria for predicting earthquake locations and their application to major plate boundaries of the Pacific and the Caribbean. *J. Geophys. Res.* ; 1973; v. 78(n. 14): p. 2547-2585.

1957. Richards, P. G. . The dynamic field of a growing plane elliptical shear crack. *Int. J. Solids Structures*; 1973; v. 9: p. 843-861.

1958. Ladd, J.W., G.O. Dickson, and W.C. Pitman, III. The age of the South Atlantic. in: "The Ocean Basins and Margins". NY: Plenum Pub. Corp.; 1973; v. 1: p. 555-573.

1959. Kahle, H. G. and M. Talwani. Gravimetric Indian Ocean geoid. *Zeitschrift fur Geophys.*; 1973; v. 39: p. 167-187.

1960. Streeter, S. S. . Bottom water and benthonic foraminifera in the North Atlantic -- glacial-interglacial contrasts. *Quat. Res.* ; 1973; v. 3(n. 1): p. 131-141.

1961. Venkatarathnam, K. Mineralogical data from sites 211, 212, 213, 214 and 215 of deep sea drilling project Leg 22 and origin of non-carbonate sediments in the equatorial Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxii: p. 489-501.

1962. Imbrie, J., J. van Donk, and N. G. Kipp. Paleoclimatic investigation of a Late Pleistocene Caribbean deep-sea core: comparison of isotopic and faunal methods. *Quat. Res.* ; 1973; v. 3(n. 1): p. 10-38.

1963. Houtz, R. and F. J. Davey. Seismic profiler and sonobuoy measurements in Ross Sea, Antarctica. *J. Geophys. Res.* ; 1973; v. 78(n. 17): p. 3448-3468.

1964. Bé , A W.H., S.M. Harrison, and L. Lott. *Orbulina universa* d'Orbigny in the Indian Ocean. *Micropaleontology*; 1973; v. 19(n. 2): p. 150-192.

1965. Kent, D. V. . Paleomagnetism of some Neogene sedimentary rocks on Oga Peninsula, Japan. *J. Geomagn. Geoelectr.*; 1973; v. 25: p. 87-103.

1966. Gedzelman, S. D. . Hydromagnetic stability of parallel flow of an ideal heterogeneous fluid. *J. Fluid Mech.*; 1973; v. 58(part 4): p. 777-794.

1967. Naini, B. R. and R. Leyden. Ganges cone: a wide angle seismic reflection and refraction study. *J. Geophys. Res.* ; 1973; v. 78(n. 35): p. 8711-8720.

1968. Ruddiman, W. F. and A. McIntyre. Time-transgressive deglacial retreat of polar waters from the North Atlantic. *Quat. Res.* ; 1973; v. 3(n. 1): p. 117-130.

1969. Murauchi, S., W. J. Ludwig, N. Den, H. Hotta, T. Asanuma, T. Yoshii, A. Kubotera, and K. Hagiwara. Structure of the Sulu Sea and the Celebes Sea. *J. Geophys. Res.* ; 1973; v. 78(n. 17): p. 3437-3447.

1970. Shackleton, N. J. and N. D. Opdyke. Oxygen isotope and palaeomagnetic stratigraphy of equatorial Pacific core V22-238: oxygen isotope temperatures and ice volumes on a 105 year and 106 year scale. *Quat. Res.* ; 1973; v. 3(n. 1): p. 39-55.

1971. Choy, G. and K. McCamy. Enhancement of long-period signals by time-varying adaptive filters. *J. Geophys. Res.* ; 1973; v. 78(n. 17): p. 3505-3511.

1972. Venkatarathnam, K. and P. E. Biscaye. Deep-sea zeolites: variations in space and time in the sediments of the Indian Ocean. *Mar. Geol.* ; 1973; v. 15: p. M11-M17.

1973. Fox, P. J. and N. D. Opdyke. Geology of the oceanic crust: magnetic properties of oceanic rocks. *J. Geophys. Res.* ; 1973; v. 78(n. 23): p. 5139-5154.

1974. Fox, P. J., E. Schreiber, and J. J. Peterson. The geology of the oceanic crust: compressional wave velocities of oceanic rocks. *J. Geophys. Res.* ; 1973; v. 78(n. 23): p. 5155-5572.

1975. Lancelot, Y. Chert and silica diagenesis in sediments from the Central Pacific. in: "Initial Reports of the Deep Sea Drilling Projects," National Science Foundation; 1973; v. xvii: p. 377-405.

1976. Broecker, W.S. Factors controlling CO<sub>2</sub> content in the oceans and atmosphere. *Proc. 24th Brookhaven Symp. in Bio., Conf. 720510, AEC Series No. 30.* Springfield, VA: Available NTIS; 1973.

1977. Venkatharathnam, K. and P. E. Biscaye. Clay mineralogy and sedimentation in the eastern Indian Ocean. *Deep-Sea Res.* ; 1973; v. 20: p. 727-738.

1978. Hall, J. K. . Geophysical evidence for ancient seafloor spreading from Alpha Cordillera and Mendeleyev ridge. *Arctic Geol.* ; 1973; Memoir No. 19: p. 542-561.

1979. Anderson, J. and J. Dorman. Local geological effects on short-period Rayleigh waves around New York City. *Bull. Seismol. Soc. Am.* ; 1973; v. 63(n. 4): p. 1487-1497.

1980. Keihm, S.J. and M.G. Langseth, Jr. Surface brightness temperatures at the Apollo 17 heat flow site; Thermal conductivity of the Upper 15 cm of regolith. Proc. Fourth Lunar Science Conf. Supple. 4, *Geochim. et Cosmochim. Acta*; 1973; v. 3: p. 2503-2513.

1981. Donn, W. L. and B. Naini. Sea wave origin of microbaroms and microseisms. *J. Geophys. Res.* ; 1973; v. 78(n. 21): p. 4482-4488.

1982. Thompson, P. R. . Two new late Pleistocene planktonic foraminifera from a core in the southwest Indian Ocean. *Micropaleontology*; 1973; v. 19(n. 4): p. 469-474.

1983. Emerson, S. and R. Hesslein. Distribution and uptake of artificially introduced radium-226 in a small lake. *J. Fisheries Res. Bd. Canada*; 1973; v. 30(n. 10): p. 1485-1490.

1984. Amos, A.F., W.B. Leaf, and R.D. Gerard. A deep-ocean electronic nephelometer. in: "Ocean 1973," *Inst. Elect. & Electron. Eng. Conf. on Eng. in the Ocean Environment*, Publ. 73-CHO 774-0-0CC; 1973: p. 24-30.

1985. Hayes, D. E. . Marine geophysics. *Antarctic J. U. S.* ; 1973; v. viii(n. 3): p. 79-86.

1986. Scholz, C. A comparison of the San Andreas fault with the Alpine fault. Proc. Conf. Tectonic Problems San Andreas Fault System, Stanford Univ. Pub. *Geol. Sci.*; 1973; v. 13: p. 186-191.

1987. McElhinny, M. W. and N. D. Opdyke. Remagnetization hypothesis discounted: a paleomagnetic study of the Trenton limestone, New York State. *Geol. Soc. Am. Bull.* ; 1973; v. 84: p. 3697-3708.

1988. Klitgord, K. D., J. D. Mudie, P. A. Larson, and J. A. Grow. Fast sea-floor spreading on the Chile Ridge. *Earth Planet. Sci. Lett.* ; 1973; v. 20: p. 93-99.

1989. Herron, T. J. and W. L. Donn. Diurnal variations of F-region waves. *J. Terrestrial Phys.* ; 1973; v. 35: p. 2163-2176.

1990. Creer, K. M., D. T. Georgi, and W. Lowrie. On the representation of the Quaternary and Late Tertiary geomagnetic fields in terms of dipoles and quadrupoles. *Geophys. J. R. astr. Soc.* ; 1973; v. 33: p. 323-345.

1991. Klein, F. W., P. Einarsson, and M. Wyss. Microearthquakes on the Mid-Atlantic plate boundary on the Reykjanes Peninsula in Iceland. *J. Geophys. Res.* ; 1973; v. 78(n. 23): p. 5084-5099.

1992. Dewey, J. F., W. C. Pitman, III, W. B. F. Ryan, and J. Bonnin. Plate tectonics and the evolution of the Alpine system. *Geol. Soc. Am. Bull.* ; 1973; v. 84: p. 3137-3180.

1993. Hays, J. D. and W. C. Pitman, III. Lithospheric plate motion, sea level changes and climatic and ecological consequences. *Nature*; 1973; v. 246(n. 5427): p. 18-22.

1994. Sykes, L. R. and M. L. Sbar. Intraplate earthquakes, lithospheric stresses and the driving mechanism of plate tectonics. *Nature*; 1973; v. 245(n. 5424): p. 298-302.

1995. Talwani, M. Computer usage in the computation of gravity anomalies. in: "Methods in Computational Physics": Academic Press, Inc.; 1973; v. 13: p. 343-389.

1996. Gordon, A. L. . Physical oceanography. *Antarctic J. U. S.* ; 1973; v. viii(n. 3): p. 61-68.

1997. Rind, D. and V. Pagnotti. Relationship between midstratospheric temperatures and tropospheric synoptic features. *Mon. Weather Rev.*; 1973; v. 101(n. 6): p. 475-485.

1998. Cochran, J. R. . Gravity and magnetic investigations in the Guiana Basin, western equatorial Atlantic. *Geol. Soc. Am. Bull.*; 1973; v. 84: p. 3249-3267.

1999. Yegulalp, T. M. and J. T. Kuo. Statistical prediction of the occurrence of maximum magnitude earthquakes. *Bull. Seismol. Soc. Am.* ; 1974; v. 64(n. 2): p. 393-414.

2000. Dymond, J., P. E. Biscaye, and R. W. Rex. Eolian origin of mica in Hawaiian soils. *Geol. Soc. Am. Bull.* ; 1974; v. 85: p. 37-40.

2001. Emerson, S., W. Broecker, and D. W. Schindler. Gas-exchange rates in a small lake as determined by the radon method. *J. Fisheries Res. Bd. Canada*; 1973; v. 30(n. 10): p. 1475-1484.

2002. Bittman, R., W. C. Chen, and O. R. Anderson. Interaction of filipin III and amphotericin B with lecithin-sterol vesicles and cellur membranes. Spectral and electron microscope studies. *Biochemistry*; 1974; v. 13(n. 7): p. 1364-1373.

2003. Saito, T. and S. Maiya. Planktonic foraminifera of the Nishikurosawa formation, northeast Honshu, Japan. *Trans. Proc. Paleontol. Soc. Japan, N. S.* ; 1973; n. 91: p. 113-125.

2004. Naini, B.R. . A marine geophysical survey (site 211 DSDP) in the Wharton Basin, Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxii: p. 835-842.

2005. Naini, B.R. and S.L. Eittreim. Marine geophysical survey (site 214 DSDP) on the NinetyEast Ridge, Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxii: p. 843-849.

2006. Naini, B.R. and S.L. Eittreim. A marine geophysical site survey (216 DSDP) on the NinetyEast Ridge, equatorial Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxii: p. 851-859.

2007. Opdyke, N. D., D. V. Kent, and W. Lowrie. Details of magnetic polarity transitions recorded in a high deposition rate deep-sea core. *Earth Planet. Sci. Lett.* ; 1973; v. 20: p. 315-324.

2008. Peterson, J. J., P. J. Fox, and E. Schreiber. Newfoundland ophiolites and the geology of the oceanic layer. *Nature*; 1974; v. 247(n. 5438): p. 194-196.

2009. Larson, R. L. and J. W. Ladd. Evidence for the opening of the South Atlantic in the Early Cretaceous. *Nature*; 1973; v. 246(n. 5430): p. 209-212.

2010. Kent, D. V. . Post-depositional remanent magnetisation in deep-sea sediment. *Nature*; 1973; v. 246(n. 5427): p. 32-34.

2011. Rind, D., W. L. Donn, and E. Dede. Upper air wind speeds calculated from observations of natural infrasound. *J. Atmos. Sci.* ; 1973; v. 30(n. 8): p. 1726-1729.

2012. Heezen, B.C., I.D. MacGregor, H.P. Foreman, G. Forristall, H. Hekel, R. Hesse, R.H. Hoskins, E.J.W. Jones, A. Kaneps, V.A. Krashennnikov, H. Okada, and M.H. Ruef. The post Jurassic sedimentary sequences on the Pacific Plate: A kinematic interpretation of diachronous deposits. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1973; v. xx: p. 725-738.

2013. Hesslein, R. and P. Quay. Vertical eddy diffusion studies in the thermocline of a small stratified lake. *J. Fisheries Res. Bd. Canada*; 1973; v. 30(n. 10): p. 1491-1500.

2014. Richards, P. G. . Calculation of body waves, for caustics and tunnelling in core phases. *Geophys. J. R. astr. Soc.* ; 1973; v. 35: p. 243-264.

2015. Carmichael, D., G. Carpenter, A. Hubbard, K. McCamy, and W. McDonald. A recording ocean bottom seismograph. *J. Geophys. Res.* ; 1973; v. 78(n. 35): p. 8748-8750.
2016. Othmer, D. F. and O. A. Roels. Power, fresh water, and food from cold, deep sea water. *Science*; 1973; v. 182: p. 121-125.
2017. Kay, R. W. and P. W. Gast. The rare earth content and origin of alkali-rich basalts. *J. Geol.* ; 1973; v. 81: p. 653-682.
2018. Horn, D. R., B. M. Horn, and M. N. Delach. Copper and nickel content of ocean ferromanganese deposits and their relation to properties of the substrate. *Intl. Symp. R/V Valdivia Mang. Explor. Group West Germany and Hawaii Inst. Geophys.*; 1974: p. 77-83.
2019. Horn, D.R., M.N. Delach, and B.M. Horn. Physical properties of sedimentary provinces, North Pacific and North Atlantic oceans. in: "Deep Sea Sediments". New York: Plenum Pub. Corp.; 1974: p. 417-441.
2020. Leyden, R., M. Ewing, and S. Murauchi. Sonobuoy refraction measurements in East China Sea. *Am. Assoc. Pet. Geol. Bull.* ; 1973; v. 57(n. 12): p. 2396-2403.
2021. Bryan, G. M. In situ indications of gas hydrate. in: "Natural Gases in Marine Sediments". New York: Plenum Pub. Corp.; 1974: p. 299-308.
2022. Naini, B.R. and J. Chute. A marine geophysical survey in the vicinity of DSDP site 245, Madagascar Basin, Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxv: p. 863-872.
2023. Cande, S. and J. L. LaBrecque. Behavior of the earth's palaeomagnetic field from small scale marine magnetic anomalies. *Nature*; 1974; v. 247(n. 5435): p. 26-28.
2024. Alvarez, W. The Pleistocene volcanoes north of Rome. in: "Geology of Italy," The Earth Sciences Soc. Libyan Arab Republic, Tripoli; 1975: p. 355-377.
2025. Lowrie, W., R. Lovlie, and N. D. Opdyke. Magnetic properties of deep-sea drilling project basalts from the North Pacific Ocean. *J. Geophys. Res.*; 1973; v. 78(n. 32): p. 7647-7660.
2026. Houtz, R. Comparison of sonobuoy and sonic probe measurements with drilling results. in: "Initial reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. xxix: p. 1123-1131.

2027. Heezen, B. C. and M. Tharp. USNS Eltanin Cruise 55. *Antarctic J. U. S.* ; 1973; v. viii(n. 3): p. 137-140.
2028. Herron, T. J. . Dispersion of ionospheric waves. *Nature*; 1974; v. 248(n. 5445): p. 213-215.
2029. Watts, A. B. and M. Talwani. Gravity anomalies seaward of deep-sea trenches and their tectonic implidations. *Geophys. J. R. astr. Soc.* ; 1974; v. 36: p. 57-90.
2030. Lawrence, J.R. Stable oxygen and carbon isotope variations in the pore waters, carbonates and silicates, sites 225 and 228, Red Sea. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxiii: p. 939-942.
2031. Murauchi, S., w. J. Ludwig, N. Den, H. Hotta, T. Asanuma, T. Yoshii, A. Kubotera, and K. Hagiwara. Sesimic refraction measurements on the Ontong Java plateau northeast of New Ireland. *J. Geophys. Res.* ; 1973; v. 78(n. 35): p. 8653-8663.
2032. Donn, W. L. and D. Rind. Microbaroms as a probe of atmospheric circulation. *Coll. Internat. Infra-Sons, Centre Nat. Recherche Sci.*; 1974: p. 121-127.
2033. Eittreim, S.L. and M. Ewing. Turbidity distribution in the deep waters of the western Atlantic trough. in: "Suspended Solids in Water". New York: Plenum Publ. Corp.; 1974: p. 213-225.
2034. Maasha, N. . The seismicity of the Ruwenzori region in Uganda. *J. Geophys. Res.* ; 1975; v. 80(n. 11): p. 1485-1496.
2035. Naini, B. and J. Chute. Geophysical investigations around DSDP Site 251, southwestern Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxvi: p. 959-966.
2036. Malone, T. C., C. Garside, R. Anderson, and O. A. Roels. The possible occurrence of photosynthetic microorganisms in deep-sea sediments of the North Atlantic. *J. Phycology*; 1973; v. 9(n. 4): p. 482-488.
2037. Lovlie, R. and N. D. Opdyke. Rock magnetism and paleomagnetism of some intrusions from Virginia. *J. Geophys. Res.* ; 1974; v. 79(n. 2): p. 343-349.

2038. Alvarez, W. . Sardinia and Corsica: one microplate or two? *Paleogeografia del Terziario sardo nell'ambito del Mediterraneo occidentale*; 1974; suppl. Rend. Sem. Fac. Sc. Univ Cagliari: p. 1-4.
2039. Connary, S. D. and M. Ewing. Penetration of Antarctic bottom water from the Cape basin into the Angola basin. *J. Geophys. Res.* ; 1974; v. 79(n. 3): p. 463-469.
2040. Macdonald, W. D. and N. D. Opdyke. Triassic paleomagnetism of northern South America. *Am. Assoc. Pet. Geol. Bull.* ; 1974; v. 58(n. 2): p. 208-215.
2041. Alvarez, W. and T. Cocozza. The tectonics of central eastern Sardinia and the possible continuation of the Alpine chain to the south of Corsica. in: "*Paleogeografia del Terziario sardo nell'ambito del Mediterraneo occidentale*," suppl. Rend. Sem. Fac. Sc. Univ. Cagliari; 1974: p. 5-34.
2042. Gedzelman, S. D. . A universal shape for meanders. *Pure Appl. Geophys.* ; 1974; v. 112: p. 265-273.
2043. Srinivasan, M.S., J.P. Kennett, and A.W.H. Bé . *Globorotalia menardii neoflexuosa* new subspecies from the northern Indian Ocean. *Deep-Sea Res.*; 1974; v. 21: p. 321-324.
2044. Gordon, A. L. . Varieties and variability of Antarctic bottom water. *Coll. Internatl. CNRS*; 1974; (N. 215): p. 33-47.
2045. Watts, A. B. and J. R. Cochran. Gravity anomalies in the Galapagos Islands area. *Science*; 1974; v. 184: p. 808-809.
2046. Alvarez, W. . A former continuation of the Alps. *Geol. Soc. Am. Bull.* ; 1976; v. 87: p. 891-896.
2047. Feely, R.A., L. Sullivan, and W.M. Sackett. Light-scattering measurements and chemical analysis of suspended matter in the near-bottom nepheloid layer of the Gulf of Mexico. in: "*Suspended Solids in Water*". New York: Plenum Publ. Corp.; 1974: p. 281-293.
2048. Bloom, A.L, W. S. Broecker, J. M. A. Chappell, R. K. Matthews, and K. J. Mesolella. Quaternary sea level fluctuations on a tectonic coast: New  $^{230}\text{Th}/^{234}\text{U}$  dates from the Huon Peninsula, New Guinea. *Quat. Res.* ; 1974; v. 4(n. 2): p. 185-205.
2049. Goll, R. M. and K. R. Bjorklund. Radiolaria in surface sediments of the South Atlantic. *Micropaleontology*; 1974; v. 20(n. 1): p. 38-75.



2050. Shido, F., A. Miyashiro, and M. Ewing. Compositional variation in pillow lavas from the Mid-Atlantic Ridge. *Mar. Geol.* ; 1974; v. 16: p. 177-190.

2051. Shido, F., A. Miyashiro, and M. Ewing. Basalts and serpentinite from the Puerto Rico Trench, I. *Petrology. Mar. Geol.* ; 1974; v. 16: p. 191-203.

2052. Biscaye, P.E. and S.L. Eittreim. Variations in benthic boundary layer phenomena: nepheloid layer in the North American Basin. in: "Suspended Solids in Water". New York: Plenum Publ. Corp.; 1974: p. 227-260.

2053. Kukla, G. J. and H. J. Kukla. Increased surface albedo in the northern hemisphere. *Science*; 1974; v. 183: p. 709-714.

2054. Horai, K. I. . Heat flow anomaly associated with dike intrusion. *J. Geophys. Res.* ; 1974; v. 79(n. 11): p. 1640-1646.

2055. Rabinowitz, P. D. . Gravity anomalies on the continental margin of Angola, Africa: Reply. *J. Geophys. Res.* ; 1974; v. 79(n. 11): p. 1727-1728.

2056. Alvarez, W., T. Coccozza, and F. C. Wezel. Fragmentation of the Alpine orogenic belt by microplate dispersal. *Nature*; 1974; v. 248(n. 5446): p. 309-314.

2057. Wollin, G., D. B. Ericson, and J. Wollin. Geomagnetic variations and climatic changes 2,000,000 BC-1970 AD. *Coll. Internatl. CNRS*; 1974; (N. 219): P. 273-288.

2058. Hammond, D.E. Dissolved gases in Cariaco trench sediments: Anaerobic diagenesis. in: "Natural Gases in Marine Sediments". New York: Plenum Pub. Corp.; 1974: p. 71-89.

2059. Pen, T. H., T. Takahashi, and W.S. Broecker. Surface Radon Measurements in the North Pacific Ocean Station PaPa. *J. Geophys. Res.* ; 1974; v. 79(n. 12): p. 1772-1780.

2060. Broecker, W. S. and T. H. Peng. Gas exchange rates between air and sea. *Tellus*; 1974; v. xxvi(n. 1-2): p. 21-35.

2061. Sheridan, R. E., X. Golovchenko, and J. I. Ewing. Late Miocene turbidite horizon in Blake-Bahama basin. *Am. Assoc. Pet. Geol. Bull.*; 1974; v. 58(n. 9): p. 1797-1805.

2062. Lowrie, W. and M.N. Israfil. Paleomagnetism of basalt samples from Leg 29. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. xxix: p. 1109-1115.

2063. Mattson, P.H. and J.W. Ladd. Volcanic history and plate interactions in the Northern Caribbean, 1. 127-84 m.y. 2nd. Congreso Latinoamericano de Geologia, Caracas 1973, Memoria, t. 4; 1977: p. 2349-2398.

2064. Oppenheim, A. . Classical spectrum function for Coulomb interactions. Phys. Rev. A. ; 1974; v. 10(n. 3): p. 769-773.

2065. Roether, W. . The tritium and carbon-14 profiles at the Geosecs I (1969) and Gogo I (1971) North Pacific stations. Earth Planet. Sci. Lett. ; 1974; v. 23: p. 108-115.

2066. Scholz, C. H. and R. Kranz. Notes on dilatancy recovery. J. Geophys. Res. ; 1974; v. 79(n. 14): p. 2132-2135.

2067. Saito, T. and J. van Donk. Oxygen and carbon isotope measurements of Late Cretaceous and Early Tertiary foraminifera. Micropaleontology; 1974; v. 20(n. 2): p. 152-177.

2068. Roels, O. A. . The environmental impact of manganese nodule mining. II Coll. Internatl. l'Exploit. Oceans; 1974: p. 1-7.

2069. Smith, R. B. and M. L. Sbar. Contemporary tectonics and seismicity of the western United States with emphasis on the Intermountain seismic belt. Geol. Soc. Am. Bull. ; 1974; v. 85: p. 1205-1218.

2070. Gregersen, S. and L. E. Alsop. Amplitudes of horizontally refracted Love waves. Bull. Seismol. Soc. Am. ; 1974; v. 64(n. 3): p. 535-553.

2071. Anderson, J. . A dislocation model for the Parkfield earthquake. Bull. Seismol. Soc. Am. ; 1974; v. 64(n. 3): p. 671-686.

2072. Dalziel, I. W. D. and G. L. Stirewalt. Stress history of folding and cleavage development, Baraboo syncline, Wisconsin. Geol. Soc. Am. Bull. ; 1975; v. 86: p. 1671-1690.

2073. Weissel, J. K. and D. E. Hayes. The Australian-Antarctic discordance: new results and implications. J. Geophys. Res.; 1974 ; v. 79(n. 17): p. 2579-2587.

2074. Lowrie, W. and W. Alvarez. Rotation of the Italian Peninsula. *Nature*; 1974; v. 251(n. 5473): p. 285-288.

2075. Olson, W. S. . Structural history and oil potential of offshore area from Cape Hatteras to Bahamas. *Am. Assoc. Pet. Geol. Gull.* ; 1974; v. 58(n. 6): p. 1191-1200.

2076. Saito, T., L.H. Burckle, and J.D. Hays. Implications of some pre-Quaternary sediment cores and dredgings. in: "Studies in Paleo-Oceanography," *Soc., Econ. Paleo. and Mineralog., Spec. Pub.*, No. 20; 1974: p. 6-36.

2077. Markl, R.G. Bathymetric map of the eastern Indian Ocean. in: "Initial Reports of the Deep Sea Drilling Project," *National Science Foundation*; 1974; v. xxvi: p. 967-968.

2078. Mattson, P.H. and W. Alvarez. Base surge deposits in Pleistocene volcanic ash near Rome. *Bull. Volcanologie*; 1973; t.(xxxvii-4): p. 967-968.

2079. Houtz, R.E. Preliminary study of global sediment sound velocities from sonobuoy data. in: "Physics of Sound in Marine Sediments". New York: Plenum Pub. Corp.; 1974: p. 519-535.

2080. Bryan, G.M. Sonobuoy measurements in thin layers. in: "Physics of Sound in Marine Sediments". NY: Plenum Pub. Corp.; 1974: p. 119-130.

2081. Larson, R. L., P. A. Larson, J. D. Mudie, and F. N. Spiess. Models of near-bottom magnetic anomalies on the East Pacific rise crest at 21°N. *J. Geophys. Res.* ; 1974; v. 79(n. 17): p. 2686-2689.

2082. Tatham, R. H. and J. M. Savino. Faulting mechanisms for two oceanic earthquake swarms. *J. Geophys. Res.* ; 1974; v. 79(n. 17): p. 2643-2652.

2083. Herron, E. M., J. F. Dewey, and W. C. Pitman III. Plate tectonics model for the evolution of the Arctic. *Geology*; 1974; (August): p. 377-380.

2084. Broecker, W.S. and S. Broecker. Carbonate dissolution on the western flank of the East Pacific Rise. in: "Studies in Paleo-Oceanography," *Soc. Econ. paleo and Miner. Spec. Pub.*, No. 20; 1974: p. 44-57.

2085. Talwani, M., G. Thompson, B. Dent, H.G. Kahle, and S. Buck. Traverse gravimeter experiment. in: "Apollo 17 Prelim. Sci. report," NASA-SP-330: U.S. Government Printing Office; 1974: p. 23-1--13-13.

2086. Simpson, H.J., R. Bopp, and D. Thurber. Salt movement patterns in the lower Hudson. Third Symp. Hudson River Ecology, Hudson River Environ. Soc.; 1974: p. 1-33.

2087. Langseth, M.G., F.E. Ruccia, and A.E. Wechsler. Thermal conductivity of evacuated glass beads: Line source measurements in a large volume bead bed between 225 and 300 K. in: "Heat Transmission Measurements in Thermal Insulations," ASTM STP 544, Amer. Soc. Testing and Materials; 1974: p. 256-274.

2088. Stoffa, P. L., P. Buhl, and G. M. Bryan. The application of homomorphic deconvolution to shallow-water marine seismology -- Part I: Models. *Geophysics*; 1974; v. 39(n. 4): p. 401-416.

2089. Buhl, P., P. L. Stoffa, and G. M. Bryan. The application of homomorphic deconvolution to shallow-water marine seismology -- Part II: Real data. *Geophysics*; 1974; v. 39(n. 4): p. 417-426.

2090. Nowroozi, A. A. . Characteristic periods and Q for oscillations of the earth following an intermediate-focus earthquake. *J. Phys. Earth*; 1974; v. 22: p. 1-23.

2091. Thompson, P. R. and T. Saito. Pacific Pleistocene sediments: planktonic foraminifera dissolution cycles and geochronology. *Geology*; 1974; v. 2(n. 7): p. 333-335.

2092. Stoffa, P. L., P. Buhl, and G. M. Bryan. Cepstrum aliasing and the calculation of the Hilbert transform. *Geophysics*; 1974; v. 39(n. 4): p. 543-544.

2093. Watts, A. B. and J. R. Cochran. Gravity anomalies and flexure of the lithosphere along the Hawaiian-Emperor seamount chain. *Geophys. J. R. astr. Soc. ;* 1974; v. 38: p. 119-141.

2094. Matthews, J. L., B. C. Heezen, R. Catalano, A. Coogan, M. Tharp, J. Natland, and M. Rawson. Cretaceous drowning of reefs on Mid-Pacific and Japanese guyots. *Science*; 1974; v. 184: p. 462-464.

2095. Chen, P.H. Antarctica Radiolaria. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. 28: p. 437-513.

2096. Ludwig, W.J. Structure of the Bering Sea basins. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 661-668.

2097. Rabinowitz, P.D. The boundary between oceanic and continental crust in the western North Atlantic. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 67-84.

2098. Talwani, M. and O. Eldholm. Margins of the Norwegian-Greenland Sea. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 361-374.

2099. Houtz, R.E. Continental margin of Antarctica: Pacific-Indian sectors. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 655-658.

2100. Hayes, D.E. Continental margin of western South America. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 581-590.

2101. Heezen, B.C. Atlantic-type continental margins. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 13-24.

2102. Dalziel, I.W. Evolution of the margins of the Scotia Sea. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 567-579.

2103. Kent, D. V. and W. Lowrie. Origin of magnetic instability in sediment cores from the central North Pacific. *J. Geophys. Res.*; 1974; v. 79(n. 20): p. 2987-3000.

2104. Palmason, G. Insular margins of Iceland. in: "The Geology of Continental Margins". New York: Springer-Verlag; 1974: p. 375-379.

2105. Simpson, D.W. The use of seismograph arrays in determining earth structure. in: "Exploitation of Seismograph Networks," *Nato Adv. Study Inst. Series E*; 1975; (n. 11): p. 489-500.

2106. Opdyke, N. D., L. H. Burckle, and A. Todd. The extension of the magnetic time scale in sediments of the central Pacific Ocean. *Earth Planet. Sci. Lett.* ; 1974; v. 22: p. 300-306.

2107. Broecker, W. S. . "No," a conservative water-mass tracer. *Earth Planet. Sci. Lett.* ; 1974; v. 23: p. 100-107.

2108. Schreiber, E., M.R. Perfit, and P.J. Cernock. Compressional wave velocities in samples of basalt recovered by DSDP Leg 24. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1974; v. xxiv: p. 787-790.

2109. Lowrie, W. . Oceanic basalt magnetic properties and the Vine and Matthews hypothesis. *J. Geophys. ;* 1974; v. 40: p. 513-536.
2110. Heezen, B.C., J.L. Matthews, R. Catalano, J. Natland, A. Coogan, M. Tharp, and M. Rawson. Western Pacific guyots. in: "Initial Reports of the Deep Sea Drilling Project"; 1973; v. xx: p. 653-723.
2111. Roels, O. A. . Will nodule mining disturb the marine environment? *Mar. Technol. Soc. J. ;* 1974; v. 8(n. 8): p. 17-20.
2112. Scholz, C. H. . Post-earthquake dilatancy recovery. *Geology;* 1974; (November ): p. 551-554.
2113. Veevers, J. J., D. A. Falvey, L. V. Hawkins, and W. J. Ludwig. Seismic reflection measurements of northwest Australian margin and adjacent deeps. *Am. Assoc. Pet. Geol. Bull.;* 1974; v. 58(n. 9): p. 1731-1750.
2114. Roels, O. A. . Environmental impact of deep ocean mining. *Am. Mining Congress;* 1974: p. 1-4.
2115. Lowrie, W. and D.E. Hayes. Magnetic properties of oceanic basalt samples. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. 28: p. 869-878.
2116. Larson, R. L. and W. C. Pitman III. World-wide correlation of Mesozoic magnetic anomalies and its implications: discussion and reply. *Geol. Soc. Am. Bull. ;* 1975; v. 86: p. 267-272.
2117. Brocoum, S. J. and I. W. D. Dalziel. The Sudbury Basin, the southern province, the Grenville front, and the Penokean orogeny. *Geol. Soc. Am. Bull. ;* 1974; v. 85: p. 1571-1580.
2118. Thorndike, E. M. . A deep sea photographic nephelometer. *Ocean Eng. ;* 1975; v. 3: p. 1-15.
2119. Rabinowitz, P. D. and S. L. Eittreim. Bottom current measurements in the Labrador Sea. *J. Geophys. Res. ;* 1974; v. 79(n. 27): p. 4085-4090.
2120. Dalziel, I. W. D., M. J. de Wit, and K. F. Palmer. Fossil marginal basin in the southern Andes. *Nature;* 1974; v. 250(n. 5464): p. 291-294.

2121. Brueckner, H. K. . "Mantle" Rb/Sr and  $87\text{Sr}/86\text{Sr}$  ratios for clinopyroxenes from Norwegian garnet periodotites and pyroxenites. *Earth Planet. Sci. Lett.*; 1974; v. 24: p. 26-32.
2122. Fletcher, J. P. and J. G. Anderson. First strong-motion records from a central or eastern United States earthquake. *Bull. Seismol. Soc. Am.* ; 1974; v. 64(n. 5): p. 1455-1466.
2123. Donn, W. L. and D. M. Shaw. Continental drift and Arctic climate. in : M. J. Dunbar, Ed. . *Polar Oceans*. Calgary: Arctic Institute of North America; 1977: p. 555-570.
2124. Palmason, G. Heat flow and hydrothermal activity in Iceland. in: "Geodynamics of Iceland and the North Atlantic Area": D. Reidel Publ. Co.; 1974: p. 297-306.
2125. Langseth, M.G. and G.W. Zielinski. Marine heat flow measurements in the Norwegian-Greenland Sea and in the vicinity of Iceland. in: "Geodynamics of Iceland and the North Atlantic Areas". Holland: D. Reidel Publ. Co.; 1974: p. 277-295.
2126. Markl, R. G. . Evidence for the breakup of eastern Gondwanaland by the Early Cretaceous. *Nature*; 1974; v. 251(n. 5472): p. 196-200.
2127. Donn, W. L. and N. K. Balachandran. Meteors and meteorites detected by infrasound. *Science* ; 1974; v. 185: p. 707-709.
2128. Malone, T. C., C. Garside, K. C. Haines, and O. A. Roels. Nitrate uptake and growth of *Chaetoceros* sp. in large outdoor continuous cultures. *Limnol. Oceanogr.* ; 1975; v. 20(n. 1): p. 9-19.
2129. Tucholke, B. E. and S. Eittreim. The western boundary undercurrent as a turbidity maximum over the Puerto Rico Trench. *J. Geophys. Res.* ; 1974; v. 79(n. 27): p. 4115-4118.
2130. Engelder, J. T. . Microscopic wear grooves on slickensides: indicators of paleoseismicity. *J. Geophys. Res.* ; 1974; v. 79(n. 29): p. 4387-4392.
2131. Sykes, L.R. and M.L. Sbar. Focal mechanism solutions of intraplate earthquakes and stresses in the lithosphere. in: "Geodynamics of Iceland and the North Atlantic Area". Holland: D. Reidel Publ. Co.; 1974: p. 207-224.
2132. Gardner, J.V. Late Pleistocene carbonate dissolution cycles in the eastern equatorial Atlantic. in: "Dissolution of Deep-Sea Carbonates," *Spec. Pub. No. 13: Cushman Fdn. Forum. Res.*; 1975: p. 129-141.

2133. Donn, W. L., N. K. Balachandran, and D. Rind. Tidal wind control of long-range rocket infrasound. *J. Geophys. Res.* ; 1975; v. 80(n. 12): p. 1662-1664.
2134. Eldholm, O. and C. C. Windisch. Sediment distribution in the Norwegian-Greenland Sea. *Geol. Soc. Am. Bull.* ; 1974; v. 85: p. 1661-1676.
2135. Georgi, D. T. . Spherical harmonic analysis of palaeomagnetic inclination data. *Geophys. J. R. astr. Soc.* ; 1974; v. 39: p. 71-86.
2136. Tucholke, B. E. and J. I. Ewing. Bathymetry and sediment geometry of the Greater Antilles outer ridge and vicinity. *Geol. Soc. Am. Bull.* ; 1974; v. 85: p. 1789-1802.
2137. Richards, P. G. . Weakly coupled potentials for high-frequency elastic waves in continuously stratified media. *Bull. Seismol. Soc. Am.* ; 1974; v. 64(n. 5): p. 1575-1588.
2138. Schroeder, F. A geophysical survey at site 325 in the Bellingshausen Basin. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1976: p. 251-261.
2139. Bischke, R. E. . A model of convergent plate margins based on the recent tectonics of Shikoku, Japan. *J. Geophys. Res.* ; 1974; v. 79(n. 32): p. 4845-4857.
2140. Kelleher, J., J. Savino, H. Rowlett, and W. McCann. Why and where great thrust earthquakes occur along island arcs. *J. Geophys. Res.* ; 1974; v. 79(n. 32): p. 4889-4899.
2141. Langseth, M.G. and S.J. Keihm. In-situ measurements of lunar heat flow. in: *Proc. Soviet-American Conf. Cosmochemistry of Moon and Planets*; 1974: p. 27.
2142. Pitman, W.C. III, and E.M. Herron. Continental drift in the Atlantic and the Arctic. in: "Geodynamics of Iceland and the North Atlantic Area": D. Reidel Publ. Co.; 1974: p. 1-15.
2143. Dalziel, I. W. D., R. Caminos, K. F. Palmer, F. Nullo, and R. Casanova. South extremity of Andes: Geology of Isla de los Estados Argentina Tierra del Fuego. *Am. Assoc. Pet. Geol. Bull.* ; 1974; v. 58(n. 12): p. 2502-2512.
2144. Hunkins, K. L. . Subsurface eddies in the Arctic Ocean. *Deep-Sea Res.* ; 1974; v. 21: p. 1017-1033.
2145. Rabinowitz, P. D. . Seismic profiling between Bowers Ridge and Shirshov Ridge in the Bering Sea. *J. Geophys. Res.* ; 1974; v. 79(n. 32): p. 4977-4979.



2146. Bonatti, E., J. Honnorez, P. Kirst, and F. Radicati. Metagabbros from the Mid-Atlantic Ridge at 06oN: contact - hydrothermal -dynamic metamorphism beneath the axial valley. *J. Geol.* ; 1975; v. 83: p. 61-78.

2147. Larson, R.L. and W. Lowrie. Paleomagnetic evidence for motion of the Pacific plate from Leg 32 basalts and magnetic anomalies. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. xxxii: p. 571-577.

2148. Alsop, L. E., A. S. Goodman, and S. Gregersen. Reflection and transmission of inhomogeneous waves with particular application to Rayleigh waves. *Bull. Seismol. Soc. Am.* ; 1974; v. 64(n. 6): p. 1635-1652.

2149. Jacobs, M. B. . Clay mineral changes in Antarctic deep-sea sediments and Cenozoic climatic events. *J. Sediment. Petrol.* ; 1974; v. 44(n. 4): p. 1079-1086.

2150. Larson, R. L. . Late Jurassic sea-floor spreading in the eastern Indian Ocean. *Geology*; 1975; (February): p. 69-71.

2151. Hayes, D.E. and F.J. Davey. A geophysical study of the Ross Sea, Antarctica. in: "Initial Reports of the Deep Sea Drilling Project," National Science Foundation; 1975; v. 28: p. 887-907.

2152. Bjornsson, S. and P. Einarsson. Seismicity of Iceland. in: "Geodynamics of Iceland and the North Atlantic Area": D. Reidel Publ. Co.; 1974: p. 225-239.

2153. Anderson, R. N., D. W. Forsyth, P. Molnar, and J. Mammerrickx. Fault plane solutions of earthquakes on the Nazca plate boundaries and the Easter plate. *Earth Planet. Sci. Lett.*; 1974; v. 24: p. 188-202.

2154. Ludwig, W. J., R. E. Houtz, and J. I. Ewing. Profiler-sonobuoy measurements in Colombia and Venezuela Basins, Caribbean Sea. *Am. Assoc. Pet. Geol. Bull.*; 1975; v. 59(n. 1): p. 115-123.

2155. Damuth, J. E. . Echo character of the western equatorial Atlantic floor and its relationship to the dispersal and distribution of terrigenous sediments. *Mar. Geol.* ; 1975; v. 18: p. 17-45.

2156. Johnson, N. M., N. D. Opdyke, and E. H. Lindsay. Magnetic polarity stratigraphy of Pliocene-Pleistocene terrestrial deposits and vertebrate faunas, San Pedro Valley, Arizona. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 5-12.

2157. Donn, W. L., N. K. Balachandran, and G. Kaschak. Atmospheric infrasound radiated by bridges. *J. Acoust. Soc. Am.* ; 1974; v. 56(n. 5): p. 1367-1370.
2158. Amos, A. F., S. C. Daubin, Jr., C. Garside, T. C. Malone, A. Z. Paul, G. E. Rice, and O. A. Roels. Environmental impact of manganese nodule mining: preliminary report on a cruise to study baseline conditions in a manganese nodule province. II Coll. Internatl. l'Exploit. Oceans; 1974; v. 6: p. 1-20.
2159. Maasha, N. . The seismicity and tectonics of Uganda. *Tectonophysics*; 1975; v. 27: p. 381-393.
2160. Lawrence, J. R. and M. Kastner. 018/016 of feldspars in carbonate rocks. *Geochim. Cosmochim. Acta*; 1975; v. 39: p. 97-102.
2161. Tatham, R. H. . Surface-wave dispersion applied to the detection of sedimentary basins. *Geophysics*; 1975; v. 40(n. 1): p. 40-55.
2162. Kelleher, J. and J. Savino. Distribution of seismicity before large strike slip and thrust-type earthquakes. *J. Geophys. Res.* ; 1975; v. 80(n. 2): p. 260-271.
2163. Cormier, V. F. . Tectonics near the junction of the Aleutian and Kuril-Kamchatka arcs and a mechanism for middle Tertiary magmatism in the Kamchatka basin. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 443-453.
2164. Gordon, A.L. General ocean circulation. in: "Numerical Models of Ocean Circulation," National Academy of Science; 1975: p. 39-53.
2165. Burckle, L. H. and A. Todd. Size differences in the Diatom, *Annellus californicus* Tempere. *Trans. Proc. Palaeontol. Soc. Japan*; 1974; (n. 96): p. 437-441.
2166. Shibata, T. and P. J. Fox. Fractionation of abyssal Tholeiites: samples from the oceanographer fracture zone (35oN, 35oW). *Earth Planet. Sci. Lett.* ; 1975; v. 27: p. 62-72.
2167. Bonatti, E. . Metallogensis at oceanic spreading centers. *Ann. Rev. Earth Planet. Sci.* ; 1975; v. 3: p. 401-431.
2168. Hollister, C.D., B.C. Heezen, and K.E. Nafe. Animal traces on the deep-sea floor. in: Robert. W. Frey, Ed. "Study of Trace Fossils". NY: Springer-Verlag, Inc.; 1975: p. 493-510.

2169. Watts, A. B. and J. K. Weissel. Tectonic history of the Shikoku marginal basin. *Earth Planet. Sci. Lett.* ; 1975; v. 25: p. 239-250.

2170. Hunkins, K.L. Surface eddies in the Arctic Ocean and baroclinic instability. in: "Climate of the Arctic," Univ. of Alaska Symp. 1973; 1975: p. 398-406.

2171. Keihm, S. J. and M. G. Langseth. Microwave emission spectrum of the moon: mean global heat flow and average depth of the regolith. *Science*; 1975; v. 187: p. 64-66.

2172. Kellogg, T.B. Late Quaternary climatic changes in the Norwegian and Greenland Seas. in: "Climate of the Arctic," Univ. of Alaska Symp. 1973; 1975: p. 3-36.

2173. Saito, T., P.R. Thompson, and D. Breger. Skeletal ultramicrostructure of some elongate chambered planktonic foraminifera and related species. in: "Progress in Micropaleontology"; 1976: p. 278-304.

2174. Bé , A.W.H., J.W. Morse, and S.M. Harrison. Progressive dissolution and ultrastructural breakdown of planktonic foraminifera. in: "Dissolution of Deep-Sea Carbonates," Spec. Pub. No. 13, Cushman Fdn. For. Res.; 1975: p. 27-55.

2175. Luz, B. and N.J. Shackelton. CaCO<sub>3</sub> solution in the tropical east Pacific during the past 130,000 years. in: "Dissolution of Deep-Sea Carbonates," Spec. Pub. No. 13, Cushman Fdn. For. Res.; 1975.

2176. Sbar, M. L., R. R. Jordan, C. D. Stephens, T. E. Pickett, K. D. Woodruff, and C. G. Sammis. The Delaware-New Jersey earthquake of February 28, 1973. *Bull. Seismol. Soc. Am.* ; 1975; v. 65(n. 1): p. 85-92.

2177. Lawrence, J. R., J. M. Gieskes, and W. S. Broecker. Oxygen isotope and cation composition of DSDP pore waters and the alteration of layer II basalts. *Earth Planet. Sci. Lett.* ; 1975; v. 27: p. 1-10.

2178. Gordon, A. L. . An Antarctic oceanographic section along 170°E. *Deep-Sea Res.* ; 1975; v. 22: p. 357-377.

2179. Keihm, S. J. and M. G. Langseth. Lunar microwave brightness temperature observations reevaluated in the light of Apollo program findings. *Icarus*; 1975; v. 24: p. 211-230.

2180. King, K. Jr. Amino acid composition of the silicified organic matrix in fossil polycystine Radiolaria. *Micropaleontology*; 1975; v. 21(n. 2): p. 215-226.
2181. King, K. Jr. Preserved amino acids from silicified protein in fossil Radiolaria. *Nature*; 1974; v. 252(n. 5485): p. 690-692.
2182. Gordon, A. L. and H. W. Taylor. Seasonal change of Antarctic Sea ice cover. *Science*; 1975; v. 187: p. 346-347.
2183. Choy, G. L. and P. G. Richards. Pulse distortion and Hilbert transformation in multiply reflected and refracted body waves. *Bull. Seismol. Soc. Am.* ; 1975; v. 65(n. 1): p. 55-70.
2184. Alvarez, W. and W. Lowrie. Paleomagnetismo della scaglia rossa umbra e rotazione della Penisola italiana. *Boll. Soc. Geol. It.* ; 1974; v. 93: p. 883-891.
2185. Watts, A. B. and M. Talwani. Gravity effect of downgoing lithospheric slabs beneath island arcs. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 1-4.
2186. Ludwig, W. J., S. Murauchi, and R. E. Houtz. Sediments and structure of the Japan Sea. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 651-664.
2187. Aggrawal, Y. P., L. R. Sykes, D. W. Simpson, and P. G. Richards. Spatial and temporal variations in  $t_s/t_p$  and in P wave residuals at Blue Mountain Lake, New York: application to earthquake prediction. *J. Geophys. Res.* ; 1975; v. 80(n. 5): p. 718-732.
2188. Burckle, L. H. . Diatom evidence bearing on the correlation of the Relizian stage, California. *Pacific Geol.* ; 1975; v. 9: p. 33-34.
2189. Burckle, L.H. and A. Todd. Correlation of Late Neogene sections on Noto and Oga Peninsula, Japan. in: "Progress in Micropaleontology"; 1976: p. 20-26.
2190. Amos, A.F. Physical oceanography from the Arctic ice pack: Project AIDJEX STD programs. *Proc. Plessey Environ. Systems, Third STD Conf. and Workshop*; 1975: p. 125-142.
2191. Bé , A.W.H., S.M. Harrison, W.E. Frerichs, and M.E. Heiman. Variability in test porosity of *Orbulina universa* d'Orbigny at two Indian Ocean localities. in: "Progress in Micropaleontology"; 1976: p. 1-9.

2192. Chen, P. H. . Some new Tertiary Radiolaria from Antarctic deep-sea sediments. *Micropaleontology*; 1974; v. 20(n. 4): p. 480-492.
2193. Damuth, J. E. and N. Kumar. Amazon cone: morphology, sediments, age, and growth pattern. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 863-878.
2194. Brueckner, H. K. . Contact and fracture ultramafic assemblages from Norway: Rb-Sr evidence for crustal contamination. *Contrib. Mineral. Petrol.* ; 1975; c. 49: p. 39-48.
2195. Harrison, C. G. A., R. D. Jarrard, V. Vacquier, and R. L. Larson. Paleomagnetism of Cretaceous Pacific seamounts. *Geophys. J. R. astr. Soc.* ; 1975; v. 42: p. 859-882.
2196. Lowrie, W. and W. Alvarez. Paleomagnetic evidence for rotation of the Italian peninsula. *J. Geophys. Res.* ; 1975; v. 80(n. 11): p. 1579-1592.
2197. Eittreim, S. and J. Ewing. Vema fracture zone transform fault. *Geology*; 1975; (October): p. 555-558.
2198. Donn, W.L. and D. Shaw. The evolution of climate. *Proc. World Meteor. Org. Symp. on Long-Term Climatic Fluctuations*, WMO No. 421, Geneva, Switz.; 1975: p. 394-396.
2199. Donn, W. L. and N. K. Balachandran. Meteor-generated infrasound -- Criticism by D. O. Revelle -- Reply. *Science*; 1975; v. 189: p. 394-396.
2200. Cochran, J. R. and M. Talwani. Gravity, magnetics, and seismicity. in : *Mesa New York Bight Atlas Mono. 9*. Albany, NY: New York Sea Grant Inst. ; 1976: p. 3-21.
2201. Larson, R. L. and T. W. C. Hilde. A revised time scale of magnetic reversals for the Early Cretaceous and Late Jurassic. *J. Geophys. Res.* ; 1975; v. 80(n. 17): p. 2586-2594.
2202. Watts, A. B., J. R. Cochran, and G. Selzer. Gravity anomalies and flexure of the lithosphere: a three-dimensional study of the Great Meteor Seamount, Northeast Atlantic. *J. Geophys. Res.* ; 1975; v. 80(n. 11): p. 1391-1398.
2203. Schilling, J. G. and E. Bonatti. East Pacific Ridge (20S-19oS) versus Nazca intraplate volcanism: rare-earth evidence. *Earth Planet. Sci. Lett.* ; 1975; v. 25: p. 93-102.

2204. Dalziel, I. W. D., R. H. Dott, Jr., R. D. Winn, Jr. and R. L. Bruhn. Tectonic relations of south Georgia Island to the southernmost Andes. *Geol. Soc. Am. Bull.* ; 1975; v. 86: p. 1034-1040.

2205. Johnson, T. L. . A comparison of frictional sliding on granite and dunite surfaces. *J. Geophys. Res.* ; 1975; v. 80(n. 17): p. 2600-2605.

2206. Kukla, G. J. . Missing link between Milankovitch and climate. *Nature*; 1975; v. 253(n. 5493): p. 600-603.

2207. Catanzaro, E. J. . A simple isotope dilution technique for the determination of lead and copper in natural waters. *J. Water Poll. Contr. Fed.* ; 1975; v. 47(n. 1): p. 203-204.

2208. Forsyth, D. W. . Fault plane solutions and tectonics of the South Atlantic and Scotia Sea. *J. Geophys. Res.*; 1975; v. 80(n. 11): p. 1429-1443.

2209. Roche, M. B., A. McIntyre, and J. Imbrie. Quantitative paleoceanography of the Late Pleistocene-Holocene North Atlantic: coccolith evidence. in : *Late Neogene Epoch Boundaries. Micropaleontology Spec. Pub. No. 1* ed.; 1975: p. 199-224.

2210. Ninkovich, D. and N. J. Shackleton. Distribution, stratigraphic position and age of ash layer "L" in the Panama Basin region. *Earth Planet. Sci. Lett.* ; 1975; v. 27: p. 20-34.

2211. Ninkovich, D. and J. H. Robertson. Volcanogenic effects on the rates of deposition of sediments in the northwest Pacific Ocean. *Earth Planet. Sci. Lett.* ; 1975; v. 27: p. 127-136.

2212. Amos, A.F., S.C. Daubin, Jr., C. Garside, T.C. Malone, A.Z. Paul, G.E. Rice, and O.A. Roels. Report on a cruise to study environmental baseline conditions in a manganese nodule province. *Offshore Technol. Conf., Dallas, TX, Paper OTC 2162*; 1975: p. 143-151.

2213. Simpson, H. J., D. E. Hammond, B. L. Deck, and S. C. Williams. Nutrient budgets in the Hudson River estuary. in : *ACS Symp. Ser. No. 18. Mar. Chem. Coastal Environ.* ed.; 1975: p. 618-635.

2214. Watts, A. B. . Gravity field of the Northwest Pacific Ocean basin and its margin -- Hawaii and vicinity . Boulder, CO 80301: GSA; 1975.

2215. Harrison, C. G. A., E. Bonatti, and L. Stieltjes. Tectonism of axial valleys in spreading centers: data from the Afar rift. in : A. Pilger and A. Rosler, Eds. *Afar Depression of Ethiopia*. Stuttgart; 1975: p. 178-198.

2216. Ryan, W.B.F., M.B. Cita, M. Dreyfus Rawson, L.H. Burckle, and T. Saito. A paleomagnetic assignment of Neogene stage boundaries and the development of isochronous datum planes between the Mediterranean, the Pacific and Indian Oceans in order to investigate the response of the world ocean to the Mediterranean "salinity crisis". *Riv. Ital. Paleont.*; 1974; v. 80(n. 4): p. 631-688.

2217. Watts, A. B., B. C. Schreiber, and D. Habib. Dredged rocks from Hatton Bank, Rockall Plateau. *J. Geol. Soc. London*; 1975; v. 131: p. 639-646.

2218. Larson, R. L. and C. E. Helsley. Mesozoic reversal sequence. *Rev. Geophys. Space Phys.*; 1975; v. 13(n. 3): p. 174-209.

2219. Broecker, W. S. . Floating glacial ice caps in the Arctic Ocean. *Science*; 1975; v. 188: p. 1116-1118.

2220. Watts, A. B., M. Talwani, and J. R. Cochran. Gravity field of the northwest Pacific Ocean basin and its margin. in : *Geophys. Mono. 19*. Washington, DC: AGU; 1976: p. 17-34.

2221. Biscaye, P. E., R. Chesselet, and J. M. Prospero. Rb-Sr,  $^{87}\text{Sr}/^{86}\text{Sr}$  isotope system as an index of provenance of continental dusts in the open Atlantic Ocean. *J. de Recher. Atmos.*; 1974; v. VIII(n. 3-4): p. 819-829.

2222. Engelder, J. T., J. M. Logan, and J. H. Handin. The sliding characteristics of sandstone on quartz fault-gouge. *Pure Appl. Geophys.* ; 1975; v. 113: p. 69-86.

2223. Saito, T., L. H. Burckle, and J. D. Hays. Late Miocene to Pleistocene biostratigraphy of equatorial Pacific sediments. in : *Late Neogene Epoch Boundaries. Micropaleontology Spec. Pub. No. 1* ed.; 1975: p. 226-244.

2224. Renz, O., R. Imlay, Y. Lancelot, and W. B. F. Ryan. Ammonite-rich Oxfordian limestones from the base of the continental slope off northwest Africa. *Eclogae Geol. Helv.* ; 1975; v. 68(n. 2): p. 431-448.

2225. Fliegel, M. and K. Hunkins. Internal wave dispersion calculated using the Thomson-Haskell method. *J. Phys. Oceanogr.*; 1975; v. 5(n. 3): p. 541-548.

2226. Anderson, J. G. and P. G. Richards. Comparison of strong ground motion from several dislocation models. *Geophys. J. R. astr. Soc.* ; 1975; v. 42: p. 347-373.

2227. Watts, A. B. . Marine gravity. *Rev. Geophys. Space Phys.* ; 1975; v. 13(n. 3): p. 531-546.

2228. Anderson, O. R. . A possible origin of some olive-green cells in aphotic marine environments. *Limnol. Oceanogr.* ; 1975; v. 20(n. 6): p. 1000-1004.

2229. Hammond, D. E., H. J. Simpson, and G. Mathieu. Methane and Radon-222 as tracers for mechanisms of exchange across the sediment-water interface in the Hudson River estuary. in : *ACS Symp. Ser. No. 18. Mar. Chem. Coastal Environ. ed.*; 1975: p. 119-132.

2230. Maiya, S., T. Saito, and T. Sato. Late Cenozoic planktonic foraminiferal biostratigraphy of northwest Pacific sedimentary sequences. in : *Progress in Micropaleontology: Micropaleontology Press*; 1976: p. 395-422.

2231. Tobias, W. . A collector trap for lobster larvae. *Aquaculture*; 1975; v. 6: p. 199-201.

2232. Hunkins, K. . The oceanic boundary layer and stress beneath a drifting ice floe. *J. Geophys. Res.* ; 1975; v. 80(n. 24): p. 3425-3433.

2233. Rind, D. and W. L. Donn. Further use of natural infrasound as a continuous monitor of the upper atmosphere. *J. Atmos. Sci.* ; 1975; v. 32(n. 9): p. 1696-1704.

2234. Gardner, J. V. and L. H. Burckle. Upper Pleistocene *Ethmodiscus rex* oozes from the eastern equatorial Atlantic. *Micropaleontology*; 1975; v. 21(n. 2): p. 236-242.

2235. Burckle, L. H. and D. Stanton. Distribution of displaced Antarctic diatoms in the Argentine Basin. *Nova Hedwigia*; 1975; v. 53: p. 282-292.

2236. Kellogg, D. E. and J. D. Hays. Microevolutionary patterns in Late Cenozoic Radiolaria. *Paleobiology*; 1975; v. 1(n. 2): p. 150-160.

2237. Ridley, W. I. . Petrology of lunar rocks and implication to lunar evolution. *Ann. Rev. Earth Planet. Sci.* ; 1976; v. 4: p. 15-48.

2238. Fox, P. J. and B. C. Heezen. Geology of the Caribbean crust. in : *The Ocean Basins and Margins. V. 3 ed.* New York: Plenum Pub. Corp.; 1975: p. 421-466.

2239. Talwani, M. . Structures derived from geophysical measurements across continental margins of Atlantic type. in : *An. Acad. bras. Cienc. v. 48 supl. ed.*; 1976: p. 337-352.



2240. Talwani, M. and H.-G. Kahle. Apollo 17 traverse gravimeter experiment (preliminary results). *Geologisches Jahrbuch*; 1976; V-E 7: p. 85-91.

2241. Forsyth, D. and S. Uyeda. On the relative importance of the driving forces of plate motion. *Geophys. J. R. astr. Soc.* . 1975; v. 43: p. 163-200.

2242. Watts, A. B. . Gravity field of the northwest Pacific Ocean basin and its margin -- Aleutian Island arc-trench system. Boulder, CO 80301: GSA.

2243. Jacobi, R. D., P. D. Rabinowitz, and R. W. Embley. Sediment waves on the Moroccan continental rise. *Mar. Geol.* ; 1975; v. 19: p. M61-M67.

2244. Hayes, D. E. . Nature and implications of asymmetric sea-floor spreading -- "Different rates for different plates". *Geol. Soc. Am. Bull.*; 1976; v. 87: p. 994-1002.

2245. Einarsson, P. and S. Bjornsson. Seismic activity associated with the 1970 eruption of volcano Hekla in Iceland. *Jokull*; 1976; v. 26: p. 8-19.

2246. Einarsson, P. . Seismic activity recorded in Surtsey during the summer of 1966. *Surtsey Research Progress Report VII*; 1974: p. 83-90.

2247. Richardson, D. and D. Ninkovich. Use of K<sub>2</sub>O, Rb, Zr, and Y versus SiO<sub>2</sub> in volcanic ash layers of the eastern Mediterranean to trace their source. *Geol. Soc. Am. Bull.* ; 1976; v. 87: p. 110-116.

2248. Broecker, W. S. . Climatic change: are we on the brink of a pronounced global warming? *Science*; 1975; v. 189: p. 460-463.

2249. Watts, A. B., J. K. Weissel, and R. L. Larson. Sea-floor spreading in marginal basins of the western Pacific. *Tectonophysics*; 1977; v. 37: p. 167-181.

2250. Anderson, R. N. . Heat flow in the Mariana Marginal Basin. *J. Geophys. Res.* ; 1975; v. 80(n. 29): p. 4043-4048.

2251. Damuth, J. E. and N. Kumar. Late Quaternary depositional processes on continental rise of western Equatorial Atlantic: comparison with western North Atlantic and implications for reservoir-rock distribution. *Am. Assoc. Pet. Geol. Bull.* ; 1975; v. 59(n. 11): p. 2171-2181.

2252. Anderson, O. R. . The ultrastructure and cytochemistry of resting cell formation in *Amphora coffaeiformis* (bacillariophyceae). *J. Phycol.* ; 1975; v. 11(n. 3): p. 272-281.
2253. Ridley, W. I. . On high-alumina mare basalts. *Proc. Lunar Sci. Conf. 6th*; 1975: p. 131-145.
2254. Bursnall, J. T. and M. J. de Wit. Timing and development of the orthotectonic zone in the Appalachian orogen of northwest Newfoundland. *Can. J. Earth Sci.* ; 1975; v. 12(n. 10): p. 1712-1722.
2255. Gong, C., R. C. Jachens, and J. T. Kuo. A pseudo three-dimensional finite element formulation for elastostatic problems and its geophysical applications. *J. Geophys. Res.* ; 1975; v. 80(n. 29): p. 4103-4110.
2256. Gordon, A. L. and E. Molinelli. USNS ELTANIN Southern Ocean Oceanographic Atlas, Cruises 4-55, June 1962 to November 1972. LDGO; 1975.
2257. Horai, K. I. and J. L. Winkler, Jr. . Thermal diffusivity of lunar rock sample 12002, 85. *Proc. Lunar Sci. Conf. 6th*; 1975: p. 3207-3215.
2258. Damuth, J. E. . Quaternary climate change as revealed by calcium carbonate fluctuations in western Equatorial Atlantic sediments. *Deep-Sea Res.* ; 1975; v. 22: p. 725-743.
2259. Gordon, A. L. and H. W. Taylor. Heat and salt balance within the cold waters of the world ocean. in : *Numerical Models of Ocean Circulation*: National Academy of Science; 1975: p. 54-56.
2260. Scholz, C. H., T. A. Koczynski, and D. G. Hutchins. Evidence for incipient rifting in southern Africa. *Geophys. J. R. astr. Soc.* ; 1976; v. 44: p. 135-144.
2261. Emerson, S. . Chemically enhanced CO<sub>2</sub> gas exchange in a eutrophic lake: a general model. *Limnol. Oceanogr.* ; 1975; v. 20(n. 5): p. 743-753.
2262. Sunderlin, J.B., M. Brenner, M. Castagna, J. Hirota, R.W. Menzel, and O.A. Roels. Comparative growth of hard shell clams (*Mercenaria mercenaria* Linne and *Mercenaria campechiensis* Gmelin) and their F1 cross in temperate, subtropical, and tropical natural waters and in a tropical artificial upwelling mariculture system. *Proc. World Mariculture Soc. Meeting*; 1975: p. 171-183.

2263. Weissel, J. K. and A. B. Watts. Tectonic complexities in the South Fiji marginal basin. *Earth Planet. Sci. Lett.* ; 1975; v. 28: p. 121-126.

2264. Hayes, D. E. and P. D. Rabinowitz. Mesozoic magnetic lineations and the magnetic quiet zone off northwest Africa. *Earth Planet. Sci. Lett.* ; 1975; v. 28: p. 105-115.

2265. Emerson, S. . Gas exchange rates in small Canadian Shield lakes. *Limnol. Oceanogr.* ; 1975; v. 20(n. 5): p. 754-761.

2266. Kent, D. V. and W. Lowrie. On the magnetic susceptibility anisotropy of deep-sea sediment. *Earth Planet. Sci. Lett.* ; 1975; v. 28: p. 1-12.

2267. Bonatti, E., M. Zerbi, R. Kay, and H. Rydell. Metalliferous deposits from the Apennine ophiolites: Mesozoic equivalents of modern deposits from oceanic spreading centers. *Geol. Soc. Am. Bull.*; 1976; v. 87: p. 83-94.

2268. McIntyre, A., N.G. Kipp, A.W.H. Bé , T. Crowley, T. Kellogg, J.V. Gardner, W. Prell, and W.F. Ruddiman. Glacial North Atlantic 18,000 years ago: a CLIMAP reconstruction. *Geol. Soc. Am. Mem.* 145; 1976: p. 43-76 .

2269. Ruddiman, W. F. and A. McIntyre. Northeast Atlantic paleoclimatic changes over the past 600,000 years. *Geol. Soc. Am. Mem.* 145; 1976: p. 111-146.

2270. van Donk, J. . O18 record of the Atlantic Ocean for the entire Pleistocene epoch. *Geol. Soc. Am. Mem.* 145; 1976: p. 147-183.

2271. Bé , A.W.H., J.E. Damuth, L. Lott, and R. Free. Late Quaternary climatic record in western equatorial Atlantic sediment. *Geol. Soc. Am. Mem.* 145; 1976: p. 165-200.

2272. Prell, W. L. and J. D. Hays. Pleistocene faunal and temperature patterns of the Colombia Basin, Caribbean Sea. *Geol. Soc. Am. Mem.* 145; 1976: p. 201-220.

2273. Gardner, J. V. and J. D. Hays. Responses of sea-surface temperature and circulation to global climatic change during the past 200,000 years in the eastern equatorial Atlantic Ocean. *Geol. Soc. Am. Mem.* 145; 1976: p. 221-246.

2274. Lozano, J. A. and J. D. Hays. Relationship of radiolarian assemblages to sediment types and physical oceanography in the Atlantic and western Indian Ocean sectors of the Antarctic Ocean. *Geol. Soc. Am. Mem.* 145; 1976: p. 303-336.

2275. Hays, J. D., J. A. Lozano, N. Shackleton, and G. Irving. Reconstruction of the Atlantic and western Indian Ocean sectors of the 18,000 B.P. Antarctic Ocean. *Geol. Soc. Am. Mem.* 145; 1976: p. 337-372.

2276. Geitzenauer, K. R., M. B. Roche, and A. McIntyre. Modern Pacific Coccolith assemblages: derivation and application to Late Pleistocene paleotemperature analysis. *Geol. Soc. Am. Mem.* 145; 1976: p. 423-448.

2277. Shackleton, N. J. and N. D. Opdyke. Oxygen-isotope and paleomagnetic stratigraphy of Pacific core V28-239 Late Pliocene to Latest Pleistocene. *Geol. Soc. Am. Mem.* 145; 1976: p. 449-464.

2278. Kellogg, T. B. . Late Quaternary climatic changes: evidence from deep-sea cores of Norwegian and Greenland Seas. *Geol. Soc. Am. Mem.* 145; 1976: p. 77-110.

2279. Prell, W.L., J.V. Gardner, A.W.H. Bé , and J.D. Hays. Equatorial Atlantic and Caribbean foraminiferal assemblages, temperatures, and circulation: interglacial and glacial comparisons. *Geol. Soc. Am. Mem.* 145; 1976: p. 247-266.

2280. Ryan, W. B. F. Geodynamic evolution of the Mediterranean Sea: some unanswered questions as to the role played by Italy. *Mem. Soc. Geol. It.* ; 1974; v. 13(n. 2): p. 201-207.

2281. Rabinowitz, P. D. . Geophysical study of the continental margin of southern Africa. *Geol. Soc. Am. Bull.* ; 1976; v. 87: p. 1643-1653.

2282. Eitrem, S., P. E. Biscaye, and A. F. Amos. Benthic nepheloid layers and the Ekman thermal pump. *J. Geophys. Res.* ; 1975; v. 80(n. 36): p. 5061-5067.

2283. Ladd, J. W. . Relative motion of South America with respect to North America and Caribbean tectonics. *Geol. Soc. Am. Bull.* ; 1976; v. 87: p. 969-976.

2284. Pochapsky, T. E. . Vertical structure of currents and deep temperatures in the western Sargasso Sea. *J. Phys. Oceanogr.* ; 1976; v. 6(n. 1): p. 45-56.

2285. Anderson, R. N., S. Uyeda, and A. Miyashiro. Geophysical and geochemical constraints at converging plate boundaries -- Part I: Dehydration in the downgoing slab. *Geophys. J. R. astr. Soc.* ; 1976; v. 44: p. 333-357.

2286. Maasha, N. . Electrical resistivity and microearthquake surveys of the Sempaya, Lake Kitagata, and Kitagata geothermal anomalies, Western Uganda. 2nd UN Symp. Dev. and Use Geothermal Resources; 1976: p. 1103-1112.

2287. Damuth, J. E. and M. A. Gorini. The equatorial mid-ocean canyon: a relict deep-sea channel on the Brazilian continental margin. *Geol. Soc. Am. Bull.*; 1976; v. 87: p. 340-346.

2288. Engelder, J. T. and M. L. Sbar. Evidence for uniform strain orientation in the Potsdam sandstone, northern New York, from in situ measurements. *J. Geophys. Res.* ; 1976; v. 81(n. 17): p. 3013-3017.

2289. Leyden, R., H. Asmus, S. Zembruski, and G. Bryan. South Atlantic diapiric structures. *Am. Assoc. Pet. Geol. Bull.* ; 1976; v. 60(n. 2): p. 196-212.

2290. Murphy, A. J. and J. M. Savino. A comprehensive study of long-period (20 to 200 seconds) earth noise at the high-gain worldwide seismograph stations. *Bull. Seismol. Soc. Am.*; 1975; v. 65(n. 6): p. 1827-1862.

2291. Engelder, J. T. . Effect of scratch hardness on frictional wear and stick-slip of Westerly granite and Cheshire quartzite. in : R. G. J. Sterns, Ed. *Physics and Chemistry of Minerals and Rocks*. New York: John Wiley; 1976: p. 139-150.

2292. de Wit, M. J. and C. R. Stern. A model for ocean-floor metamorphism, seismic layering and magnetism. *Nature*; 1976; v. 264(n. 5587): p. 615-619.

2293. Rabinowitz, P. D., S. C. Cande, and J. L. LaBrecque. The Falkland escarpment and Agulhas fracture zone: the boundary between oceanic and continental basement at conjugate continental margins. *An. Acad. bras. Cienc.*; 1976; v. 48 suppl. : p. 241-251.

2294. Ninkovich, D. . Late Cenozoic clockwise rotation of Sumatra. *Earth Planet. Sci. Lett.* ; 1976; v. 29: p. 269-275.

2295. Bé , A.W.H. and O.R. Anderson. Preservation of planktonic foraminifera and other calcareous plankton. in : *Zooplankton Fixation and Preservation*. Paris: UNESCO Press; 1976: p. 250-258.

2296. Cande, S. C. . A palaeomagnetic pole from Late Cretaceous marine magnetic anomalies in the Pacific. *Geophys. J. R. astr. Soc.* ; 1976; v. 44: p. 547-566.

2297. Schouten, H. and S. C. Cande. Paleomagnetic poles from marine magnetic anomalies. *Geophys. J. R. astr. Soc.*; 1976; v. 44: p. 567-575.

2298. Watts, A. B. . Gravity and bathymetry in the central Pacific Ocean. *J. Geophys. Res.* ; 1976; v. 81(n. 8): p. 1533-1553.

2299. Anderson, R. N., M. G. Langseth, V. Vacquier, and J. Francheteau. New terrestrial heat flow measurements on the Nazca plate. *Earth Planet. Sci. Lett.* ; 1976; v. 29: p. 243-254.

2300. Kay, R. W. and R. G. Senechal. The rare earth geochemistry of the Troodos ophiolite complex. *J. Geophys. Res.* ; 1976; v. 81(n. 5): p. 964-970.

2301. Johnson, T. L. and C. H. Scholz. Dynamic properties of stick-slip friction of rock. *J. Geophys. Res.* ; 1976; v. 81(n. 5): p. 881-888.

2302. Kumar, N., G. Bryan, M. Gorini, and J. Carvalho. Evolution of the continental margin off northern Brazil: sediment distribution and carbon potential. *An. Acad. bras. Cienc.*; 1976; v. 84, supl.: p. 131-143.

2303. Richards, P. G. . Dynamic motions near an earthquake fault: a three-dimensional solution. *Bull. Seismol. Soc. Am.* ; 1976; v. 66 (n. 1): p. 1-32.

2304. Brewer, P.G., D.W. Spencer, P.E. Biscaye, A. Hanley, P.L. Sachs, C.L. Smith, S. Kadar, and J. Fredericks. The distribution of particulate matter in the Atlantic Ocean. *Earth Planet. Sci. Lett.*; 1976; v. 32: p. 315-316.

2305. Horai, K. I. . Heat flow anomaly associated with dike intrusion, 2. *J. Geophys. Res.* ; 1976; v. 81(n. 5): p. 894-898.

2306. Donn, W. L. . Comment on "Ice Ages and the Thermal Equilibrium of the Earth, II" by D. P. Adam. *Quat. Res.*; 1976; v. 6: p. 315-316.

2307. Gorini, M. A. and G. M. Bryan. The tectonic fabric of the equatorial Atlantic and adjoining continental margins: Gulf of Guinea to northeastern Brazil. *An. Acad. bras. Cienc.* ; 1976; v. 48, supl.: p. 101-119.

2308. Anderson, R. N. and M. A. Hobart. The relation between heat flow, sediment thickness, and age in the eastern Pacific. *J. Geophys. Res.* ; 1976; v. 81(n. 17): p. 2968-2989.

2309. Anderson, O.R. and A.W.H. Bé . The ultrastructure of a planktonic foraminifer, *Globigerinoides sacculifer* (Brady), and its symbiotic dinoflagellates. *J. Foraminiferal Res.* ; 1976; v. 6(n. 1): p. 1-21.

2310. Broecker, W. S., J. Goddard, and J. L. Sarmiento. The distribution of <sup>226</sup>Ra in the Atlantic Ocean. *Earth Planet. Sci. Lett.* ; 1976; v. 32: p. 220-235.

2311. Watts, A. B. . Gravity field of the northwest Pacific Ocean basin and its margin -- Philippine Sea. Boulder, CO 80301: GSA; 1976: Map.

2312. Anderson, O. R. . Respiration and photosynthesis during resting cell formation in *Amphora Coffeaeformis* (AG.) Kutz. *Limnol. Oceanogr.*; 1976; v. 21(n. 3): p. 452-456.

2313. Catanzaro, E. J. . Some relationships between exchangeable copper and lead and particulate matter in a sample of Hudson River water. *Environ. Sci. Technol.* ; 1976; v. 10: p. 386-388.

2314. CLIMAP Project Members. The surface of the ice-age earth. *Science*; 1976; v. 191: p. 1131-1137.

2315. Klein, F. W. . Earthquake swarms and the semidiurnal solid earth tide. *Geophys. J. R. astr. Soc.* ; 1976; v. 45: p. 245-295.

2316. Kolla, V., A W.H. Bé , and P.E. Biscaye. Calcium carbonate distribution in the surface sediments of the Indian Ocean. *J. Geophys. Res.* ; 1976; v. 81(n. 15): p. 2605-2616.

2317. Houtz, R. and J. Ewing. Upper crustal structure as a function of plate age. *J. Geophys. Res.* ; 1976; v. 81(n. 14): p. 2490-2498.

2318. Anderson, R.N., G.F. Moore, S.S. Schilt, R.C. Cardwell, A. Tré hu, and V. Vacquier. Heat flow near a fossil ridge on the north flank of the Galapagos spreading center. *J. Geophys. Res.*; 1976; v. 81(n. 11): p. 1828-1838.

2319. Embley, R. W. . New evidence for occurrence of debris flow deposits in the deep sea. *Geology*; 1976; v. 4: p. 371-374.

2320. Roels, O. A., K. C. Haines, and J. B. Sunderlin. The potential yield of artificial upwelling mariculture. in : 10th European Symposium Marine Biology. V. 1 ed.; 1976: p. 381-390.

2321. Amos, A. F., O. A. Roels, and A. Z. Paul. Environmental baseline conditions in a manganese-nodule province in April-May 1975. in : Offshore Technol. Conf., Dallas, TX. Paper OTC 2456 ed.; 1976: p. 341-346.

2322. Saito, T. . Geologic significance of coiling direction in the planktonic foraminifera *Pulleniatina*. *Geology*; 1976; May: p. 305-309.

2323. Garside, C., T. C. Malone, O. A. Roels, and B. A. Sharfstein. An evaluation of sewage-derived nutrients and their influence on the Hudson estuary and New York bight. *Estuarine Coastal Mar. Sci.* ; 1976; v. 4: p. 281-289.

2324. Cormier, V. F. and P. G. Richards. Comments on "The Damping of Core Waves" by Anthony Qamar and Alfredo Eisenberg. *J. Geophys. Res.* ; 1976; v. 81(n. 17): p. 3066-3068.

2325. Hesslein, R. H. . An in situ sampler for close interval pore water studies. *Limnol. Oceanogr.* ; 1976; v. 21(n. 6): p. 912-914.

2326. Alvarez, W., M. Nicoletti, and C. Petrucciani. Potassium-argon ages on pyroclastic rocks from the Pleistocene Sabatino volcanic district, north of Rome. *Soc. Ital, Min. Pet. Rend.* ; 1976; v. 32(n. 1): p. 147-152.

2327. Bonatti, E., B.-M. Honnorez-Guerstein, J. Honnorez, and C. Stern. Hydrothermal pyrite concretions from the Romanche trench (equatorial Atlantic): metallogenesis in oceanic fracture zones. *Earth Planet. Sci. Lett.* ; 1976; v. 32: p. 1-10.

2328. Kolla, V., L. Sullivan, S. S. Streeter, and M. G. Langseth. Spreading of Antarctic bottom water and its effects on the floor of the Indian Ocean inferred from bottom-water potential temperature, turbidity, and sea-floor photography. *Mar. Geol.* ; 1976; v. 21: p. 171-189.

2329. Tatham, R. H., D. W. Forsyth, and L. R. Sykes. The occurrence of anomalous seismic events in eastern Tibet. *Geophys. J. R. astr. Soc.* ; 1976; v. 45: p. 451-481.

2330. Wehmiller, J. F., P. E. Hare, and G. A. Kujala. Amino acids in fossil corals: racemization (epimerization) reactions and their implications for diagenetic models and geochronological studies. *Geochim. Cosmochim. Acta*; 1976; v. 40: p. 763-776.

2331. Pomeroy, P. W., D. W. Simpson, and M. L. Sbar. Earthquakes triggered by surface quarrying -- the Wappingers Falls, New York sequence of June, 1974. *Bull. Seismol. Soc. Am.*; 1976; v. 66(n. 3): p. 685-700.



2332. Anderson, J. G. and J. B. Fletcher. Source properties of a Blue Mt. Lake earthquake . Bull. Seismol. Soc. Am. ; 1976; v. 66(n. 3): p. 677-683.

2333. Biscaye, P. E., V. Kolla, and K. K. Turekian. Distribution of calcium carbonate in surface sediments of the Atlantic Ocean. J. Geophys. Res. ; 1976; v. 81(n. 15): p. 2595-2603.

2334. Forsyth, D. W. . Higher-mode Rayleigh waves as an aid to seismic discrimination. Bull. Seismol. Soc. Am. ; 1976; v. 66(n. 3): p. 827-841.

2335. Richards, P. G. and C. W. Frasier. Scattering of elastic waves from depth-dependent inhomogeneities. Geophysics; 1976; v. 41(n. 3): p. 441-458.

2336. Scholz, C. H. and J. T. Engelder. The role of asperity indentation and ploughing in rock friction -- 1. Asperity creep and stick-slip. Int. J. Rock Mech. Min. Sci, & Geomech. Abstr. ; 1976; v. 13: p. 149-154.

2337. Richards, P. G. . On the adequacy of plane-wave reflection/transmission coefficients in the analysis of seismic body waves. Bull. Seismol. Soc. Am. ; 1976; v. 66(n. 3): p. 701-717.

2338. Cande, S. C. and D. V. Kent. Constraints imposed by the shape of marine magnetic anomalies on the magnetic source. J. Geophys. Res. ; 1976; v. 81(n. 23): p. 4157-4162.

2339. Engelder, J. T. and C. H. Scholz. The role of asperity indentation and ploughing in rock friction -- II. Influence of relative hardness and normal load. Int. J. Rock Mech. Min. Sci. & Geomech. Abstr.; 1976; v. 13: p. 155-163.

2340. Paul, A. Z. . Deep-sea bottom photographs show that benthic organisms remove sediment cover from manganese nodules. Nature; 1976; v. 263(n. 5572): p. 50-51.

2341. Bé , A.W.H. and O.R. Anderson. Gametogenesis in planktonic foraminifera. Science; 1976; v. 192(n. 4242): p. 890-892.

2342. Langseth, M. G. and M. A. Hobart. Interpretation of heat flow measurements in the Vema fracture zone. Geophys. Res. Lett. ; 1976; v. 3(n. 5): p. 241-244.

2343. Anderson, O. R. . Ultrastructure of a colonial radiolarian *Collozoum inerme* and a cytochemical determination of the role of its zooxanthellae. Tissue and Cell; 1976; v. 8(n. 2): p. 195-208.

2344. Alvarez, W., A. Gordon, and E. P. Rashak. Eruptive source of the "Tufo rosso a scorie nere" -- a Pleistocene ignimbrite north of Rome. *Geological Rom.* ; 1975; v. 14: p. 141-153.

2345. Schilling, J. G., R. N. Anderson, and P. Vogt. Rare earth, Fe and Ti variations along the Galapagos spreading centre, and their relationship to the Galapagos mantle plume. *Nature*; 1976; v. 261(n. 5556): p. 108-113.

2346. Haines, K. C. . Growth of the carrageenan-producing tropical red seaweed *Hypnea musciformis* in surface water, 870 m deep water, effluent from a clam mariculture system, and in deep water enriched with artificial fertilizers or domestic sewage. in : 10th European Symposium Marine Biology. V. 1 ed.; 1976: p. 207-220.

2347. Schweickert, R. A. . Early Mesozoic rifting and fragmentation of the Cordilleran orogen in the western USA. *Nature*; 1976; v. 260(n. 5552): p. 586-591.

2348. Tucholke, B. E. and J. I. Ewing. Bathymetry and sediment geometry of the Greater Antilles Outer Ridge and vicinity: discussion and reply. *Geol. Soc. Am. Bull.* ; 1976; v. 87: p. 1370-1374.

2349. Rowlett, H. and J. Kelleher. Evolving seismic and tectonic patterns along the western margin of the Philippine Sea plate. *J. Geophys. Res.* ; 1976; v. 81(n. 20): p. 3518-3524.

2350. Bonatti, E. and J. Honnorez. Section of the earth's crust in the equatorial Atlantic. *J. Geophys. Res.* ; 1976; v. 81(n. 23): p. 4104-4116.

2351. Anderson, O. R. . A cytoplasmic fine-structure study of two spumellarian *Radiolaria* and their symbionts. *Mar. Micropaleontol.* ; 1976; v. 1: p. 81-99.

2352. Sunderlin, J. B., P. T. Baab, and E. M. Patry. Growth of clam and oyster larvae on different algal diets in a tropical artificial upwelling mariculture system. in : Proc. 7th Annual Workshop, World Mariculture Society; 1976: p. 215-228.

2353. Anderson, J. G. . Motions near a shallow rupturing fault: evaluation of effects due to the free surface. *Geophys. J. R. astr. Soc.* ; 1976; v. 46: p. 575-593.

2354. Jacobi, R. and Y. Kristoffersen. Geophysical and geological trends on the continental shelf off northeastern Newfoundland. *Can. J. Earth Sci.* ; 1976; v. 13: p. 1039-1051.

2355. Loudon, K. W. and D. W. Forsyth. Thermal conduction across fracture zones and the gravitational edge effect. *J. Geophys. Res.* ; 1976; v. 81(n. 26): p. 4869-4874.

2356. Schreiber, E. and P. J. Fox. Compressional wave velocities and mineralogy of fresh basalts from the Famous area and the Oceanographer fracture zone and the texture of layer 2A of the oceanic crust. *J. Geophys. Res.* ; 1976; v. 81(n. 23): p. 4071-4076.

2357. Fox, P. J., E. Schreiber, H. Rowlett, and K. McCamy. The geology of the Oceanographer fracture zone: a model for fracture zones. *J. Geophys. Res.* ; 1976; v. 81(n. 23): p. 4117-4128.

2358. O'Nions, R. K. and R. J. Pankhurst. Early Archaean rocks and geochemical evolution of the earth's crust. *Earth Planet. Sci. Lett.* ; 1978; v. 38: p. 211-236.

2359. Kolla, V., D. G. Moore, and J. R. Curray. Recent bottom-current activity in the deep western Bay of Bengal. *Mar. Geol.* ; 1976; v. 21: p. 255-270.

2360. Kukla, G. J. Global variation of snow and ice extent. *Proc. Meteor. Observations from Space: Their Contribution to the First GARP Global Experiment*; 1976: p. 110-115.

2361. Anderson, O. R. . Fine structure of a collodarian radiolarian (*Sphaerococcus punctatum* Muller 1858) and cytoplasmic changes during reproduction. *Mar. Micropaleontol.* ; 1976; v. 1: p. 287-297.

2362. Stern, C., M. J. de Wit, and J. R. Lawrence. Igneous and metamorphic processes associated with the formation of Chilean ophiolites and their implication for ocean floor metamorphism, seismic layering, and magnetism. *J. Geophys. Res.*; 1976; v. 81(n. 23): p. 4370-4380.

2363. Kolla, V., L. Henderson, and P. E. Biscaye. Clay mineralogy and sedimentation in the western Indian Ocean. *Deep-Sea Res.* ; 1976; v. 23: p. 949-961.

2364. Kelleher, J. and W. McCann. Buoyant zones, great earthquakes, and unstable boundaries of subduction. *J. Geophys. Res.* ; 1976; v., 81(n. 26): p. 4885-4896.

2365. Johnson, D. A., M. Ledbetter, and L. H. Burckle. VEMA Channel paleo-oceanography: Pleistocene dissolution cycles and episodic bottom water flow. *Mar. Geol.* ; 1977; v. 23: p. 1-33.

2366. Anderson, T.F., T.W. Donnelly, J.I Drever, E. Eslinger, J.M. Gieskes, M. Kastner, J.R. Lawrence, and E.A. Perry. Geochemistry and diagenesis of deep-sea sediments from Leg 35 of the Deep Sea Drilling Project. *Nature*; 1976; v. 261(n. 5560): p. 473-4762273.

2367. Sarmiento, J. L., D. E. Hammond, and W. S. Broecker. The calculation of the statistical counting error for <sup>222</sup>Rn scintillation counting. *Earth Planet. Sci. Lett.* ; 1976; v. 32: p. 351-356.

2368. Tatham, R. H. and P. L. Stoffa. Vp/Vs -- a potential hydrocarbon indicator. *Geophysics*; 1976; v. 42(n. 5): p. 835-849.

2369. Langseth, M. G., S. J. Keihm, and K. Peters. Revised lunar heat-flow values. *Proc. Lunar Sci. Conf. 7th*; 1976: p. 3143-3171.

2370. Booth, J. D. and L. H. Burckle. Displaced Antarctic diatoms in the southwestern and central Pacific. *Pacific Geol.* ; 1976; v. 11: p. 99-108.

2371. Bonatti, E. . Serpentinite protrusions in the oceanic crust. *Earth Planet. Sci. Lett.* ; 1976; v. 32: p. 107-113.

2372. de Wit, M. J. . The evolution of the Scotia Arc as a key to the reconstruction of southwestern Gondwanaland. *Tectonophysics*; 1977; v. 37: p. 53-81.

2373. Mallet, C. D. and B. C. Heezen. Circum-polar circulation and Late Tertiary changes in the carbonate compensation depth south of Australia. *Mar. Geol.* ; 1977; v. 23: p. 89-101.

2374. Kent, D. V. and N. D. Opdyke. Paleomagnetic field intensity variation recorded in a Brunhes epoch deep-sea sediment core. *Nature*; 1977; v. 266(n. 5598): p. 156-159.

2375. Geitzenauer, K. R., M. B. Roche, and A. McIntyre. Coccolith biogeography from North Atlantic and Pacific surface sediments. in : H. T. S. Ramsay, Ed. . *Oceanic Micropaleontology*. V. 2 ed. London: Academic Press, Inc. ; 1977: p. 973-1008.

2376. Sarmiento, J.L., H.W. Feely, W.S. Moore, A.E. Bainbridge, and W.S. Broecker. The relationship between vertical eddy diffusion and buoyancy gradient in the deep sea. *Earth Planet. Sci. Lett.*; 1976; v. 32: p. 357-370.

2377. Alvarez, W., T. Engelder, and W. Lowrie. Formation of spaced cleavage and folds in brittle limestone by dissolution. *Geology*; 1976; v. 4: p. 698-701.

2378. Lowrie, W. and W. Alvarez. Upper Cretaceous magnetic stratigraphy. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 374-377.

2379. Alvarez, W., M.A. Arthur, A.G. Fisher, W. Lowrie, G. Napoleone, I.P. Silva, and W.M. Roggenthen. Type Section for the Late Cretaceous-Paleocene geomagnetic reversal time scale. *Geol. Soc. Am. Bull.*; 1977; v. 88: p. 383-389.

2380. Menke, W. H. and K. H. Jacob. Seismicity patterns in Pakistan and northwestern India associated with continental collision. *Bull. Seismol. Soc. Am.* ; 1976; v. 66(n. 5): p. 1695-1711.

2381. Sunderlin, J. B., W. J. Tobias, and O. A. Roels. Growth of the European oyster, *Ostrea edulis* Linne, in the St. Croix artificial upwelling mariculture system and in natural waters. *Proc. Natl. Shellfisheries Assoc.* ; 1976; v. 65: p. 43-48.

2382. Thompson, P. R. . Planktonic foraminiferal dissolution and the progress towards a Pleistocene equatorial Pacific transfer function. *J. Foraminiferal Res.* ; 1976; v. 6(n. 3): p. 208-227.

2383. Ridley, W. I. . Some petrological aspects of Imbrium stratigraphy. *Philos. Trans. R. Soc. London*; 1977; v. 285: p. 105-114.

2384. Johnson, D. A., S. E. McDowell, L. G. Sullivan, and P. E. Biscaye. Abyssal hydrography, nephelometry, currents and benthic boundary layer structure in the Vema Channel. *J. Geophys. Res.* ; 1976; v. 81(n. 33): p. 5771-5786.

2385. Bé , A.W.H. and J.C. Duplessy. Subtropical convergence fluctuations and Quaternary climates in the middle latitudes of the Indian Ocean. *Science*; 1976; v. 194: p. 419-422.

2386. Rabinowitz, P. D. and G. M. Purdy. The Kane fracture zone in the western Central Atlantic Ocean. *Earth Planet. Sci. Lett.* ; 1976; v. 33: p. 21-26.

2387. Bé , A.W.H. . 1. An ecological, zoogeographic and taxonomic review of Recent planktonic foraminifera. in: A.T.S. Ramsay, Ed. "Oceanic Micropaleontology". London: Academic Press, Inc.; 1977; v. 1 : p. 1-100.

2388. Bé , A.W.H. and R.W. Gilmer. A zoogeographic and taxonomic review of euthecosomatous pteropoda. in: A. T. S. Ramsay, Ed. *Oceanic Micropaleontology*. V. 1 ed. London: Academic Press, Inc. ; 1977: p. 733-808.

2389. Peng, T-H, W. S. Broecker, G. Kipphut, and N. Shackleton. Benthic mixing in deep sea cores as determined by <sup>14</sup>C dating and its implications regarding climate stratigraphy and the fate of fossil fuel CO<sub>2</sub>. in : N. R. Andersen and A. Malahoff, Eds. *The Fate of Fossil Fuel CO<sub>2</sub> in the Oceans*. New York: Plenum Pub. Corp.; 1977: p. 355-373.

2390. Simpson, H. J., C. R. Olsen, R. M. Trier, and S. C. Williams. Man-made radionuclides and sedimentation in the Hudson River estuary. *Science*; 1976; v. 194: p. 179-183.

2391. Jacobi, R. D. . Sediment slides on the northwestern continental margin of Africa. *Mar. Geol.* ; 1976; v. 22: p. 157-173.

2392. Horai, K. and J. L. Winkler, Jr. . Thermal diffusivity of four Apollo 17 rock samples. *Proc. Lunar Sci. Conf. 7th*; 1976: p. 3183-3204.

2393. Saito, T. and L. H. Burckle. Occurrence of silicoflagellate *Mesocena elliptica*: further evidence on the age of the Wakimoto Formation, OGA Penseinsula, Japan and the recognition of the Jaramillo event. *J. Geol. Soc. Japan*; 1977; v. 83(n. 3): p. 181-186.

2394. Hecht, A.D., A.W.H. Bé , and L. Lott. Ecologic and paleoclimatic implications of morphologic variation of *Orbulina universa* in the Indian Ocean. *Science*; 1976; v. 194: p. 422-424.

2395. Watts, A. B. and W. B. F. Ryan. Flexure of the lithosphere and continental margin basins. *Tectonophysics*; 1976; v. 36: p. 25-44.

2396. Kumar, N., J. E. Damuth, and M. A. Gorini. Relict magnesian calcite oolite and subsidence of the Amazon shelf. *Sedimentology*; 1977; v. 24: p. 143-148.

2397. Ryan, W. B. F. . Quantitative evaluation of the depth of the western Mediterranean before, during and after the Late Miocene salinity crisis. *Sedimentology*; 1976; v. 23: p. 791-813.

2398. Biscaye, P. E. and S. L. Eittreim. Suspended particulate loads and transports in the nepheloid layer of the abyssal Atlantic Ocean. *Mar. Geol.* ; 1977; v. 23: p. 155-172.

2399. LaBrecque, J. L., D. V. Kent, and S. C. Cande. Revised magnetic polarity time scale for Late Cretaceous and Cenozoic time. *Geology*; 1977; v. 5: p. 330-335.

2400. Bonatti, E. and C. G. A. Harrison. Hot lines in the Earth's mantle. *Nature*; 1976; v. 263(n. 5576): p. 402-404.

2401. Amos, A.F., O.A. Roels, C. Garside, T.C. Malone, and A.Z. Paul. Environmental aspects of nodule mining. in: G.P. Glasby, Ed. "Marine Manganese Deposits". Amsterdam and New York: Elsevier Oceanogr. Ser. 15; 1977: p. 391-437.

2402. Gordon, A.L., A.F. Amos, and R.D. Gerard. New York Bight water stratification -- October 1974. in: "Middle Atlantic Continental Shelf and the New York Bight"; Am. Soc. Limnol. Oceanogra. Inc. Spec. Symp.; 1976; v. 2: p. 45-57.

2403. Johnson, T. L., J. Madrid, and T. Koczyński. A study of microseismicity in northern Baja, California. Bull. Seismol. Soc. Am. ; 1976; v. 66(n. 6): p. 1921-1929.

2404. Anderson, O.R. and A.W H. Bé . A cytochemical fine structure study of phagotrophy in a planktonic foraminifer, *Hastigerina pelagica* (d'Orbigny). Biol. Bull. ; 1976; v. 251: p. 437-449.

2405. Bruhn, R.L. and I.W.D. Dalziel. Destruction of the Early Cretaceous marginal basin in the Andes of Tierra del Fuego. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 395-405.

2406. Herron, E.M., R. Bruhn, M. Winslow, and L. Chuaqui. Post Miocene tectonics of the margin of Southern Chile. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 273-284.

2407. Jacob, K.H., K. Nakamura, and J.N. Davies. Trench-volcano gap along the Alaska-Aluetian arc: facts, and speculations on the role of terrigenous sediments for subduction. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1(): p. 243-258.

2408. Kelleher, J. and W. McCann. Bathymetric highs and the development of convergent plate boundaries. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 115-122.

2409. Watanabe, T., M.G. Langseth, and R.N. Anderson. Heat flow in back-arc basins fo the Western Pacific. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 137-161.

2410. Ninkovich, D. and W.L. Donn. Cenozoic explosive volcanism related to east and southeast Asian arcs. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1 : p. 337-347.

2411. Talwani, M., C.C. Windisch, P.L. Stoffa, P. Buhl, and R.E. Houtz. Multichannel seismic study in the Venezuelan Basin and the Curacao Ridge. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 83-98.

2412. Watts, A.B., J.K. Weissel, and F.J. Davey. Tectonic evolution of the South Fiji marginal basin. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 419-427.

2413. Weissel, J.K. Evolution of the Lau basin by the growth of small plates. in: "Island Arcs, Deep Sea Trenches and Back-Arc Basins," Maurice Ewing Ser. Washington, DC: AGU; 1977; v. 1: p. 429-436.

2414. Biscaye, P.E. and C.R. Olsen. Suspended particulate concentrations and compositions in the New York Bight. in: "Middle Atlantic Continental Shelf and the New York Bight," The Am. Soc. Limnol. Oceanogr., Inc. 1976, Spec. Symp.; 1976; v. 2( p. 124-137).

2415. Larson, R. L. . Late Jurassic and Early Cretaceous evolution of the western central Pacific Ocean. *J. Geomagn. Geoelectr.* ; 1976; v. 28: p. 219-236.

2416. Gregersen, S. and L. E. Alsop. Mode conversion of Love waves at a continental margin. *Bull. Seismol. Soc. Am.* ; 1976; v. 66(n. 6): p. 1855-1872.

2417. Burckle, L. H. and R. B. McLaughlin. Size changes in the marine diatom *Coscinodiscus nodulifer* A. Schmidt in the equatorial Pacific. *Micropaleontology*; 1977; v. 23(n. 2): p. 216-222.

2418. Okada, H. and A. McIntyre. Modern coccolithophores of the Pacific and North Atlantic Oceans. *Micropaleontology*; 1977; v. 23(n. 1): p. 1-55.

2419. Bonatti, E., B.-M. Guerstein-Honnorez, and J. Honnorez. Copper-iron sulfide mineralizations from the equatorial Mid-Atlantic Ridge. *Economic Geol.* ; 1976; v. 71: p. 1515-1525.

2420. Ryan, W. B. F. and M. B. Cita. Ignorance concerning episodes of ocean-wide stagnation. *Mar. Geol.* ; 1977; v. 23: p. 197-215.

2421. Heezen, B. C. and M. Rawson. Visual observations of contemporary current erosion and tectonic deformation of the Cocos Ridge crest. *Mar. Geol.* ; 1977; v. 23: p. 173-196.

2422. Houtz, R. E. . Seismic properties of layer 2A in the Pacific. *J. Geophys. Res.* ; 1976; v. 81(n. 35): p. 6321-6331.

2423. Broecker, W. S., T. Takahashi, and Y-H Li. Hydrography of the central Atlantic -- I. The two-degree discontinuity. *Deep-Sea Res.* ; 1976; v. 23: p. 1083-1104.



2424. King, K. Jr. Amino acid survey of Recent calcareous and siliceous deep-sea microfossils. *Micropaleontology*; 1977; v. 23(n. 2): p. 180-193.
2425. Perfit, M. R. . Petrology and geochemistry of mafic rocks from the Cayman Trench: evidence for spreading. *Geology*; 1977; v. 5: p. 105-110.
2426. O'Nions, R. K., P. J. Hamilton, and N. M. Evensen. Variations in  $^{143}\text{Nd}/^{144}\text{Nd}$  and  $^{87}\text{Sr}/^{86}\text{Sr}$  ratios in oceanic basalts. *Earth Planet. Sci. Lett.* ; 1977; v. 34: p. 13-22.
2427. Ninkovich, D. and W. L. Donn. Explosive Cenozoic volcanism and climatic implications. *Science*; 1976; v. 194: p. 899-906.
2428. Eittrheim, S., E. M. Thorndike, and L. Sullivan. Turbidity distribution in the Atlantic Ocean. *Deep-Sea Res.* ; 1976; v. 23: p. 1115-1127.
2429. Thierstein, H. R. . Mesozoic calcareous nannoplankton biostratigraphy of marine sediments. *Mar. Micropaleontol.* ; 1976; v. 1: p. 325-362.
2430. Bjorklund, K. R. . *Actinomma haysi*, n. sp., its Holocene distribution and size variation in Atlantic Ocean sediments. *Micropaleontology*; 1977; v. 23(n. 1): p. 114-126.
2431. Lowrie, W. and W. Alvarez. Paleomagnetic studies of the Scaglia Rossa limestone in Umbria. *Mem. Soc. Geol. It.* ; 1976; v. 15: p. 41-50.
2432. Torgersen, T., Z. Top, W.B. Clarke, W.J. Jenkins, and W.S. Broecker. A new method for physical limnology-tritium-helium---3ages---results for Lakes Erie, Huron, and Ontario. *Limnol. Oceanogr.*; 1977; v. 22(n. 2): p. 181-193.
2433. Larson, R. L. . Early Cretaceous breakup of Gondwanaland off western Australia. *Geology*; 1977; v. 5: p. 57-60.
2434. Hays, J. D., J. Imbrie, and N. J. Shackleton. Variations in the Earth's orbit: pacemaker of the ice ages. *Science*; 1976; v. 194: p. 1121-1132.
2435. Shackleton, N. J. . The oxygen isotope stratigraphic record of the Late Pleistocene. *Philos. Trans. R. Soc. London B*; 1977; v. 280: p. 169-182.

2436. Forsyth, D. W. . The evolution of the upper mantle beneath mid-ocean ridges. *Tectonophysics*; 1977; v. 38: p. 89-118.
2437. Klein, F. W. . Tidal triggering of reservoir-associated earthquakes. *Eng. Geol.* ; 1976; v. 10: p. 197-210.
2438. Scholz, C. H. . Transform fault systems of California and New Zealand: similarities in their tectonic and seismic styles. *J. Geol. Soc. London*; 1977; v. 133: p. 215-229.
2439. Broecker, W.S. and T. Takahashi. The solubility of calcite in sea water. in: D.G. Fraser, Ed. "Thermodynamics in Geology". Dordrecht-Holland: D. Reidel Pub. Co.; 1977: p. 365-379.
2440. Donn, W. L. and D. M. Shaw. Model of climate evolution based on continental drift and polar wandering. *Geol. Soc. Am. Bull.* ; 1977; v. 83: p. 390-396.
2441. Larson, R. L. . Deep Sea Drilling results related to the paleomagnetic and paleontologic stratigraphy at Gubbio. *Mem. Soc. Geol. It.*; 1976; v. 15: p. 61-68.
2442. Alvarez, W., T. Engelder, and W. Lowrie. The role of calcium carbonate dissolution in deformation of the Scaglia Rossa limestone. *Mem. Soc. Geol. It.* ; 1976; v. 15: p. 33-40.
2443. Brueckner, H. K. . A crustal origin for eclogites and a mantle origin for garnet peridotites: strontium isotopic evidence from clinopyroxenes. *Contrib. Mineral Petrol.* ; 1977; v. 60: p. 1-15.
2444. Einarsson, P., F. W. Klein, and S. Bjornsson. The Borgarfjordur earthquakes of 1974 in west Iceland. *Bull. Seismol. Soc. Am.* ; 1977; v. 67(n. 1): p. 187-208.
2445. Hays, J. D. and N. J. Shackleton. Globally synchronous extinction of the radiolarian *Stylatractus universus*. *Geology*; 1976; v. 4: p. 649-652.
2446. Simpson, D. W. . Seismicity changes associated with reservoir loading. *Engineering Geol.* ; 1976; v. 10: p. 123-150.
2447. Erickson, A.J., G. Simmons, and W.B.F. Ryan. Review of heatflow data from the Mediterranean and Aegean Seas. in: Biju-Duval and L. Montadert, Eds. "Structural History of the Mediterranean Basin". Paris: Editions Technip; 1977: p. 263-280.

2448. Klein, F. W., P. Einarsson, and M. Wyss. The Reykjanes peninsula, Iceland, earthquake swarm of September 1972 and its tectonic significance. *J. Geophys. Res.*; 1977; v. 82(n. 5): p. 865-888.
2449. Kowsmann, R., R. Leyden, and O. Francisconi. Marine seismic investigations, Southern Brazil Margin. *Am. Assoc. Pet. Geol. Bull.* ; 1977; v. 61(n. 4): p. 546-557.
2450. Bilham, R. . A sea-level recorder for tectonic studies. *Geophys. J. R. astr. Soc.* ; 1977; v. 48: p. 307-314.
2451. Kumar, N. and R. W. Embley. Evolution and origin of Ceara Rise: an aseismic rise in the western equatorial Atlantic. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 683-694.
2452. Houtz, R. E. . Sound-velocity characteristics of sediment from the eastern South American margin. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 720-722.
2453. Houtz, R. E., W. J. Ludwig, J. D. Milliman, and J. A. Grow. Structure of the northern Brazilian continental margin. *Geol. Soc. Am. Bull.*; 1977; v. 88: p. 711-719.
2454. Damuth, J. E. . Late Quaternary sedimentation in the western equatorial Atlantic. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 695-710.
2455. Engelder, T., M. L. Sbar, and R. Kranz. A mechanism for strain relaxation of Barre Granite: opening of microfractures. *Pageoph.* ; 1977; v. 115: p. 27-40.
2456. Engelder, T. and M. L. Sbar. The relationship between in situ strain relaxation and outcrop fractures in the Potsdam Sandstone, Alexandria Bay, New York. *Pageoph.* ; 1977; v. 115: p. 41-55.
2457. O'Nions, R.K. and R.J. Powell. The thermodynamics of trace element distribution. in: D.G. Fraser, Ed. "Thermodynamics in Geology": NATO Advanced Studies Inst., Ser. C. Mathematics and Phys. Sci.; 1977: p. 349-363.
2458. Rind, D. . Heating of the lower thermosphere by the dissipation of acoustic waves. *J. Atmos. Terr. Phys.* ; 1977; v. 39: p. 445-556.
2459. Li, Y-H. Confusion of the mathematical notation for defining the residence time. *Geochim. Cosmochim. Acta*; 1977; v. 41: p. 555-556.

2460. Nakamura, K. . Volcanoes as possible indicators of tectonic stress orientation -- principle and proposal. *J. Volcanol. Geotherm. Res.* ; 1977; v. 2: p. 1-16.
2461. Burckle, L. H. . Pliocene and Pleistocene diatom datum levels from the Equatorial Pacific. *Quat. Res.* ; 1977; v. 7: p. 330-340.
2462. Opdyke, N. D., E. H. Lindsay, N. M. Johnson, and T. Downs. The paleomagnetism and magnetic polarity stratigraphy of the mammal-bearing section of Anza Borrego State Park, California. *Quat. Res.*; 1977; v. 7: p. 316-329.
2463. Tucholke, B. E., G. M. Bryan, and J. I. Ewing. Gas-hydrate horizons detected in seismic-profiler data from the western North Atlantic. *Am. Assoc. Pet. Geol. Bull.* ; 1977; v. 61(n. 5): p. 698-707.
2464. Seeber, L. and K.H. Jacob. Microearthquake survey of northern Pakistan preliminary results and tectonic implications. *Proc. C.N.R.S. Symp. on Himalayan Ecology and Geology*, Paris; 1976: p. 347-360.
2465. Leyden, R. . Salt distribution and crustal models for the eastern Brazilian margin. *An. Acad. bras. Cienc.*; 1976; v. 48, supl.: p. 159-168.
2466. Hemleben, C., A.W.H. Bé , O.R. anderson, and S. Tuntivate. Test morphology, organic layers and chamber formation of the planktonic foraminifer *Globorotalia menardii* (D'Orbigny). *J. Foraminiferal Res.* ; 1977; v. 7(n. 1): p. 1-25.
2467. Gordon, A. L., D. T. Georgi, and H. W. Taylor. Antarctic polar front zone in the western Scotia Sea -- summer 1975. *J. Phys. Oceanogr.* ; 1977; v. 7(n. 3): p. 309-328.
2468. Kuo, J. T. and R. C. Jachens. Indirect mapping of ocean tides by solving the inverse problem for the tidal gravity observations. *Ann. Geophys.*; 1977; t. 33(fasc. 1/2): p. 73-82.
2469. Rabinowitz, P. D. and A. Cooper. Structure and sediment distribution in the western Bering Sea. *Mar. Geol.* ; 1977; v. 24: p. 309-320.
2470. Konig, M. and M. Talwani. A geophysical study of the southern continental margin of Australia: Great Australian Bight and western sections. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 1000-1014.
2471. Malone, T. C. . Light-saturated photosynthesis by phytoplankton size fractions in the New York Bight, USA. *Mar. Biol.* ; 1977; v. 42: p. 281-292.

2472. Anderson, R. N., M. G. Langseth, and J. G. Sclater. The mechanisms of heat transfer through the floor of the Indian Ocean. *J. Geophys. Res.* ; 1977; v. 82(n. 23): p. 3391-3409.

2473. Heezen, B.C. Submarine geology from submersibles. in: R.A. Geyer, Ed. "Submersibles and Their Use in Oceanography and Ocean Engineering". Amsterdam: Elsevier Sci. Pub. Co.; 1977: p.169-212.

2474. Bé , A.W.H., C. Hemleben, O.R. Anderson, M. Spindler, J. Hacunda, and S. Tuntivate-Choy. Laboratory and field observations of living planktonic foraminifera. *Micropaleontology*; 1977; v. 23(n. 2): p. 155-179.

2475. Schreiber, E. and P. J. Fox. Density and P-wave velocity of rocks from the FAMOUS region and their implication to the structure of the oceanic crust. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 600-608.

2476. Rabinowitz, P. D. and J. L. LaBrecque. The isostatic gravity anomaly: key to the evolution of the ocean-continent boundary at passive continental margins. *Earth Planet. Sci. Lett.* ; 1977; v. 35: p. 145-150.

2477. Bonatti, E., C.G.A. Harrison, D.E. Fisher, J. Honnorez, J.-G. Schilling, J.J. Stipp, and M. Zentilli. Easter Volcanic chain (southeast Pacific): a mantle hot line. *J. Geophys. Res.*; 1977; v. 82(n. 17): p. 2457-2478.

2478. King, K. Jr. and C. Neville. Isoleucine epimerization for dating marine sediments: importance of analyzing monospecific foraminiferal samples. *Science*; 1977; v. 195: p. 1333-1335.

2479. Simpson, H.J., C.R. Olsen, R. Bopp, R.M. Trier, and S.C. Williams. Cesium-137 as a tracer for reactive pollutants in estuarine sediments. in: "First American-Soviet Symposium on Chemical Pollution of the Marine Environment," U.S. Environmental Protection Agency, EPA-600/9-78-038. Gulf Breeze, FL; 1978: p. 102-113.

2480. Gordon, A.L., H.W. Taylor, and G.T. Georgi. Antarctic oceanographic zonation. in: M.J. Dunbar, Ed. "Polar Oceans". Calgary: Arctic Institute of North America; 1977: p. 45-76.

2481. Burckle, L.H. and N.D. Opdyke. Late Neogene diatom correlations in the Circum-Pacific. in: T. Saito and H. Ujiie, Eds. "Proc. First International Congress on Pacific Neogene Stratigraphy". Tokyo: Kaiyo Shuppan Co. Ltd.; 1977: p. 255-284.

2482. Stoll, R. D. . Acoustic waves in ocean sediments. *Geophysics*; 1977; v. 42(n. 4): p. 715-725.
2483. Cande, S. C. and Y. Kristoffersen. Late Cretaceous magnetic anomalies in the North Atlantic. *Earth Planet. Sci. Lett.* ; 1977; v. 35: p. 215-224.
2484. Eldholm, O. and M. Talwani. Sediment distribution and structural framework of the Barents Sea. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 1015-1029.
2485. Kristoffersen, Y. and M. Talwani. Extinct triple junction south of Greenland and the Tertiary motion of Greenland relative to North America. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 1037-1049.
2486. Talwani, M. and O. Eldholm. Evolution of the Norwegian-Greenland Sea. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 969-999.
2487. Fodor, R. V., J. W. Husler, and N. Kumar. Petrology of volcanic rocks from an aseismic rise: implications for the origin of the Rio Grande rise, South Atlantic Ocean. *Earth Planet. Sci. Lett.* ; 1977; v. 35: p. 225-233.
2488. Heezen, B. C. and M. Rawson. Visual observations of the sea floor subduction line in the Middle-America Trench. *Science*; 1977; v. 196: p. 423-426.
2489. Damuth, J. E. and D. E. Hayes. Echo character of the East Brazilian continental margin and its relationship to sedimentary processes. *Mar. Geol.* ; 1977; v. 24: p. 73-95.
2490. Tucholke, B. E. and G. B. Carpenter. Sediment distribution and Cenozoic sedimentation patterns on the Agulhas Plateau. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 1337-1346.
2491. Brock, W. G. and T. Engelder. Deformation associated with the movement of the Muddy Mountain overthrust in the Buffington window, southeastern Nevada. *Geol. Soc. Am. Bull.*; 1977; v. 88: p. 1667-1677.
2492. Simpson, D. W. and J. R. Cleary. P-signal complexity and upper mantle structure. *Geophys. J. R. astr. Soc.* ; 1977; v. 49: p. 747-756.
2493. Houtz, R. and C. Windisch. Barents Sea continental margin sonobuoy data. *Geol. Soc. Am. Bull.* ; 1977; v. 88: p. 1030-1036.

2494. Shackleton, N.J. Carbon-13 in Uvigerina: tropical rainforest history and the equatorial Pacific carbonate dissolution cycles. in: N.R. Andersen and A. Malahoff, Eds. "The Fate of Fossil Fuel CO<sub>2</sub> in the Oceans". New York: Plenum Pub. Corp.; 1977: p. 213-241.

2495. Paul, A.Z. The effect of benthic biological processes on the CO<sub>2</sub> carbonate system. in: N.R. Andersen and A. Malahoff, Eds. "The Fate of Fossil Fuel CO<sub>2</sub> in the Oceans". New York: Plenum Pub. Co.; 1977: p. 345-354.

2496. deWit, M. J., S. Dutch, R. Kligfield, R. Allen, and C. Stern. Deformation, serpentinization and emplacement of a dunite complex, Gibbs Island, South Shetland Islands: possible fracture zone tectonics. *J. Geol.*; 1977; v. 85: p. 745-762.

2497. Bonatti, E., M. Sarnthein, A. Boersma, M. Gorini, and J. Honnorez. Neogene crustal emersion and subsidence, at the Romanche fracture zone, equatorial Atlantic. *Earth Planet, Sci. Lett.*; 1977; v. 35: p. 369-383.

2498. Hunkins, K. Oceanographic aspects of the Arctic Ice Dynamics Joint Experiment. in: M.J. Dunbar, Ed. "Polar Oceans". Calgary: Arctic Institute of North America; 1977: p. 209-218.

2499. Gordon, A.L. and M.R. Rodman. Southern ocean temperature gradient near 20C. in: M. Angel, Ed. "A Voyage of Discovery". Oxford: Pergamon Press; 1977: p. 85-102.

2500. Cormier, V. F. and P. G. Richards. Full wave theory applied to a discontinuous velocity increase: the inner core boundary. *J. Geophys.* ; 1977; v. 43: p. 3-31.

2501. Biscaye, P.E., C.R. Olsen, and G. Mathieu. Suspended particulates and natural radionuclides as tracers of pollutant transports in continental shelf waters of the eastern USA. in: "First American-Soviet Symposium on Chemical Pollution of the Marine Environment". Gulf Breeze, FL: U.S. Environmental Protection Agency, EPA-600/9-78-038; 1978: p. 125-146.

2502. Fink, J. and G. J. Kukla. Pleistocene climates in Central Europe: at least 17 interglacials after the Olduvai event. *Quat. Res.* ; 1977; v. 7: p. 363-371.

2503. Nakamura, K., K. H. Jacob, and J. N. Davies. Volcanoes as possible indicators of tectonic stress orientation -- Aleutians and Alaska. *Pageoph.* ; 1977; v. 115: p. 87-112.

2504. Jacobs, S.S. and D.T. Georgi. Observations on the southwest Indian/Antarctic Ocean. in: M. Angel, Ed. "A Voyage of Discovery". Oxford: Pergamon Press; 1977: p. 43-84.

2505. Talwani, M. Distribution of basement under the eastern North Atlantic Ocean and the Norwegian Sea. in: D.R. Bowes and B.E. Leake, Eds. "Crustal Evolution in Northwestern Britain and Adjacent Regions". Liverpool: Seel House Press; 1978: p. 347-376.

2506. Rabinowitz, P.D., S.C. Cande, and D.E. Hayes. The J-anomaly in the central North Atlantic Ocean. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1979; v. 43: p. 879-885.

2507. Herman, B. M., M. G. Langseth, and M. A. Hobart. Heat flow in the oceanic crust bounding western Africa. *Tectonophysics*; 1977; v. 41: p. 61-77.

2508. Menke, W. H. . Lateral inhomogeneities in P velocity under the Tarbela array of the lesser Himalayas of Pakistan. *Bull. Seismol. Soc. Am.* ; 1977; v. 67(n. 3): p. 725-734.

2509. Scholz, C. H. . A physical interpretation of the Haicheng earthquake prediction. *Nature*; 1977; v. 267(n. 5607): p. 121-124.

2510. Sykes, L. R. . Research on earthquake prediction and related areas at Columbia University. *J. Phys. Earth*; 1977; v. 25, Suppl.: p. S13-S29.

2511. Saito, T. and P. E. Biscaye. Emendation of *Riveroinella martinezpicoi* Bermudez and Seiglie, 1967, and synonymy of *Riveroinella* with *Cassigerinella* Pokorny, 1955. *Micropaleontology*; 1977; v. 23(n. 3): p. 319-329.

2512. Chun, K-Y and T. Yoshii. Crustal structure of the Tibetan Plateau: a surface-wave study by a moving window analysis. *Bull. Seismol. Soc. Am.* ; 1977; v. 67(n. 3): p. 735-750.

2513. Broecker, W.S. and T. Takahashi. Neutralization of fossil fuel CO<sub>2</sub> by marine calcium carbonate. in: N.R. Andersen and A. Malahoff, Eds. "The Fate of Fossil Fuel CO<sub>2</sub> in the Oceans". New York: Plenum Pub. Corp.; 1977: p. 213-241.

2514. Tucholke, B.E. Relationships between acoustic stratigraphy and litho-stratigraphy in the western North Atlantic Basin. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1979; v. 43: p. 827-846.

2515. Carmichael, D., W.J. Ludwig, J.I. Ewing, G. Carpenter, and A.C. Hubbard. A pop-up ocean bottom hydrophone. *Mar. Geophys. Res.*; 1977; v. 3: p. 225-228.

2516. Van der Voo, R. and K. L. Grubbs . Paleomagnetism of the Triassic Chugwater redbeds revisited (Wyoming, USA). *Tectonophysics*; 1977; v. 41: p. T27-T33.



2517. Thierstein, H. R., K. R. Geitzenauer, B. Molfino, and N. J. Shackleton. Global synchronicity of late Quaternary coccolith datum levels: validation by oxygen isotopes. *Geology*; 1977; v. 5: p. 400-404.

2518. Ruddiman, W. F. . North Atlantic ice-rafting: a major change at 75,000 years before the present. *Science*; 1977; v. 196: p. 1208-1211.

2519. Engelder, T. and R. Engelder. Fossil distortion and decollement tectonics of the Appalachian Plateau. *Geology*; 1977; v. 5: p. 457-460.

2520. Watts, A. B. and A. R. Leeds. Gravimetric geoid in the Northwest Pacific Ocean. *Geophys. J. R. astr. Soc.*; 1977; v. 50: p. 249-278.

2521. Adams, C.G., R.H. Benson, R.B. Kidd, W.B.F. Ryan, and R.C. Wright. The Messinian salinity crisis and evidence of Late Miocene eustatic changes in the world ocean. *Nature*; 1977; v. 269(n. 5627): p. 383-386.

2522. Cochran, J. R. and M. Talwani. Free-air gravity anomalies in the world's oceans and their relationship to residual elevation. *Geophys. J. R. astr. Soc.* ; 1977; v. 50: p. 495-552.

2523. Kolla, V. and P. E. Biscaye. Distribution and origin of quartz in the sediments of the Indian Ocean. *J. Sediment. Petrol.* ; 1977; v. 47(n. 2): p. 642-649.

2524. Fletcher, J. B. and L. R. Sykes. Earthquakes related to hydraulic mining and natural seismic activity in western New York State`. *J. Geophys. Res.* ; 1977; v. 82(n. 26): p. 3767-3780.

2525. Takahashi, T. and W.S. Broecker. Mechanisms for calcite dissolution on the sea floor. in: N.R. Andersen and A. Malahoff, Eds. "The Fate of Fossil Fuel CO<sub>2</sub> in the Oceans". New York: Plenum Pub. Corp.; 1977: p. 455-477.

2526. Nesteroff, W. D. and B. C. Heezen. Du mode de formation de quelques nodules et encroulements de ferromanganese des grands fonds océaniques. *C. R. Acad. Sc., Paris*; 1977; t. 284(Ser. D. ): p. 799-801.

2527. Balachandran, N. K., W. L. Donn, and D. H. Rind. Concorde sonic booms as an atmospheric probe. *Science*; 1977; v. 197: p. 47-49.

2528. Weissel, J. K. and D. E. Hayes. Evolution of the Tasman Sea reappraised. *Earth Planet. Sci. Lett.* ; 1977; v. 36: p. 77-84.

2529. Ujite, H., T. Saito, D.V. Kent, P.R. Thompson, H. Okada, G. deVries Klein, I. Koizumi, H.E. Harper, Jr., and T. Sato. Biostratigraphy, paleomagnetism and sedimentology of Late Cenozoic sediments in northwestern Hokkaido, Japan. *Bull. Nat. Sci. Museum, Ser. C.*; 1977; v. 3(n. 2): p. 49-102.
2530. Durazzi, J. T. . Stable isotopes in the ostracod shell: a preliminary study. *Geochim. Cosmochim. Acta*; 1977; v. 41: p. 1168-1170.
2531. Hawkesworth, C.J., R.K. O'Nions, R.J. Pankhurst, P.J. Hamilton, and N.M. Evensen. A geochemical study of island-arc and back-arc tholeiites from the Scotia Sea. *Earth Planet. Sci. Lett.*; 1977; v. 36: p. 253-262.
2532. Schreiber, B. C. and E. Schreiber. The salt that was. *Geology*; 1977; v. 5: p. 527-528.
2533. Van der Voo, R. and R. B. French. Paleomagnetism of the Late Ordovician Juniata Formation and the remagnetization hypothesis. *J. Geophys. Res.* ; 1977; v. 82(n. 36): p. 5796-5802.
2534. Hamilton, P. J., R. K. O'Nions, and N. M. Evensen. Sm-Nd dating of Archaean basic and ultrabasic volcanics. *Earth Planet. Sci. Lett.* ; 1977; v. 36: p. 263-268.
2535. McDonald, W. G., A. C. Hubbard, R. G. Bookbinder, and K. McCamy. Design and shipboard operation of a multipurpose ocean bottom seismograph. *Mar. Geophys. Res.* ; 1977; v. 3: p. 179-196.
2536. Ruddiman, W. F. and A. McIntyre. Late Quaternary surface ocean kinematics and climatic change in the high-latitude North Atlantic. *J. Geophys. Res.* ; 1977; v. 82(n. 27): p. 3877-3887.
2537. Keihm, S. J. and M. G. Langseth. Lunar thermal regime to 300 km. *Proc. 8th Lunar Sci. Conf*; 1977: p. 499-514.
2538. Wollin, G., W. B. F. Ryan, D. B. Ericson, and J. H. Foster. Paleoclimate, paleomagnetism and the eccentricity of the earth's orbit. *Geophys. Res. Lett.* ; 1977; v. 4(n. 7): p. 267-270.
2539. Hammond, D. E., H. J. Simpson, and G. Mathieu. Radon 222 distribution and transport across the sediment-water interface in the Hudson River estuary. *J. Geophys. Res.* ; 1977 ; v. 82(n. 27): p. 3918-3920.

2540. Choy, G. L. . Theoretical seismograms of core phases calculated by frequency-dependent full wave theory, and their interpretation. *Geophys. J. R. astr. Soc.* ; 1977; v. 51: p. 275-312.

2541. Saito, T. Late Cenozoic planktonic foraminiferal datum levels: the present state of knowledge toward accomplishing Pan-Pacific stratigraphic correlation. in: "Proceedings for the First International Congress on Pacific Neogene Stratigraphy, Tokyo 1976". Tokyo: Kaiyo Shuppan Co. Ltd.; 1977: p. 61-80.

2542. Anderson, O. R. . Cytoplasmic fine structure of nassellarian Radiolaria. *Mar. Micropaleontol.* ; 1977; v. 2: p. 251-264.

2543. Lancelot, Y. and R. W. Embley. Piercement structures in deep oceans. *Am. Assoc. Pet. Geol. Bull.* ; 1977; v. 61(n. 11): p. 2991-2000.

2544. Vergnaud-Grazzini, C., W. B. F. Ryan, and M. B. Cita. Stable isotopic fractionation, climate change and episodic stagnation in the eastern Mediterranean during the late Quaternary. *Mar. Micropaleontol.* ; 1977; v. 2: p. 353-370.

2545. LaBrecque, J. and P.D. Rabinowitz. Magnetic anomalies bordering the continental margin of Argentina. in: *Map Series*. Tulsa, OK 74101: Available from AAPG, Box 979; 1977.

2546. Sclater, J. G., H. Dick, I. O. Norton, and D. Woodroffe. Tectonic structure and petrology of the Antarctic plate boundary near the Bouvet triple junction. *Earth Planet. Sci. Lett.* ; 1978; v. 37: p. 393-400.

2547. Houtz, R. E. and W. J. Ludwig. Structure of Colombia Basin, Caribbean Sea from profiler-sonobuoy measurements. *J. Geophys. Res.* ; 1977; v. 82(n. 30): p. 4861-4867.

2548. Keller, J., W. B. F. Ryan, D. Ninkovich, and R. Altherr. Explosive volcanic activity in the Mediterranean over the last 200,000 years as recorded in deep sea sediments. *Geol. Soc. Am. Bull.* ; 1978; v. 89(n. 4): p. 591-604.

2549. Rabinowitz, P.D. Free-air gravity anomalies bordering the continental margin of Argentina. in: *Map Series*. Tulsa, OK 74101: Available from AAPG, Box 979; 1977.

2550. Anderson, O. R. . Fine structure of a marine ameba associated with a glue-green alga in the Sargasso Sea. *J. Protozool.* ; 1977; v. 24(n. 3): p. 370-376.

2551. Houtz, R. E., D. E. Hayes, and R. G. Markl. Kerguelen Plateau bathymetry, sediment distribution and crustal structure. *Mar. Geol.* ; 1977; v. 25: p. 95-130.

2552. Ninkovich, D., J.-P. Cadet, L. H. Burckle, and S. Hammond. Le volcanisme explosif de l'arc des Aleoutiennes: repartition spatio-temporelle des cendres dans les sediments marins: implications geodynamiques. *C.R. somm. Soc. geol. Fr.*; 1977; fasc. 5: p. 273-276.

2553. Embley, R. W. and R. D. Jacobi. Exotic middle Miocene sediment from Cape Verde Rise and its relation to piercement structures. *Am. Assoc. Pet. Geol. Bull.* ; 1977; v. 61(N. 11, PT. I OF II); ISSN P. 2004-2009.

2554. Tucholke, B. E. . Sedimentation processes and acoustic stratigraphy in the Bellingshaussen Basin. *Mar. Geo.* ; 1977; V. 25: P. 209-230.

2555. Kranz, R. L. and C. H. Scholz. Critical dilatant volume of rocks at the onset of Tertiary creep. *J. Geophys. Res.* ; 1977; v. 82(n. 30): p. 4893-4898.

2556. Watkins, N.D., R.S.J. Sparks, H. Sigurdsson, T.C. Huang, A. Federman, S. Carye, and D. Ninkovich. Volume and extent of the Minoan tephra from Santorini Volcano: new evidence from deep-sea sediment cores. *Nature*; 1978; v. 271(n. 5641): p. 122-126.

2557. Ruddiman, W. F. . Late Quaternary deposition of ice-rafted sand in the subpolar North Atlantic (lat. 40o to 65o n). *Geol. Soc. Am. Bull.*; 1977; v.88: p. 1813-1827.

2558. Scheidegger, K. F., P. A. Jezek, and D. ninkovich. Chemical and optical studies of glass shards in Pleistocene and Pliocene ash layers from DSDP Site 192, Northwest Pacific Ocean. *J. Volcanol. Geotherm. Res.* ; 1978; v. 4: p. 99-116.

2559. Jacobi, R.D. and C.L. Mrozowski. Sediment slides and sediment waves in the Bonin Trough, western Pacific. *Mar. Geol.*; 1979; v. 29: p. M1-M9.

2560. Kukla, G.J., J.K. Angell, J. Korshover, H. Dronia, M. Hoshiai, J. Namias, M. Rodewald, R. Yamamoto, and T. Iwashima. New data on climatic trends. *Nature*; 1977; v. 270(n. 5638): p. 573-580.

2561. Weissel, J. K., D. E. Hayes, and E. M. Herron. Plate tectonics synthesis: the displacements between Australia, New Zealand, and Antarctica since the Late Cretaceous. *Mar. Geol.* ; 1977; v. 25: p. 231-277.

2562. Schreiber, E. The Moon and Q. *Proc. Lunar Sci. Conf. 8th*; 1977: p. 1201-1208.

2563. Kristoffersen, Y. . Sea-floor spreading and the early opening of the North Atlantic. *Earth Planet. Sci. Lett.* ; 1978; v. 38: p. 273-290.

2564. Grow, J. A. and R. G. Markl. IPOD-USGS multichannel seismic reflection profile from Cape Hatteras to the Mid-Atlantic Ridge. *Geology*; 1977; v. 5: p. 625-630.

2565. Markl, R. G. . Further evidence for the Early Cretaceous breakup of Gondwanaland off southwestern Australia. *Mar. Geol.* ; 1978; v. 26: p. 41-48.

2566. Bonatti, E. . Vertical tectonism in oceanic fracture zones. *Earth Planet. Sci. Lett.* ; 1978; v. 37: p. 369-379.

2567. Li, Y-H, G. Mathieu, P. Biscaye, and H. J. Simpson. The flux of <sup>226</sup>Ra from estuarine and continental shelf sediments. *Earth Planet. Sci. Lett.*; 1977; v. 37: p. 237-241.

2568. Garside, C. and T. C. Malone. Monthly oxygen and carbon budgets of the New York Bight Apex. *Estuarine Coastal Mar. Sci.* ; 1978; v. 6: p. 93-104.

2569. Kent, D. V. . An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary. *Geology*; 1977; v. 5: p. 769-771.

2570. Rabinowitz, P.D., M. Delach, M. Truchan, and A. Lonardi. Bathymetry of the Argentine continental margin and adjacent areas. Tulsa, OK 74101: Available from AAPG, Box 979; 1978.

2571. Lowrie, W. and W. Alvarez. Late Cretaceous geomagnetic polarity sequence: detailed rock and paleomagnetic studies of the Scaglia Rossa limestone at Gubbio, Italy. *Geophys. J. R. astr. Soc.* ; 1977; v. 51(n. 3): p. 561-581.

2572. Schreiber, B.C., R. Catalano, and E. Schreiber. An evaporitic lithofacies continuum: latest Miocene (Messinian) deposits of Salemi Basin (Sicily) and a modern analog. in : J.H. Fisher, Ed. "Reefs and Evaporites -- Concepts and Depositional Models". Tulsa, OK: AAPG Studies in Geology #5; 1977: p. 169-180.

2573. Embley, R. W. and M. G. Langseth. Sedimentation processes on the continental rise of northeastern South America. *Mar. Geol.* ; 1977; v. 25: p. 279-297.

2574. Prell, W. L. . Winnowing of recent and Late Quaternary deep-sea sediments: Colombia Basin, Caribbean Sea. *J. Sediment Petrol.* ; 1977; v. 47(n. 4): p. 1583-1592.

2575. Ridley, W. I. The crystallisation trends of spinels in Tertiary basalts from Rhum and Muck and their petrogenetic significance. *Contrib. Mineral. Petrol.* ; 1977; v. 64: p. 243-255.

2576. Fornari, D. J., A. Malahoff, and B. C. Heezen. Volcanic structure of the crest of the Puna Ridge, Hawaii: geophysical implications of submarine volcanic terrain. *Geol. Soc. Am. Bull.*; 1978; v. 89: p. 605-616.

2577. Rabinowitz, P. D. . Geophysical study of the continental margin of Southern Africa: reply to R. A. Scrutton. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 791-796.

2578. Bower, P. M., H. J. Simpson, S. C. Williams, and Y-H Li. Heavy metals in the sediments of Foundry Cove, Cold Spring, New York. *Environ. Sci. Technol.* ; 1978; v. 12: p. 683-687.

2579. Bé , A.W.H. and W. H. Hutson. Ecology of planktonic foraminifera and biogeographic patterns of life and fossil assemblages in the Indian Ocean. *Micropaleontology*; 1977; v. 23(n. 4): p. 369-414.

2580. Ludwig, W.J., G. Carpenter, R.E. Houtz, A.G. Lonardi, and F.F. Rios. Sediment isopach map: Argentine continental margin and adjacent areas. AAPG, Box 979, Tulsa, OK 74101; 1978.

2581. Houtz, R. E. Interval velocities in crustal layers from sonobuoy records of mantle reflections. *J. Geophys. Res.* ; 1977; v. 82(n. 33): p. 4395-5400.

2582. Carter, S. R., N. M. Evensen, P. J. Hamilton, and R. K. O'Nions. Continental volcanics derived from enriched and depleted source regions: Nd- and Sr-isotope evidence. *Earth Planet. Sci. Lett.*; 1978; v. 37: p. 401-408.

2583. Krinsley, D. H. and F. W. McCoy. Significance and origin of surface textures on broken sand grains in deep-sea sediments. *Sedimentology*; 1977; v. 24: p. 857-862.

2584. Broecker, W. S. and T. Takahashi. The relationship between lysocline depth and in situ carbonate ion concentration. *Deep-Sea Res.*; 1978; v. 25: p. 65-95.

2585. Cook, E. R. and G. C. Jacoby, Jr. . Tree-ring drought relationships in the Hudson Valley, New York. *Science*; 1977; v. 198: p. 399-401.

2586. Spanglet, M., H. K. Brueckner, and R. G. Senechal. Old Rb-Sr whole-rock isochron apparent ages from Lower Cambrian psammites and metapsammites, southeastern New York. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 783-790.
2587. Sbar, M. L. and L. R. Sykes. Seismicity and lithospheric stress in New York and adjacent areas. *J. Geophys. Res.* ; 1977; v. 82(n. 36): p. 5771-5786.
2588. Beavan, J. and R. Bilham. Thermally induced errors in fluid tube tiltmeters. *J. Geophys. Res.* ; 1977; v. 82(n. 36): p. 5699-5704.
2589. Perfit, M. R. and B. C. Heezen. The geology and evolution of the Cayman Trench. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 1155-1174.
2590. Van der Voo, R., S. G. Henry, and H. N. Pollack. On the significance and utilization of secondary magnetizations in red beds. *Phys. Earth Planet. Inter.* ; 1978; v. 16: p. 12-19.
2591. Hays, J. D., J. Imbrie, and N. J. Shackleton. Variations in the Earth's orbit: pacemaker of the ice ages? *Science*; 1977; v. 198: p. 529-530.
2592. Gedzelman, S. D. . Mountain wave weather in New York City. *Weatherwise*, October; 1977 : p. 202-206.
2593. Shackleton, N. J. and N. D. Opdyke. Oxygen isotope and palaeomagnetic evidence for early Northern Hemisphere glaciation. *Nature*; 1977; v. 270(n. 5634): p. 216-219.
2594. Prell, W. L. . Upper Quaternary sediments of the Colombia Basin: spatial and stratigraphic variation. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 1241-1255.
2595. Rynn, J. M. W. and C. H. Scholz. Seismotectonics of the Arthur's Pass region, South Island, New Zealand. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 1373-1388.
2596. Rynn, J. M. W. and C. H. Scholz. Study of the velocity ratio for several regions of the South Island, New Zealand: evaluation of regional  $t_s/t_p$  and near source  $V_p/V_s$  values. *Geophys. J. R. astr. Soc.*; 1978; v. 53: p. 87-112.
2597. Quay, P.D., W.S. Broecker, R.H. Hesslein, and D.W. Schindler. Vertical diffusion rates determined by tritium tracer experiments in the thermocline and hypolimnion of two lakes. *Limnol. Oceanogr.*; 1980; v. 25(n. 2): p. 201-218.

2598. Hall, J.K. An algorithm for integrating polynomials over any closed boundary, and its application to calculation of volume under polynomial trend surfaces. in: D. Gill and D.F. Merriam, Eds. "Geomathematical and Petrophysical Studies in Sedimentology". Oxford: Pergamon Press; 1979: p. 211-218.

2599. Torgersen, T. and W. B. Clarke. Excess helium-4 in Teggau Lake: possibilities for a uranium ore body. *Science*; 1978; v. 199: p. 768-771.

2600. Burckle, L. H. and F. Akiba. Implications of late Neogene fresh-water sediment in the Sea of Japan. *Geology*; 1978; v. 6: p. 123-127.

2601. Kligfield, R. and J.E.T. Channell. Paleomagnetic evidence of large fault displacement around the Po Basin - discussion. *Tectonophysics*; 1979; (v. 53); ISSN p. 139-146.

2602. Carmignani, L., G. Giglia, and R. Kligfield. Structural evolution of the Apuane Alps: an example of continental margin deformation in the North Apennines, Italy. *J. Geol.* ; 1978; v. 86: p. 487-504.

2603. Embley, R. W. and R. D. Jacobi. Distribution and morphology of large submarine sediment slides and slumps on Atlantic continental margins. *Mar. Geotechnol.* ; 1977; v. 2, *Marine Slope Stability*: p. 205-228.

2604. Hamilton, P.J., R.K. O'Nions, N.M. Evensen, D. Bridgwater, and J.H. Allaart. Sm-Nd isotopic investigations of Isua supracrustals and implications for mantle evolution. *Nature*; 1978; v. 272(n. 5648): p. 41-43.

2605. Kukla, G. J. . Pleistocene land-sea correlations. I. Europe. *Earth Sci. Rev.* ; 1977; v. 13: p. 307-374.

2606. Kolla, V., L. Henderson, L. Sullivan, and P. E. Biscaye. Recent sedimentation in the southeast Indian Ocean with special reference to the effects of Antarctic Bottom Water circulation. *Mar. Geol.* ; 1978; v. 27: p. 1-17.

2607. Armbruster, J., L. Seeber, and K. H. Jacob. The northwestern termination of the Himalayan mountain front: active tectonics from microearthquakes. *J. Geophys. Res.* ; 1978; v. 83(n. B1): p. 268-282.

2608. Kulagin, V.K., D.W. Simpson, and S.N. Zakoulova. Determination of the velocity structure of the sediment cover of the Tadjik Depression in the Nureck Reservoir region. in: "Collection of Soviet-American Works on Earthquake Prediction". Moscow: Donish Dushanbe; 1979; V. 2(Book 1): p. 152-161.



2609. Scholz, C. H. and T. Kato. The behavior of a convergent plate boundary: crustal deformation in the South Kanto district, Japan. *J. Geophys. Res.* ; 1978; v. 83(n. B2): p. 783-797.
2610. O'Nions, R. K., N. M. Evensen, P. J. Hamilton, and S. R. Carter. Melting of the mantle past and present: isotope and trace element evidence. *Philos. Trans. R. Soc. London A*; 1978; v. 288: p. 547-559.
2611. Herron, T.J., W.J. Ludwig, P.L. Stoffa, T.K. Kan, and P. Buhl. Structure of the East Pacific Rise crest from multichannel seismic reflection data. *J. Geophys. Res.*; 1978; v. 83(n. B2): p. 798-804.
2612. Larson, R. L., G. B. Carpenter, and J. B. Diebold. A geophysical study of the Wharton Basin near the Investigator Fracture Zone. *J. Geophys. Res.* ; 1978; v. 83(n. B2): p. 773-782.
2613. Kumar, N. . Sediment distribution in western Atlantic off northern Brazil -- structural controls and evolution . *Am. Assoc. Pet. Geol.* ; 1978; v. 62(n. 2): p. 273-294.
2614. Rind, D. and W. Donn. Observation of sound velocity near the stratopause using natural infrasound. in: F. Hall and J. Pike, Eds. Preprint Volume: Fourth Symposium on Meteorological Observations and Instrumentation, Denver. Boston: Am. Meteorol. Soc.; 1978: p. 443-446.
2615. Aggarwal, Y. P. and L. R. Sykes. Earthquakes, faults, and nuclear power plants in southern New York and northern New Jersey. *Science*; 1978; v. 200: p. 425-429.
2616. Fletcher, J. B., M. L. Sbar, and L. R. Sykes. Seismic trends and travel-time residuals in eastern North America and their tectonic implications. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 1656-1676.
2617. Talwani, M., J. Mutter, R. Houtz, and M. Konig. The margin south of Australia -- a continental margin paleorift. in: I.B. Brambers and E.-R. Neumann, Eds. "Tectonics and Geophysics of Continental Rifts". Dordrecht: Reidel Pub. Co.; 1978: p. 203-219.
2618. Rabinowitz, P.D. and J.R. Cochran. Free-air gravity anomalies bordering the margin of Brazil. Catalog 829, Map Series. Tulsa, OK 74101: AAPG, Box 979; 1979.
2619. Peng, T-H, Y-H Li, and F. T. Wu. Tectonic uplift rates of the Taiwan Island since the early Holocene. *Mem. Geol. Soc. China*; 1977; (n. 2): p. 57-69.

2620. Engelder, T. . Aspects of asperity-surface interaction and surface damage of rocks during experimental frictional sliding. *Pageoph.* ; 1978; v. 116: p. 705-716.

2621. Engdahl, E. R. and C. H. Scholz. A double Benioff zone beneath the Central Aleutians: an unbending of the lithosphere. *Geophys. Res. Lett.* ; 1977; v. 4(n. 10): p. 473-476.

2622. Ryan, W.B.F., M.B. Cita, E.L. Miller, D. Hanselman, W.D. Nesteroff, B. Hecker, and M. Nibbelink. Bedrock geology in New England submarine canyons. *Oceanol. Acta*; 1978; v. 1(n. 2): p. 233-254.

2623. Broecker, W. S. and A. Bainbridge. An abyssal shear zone. *J. Geophys. Res.* ; 1978; v. 83(n. C4): p. 1963-1966.

2624. Kumar, N. and L.A.P. Gamboa. Evolution of the Sao Paulo Plateau (southern Brazilian margin) and implications for the early history of the South Atlantic. *Geol. Soc. Am. Bull.*; 1979; v. 90: p. 281-293.

2625. Stoll, R.D. Damping in saturated soil. *Proc. on Earthquake Engineering and Soil Dynamics ASCE/Pasadena, CA, June 1978*; 1978: p. 960-975.

2626. Pitman, W. C. III. Relationship between eustacy and stratigraphic sequences of passive margins. *Geol. Soc. Am. Bull.* ; 1978; v. 89: p. 1389-1403.

2627. Johnson, T. L. . Rupture and particle velocity during frictional sliding. *Pageoph.* ; 1978; v. 116: p. 954-963.

2628. Rind, D. H. and W. L. Donn. Infrasonic observations of variability during stratospheric warmings. *J. Atmos. Sci.* ; 1978; v. 35: p. 546-553.

2629. Gedzelman, S. D. and R. A. Rilling. Short-period atmospheric gravity waves: a study of their dynamic and synoptic features. *Mon. Weather Rev.* ; 1978; v. 206(n. 2): p. 196-210.

2630. Leyden, R., J.E. Damuth, L.K. Ongley, J. Kostecki, and W. Van Stevenick. Salt diapirs on Sao Paulo plateau, southeastern Brazilian continental margin. *Am. Assoc. Pet. Geol.*; 1978; v. 62(n. 4): p. 657-666.

2631. Karig, D. E., R. N. Anderson, and L. D. Bibee. Characteristics of back arc spreading in the Mariana Trough. *J. Geophys. Res.* ; 1978; v. 83(n. B3): p. 1213-1226.

2632. Burckle, L. H., D. B. Clarke, and N. J. Shackleton. Isochronous last-abundant-appearance datum (LAAD) of the diatom *Hemidiscus karstenii* in the sub-Antarctic. *Geology*; 1978; v. 6: p. 243-246.

2633. Houtz, R.E. Results and methods used to determine the acoustic properties of the Southeast Asian margins. in: W.A. Kuperman and F.B. Jensen, Eds. "Bottom-Interacting Ocean Acoustics". New York: Plenum Pub. Corp.; 1980: p. 99-109.

2634. Jacoby, G.C., Jr. Predicting the impacts of surface coal mining on trout populations in the Yampa River basin: a discussion. in: W.O. Spofford, Jr., A.L. Parker, and A.V. Kneese, Eds. "Energy Development in the Southwest". Washington, DC: Resources for the Future; 1980: p. 438-448.

2635. Lowrie, W. and D. V. Kent. Characteristics of VRM in oceanic basalts. *J. Geophys. ;* 1978; v. 44: p. 297-315.

2636. Spindler, M., O.R. Anderson, C. Hemleben, and A.W.H. Bé . Light and electron microscopic observations of gametogenesis in *Hastigerina pelagica* (foraminifera). *J. Protozool. ;* 1978; v. 25(n. 4): p. 427-433.

2637. Hemleben, C., A.W.H. Be, M. Spindler, and O.R. Anderson. "Dissolution" effects induced by shell resorption during gametogenesis in *Hastigerina pelagica* (d'Orbigny). *J. Foraminiferal Res.;* 1979; v. 9(n. 2): p. 118-124.

2638. Alvarez, W. and W. Lowrie. Upper Cretaceous palaeomagnetic stratigraphy at Moria (Umbrian Apennines, Italy): verification of the Gubbio section. *Geophys. J. R. astr. Soc. ;* 1978; v. 55: p. 1-17.

2639. Ryan, W.B.F., E. Miller, M.B. Cita, D. Hanselman, W.D. Nesteroff, and M. Nibbelink. Geological history of Georges Bank as determined by submersible exploration of submarine canyons. in: B. Dillard, Ed. Proc. 10th Annual Offshore Technology Conference. Houston, TX; 1978: p. 1860-1868.

2640. Anderson, R. N. and R. P. von Herzen. Heat flow on the Pacific-Antarctic Ridge. *Earth Planet. Sci. Lett. ;* 1978; v. 41: p. 451-460.

2641. Cande, S.C. and P.D. Rabinowitz. Mesozoic seafloor spreading bordering conjugate continental margins of Angola and Brazil. in: B. Dillard, Ed. Proc. 10th Annual Offshore Technology Conference. Houston; 1978: p. 1869-1876.

2642. Schweikert, R.A. Triassic and Jurassic paleogeography of the Sierra Nevada and adjacent regions, California and Western Nevada. in: D.G. Howell and K.A. McDougall, Eds. "Mesozoic Paleogeography of the Western United States". Los Angeles: SEPM; 1978: p. 361-384, Pacific Section.

2643. Engelder, T., M.L. Sbar, S. Marshak, and R. Plumb. New surface in situ stress pattern adjacent to the San Andreas fault, Palmdale, California. in: C.Y. Kim, Ed. Proc. 19th U.S. Symposium on Rock Mechanics, Stateline, Nevada; 1978: p. 95-100.

2644. Ryan, W. B. F. and M. B. Cita. The nature and distribution of Messinian erosional surfaces - indicators of a several kilometer-deep Mediterranean in the Miocene. *Mar. Geol.* ; 1978; v. 27: p. 193-230.

2645. Ryan, W. B. F. . Messinian badlands on the southeastern margin of the Mediterranean Sea. *Mar. Geol.* ; 1978; v. 27: p. 349-363.

2646. Alvarez, W., T. Engelder, and P. A. Geiser. Classification of solution cleavage in pelagic limestones. *Geology*; 1978; v. 6: p. 263-266.

2647. Morley, J. J. and N. J. Shackleton. Extension of the radiolarian *Stylatractus universus* as a biostratigraphic datum to the Atlantic Ocean. *Geology*; 1978; v. 6: p. 309-311.

2648. Peng, T-H, J. G. Goddard, and W. S. Broecker. A direct comparison of 14C and 230Th ages at Searles Lake, California. *Quat. Res.* ; 1978; v. 9: p. 319-329.

2649. Kumar, N. Origin of "paired" aseismic rises: Ceara and Sierra Leone rises in the equatorial, and the Rio Grande Rise and Walvis Ridge in the South Atlantic. *Mar. Geol.*; 1979; v. 30: p. 175-191.

2650. Anderson, R. N., M. A. Hobart, R. P. von Herzen, and D. J. Fornari. Geophysical surveys on the East Pacific Rise -- Galapagos Rise system. *Geophys. J. R. astr. Soc.* ; 1978; v. 54: p. 141-166.

2651. Anderson, O. R. . Fine structure of a symbiont-bearing colonial radiolarian *Collosphaera globularis* and 14C isotopic evidence for assimilation of organic substances from its zooxanthellae. *J. Ultrastruct. Res.* ; 1978; v. 62: p. 181-189.

2652. Moody, R., D.E. Hayes, and S. Connary. Bathymetry of the continental margin of Brazil. Catalog 832, Map Series. Tulsa, OK 74101: AAPG, Box 979; 1979.

2653. Gronlie, G. and M. Talwani. Geophysical Atlas of the Norwegian-Greenland Sea. VEMA Research Series IV. Palisades, NY: Lamont-Doherty Geological Observator of Columbia University; 1978.

2654. Dalziel, I.W.D. and K.F. Palmer. Progressive deformation and orogenic uplift at the southern extremity of the Andes. *Geol. Soc. Am. Bull.*; 1979; v. 90(Part 1): p. 259-280.

2655. Summerhayes, C.P., B.D. Bornhold, and R.W. Embley. Surficial slides and slumps on the continental slope and rise of South West Africa: a reconnaissance study. *Mar. Geol.*; 1979; v. 31: p. 265-277.

2656. Cande, S. C. . Anomalous behavior of the paleomagnetic field inferred from the skewness of anomalies 33 and 34. *Earth Planet. Sci. Lett.* ; 1978; v. 40: p. 275-286.

2657. Peng, T-H and W. S. Broecker. Effect of sediment mixing on the rate of calcite dissolution by fossil fuel CO<sub>2</sub>. *Geophys. Res. Lett.* ; 1978; v. 5(n. 5): p. 349-352.

2658. Tucholke, B.E. and P.R. Vogt. Western North Atlantic: sedimentary evolution and aspects of tectonic history. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1979; v. 43: p. 791-825.

2659. Williams, S.C., H.J. Simpson, C.R. Olsen, and R.F. Bopp. Sources of heavy metals in sediments of the Hudson River Estuary. *Mar. Chem.*; 1978; v. 6: p. 195-213.

2660. Paul. A.Z., E.M. Thorndike, L.G. Sullivan, B.C. Heezen, and R.D. Gerard. Observations of the deep-sea floor from 202 days of time-lapse photography. *Nature*; 1978; v. 272(n. 5656): p. 812-814.

2661. Olsen, C.R., H.J. Simpson, R.F. Bopp, S.C. Williams, T.H. Peng, and B.L. Deck. A geochemical analysis of the sediments and sedimentation in the Hudson Estuary. *Petrol.*; 1978; v. 48(n. 2): p. 401-418.

2662. Damuth, J. E. . Echo character of the Norwegian-Greenland Sea: relationship to Quaternary sedimentation. *Mar. Geol.* ; 1978; v. 28: p. 1-36.

2663. Gordon, A. L., E. Molinelli, and T. Baker. Large-scale relative dynamic topography of the Southern Ocean. *J. Geophys. Res.* ; 1978; v. 83(n. C6): p. 3023-3032.

2665. Gordon, A. L. and W. D. Nowlin, Jr. . The basin waters of the Bransfield Strait. *J. Phys. Oceanogr.* ; 1978; v. 8(n. 2): p. 258-264.

2666. Cande, S.C. and P.D. Rabinowitz. Magnetic anomalies bordering the continental margin of Brazil. Catalog 830, Map Series. Tulsa, OK 74101: AAPG, Box 979; 1979.
2667. Quittmeyer, R.C., A. Farah, and K.H. Jacob. The seismicity of Pakistan and its relation to surface faults. in: A. Farah and K.A. DeJong, Eds. "Geodynamics of Pakistan". Quetta: Geol. Survey Pakistan; 1979: p. 271-284.
2668. Rind, D. H. and W. L. Donn. Microseisms at Palisades, 1. Source location and propagation. J. Geophys. Res. ; 1978; v. 83(n. B7): p. 3525-3534.
2669. King, K. Jr. . -carboxyglutamic acid in fossil bones and its significance for amino acid dating. Nature; 1978; v. 273(n. 5657): p. 41-43.
2670. Sarmiento, J. L., W. S. Broecker, and P. E. Biscaye. Excess bottom radon 222 distribution in deep ocean passages. J. Geophys. Res. ; 1978; v. 83(n. C10): p. 5068-5076.
2671. Donn, W.L. and D. Rind. Monitoring stratospheric winds with Concorde-generated infrasound. J. Appl. Meteorol.; 1979; v. 18(n. 7): p. 945-952.
2672. Kahle, H.-G., M. Chapman, and M. Talwani. Detailed 10 x 10 gravimetric Indian Ocean geoid and comparison with GEOS-3 radar altimeter geoid profiles. Geophys. J. R. astr. Soc. ; 1978; v. 55: p. 703-720.
2673. Sykes, L.R. Plate tectonic framework of Middle America and Caribbean regions and prospects for earthquake prediction. in: "International Symposium on February 4, 1976 Guatemalan Earthquake and Reconstruction Process"; 1978; Symp. Vol. II: 11 pgs.
2674. Vogt, P.R. and B.E. Tucholke. The New England Seamounts: testing origins. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1979; v. 43: p. 847-856.
2675. Elthon, D. and C. Stern. Metamorphic petrology of the Sarmiento ophiolite complex, Chile. Geology; 1978; v. 6: p. 464-468.
2676. Anderson, O. R. . Light and electron microscopic observations of feeding behavior, nutrition, and reproduction in laboratory cultures of *Thalassicola nucleata* Huxley. Tissue and Cell; 1978; v. 10(n. 3): p. 401-412.

2677. Zimmerman, H.B., P.R. Supko, and F.W. McCoy. Acoustic horizons in the Argentine Basin, southwestern Atlantic Ocean: new evidence from deep-sea drilling. *Geol.*; 1979; v. 7: p. 45-48.

2678. Broecker, W.S. and T-H Peng. Applications of atom counting to oceanography. in: H.E. Gove, Ed. "Proc. First Conference on Radiocarbon Dating with Accelerators": University of Rochester; 1978: p. 294-313.

2679. O'Nions, R.K., S.R. Carter, R.S. Cohen, N.M. Evensen, and P.J. Hamilton. Pb, Nd and Sr isotopes in oceanic ferromanganese deposits and ocean floor basalts. *Nature*; 1978; v. 273(n. 5662): p. 435-438.

2680. Anderson, O.R. and A.W.H. Bé . Recent advances in foraminiferal fine structure research. in: R.H. Hedley and C.G. Adams, Eds. "Foraminifera". London: Academic Press; 1978; V. 3: p. 121-202.

2681. Fornari, D. J., J. G. Moore, and L. Calk. A large submarine sand-rubble flow on Kilauea volcano, Hawaii. *J. Volcanol. Geotherm. Res.* ; 1979; v. 5: p. 239-256.

2682. de Wit, M. J. and C. Stern. Pillow talk. *Geotherm. Res.*; 1978; v. 4: p. 55-80.

2683. Watts, A. B. . Comment on "On global gravity anomalies and two-scale convection" by Bruce D. Marsh and James G. Marsh. *J. Geophys. Res.*; 1978; v. 83(n. B7): p. 3551-3554.

2684. Broecker, W. S. . A revised estimate for the radiocarbon age of North Atlantic deep water. *J. Geophys. Res.* ; 1979; v. 84(n. C6): p. 3218-3226.

2685. Steckler, M. S. and A. B. Watts. Subsidence of the Atlantic-type continental margin off New York. *Earth Planet. Sci. Lett.* ; 1978; v. 41: p. 1-13.

2686. Beavan, J. . A note on the strains at a distance from an ellipsoidal inhomogeneity. *Geophys. J. R. astr. Soc.* ; 1978; v. 54: p. 713-719.

2687. Burckle, L. H., S. R. Hammond, and S. M. Seyb. A stratigraphically important new diatom from the Pleistocene of the North Pacific. *Pacific Sci.* ; 1978; v. 32(n. 2): p. 209-214.

2688. Gordon, A. L. . Deep Antarctic convection west of Maud Rise. *J. Phys. Oceanogr.* ; 1978; v. 8(n. 4): p. 600-612.

2689. Taylor, H. W., A. L. Gordon, and E. Molinelli. Climatic characteristics of the Antarctic Polar Front Zone. *J. Geophys. Res.* ; 1978; v. 83(n. C9): p. 4572-4578.
2690. Seeber, L. and J. Armbruster. Seismicity of the Hazara arc in northern Pakistan: decollement vs basement faulting. in: A. Farah and K.A. DeJong, Eds. "Geodynamics of Pakistan". Quetta: Geol. Survey Pakistan; 1979: p. 131-142.
2691. Weissel, J. K. and R. N. Anderson. Is there a Caroline Plate? *Earth Planet. Sci. Lett.* ; 1978; v. 41: p. 143-158.
2692. Bruhn, R., C. Stern, and M. J. de Wit. Field and geochemical data bearing on the development of a Mesozoic volcano-tectonic rift zone and back-arc basin in southernmost South America. *Earth Planet. Sci. Lett.* ; 1978; v. 41(n. 1): p. 32-46.
2693. Evensen, N. M., P. J. Hamilton, and R. K. O'Nions. Rare-earth abundances in chondritic meteorites. *Geochim. Cosmochim. Acta*; 1978; v. 42: p. 1199-1212.
2694. Bookbinder, R.G., A.C. Hubbard, W.G. McDonald, and P.W. Pomeroy. Design of an ocean bottom seismometer with response from 25 Hz to 100 seconds. in: "The Ocean Challenge" and the IEEE, Inc. New York: Marine Tech. Soc., Washington, DC; 1978: p. 510-515.
2695. Cita, M.B. and W.B.F. Ryan. The deep-sea record of the Eastern Mediterranean in the last 150,000 years. in: C. Doumas. "Thera and the Aegean World I". London; 1978; ( ): p. 45-60.
2696. Bonatti, E. and P. R. Hamlyn. Mantle uplifted block in the Western Indian Ocean. *Science*; 1978; v. 201: p. 249-251.
2697. Scholz, C. H. . Velocity anomalies in dilatant rock. *Science*; 1978; v. 201: p. 441-442.
2698. Rabinowitz, P. D., S. C. Cande, and D. E. Hayes. Grand Banks and J-anomaly ridge. *Science*; 1978; v. 202: p. 71-73.
2699. Boatwright, J. . Detailed spectral analysis of two small New York State earthquakes. *Bull. Seismol. Soc. Am.* ; 1978; v. 68(n. 4): p. 1117-1131.
2700. Sykes, L. R. . Intraplate seismicity, reactivation of preexisting zones of weakness, alkaline magmatism, and other tectonism postdating continental fragmentation. *Rev. Geophys. Space Phys.* ; 1978; v. 16(n. 4): p. 621-688.



2701. Burckle, L.H. Early Miocene to Pliocene datum levels for the Equatorial Pacific". in: "Proc. Second Working Group Meeting, Biostratigraphic Datum--Planes of the Pacific Neogene," IGCP Project 114, Republic of Indonesia Geological Research and Development Centre Special Publication No. 1; 1978; (N. 1): p. 25-44.

2702. Molinelli, E. . Isohaline thermoclines in the southeast Pacific Ocean. *J. Phys. Oceanogr.* ; 1978; v. 8(n. 6): p. 1139-1145.

2703. Broecker, W. S., T-H Peng, and M. Stuiver. An estimate of the upwelling rate in the equatorial Atlantic based on the distribution of bomb radiocarbon. *J. Geophys. Res.* ; 1978; v. 83(n. C12): p. 6179-6186.

2704. King, K. Jr. . Distribution of  $\gamma$ -carboxyglutamic acid in calcified tissues. *Biochim. Biophys. Acta*; 1978; v. 542: p. 542-546.

2705. Cochran, J. R. and M. Talwani. Gravity anomalies, regional elevation, and the deep structure of the North Atlantic. *J. Geophys. Res.* ; 1978; v. 83(n. B10): p. 4907-4924.

2706. Elthon, D. and W.I. Ridley. The oxide and silicate mineral chemistry of a kimberlite from the Premier Mine. in: F.R. Boyd and H.O.A. Meyer, Eds. "Kimberlites, Diatremes, and Diamonds: Their Geology, Petrology, and Geochemistry". Washington, DC: AGU; 1979: p. 206-216.

2707. Kuo, J.T., F. Malone, W. MacDonald, and A. Hubbard. Ocean-bottom tidal gravity, ocean tide and current measurements. in: M. Bonatz and P. Melchior , Eds. "Eighth International Symposium on Earth Tides". Bonn, Germany: Inst. fur Theoretische Geodasie der Universitat; 1979: p. 356-363.

2708. Prell, W. L. and J. E. Damuth. The climate-related diachronous disappearance of *Pulleniatina obliquiloculata* in Late Quaternary sediments of the Atlantic and Caribbean. *Mar. Micropaleontol.* ; 1978; v. 3: p. 267-277.

2709. Hays, J.D. A review of the Late Quaternary climatic history of Antarctic Seas. in: E.M. Van Zinderen Bakker, Ed. "Antarctic Glacial History and World Palaeoenvironments". Rotterdam: A.A. Balkema; 1978: p. 57-71.

2710. Kent, D. V. and N. D. Opdyke. Paleomagnetism of the Devonian Catskill red beds: evidence for motion of the coastal New England-Canadian Maritime region relative to cratonic North America. *J. Geophys. Res.* ; 1978; v. 83(n. B9): p. 4441-4450.

2711. Alvarez, W. . Fold distortion: a new indicator of tectonic transport direction. *Geology*; 1978; v. 6: p. 657-660.

2712. Simpson, D. W. and S. Kh. Negmatullaev. Induced seismicity studies in Soviet Central Asia. *Earthquake Information Bull.* ; 1978; v. 10(n. 6): p. 2098-213.

2713. Negmatullaev, S. Kh., G.S. Seleznyov, D.W. Simpson, and C. Rojahn. Engineering and seismological observations at dams. in: "Proc. Second International Conference on Microzonation for Safer Construction--Research and Application"; 1978; V. 11: p. 681-691.

2714. Chen, T. and D. W. Forsyth. A detailed study of two earthquakes seaward of the Tonga Trench: implications for mechanical behavior of the oceanic lithosphere. *J. Geophys. Res.* ; 1978; v. 83(n. B10): p. 4995-5003.

2715. Kent, D. V., B. M. Honnorez, N. D. Opdyke, and P. J. Fox. Magnetic properties of dredged oceanic gabbros and the source of marine magnetic anomalies. *Geophys. J. R. astr. Soc.* ; 1978; v. 55: p. 513-537.

2716. Rind, D. . Investigation of the lower thermosphere results of ten years of continuous observations with natural infrasound. *J. Atmos. Terr. Phys.* ; 1978; v. 40: p. 1199-1209.

2717. Kligfield, R. . The Northern Apennines as a collisional orogen. *Am. J. Sci.*; 1979; v. 279: p. 676-691.

2718. Embley, R. W., P. D. Rabinowitz, and R. D. Jacobi. Hyperbolic echo zones in the eastern Atlantic and the structure of the southern Madeira Rise. *Earth Planet. Sci. Lett.* ; 1978; v. 41: p. 419-433.

2719. Posmentier, E. S. and R. W. Houghton. Fine structure instabilities induced by double diffusion in the shelf/slope water front. *J. Geophys. Res.* ; 1978; v. 83(n. C10): p. 5135-5138.

2720. Snyder, W. S. . Manganese deposited by submarine hot springs in chert-greenstone complexes, western United States. *Geology*; 1978; v. 6: p. 741-744.

2721. Wollin, G., W. B. F. Ryan, and D. B. Ericson. Climatic changes, magnetic intensity variations and fluctuations of the eccentricity of the earth's orbit during the past 2,000,000 years and a mechanism which may be responsible for the relationship. *Earth Planet. Sci. Lett.* ; 1978; v. 41: p. 395-397.

2722. Cande, S. C., R. L. Larson, and J. L. LaBrecque. Magnetic lineations in the Pacific Jurassic quiet zone. *Earth Planet. Sci. Lett.* ; 1978; v. 41: p. 434-440.
2723. Broecker, W. S. and H. G. Ostlund. Property distributions along the  $\sigma_{26.8}$  isopycnal in the Atlantic Ocean. *J. Geophys. Res.* ; 1979; v. 84(n. C3): p. 1145-1154.
2724. Ninkovich, D. and L. H. Burckle. Absolute age of the base of the hominid-bearing beds in Eastern Java. *Nature*; 1978; v. 275(n. 5678): p. 306-308.
2725. Ninkovich, D. . Distribution, age and chemical composition of tephra layers in deep-sea sediments off western Indonesia. *J. Volcanol. Geotherm. Res.* ; 1979; v. 5: p. 67-86.
2726. Lawrence, J. R. and S. Maxwell. Geothermal exploration in the Azores:  $^{18}\text{O}/^{16}\text{O}$  in calcites from volcanic rocks. *J. Volcanol. Geotherm. Res.*; 1978; v. 4: p. 219-223.
2727. Thompson, P.R. and J.R. Sciarrillo. Planktonic foraminiferal biostratigraphy in the Equatorial Pacific. *Nature*; 1978; v. 275(n. 5683): p. 29-33.
2728. Houtz, R. E. Preliminary sonobuoy study of rapidly accumulating shelf sediments. *J. Geophys. Res.* ; 1978; v. 83(n. B11): p. 5397-5404.
2729. O'Nions, R. K., S. R. Carter, N. M. Evensen, and P. J. Hamilton. Geochemical and cosmochemical applications of Nd isotope analysis. *Ann. Rev. Earth Planet. Sci.*; 1979; v. 7: p. 11-38.
2730. Fairbanks, R. G. and R. K. Matthews. The marine oxygen isotope record in Pleistocene coral, Barbados, West Indies. *Quat. Res.* ; 1978; v. 10: p. 181-196.
2731. Herman, B.M., R.N. Anderson, and M. Truchan. Extensional tectonics in the Okinawa Trough. in: R. Hart, Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 199-208.
2732. Kumar, N., R. Leyden, J. Carvalho, and O. Francisconi. Sediment isopach map: Brazilian continental margin. in: "Map Series". Tulsa, OK 74101: AAPG, Box 979; 1979.
2733. Li, Y-H, H. W. Feely, and P. H. Santschi.  $^{228}\text{Th}$ - $^{228}\text{Ra}$  radioactive disequilibrium in the New York Bight and its implications for coastal pollution. *Earth Planet. Sci. Lett.*; 1979; v. 42: p. 13-26.

2734. McIntyre, A., W.F. Ruddiman, and J.T. Durazzi. The role of the North Atlantic Ocean in rapid glacial growth. in: "Evolution of Planetary Atmospheres and Climatology of the Earth". Toulouse: Centre National D'Etudes Spatiales; 1978: p. 113-120.

2735. Sheridan, R.E., C.C. Windisch, J.I. Ewing, and P.L. Stoffa. Structure and stratigraphy of the Blake Escarpment based on seismic reflection profiles. in: R. Hart, Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 177-186.

2736. Talwani, M., J. Mutter, R. Houtz, and M. Konig. The crustal structure and evolution of the area underlying the Magnetic Quiet Zone on the margin south of Australia. in: R. Hart, Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 151-175.

2737. Hecker, B. and A. Paul. Abyssal community structure of the benthic infauna of the eastern Equatorial Pacific: DOMES Sites A, B, and C. in: J.L. Bischoff and D.Z. Piper, Eds. "Marine Geology and Oceanography of the Pacific Manganese Nodule Province". New York: Plenum Press; 1979; V. 9, Mar. Sci.: p. 287-308.

2738. Pitman, W.C. III. The effect of eustatic sea level changes on stratigraphic sequences at Atlantic margins. in: R. Hart, Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 453-460.

2739. Bilham, R.G. and R.J. Beavan. Strains and tilts on crustal blocks. in: C.A. Whitten, R. Green, and B.K. Meade, 1977, Eds. "Recent Crustal Movements": Tectonophysics; 1979; V. 52: p. 121-138.

2740. Ludwig, W.J., C.C. Windisch, R.E. Houtz, and J.I. Ewing. Structure of Falkland Plateau and offshore Tierra del Fuego, Argentina. in: R. Hart., Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 125-137.

2741. Ludwig, W.J., J.I. Ewing, C.C. Windisch, A.G. Lonardi, and F.F. Rios. Structure of Colorado Basin and continent-ocean crust boundary off Bahia Blanca, Argentina. in: R. Hart, Ed. "Geological and Geophysical Investigations of Continental Margins," AAPG Mem. 29. Tulsa, OK: AAPG; 1979: p. 113-124.

2742. Donn, W. L. Exploring the atmosphere with sonic booms or how I learned to love the Concorde. Am. Sci.; 1978; v. 66(n. 6): p. 724-733.

2743. Carter, S. R., N. M. Evensen, P. J. Hamilton, and R. K. O'Nions. Neodymium and strontium isotope evidence for crustal contamination of continental volcanics. Science; 1978; v. 202: p. 743-747.

2744. Watts, A. B. . An analysis of isostasy in the world's oceans 1. Hawaiian-Emperor seamount chain. *J. Geophys. Res.* ; 1978; v. 83(n. B12): p. 5989-6004.
2745. Kukla, G.J. and J. Gavin. Recent secular variations of snow and sea ice cover. in: "World Glacier Inventory," Proc. Riederalp Workshop, Sept. 1978, IAHS-AISH Publ.; 1980; (n. 126): p. 249-258.
2746. Hall, J. K. . Sediment waves and other evidence of paleo-bottom currents at two locations in the deep Arctic Ocean. *Sediment. Geol.* ; 1979; v. 23: p. 269-299.
2747. Amos, A. F. and R. D. Gerard. Anomalous bottom water south of the Grand Banks suggests turbidity current activity. *Science*; 1979; v. 203: p. 894-897.
2748. Ninkovich, D., N.J. Shackleton, A.A. Abdel-Monem, J.D. Obradovich, and G. Izett. K-Ar age of the late Pleistocene eruption of Toba, north Sumatra. *Nature*; 1978; v. 276(n. 5688): p. 574-577.
2749. Powers, L. S., H. K. Brueckner, and D. H. Krinsley. Rb-Sr provenance ages from weathered and stream transported quartz grains from the Harney Peak Granite, Black Hills, South Dakota. *Cosmochim. Acta*; 1979; v. 43: p. 137-146.
2750. Sbar, M. L., T. Engelder, R. Plumb, and S. Marshak. Stress pattern near the San Andreas fault, Palmdale, California, from near-surface in situ measurements. *J. Geophys. Res.* ; 1979; v. 84(n. B1): p. 156-164.
2751. Forsythe R. and C. Mpodozis. El Archipiélago Madre de Dios, Patagonia Occidental, Magallanes: rasgos generales de la estratigrafía y estructura del "basamento" pre-Jurásico superior. *Revista Geológica de Chile*; 1979; v. 7: p. 13-29.
2752. Malone, T. C., M. B. Chervin, and D. C. Boardman. Effects of 22- m screens on size-frequency distributions of suspended particles and biomass estimates of phytoplankton size fractions. *Limnol. Oceanogr.* ; 1979; v. 24(n. 5): p. 956-960.
2753. Evensen, N.M., S.R. Carter, P.J. Hamilton, R.K. O'Nions, and W.I. Ridley. A combined chemical-petrological study of separated chondrules from the Richardson meteorite. *Earth Planet. Sci. Lett.*; 1979; v. 84(n. B8): p. 223-236.
2754. Chapman, M. E. . Techniques for interpretation of geoid anomalies. *J. Geophys. Res.* ; 1979; v. 84(n. B8): p. 3793-3801.

2755. Jansa, L.F., P. Enos, B.E. Tucholke, F.M. Gradstein, and R.E. Sheridan. Mesozoic-Cenozoic sedimentary formations of the North American Basin: western Atlantic. in: M. Talwani, W. Hay, and W.B.F. Ryan, Eds. "Deep Drilling Results in the Atlantic Ocean: Continental Margins and Paleo-environment," Maurice Ewing Series 3. Washington, DC: AGU; 1979: p. 1-57.

2756. Tucholke, B.E. and G.S. Mountain. Seismic stratigraphy, lithostratigraphy and paleosedimentation patterns in the North American Basin. in: M. Talwani, W. Hay, and W.B.F. Ryan, Eds. "Deep Drilling Results in the Atlantic Ocean: Continental Margins and Paleo-environment," Maurice Ewing Series 3. Washington, DC: AGU; 1979: p. 58-86.

2757. Tucholke, B. E. and D. J. Shirley. Comparison of laboratory and in situ compressional-wave velocity measurements on sediment cores from the western North Atlantic. *J. Geophys. Res.*; 1979; v. 84(n. B2): p. 687-695.

2758. Kranz, R. L. . Crack growth and development during creep of Barre granite. *Int. J. Rock Mech. Min. Sci. and Geomech. Abstr.*; 1979; v. 16: p. 23-35.

2759. Kranz, R. L. . Crack-crack and crack-pore interactions in stressed granite. *Int. J. Rock Mech. Min. Sci. and Geomech. Abstr.* ; 1979; v. 16: p. 37-47.

2760. LaBrecque, J.L. and E. Draganovic. A general purpose computer system for oceanographic research vessels. in: C.D. Tollios and M.K. McElroy, Eds. "Second Working Conference on Oceanographic Data Systems Proceedings 1978": University National Oceanographic Laboratory Systems; 1978: p. 242-253.

2761. Fornari, D.J., D.W. Peterson, J.P. Lockwood, A. Malahoff, and B.C. Heezen. Submarine extension of the southwest rift zone of Mauna Loa Volcano, Hawaii: visual observations from U.S. Navy Deep Submergence Vehicle DSV Sea Cliff. *Geol. Soc. Am. Bull.*, Part I; 1979; v. 90: p. 435-443.

2762. Tamaki, K., M. Joshima, and R. L. Larson. Remanent Early Cretaceous spreading center in the Central Pacific Basin. *J. Geophys. Res.* ; 1979; v. 84(n. B9): p. 4501-4510.

2763. Fornari, D. J., A. Malahoff, and B. C. Heezen. Visual observations of the volcanic micromorphology of Tortuga, Lorraine and Tutu Seamounts; and petrology and chemistry of ridge and seamount features in and around the Panama Basin. *Mar. Geol.* ; 1979; v. 31: p. 1-30.

2764. Anderson, O.R. Radiolaria. in: M. Levandowsky and S.H. Hutner, Eds. "Biochemistry and Physiology of Protozoa". Second Edition ed. New York: Academic Press; 1980: p. 1-42.

2765. Eldholm, O. and M. Talwani. The passive margins of northern Europe and East-Greenland. in: R.A. Scrutton, Ed. "Dynamics of Passive Margins" Geodynamics Series. Washington, DC: AGU; 1981; V. 6: p. 30-44.
2766. Malone, T. C. and M. B. Chervin. The production and fate of phytoplankton size fractions in the plume of the Hudson River, New York Bight. *Limnol. Oceanogr.*; 1979; v. 24(n. 4): p. 683-696.
2767. Streeter, S. S. and N. J. Shackleton. Paleocirculation of the deep North Atlantic: 150,000-year record of benthic foraminifera and oxygen-18. *Science*; 1979; v. 203: p. 168-171.
2768. Kolla, V., P. E. Biscaye, and A. F. Hanley. Distribution of quartz in Late Quaternary Atlantic sediments in relation to climate. *Quat. Res.* ; 1979; v. 11: p. 261-277.
2769. Hamilton, P. J., N. M. Evensen, R. K. O'Nions, and J. Tarney. Sm-Nd systematics of Lewisian gneisses: implications for the origin of granulites. *Nature*; 1979; v. 277(n. 5691): p. 25-28.
2770. Bruchhausen, P.M., J.A. Raymond, S.S. Jacobs, A.L. DeVries, E.M. Thorndike, and H.H. DeWitt. Fish, crustaceans, and the sea floor under the Ross Ice Shelf. *Science*; 1979; v. 203: p. 449-451.
2771. Wollin, G. and W. B. F. Ryan. Synthesis of protein, nucleosides and other organic compounds from cyanamide and potassium nitrite under possible primitive earth conditions. *Biochim. Biophys. Acta*; 1979; v. 584(n. 3): p. 493-506.
2772. Stern, C. and D. Elthon. Vertical variations in the effects of hydrothermal metamorphism in Chilean ophiolites: their implications for ocean floor metamorphism. in: J. Francheteau, Ed. "Processes at Mid-Ocean Ridges": *Tectonophysics*; 1979; v. 55: p. 179-213.
- 2773a. Gordon, A. L. and P. Tchernia. Waters of the continental margin off Adelie Coast, Antarctica. *Antarctic Res. Ser.* ; 1972; v. 19: p. 59-69.
- 2773b. O'Nions, R.K., N.M. Evenson, S.R. Carter, and P.J. Hamilton. Isotope geochemical studies of North Atlantic Ocean basalts and their implications for mantle evolution. in: M. Talwani, C.G. Harrison, and D.E. Hayes, Eds. "Deep Drilling Results in the Atlantic Ocean: Ocean Crust," Maurice Ewing Series 2. Washington, DC: AGU; 1979: p. 342-351.
2774. Taylor, B. . Bismarck Sea: evolution of a back-arc basin. *Geology*; 1979; v. 7: p. 171-174.

2775. Anderson, O. R. and W. K. Hoeffler. Fine structure of a marine proteomyxid and cytochemical changes during encystment. *J. Ultrastruct. Res.* ; 1979; v. 66: p. 276-284.
2776. Jacobs, S. S., A. L. Gordon, and J. L. Ardai, Jr. . Circulation and melting beneath the Ross Ice Shelf. *Science*; 1979; v. 203: p. 439-442.
2777. Peng, T-H, W. S. Broecker, and W. H. Berger. Rates of benthic mixing in deep-sea sediment as determined by radioactive tracers. *Quat. Res.* ; 1979; v. 11: p.141-149.
2778. Engelder, T. . The nature of deformation within the outer limits of the central Appalachian foreland fold and thrust belt in New York State. *Tectonophysics*; 1979; v. 55: p. 289-310.
2779. Bodine, J. H. and A. B. Watts. On lithospheric flexure seaward of the Bonin and Mariana trenches. *Earth Planet. Sci. Lett.*; 1979; v. 43: p. 132-148.
2780. Nishenko, S. and W. McCann. Large thrust earthquakes and tsunamis: implications for the development of fore arc basins. *J. Geophys. Res.* ; 1979; v. 84(n. B2): p. 573-584.
2781. McCoy, F.W. The Upper Thera (Minoan) ash in deep-sea sediments: distribution and comparison with other ash layers. in: C. Doumas, Ed. "Thera and the Aegean World II". London; 1980: p. 57-78.
2782. Cochran, J. R. . Some remarks on isostasy and the long-term behavior of the continental lithosphere. *Earth Planet. Sci. Lett.* ; 1980; v. 46: p. 266-274.
2783. Bonatti, E., V. Kolla, W. S. Moore, and C. Stern. Metallogenesis in marginal basins: Fe-rich basal deposits from the Philippine Sea. *Mar. Geol.* ; 1979; v. 32: p. 21-37.
2784. Cochran, J. R. and M. Talwani. Marine gravimetry. *Rev. Geophys. Space Phys.* ; 1979; v. 17(n. 6): p. 1387-1397.
2785. Bonatti, E., A. Chermak, and J. Honnorez. Tectonic and igneous emplacement of crust in oceanic transform zones. in: M. Talwani, C.G. Harrison, and D.E. Hayes, Eds. "Deep Drilling Results in the Atlantic Ocean: Ocean Crust," Maurice Ewing Series 2. Washington, DC: AGU; 1979: p. 239-248.
2786. Bilham, R., R. Plumb, and J. Beavan. Design considerations in an ultra-stable, long baseline tiltmeter -- results from a laser tiltmeter. in: A. Vogel, Ed. "Terrestrial and Space



Techniques in Earthquake Prediction Research". Braunschweig/Wiesbaden: Friedr. Vieweg & Sohn; 1979: p. 235-254.

2787. Bilham, R. and J. Beavan. Satellite telemetry of sea-level data to monitor crustal motions in the Shumagin Islands region of the Aleutian arc. in: A. Vogel, Ed. "Terrestrial and Space Techniques in Earthquake Prediction Research". Braunschweig/Wiesbaden: Friedr. Vieweg & Son; 1979: p. 269-283.

2788. Jacobs, S. S., A. L. Gordon, and A. F. Amos. Effect of glacial ice melting on the Antarctic Surface Water. *Nature*; 1979; v. 277(n. 5696): p. 469-471.

2789. Lawrence, J. R., J. I. Drever, T. F. Anderson, and H. K. Brueckner. Importance of alteration of volcanic material in the sediments of Deep Sea Drilling Site 323: chemistry,  $^{18}O/^{16}O$  and  $^{87}Sr/^{86}Sr$ . *Geochim. Cosmochim. Acta*; 1979; v. 43: p. 573-588.

2790. Balachandran, N. K. . Infrasonic signals from thunder. *J. Geophys. Res.* ; 1979; v. 84(n. C4): p. 1735-1745.

2791. Nelson, E. P. and B. C. Burchfiel. Deformation of autochthonous foreland basement, Clark Mountain thrust complex, southeastern California. RMAG-UGA 1979 Basin and Range Symposium; 1979: p. 107-114.

2792. Haines, K.C. The use of *Corbicula* as a clarifying agent in experimental tertiary sewage treatment process on St. Croix, U.S. Virgin Islands. in: J.C. Britton, Ed. "Proc. First International *Corbicula* Symposium". Fort Worth, TX: Texas Christian University Research Foundation; 1977: p. 165-175.

2793. Weaver, J. S., D. W. Chipman, and T. Takahashi. Comparison between thermochemical and phase stability data for the quartz-coesite-stishovite transformations. *Am. Mineral.* ; 1979; v. 64: p. 604-614.

2794. Stoll, R. D. and G. M. Bryan. Physical properties of sediments containing gas hydrates. *J. Geophys. Res.* ; 1979; v. 84(n. B4): p. 1629-1634.

2795. Bruhn, R. L. . Rock structures formed during back-arc basin deformation in the Andes of Tierra del Fuego. *Geol. Soc. Am. Bull., Part I*; 1979; v. 90: p. 998-1012.

2796. Engelder, T. . Mechanisms for strain within the Upper Devonian clastic sequence of the Appalachian plateau, Western New York. *Am. J. Sci.*; 1979; v. 279: p. 527-542.

2797. Fornari, D. J., A. Malahoff, and B. C. Heezen. Submarine slope micromorphology and volcanic substructure of the Island of Hawaii inferred from visual observations made from U. S. Navy deep-submergence vehicle (DSV) "Sea Cliff". *Mar. Geol.* ; 1979; v. 32: p. 1-20.

2798. Neville, C., N. D. Opdyke, E. H. Lindsay, and N. M. Johnson. Magnetic stratigraphy of Pliocene deposits of the Glens Ferry Formation, Idaho, and its implications for North American mammalian biostratigraphy. *Am. J. Sci.* ; 1979; v. 279: p. 503-526.

2799. Opdyke, N.D., E. Lindsay, G.D. Johnson, N. Johnson, R.A.K. Tahirkheli, and M.A. Mirza. Magnetic polarity stratigraphy and vertebrate paleontology of the Upper Siwalik subgroup of northern Pakistan. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1979; v. 27: p. 1-34.

2800. Kadko, D. .  $^{230}\text{Th}$ ,  $^{226}\text{Ra}$  and  $^{222}\text{Rn}$  in abyssal sediments. *Earth Planet. Sci. Lett.* ; 1980; v. 49: p. 360-380.

2801. Peng, T-H, W. S. Broecker, G. G. Mathieu, and Y-H Li. Radon evasion rates in the Atlantic and Pacific Oceans as determined during the Geosecs program. *J. Geophys. Res.*; 1979 ; v. 84(n. C5): p. 2471-2486.

2802. Watts, A.B. and M.S. Steckler. Subsidence and eustasy at the continental margin of eastern North America. in: M. Talwani, W. Hay, and W.B.F. Ryan, Eds. "Deep Drilling Results in the Atlantic Ocean: Continental Margins and Paleo-environment," Maurice Ewing Series 3. Washington, DC: AGU; 1979: p. 218-234.

2803. Li, Y-H and L-H Chan. Desorption of Ba and  $^{226}\text{Ra}$  from river-borne sediments in the Hudson estuary. *Earth Planet. Sci. Lett.*; 1979; v. 43: p. 343-350.

2804. Richards, P. G. . Theoretical seismic wave propagation. *Rev. Geophys. Space Phys.* ; 1979; v. 17(n. 2): p. 312-328.

2805. Davies, J. N. and L. House. Aleutian subduction zone seismicity, volcano-trench separation, and their relation to great thrust-type earthquakes. *J. Geophys. Res.*; 1979; v. 84(n. B9): p. 4583-4591.

2806. Kukla, G., B.P. Collins, and M.L. Bender. Radiometric age of the Arctica Islandica boundary in Italy: 2 M. Y. in: *Annales Geologiques des Pays Helleniques, VII International Congress on Mediterranean Neogene*. Athens; 1979; v. 2: p. 699-709.

2807. Elthon, D. . High magnesia liquids as the parental magma for ocean floor basalts. *Nature*; 1979; v. 278(n. 5704): p. 514-518.

2808. Hamilton, P.J., N.M. Evensen, R.K. O'Nions, H.S. Smith, and A.J. Erlank. Sm-Nd dating of Onverwacht Group Volcanics, Southern Africa. *Nature*; 1979; v. 279(n. 5711): p. 298-300.

2809. Hamlyn, P.R. and R.R. Keays. Origin of chromite compositional variation in the Pantan Sill, Western Australia. *Contrib. Mineral. Petrol.* ; 1979; v. 69: p. 75-82.

2810. Ruddiman, W. F. and A. McIntyre. Warmth of the subpolar North Atlantic Ocean during Northern Hemisphere ice-sheet growth. *Science*; 1979; v. 204: p. 173-175.

2811. Saunders, A.D., J. Tarney, C.R. Stern, and I.W.D. Dalziel. Geochemistry of Mesozoic marginal basin floor igneous rocks from southern Chile. *Geol. Soc. Am. Bull., Part I*; 1979; v. 90: p. 237-258.

2812. Cochran, J.R. An analysis of isostasy in the world's oceans 2. Midocean ridge crests. *J. Geophys. Res.*; 1979; v. 84(n. B9): p. 4713-4719.

2813. Chapman, M.E. and M. Talwani. Comparison of gravimetric geoids with Geos 3 altimetric geoid. *J. Geophys. Res.*; 1979; v. 84(n. B8): p. 3803-3816.

2814. Watts, A.B. On geoid heights derived from Geos 3 altimeter data along the Hawaiian-Emperor seamount chain. *J. Geophys. Res.*; 1979; v. 84(n. B8): p. 3817-3826.

2815. Kukla, G. and D. Robinson. Accuracy of snow and ice monitoring; Glaciological Data, Report DG-5, May 1979, World Data Center A for Glaciology. *Environ. Data Svc., NOAA*; 1979: p. 91-97.

2816. Quittmeyer, R.C. and K.H. Jacob. Historical and modern seismicity of Pakistan, Afghanistan, Northwestern India, and Southeastern Iran. *Bull. Seismol. Soc. Am.*; 1979; v. 69(n. 3): p. 773-823.

2817. Gronlie, G. and M. Talwani. Bathymetry of the Norwegian-Greenland Sea. in: "Geophysical Studies in the Norwegian-Greenland Sea," *Norsk Polarist. Skrifter Nr. 170*; 1979: p. 3-24.

2818. Gronlie, G., M. Chapman, and M. Talwani. Jan Mayen Ridge and Iceland Plateau: origin and evolution. in: "Geophysical Studies in Norwegian-Greenland Sea," *Norsk Polarist. Skrifter Nr. 170*; 1979: p. 25-47.

2819. Ludwig, W.J., N. Kumar, and R.E. Houtz. Profile sonobuoy measurements in the South China Sea basin. *J. Geophys. Res.*; 1979; v. 84(n. B7): p. 3505-3518.

2820. Bé, A.W.H., C. Hemleben, O.R. Anderson, and M. Spindler. Chamber formation in planktonic foraminifera. *Micropaleontology*; 1979; v. 25(n. 3): p. 294-307.

2821. Jacobi, R.D. Comment on "Geophysical evidence for an east-dipping Appalachian subduction zone beneath Newfoundland," Haworth et al., 1978. *Geology*; 1979; v. 7(n. 10): p. 470-471.

2822. Burckle, L.H. and J. Trainer. Middle and Late Pliocene diatom datum levels from the central Pacific. *Micropaleontology*; 1979; v. 25(n. 3): p. 281-293.

2823. Chapman, M.E. and J.H. Bodine. Considerations of the indirect effect in marine gravity modeling. *J. Geophys. Res.*; 1979; v. 84(n. B8): p. 3889-3892.

2824. Bower, P. and D. McCorkle. Gas exchange, photosynthetic uptake, and carbon budget for a radiocarbon addition to a small enclosure in a stratified lake. *Can. J. Fish. Aquat. Sci.*; 1980; v. 37: p. 464-471.

2825. Houtz, R.E. and W.J. Ludwig. Distribution of reverberant subbottom layers in the southwest Pacific basin. *J. Geophys. Res.*; 1979; v. 84(n. B7): p. 3497-3504.

2826. Fornari, D.J., J.P. Lockwood, P.W. Lipman, M. Rawson, and A. Malahoff. Submarine volcanic features west of Kealahou Bay, Hawaii. *J. Volcanol. Geotherm. Res.*; 1980; v. 7: p. 323-337.

2827. Burckle, L.H. . Diatom biostratigraphy of Unit 2 (Tripoli) of the Neostrototype Messinian. *Riv. Ital. Paleont.*; 1978; v. 84(n. 4): p. 1037-1050.

2828. Anderson, R.N., M.A. Hobart, and M.G. Langseth. Geothermal convection through oceanic crust and sediments in the Indian Ocean. *Science*; 1979; v. 204: p. 828-832.

2829. Asquith, S.M. Nature and origin of the lower continental rise hills off the east coast of the United States. *Mar. Geol.*; 1979; v. 32: p. 165-190.

2830. Kranz, R.L., A.D. Frankel, T. Engelder, and C.H. Scholz. The permeability of whole and jointed Barre granite. *Int. J. Rock Mech. Min. Sci. & Geomech. Abstr.*; 1979; v. 16: p. 225-234.

2831. Kent, D.V. Paleomagnetism of the Devonian Onondaga limestone revisited. *J. Geophys. Res.*; 1979; v. 84(n. B7): p. 3576-3588.
2832. O'Nions, R. K., N. M. Evensen, and P. J. Hamilton. Geochemical modeling of mantle differentiation and crustal growth. *J. Geophys. Res.*; 1979; v. 84(n. B11): p. 6091-6101.
2833. Elthon, D. and W. I. Ridley. Comments on "The partitioning of nickel between olivine and silicate melt" by S. R. Hart and K. E. Davis. *Earth Planet. Sci. Lett.*; 1979; v. 44: p. 162-164.
2834. MacFadden, B. J., N. M. Johnson, and N. D. Opdyke. Magnetic polarity stratigraphy of the Mio-Pliocene mammal-bearing Big Sandy Formation of western Arizona. *Earth Planet. Sci. Lett.*; 1979; v. 44: p. 349-364.
2835. Richards, P. G. Elementary solutions to Lamb's problem for a point source and their relevance to three-dimensional studies of spontaneous crack propagation. *Bull. Seismol. Soc. Am.*; 1979; v. 69(n. 4): p. 947-956.
2836. Weissel, J. K. and A. B. Watts. Tectonic evolution of the Coral Sea basin. *J. Geophys. Res.*; 1979; v. 84(n. B9): p. 4572-4582.
2837. Kent, D. V. and N. D. Opdyke. The Early Carboniferous paleomagnetic field of North America and its bearing on tectonics of the Northern Appalachians. *Earth Planet. Sci. Lett.*; 1979; v. 44: p. 365-372.
2838. Moore, W. S., H. W. Feely, and Y-H Li. Radium isotopes in sub-Arctic waters. *Earth Planet. Sci. Lett.*; 1980; v. 49: p. 329-340.
2839. Larson, R.L., J.C. Mutter, J.B. Diebold, G.B. Carpenter, and P.Symonds. Cuvier Basin: a product of ocean crust formation by Early Cretaceous rifting off western Australia. *Earth Planet. Sci. Lett.*; 1979; v. 45: p. 105-114.
2840. Armbruster, J., L. Seeber, R. Quittmeyer, and A. Farah. Seismic network data from Quetta, Pakistan. *Records of the Geological Survey of Pakistan*; 1979; v. 49: p. 1-5.
2841. Anderson, O. R., M. Spindler, A. W. H. Be, and C. Hemleben. Trophic activity of planktonic foraminifera. *J. Mar. Biol. Assoc. U. K.*; 1979; v. 59: p. 791-799.
2842. Detrick, R. S. and A. B. Watts. An analysis of isostasy in the world's oceans 3. Aseismic ridges. *J. Geophys. Res.*; 1979; v. 84(n. B7): p. 3637-3653.

2843. Lawrence, J. R. .  $^{18}\text{O}/^{16}\text{O}$  of the silicate fraction of Recent sediments used as a provenance indicator in the South Atlantic. *Mar. Geol.* ; 1979; v. 33: p. M1-M7.
2844. Morley, J. J. and J. D. Hays. *Cycladophora davisiana*: a stratigraphic tool for Pleistocene North Atlantic and interhemispheric correlation. *Earth Planet. Sci. Lett.*; 1979; v. 44: p. 383-389.
2845. Gedzelman, S. D. and W. L. Donn. Atmospheric gravity waves and coastal cyclones. *Mon. Weather Rev.*; 1979; v. 107(n. 6): p. 667-681.
2846. Hunkins, K. Review of the AIDJEX oceanographic program. in: R. Pritchard, Ed. "Sea Ice Processes and Models," *Proc. Arctic Ice Dynamics Joint Experiment, International Commission on Snow and Ice Symposium*. Seattle: University Washington Press; 1980: p. 34-45.
2847. Stoll, R. D. . Experimental studies of attenuation in sediments. *J. Acoust. Soc. Am.* ; 1979; v. 66(n. 4): p. 1152-1160.
2848. Spindler, M., C. Hemleben, U. Bayer, A.W.H. Bé , and O.R. Anderson. Lunar periodicity of reproduction in the planktonic foraminifer *Hastigerina pelagica*. *Mar. Ecol. Prog. Ser.*; 1979; v. 1: p. 61-64.
2849. Fairbanks, R. G. and R. E. Dodge. Annual periodicity of the  $^{18}\text{O}/^{16}\text{O}$  and  $^{13}\text{C}/^{12}\text{C}$  ratios in the coral *Montastrea annularis*. *Geochim. Cosmochim. Acta*; 1979; v. 43: p. 1009-1020.
2850. Jacob, K.H., W.D. Pennington, J. Armbruster, L. Seeber. Tabela reservoir, Pakistan: a region of compressional tectonics with reduced seismicity upon initial reservoir filling. *Bull. Seismol. Soc. Am.*; 1979; v. 69(n. 4): p. 1175-1192.
2851. Purdy, G. M., P. D. Rabinowitz, and J. J. A. Velterop. The Kane fracture zone in the central Atlantic Ocean. *Earth Planet. Sci. Lett.*; 1979; v. 45: p. 429-434.
2852. Rind, D. and W. L. Donn. Microseisms at Palisades 2. Rayleigh wave and Love wave characteristics and the geologic control of propagation. *J. Geophys. Res.* ; 1979; v. 84(n. B10): p. 5632-5642.
2853. Quittmeyer, R. C. . Seismicity variations in the Makran region of Pakistan and Iran: relation to great earthquakes. *Pageoph*; 1979; v. 117: p. 1212-1228.

2854. Santschi, P. H., Y-H Li, and J. Bell. Natural radionuclides in the water of Narragansett Bay. *Earth Planet. Sci. Lett.*; 1979; v. 45: p. 201-213.
2855. Fornari, D. J., J. K. Weissel, M. R. Perfit, and R. N. Anderson. Petrochemistry of the Sorol and Ayu Troughs: implications for crustal accretion at the northern and western boundaries of the Caroline plate. *Earth Planet. Sci. Lett.*; 1979; v. 45: p. 1-15.
2856. Damuth, J. E. and R. W. Embley. Upslope flow of turbidity currents on the northwest flank of the Ceara Rise: western Equatorial Atlantic. *Sedimentology*; 1979; v. 26: p. 825-834.
2857. Johnson, D. A. and J. E. Damuth. Deep thermohaline flow and current-controlled sedimentation in the Amirante Passage: western Indian Ocean. *Mar. Geol.*; 1979; v. 33: p. 1-44.
2858. Anderson, O.R. Radiolarian fine structure and silica deposition. in: T.L. Simpson and B.E. Volcani, Eds. "Silicon and Siliceous Structures in Biological Systems". New York: Springer-Verlag; 1981: p. 347-380.
2859. Seeber, L., J. Armbruster, and S. Farhatulla. Seismic activity at the Tarbela dam site and surrounding region. *Geol. Bull. Univ. Peshawar, Special Issue*; 1980; v. 13: p. 169-191.
2860. Stoffa, P. L. and P. Buhl. Two-ship multichannel seismic experiments for deep crustal studies: expanded spread and constant offset profiles. *J. Geophys. Res.* ; 1979; v. 84(n. B13): p. 7645-7660.
2861. Stoffa, P.L., P. Buhl, T.J. Herron, T.K. Kan, and W.J. Ludwig. Mantle reflections beneath the crestal zone of the East Pacific Rise from multichannel seismic data. *Mar. Geol.* ; 1980; v. 35: p. 83-97.
2862. Perfit, M. R. and J. R. Lawrence. Oxygen isotopic evidence for meteoric water interaction with the Captains Bay pluton, Aleutian Islands. *Earth Planet. Sci. Lett.*; 1979; v. 45: p. 16-22.
2863. Wang, S-C, R. J. Geller, S. Stein, and B. Taylor. An interplate thrust earthquake in the South China Sea. *J. Geophys. Res.* ; 1979; v. 84 (n. B10): p. 5627-5631.
2864. Scholz, C. H. and T. A. Koczyński. Dilatancy anisotropy and the response of rock to large cyclic loads. *J. Geophys. Res.* ; 1979; v. 84 (n. B10): p. 5525-5534.

2865. Morley, J. J. . A transfer function for estimating paleoceanographic conditions based on deep-sea surface sediment distribution of radiolarian assemblages in the South Atlantic. *Quat. Res.* ; 1979; v. 12: p. 381-395.

2866. Morley, J. J. and J. D. Hays. Comparison of glacial and interglacial oceanographic conditions in the South Atlantic from variations in calcium carbonate and radiolarian distributions. *Quat. Res.*; 1979; v. 12: p. 396-408.

2867. Johnson, T. L. . Alternative model for emplacement of the Papuan ophiolite, Papua, New Guinea. *Geology*; 1979; v. 7: p. 495-498.

2868. Frankel, A. and W. McCann. Moderate and large earthquakes in the South Sandwich arc: indicators of tectonic variation along a subduction zone. *J. Geophys. Res.* ; 1979; v. 84(n. B10): p. 5571-5576.

2869. Carter, S. R., N. M. Evensen, P. J. Hamilton, and R. K. O'Nions. Basalt magma sources during the opening of the North Atlantic. *Nature*; 1979; v. 281(n. 5726): p. 28-30.

2870. Santschi, P. H., Y-H Li, and S. R. Carson. The fate of trace metals in Narragansett Bay, Rhode Island: radiotracer experiments in microcosms. *Estuarine Coastal Mar. Sci.* ; 1980; v. 10: p. 635-654.

2871. Engelder, T. and P. Geiser. The relationship between pencil cleavage and lateral shortening within the Devonian section of the Appalachian Plateau, New York. *Geology*; 1979; v. 7: p. 460-464.

2872. Cohen, C. R. and S. Schamel. Progressive Neogene deformation of southern Hedil, Tunisian Atlas. *Am. Assoc. Pet. Geol. Bull.*; 1980; v. 64(n. 3): p. 423-427.

2873. Ruddiman, W.F., A. McIntyre, W. Niebler-Hunt, and J.T. Durazzi. Oceanic evidence for the mechanism of rapid northern hemisphere glaciation. *Quat. Res.*; 1980; v. 13: p. 33-64.

2874. Seeber, L., R. Quittmeyer, and J. Armbruster. Seismotectonics of Pakistan: a review of results from network-data and implications for Central Himalaya. in: P.S. Saklani, Ed. "Structural Geology of the Himalayas". New Delhi: Today and Tomorrow's Printers and Publishers; 1979: p. 361-392.

2875. Menke, W. . Comment on 'Dispersion function computations for unlimited frequency values' by Anas Abo-Zena. *Geophys. J. R. astr. Soc.* ; 1979; v. 59(p. 315-323).



2876. Thompson, P. R., A. W. H. Be, J.-C. Duplessy, and N. J. Shackleton. Disappearance of pink-pigmented *Globigerinoides ruber* at 120,000 yr BP in the Indian and Pacific Oceans. *Nature*; 1979; v. 280(n. 5723): p. 554-558.

2877. Feely, H.W., G.W. Kipphut, R.M. Trier, and C. Kent.  $^{228}\text{Ra}$  and  $^{228}\text{Th}$  in coastal waters. *Estuarine Coastal Mar. Sci.* ; 1980; v. 11: p. 179-205.

2878. LaBrecque, J. L. and D. E. Hayes. Seafloor spreading history of the Agulhas Basin. *Earth Planet. Sci. Lett.* ; 1979; v. 45: p. 411-428.

2879. Cohen, C. R., S. Schamel, and P. Boyd-Kaygi. Neogene deformation in northern Tunisia: origin of the eastern Atlas by microplate -- continental margin collision. *Geol. Soc. Am. Bull., Part I*; 1980; v. 91: p. 225-237.

2880. Choudhury, B. and G. Kukla. Impact of  $\text{CO}_2$  on cooling of snow and water surfaces. *Nature*; 1979; v. 280(n. 5724): p. 668-671.

2881. Chen, T. C. and L. E. Alsop. Reflection and transmission of obliquely incident Rayleigh waves at a vertical discontinuity between two welded quarter-spaces. *Bull. Seismol. Soc. Am.* ; 1979; v. 69(n. 5): p. 1409-1423.

2882. Rabinowitz, P. D. and J. LaBrecque. The Mesozoic South Atlantic Ocean and evolution of its continental margin. *J. Geophys. Res.* ; 1979; v. 84(n. B11): p. 5973-6002.

2883. Edmond, J.M., S.S. Jacobs, A.L. Gordon, A.W. Mantyla, and R.F. Weiss. Water column anomalies in dissolved silica over opaline pelagic sediments and the origin of the deep silica maximum. *J. Geophys. Res.*; 1979; v. 84(n. C12): p. 7809-7826.

2884. Ludwig, W.J. and R.E. Houtz. Isopach map of sediments in the Pacific Ocean Basin and marginal sea basins. in: *Map Series, Catalog 647*. Tulsa, OK: AAPG, Box 979; 1979.

2885. Sykes, L.R. Earthquakes and other processes within lithospheric plates and the reactivation of pre-existing zones of weakness. in: D.W. Strangway, Ed. "The Continental Crust and Its Mineral Deposits". Waterloo, Canada: Johanns Graphics; 1980: p. 215-237, *Geol. Soc. Canada Spec. Paper* 20.

2886. Murphy, A. J. and W. R. McCann. Preliminary results from a new seismic network in the northeastern Caribbean. *Bull. Seismol. Soc. Am.* ; 1979; v. 69(n. 5): p. 1497-1513.

2887. Broecker, W. S. and T-H Peng. The distribution of bomb-produced tritium and radiocarbon at GEOSECS station 347 in the eastern North Pacific. *Earth Planet. Sci. Lett.* ; 1980; v. 49: p. 453-462.

2888. Broecker, W. S. . The distribution of  $^3\text{He}$  anomalies in the Deep Atlantic. *Earth Planet. Sci. Lett.* ; 1980; v. 49: p. 513-519.

2889. Broecker, W. S., T-H Peng, and T. Takahashi. A strategy for the use of bomb-produced radiocarbon as a tracer for the transport of fossil fuel  $\text{CO}_2$  into the deep-sea source regions. *Earth Planet. Sci. Lett.*; 1980; v. 49: p. 463-468.

2890. Mrozowski, C. L. and D. E. Hayes. The evolution of the Parece Vela Basin, eastern Philippine Sea. *Earth Planet. Sci. Lett.* ; 1979; v. 46: p. 49-67.

2891. Sarmiento, J. L. and W. S. Broecker. Ocean floor  $^{222}\text{Rn}$  standing crops in the Atlantic and Pacific Oceans. *Earth Planet. Sci. Lett.* ; 1980; v. 49: p. 341-350.

2892. Simpson, H.J., R.F. Bopp, B.L. Deck, and C.R. Olsen. Fluxes and behavior of reactive materials in urban estuaries. in: J.D. Burton, Ed. "River Input to Ocean Systems". New York: United Nations; 1981: p. 343-351.

2893. Broecker, W. S., T. Takahashi, H. J. Simpson, and T-H Peng. Fate of fossil fuel carbon dioxide and the global carbon budget. *Science*; 1979; v. 206: p. 409-418.

2894. Houghton, R. W. . Characteristics of the fortnightly shelf wave along the Ghana coast. *J. Geophys. Res.* ; 1979; v. 84(n. C10): p. 6355-6361.

2895. Simpson, H.J., R.M. Trier, C.R. Olsen, D.E. Hammond, A. Ege, L. Miller, and J.M. Melack. Fallout plutonium in an alkaline, saline lake. *Science*; 1980; v. 207(n. 4435): p. 1071-1073; ISSN .

2896. Horai, K., J.L. Winkler, Jr., S.J. Keihm, M.G. Langseth, J.A. Fountain, and E.A. West. Thermal conduction in a composite circular cylinder: a new technique for thermal conductivity measurements of lunar core samples. *Philos. Trans. R. Soc. London, A. Mathematical and Physical Sci.*; 1980; v. 293(n. 1406): p. 571-598.

2897. Damuth, J. E. . Migrating sediment waves created by turbidity currents in the northern South China Basin. *Geology*; 1979; v. 7: p. 520-523.

2898. Scholz, C. H., J. Beavan, and T. C. Hanks. Frictional metamorphism, argon depletion, and tectonic stress on the Alpine Fault, New Zealand. *J. Geophys. Res.* ; 1979; v. 84(n. B12): p. 6770-6782.

2899. Okada, H. and A. McIntyre. Seasonal distribution of modern coccolithophores in the western North Atlantic Ocean. *Mar. Biol.* ; 1979; v. 54: p. 319-328.

2900. Schweickert, R. A., R. L. Armstrong, and J. E. Harakal. Lawsonite blueschist in the northern Sierra Nevada, California. *Geology*; 1980; v. 8: p. 27-31.

2901. LaBrecque, J.L. and M. Keller. A geophysical study of the Indo-Atlantic Basin. in: C. Craddock, Ed. "Antarctic Geoscience". Madison, WI: The University of Wisconsin Press; 1982: p. 387-396.

2902. Malone, T.C., P.J. Neale, and D. Boardman. Influences of estuarine circulation on the distribution and biomass of phytoplankton size fractions. in: V.S. Kennedy, Ed. "Estuarine Perspectives," *Proc. Fifth Biennial International Estuarine Res. Conf.* London: Academic Press; 1980: p. 249-262.

2903. Williams, D.F., A.W.H. Be, and R.G. Fairbanks. Seasonal oxygen isotopic variations in living planktonic foraminifera off Bermuda. *Science*; 1979; v. 206(p. 447-449).

2904. King, K. Jr. and J. L. Bada. Effect of in situ leaching on amino acid racemisation rates in fossil bone. *Nature*; 1979; v. 281(n. 5727): p. 135-137.

2905. Broecker, W. S., J. R. Toggweiler, and T. Takahashi. The Bay of Bengal — a major nutrient source for the deep Indian Ocean. *Earth Planet. Sci. Lett.* ; 1980; v. 49: p. 506-512.

2906. McCann, W. R., S. P. Nishenko, L. R. Sykes, and J. Krause. Seismic gaps and plate tectonics: seismic potential for major boundaries. *Pageoph*; 1979; v. 117: p. 1082-1147.

2907. Engelder, T. Evidence from strain relaxation tests for the exchange of principal stress axes. in: T. Hanks and B. Raleigh, Eds. "Proc. Conference IX -- Magnitude of Deviatoric Stresses in the Earth's Crust and Upper Mantle," USGS Open File Report No. 80-625. Menlo Park, CA: U.S. Dept. Interior Geol. Survey; 1980: p. 444-461.

2908. Berberian, M., I. Asudeh, R.G. Bilham, C.H. Scholz, and C. Soufleris. Mechanism of the main shock and the aftershock study of the Tabas-e-Golshan (Iran) earthquake of September 16, 1978: a preliminary report. *Bull. Seismol. Soc. Am.*; 1979; v. 69(n. 6): p. 1851-1859.

2909. Perfit, M. R., B. C. Heezen, M. Rawson, and T. W. Donnelly. Chemistry, origin and tectonic significance of metamorphic rocks from the Puerto Rico Trench. *Mar. Geol.* ; 1980; v. 34: p. 125-156.
2910. Schweickert, R.A. and W.S. Snyder. Paleozoic plate tectonics of the Sierra Nevada and adjacent regions. in: W.G. Ernst, Ed. "The Geotectonic Development of California". Englewood Cliffs, NJ: Prentice-Hall; 1981: p. 182-201.
2911. Schweicker, R.A. . Tectonic evolution of the Sierra Nevada Range. in: W.G. Ernst, Ed. "The Geotectonic Development of California". Englewood Cliffs, NJ: Prentice-Hall; 1981: p. 87-131.
2912. Ninkovich, D., R. S. J. Sparks, and M. T. Ledbetter. The exceptional magnitude and intensity of the Toba eruption, Sumatra: an example of the use of deep-sea tephra layers as a geological tool. *Bull. Volcanol.* ; 1978; v. 41(n. 3): p. 1-13.
2913. Kranz, R. L. . The effects of continuing pressure and stress difference on static fatigue of granite. *J. Geophys. Res.* ; 1980; v. 85(n. B4): p. 1854-1866.
2914. Santschi, P.H., D. Adler, M. Amdurer, Y-H Li, and J.J. Bell. Thorium isotopes as analogues for "particle-reactive" pollutants in coastal marine environments. *Earth Planet. Sci. Lett.*; 1980; v. 47: p. 327-335.
2915. Kolla, V., S. Eittreim, L. Sullivan, J.A. Kostecki, and L.H. Burckle. Current-controlled, abyssal microtopography and sedimentation in Mozambique Basin, southwest Indian Ocean. *Mar. Geol.* ; 1980; v. 34: p. 171-206.
2916. Cook, E. R. and G. C. Jacoby, Jr. Evidence for quasi-periodic July drought in the Hudson Valley, New York. *Nature*; 1979; v. 282(n. 5737): p. 390-392.
2917. Tauxe, L. . A new data for Ramapithecus. *Nature*; 1979; v. 282(n. 5737): p. 399-401.
2918. Cohen, C. R. . Plate tectonic model for the Oligo-Miocene evolution of the western Mediterranean. *Tectonophysics*; 1980 ; v. 68( ) : p. 283-311.
2919. Cohen, C. R., R. A. Schweickert, and A. L. Odom. Age of emplacement of the Schistes lustrés nappe, Alpine Corsica. *Tectonophysics*; 1981; v. 73: p. 267-283.
2920. Gordon, A. L. and T. N. Baker. Ocean transients as observed by Geos 3 coincident orbits. *J. Geophys. Res.* ; 1980; v. 85(n. C1): p. 502-506.

2921. Kukla, G. End of the last interglacial: a predictive model of the future? in: E.M. Van Zinderen Bakker, Sr., and J.A. Coetzee, Eds. "Palaeoecology of Africa and the Surrounding Islands". Rotterdam: A.A. Balkema; 1980; V. 12: p. 395-408.
2922. Houtz, R., C. Windisch, and S. Murauchi. Changes in the crust and upper mantle near the Japan-Bonin trench. *J. Geophys. Res.*; 1980; v. 85(n. B1): p. 267-274.
2923. Gardner, W. D. . Sediment trap dynamics and calibration: a laboratory evaluation. *J. Mar. Res.* ; 1980; v. 38(n. 1): p. 17-39.
2924. Gardner, W. D. . Field assessment of sediment traps. *J. Mar. Res.*; 1980; v. 38(n. 1): p. 41-52.
2925. Dickinson, W. R. and W. S. Snyder. Geometry of subducted slabs related to San Andreas transform. *J. Geol.* ; 1979; v. 87: p. 609-627.
2926. Cohen, R.S., N.M. Evensen, P.J. Hamilton, and R.K. O'Nions. U-Pb, Sm-Nd and Rb-Sr systematics of mid-ocean ridge basalt glasses. *Nature*; 1980; v. 283(n. 5743): p. 149-153.
2927. Olsen, C.R., P.E. Biscaye, H.J. Simpson, R.M. Trier, N. Kostyk, R.F. Bopp, and Y.-H. Li. Reactor-released radionuclides and fine-grained sediment transport and accumulation patterns in Barnegat Bay, New Jersey and adjacent shelf waters. *Estuarine Coastal Mar. Sci.*; 1980; v. 10: p. 119-142.
2928. Watts, A. B., J. H. Bodine, and N. M. Ribe. Observations of flexure and the geological evolution of the Pacific Ocean basin. *Nature*; 1980; v. 283(n. 5747): p. 532-537.
2929. Fairbanks, R. G., P. H. Wiebe, and A. W. H. Be. Vertical distribution and isotopic composition of living planktonic foraminifera in the western North Atlantic. *Science*; 1980; v. 207: p. 61-63.
2930. Langseth, M.G. and C.L. Mrozowski. Geophysical surveys for Leg 59 sites, Deep Sea Drilling Project. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1981; V. 59: p. 487-502.
2931. Hunkins, K., Y. Kristoffersen, G. L. Johnson, and A. Heiberg. The Fram I Expedition. *EOS*; 1979; v. 60: p. 1043-1044.

2932. Marra, J. . Time course of light intensity adaptation in a marine diatom. *Mar. Biol. Lett.* ; 1980; v. 1: p. 175-183.

2933. Purdy, G. M., J. I. Ewing, and G. M. Bryan. A deep-towed hydrophone seismic-reflection survey around IPOD sites 417 and 418. *Mar. Geol.* ; 1980; v. 35: p. 1-19.

2934. Nakamura, K., G. Plafker, and J. N. Davies. A tectonic stress trajectory map of Alaska using information from volcanoes and faults. *Bull. Earthquake Res. Inst.*; 1980; v. 55: p. 89-100.

2935. Rabinowitz, P. D. and W. J. Ludwig. Geophysical measurements at candidate drill sites along an east-west flow line in the Central Atlantic Ocean. *Mar. Geol.* ; 1980; v. 35: p. 243-275.

2936. Forsythe, R. and R. Allen. The basement rocks of Peninsula Staines, Region XII, province of Ultima Esperanza, Chile. *Revista Geologica de Chile*; 1980; (n. 10): p. 3-15.

2937. Ludwig, W. J. and P. D. Rabinowitz. Geophysical characteristics of ocean crust: IPOD candidate site PAC 5, central eastern Pacific Ocean Basin. *Mar. Geol.* ; 1980; v. 35: p. 111-127.

2938. Ludwig, W. J. and P. D. Rabinowitz. Structure of Vema Fracture Zone. *Mar. Geol.* ; 1980; v. 35: p. 99-110.

2939. Boatwright, J. . A spectral theory for circular seismic sources; simple estimates of source dimension, dynamic stress drop, and radiated seismic energy. *Bull. Seismol. Soc. Am.* ; 1980; v. 70: p. 1-27.

2940. Santschi, P.H., W.S. Broecker, Y-H Li, J. Bell, and S. Carson. Radioactive and stable trace metals in Narragansett Bay, Rhode Island. in: T.F. Gesell and W.M. Lowder, Eds. "Natural Radiation Environment III". Springfield, VA: National Technical Information Service, U.S. Dept. of Commerce; 1980; ( ): p. 514-528.

2941. Tauxe, L., D. V. Kent, and N. D. Opdyke. Magnetic components contributing to the NRM of Middle Siwalik red beds. *Earth Planet. Sci. Lett.* ; 1980; v. 47: p. 279-284.

2942. Kukla, G. and D. Robinson. Annual cycle of surface albedo. *Mon. Weather Rev.*; 1980; v. 108(n. 1): p. 56-68.

2943. Bryan, G. M., R. G. Markl, and R. E. Sheridan. IPOD site surveys in the Blake-Bahama Basin. *Mar. Geol.* ; 1980; v. 35: p. 43-63.

2944. King, K. Jr. . Applications of amino acid biogeochemistry for marine sediments. in: P.E. Hare, T.C. Hoering, and K. King, Jr., Eds. "Biogeochemistry of Amino Acids". New York: John Wiley & Sons, Inc.; 1980: p. 377-391.
2945. King, K. Jr.  $\gamma$ -Carboxyglutamic acid in fossil bone. in: P.E. Hare, T.C. Hoering, and K. King, Jr., Eds. "Biogeochemistry of Amino Acids". New York: John Wiley & Sons, Inc.; 1980: p. 491-501.
2946. Holcomb, D. J. and T. Koczyński. Automatic tracking, peak timer. *Rev. Sci. Instrum.* ; 1980; v. 51(n. 3): p. 310-313.
2947. Adler, D., M. Amdurer, and P.H. Santschi. Metal tracers in two marine microcosms: sensitivity to scale and configuration. in: J.P. Giesy, Jr., Ed. "Microcosms in Ecological Research": U.S. Dept. Energy, U.S. Technical Information Center, Symposium Series 52, (CONF-781101); 1980: p. 348-368.
2948. Griffin, W. L. and H. K. Brueckner. Caledonian Sm-Nd ages and a crustal origin for Norwegian eclogites. *Nature*; 1980; v. 285(n. 5763): p. 319-321.
2949. Broecker, W.S., T-H Peng, G. Mathieu, R. Hesslein, and T. Torgersen. Gas exchange rate measurements in natural systems. *Radiocarbon*; 1980; v. 22(n. 3): p. 676-683.
2950. Herron, E.M., S.C. Cande, and B.R. Hall. An active spreading center collides with a subduction zone: a geophysical survey of the Chile Margin triple junction. in: L.D. Kulm, J. Dymond, E.J. Dasch, and D.M. Hussong, Eds. "Nazca Plate: Crustal Formation and Andean Convergence". Boulder, CO: GSA; 1981: p. 683-701, Mem. 154.
2951. Herron, E.M. Chile Margin near lat. 38oS: evidence for a genetic relationship between continental and marine geologic features or a case of curious coincidences? in: L.D. Kulm, J. Dymond, E.J. Dasch, and D.M. Hussong, Eds. "Nazca Plate: Crustal Formation and Andean Convergence". Boulder, CO: GSA; 1981: p. 755-760, Mem. 154.
2952. Simpson, D.W. Reservoir-induced seismicity at Nurek and Toktogul Reservoirs, Soviet Central Asia. in: "Proc. International Research Conference on Intra-Continental Earthquakes, September 17-21, 1979". Ohrid, Yugoslavia; 1981: p. 249-257.
2953. Balachandran, N. K. Gravity waves from thunderstorms. *Mon. Weather Rev.*; 1980; v. 108(n. 6): p. 804-816.
2954. O'Nions, R. K., N. M. Evensen, and P. J. Hamilton. Differentiation and evolution of the mantle. *Philos. Trans. R. Soc. London A*; 1980; v. 297: p. 479-493.

2955. McCann, W. R., O. J. Perez, and L. R. Sykes. Yakataga gap, Alaska: seismic history and earthquake potential. *Science*; 1980; v. 207(p. 1309-1314).

2956. Hamlyn, P. R. and E. Bonatti. Petrology of mantle-derived ultramafics from the Owen fracture zone, northwest Indian Ocean: implications for the nature of the oceanic upper mantle. *Earth Planet. Sci. Lett.*; 1980; v. 48: p. 65-79.

2957. Ruddiman, W.F., G.A. Jones, T.-H. Peng, L.K. Glover, B.P. Glass, and P.J. Liebertz. Tests for size and shape dependency in deep-sea mixing. *Sediment. Geol.* ; 1980; v. 25: p. 257-276.

2958. Morley, J. J. . Analysis of the abundance variations of the subspecies of *Cycladophora davisiana*. *Mar. Micropaleontol.* ; 1980; v. 5: p. 205-214.

2959. Kolla, V., L. Nadler, and E. Bonatti. Clay mineral distributions in surface sediments of the Philippine Sea. *Oceanol. Acta*; 1980; v. 3(n. 2): p. 245-250.

2960. Burckle, L. H., J. R. Dodd, and R. J. Stanton, Jr. Diatom biostratigraphy and its relationship to paleomagnetic stratigraphy and molluscan distribution in the Neogene Centerville Beach section, California. *J. Paleontol.* ; 1980; v. 54(n. 4): p. 664-674.

2961. Malone, F. D. and J. T. Kuo. Semi-implicit finite element methods applied to the solution of the shallow water equations. *J. Geophys. Res.*; 1981; v. 86(n. C5): p. 4029-4040.

2962. Haq, B.U., T.R. Worsley, L.H. Burckle, R.G. Douglas, L.D. Keigwin, Jr., N.D. Opdyke, S.M. Savin, M.A. Sommer, II, E. Vincent, and F. Woodruff. Late Miocene marine carbon-isotopic shift and synchronicity of some phytoplanktonic biostratigraphic events. *Geology*; 1980; v. 8: p. 427-431.

2963. Frankel, A., W. R. McCann, and A. J. Murphy. Observations from a seismic network in the Virgin Islands region: tectonic structures and earthquake swarms. *J. Geophys. Res.*; 1980; v. 85(n. B5): p. 2669-2678.

2964. Perfit, M. R., H. Brueckner, and J. R. Lawrence. Trace element and isotopic variations in a zoned pluton and associated volcanic rocks, Unalaska Island, Alaska: a model for fractionation in the Aleutian calcalkaline suite. *Contrib. Mineral. Petrol.* ; 1980; v. 73(n. 1): p. 69-87.



2965. Takahashi, T., W. S. Broecker, S. R. Werner, and A. Bainbridge. Carbonate chemistry of the surface waters of the world oceans. in : E. D. Goldberg, Y. Horibe, and K. Saruhashi, Eds. *Isotope Marine Chemistry*. Tokyo: Uchida Rokakuho Pub.; 1980: p. 291-326.

2966. Li, Y-H, H. W. Feely, and J. R. Toggweiler.  $^{228}\text{Ra}$  and  $^{228}\text{Th}$  concentrations in GEOSECS Atlantic surface waters. *Deep-Sea Res.*; 1980; v. 27A: p. 545-555.

2967. Acharya, H. K. and Y. P. Aggarwal. Seismicity and tectonics of the Philippine Islands. *J. Geophys. Res.*; 1980; v. 85(n. B6): p. 3239-3250.

2968. Kolla, V., J. A. KostECKI, L. Henderson, and L. Hess. Morphology and Quaternary sedimentation of the Mozambique Fan and environs, southwestern Indian Ocean. *Sedimentology*; 1980; v. 27: p. 357-378.

2969. Malahoff, A., R. W. Embley, R. B. Perry, and C. Fefe. Submarine mass-wasting of sediments on the continental slope and upper rise south of Baltimore Canyon. *Earth Planet. Sci. Lett.*; 1980; v. 49: p. 1-7.

2970. Peng, T-H and W. Broecker. Gas exchange rates for three closed-basin lakes. *Limnol. Oceanogr.*; 1980; v. 25(n. 5): p. 789-796.

2971. Broecker, W. S. Geochemical tracers and ocean circulation. in : B. A. Warren and C. Wunsch, Eds. *Evolution of Physical Oceanography*. Cambridge, MA: MIT; 1981: p. 434-460.

2972. McCoy, F. W. . Climatic change in the eastern Mediterranean area during the past 240,000 years. in : C. Dumas, Ed. *Thera and the Aegean World II*. London; 1980: p. 79-100.

2973. Stuiver, M., A. Rebello, J. White, and W. Broecker. Isotopic indicators of age/growth in tropical trees. in: F.H. Bormann and G. Berlyn, Eds. "Age and Growth Rate of Tropical Trees: New Directions for Research," *School of Forestry and Environmental Studies Bulletin No. 94*. New Haven, CT: Yale University; 1981: p. 75-82.

2974. Hamlyn, P.R. Equilibration history and phase chemistry of the Pantou Sill, Western Australia. *Am. J. Sci.* ; 1980; v. 280: p. 631-668.

2975. Houtz, R.E. Crustal structure of the North Atlantic on the basis of large-airgun-sonobuoy data. *Geol. Soc. Am. Bull., Part I*; 1980; v. 91: p. 406-413.

2976. Langseth, M.G., M.A. Hobart, and K-I Horai. Heat flow in the Bering Sea. *J. Geophys. Res.*; 1980; v. 85(n. B7): p. 3740-3750.

2977. Flood, R.D. Longitudinal triangular ripples in the Blake-Bahama Basin. *Mar. Geol.*; 1981; v. 39: p. M13-M20.
2978. Broecker, W.S., T-H Peng, and R. Engh. Modeling the carbon system. *Radiocarbon*; 1980; v. 22(n. 3): p. 565-598.
2979. Wesnousky, S.G. and C.H. Scholz. The craton: its effect on the distribution of seismicity and stress in North America. *Earth Planet. Sci. Lett.*; 1980; v. 48: p. 348-355.
2980. Bé , A.W.H., C. Hemleben, O.R. Anderson, and M. Spindler. Pore structures in planktonic foraminifera. *J. Foraminiferal Res.*; 1980; v. 10(n. 2): p. 117-128.
2981. Embley, R.W. and J.J. Morley. Quaternary sedimentation and paleo-environmental studies off Namibia (South-West Africa). *Mar. Geol.*; 1980; v. 36: p. 183-204.
2982. Rind, D. Microseisms at Palisades 3. Microseisms and microbaroms. *J. Geophys. Res.*; 1980; v. 85(n. B9): p. 4854-4862.
2983. Berggren, W.A., L.H. Burckle, M.B. Cita, H.B.S. Cooke, B.M. Funnell, S. Gartner, J.D. Hays, J.P. Kennett, N.D. Opdyke, L. Pastouret, N.J. Shackleton, and Y. Takayanagi. Towards a Quaternary time scale. *Quat. Res.*; 1980; v. 13: p. 277-302.
2984. Anderson, R.N., D.J. Spariosu, J.K. Weissel, and D.E. Hayes. The interrelation between variations in magnetic anomaly amplitudes and basalt magnetization and chemistry along the southeast Indian Ridge. *J. Geophys. Res.*; 1980; v. 85(n. B7): p. 3883-3898.
2985. Bé , A.W.H. Gametogenic calcification in a spinose planktonic foraminifer, *Globigerinoides sacculifer* (Brady). *Mar. Micropaleontol.*; 1980; v. 5: p. 283-310.
2986. Broecker, W.S., T. Takahashi, and M. Stuiver. Hydrography of the central Atlantic--II. Waters beneath the two-degree discontinuity. *Deep-Sea Res.*; 1980; v. 27A: p. 397-419.
2987. Alvarez, W., D.V. Kent, I.P. Silva, R.A. Schweickert, and R.A. Larson. Franciscan Complex limestone deposited at 17° South paleolatitude. *Geol. Soc. Am. Bull., Part I*; 1980; v. 91: p. 476-484.
2988. Santschi, P.H. A revised estimate for trace metal fluxes to Narragansett Bay: a comment. *Estuarine Coastal Mar. Sci.*; 1980; v. 11: p. 115-118.

2989. Boatwright, J. Preliminary body-wave analysis of the St. Elias, Alaska earthquake of February 28, 1979. *Bull. Seismol. Soc. Am.*; 1980; v. 70(n. 2): p. 419-436.
2990. Liddicoat, J.C., N.D. Opdyke, and G.I. Smith. Palaeomagnetic polarity in a 930-m core from Searles Valley, California. *Nature*; 1980; v. 286(n. 5768): p. 22-25.
2991. Gordon, A.L. and F. Aikman, III. Salinity maximum in the pycnocline of the Middle Atlantic Bight. *Limnol. Oceanogr.*; 1981; v. 26(n. 1): p. 123-130.
2992. Bonatti, E., J.R. Lawrence, P.R. Hamlyn, and D. Breger. Aragonite from deep sea ultramafic rocks. *Geochim. Cosmochim. Acta*; 1980; v. 44: p. 1207-1214.
2993. Bishop, J.K.B., R.W. Collier, D.R. Kettens, and J.M. Edmond. The chemistry, biology, and vertical flux of particulate matter from the upper 1500 m of the Panama Basin. *Deep-Sea Res.*; 1980; v. 27A: p. 615-640.
2994. Stoll, R.D. . Theoretical aspects of sound transmission in sediments. *J. Acoust. Soc. Am.*; 1980; v. 68(n. 5): p. 1341-1350.
2995. Embley, R.W., P.J. Hoose, P. Lonsdale, L. Mayer, and B.E. Tucholke. Furrowed mud waves on the western Bermuda Rise. *Geol. Soc. Am. Bull., Part I*; 1980; v. 91: p. 731-740.
2996. Marra, J. . Vertical mixing and primary production. in : P. G. Falkowski, Ed. *Primary Production in the Sea*. New York: Plenum Pub. Corp.; 1980: p. 121-137.
2997. Broecker, W. S. and T-H Peng. Seasonal variability in the  $^{14}\text{C}/^{12}\text{C}$  ratio for surface ocean water. *Geophys. Res. Lett.*; 1980; v. 7(n. 11): p. 1020-1022.
2998. Torgersen, T., D. E. Hammond, W. B. Clarke, and T-H Peng. Fayetteville, Green Lake, New York:  $^3\text{H}$ - $^3\text{He}$  water mass ages and secondary chemical structure. *Limnol. Oceanogr.*; 1981; v. 26(n. 1): p. 110-122.
2999. Steckler, M. S. and A. B. Watts. Subsidence history and tectonic evolution of Atlantic-type continental margins. in : R. A. Scrutton , Ed. *Dynamics of Passive Margins*. *Geodynamics Series, V. 6* ed. Washington, DC: American Geophysical Union ; 1981: p. 184-196.
3000. Talwani, M., J. Mutter, and O. Eldholm. The initiation of opening of the Norwegian Sea. in : *Proc. 26th International Geological Congress, Geology of Continental Margins Symposium*; 1980; Paris: *Oceanol. Acta*; 1981; n. SP: P. 23-30.

3001. Das, S. and C.H. Scholz. Stress corrosion cracking in the earth. in: S. Nemat-Nasset, Ed. "Solid Earth Geophysics and Geotechnology AMD". New York: American Society Mechanical Engineers; 1980; V. 42: p. 11-20.
3002. Ninkovich, D., L.H. Burckle, and N.D. Opdyke. Palaeographic and geologic setting for early man in Java. in: R.A. Scrutton and M. Talwani, Eds. "The Ocean Floor". New York: John Wiley & Sons, Inc.; 1982: p. 211-227.
3003. Lindsay, E. H., N. D. Opdyke, and N. M. Johnson. Pliocene dispersal of the horse *Equus* and late Cenozoic mammalian dispersal events. *Nature*; 1980; v. 287(n. 5778): p. 135-138.
3004. Menke, W. H. and P. G. Richards. Crust-mantle whispering gallery phases: a deterministic model of teleseismic Pn wave propagation. *J. Geophys. Res.*; 1980; v. 85(n. B10): p. 5416-5422.
3005. Kristy, M. J. and D. W. Simpson. Seismicity changes preceding two recent central Asian earthquakes. *J. Geophys. Res.*; 1980; v. 85(n. B9): p. 4829-4837.
3006. Kent, D.V. and F.J-M.R. Maurrasse. Paleomagnetic results from the Cretaceous Dumisseau Formation of Haiti. in: F.J-M.R. Maurrasse, Ed. "Transactions du 1er Colloque sur la Geologie d'Haiti". Port-Au-Prince, Haiti: Le Natal; 1982: p. 236-244.
3007. Houtz, R. E. Seafloor and near-surface sound velocities from Barents Sea sonobuoy data. *J. Geophys. Res.*; 1980; v. 85(n. B9): p. 4838-4844.
3008. Broecker, W. S. and T. Takahashi. Hydrography of the Central Atlantic-III. The North Atlantic deep-water complex. *Deep-Sea Res.*; 1980; v. 27A: p. 591-613.
3009. Damuth, J. E. . Use of high-frequency (3.5-12 kHz) echograms in the study of near-bottom sedimentation processes in the deep-sea: a review. *Mar. Geol.* ; 1980; v. 38: p. 51-75.
3010. Bilham, R. and D. Simpson. Indo-Asian convergence and the 1913 survey line connecting the Indian and Russian triangulation surveys. in: K.J. Miller, Ed. "International Karakoram Project". London: Cambridge University Press; 1984; V. 1: p. 160-170.
3011. Donn, W. L. and D. Ninkovich. Rate of Cenozoic explosive volcanism in the North Atlantic Ocean inferred from deep sea cores. *J. Geophys. Res.*; 1980; v. 85(n. B10): p. 5455-5460.

3012. Scholz, C. H. . Shear heating and the state of stress on faults. *J. Geophys. Res.* ; 1980; v. 85(n. B11): p. 6174-6184.

3013. Embley, R. W. and D. A. Johnson. Acoustic stratigraphy and biostratigraphy of Neogene carbonate horizons in the north equatorial Pacific. *J. Geophys. Res.*; 1980; v. 85(n. B10): p. 5423-5437.

3014. Watts, A. B., J. H. Bodine, and M. S. Steckler. Observations of flexure and the state of stress in the oceanic lithosphere. *J. Geophys. Res.*; 1980; v. 85(n. B11): p. 6369-6376.

3015. McKenzie, D., A. Watts, B. Parsons, and M. Roufousse. Planform of mantle convection beneath the Pacific Ocean. *Nature*; 1980; v. 288(n. 5790): p. 442-446.

3016. Santschi, P.H., Y-H Li, J.J. Bell, R.M. Trier, and K. Kawtaluk. Pu in coastal marine environments. *Earth Planet. Sci. Lett.*; 1980; v. 51: p. 248-265.

3017. Fairbanks, R.G. and P.H. Wiebe. Foraminifera and chlorophyll maximum: vertical distribution, season succession, and paleoceanographic significance. *Science*; 1980; v. 209: p. 1524-1526.

3018. Kadko, D. A detailed study of some uranium series nuclides at an abyssal hill area near the East Pacific Rise at 8 0 45'N. *Earth Planet. Sci. Lett.*; 1980; v. 51: p. 115-131.

3019. Perez, O.J. and K.H. Jacob. St. Elias, Alaska, earthquake of February 28, 1979: tectonic setting and precursory seismic pattern. *Bull. Seismol. Soc. Am.*; 1980; v. 70(n. 5): p. 1595-1606.

3020. McCoy, F.W. Photographic analysis of coring. *Mar. Geol.*; 1980; v. 38: p. 263-282.

3021. Nelson, E.P., I.W.D. Dalziel, and A.G. Milnes. Structural geology of the Cordillera Darwin--collisional-style orogenesis in the southernmost Chilean Andes. *Eclogae geol. Helv.*; 1980; v. 73(n. 3): p. 727-751.

3022. Engelder, T. and P. Geiser. On the use of regional joint sets as trajectories of paleostress fields during the development of the Appalachian Plateau, New York. *J. Geophys. Res.*; 1980; v. 85(n. B11): p. 6319-6341.

3023. Malone, T.C., C. Garside, and P.J. Neale. Effects of silicate depletion on photosynthesis by diatoms in the plume of the Hudson River. *Mar. Biol.*; 1980; v. 58: p. 197-204.

3024. Weissel, J.K., R.N. Anderson, and C.A. Geller. Deformation of the Indo-Australian plate. *Nature*; 1980; v. 287(n. 5780): p. 284-291.
3025. Prothero, D.R. and D.B. Lazarus. Planktonic microfossils and the recognition of ancestors. *Sys. Zool.*; 1980; v. 29(n. 2): p. 119-129.
3026. Kaufman, K. and L.J. Burdick. The reproducing earthquakes of the Galapagos Islands. *Bull. Seismol. Soc. Am.*; 1980; v. 70(n. 5): p. 1759-1770.
3027. Flood, R.D. Deep-sea sedimentary morphology: modelling and interpretation of echo-sounding profiles. *Mar. Geol.*; 1980; v. 38: p. 77-92.
3028. Cochran, J.R. The Gulf of Aden: structure and evolution of a young ocean basin and continental margin. *J. Geophys. Res.*; 1981; v. 86(n. B1): p. 263-287.
3029. Falvey, D.A. and J.C. Mutter. Regional plate tectonics and the evolution of Australia's passive continental margins. *BMR J. Australian Geol. Geophys.*; 1981; v. 6: p. 1-29.
3030. Mrozowski, C.L. and D.E. Hayes. A seismic reflection study of faulting in the Mariana fore arc. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands," *Geophysical Monography 23*. Washington, DC: AGU; 1980: p. 223-234.
3031. Lewis, S.D. and D.E. Hayes. The structure and evolution of the Central Basin Fault, West Philippine Basin. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands," *Geophysical Monography 23*. Washington, DC: AGU; 1980: p. 77-88.
3032. Weissel, J.K. Evidence for Eocene oceanic crust in the Celebes Basin. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands," *Geophysical Monograph 23*. Washington, DC: AGU; 1980: p. 37-47.
3033. Anderson, R.N. 1980 update of heat flow in the east and southeast Asian Seas. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands," *Geophysical Monography 23*. Washington, DC: AGU; 1980: p. 319-326.
3034. Damuth, J. E. . Quaternary sedimentation processes in the South China Basin as revealed by echo-character mapping and piston-core studies. in : D. E. Hayes, Ed. *The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands. Geophysical Monograph 23 ed*. Washington, DC: American Geophysical Union; 1980: p. 105-125.

3035. Taylor, B. and D. E. Hayes. The tectonic evolution of the South China Basin. in : D. E. Hayes, Ed. The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands. Geophysical Monograph 23 ed. Washington, DC: American Geophysical Union ; 1980: p. 105-125.

3036. Steckler, M. S. and A. B. Watts. The Gulf of Lion: subsidence of a young continental margin. *Nature*; 1980; v. 287(n. 5781): p. 425-429.

3037. Kristy, M. J., L. J. Burdick, and D. W. Simpson. The focal mechanisms of the Gazli, USSR, earthquakes. *Bull. Seismol. Soc. Am.*; 1980; v. 70(n. 5): p. 1737-1750.

3038. Ruddiman, W. F., B. Molino, A. Esmay, and E. Pokras. Evidence bearing on the mechanism of rapid deglaciation. *Climatic Change*; 1980; v. 3: p. 65-87.

3039. Winslow, M. A. . The structural evolution of the Magallanes Basin and neotectonics in the southernmost Andes. in : C. Craddock, Ed. Antarctic Geoscience. Madison, WI: The University of Wisconsin; 1982: p. 143-154.

3040. Bopp, R. F., P. H. Santschi, Y-H Li, and B. L. Deck. Biodegradation and gas-exchange of gaseous alkalines in model estuarine ecosystems. *Organic Geochem.* ; 1981; v. 3: p. 9-14.

3041. Talwani, M. . Marine research and the Law of the Sea. *Columbia J. World Business*; Winter 1980; Law of the Sea Issue: p. 84-91.

3042. Houtz, R. E. . Comparison of velocity-depth characteristics in western North Atlantic and Norwegian Sea sediments. *J. Acoust. Soc. Am.*; 1980; v. 68(n. 5): p. 1409-1414.

3043. Bryan, G. M. . The hydrophone-pinger experiment. *J. Acoust. Soc. Am.* ; 1980; v. 68(n. 5); ISSN p. 1403-1408.

3044. House, L. and J. Boatwright. Investigation of two high stress drop earthquakes in the Shumagin seismic gap, Alaska. *J. Geophys. Res.*; 1980; v. 85(n. B12): p. 7151-7165.

3045. Kadko, D. and L. H. Burckle. Manganese nodule growth rates determined by fossil diatom dating. *Nature*; 1980; v. 287(n. 5784): p. 725-726.

3046. Seeber, L., J. G. Armbruster, and R. C. Quittmeyer. Seismicity and continental subduction in the Himalayan arc. in : F. M. Delany and H. K. Gupta, Eds. Zagros, Hindu Kush, Himalaya Geodynamic Evolution. Geodynamic Series, V. 3 ed. Washington, DC and Boulder, CO: American Geophysical Union and Geological Society of America; 1981: p. 215-242.

3047. Jarrard, R.D. and S. Sasajima. Paleomagnetic synthesis for Southeast Asia: constraints on plate motions. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands" . Washington, DC: AGU; 1980; Geophysical Monograph 23: p. 293-316.

3048. Tucholke, B. E. . Acoustic environment of the Hatteras and Nares Abyssal Plains, western North Atlantic Ocean, determined from velocities and physical properties of sediment cores. J. Acoust. Soc. Am. ; 1980; v. 68(n. 5): p. 1376-1390.

3049. Bonatti, E. and P.R. Hamlyn. Oceanic ultramafic rocks. in: C. Emiliani, Ed. "The Oceanic Lithosphere". New York: John Wiley & Sons, Inc.; 1981; V. 7, The Sea: p. 241-283.

3050. Dalziel, I.W.D. . The Early (pre-Middle Jurassic) history of the Scotia Arc region: a review and progress report. in: C. Craddock, Ed. "Antarctic Geoscience". Madison, WI: The University of Wisconsin Press; 1982: p. 111-126.

3051. Herron, T. J., P. L. Stoffa, and P. Buhl. Magma chamber and mantle reflections - East Pacific Rise. Geophys. Res. Lett.; 1980; v. 7(n. 11): p. 989-992.

3052. Bonatti, E. and A. Chermak. Formerly emerging crustal blocks in the equatorial Atlantic. Tectonophysics; 1981; v. 72: p. 165-180.

3053. Jacoby, G.C. The Arctic. in: M.K. Huges, P.M. Kelly, J.R. Pilcher, and V.C. LaMarche, Jr., Eds. "Climate from Tree Rings". London: Cambridge University Press; 1982: p. 107-118.

3054. Kent, D. V. and N. D. Opdyke. Paleomagnetism of Siluro-Devonian rocks from eastern Maine. Can. J. Earth Sci. ; 1980; v. 17: p. 1653-1665.

3055. Harrison, C.G.A. and E. Bonatti. The oceanic lithosphere. in: C. Emiliani, Ed. "The Oceanic Lithosphere". New York: John Wiley & Sons, Inc.; 1981; V. 7, The Sea: p. 21-48.

3056. Elthon, D. Metamorphism in oceanic spreading centers. in: C. Emiliani, Ed. "The Oceanic Lithosphere". New York: John Wiley & Sons, Inc.; 1981; V. 7, The Sea: p. 285-303.

3057. Thompson, P. R. and N. J. Shackleton. North Pacific palaeoceanography: late Quaternary coiling variations of planktonic foraminifer *Neogloboquadrina pachyderma*. Nature; 1980; v. 287(n. 5785): p. 829-833.



3058. Bopp, R. F., H. J. Simpson, C. R. Olsen, and N. Kostyk. Polychlorinated biphenyls in sediments of the tidal Hudson River, New York. *Environ. Sci. Technol.* ; 1981; v. 15(n. 2): p. 210-216.

3059. Horai, K. and J.L. Winkler. Thermal diffusivity of two Apollo II samples, 10020,44 and 10065,23: effect of petro-fabrics on the thermal conductivity of porous lunar rocks under vacuum. *Proc. Lunar Planet. Sci. Conf. 11th.* New York: Pergamon Press; 1980; ( ): p. 1777-1788.

3060. Diebold, J. and P. L. Stoffa. The travelttime equation tau-p mapping and inversion of common midpoint data. *Geophysics*; 1981; v. 46(n. 3): p. 238-254.

3061. Burckle, L. H. . Displaced Antarctic diatoms in the Amirante Passage. *Mar. Geol.* ; 1981; v. 39: p. M39-M43.

3062. Perez, O. J. and K. H. Jacob. Tectonic model and seismic potential of the eastern Gulf of Alaska and Yakataga seismic gap. *J. Geophys. Res.* ; 1980; v. 85(n. B12): p. 7132-7150.

3063. Stoffa, P. L., P. Buhl, J. B. Diebold, and F. Wenzel. Direct mapping of seismic data to the domain of intercept time and ray parameter -- a plane-wave decomposition. *Geophysics*; 1981; v. 46(n. 3): p. 255-267.

3064. White, J.W.C. and J.R. Lawrence. The relationship between the non-exchangeable hydrogens of tree-ring cellulose and the definition of source waters for tree sap. in: G.C. Jacoby, Ed. "Proc. International Meeting on Stable Isotopes in Tree-Ring Research". Palisades, NY: Lamont-Doherty Geological Observatory of Columbia University; 1980: p. 58-65.

3065. Stepien, J. C., T. C. Malone, and M. B. Chervin. Copepod communities in estuary and coastal plume of the Hudson River. *Estuarine, Coastal Shelf Sci.* ; 1981; v. 13(n. 2): p. 185-195.

3066. Adem, J. and W.L. Donn. Comparison of the earth-atmosphere radiation budget and albedo determined by a climate model and by satellite observations. in: J. Winston, Ed. "Proc. Fifth Annual Climate Diagnostics Workshop, Joint Institute for the Study of the Atmosphere and Ocean" University of Washington. Washington, DC: NOAA; 1981: p. 319-327.

3067. Donn, W.L. and J. Adem. Normals of monthly surface northern hemisphere albedo. in: J. Winston, Ed. "Proc. Fifth Annual Climate Diagnostics Workshop, Joint Institute for the Study of the Atmosphere and Ocean". Washington, DC: NOAA; 1981: p. 144-152.

3068. Bé , A. W. H., D. A. Caron, and O. R. Anderson. Effects of feeding frequency on life processes of the planktonic foraminifer *Globigerinoides sacculifer* in laboratory culture. *J. Mar. Biol. Assoc. U. K.* ; 1981; v. 61: p. 257-277.

3069. Abbott, D., W. Menke, M. Hobart, and R. Anderson. Evidence for excess pore pressures in southwest Indian Ocean sediments. *J. Geophys. Res.*; 1981; v. 86(n. B3): p. 1813-1827.

3070. Simpson, D. W., M. W. Hamburger, V. D. Pavlov, and I. L. Neresov. Tectonics and seismicity of the Toktogul reservoir region, Kirgizia, USSR. *J. Geophys. Res.* ; 1981; v. 86(n. B1): p. 345-358.

3071. Watts, A.B. Gravity anomalies over oceanic rifts. in: G. Palmason, Ed. "Continental and Oceanic Rifts", *Geodynamics Series*. Washington, DC: AGU; 1982; V. 8: p. 99-105.

3072. Mrozowski, C. L., D. E. Hayes, and B. Taylor. Multichannel seismic reflection surveys of Leg 60 sites, Deep Sea Drilling Project. in : *Initial Reports of the Deep Sea Drilling Project*. V. 60 ed. Washington, DC: U. S. Government Printing Office; 1981: p. 57-69.

3073. Gamboa, L. A. P. and P. D. Rabinowitz. The Rio Grande fracture zone in the western South Atlantic and its tectonic implications. *Earth Planet. Sci. Lett.*; 1981; v. 52: p. 410-418.

3074. Sykes, L.R., J.B. Kisslinger, L. House, J.N. Davies, and K.H. Jacob. Rupture zones of great earthquakes in the Alaska-Aleutian arc 1784 to 1980. *Science*; 1980; v. 210: p. 1343-1345.

3075. Talwani, M., P. Stoffa, P. Buhl, C. Windisch , and J.B. Diebold. Seismic multichannel towed arrays in the exploration of the oceanic crust. *Tectonophysics*; 1981; v. 81 : p. 273-300.

3076. Kolla, V., P. K. Ray, and J. A. Kostecki. Surficial sediments of the Arabian Sea. *Mar. Geol.*; 1981; v. 41: p. 183-204.

3077. Rowlett, H. . Seismicity at intersections of spreading centers and transform faults. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3815-3820.

3078. Takahashi, T., W. S. Broecker, and A. E. Bainbridge. The alkalinity and total carbon dioxide concentration in the world oceans. in : B. Bolin, Ed. *Carbon Cycle Modelling*. Supplement to the alkalinity and total carbon dioxide concentration in the world oceans; V. 16 ed. New York: John Wiley & Sons, Inc.; 1981: p. 159-199.

3079. Bonatti, E. . Metal deposits in the oceanic lithosphere. in : C. Emiliani, Ed. The Oceanic Lithosphere. V. 7 ed. New York: John Wiley & Sons; 1981: p. 639-686.
3080. Watts, A. B. and s. F. Daly. Long wavelength gravity and topography anomalies. Ann. Rev. Earth Planet. Sci.; 1981; v. 9: p. 415-448.
3081. Kent, D.V., G.C. Reid, R.E. Brown, L.W. Alvarez, W. Alvarez, and H.V. Michel. Asteroid extinction hypothesis. Science; 1981; v. 211: p. 648-656.
3082. Santschi, P. . Application of enclosures to the study of ocean chemistry. in : G. D. Grice and M. R. Reeve, Eds. Marine Mesocosms: Biological and Chemical Research in Experimental Ecosystems. New York: Springer Verlag; 1982: p. 63-80.
3083. Santschi, P. H., S. Cason, and Y-H Li . Natural radionuclides as tracers for geochemical processes in MERL mesocosms and Narragansett Bay. in : G. D. Grice and M. R. Reeve, Eds. Marine Mesocosms: Biological and Chemical Research in Experimental Ecosystems. New York: Springer-Verlag; 1982: p., 97-109.
3084. Dalziel, I. W. D. . Back-arc extension in the southern Andes: a review and critical reappraisal. Philos. Trans. R. Soc. London A; 1981; v. 300: p. 319-335.
3085. Kahn, M. J. and N. D. Opdyke. The magnetic polarity stratigraphy and correlation of the upper Siwalik sediments from the Bhattani Range, North West Frontier Province, Pakistan. Phys. Earth Planet. Inter.; 1981; v. 24: p. 133-141.
3086. Selwyn, S. and F. W. McCoy. A locking-compass for in situ sample orientation. Ocean Eng.; 1981; v. 8: p. 85-90.
3087. Gordon, A. L., D. G. Martinson, and H. W. Taylor. The wind-driven circulation in the Weddell-Enderby Basin. Deep-Sea Res.; 1981; v. 28A: p. 151-163.
3088. Kukla, G. . Climatic role of snow covers. in : "Sea Level, Ice, and Climatic Change," Proc. Canberra Symp.; December 1979; Canberra: IAHS Publ. 131: p. 79-107.
3089. Jacoby, G. C. and L. D. Ulan. Review of dendroclimatology in the Forest-Tundra Ecotone of Alaska and Canada. in : C. R. Harington, Ed. Syllogeus: Climatic Change in Canada. Ottawa: National Museums of Canada; 1981; Pub. 33: p. 97-128.
3090. Weissel, J. K. . Magnetic lineations in marginal basins of the western Pacific. Philos. Trans. R. Soc. London A.; 1981; v. 300: p. 223-247.

3091. Reyners, M. . Long- and intermediate-term seismic precursors to earthquakes-state of the art. in : D. W. Simpson and P. G. Richards, Eds. Earthquake Prediction - An International Review. Maurice Ewing Series 4 ed. Washington, DC: American Geophysical Union; 1981: p. 333-347.

3092. Menke, W. . The effect of load shape on the deflection of thin elastic plates. *Geophys. J. R. astr. Soc.*; 1981; v. 65: p. 571-577.

3093. Duplessy, J. C., A. W. H. Be, and P. L. Blank. Oxygen and carbon isotopic composition and biogeographic distribution of planktonic foraminifera in the Indian Ocean. *Palaeogeogr., Paleoclimatol., Palaeoecol.*; 1981; v. 33: p. 9 - 46.

3094. Williams, D. F., A. W. H. Be, and R. G. Fairbanks. Seasonal stable isotopic variations in living planktonic foraminifera from Bermuda plankton tows. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1981; v. 33: p. 71 - 102.

3095. Sancetta, C. . Diatoms as hydrographic tracers: example from Bering Sea sediments. *Science*; 1981; v. 211: p. 279-281.

3096. Lawrence, J.R. and J.I. Drever. Evidence for cold water circulation at DSDP site 395: isotopes and chemistry of alteration products. *J. Geophys. Res.*; 1981; v. 86(n. B6): p. 5125-5133.

3097. Broecker, W.S. and T. Takahashi. Hydrography of the central Atlantic-IV. Intermediate waters of Antarctic origin. *Deep-Sea Res.*; 1981; v. 28A(n. 3): p. 177-193.

3098. Katz, E.J. Dynamic topography of the sea surface in the equatorial Atlantic. *J. Mar. Res.*; 1981; v. 39(n. 1): p. 53-63.

3099. Malone, T.C. and P.J. Neale. Parameters of light-dependent photosynthesis for phytoplankton size fractions in temperate estuarine and coastal environments. *Mar. Biol.*; 1981; v. 61: p. 289-297.

3100. Burckle, L.H. Paleomagnetic date on the *Dictyochoa asperalfibula* crossover in the equatorial Pacific. *Micropaleontology*; 1981; v. 27(n. 3): p. 332-334.

3101. Kolla, V., J.A. Kosteki, F. Robinson, and P.E. Biscaye. Distributions and origins of clay minerals and quartz in surface sediments of the Arabian Sea. *J. Sediment Petrol.*; 1981; v. 51(n. 2): p. 563-569.

3102. Jacoby, G.C. and R.S. Perry. Lead-screw device for in-motion x-rays of tree cores. *Wood Sci.*; 1981; v. 13(n. 4): p. 199-201.
3103. Amdurer, M., D.M. Adler, and P.H. Santschi. Radiotracers in studies of trace metal behavior in mesocosms: advantages and limitations. in: G.D. Grice and M.R. Reeve, Eds. "Marine Mesocosms: Biological and Chemical Research in Experimental Ecosystems". New York: Springer-Verlag; 1982: p. 81-95.
3104. Engelder, T. and C.H. Scholz. Fluid flow along very smooth joints at effective pressures up to 200 megapascals. in: N.L. Carter, M. Griedman, J.M. Logan, and D.W. Stearns, Eds. "Mechanical Behavior of Crustal Rocks". Washington, DC: AGU; 1981: p. 147-152.
3105. Kuo, J.T. The inverse problem for ocean tides. *IEEE International Geoscience and Remote Sensing Symposium Digest*; 1981; v. 2: p. 735-743.
3106. Herron, E.M. Opportunities and challenges in data storage, retrieval, and display at L-DGO in th 1980s. in: A.M. Hittelman, Ed. "Frontiers in Data Storage Retrieval and Display". Boulder, CO: National Geophysical and Solar-Terrestrial Data Center; 1981: p. 45-46.
3107. Bilham, R. Delays in the onset times of near-surface strain and tilt precursors to earthquakes. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction -- An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 411-421.
3108. Durazzi, J.T. Stable-isotope studies of planktonic foraminifera in North Atlantic core tops. *Paleogeogr., Paleoclimatol., Palaeocol.*; 1981; v. 33: p. 157-172.
3109. Morley, J.J. and J.D. Hays. Towards a high-resolution, global, deep-sea chronology for the last 750,000 years. *Earth Planet. Sci. Lett.*; 1981; v. 53: p. 279-295.
3110. Cochran, J.R. Simple models of diffuse extension and the pre-seafloor spreading development of the continental margin of the Northeastern Gulf of Aden. in: "Proc. 26th International Geological Congress -- Geology of Continental Margins Symposium," Paris, 1980, *Oceanol. Acta*; 1981; (n. SP): p. 155-165.
3111. House, L.S., L.R. Sykes, J.N. Davies, and K.H. Jacob. Identification of a possible seismic gap near Unalaska Island, eastern Aleutians, Alaska. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction -- An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 81-92.

3112. Sykes, L.R., J.B. Kisslinger, L. House, J.N. Davies, and K.H. Jacob. Rupture zones and repeat times of great earthquakes along the Alaska-Aleutian arc, 1784-1980. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction--An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981; ( ): p. 73-80.

3113. Sykes, L.R. and R.C. Quittmeyer. Repeat times of great earthquakes along simple plate boundaries. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction--An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 217-247.

3114. Kent, D.V., D. Ninkovich, T. Pescatore, and S.R. J. Sparks. Palaeomagnetic determination of emplacement temperature of Vesuvius AD 79 pyroclastic deposits. *Nature*; 1981; v. 290(n. 5805): p. 393-396.

3115. Adem, J. Numerical experiments on ice age climates. *Climatic Change*; 1981; v. 3: p. 155-171.

3116. Stoffa, P.L., A. Mauffret, M. Truchan, and P. Buhl. Sub-B layering in the southern Caribbean: the Aruba gap and Venezuela basin. *Earth Planet. Sci. Lett.*; 1981; v. 53: p. 131-146.

3117. Nishenko, S.P. and W.R. McCann. Seismic potential for the world's major plate boundaries: 1981. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction--An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 20-28.

3118. Kukla, G.J. Pleistocene climates on land. in: A. Berger, Ed. "Climatic Variations and Variability: Facts and Theories". Holland: D. Reidel Pub. Co.; 1981: p. 207-232.

3119. Kukla, G.J. Surface albedo. in: A. Berger, Ed. "Climatic Variations and Variability: Facts and Theories". Holland: D. Reidel Pub. Co.; 1981: p. 85-109.

3120. Kukla, G.J. and D.A. Robinson. Temperature changes in the last 100 years. in: A. Berger, Ed. "Climatic Variations and Variability: Facts and Theories". Holland: D. Reidel Pub. Co.; 1981: p. 287-301.

3121. Gordon, A.L. Seasonality of Southern Ocean sea ice. *J. Geophys. Res.*; 1981; v. 86(n. C5): p. 4193-4197.

3122. Davies, J., L. Sykes, L. House, and K. Jacob. Shumagin seismic gap, Alaska Peninsula: history of great earthquakes, tectonic setting, and evidence for high seismic potential. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3821-3855.

3123. Posmentier, E.S. and R.W. Houghton. Springtime evolution of the New England shelf break front. *J. Geophys. Res.*; 1981; v. 86(n. C5): p. 4253-4259.

3124. Tucholke, B.E., R.E. Houtz, and D.M. Barrett. Continental crust beneath the Agulhas Plateau, southwest Indian Ocean. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3791-3806.

3125. Seeber, L. and J.G. Armbruster. Great detachment earthquakes along the Himalayan arc and long-term forecasting. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction--An International Review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 259-277.

3126. Kahle, H.-G., B.R. Naini, M. Talwani, and O. Eldholm. Marine geophysical study of the Comorin Ridge, north Central Indian Basin. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3807-3814.

3127. Kafka, A.L. and D.J. Wedner. Earthquake focal mechanisms and tectonic processes along the southern boundary of the Caribbean plate. *J. Geophys. Res.*; 1981; v. 86(n. B4): p. 2877-2888.

3128. Martinson, D.G., P.D. Killworth, and A.L. Gordon. A convective model for the Weddell polynya. *J. Phys. Oceanogr.*; 1981; v. 11(n. 4): p. 466-488.

3129. Hinga, K.R. The distribution of linear rows of holes in the sea floor. *Biol. Oceanogr.*; 1981; v. 1(n. 2): p. 205-210.

3130. Damuth, J.E. and R.W. Embley. Mass-transport processes on Amazon Cone: western equatorial Atlantic. *Am. Assoc. Pet. Geo. Bull.*; 1981; v. 65(n. 4): p. 629-643.

3131. Weissel, R. and T.D. Aitken. Data storage and access at Lamont-Doherty Geological Observatory. in: A.M. Hittleman, Ed. "Frontiers in Data Storage, Retrieval and Display". Boulder, CO: National Geophysical and Solar-Terrestrial Data Center; 1981: p. 47-48.

3132. Kukla, G., A. Berger, R. Lotti, and J. Brown. Orbital signature of interglacials. *Nature*; 1981; v. 290(n. 5804): p. 295-300.

3133. Stein, R.S. Discrimination of tectonic displacement from slope-dependent errors in geodetic leveling from southern California, 1953-1979. in: D.W. Simpson and P.G. Richards, Eds. "Earthquake Prediction--An International review," Maurice Ewing Series 4. Washington, DC: AGU; 1981: p. 441-456.

3134. Hauksson, E. and J.G. Goddard. Radon earthquake precursor studies in Iceland. *J. Geophys. Res.*; 1981; v. 86(n. B8): p. 7037-7054.
3135. Yang, J-P and Y.P. Aggarwal. Seismotectonics of northeastern United States and adjacent Canada. *J. Geophys. Res.*; 1981; v. 86(n. B6): p. 4981-4998.
3136. Zindler, A. Nd and Sr isotopic studies of komatiites and related rocks. in: N.T. Arndt and E.G. Nisbet, Eds. "Komatiites". London: George Allen and Unwin, Ltd.; 1982: p. 399-420.
3137. Bodine, J.H., M.S. Steckler, and A.B. Watts. Observations of flexure and the rheology of the oceanic lithosphere. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3695-3707.
3138. Hunkins, K. Salt dispersion in the Hudson estuary. *J. Phys. Oceanogr.*; 1981; v. 11(n. 5): p. 729-738.
3139. Langseth, M.G., R. Von Huene, N. Nasu, and H. Okada. Subsidence of the Japan Trench forearc region of Northern Honshu. in: "Proc. 26th International Geological Congress, Geology of Continental Margins Symposium, Paris, 1980," *Oceanol. Acta*; 1981; (n. SP): p. 173-179.
3140. Broecker, W.S. . Glacial to interglacial changes in ocean and atmosphere chemistry. in: A. Berger, Ed. "Climatic Variations and Variability: Facts and Theories". Holland: D. Reidel Pub. Co.; 1981: p. 111-121.
3141. Johnson, T. Time-dependent friction of granite: implications for precursory slip on faults. *J. Geophys. Res.*; 1981; v. 86(n. B7): p. 6017-6028.
3142. Watts, A.B., M.G. Kogan, J. Mutter, G.D. Karner, and F.J. Davey. Free-air gravity field of the southwest Pacific Ocean. in: "Map and Charts Series, MC-42". Boulder, CO: GSA; 1981.
3143. Kukla, G. and D. Robinson. Accuracy of operational snow and ice charts. in: K. Carver, Ed. "Proc. IEEE International Geoscience and Remote Sensing Symposium Digest"; 1981; v. 2: p. 974-987.
3144. Houtz, R.E., S. Eittreim, and A. Grantz. Acoustic properties of northern Alaska shelves in relation to the regional geology. *J. Geophys. Res.*; 1981; v. 86(n. B5): p. 3935-3943.
3145. Houtz, R.E. Comparison of sediment sound-velocity functions from conjugate margins. *Geol. Soc. Am. Bull., Part I*; 1981; v. 92: p. 262-267.



3146. Zindler, A., S.R. Hart, and C. Brooks. The Shabogamo Intrusive Suite, Labrador: Sr and Nd isotopic evidence for contaminated mafic magmas in the Proterozoic. *Earth Planet. Sci. Lett.*; 1981; v. 54: p. 217-235.

3147. Burdick, L.J. . A comparison of the upper mantle structure beneath North America and Europe. *J. Geophys. Res.*; 1981; v. 86(n. B7): p. 5926-5936.

3148. LaBrecque, J.L. and P. Barker. The age of the Weddell Basin. *Nature*; 1981; v. 290(n. 5806): p. 489-492.

3149. Holcomb, D.J. Memory, relaxation, and micro-fracturing of dilatant rock. *J. Geophys. Res.*; 1981; v. 86(n. B7): p. 6235-6248.

3150. Neale, P.J., T.C. Malone, and D.C. Boardman. Effects of freshwater flow on salinity and phytoplankton biomass in the lower Hudson Estuary. in: R.D. Cross and D.L. Williams, Eds. "Proc. National Symposium on Freshwater Inflow to Estuaries". Washington, DC: U.S. Dept. of the Interior; 1981; v. 1: p. 168-184.

3151. Molinelli, E.J. . The Antarctic influence on Antarctic intermediate water. *J. Mar. Res.*; 1981; v. 39(n. 2): p. 267-293.

3152. Smethie, Jr., W.M., C.A. Nittrouer, and R.F.L. Self. The use of radon-222 as a tracer of sediment irrigation and mixing on the Washington continental shelf. *Mar. Geol.*; 1981; v. 42: p. 173-200; ISSN .

3153. CLIMAP Project Members - J.D. Hays. Seasonal reconstructions of the Earth's surface at the Last Glacial Maximum. Map and Chart Series MC-36; 1981: published by GSA, Boulder, CO.

3154. Horai, K. Thermal conductivity of sediments and igneous rocks recovered during Deep Sea Drilling Project Leg 60. in: "Initial reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1981; v. 60: p. 807-834.

3155. Sancetta, C. Oceanographic and ecologic significance of diatoms in surface sediments of the Bering and Okhotsk Seas. *Deep-Sea Res.*; 1981; v. 28(n. 8): p. 789-817.

3156. Herve, F., E. Nelson, K. Kawashita, and M. Suarez. New isotopic ages and the timing of orogenic events in the Cordillera Darwin, southernmost Chilean Andes. *Earth Planet. Sci. Lett.*; 1981; v. 55: p. 257-265.

3157. Ruddiman, W.F. and A. McIntyre. Oceanic mechanisms for amplification of the 23,000-year ice-volume cycle. *Science*; 1981; v. 212(n. 4495): p. 617-627.
3158. Flood, R.D. Distribution, morphology, and origin of sedimentary furrows in cohesive sediments, Southampton Water. *Sedimentology*; 1981; v. 28: p. 511-529.
3159. Das, Z. and C.H. Scholz. Theory of time-dependent rupture in the earth. *J. Geophys. Res.*; 1981; v. 86(n. B7): p. 6039-6051.
3160. Tucholke, B.E. . Geologic significance of seismic reflectors in the deep western North Atlantic basin. *The Society of Economic Paleontologists and Mineralogists, Spec. Pub.*; 1981; (n. 32): p. 23-37.
3161. Marra, J., G. Landriau, Jr., and H.W. Ducklow. Tracer kinetics and plankton rate processes in oligotrophic oceans. *Mar. Biol. Lett.*; 1981; v. 2: p. 215-223.
3162. Stoll, R.D. and T-K Kan. Reflection of acoustic waves at a water-sediment interface. *J. Acoust. Soc. Am.*; 1981; v. 70(n. 1): p. 149-156.
3163. Rabinowitz, P.D. Gravity measurements bordering passive continental margins. in: R.A. Scrutton, Ed. "Dynamics of Passive Margins". Washington, DC: AGU; 1981.
3164. Johnson, G.D., P.H. Rey, R.H. Ardrey, C.F. Visser, N.D. Opdyke, and R.A. Khan Tahirkheli. Paleoenvironments of the Siwalik Group, Pakistan and India. in: G. Rapp, Jr. and C.F. Vondra, Eds. "Hominid Sites: Their Geologic Settings". Boulder, CO: Westview Press; 1981: p. 197-254.
3165. Kukla, G. and J. Gavin. Cool autumns in the 1970's. *Mon. Weather Rev.*; 1981; v. 109(n. 4): p. 903-908.
3166. Engelder, T. General characteristics of strain relaxation: a note on sample preparation for large-scale tests. *Geophys. Res. Lett.*; 1981; v. 8(n. 7): p. 687-689.
3167. Be, A.W.H. and H.J. Spero. Shell regeneration and biological recovery of planktonic foraminifera after physical injury induced in laboratory culture. *Micropaleontology*; 1981; v. 27(n. 3): p. 305-316.
3168. Talwani, M. and M. Langseth. Ocean crustal dynamics. *Science*; 1981; v. 213: p. 22-31.

3169. Goldstein, S.L. and R.K. O'Nions. Nd and Sr isotopic relationships in pelagic clays and ferromanganese deposits. *Nature*; 1981; v. 292(n. 5821): p. 324-327.

3170. Jacobs, S.S., H.E. Huppert, G. Holdsworth, and D.J. Drewry. Thermohaline steps induced by melting of the Erebus glacier Tongue. *J. Geophys. Res.*; 1981; v. 86(n. C7): p. 6547-6555.

3171. Armbruster, J.G. and L. Seeber. Intraplate seismicity in the southeastern U.S. and the Appalachian detachment. in: J.E. Beavers, Ed. "Earthquakes and Earthquake Engineering: The Eastern United States". Ann Arbor, MI: Ann Arbor Science Pub.; 1981: p. 375-396.

3172. McCoy, F.W. A real distribution, redeposition and mixing of tephra within deep-sea sediments of the eastern Mediterranean Sea. in: S. Self and S. J. Sparks, Eds. "Tephra Studies as a tool in Quaternary Research". Holland: D. Reidel Pub. Co.; 1981: p. 245-254.

3173. Allen, R.B. and B.E. Tucholke. Petrography and implications of continental rocks from the Agulhas Plateau, southwest Indian ocean. *Geology*; 1981; v. 9: p. 463-468.

3174. Li, Y-H, P.H. Santschi, A. Kaufman, L.K. Benninger, and H.W. Feely. Natural radionuclides in waters of the New York Bight. *Earth Planet. Sci. Lett.*; 1981; v. 55: p. 217-228.

3175. Gardner, W.D. and L.G. Sullivan. Benthic storms: temporal variability in a deep-ocean nepheloid layer. *Science*; 1981; v. 213: p. 329-331.

3176. Jacoby, G.C. and E.R. Cook. Past temperature variations inferred from a 400-year tree-ring chronology from Yukon Territory, Canada. *Arctic Alpine Res.*; 1981; v. 13(n. 4): p. 409-418.

3177. Ainley, D.G. and S.S. Jacoby. Sea-bird affinities for ocean and ice boundaries in the Antarctic. *Deep-Sea Res.*; 1981; v. 28A(n. 10): p. 1173-1185.

3178. Stoffa, P.L., J.B. Diebold, and P. Buhl. Inversion of seismic data in the r-p plane. *Geophys. Res. Lett.*; 1981; v. 8(n. 8): p. 869-872.

3179. Horai, K. A remark on the theory of measuring thermal diffusivity by the modified angstroms method. *J. Geophys. Res.*; 1981; v. 86(n. B8): p. 7163-7169.

3180. Frankel, A. Source parameters and scaling relationships of small earthquakes in the northeastern Caribbean. *Geol. Soc. Am. Bull.*; 1981; v. 71(n. 4): p. 1173-1190.

3181. Swanberg, N.R. and O.R. Anderson. *Collozoum caudatum* sp. nov.: a giant colonial radiolarian from equatorial and Gulf Stream waters. *Deep-Sea Res.*; 1981; v. 28A(n. 9): p. 1033-1047.

3182. Gordon, A.L. South Atlantic thermocline ventilation. *Deep-Sea Res.*; 1981; v. 28A(n. 11): p. 1239-1264.

3183. Bonatti, E., P. Hamlyn, and G. Ottonello. Upper mantle beneath a young oceanic rift: peridotites from the island of Zabargad (Red Sea). *Geology*; 1981; v. 9: p. 474-479.

3184. Bilham, R., G.B. Pant, and G.C. Jacoby. A preliminary study of ancient trees in the Hunza Valley and their dendroclimatic potential. in: K.J. Miller, Ed. "International Karakoram Project". London: Cambridge Univ. Press; 1984: p. 599-606.

3185. Seeber, L. and J.G. Armbruster. The 1886 Charleston, South Carolina earthquake and the Appalachian detachment. *J. Geophys. Res.*; 1981; v. 86(n. B9): p. 7874-7894.

3186. Anderson, O.R. and N.R. Swanberg. Skeletal morphogenesis in some living collosphaerid Radiolaria. *Mar. Micropalaeontol.*; 1981; v. 6: p. 385-396.

3187. Donn, W.L. and N.K. Balachandran. Mount St. Helens eruption of 18 May, 1980: air waves and explosive yield. *Science*; 1981; 213: p. 539-541.

3188. Leith, W., D.W. Simpson, and W. Alvarez. Structure and permeability: geologic controls on induced seismicity at Nurek reservoir, Tadjikistan, USSR. *Geology*; 1981; v. 9: p. 440-444.

3189. Ruddiman, W.F. and A. McIntyre. The mode and mechanism of the last deglaciation: oceanic evidence. *Quat. Res.*; 1981; v. 16: p. 125-134.

3190. Olsen, C.R., H.J. Simpson, T.-H. Peng, R.F. Bopp, and R.M. Trier. Sediment mixing and accumulation rate effects on radionuclide depth profiles in Hudson estuary sediments. *J. Geophys. res.*; 1981; v. 86(n. C11): p. 11,020-11,028.

3191. Katz, E.J., R.L. Molinari, D.E. Cartwright, P. Hisard, H.U. Lass, and A. deMesquita. The seasonal transport of the Equatorial Undercurrent in the western Atlantic (during the Global Weather Experiment). *Oceanol. Acta.*; 1981; v. 4(n. 4): p. 445-450.

3192. Richardson, M.J., M. Wimbush, and L. Mayer. Exceptionally strong near-bottom flows on the continental rise of Nova Scotia. *Science*; 1981; v. 213: p. 887-888.

3193. Tharp, M. Technical Note: Exploring the deep ocean bottom: chasms beneath the sea. *Mar. Geodesy*; 1981; v. 5(n. 1): p. 67-71.

3194. Tharp, M. Technical Note: Differential bathymetry. *Mar. Geodesy*; 1981; v. 5(n. 1): p. 63-65.

3195. Wenzel, F., P.L. Stoffa, and P. Buih. Seismic modeling in the domain of intercept time and ray parameter. *IEEE Trans. Acoust. Speech, and Signal Processing*; 1982; v. ASSP-30(n. 3): p. 406-422.

3196. Das, S. Three-dimensional spontaneous rupture propagation and implications for the earthquake source mechanism. *Geophys. J.R. astr. Soc.*; 1981; v. 67: p. 375-393.

3197. Olsen, C.R., H.J. Simpson, and R.M. Trier. Plutonium, radiocesium and radiocobalt in sediments of the Hudson River estuary. *Earth Planet. Sci. Lett.*; 1981; v. 55: p. 377-392 .

3198. Lawrence, J.R. and J.M. Gieskes. Constraints on water transport and alteration in the oceanic crust from the isotopic composition of pore water. *J. Geophys. Res.*; 1981; v. 86(n. B9): p. 7924-7934.

3199. Staudigel, H., K. Muehlenbachs, S.H. Richardson, and S.R. Hart. Agents of low temperature ocean crust alteration. *Contrib. Mineral. Petrol.*; 1981; v. 77: p. 150-157.

3200. Jacobi, R.D. Peripheral bulge--a causal mechanism for the Lower/Middle Ordovician unconformity along the western margin of the Northern Appalachians. *Earth Planet. Sci. Lett.*; 1981; v. 56: p. 245-251.

3201. Diebold, J.B., P.L. Stoffa, P. Buhl, and M. Truchan. Venezuela Basin crustal structure. *J. Geophys. Res.*; 1981; v. 86(n. B9): p. 7901-7923.

3202. Li, Y-H. Ultimate removal mechanisms of elements from the ocean. *Geochim. Cosmochim. Acta*; 1981; v. 45: p. 1659-1664.

3203. Horai, K. The effect of interstitial gaseous pressure on the thermal conductivity of a simulated Apollo 12 lunar soil sample. *Phys. Earth Planet. Inter.*; 1981; v. 27: p. 60-71.

3204. Santschi, P.H. and Y-H Li. Removal pathways of Th and Pu isotopes in coastal marine environments. in: K.G. Vohra, K.C. Pillai, U.C. Mishra, and S. Sadasivan, Eds. "Second Special Symposium on Natural Radiation Environment". India: Bhabha Atomic Research Centre; 1982: p. 643-650.

3205. Simpson, D.W. and S.K. Negmatullaev. Induced seismicity at Nurek Reservoir, Tadjikistan, USSR. *Bull. Seismol. Soc. Am.*; 1981; v. 71(n. 5): p. 1561-1586.

3206. Herron, T.J. Lava flow layer -- East Pacific Rise. *Geophys. Res. Lett.*; 1982; v. 9(n. 1): p. 17-20.

3207. Burch, T.K. and M.G. Langseth. Heat-flow determination in three DSDP boreholes near the Japan Trench. *J. Geophys. Res.*; 1981; v. 86(n. B10): p. 9411-9419.

3208. Das, S. and C.H. Scholz. Off-fault aftershock clusters caused by shear stress increase? *Bull. Seismol. Soc. Am.*; 1981; v. 71(n. 5): p. 1669-1675.

3209. Gornitz, V.M. and B.C. Schreiber. Displacive halite hoppers from the Dead Sea: some implications for ancient evaporite deposits. *J. Sediment. Petrol.* ; 1981; v. 51(n. 3): p. 787-794.

3210. Ruddiman, W.F. and A. McIntyre. The North Atlantic Ocean during the last deglaciation. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1981; v. 35: p. 145-214.

3211. Bodine, J.H. and G.D. Karner. Gravity effect of axially symmetric bodies using the one-dimensional FFT. *Geophys. J.R. astr. Soc.*; 1981; v. 67: p. 747-754.

3212. Shor, A. and R. Flood. Geologic implications of abyssal bed forms along the east coast continental margin. in: *Oceans '81: "The Ocean an International Workplace"*. Piscataway, NJ: Marine Tech. Soc. Washington, DC and the IEEE; 1981: p. 1213-1215.

3213. Duplessy, J-C, P-L Blanc, and A.W.H. Bé . Oxygen-18 enrichment of planktonic foraminifera due to gametogenic calcification below the euphotic zone. *Science*; 1981; v. 213: p. 1247-1250.

3214. Perez, O.J. and Y.P. Aggarwal. Present-day tectonics of the southeastern Caribbean and northeastern Venezuela. *J. Geophys. Res.*; 1981; v. 86(n. B11): p. 10,791-10,804.

3215. Hauksson, E. . Radon content of groundwater as an earthquake precursor: evaluation of worldwide data and physical basis. *J. Geophys. Res.*; 1981; v. 86(n. B10): p. 9397-9410.

3216. Li, Y-H. Geochemical cycles of elements and human perturbation. *Geochim. Cosmochim. Acta*; 1981; v. 45: p. 2073-2084.
3217. Cochran, J.R. . The magnetic quiet zone in the eastern Gulf of Aden: implications for the early development of the continental margin. *Geophys. J.R. astr. Soc.*; 1982; v. 68: p. 171-201.
3218. Burckle, L.H., N.J. Shackleton, and S.L. Bromble. Late Quaternary stratigraphy for the equatorial Pacific based upon the diatom *Coscinodiscus nodulifer*. *Micropaleontology*; 1981; v. 27(n. 4): p. 352-355.
3219. Ryan, W.B.F. and E.L. Miller. Evidence of a carbonate platform beneath Georges Bank. *Mar. Geol.*; 1981; v. 44: p. 213-228.
3220. Cande, S.C., E.M. Herron, and B.R. Hall. The early Cenozoic tectonic history of the southeast Pacific. *Earth Planet. Sci. Lett.*; 1982; v. 57: p. 63-74.
3221. Freeman-Lynde, R.P., M.B. Cita, F.Jadoul, E.L. Miller, and W.B.F. Ryan. Marine geology of the Bahama Escarpment. *Mar. Geol.*; 1981; v. 44: p. 119-156.
3222. Langseth, M.G. and B.M. Herman. Heat transfer in the oceanic crust of the Brazil Basin. *J. Geophys. Res.*; 1981; v. 86(n. B11): p. 10,805-10,819.
3223. Thompson, P.R. Planktonic foraminifera in the western North Pacific during the past 150,000 years: comparison of modern and fossil assemblages. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1981; v. 35: p. 241-279.
3224. McCoy, F.W. Underwater photography and its application to understanding the coring process. in: P.F. Smith, Ed. "Underwater Photography, Scientific and Engineering Applications". NY: Benthos, Inc., Van Nostrand Reinhold Co.; 1984: p. 257-277.
3225. Moore, T.C. Jr., W.H. Hutson, N. Kipp, J.D. Hays, W. Prell, P. Thompson, and G. Boden. The biological record of the ice-age ocean. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1981; v. 35: p. 357-370.
3226. Buhl, P., J.B. Diebold, and P.L. Soffa. Array length magnification through the use of multiple sources and receiving arrays. *Geophysics*; 1982; v. 47(n. 3): p. 311-315.

3227. Burdick, L.J. and C. Powell. Reply to the comments of C. Wright on "Apparent velocity measurements for the lower mantle from a wide aperture array". *J. Geophys. Res.*; 1981; v. 86(n. B12): p. 11,931-11,932.

3228. Kukla, G. and J. Gavin. Summer ice and carbon dioxide. *Science*; 1981; v. 214: p. 497-503.

3229. Mrozowski, C.L., S.D. Lewis, and D.E. Hayes. Complexities in the tectonic evolution of the West Philippine Basin. *Tectonophysics*; 1982; v. 82: p. 1-24.

3230. Stoffa, P.L., J.B. Diebold, and P. Buhl. Velocity analysis for wide aperture seismic data. *Geophys. Prospecting*; 1982; v. 30: p. 25-57.

3231. Torgersen, T., G. Mathieu, R.H. Hesslein, and W.S. Broecker. Gas exchange dependency on diffusion coefficient: direct Rn and He comparisons in a small lake. *J. Geophys. res.*; 1982; v. 87(n. C1): p. 546-556.

3232. Kent, D.V. and N.D. Opdyke. Paleomagnetism of Siluro-Devonian rocks from eastern Maine: reply. *Can. J. Earth Sci.*; 1982; v. 19: p. 232-237.

3233. Chapman, M.E. and M. Talwani. Geoid anomalies over deep sea trenches. *Geophys. J.R. astr. Soc.*; 1982; v. 68: p. 349-369.

3234. Schreiber, B.C., D. Smith, and E. Schreiber. Spring peas from New York State: nucleation and growth of fresh water bollow ooliths and pisoliths. *J. Sediment. Petrol.*; 1981; v. 51(n. 4): p. 1341-1346.

3235. Engelder, T. A natural example of the simultaneous operation of free-face dissolution and pressure solution. *Geochim. Cosmochim. Acta*; 1982; v. 46: p. 69-74.

3236. Hauksson, E. Episodic rifting and volcanism at Krafla in north Iceland: radon (<sup>222</sup>Rn) emission from fumaroles near Leirhnjúkur. *J. Geophys. Res.*; 1981; v. 86(n. B12): p. 11,806-11,814.

3237. Nunns, A. Plate tectonic evolution of the Greenland-Scotland ridge and surrounding regions. in: M.H.P. Bott, S. Saxov, M. Talwani, and J. Thiede, Eds. "Structure and Development of the Greenland-Scotland Ridge: New Methods and Concepts". NY: Plenum Pub. Corp.; 1983: p. 11-30.



3238. Garzoli, S. and E.J. Katz. Observations of inertia-gravity waves in the Atlantic from inverted echo sounders during FGGE. *J. Phys. Oceanogr.*; 1981; v. 11(n. 11): p. 1463-1473.

3239. Watts, A.B. The U.S. Atlantic continental margin: subsidence history, crustal structure and thermal evolution. in: "Geology of Passive Continental Margins: History, Structure and Sedimentologic Record". Tulsa, OK: AAPG; 1981; (Education Course Note Series n. 19): p. 1-77.

3240. Sheridan, R.E., J.T. Crosby, G.M. Bryan, and P.L. Stoffa. Stratigraphy and structure of southern Blake Plateau, northern Florida Straits, and northern Bahama platform from multichannel seismic reflection data. *Am. Assoc. Pet. Geol. Bull.*; 1981; v. 65(n. 12): p. 2571-2593.

3241. Reyners, M. and K.S. Coles. Fine structure of the dipping seismic zone and subduction mechanics in the Shumagin Islands, Alaska. *J. Geophys. Res.*; 1982; v. 87(n. B1): p. 356-366.

3242. Posmentier, E.S. and C.B. Hibbard. The role of tilt in double diffusive interleaving. *J. Geophys. Res.*; 1982; v. 87(n. C1): p. 518-524.

3243. Staudigel, H. and W.B. Bryan. Contrasted glass-whole rock compositions and phenocryst redistribution, IPOD sites 417 and 418. *Contrib. Mineral Petrol.*; 1981; v. 78: p. 255-262.

3244. Caron, D.A., A.W.H. Bé, and O.R. Anderson. Effects of variations in light intensity on life processes of the planktonic foraminifer *Globigerinoides sacculifer* in laboratory culture. *J. Mar. Biol. Assoc.*; 1981; v. 62: p. 435-451.

3245. Santschi, P.H., D.M. Adler, and M. Amdurer. The fate of particles and particle-reactive trace metals in coastal waters: radioisotope studies in microcosms. in: C.S. Wong, et al., Eds. "Trace Metals in Sea Waters". NY: Plenum Pub. Corp.; 1983: p. 331-349.

3246. Adem, J., W.L. Donn, and R. Goldberg. Monthly climate predictions for 1980-81 with a thermodynamic model incorporating parameterized dynamics. in: "Proc. Sixth Annual Climate Diagnostics Workshop". Washington, DC: U.S. Dept. of Commerce, NOAA; 1982: p. 300-310.

3247. Goldberg, R.A. and W.L. Donn. Persistence as feature of 1980-81 climate. in: "Proc. Sixth Annual Climate Diagnostics Workshop". Washington, DC: U.S. Dept. of Commerce, NOAA; 1982: p. 311-315.

3248. Goldberg, R.A. and W.L. Donn. Persistence as a feature of 1980-81 climate. in: "Proc. Sixth Annual Climate Diagnostics Workshop". Washington, DC: U.S. Dept. of Commerce, NOAA; 1982: p. 25-27.

3249. Amdurer, M., D. Adler, and P.H. Santschi. Studies of the chemical forms of trace elements in sea water using radiotracers. in: C.S. Wong, et al., Eds. "Trace Metals in Sea Water". NY: Plenum Pub. Corp.; 1983: p. 537-562.

3250. Naini, B. and M. Talwani. Structural framework and the evolutionary history of the continental margin of western India. in: J.S. Watkins, and C.L. Drake, Eds. "Studies in Continental Margin Geology". Tulsa, OK: Mem. 34, AAPG; 1983: p. 167-191.

3251. McNutt, S.R. and R.J. Beavan. Volcanic earthquakes at Pavlof Volcano correlated with the solid earth tide. *Nature*; 1981; v. 294(n. 5842): p. 615-618.

3252. Burckle, L.H. Diatom biostratigraphy of Late Miocene and Pliocene sediments of eastern Java (Indonesia). *Mar. Micropaleontol.*; 1982; v. 7(): p. 363-368.

3253. Naini, B.R. and V. Kolla. Acoustic character and thickness of sediments of the Indus Fan and the continental margin of western India. *Mar. Geol.*; 1982; v. 47: p. 181-195.

3254. Scholz, C.H. Scaling laws for large earthquakes: consequences for physical models. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 1): p. 1-14.

3255. Johnson, G.L., J-R Vanney, A. Elverhoi, and J.L. LaBrecque. Morphology of the Weddell Sea and Southwest Indian Ocean. *Deutsche Hydrographische Zeitschrift*; 1982; v. 34(n. 6): p. 263-272.

3256. Takahashi, T. and A.E.G. Azevedo. The oceans as a CO<sub>2</sub> reservoir. in: R.A. Reck and J.R. Hummel, Eds. "Interpretation of Climate and Photochemical Models, Ozone and Temperature Measurements". NY: American Institute of Physics; 1982: p. 83-109.

3257. Channell, J.E.T., R. Freeman, F. Heller, and W. Lowrie. Timing of diagenetic haematite growth in red pelagic limestones from Gubbio (Italy). *Earth Planet. Sci. Lett.*; 1982; v. 58: p. 189-201.

3258. McNutt, S.R. and R.J. Beavan. Correlation of the solid earth tide with volcanic earthquakes at Pavlof Volcano, Alaska. in: J.T. Kuo, Ed. "Proc. Ninth International Symposium on Earth Tides". Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung; 1983: p. 703-713.

3259. Cook, R.B. and D.W. Schindler. The biogeochemistry of sulfur in an experimentally acidified lake. *Ecological Bull.*, (Stockholm); 1983; v. 35: p. 115-127.
3260. Hart, S.R. and H. Staudigel. The control of alkalies and uranium in seawater by ocean crust alteration. *Earth Planet. Sci. Lett.*; 1982; v. 58: p. 202-212.
3261. Manley, T.O., D. Perti, K. Hunkins, and J. Ardai. Field tests of the ocean data equipment portable high resolution CSTD in the Arctic Ocean during the FRAM experiments. in : "Proc. International STD Conference and Workshop". San Diego: Marine Technology Society and MTS Oceanic Instructation Committee; 1982.
3262. Opdyke, N.D., N.M. Johnson, G.D. Johnson, E.H. Lindsay, and R.A.K. Tahirkheli. Paleomagnetism of the Middle Siwalik formations of northern Pakistan and rotation of the Salt Range Decollement. *Palaeogeogr., Palaeoclimatol, Palaeoecol.* ; 1982; v. 37: p. 1-15.
3263. Dalziel, I.W.D. West Antarctica: problem child of Gondwanaland. *Tectonics*; 1982; v. 1(n. 1): p. 3-19.
3264. Jacobi, R.D. and D.E. Hayes. Bathymetry, microphysiography and reflectivity characteristics of the West African Margin between Sierra Leone and Mauritania. in: U. von Rad, K. Hinz, M. Sarnthein, and E. Seibold, Eds. "Geology of the Northwest African Continental Margin". Heidelberg: Springer-Verlag; 1982: p. 182-212.
3265. Watts, A.B., G.D. Karner, and M.S. Steckler. Lithospheric flexure and the evolution of sedimentary basins. *Philos. Trans. R. Soc. London A.*; 1982; v. 305: p. 249-281.
3266. Wollin, G. W.B.F. Ryan, and D.B. Ericson. Relationship between annual variations in the rate of change of magnetic intensity and those of surface air temperature. *J. Geomag. Geoelectr.*; 1981; v. 33: p. 545-567.
3267. Tauxe, L. and N.D. Opdyke. A time framework based on magnetostratigraphy for the Siwalik sediments of the Khaur area, northern Pakistan. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1982; v. 37: p. 43-61.
3268. Thorndike, E.M., R.D. Gerard, L.G. Sullivan, and A.Z. Paul. Long-term, time-lapse photography of the deep ocean floor. in: R.A. Scrutton and M. Talwani, Eds. "The Ocean Floor". NY: John Wiley & Sons, Inc.; 1982: p. 255-275.
3269. Jones, G.A. and W.F. Ruddiman. Assessing the global meltwater spike. *Quat. Res.*; 1982; v. 17: p. 148-172.

3270. Bishop, J.K.B. and P.E. Biscaye. Chemical characterization of individual particles from the nepheloid layer in the Atlantic Ocean. *Earth Planet. Sci. Lett.*; 1982; v. 58: p. 265-275.

3271. Rabinowitz, P.D., M.F. Coffin, and D. Falvey. Salt diapirs bordering the continental margin of northern Kenya and southern Somalia. *Science*; 1981; v. 215: p. 663-665.

3272. Legeckis, R. and A.L. Gordon. Satellite observations of the Brazil and Falkland currents--1975 to 1976 and 1978. *Deep-Sea Res.*; 1982; v. 29(n. 3A): p. 375-401.

3273. Cande, S.C. and J.C. Mutter. A revised identification of the oldest sea-floor spreading anomalies between Australia and Antarctica. *Earth Planet. Sci. Lett.*; 1982; v. 58: p. 151-160.

3274. Johnson, D.A., W.A. Berggren, and J.E. Damuth. Cretaceous ocean floor in the Amirante Passage: tectonic and oceanographic implications. *Mar. Geol.*; 1982; v. 47: p. 331-343.

3275. Lazarus, D.B., J.D. Hays, and D.R. Prothero. Evolution in the radiolarian species--complex *Pterocanium*. in: B. Mamet and M.J. Copeland, Eds. "Proc. Third North American Paleontological Convention" *J. Paleontol.*; 1982: p. 323-328.

3276. House, L.S. and K.H. Jacob. Thermal stresses in subducting lithosphere can explain double seismic zones. *Nature*; 1982; v. 295(n. 5850): p. 587-589.

3277. Bilham, R., J. Beavan, and K. Evans. Long baseline fluid-tube tiltmeter geometry and the detection of flexure and tilt. in: J.T. Kuo, Ed. "Proc. Ninth International Symposium on Earth Tides". E. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart; 1983: p. 85-94.

3278. Schilt, F.S., D.E. Karig, and M. Truchan. Kinematic evolution of the northern Cocos plate. *J. Geophys. Res.*; 1982; v. 87(n. B4): p. 2958-2968.

3279. Karner, G.D. and A.B. Watts. On isostasy at Atlantic-type continental margins. *J. Geophys. Res.*; 1982; v. 87(n. B4): p. 2923-2948.

3280. Katz, E.J. and S. Garzoli. Response of the western Equatorial Atlantic Ocean to an annual wind cycle. *J. Mar. Res.*; 1982; v. 40(Supplement): p. 307-327.

3281. Li, Y-H. Interelement relationship in abyssal Pacific ferromanganese nodules and associated pelagic sediments. *Geochim. Cosmochim. Acta*; 1982; v. 46: p. 1053-1060.

3282. Peters, K., C. Jacoby, and E.R. Cook. Principal components analysis of tree-ring sites. *Tree-Ring Bull.*; 1981; v. 41: p. 1-19.

3283. Cook, E.R. and K. Peters. The smoothing spline: a new approach to standardizing forest interior tree-ring width series for dendroclimatic studies. *Tree-Ring Bull.*; 1981; v. 41: p. 45-53.

3284. Marra, J. and K. Heinemann. Photosynthesis response by phytoplankton to sunlight variability. *Limnol. Oceanogr.*; 1982; v. 27(n. 6): p. 1141-1153.

3285. Liddicoat, J.C., R.S. Coe, P.W. Lambert, H.E. Malde, and V. Steen-McIntyre. Paleomagnetic investigation of Quaternary sediment at Tlapacoya, Mexico, and at Valsequillo, Puebla, Mexico. *Geof. Int.*; 1981; v. 20(n. 3): p. 249-262.

3286. Liddicoat, J.C., C.R. Denham, and C.K. Paull. Paleomagnetism of cored sidement from Lake Atitlan, Guatemala: a preliminary study. *Geof. Int.*; 1981; v. 20(n. 3): p. 263-270.

3287. McCoy, F.W. Sea-floor sediment. in: "Geologic Map of Circum-Pacific Region, Northeast Quadrant," Map Series. Tulsa, OK: Am. Assoc. Petrol. Geol.; 1983.

3288. McCoy, F.W. Sea-floor sediment. in: "Geologic Map of Circum-Pacific Region, Southeast Quadrant". Tulsa, OK: AAPG; 1985.

3289. McCoy, F. W. . Sea-floor sediments. in : "Geologic Map of Circum-Pacific Region, Northwest Quadrant". Map Series ed. Tulsa, OK: Am. Assoc. Pet. Geol.; 1988.

3290. Coffin, M.F. and P.D. Rabinowitz. A multichannel seismic transect of the Somalian continental margin. in: "Proc. 14th Annual Offshore Technology Conference". Houston, TX; 1982: p. 421-430.

3291. Ducklow, H.W., D.L. Kirchman, and G.T. Rowe. Production and vertical flux of attached bacteria in the Hudson River Plume of the New York Bight as studied with floating sediment traps. *Appl. Environ. Microbiol.*; 1982; v. 43(n. 4): p. 769-776.

3292. Tucholke, B.E., R.E. Houtz, and W.J. Ludwig. Sediment thickness and depth to basement in western North Atlantic Ocean Basin. *Am. Assoc. Pet. Geol. Bull.*; 1982; v. 66(n. 9): p. 1384-1395.

3293. Hsü , K.J., Q. He, J.A. McKenzie, H. Weissert, K. Perch-Nielsen, H. Oberhansli, K. Kelts, J. LaBrecque, L. Tauxe, U. Krahenbuhl, S.F. Percival, Jr., R. Wright, A.M. Karpoff, N.

Petersen, P. Tucker, R.Z. Poore, A.M. Gombos, K. Pisciotto, M.F. Carman, Jr., and E. Schrieber. Mass mortality and its environmental and evolutionary consequences. *Science*; 1982; v. 216: p. 249-256.

3294. Nishenko, S.P. and A.L. Kafka. Earthquake focal mechanisms and the intraplate setting of the Bermuda rise. *J. Geophys. Res.*; 1982; v. 87(B5): p. 3929-3941.

3295. Mutter, J.C., M. Talwani, and P.L. Stoffa. Origin of seaward-dipping reflectors in oceanic crust off the Norwegian margin by "subaerial sea-floor spreading". *Geology*; 1982; v. 10: p. 353-357.

3296. Menke, W. On extending Biot's theory of multiple scattering at low frequencies from acoustic to elastic media. *J.R. astr. Soc.*; 1982; v. 69: p. 819-830.

3297. Ryan, W.B.F., K.A. Kastens, and M.B. Cita. Geological evidence concerning compressional tectonics in the eastern Mediterranean. *Tectonophysics*; 1982; v. 86: p. 213-242.

3298. Ludwig, W.J. and P.D. Rabinowitz. The collision complex of the North Scotia ridge. *J. Geophys. Res.*; 1982; v. 87(n. B5): p. 3731-3740.

3299. Engelder, T. Is there a genetic relationship between selected regional joints and contemporary stress within the lithosphere of North America? *Tectonics*; 1982; v. 1(n. 2): p. 161-177.

3300. Molfino, B., N.G. Kipp, and J.J. Morley. Comparison of Foraminiferal, Coccolithophorid, and Radiolarian paleotemperature equations: assemblage coherency and estimate concordancy. *Quat. Res.*; 1982; v. 17: p. 279-313.

3301. Ruddiman, W.F. and L.K. Glover. Mixing of volcanic ash zones in subpolar North Atlantic sediments. in: R.A. Scrutton and M. Talwani, Eds. "The Ocean Floor". NY: John Wiley & Sons, Inc.; 1982; p. 37-60.

3302. Menke, W. and P.G. Richards. On extending Biot's theory of low-frequency acoustic scatter about a rough fluid-rigid interface to more general acoustic media. *J. Acoust. Soc. Am.*; 1982; v. 71(n. 5): p. 1101-1105.

3303. Nunns, A.G., M. Talwani, G.R. Lorentzen, P.R. Vogt, T. Sigurgeirsson, L. Kristjansson, H.C. Larsen, and D. Voppel. Magnetic anomalies over Iceland and surrounding seas. in: M.H. P. Bott, S. Saxov, M. Talwani, and J. Thiede, Eds. "Structure and Development of the Greenland-Scotland Ridge: New Methods and Concepts". NY: Plenum Pub. Corp.; 1983: p. 661-678.

3304. Seeber, L., J.G. Armbruster, and G.A. Bollinger. Large-scale patterns of seismicity before and after the 1886 South Carolina earthquake. *Geology*; 1982; v. 10: p. 383-386.

3305. Lawrence, J.R., S.D. Gedzelman, J.W.C. White, D.Smiley, and P. Lazov. Storm trajectories in eastern US D/H isotopic composition of precipitation. *Nature*; 1982; v. 296(n. 5858): p. 638-640.

3306. Sancetta, C. Fossils diatoms and the oceanography of the Bering Sea during the last glacial event. in: A. Iijima, J.R. Hein, and R. Siever, Eds. "Siliceous Deposits in the Pacific Region". Amsterdam: Elsevier Scientific Pub. Co.; 1983: p. 333-346.

3307. Adem, J. and W.L. Donn. Progress in monthly climate forecasting with a physical model. *Am. Meteorol. Soc. Bull.*; 1981; v. 62(n. 12): p. 1666-1675.

3308. Gordon, A.L. and E.J. Molinelli. Thermohaline and chemical distributions and the atlas data set. in: "Southern Ocean Atlas". NY: Columbia University Press; 1982: .

3309. Gordon, A.L. and T.N. Baker. Objective contouring and the grid point data set. in: "Southern Ocean Atlas". NY: Columbia University Press; 1982.

3310. Oppenheim, A. and W.L. Donn. Climate models and CO2 warming. in: "A Selective Review and Summary". Washington, DC: American Petroleum Institute; 1982; (API Pub. n. 4347): p. 1-44.

3311. Jacobi, R.D. Microphysiography of the southeastern North Atlantic and its implications for the distribution of near-bottom processes and related sedimentary facies. *Bull. Inst. Geol. Bassin d'Aquitaine, Bordeaux*; 1982; (n. 31): p. 31-46.

3312. Flood, R.D. Observations, classification, and dynamics of furrows in cohesive sediments. *Bull. Inst. Geol. Bassin d'Aquitaine, Bordeaux*; 1982; (n. 31): p. 167-179.

3313. Simpson, H.J., R.M. Trier, J.R. Toggweiler, G. Mathieu, B.L. Deck, C.R. Olsen, D.E. Hammond, C. Fuller, and T.L. Ku. Radionuclides in Mono Lake, California. *Science*; 1982; v. 216: p. 512-514.

3314. Frankel, A. . A composite focal mechanism for microearthquakes along the northeastern border of the Caribbean plate. *Geophys. Res. Lett.*; 1982; v. 9(n. 5): p. 511-514.

3315. Kostrov, B.V. and S. Das. Idealized models of fault behavior prior to dynamic rupture. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 3): p. 679-703.

3316. Weissel, J.K., B. Taylor, and G.D. Karner. The opening of the Woodlark Basin, subduction of the Woodlark spreading system, and the evolution of Northern Melanesia since mid-Pliocene time. in: G.H. Packham, Ed. "The Evolution of the India-Pacific Plate Boundaries": *Tectonophysics*; 1982; v. 87: p. 253-277.

3317. Keith, C.M., D.W. Simpson, O.V. Soboleva. Induced seismicity and style of deformation of Nurek Reservoir, Tadjik SSR. *J. Geophys. Res.*; 1982; v. 87(n. B.6): p. 4609-4624.

3318. Martinson, D.G., W. Menke, and P. Stoffa. An inverse approach to signal correlation. *J. Geophys. Res.*; 1982; v. 87(n. B6): p. 4807-4818.

3319. Marra, J., R.W. Houghton, D.C. Boardman, and P.J. Neale. Variability in surface chlorophyll a at a shelf-break front. *J. Mar. Res.*; 1982; v. 40(n. 3): p. 575-591.

3320. Selwyn, S. and F.W. McCoy. The hydrostatic motor: utilization of hydrostatic pressure differentials in the deep sea. *Geo-Marine Lett.*; 1981; v. 1(n. 3-4): p. 233-236.

3321. Weissel, J.K., A.B. Watts, and A. Lapouille. Evidence for Late Paleocene to Late Eocene seafloor in the southern New Hebrides Basin. in: G.H. Packham, Ed. "The Evolution of the India-Pacific Plate Boundaries": *Tectonophysics*; 1982; v. 87: p. 243-251.

3322. Streeter, S.S., P.E. Belanger, T.B. Kellogg, and J.C. Duplessy. Late Pleistocene paleo-oceanography of the Norwegian-Greenland Sea: benthic foraminiferal evidence. *Quat. Res.*; 1982; v. 18(n. 1): p. 72-90.

3323. Bé, A.W.H., H.J. Spero, and O.R. Anderson. Effects of symbiont elimination and reinfection on the life processes of the planktonic foraminifer *Globigerinoides sacculifer*. *Mar. Biol.*; 1982; v. 70: p. 73-86.

3324. Watts, A.B. Tectonic subsidence, flexure and global changes of sea level. *Nature*; 1982; v. 297(n. 5866): p. 469-474.

3325. Liddicoat, J.C. . Gauss-Matuyama polarity transition. *Philos. Trans. R. Soc. London A*; 1982; v. 306( ): p. 121-128.



3326. Forsythe, R. The late Palaeozoic to early Mesozoic evolution of southern South America: a plate tectonic interpretation. *J. Geol. Soc. London*; 1982; v. 139(n. 6): p. 671-682.

3327. Gordon, A.L. Weddell deep water variability. *J. Mar. Res.*; 1982; v. 40(Supplement): p. 199-217.

3328. Channell, J.E.T., J.G. Ogg, and W. Lowrie. Geomagnetic polarity in the early Cretaceous and Jurassic. *Philos. Trans. R. Soc. London A*; 1982; v. 306: p. 137-146.

3329. Ducklow, H.W. Chesapeake Bay nutrient and plankton dynamics. I. Bacterial biomass and production during spring tidal destratification in the York River, Virginia, estuary. *Limnol. Oceanogr.*; 1982; v. 27(n. 4): p. 651-659.

3330. Tharp, M. Mapping the ocean floor--1947 to 1977. in: R.A. Scrutton and M. Talwani, Eds. "The Ocean Floor". NY: John Wiley & Sons, Inc.; 1982; ( p. 19-31).

3331. Clement, B.M., D.V. Kent, and N.D. Opdyke. Brunhes-Matuyama polarity transition in three deep-sea sediment cores. *Philos. Trans. R. Soc. London A*; 1982; v. 306: p. 113-119.

3332. Garzoli, S.L., E.J. Katz, H-J Panitz, and P. Speth. In situ wind measurements in the equatorial Atlantic during 1979. *Oceanol. Acta*; 1982; v. 5(n. 3): p. 281-288.

3333. Li, Y-H. Ultimate removal mechanisms of elements from the ocean (reply to a comment by M. Whitfield and D.R. Turner). *Geochim. Cosmochim. Acta*; 1982; v. 46: p. 1993-1995.

3334. Rodman, M.R. and A.L. Gordon. Southern Ocean bottom water of the Australian-New Zealand sector. *J. Geophys. Res.*; 1982; v. 87(n. C8): p. 5771-5778.

3335. Fairbanks, R.G. The origin of continental shelf and slope water in the New York Bight and Gulf of Maine: evidence from H<sub>2</sub> 18O/H<sub>2</sub> 16O ratio measurements. *J. Geophys. res.*; 1982; v. 87(n. C8): p. 5796-5808.

3336. Hogg, N., P. Biscaye, W. Gardner, and W.J. Schmitz, Jr. On the transport and modification of Antarctic Bottom Water in the Vema Channel. *J. Mar. Res.*; 1982; v. 40(Supplement): p. 231-263.

3337. Sykes, L.R. Predicting great earthquakes. in: H. Kanamori and E. Boschi, Eds. "Earthquakes: Observations, Theory and Interpretation," Proc. International School of Physics "Enrico Fermi" Course LXXX. Bologna, Italy: Societa Italiana di Fisica; 1983; ( p. 398-435).

3338. Sancetta, C. Distribution of diatom species in surface sediments of the Bering and Okhotsk Seas. *Micropaleontology*; 1982; v. 28(n. 3): p. 221-257.
3339. Burdick, L.J. Comments on the "The corner frequency shift, earthquake source models, and Q," by T.C. Hanks. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 4): p. 1419-1426.
3340. Peseckis, L.L. and L.J. Burdick. Station site characteristics of WWSSN stations in India and Southern Asia. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 4): p. 1207-1218.
3341. Frankel, A. Precursors to a magnitude 4.8 earthquake in the Virgin Islands: spatial clustering of small earthquakes, anomalous focal mechanisms, and earthquake doublets. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 4): p. 1277-1294.
3342. Frankel, A. The effects of attenuation and site response on the spectra of microearthquakes in the northeastern Caribbean. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 4): p. 1379-1402.
3343. Weber, M.E. and W.L. Donn. Ducted propagation of Concorde-generated shock waves. *J. Acoust. Soc. Am.*; 1982; v. 71(n. 2): p. 340-347.
3344. Kukla, G.J. and J.A. Brown. Impact of snow on surface brightness. *EOS, Trans. Am. Geophys. Union*; 1982; v. 63(n. 29): p. 577-578.
3345. Cochran, J.R. Reply to comments by R.W. Girdler and P. Styles. *J. Geophys. Res.*; 1982; v. 87(n. B8): p. 6765-6770.
3346. Bé , A.W.H. Biology of planktonic foraminifera. in: T.W. Broadhead, Ed. "Foraminifera: Notes for a Short Course". Knoxville, TN: Univ. of Tennessee; 1982; v. 6: p. 51-92.
3347. Kolla, V. and R.B. Kidd. Sedimentation and sedimentary processes in the Indian Ocean. in: A.E.M. Nairn and F.G. Stehli, Eds. "The Ocean Basins and Margins: The Indian Ocean". NY: Plenum Pub. Corp.; 1982; v. 6: p. 1-50.
3348. Gedzelman, S.D. Rainbow brightness. *Appl. Optics*; 1982; v. 21(n. 16): p. 3032-3037.
3349. Manley, T.O., L.A. Codispoti, K.L. Hunkins, H.R. Jackson, E.P. Jones, V. Lee, S. Moore, J. Morison, T.T. Packard, and P. Wadhams. The FRAM 3 expedition. *EOS, Trans. Am. Geophys. Union*; 1982; v. 63(n. 35): p. 627-636.

3350. Wesnousky, S.G., C.H. Scholz, and K. Shimazaki. Deformation of an island arc: rates of moment release and crustal shortening in intraplate Japan determined from seismicity and Quaternary fault data. *J. Geophys. Res.*; 1982; v. 87(n. B8): p. 6829-6852.

3351. Marshak, S., P.A. Geiser, W. Alvarez, and T. Engelder. Mesoscopic fault array of the northern Umbrian Apennine fold belt, Italy: geometry of conjugate shear by pressure-solution slip. *Geol. Soc. Am. Bull.*; 1982; v. 93: p. 1013-1022.

3352. Ribe, N.M. and A.B. Watts. The distribution of intraplate volcanism in the Pacific Ocean basin: a spectral approach. *Geophys. J.R. astr. Soc.*; 1982; v. 71: p. 333-362.

3353. Evans, K., G. Holzhausen, and D.M. Wood. The geometry of a large-scale nitrogen gas hydraulic fracture formed in Devonian shale: an example of fracture mapping with tiltmeters. *J. Soc. Pet. Eng.*; 1982; October: p. 755-763.

3354. McCoy, F. W. . Sea-floor sediments. in : "Geologic Map of Circum-Pacific Region, Southwest Quadrant". Map Series ed. Tulsa, OK: Am. Assoc. Pet. Geol.; 1988.

3355. Leith, W. Rock assemblages in Central Asia and the evolution of the southern Asian margin. *Tectonics*; 1982; v. 1(n. 3): p. 303-318.

3356. Bopp, R.F., H.J. Simpson, C.R. Olsen, R.M. Trier, and N. Kostyk. Chlorinated hydrocarbons and radionuclide chronologies in sediments of the Hudson River and estuary, New York. *Environ. Sci. Technol.*; 1982; v. 16: p. 666-676.

3357. Jacoby, G.C. and L.D. Ulan. Reconstruction of past ice conditions in a Hudson Bay estuary using tree rings. *Nature*; 1982; v. 298(n. 5875): p. 637-639.

3358. Fairbanks, R.G., M. Sverdløve, R. Free, P.H. Wiebe, and A.W.H. Bé . Vertical distribution and isotopic fractionation of living planktonic foraminifera from the Panama Basin. *Nature*; 1982; v. 298(n. 5877): p. 841-844.

3359. Ou, H.W. and R. Houghton. A model of the summer progression of the cold-pool temperature in the Middle Atlantic Bight. *Nature*; 1982; v. 12(n. 10): p. 1030-1036.

3360. Houghton, R.W., R. Schlitz, R.C. Beardsley, B. Butman, and J.L. Chamberlin. The Middle Atlantic Bight cold pool: evolution of the temperature structure during summer 1979. *J. Phys. Oceanogr.*; 1982; v. 12(n. 10): p. 1019-1029.

3361. Burckle, L.H., D. Robinson, and D. Cooke. Reappraisal of sea-ice distribution in Atlantic and Pacific sectors of the Southern Ocean at 18,000 yr. BP. *Nature*; 1982; v. 299(n. 5882): p. 435-437.

3362. Coleman, P.J., P.J. Michael, and J.C. Mutter. The origin of the Naturaliste Plateau, SE Indian Ocean: implications from dredged basalts. *J. Geol. Soc. Australia*; 1982; v. 29: p. 457-468.

3363. Rind, D., W.L. Donn, and W. Robinson. Stratospheric variability in summer. *J. Appl. Meteorol.*; 1981; v. 20(n. 8): p. 900-909.

3364. Horai, K. Adjustment, interpolation, and smoothing of GEOS 3 altimeter data. *J. Geophys. Res.*; 1982; v. 87(n. B10): p. 8693-8707.

3365. Zindler, A., E. Jagoutz, and S. Goldstein. Nd, Sr and Pb isotopic systematics in a three-component mantle: a new perspective. *Nature*; 1982; v. 298(n. 5874): p. 519-523.

3366. Hoari, K. A satellite altimetric geoid in the Philippine Sea. *Nature*; 1982; v. 299(n. 5879): p. 117-121.

3367. Kelly, C.A., J.W.M. Rudd, R.B. Cook, and D.W. Schindler. The potential importance of bacterial processes in regulating rate of lake acidification. *Limnol. Oceanogr.*; 1982; v. 27(n. 5): p. 868-882.

3368. Raleigh, C.B., K. Sieh, L.R. Sykes, and D.L. Anderson. Forecasting southern California earthquakes. *Science*; 1982; v. 217: p. 1097-1104.

3369. Malone, T.C. Size-fractionated primary productivity of marine phytoplankton. in: P.G. Falkowski, Ed. "Primary Productivity in the Sea". NY: Plenum Pub. Corp.; 1980: p. 301-319.

3370. Taylor, B. and D.E. Hayes. Origin and history of the South China Sea basin. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands, Part 2". Washington, DC: AGU; 1982; v. 27: p. 23-56.

3371. Lewis, S.D. and D.E. Hayes. The tectonics of northward propagating subduction along eastern Luzon, Philippine Islands. in: D.E. Hayes, Ed. "The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands, Part 2". Washington, DC: AGU; 1982; v. 27: p. 57-78.

3372. Hegarty, K.A., J.K. Weissel, and D.E. Hayes. Convergence at the Caroline-Pacific plate boundary: collision and subduction. in: D.E. Hayes, Ed. "The Tectonic and Geologic

Evolution of Southeast Asian Seas and Islands, Part 2". Washington, DC: AGU; 1982; v. 27: p. 326-348.

3373. Kent, D.V. Paleomagnetic evidence for post-Devonian displacement of the Avalon Platform (Newfoundland). *J. Geophys. Res.*; 1982; v. 87(n. B10): p. 8709-8716.

3374. Burckle, L.H., L.D. Keigwin, and N.D. Opdyke. Middle and Late Miocene stable isotope stratigraphy: correlation to the paleomagnetic reversal record. *Micropaleontology*; 1982; v. 28(n. 4): p. 329-334.

3375. Swanberg, N.R. The trophic role of colonial Radiolaria in oligotrophic oceanic environments. *Limnol. Oceanogr.*; 1983; v. 28(n. 4): p. 655-666.

3376. Hanson, R.E. and R.A. Schweickert. Chilling and brecciation of a Devonian rhyolite sill intruded into wet sediments, northern Sierra Nevada, California. *J. Geol.*; 1982; v. 90: p. 717-724.

3377. Plumb, R.A. The correlation between the orientation of induced fractures with in-situ stress or rock anisotropy. in: "Hydraulic Fracturing Stress Measurements: Proceedings of a Workshop, December 2-5, 1981". Washington, DC: National Research Council; 1983: p. 221-234, U.S. National Committee for Rock Mechanics (May 1983).

3378. Michael, P.J. Chemical differentiation of the Bishop Tuff and other high-silica magmas through crystallization processes. *Geology*; 1983; v. 11: p. 31-34.

3379. Kent, D.V. Apparent correlation of palaeomagnetic intensity and climatic records in deep-sea sediments. *Nature*; 1982; v. 299(n. 5883): p. 538-539.

3380. Gedzelman, S.D. and J.R. Lawrence. The isotopic composition of cyclonic precipitation. *J. Appl. Meteorol.*; 1982; v. 21(n. 10): p. 1385-1404.

3381. Burckle, L.H. First appearance datum of *Hemidiscus Karstenii* in late Pleistocene of the subantarctic region. *Antarctic J. of the US*; 1982; v. 17(n. 5): p. 142-143.

3382. Tucholke, B.E. and W.J. Ludwig. Structure and origin of the J Anomaly Ridge, western North Atlantic Ocean. *J. Geophys. Res.*; 1982; v. 87(n. B11): p. 9389-9407.

3383. Abbott, D.H., W. Menke, and R. Morin. Constraints upon water advection in sediments of the Mariana Trough. *J. Geophys. Res.*; 1983; v. 88(n. B2): p. 1075-1093.

3384. Ruddiman, W.F. and A. McIntyre. Severity and speed of Northern Hemisphere glaciation pulses: the limiting case? *Geol. Soc. Am. Bull.*; 1982; v. 93: p. 1272-1279.
3385. Geller, C.A., J.K. Weisell, and R.N. Anderson. Heat transfer and intraplate deformation in the Central Indian Ocean. *J. Geophys. Res.*; 1983; v. 88(n. B2): p. 1018-1032.
3386. Damuth, J.E., V. Kolla, R.D. Flood, R.O. Kowsmann, M.C. Monteiro, M.A. Gorini, J.J.C. Palma, and R.H. Belderson. Distributary channel meandering and bifurcation patterns on the Amazon deep-sea fan as revealed by long-range side-scan sonar (GLORIA). *Geology*; 1983; v. 11 : p. 94-98.
3387. Donn, W.L. The enigma of high-latitude paleoclimate. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1982; v. 40: p. 199-212.
3388. McCann, W.R., J.W. Dewey, A.J. Murphy, and S.T. Harding. A large normal-fault earthquake in the overriding wedge of the Lesser Antilles subduction zone: the earthquake of 8 October 1974. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 6): p.2267-2283.
3389. Nishenko, S.P., G.M. Purdy, and J.I. Ewing. Microaftershock survey of the 1978 Bermuda Rise earthquake. *J. Geophys. Res.*; 1982; v. 87(n. B13): p. 10,624-10636.
3390. Scholz, C.H. Scaling relations for strong ground motion in large earthquakes. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 6): p. 1903-1909.
3391. Das, S. Appropriate boundary conditions for modeling very long earthquakes and physical consequences. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 6): p. 1911-1926.
3392. Bonatti, E., R. Sartori, and A. Boersma. Vertical crustal movements at the Vema fracture zone in the Atlantic: evidence from dredged limestones. *Tectonophysics*; 1983; v. 91: p. 213-232.
3393. Bonatti, E. and K. Crane. Oscillatory spreading explanation of anomalously old uplifted crust near oceanic transforms. *Nature*; 1982; v. 300(n. 5890): p. 343-345.
3394. Li, Y-H. A brief discussion on the mean oceanic residence time of elements. *Geochim. Cosmochim. Acta*; 1982; v. 46: p. 2671-2675.
3395. Bonatti, E., E.C. Simmons, D. Breger, P.R. Hamlyn, and J. Lawrence. Ultramafic rock/seawater interaction in the oceanic crust: Mg-silicate (sepiolite) deposit from the Indian Ocean floor. *Earth Planet. Sci. Lett.*; 1983; v. 62( ): p. 229-238.

3396. Cita, M.B., F.W. McCoy, and S. Coughlin. Tephrochronology of the Mediterranean deep-sea record, new data from the western Mediterranean Ridge and from the Tyrrhenian Basin. *Rend. Soc. Geol. It.*; 1981; v. 4: p. 255-258.

3397. Anderson, O.R. and M. Botfield. Biochemical and fine structure evidence for cellular specialization in a large spumellarian radiolarian *Thalassicolla nucleata*. *Mar. Biol.*; 1983; v. 72: p. 235-241.

3398. Morley, J.J., J.D. Hays, and J.H. Robertson. Stratigraphic framework for the late Pleistocene in the northwest Pacific Ocean. *Deep-Sea Res.*; 1982; v. 29(n. 12A): p. 1485-1499.

3399. Dodge, R.E., R.G. Fairbanks, L.K. Benninger, and F. Maurrasse. Pleistocene sea levels from raised coral reefs of Haiti. *Science*; 1983; v. 219: p. 1423-1425.

3400. Raleigh, B. A strategy for short-term prediction of earthquakes. *Bull. Seismol. Soc. Am.*; 1982; v. 72(n. 6): p. S337-S342.

3401. Embley, R.W., M.A. Hobart, R.N. Anderson, and D. Abbott. Anomalous heat flow in the Northwest Atlantic: a case for continued hydrothermal circulation in 80-m.y. crust. *J. Geophys. Res.*; 1983; v. 88(n. B2): p. 1067-1074.

3402. Sykes, L.R., W.R. McCann, and A.L. Kafka. Motion of Caribbean plate during the last 7 million years and implications for earlier Cenozoic movements. *J. Geophys. Res.*; 1982; v. 87(n. B13): p. 10,656-10,676.

3403. Hauksson, E. Episodic rifting and volcanism at Krafla in north Iceland: growth of large ground fissures along the plate boundary. *J. Geophys. Res.*; 1983; v. 88(n. B1): p. 625-636.

3404. Merguerian, C. Tectonic significance of Cameron's line in the vicinity of the Hodges Complex--an imbricate thrust model for western Connecticut. *Am. J. Sci.*; 1983; v. 283: p. 341-368.

3405. Engelder, T. Reply to a comment on "Is there a genetic relationship between selected regional joints and contemporary stress within the lithosphere of North America?" by A.E. Scheidegger. *Tectonics*; 1982; v. 1(n. 5): p. 465-470.

3406. Stoll, R.D. and R.E. Houtz. Attenuation measurement with sonobuoys. *J. Acoust. Soc. Am.*; 1983; v. 73(n. 1): p. 163-172.

3407. Tahira, M. and W.L. Donn. Anomalous infrasound from Space Shuttle II and Skylab I. *J. Acoust. Soc. Am.*; 1983; v. 73(n. 2): p. 461-464.
3408. Mpodozis, C. and R. Forsythe. Stratigraphy and geochemistry of accreted fragments of the ancestral Pacific floor in southern South America. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1983; v. 41: p. 103-124.
3409. Burckle, L.H. and D.W. Cooke. Late Pleistocene *Eucampia antarctica* abundance stratigraphy in the Atlantic sector of the Southern Ocean. *Micropaleontology*; 1983; v. 29(n. 1): p. 6-10.
3410. Santschi, P.H., U.P. Nyffeler, P. O'Hara, M. Buchholtz, and W.S. Broecker. Radiotracer uptake on the sea floor: results from the MANOP chamber deployments in the eastern Pacific. *Deep-Sea Res.*; 1984; v. 31(n. 5): p. 451-468.
3411. Lowrie, W. and D.V. Kent. Geomagnetic reversal frequency since the Late Cretaceous. *Earth Planet. Sci. Lett.*; 1983; v. 62: p. 305-313.
3412. Adem, J., W.L. Donn, and R. Goldberg. Monthly climate predictions for 1981-82. in: "Proc. Seventh Annual Climate Diagnostics Workshop". Washington, DC: US Dept. of Commerce, NOAA; 1983: p. 461-468.
3413. Gordon, A.L., K. Horai, and M. Donn. Southern hemisphere western boundary current variability revealed by GEOS 3 altimeter. *J. Geophys. Res.*; 1983; v. 88(n. C1): p. 755-762.
3414. Ribe, N.M. Diapirism in the earth's mantle: experiments on the motion of a hot sphere in a fluid with temperature-dependent viscosity. *J. Volcanol. Geotherm. Res.*; 1983; v. 16: p. 221-245.
3415. May, L.T., O.R. Anderson, and J.F. Hogg. Changes of cellular structure and subcellular enzymatic patterns during the activation of glycogenesis in *Tetrahymena pyriformis*. *J. Ultrastruct. Res.*; 1982; v. 81: p. 271-289.
3416. Menke, W. and P.G. Richards. The horizontal propagation of P waves through scattering media: analog model studies relevant to long-range P wave propagation. *Bull. Seismol. Soc. Am.*; 1983; v. 73(n.1): p. 125-142.
3417. Santschi, P.H., Y-H Li, D.M. Adler, M. Amdurer, J. Bell, and U.P. Nyffeler. The relative mobility of natural (Th, Pb and Po) and fallout (Pu, Am, Cs) radionuclides in the coastal marine environment: results from model ecosystems (MERL) and Narragansett Bay. *Geochim. Cosmochim. Acta*; 1983; v. 47: p. 201-210.



3418. Dalziel, I.W.D. The evolution of the Scotia Arc: a review. in: R.L. Oliver, P.R. James, and J.B. Jago, Eds. "Antarctic Earth Science". London: Cambridge Univ. Press; 1983: p. 283-288.

3419. Cochran, J.R. A model for development of the Red Sea. *Am. Assoc. Pet. Geol.*; 1983; v. 67(n. 1): p. 41-69.

3420. Kadko, D. A multitracer approach to the study of erosion in the northeast equatorial pacific. *Earth Planet. Sci. Lett.*; 1983; v. 63: p. 13-33.

3421. Evans, K. On the development of shallow hydraulic fractures as viewed through the surface deformation field: Part 1—Principles. *J. Pet. Technol.*; 1983; February: p. 406-410.

3422. Evans, K. and G. Holzhausen. On the development of shallow hydraulic fractures as viewed through the surface deformation field: Part 2—Case Histories. *J. Pet. Technol.*; 1983; February: p. 411-420.

3423. Evans, K.F. Some examples and implications of observed elastic deformations associated with growth of hydraulic fractures in the earth. in: "Hydraulic Fracturing Stress Measurements: Proceedings of a Workshop, December 2-5, 1981". Washington, DC: US National Committee of Rock Mechanics; 1983.

3424. Bookbinder, R., J. Horstmann, A. Hubbard, J.T. Kuo, and W. McDonald. Geophysical ocean bottom instrument (GOBI). in: J.T. Kuo, Ed. "Proc. Ninth International Symposium on Earth Tides". Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung; 1983; ( p. 329-339).

3425. Malone, F.D. and J.T. Kuo. Finite element modeling of tides and currents in the New York Bight. in: J.T. Kuo, Ed. "Proc. Ninth International Symposium on Earth Tides". Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung; 1983; ( p. 385-397).

3426. Kuo, J.T., W. Brown, D. Carmichael, G-X Gu, and K-R Liu. A US/China joint research project on the relationship between gravity variations and earthquake occurrences in the Beijing-Tianjin region. in: J.T. Kuo, Ed. "Proc. Ninth International Symposium on Earth Tides". Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung; 1983: p. 673-694.

3427. Bromble, S.L. and L.H. Burckle. A late Quaternary stratigraphy for DSDP Site 480, Gulf of California. *Mar. Micropaleontol.*; 1983; v. 7(): p. 541-543.

3428. Kukla, G. and M. Briskin. The age of the 4/5 isotopic stage boundary on land and in the oceans. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1983; v. 42: p. 35-45.

3429. Geiser, P. and T. Engelder. The distribution of layer parallel shortening fabrics in the Appalachian foreland of New York and Pennsylvania: evidence for two non-coaxial phases of the Alleghanian Orogeny. in: R.D. Hatcher, Jr., H. Williams, and I. Zietz, Eds. "Contributions to the Tectonics and Geophysics of Mountain Chains,". Boulder, CO: Geological Society of America; 1983: Memoir 158, p. 161-175, .

3430. Gordon, A.L. Polar oceanography. *Rev. Geophys. Space Phys.*; 1983; v. 21(n. 5): p. 1124-1131.

3431. Kent, D.V. and D.J. Spariosu. High resolution magnetostratigraphy of Caribbean Plio-Pleistocene deep-sea sediments. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1983; v. 42: p. 47-64.

3432. Staudigel, H. and S.R. Hart. Alteration of basaltic glass: mechanisms and significance for the oceanic crust-seawater budget. *Geohim. Cosmochim. Acta.*; 1983; v. 47: p. 337-350.

3433. Walker, D. New developments in magmatic processes. *Rev. Geophys. Space Phys.*; 1983; v. 21(n. 6): p. 1372-1384.

3434. Ryan, W.B.F. and J.A. Farre. Potential of radioactive and other waste disposals on the continental margin by natural dispersal processes. in: P. Park, D. Kester, I. Duedall, and B. Ketchum, Eds. "Wastes in the Ocean: Radioactive Wastes and the Ocean". NY, NY: John Wiley & Sons Inc.; 1983; v. 3: p. 215-236.

3435. Bopp, R.F. . Revised parameters for modeling the transport of PCB components across an air water interface. *J. Geophys. Res.*; 1983; v. 88(n. C4): p. 2521-2529.

3436. Damuth, J.E., R.D. Jacobi, and D.E. Hayes. Sedimentation processes in the northwest pacific Basin revealed by echocharacter mapping studies. *Geol. Soc. Am. Bull.*; 1983; v. 94: p. 381-395.

3437. Johnson, D.A., M.T. Ledbetter, and J.E. Damuth. Neogene sedimentation and erosion in the Amirante Passage, western Indian Ocean. *Deep-Sea Res.*; 1983; v. 30(n. 2A): p. 195-219.

3438. Farre, J.A., B.A. McGregor, W.B.F. Ryan, and J.M. Robb. Breaching the shelfbreak: passage from youthful to mature phase in submarine canyon evolution. *The Society of Economic Paleontologists and Mineralogists*; 1983; *Spec. Pub.*(n. 33): p. 25-39.

3439. Eittreim, S.L., P.E. Biscaye, and S.S. Jacobs. Bottom-water observations in the Vema fracture zone. *J. Geophys. Res.*; 1983; v. 88(n. C4): p. 2609-2614.

3440. Williams, P.J., K.R. Heinemann, J. Marra, and D.A. Purdie. Comparison of  $^{14}\text{C}$  and  $\text{O}_2$  measurements of phytoplankton production in oligotrophic waters. *Nature*; 1983; v. 305(n. 5929): p. 49-50.

3441. Karner, G.D. Spectral representation of isostatic models. *MBR J. Australian Geol. Geophys.*; 1982; v. 7: p. 55-62.

3442. Anderson, O.R. The radiolarian symbiosis. in: L.J. Goff, Ed. "Algal Symbiosis". London: Cambridge Univ. Press; 1983: p. 69-89.

3443. Tauxe, L., J. Besse, and J.L. LaBrecque . Palaeolatitudes from DSDP Leg 73 sediment cores: implications for the apparent polar wander path for Africa during the late Mesozoic and Cenozoic. *Geophys. J. R.astr. Soc.*; 1983; v. 73: p. 315-324.

3444. Balachandran, N.K. Acoustic and electric signals from lightning. *J. Geophys. Res.*; 1983; v. 88(n. C6): p. 3879-3884.

3445. Sancetta, C.A. . Diatoms in sediments as indicators of the shelf-slope break. *The Society of Economic Paleontologists and Mineralogists*; 1983; Spec. Pub.(n. 33): p. 373-380.

3446. Rabinowitz, P.D. and C. Brenner. The IPOD geological/geophysical data bank. in: *Proceedings of the 15th Annual Offshore Technology Conference*. Houston, TX; 1983: p. 401-403.

3447. Rabinowitz, P.D., M.F. Coffin, and D. Falvey. The separation of Madagascar and Africa. *Science*; 1983; v. 220: p. 67-69.

3448. Pitman, W.C. III and X. Golovchenko. The effect of sealevel change on the shelfedge and slope of passive margins. *The Society of Economic Paleontologists and Mineralogists*; 1983; Spec. Pub.(n. 33): p. 41-58.

3449. Watts, A.B. The strength of the earth's crust. *Mar. Technol. Soc. J.*; 1983; v. 17(n. 1): p. 5-17.

3450. Houghton, R.W. and J. Marra. Physical/biological structure and exchange across the thermohaline shelf/slope front in the New York Bight. *J. Geophys. Res.*; 1983; v. 88(n. C7): p. 4467-4481.

3451. Peng, T-H, W.S. Broecker, H.D. Freyer, and S. Trumbore. A deconvolution of the tree ring based  $\delta^{13}\text{C}$  record. *J. Geophys. Res.*; 1983; v. 88(n. C6): p. 3609-3620.

3452. Kent, D.V. Geomagnetic excursions and climate change. *Nature*; 1983; v. 302(n. 5907): p. 455.

3453. McCoy, F.W. . Sea-floor sediments. in: "Geologic Map of Circum-Pacific Region, Antarctica" . Map Series ed. Tulsa, OK: Am. Assoc. Pet. Geol.; 1989.

3454. Flood, R.D. Classification of sedimentary furrows and a model for furrow initiation and evolution. *Geol. Soc. Am. Bull.*; 1983; v. 94: p. 630-639.

3455. Coffin, M.F. and P.D. Rabinowitz. East African continental margin transect. in: A.W. Bally, Ed. "Seismic Expression of Structural Styles," Studies in Geology Series #15. Tulsa, OK: Am. Assoc. of Petroleum Geologists; 1983; V. 2: p. 2.3.3-22.

3456. Ladd, J.W. and M. Truchan. Compressional features across the Caribbean margin of Colombia. in: A.W. Bally, Ed. "Seismic Expression of Structural Styles," Studies in Geology Series #15. Tulsa, OK: Am. Assoc. of Petroleum Geologists; 1983; V. 3: p. 3.4.2-163.

3457. Mountain, G.S. and B.E. Tucholke. Abyssal sediment waves. in: A.W. Bally, Ed. "Seismic Expression of Structural Styles" Studies in Geology Series #15. Tulsa, OK: Am. Assoc. of Petroleum Geologists; 1983; V. 1( p. 1.2.5-22).

3458. Mutter, J.C. Structure within oceanic crust off the Norwegian margin. in: A.W. Bally, Ed. "Seismic Expression of Structural Styles," Studies in Geology Series #15. Tulsa, OK: Am. Assoc. of Petroleum Geologists; 1983; V. 2: p. 2.2.3-36.

3459. Ducklow, H.W., and D.L. Kirchman. Bacterial dynamics and distribution during a spring diatom bloom in the Hudson River plume, USA. *J. Plankton Res.*; 1983; v. 4(n. 3): p. 333-355.

3460. Markl, R.G. and G.M. Bryan. Stratigraphic evolution of Blake Outer Ridge. *Am. Assoc. Pet. Geol. Bull.*; 1983; v. 67(n. 4): p. 666-683.

3461. Gardner, W.D., K.R. Hinga, and J. Marra. Observations on the degradation of biogenic material in the deep ocean with implications on accuracy of sediment trap fluxes. *J. Mar. Res.*; 1983; v. 41(n. 2): p. 195-214.

3462. Snyder, W.S. and H.K. Brueckner. Tectonic evolution of the Golconda allochthon, Nevada: problems and perspectives. in: C.A. Stevens, Ed. "Paleozoic and Early Mesozoic Rocks in Microplates of Western North America": The Society of Economic Paleontologists and Mineralogists; 1983: p. 103-123, Pacific Section.

3463. Tauxe, L., P. Tucker, N.P. Petersen, and J.L. LaBrecque. The magnetostratigraphy of Leg 73 sediments. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1983; v. 42: p. 45-90.

3464. Das, S. and B.V. Kostrov. Breaking of a single asperity: rupture process and seismic radiation. *J. Geophys. Res.*; 1983; v. 88(n. B5): p. 4277-4288.

3465. Jacoby, Jr., G.C. A dendroclimatic study in the forest-tundra ecotone on the east shore of Hudson Bay. in: P. Morisset and S. Payetts, Eds. "Tree-Line Ecology," Proceedings of the Northern Quebec Tree-Line Conference. Quebec, Canada: Kuujjuarapik; 1983; ( p. 95-99).

3466. Bonatti, E., R. Clocchiatti, P. Colantoni, R. Gelmini, G. Marinelli, G. Ottonello, R. Santacrace, M. Taviani, A.A. Abdel-Meguid, H.S. Assaf, and M.A. El Tahir. Zabargad (St. John's) Island: an uplifted fragment of sub-Red Sea lithosphere. *J. Geol. Soc.*, London; 1983; v. 140: p. 677-690.

3467. Jones, G.A. and P. Kaiteris. A vacuum-gasometric technique for rapid and precise analysis of calcium carbonate in sediments and soils. *J. Sed. Petrology*; 1983; v. 53(n. 2): p. 655-660.

3468. Snyder, W.S., H.K. Brueckner, and R.A. Schweickert. Deformational styles in the Monterey Formation and other siliceous sedimentary rocks. in: C.A. Stevens, Ed. "Paleozoic and Early Mesozoic Rocks in Microplates of Western North America": The Society of Economic Paleontologists and Mineralogists; 1983: p. 151-170, Pacific Section.

3469. Elthon, D., J.R. Lawrence, R.E. Hanson, and C. Stern. Modelling of oxygen-isotope data from the Sarmiento ophiolite complex, Chile. in: I.G. Gass, S.J. Lippard, and A.W. Shelton, Eds. "Ophiolites and Oceanic Lithosphere". London: Blackwell Scientific Pub.; 1984; (Geol. Soc. London, Spec. Pub. No. 13): p. 185-197.

3470. Seeber, L. and V. Gronitz. River profiles along the Himalayan arc as indicators of active tectonics. *Tectonophysics*; 1983; v. 92: p. 335-367.

3471. Simpson, H.J., H.W. Ducklow, B. Deck, and H.L. Cook. Brackish-water aquaculture in pyrite-bearing tropical soils. *Aquaculture*; 1983; v. 34: p. 333-350.

3472. Swift, J.H., T. Takahashi, and H.D. Livingston. The contribution of the Greenland and Barents Seas to the deep water of the Arctic Ocean. *J. Geophys. Res.*; 1983; v. 88(n. C10): p. 5981-5986.

3473. Robinson, D., M. Wilson, G. Kukla, and A. Henderson-Sellers. Observation of surface albedo and its variation for climate models. in: "Proceedings of the Seventeenth International Symposium on Remote Sensing of Environment, May 9-13, Ann Arbor". Ann Arbor, MI: Environmental Research Institute of Michigan; 1983: p. 469-477.

3474. Ladd, J.W., M. Truchan, M. Talwani, P.L. Stoffa, P. Buhl, R. Houtz, A. Mauffret, and G. Westbrook. Seismic reflection profiles across the southern margin of the Caribbean. in: W.E. Bonini, R.B. Hargraves, and R. Shagam, Eds. "The Caribbean-South American Plate Boundary and Regional Tectonics". Boulder, CO: Geological Society of America; 1984: p. 153-159, Memoir 162.

3475. Sancetta, C. and S.W. Robinson. Diatom evidence on Wisconsin and Holocene events in the Bering Sea. *Quat. Res.*; 1983; v. 20: p. 232-245.

3476. Piola, A.R. Horizontal advection of temperature in the Drake Passage. *J. Geophys. Res.*; 1983; v. 88(n. C12): p. 7634-7640.

3477. Bilham, R. Vertical geodesy without slope dependent errors--A proposed hydrostatic pressure level using water at 4° C . *Tectonophysics*; 1983; v. 97: p. 337-349.

3478. Richards, P.G. and W. Menke. The apparent attenuation of a scattering medium. *Bull. Seism. Soc. Am.*; 1983; v. 73(n. 4): p. 1005-1021.

3479. LaBrecque, J.L., K.J. Hsu, M.F. Carman, Jr., A.M. Karpoff, J.A. McKenzie, S.F. Percival, Jr., J.P. Petersen, K.A. Pisciotto, E. Schreiber, L. Tauxe, P. Tucker, H.J. Weissert, and R. Wright. DSDP Leg 73: Contributions to paleogene stratigraphy in nomenclature, chronology and sedimentation rates. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1983; v. 42: p. 91-125.

3480. Rossignol-Strick, M. African monsoons, an immediate climate response to orbital insolation. *Nature*; 1983; v. 303(n. 5921): p. 46-49.

3481. Damuth, J.E., R.O. Kowsmann, R.D. Flood, R.H. Belderson, and M.A. Gorini. Age relationships of distributary channels on Amazon deep-sea fan: implications for fan growth pattern. *Geology*; 1983; v. 11: p. 470-473.

3482. Tauxe, L., N.D. Opdyke, G. Pasini, and C. Elmi. Age of the Plio-Pleistocene boundary in the Vrica section, southern Italy. *Nature*; 1983; v. 304(n. 5922): p. 125-129.

3483. Seeber, L. Large scale thin-skin tectonics. *Revs. Geophys. and Space Phys.* (US National Report to International union of Geodesy and Geophysics 1979-1982); 1983; v. 21(n. 6): p. 1528-1538.

3484. Mori, J. Dynamic stress drops of moderate earthquakes of the Eastern Aleutians and their relation to a great earthquake. *Geol. Soc. Am. Bull.*; 1983; v. 73(n. 4): p. 1077-1097.

3485. Gedzelman, S.D. Short-period atmospheric gravity waves: a study of their statistical properties and source mechanisms. *Monthly Weather Rev.*; 1983; v. III: p. 1293-1299.

3486. Spariosu, D.J. and D.V. Kent. Paleomagnetism of the Lower Devonian Traveler Felsite and the Acadian orogeny in the New England Appalachians. *Geol. Soc. Am. Bull.*; 1983; v. 94: p. 1319-1328.

3487. Hart, S.R. and H. Staudigel. Age of hydrothermal circulation on the Rio Grande Rise: Deep Sea Drilling Project Site 516. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: US Government Printing Office; 1983; v. 72: p. 471-474.

3488. Sancetta, C. Effect of Pleistocene glaciation upon oceanographic characteristics of the North Pacific Ocean and Bering Sea. *Deep-Sea Res.*; 1983; v. 30(n. 8A): p. 851-869.

3489. Zindler, A., H. Staudigel, S.R. Hart, R. Endres, and S. Goldstein. Nd and Sr isotopic study of a mafic layer from Ronda ultramafic complex. *Nature*; 1983; v. 304(n. 5923): p. 226-230.

3490. Ducklow, H.W. Production and fate of bacteria in the oceans. *Bioscience*; 1983; v. 33(n. 8): p. 494-501.

3491. Steckler, M. Changes in sea level. in: H.D. Holland and A.F. Trendall, Eds. "Patterns of Change in Earth Evolution". Berlin, Germany: Springer-Verlag; 1984: p. 103-121.

3492. Karner, G.D., M.S. Steckler, and J.A. Thorne. Longterm thermo-mechanical properties of the continental lithosphere. *Nature*; 1983; v. 304(n. 5923): p. 250-253.

3493. Molino, B., L.H. Heusser, and G.M. Woillard. Frequency components of a Grande Pile pollen record: evidence of precessional orbital forcing. in: A.L. Berger, et al., Eds. "Milankovitch and Climate", Part 1. Holland: D. Reidel Pub. Co.; 1984: p. 391-404.

3494. Ruddiman, W.F. and A. McIntyre. Ice-age thermal response and climatic role of the surface Atlantic Ocean, 40° N to 63° N. *Geol. Soc. Am. Bull.*; 1984; v. 95: p. 381-396.
3495. Sykes, L.R., J.F. Evernden, and I. Cifuentes. Seismic methods for verifying nuclear test bans. in: H.C. Wolfe, Ed. "Physics, Technology and the Nuclear Arms Race", Ed. NY, NY: American Institute of Physics; 1983: p. 85-133.
3496. Mutter, J.C. and S.C. Cande. The early opening between Broken Ridge and Kerguelen Plateau. *Earth Planet. Sci. Lett.*; 1983; v. 65(): p. 369-376.
3497. Morley, J.C. . Identification of Density-Stratified Waters in the Late-Pleistocene North Atlantic: A Faunal Derivation. *Quat. Res.*; 1983; v. 20: p. 374-386.
3498. Morley, J.J. and J.D. Hays. Oceanographic conditions associated with high abundances of the radiolarian *Cycladophora davisiana*. *Earth Planet. Sci. Lett.*; 1983; v. 66: p. 63-72.
3499. Scholz, C.H. and S.H. Hickman. Hysteresis in the closure of a nominally flat crack. *J. Geophys. Res.*; 1983; v. 88(n. B8): p. 6501-6504.
3500. Marra, J. and K. Heinemann. A comparison between noncontaminating and conventional incubation procedures in primary production measurements. *Limnol. Oceanogr.*; 1984; v. 29(n. 2): p. 389-392.
3501. Winslow, M.A. . Clastic dike swarms and the structural evolution of the foreland fold and thrust belt of the southern Andes. *Geol. Soc. Am. Bull.*; 1983; v. 94: p. 1073-1080.
3502. Fornari, D.J., W.B.F. Ryan, and P.J. Fox. Sea MARC 1 side-scan sonar imaging near the East Pacific Rise. *EOS, Trans. Am. Geophys. Union*; 1983; v. 64(n. 31): p. 482.
3503. McCoy, F.W. Surficial sediments of the northeastern Pacific Ocean. in: S.T. Watson, Ed. "Transactions of the Third Circum-Pacific Energy and Mineral Resources Conference, August 22-28, 1982. Tulsa, OK: AAPG Bookstore; 1982: p. 655-666.
3504. McCoy, F.W. and S. Selwyn. The hydrostatic corer. *Mar. Geol.*; 1984; v. 54: p. M33-M41.
3505. Blasing, T.J., D.N. DuVick, and E.R. Cook. Filtering the effects of competition from ring-width series. *Tree-Ring Bull.*; 1983; v. 43: p. 19-30.



3506. Shor, A.N., G.A. Jones, K.A. Rasmussen, and L.H. Burckle. Carbonate spikes and displaced components at Deep Sea Drilling Project Site 515: Pliocene/Pleistocene depositional processes in the southern Brazil basin. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1983; v. 72: p. 885-893.

3507. Gordon, A.L. and A.R. Piola. Atlantic Ocean upper layer salinity budget. *J. Phys. Oceanogr.*; 1983; v. 13(n. 7): p. 1293-1300.

3508. Broecker, W.S. and T-H Peng. Gas exchange measurements in natural systems. in: W. Brutsaert and G.H. Jirka, Eds. "Gas Transfer at Water Surfaces". Holland: D. Reidel Pub. Co.; 1984: p. 479-493.

3509. Spariosu, D.J., D.V. Kent, and J.D. Keppie. Late Paleozoic motions of the Meguma terrane, Nova Scotia: new paleomagnetic evidence. in: R. Van der Voo, C.R. Scotese, and N. Bonhommet, Eds. "Plate Reconstruction from Paleozoic Paleomagnetism". Geodynamics Series ed. Washington, DC: American Geophysical union; 1984; v. 12: p. 82-98.

3510. Santschi, P.H., P. Bower, U.P. Nyffeler, A. Azevedo, and W.S. Broecker. Estimates of the resistance to chemical transport posed by the deep-sea boundary layer. *Limnol. Oceanogr.*; 1983; v. 28(n. 5): p. 899-912.

3511. Broecker, W.S. The Ocean. *Scientific American*; 1983; v. 249(n. 3): p. 146-160.

3512. Kent, D.V., O. Dia, and J.M.A. Sougy. Paleomagnetism of Lower-Middle Devonian and Upper Proterozoic-Cambrian(?) rocks from Mejeria (Mauritania, West Africa). in: R. Van der Voo, C.R. Scotese, and N. Bonhommet, Eds. "Plate Reconstruction from Paleozoic Paleomagnetism". Geodynamics Series ed. Washington, DC: American Geophysical Union; 1984; v. 12: p. 99-115.

3513. Taylor, B. and G.D. Karner. On the evolution of marginal basins. *Revs. Geophys. and Space Phys.*; 1983; v. 21(n. 8): p. 1727-1741.

3514. Wesnousky, S.G., C.H. Scholz, K. Shimazaki, and T. Matsuda. Earthquake frequency distribution and the mechanics of faulting. *J. Geophys. Res.*; 1983; v. 88(n. B11): p. 9331-9340.

3515. LaBrecque, J.L., J. Phillips, and J.A. Austin, Jr. The crustal age and tectonic fabric at the Leg 73 sites. in: "Initial Reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1984; v. 73: p. 791-798.

3516. Bé , A.W.H., O.R. Anderson, W.W. Faber, Jr., and D.A. Caron. Sequence of morphological and cytoplasmic changes during gametogenesis in the planktonic foraminifer *Globigerinoides sacculifer* (Brady). *Micropaleontology*; 1983; v. 29(n. 3): p. 310-325.
3517. Mix, A.C. and W.F. Ruddiman. Oxygen-isotope analyses and Pleistocene ice volumes. *Quat. Res.*; 1984; v. 21: p. 1-20.
3518. Cochran, J.R. Effects of finite rifting times on the development of sedimentary basins. *Earth Planet. Sci. Lett.*; 1983; v. 66: p. 289-302.
3519. Griffin, W.L. and H.K. Brueckner. REE, Rb-Sr and Sm-Nd studies of Norwegian eclogites. *Chem. Geol.*; 1985; v. 52: p. 249-271.
3520. House, L.S. and K.H. Jacob. Earthquakes, plate subduction, and stress reversals in the eastern Aleutian arc. *J. Geophys. Res.*; 1983; v. 88(n. B11): p. 9347-9373.
3521. Anderson, R.F. A method for determining the oxidation state of uranium in natural waters. *Nucl. Instrum. Methods Phys. Res.*; 1984; v. 223: p. 213-217.
3522. Kent, D.V. and F. M. Gradstein. A Jurassic to recent chronology. in: P.R. Vogt and B.E. Tucholke, Eds. "The Western North Atlantic Region," *The Geology of North America*. Boulder, CO: Geol. Soc. Am. Bull.; 1986: p. 45-50. (3557).
3523. Berggren, W.A., D.V. Kent, J.J. Flynn, and J.A. van Couvering. Cenozoic geochronology. *Geol. Soc. Am. Bull.*; 1985; v. 96: p. 1407-1418.
3524. Berggren. W.A., D.V. Kent, and J.J. Flynn. Paleogene geochronology and chronostratigraphy. in: N.J. Snelling, Ed. "The Chronology of the Geological Record". London: The Geological Society; 1985: p. 141-186, Memoir 10.
3525. Berggren, W.A., D.V. Kent, and J.A. van Couvering. Neogene geochronology and chronostratigraphy. in: N.J. Snelling, Ed. "The Chronology of the Geological Record". London: The Geological Society; 1985: p. 211-260, Memoir 10.
3526. Jacoby, G.C. and L.D. Ulan. Tree ring indications of uplift at Icy Cape, Alaska, related to 1899 earthquakes. *J. Geophys. Res.*; 1983; v. 88(B.11): p. 9305-9313.
3527. Das, S. and C.H. Scholz. Why large earthquakes do not nucleate at shallow depths. *Nature*; 1983; v. 305(n. 5935): p. 621-623.

3528. Garzoli, S.L. and E.J. Katz. The forced annual reversal of the Atlantic North Equatorial Countercurrent. *J. Phys. Oceanogr.*; 1983; v. 13(n. 11): p. 2082-2090.

3529. Beavan, J., E. Hauksson, S.R. McNutt, R. Bilham, and K.H. Jacob. Tilt and seismicity changes in the Shumagin seismic gap. *Science*; 1983; v. 222: p. 322-325.

3530. Ou, H.W. Some two-layer models of the shelf-slope front: geostrophic adjustment and its maintenance. *J. Phys. Oceanogr.*; 1983; v. 13(n. 10): p. 1798-1808.

3531. Cook, E.R. and G.C. Jacoby. Potomac River streamflow since 1730 as reconstructed by tree rings. *J. Climate and Appl. Meteor.*; 1983; v. 22(n. 10): p. 1659-1672.

3532. Heiken, G. and F. McCoy, Jr. Caldera development during the Minoan eruption, Thira, Cyclades, Greece. *J. Geophys. Res.*; 1984; v. 89(n. B10): p. 8441-8462.

3533. Stein, R.S. . Comment on "The impact of refraction correction on leveling interpretations in southern California" by William E. Strange. *J. Geophys. Res.*; 1984; v. 89(n. B1): p. 559-561.

3534. Gardner, W.D., M.J. Richardson, K.R. Hinga, and P.E. Biscaye. Resuspension measured with sediment traps in a high-energy environment. *Earth Planet Sci. Lett.*; 1983; v. 66: p. 262-278.

3535. Cook, R.B. Distributions of ferrous iron and sulfide in an anoxic hypolimnion. *Can. J. Fish. Aquat. Sci.*; 1984; v. 41: p. 286-293.

3536. Wesnousky, S.G., C.H. Scholz, K. Shimazaki, and T. Matsuda. Integration of geological and seismological data for the analysis of seismic hazard: a case study of Japan. *Bull. Seism. Soc. Am.*; 1984; v. 74(n. 2): p. 687-708.

3537. Bonatti, E. Hydrothermal metal deposits from the oceanic rifts: a classification. in: P.A. Rona, K. Bostrom, L. Laubier, and K.L. Smith, Jr., Eds. "Hydrothermal Processes at Seafloor Spreading Centers". New York: Plenum Publishing Corp.; 1984: p. 491-502.

3538. Houghton, R.W. Seasonal variations of the subsurface thermal structure in the gulf of Guinea. *J. Phys. Oceanogr.* ; 1983; v. 13(n. 11): p. 2070-2081.

3539. Caron, D.A. and A.W.H. Bé . Predicted and observed feeding rates of the spinose planktonic foraminifer *Globigerinoides sacculifer*. *Bull. Mar. Sci.*; 1984; v. 35(n. 1): p. 1-10.

3540. Karner, G.D. and A.B. Watts. Gravity anomalies and flexure of the lithosphere at mountain ranges. *J. Geophys. Res.*; 1983; v. 88(n. B12): p. 449-10, 477.
3541. Walker, D. Lunar and terrestrial crust formation; Proceedings of the Fourteenth Lunar and Planetary Science Conference, Part 1. *J. Geophys. Res.*; 1983; v. 88(Supplement): p. B17-B25.
3542. Bahat, D. and T. Engelder. Surface morphology on crossfold joints of the Appalachian Plateau, New York and Pennsylvania. *Tectonophysics*; 1984; v. 104: p. 299-313.
3543. Comiso, J.C., S.F. Ackley, and A.L. Gordon. Antarctic sea ice microwave signatures and their correlation with in situ ice observations. *J. Geophys. Res.*; 1984; v. 89(n. C1): p. 662-672.
3544. Cita, M.B., A. Camerlenghi, K.A. Kastens, and F.W. McCoy. New findings of Bronze Age homogenites in the Ionian Sea: geodynamic implications for the Mediterranean. *Mar. Geol.*; 1984; v. 55: p. 47-62.
3545. Cita, M.B., C. Beghi, A. Camerlenghi, K.A. Kastens, F.W. McCoy, A. Nosetto, E. Parisi, F. Scolari, and L. Tomadin. Turbidites and megaturbidites from the Herodotus abyssal plain (eastern Mediterranean) unrelated to seismic events. *Mar. Geol.*; 1984; v. 55: p. 79-101.
3546. Miller, K.G. and R.G. Fairbanks. Evidence for Oligocene-Middle Miocene abyssal circulation changes in the western North Atlantic. *Nature*; 1983; v. 306(n. 5940): p. 250-253.
3547. Perfit, M.R., D.J. Fornari, A. Malahoff, and R.W. Embley. Geochemical studies of abyssal lavas recovered by DSRV Alvin from eastern Galapagos rift, Inca transform, and Ecuador rift. 3. Trace element abundances and petrogenesis. *J. Geophys. Res.*; 1983; v. 88(n. B12): p. 10551-10572.
3548. Fornari, D.J., M.R. Perfit, A. Malahoff, and R. Embley. Geochemical studies of abyssal lavas recovered by DSRV Alvin from eastern Galapagos rift, Inca transform, and Ecuador rift. 1. Major element variations in natural glasses and spacial distribution of lavas. *J. Geophys. Res.*; 1983; v. 88(n. B12): p. 10519-10529.
3549. Gordon, A.L., C.T.A. Chen, and W.G. Metcalf. Winter mixed layer entrainment of Weddell deep water. *J. Geophys. Res.*; 1984; v. 89(n. C1): p. 637-640.
3550. Perfit, M.R. and D.J. Fornari. Geochemical studies of abyssal lavas recovered by DSRV Alvin from eastern Galapagos rift, Inca transform, and Ecuador rift. 2. Phase chemistry and crystallization history. *J. Geophys. Res.*; 1983; v. 88(n. B12): p. 10530-10550.

3551. Davey, F. J. and A.B. Watts. Gravity field of the southwest Pacific Ocean Basin: New Zealand region. in: "Map and Chart Series," MC-48. Boulder, CO: Geological Society of America; 1983.

3552. Shackleton, N.J., J. Backman, H. Zimmerman, D.V. Kent, M.A. Hall, D.G. Roberts, D.Schnitker, J.G. Baldauf, A. Desprairies, R. Homrighausen, P. Huddlestun, J.B. Keene, A.J. Kaltenback, K.A.O. Krumsick, A.C. Morton, J.W. Murray, and J. Westberg-Smith. Oxygen isotope calibration of the onset of ice-rafting and history of glaciation in the North Atlantic region. *Nature*; 1984; v. 307(n. 5952): p. 620-623.

3553. Anderson, O.R., N.R. Swanberg, and P. Bennett. Assimilation of symbiont-derived photosynthates in some solitary and colonial radiolaria. *Mar. Biol.*; 1983; v. 77: p. 265-269.

3554. Christensen, J.P., A.H. Devol, and W. M. Smethie, Jr. Biological enhancement of solute exchange between sediments and bottom water on the Washington continental shelf. *Continental Shelf Res.*; 1984; v. 3(n. 1): p. 9-23.

3555. Gordon, A.L. and B.A. Huber. Thermohaline stratification below the Southern Ocean sea ice. *J. Geophys. Res.*; 1984; v. 89(n. C1): p. 641-648.

3556. Bender, J.F. , C.H. Langmuir, and G.N. Hanson. Petrogenesis of basalt glasses from the Tamayo region, East Pacific Rise. *J. Petrol.*; 1984; v. 25(n. 1): p. 213-254.

3557. Westbrook, G.K. and W.R. McCann. Subduction of Atlantic lithosphere beneath the Caribbean. in: P.R. Vogt and B.E. Tucholke, Eds. "The Western North Atlantic Region," *The Geology of North America*, V.M. Boulder, Co : The Geological Society of America ; 1986: p. 341-350.

3558. Anderson, O.R., N.R. Swanberg, and P. Bennett. Fine structure of Yellow-Brown symbionts (Prymnesiida) in solitary Radiolaria and their comparison with similar Acantharian symbionts. *J. Protozool.*; 1983; v. 30(n. 4): p. 718-722.

3559. Mutter, J.C., M. Talwani, and P.L. Stoffa. Evidence for a thick oceanic crust adjacent to the Norwegian margin. *J. Geophys. Res.*; 1984; v. 89(n. B1): p. 483-502.

3560. Sykes, L.R. and I.L. Cifuentes. Yields of Soviet underground nuclear explosions from seismic surface waves: Compliance with the Threshold Test Ban Treaty. *Proc. Nat. Acad. Sci.*; 1984; v. 81: p. 1922-1925.

3561. Quittmeyer, R.C., A.L. Kafka, and J.G. Armbruster. Focal mechanisms and depths of earthquakes in central Pakistan. *J. Geophys. Res.*; 1984; v. 89(n. B4): p. 2459-2470.

3562. Quittmeyer, R.C. and A.L. Kafka. Constraints on plate motions in southern Pakistan and the northern Arabian Sea from the focal mechanisms of small earthquakes. *J. Geophys. Res.*; 1984; v. 89(n. B4): p. 2444-2458.

3563. Gardner, W.D., J.K.B. Bishop, and P.E. Biscaye. Nephelometer and current observations at the STIE site, Panama Basin. *J. Mar. Res.*; 1984; v. 42: p. 207-219.

3564. Walker, D. and S.E. DeLong. A small Soret effect in spreading center gabbros. *Contrib. Mineral. Petrol.*; 1984; v. 85: p. 203-208.

3565. Bond, G.C. and M.A. Kominz. Construction of tectonic subsidence curves for the early Paleozoic miogeocline, southern Canadian Rocky Mountains: implications for subsidence mechanisms, age of breakup, and crustal thinning. *Geol. Soc. Am. Bull.*; 1984; v. 95: p. 155-173.

3566. Aikman, F. III. Pycnocline development and its consequences in the Middle Atlantic Bight. *J. Geophys. Res.*; 1984; v. 89(n. C1): p. 995-1004.

3567. Haxby, W. F., G.D. Karner, J.L. LaBrecque, and J.K. Weissel. Digital images of combined oceanic and continental data sets and their use in tectonic studies. *EOS*; 1983; v. 64(n. 52): p. 995-1004.

3568. Tauxe, L. and D.V. Kent. Properties of a detrital remanence carried by haematite from study of modern river deposits and laboratory redeposition experiments. *Geophys. J.R. Astr. Soc.*; 1984; v. 77: p. 543-561.

3569. Bishop, J.K.B. and J. Marra. Variations in primary production and particulate carbon flux through the base of the euphotic zone at the site of the Sediment Trap Intercomparison Experiment (Panama Basin). *J. Mar. Res.*; 1984; v. 42: p. 189-206.

3570. Bond, G.C., M.A. Kominz, and W.J. Devlin. Thermal subsidence and eustasy in the lower Palaeozoic miogeocline of western North America. *Nature*; 1983; v. 306(n. 5945): p. 775-779.

3571. Clement, B.M. and D.V. Kent. A detailed record of the lower Jaramillo polarity transition from a southern hemisphere, deep-sea sediment core. *J. Geophys. Res.*; 1984; v. 89(n. B2): p. 1049-1058.

3572. Michael, P.J. and E. Bonatti. Petrology of ultramafic rocks from Sites 556, 558, and 560 in the North Atlantic. in: "Initial reports of the Deep Sea Drilling Project". Washington, DC: U.S. Government Printing Office; 1985; v. 82: p. 523-528.

3573. Lazarus, D.B. and D.R. Prothero. The role of stratigraphic and morphologic data in phylogeny. *J. Paleontol.*; 1984; v. 58(n. 1): p. 163-172.

3574. Broecker, W.S. and T. Takahashi. Is there a tie between atmospheric CO<sub>2</sub> content and ocean circulation? in: J.E. Hansen and T. Takahashi, Eds. "Climate Processes and Climate Sensitivity," Geophysical Monograph 29. Washington, DC: American Geophysical Union; 1984; Maurice Ewing v. 5: p. 314-326.

3575. Anderson, O.R., N.R. Swanberg, and P. Bennett. An estimate of predation rate and relative preference for algal versus crustacean prey by a spongiöse skeletal radiolarian. *Mar. Biol.*; 1984; v. 78: p. 205-207.

3576. Broecker, W.S. Terminations. in: A.L. Berger, et al., Eds. "Milankovitch and Climate," Part 2. Holland: D. Reidel Pub. Co.; 1984.

3577. Bilham, R. Tsunami-resistant gauges for epicentral sea-level studies. in: E.N. Bernard, Ed. "Proceedings of the Tsunami Symposium," Hamburg, Germany. Washington, DC: United States Department of Commerce, NOAA; 1983: p. 155-175.

3578. Flood, R.D. and T.C. Johnson. Side-scan targets in Lake Superior--evidence for bedforms and sediment transport. *Sedimentology*; 1984; v. 31: p. 311-333.

3579. Kominz, M.A. Oceanic ridge volumes and sea-level change--an error analysis. in: J. Schlee, Ed. "Interregional Unconformities and Hydrocarbon Accumulations". Memoir 36 ed. Tulsa, OK: American Association of Petroleum Geologists; 1984; ( p. 109-127).

3580. Coper, E. and J.C. Stepien. Phytoplankton-zooplankton coupling in the outer continental shelf and slope waters of the Mid-Atlantic Bight, June 1979. *Estuarine Coastal and Shelf Sci.*; 1984; v. 18: p. 145-155.

3581. Santschi, P.H. Particle flux and trace metal residence time in natural waters. *Limnol. Oceanogr.*; 1984; v. 29(n. 5): p. 1100-1108.

3582. Watts, A.B., K. Horai, and N.M. Ribe. On the determination of the deflection of the vertical by satellite altimetry. *Mar. Geodesy*; 1984; v. 8(n. 1-4): p. 85-127.

3583. CLIMAP Project Members - J.D. Hays. The last interglacial ocean. *Quat. Res.*; 1984; v. 21: p. 123-224.

3584. White, J.W.C. and S.D. Gedzelman. The isotopic composition of atmospheric water vapor and the concurrent meteorological conditions. *J. Geophys. Res.*; 1984; v. 89(n. D3): p. 4937-4939.

3585. Kolla, V., R.T. Buffler, and J.W. Ladd. Seismic stratigraphy and sedimentation of Magdalena Fan, southern Columbian Basin, Carribbean Sea. *Am. Assoc. of Pet. Geol. Bull.*; 1984; v. 68(n. 2): p. 316-332.

3586. Engelder, T. The role of pore water circulation during the deformation of foreland fold and thrust belts. *J. Geophys. Res.*; 1984; v. 89(n. 6): p. 4319-4325.

3587. Engelder, T. The time-dependent strain relaxation of Algeria granite. *Int. J. Rock Mech. Min. Sci. & Geomech. Abstr.*; 1984; v. 21(n. 2): p. 75-82.

3588. Engelder, T. and R. Plumb. Changes in In Situ ultrasonic properties of rock on strain relaxation. In *J. Rock Mech. Min. Sci. & Geomech. Abstr.*; 1984; v. 21(n. 2): p. 75-82.

3589. Stoll, R.D. Computer-aided measurements of damping in marine sediments. in: C.A. Brebbia and G.A. Keramidas, Eds. "Computational Methods and Experimental Measurements". Proceedings of the 2nd International Conference, on board the liner, the Queen Elizabeth 2, New York to Southampton, June/July 1984 ed. Southampton, Hampshire S04 2AA, UK: Computational Mechanics Ctr.; 1984; p. 29-39.

3590. Broecker, W.S. and T-H Peng. The climate-chemistry connection. in: J.E. Hansen and T. Takahashi, Eds. "Climate Processes and Climate Sensitivity". *Geophysical Monograph 29* ed. Washington, DC: American Geophysical Union; 1984; v. 5: p. 327-336.

3591. Snyder, S.W., C. Miller, and K.G. Miller. Eocene-Oligocene boundary: biostratigraphic recognition and gradual paleoceanographic change at DSDP Site 549. *Geology*; 1984; v. 12: p. 112-115.

3592. Lazarus, D. Speciation in pelagic Protista and its study in the planktonic microfossil record: a review. *Paleobiology*; 1983; v. 9(no. 4): p. 327-340.

3593. Fisher, K.M. and W.R. McCann. Velocity modeling and earthquake relocation in the northeast Caribbean. *Bull. Seismol. Soc. Am.*; 1984; v. 74(no. 4): p. 1249-1262.



3594. Jones, G.A. Advective transport of clay minerals in the region of the Rio Grande Rise. *Mar. Geol.*; 1984; v. 58: p. 187-212.

3595. Jones, G.A., D.A. Johnson, and W.B. Curry. High resolution stratigraphy in late Pleistocene/Holocene sediments of the Vema Channel. *Mar. Geol.*; 1984; v. 58: p. 59-87.

3596. Jones, G.A. and D.A. Johns. Displaced Antarctic diatoms in Vema Channel sediments: late Pleistocene/Holocene fluctuations in AABW flow. *Mar. Geol.*; 1984; v. 58: p. 165-186.

3597. Herczeg, A.L. and R.H. Hesslein. Determination of hydrogen ion concentration in softwater lakes using carbon dioxide equilibria. *Geochim. Cosmochim. Acta*; 1984; v. 48: p. 837-845.

3598. Kent, D.V., M.C. McKenna, N.D. Opdyke, J.J. Flynn, and B.J. MacFadden. Arctic biostratigraphic heterochrony. *Science*; 1984; v. 224: p. 173-176.

3599. Staudigel, H., A. Zindler, S.R. Hart, T. Leslie, C-Y Chen, and D. Clague. The isotope systematics of a juvenile intraplate volcano: Pb, Nd, and Sr isotope ratios of basalts from Loihi Seamount, Hawaii. *Earth Planet. Sci. Lett.*; 1984; v. 69: p. 13-29.

3600. Seeber, L. and J.G. Armbruster. Some elements of continental subduction along the Himalayan front. *Tectonophysics*; 1984; v. 105: p. 263-278.

3601. Schlesinger-Miller, E., N.L. Barstow, and A.L. Kafka. The July 1981 earthquake sequence near Cornwall, Ontario and Massena, New York. *Earthquake Notes*; 1983; v. 54(no. 3): p. 11-26.

3602. Gamboa, L.A.P. and P.D. Rabinowitz. The evolution of the Rio Grande Rise in the southwest Atlantic Ocean. *Mar. Geol.*; 1984; v. 58: p. 35-38.

3603. Flood, R. D. and A.N. Shor. Synthetic seismogram generation from sediment composition data--an initial study in the southwest Brazil Basin. *Mar. Geol.*; 1984; v. 58: p. 263-274.

3604. McNutt, S.R. and R.J. Beavan. Patterns of earthquakes and the effect of solid earth and ocean load tides at Mount St. Helens prior to the May 18, 1980, eruption. *J. Geophys. Res.*; 1984; v. 89(n. B5): p. 3075-3086.

3605. Jacob, K.H. Estimates of long-term probabilities for future great earthquakes in the Aleutians. *Geophys. Res. Lett.*; 1984; v. II(n. 4): p. 295-298.

3606. McCoy, F.W., T.R. Swint, D.Z. Piper, and L.G. Sullivan. Manganese nodules, seafloor sediment and sedimentation rates of the Circum-Pacific Region. in: "Transactions of the Third Circum-Pacific Energy and Mineral Resources Conference". August 22-28, 1982 ed. Tulsa, OK: AAPG; 1985.

3607. Ruddiman, W. F. and A. McIntyre. An evaluation of ocean-climate theories on the North Atlantic. in: A.L. Berger, et al., Eds. "Milankovitch and Climate", Part 2. Holland: D. Reidel Pub. Co.; 1984: p. 671-686.

3608. Perez, O.J. and C.H. Scholz. Heterogeneities of the instrumental seismicity catalog (1904-1980) for strong shallow earthquakes. Bull. Seismol. Soc. Am.; 1984; v. 74(n. 2): p. 669-686.

3609. Li, Y-H, T-H Peng, W.S. Broecker, and H.G. Ö stlund. The average vertical mixing coefficient for the oceanic thermocline. Tellus; 1984; v. 36B: p. 212-217.

3610. Zindler, A., H. Staudigel, and R. Batiza. Isotope and trace element geochemistry of young Pacific seamounts: implications for the scale of upper mantle heterogeneity. Earth Planet. Sci. Lett.; 1984; v. 70: p. 175-195.

3611. McCann, W.R. and L.R. Sykes. Subduction of aseismic ridges beneath the Caribbean plate: implications for the tectonics and seismic potential of the northeastern Caribbean. J. Geophys. Res.; 1984; v. 89(n. B6): p. 4493-4519.

3612. Newmark, R.L., R.N. Anderson, D. Moos, and M.D. Zoback. Sonic and ultrasonic logging of Hole 504B and its implications for the structure, porosity, and stress regime of the upper 1 km of the oceanic crust. in: "Initial Reports of the Deep Sea Drilling Project". Washington, D.C.: U.S. Government Printing Office; 1985; v. 83: p. 479-510.

3613. Newmark, R.L. , M.D. Zoback, and R.N. Anderson. Orientation of in situ stresses near the Costa Rica rift and Peru-Chile trench: deep sea drilling project Hole 504B. in: "Initial Reports of the Deep Sea Drilling Project". Washington, D.C.: U.S. Government Printing Office; 1985; v. 83: p. 511-515.

3614. Rabinowitz. P.D. and P.E. Borella. A sonic well log of the basement complex of the Walvis Ridge. Geo-Mar. Lett.; 1984; v. 3: p. 1-7.

3615. Rabinowitz, P.D. and W-Y Jung. Gravity anomalies in the western North Atlantic Ocean. in: P. R. Vogt and B. E. Tucholke, Eds. "The Geology of North America". V. M. ed. Boulder, CO: The Geological Society of America; 1986: p. 205-214.

3616. McCoy, F.W. and C. Sancetta. North Pacific sediments. in: A.E.M. Nairn, F.G. Stehli, and S. Uyeda, Eds. "The Ocean Basins and Margins: The Pacific Ocean". NY: Plenum Pub. Corp.; 1985; v. 7: p. 1-64.

3617. Nicolson, C., D.W. Simpson, S. Singh, and J.E. Zollweg. Crustal studies, velocity inversions, and fault tectonics: results from a microearthquake survey in the New Madrid seismic zone. *J. Geophys. Res.*; 1984; v. 89(n. B6): p. 4545-4558.

3618. Anderson, O.R. Cellular specialization and reproduction in planktonic foraminifera and radiolaria. in: K. Steidinger and L. Walker, Eds. "Marine Plankton Life Cycles Strategies". Boca Raton, FL: CRC Press, Inc.; 1984: p. 35-66.

3619. Damuth, J.E. and R.D. Flood. Morphology, sedimentation processes, and growth pattern of the Amazon Deep-Sea fan. *Geo.-Marine Lett.*; 1983/1984; v. 3: p. 109-117.

3620. Langmuir, C.H. and J.F. Bender. The geochemistry of oceanic basalts in the vicinity of transform faults: observations and implications. *Earth Planet. Sci. Lett.*; 1984; v. 69: p. 107-127.

3621. Shor, A.N., D.V. Kent, and R.D. Flood. Contourite or Turbidite?: magnetic fabric of fine-grained Quaternary sediments, Nova Scotia continental rise. in: D.A.V. Stow and D.J.W. Piper, Eds. "Fine-Grained Sediments: Deep Water Processes and Facies". London: Blackwell Scientific Pub.; 1984; (Geol. Soc. London, Spec. Pub. No. 15): p. 257-273.

3622. Tucholke, B.E., C.D. Hollister, P.E. Biscaye, and W.D. Gardner. Abyssal current character determined from sediment bedforms on the Nova Scotian continental rise. in: A.R.M. Nowell and C.D. Hollister, Eds. "Deep Ocean Sediment Transport--Preliminary Results of the High Energy Benthic Boundary Layer Experiment". *Mar. Geol.* ed.; 1985; v. 66: p. 43-57.

3623. Kostrov, B.V. and S. Das. Evaluation of stress and displacement fields due to an elliptical plane shear crack. *Geophys. J.R. Astr. Soc.*; 1984; v. 78: p. 19-33.

3624. Lemke, P. and T.O. Manley. The seasonal variation of the mixed layer and the pycnocline under polar sea ice. *J. Geophys. Res.* ; 1984; v. 89(n. C4): p. 6494-6504.

3625. Bryan, G.M. A compaction model for compressional wave velocity in marine sediments. *J. Acoust. Soc. Am.*; 1984; v. 76(n. 1): p. 192-197.

3626. Hayes, D.E., . Marginal seas of southeast Asia--their geophysical characteristics and structure. in: "Origin and History of Marginal and Inland Seas". Proceedings of the 27th

International Geological Congress ed. Utrecht, The Netherlands: VNU Science Press; 1984; v. 23: p. 123-154.

3627. DeMaster, D.J., B.A. McKee, C.A. Nittrouer, D.C. Brewster and P.E. Biscaye. Rates of sediment reworking at the HEBBLE site based on measurements of Th-234, Cs-137 and Pb-210. in: A.R.M. Nowell and C.D. Hollister, Eds. "Deep Ocean Sediment Transport--Preliminary Results of the High Energy Benthic Boundary Layer Experiment": Mar. Geol.; 1985; v. 66: p. 133-148.

3628. Beavan, J., R. Bilham, and K. Hurst. Coherent tilt signals observed in the Shumagin seismic gap: detection of time dependent subduction at depth? J. Geophys. Res.; 1984; v. 89(n. B6): p. 4478-4492.

3629. Moos, D. A case study of vertical seismic profiling in fractured crystalline rock. in: M. Simaan, Ed. "Advances in Geophysical Data Processing," Vertical Seismic Profiles ed. Greenwich, CT: JAI Press, Inc.; 1984; v. 1: p. 9-37.

3630. Sykes, L.R. and S.P. Nishenko. Probabilities of occurrence of large plate rupturing earthquakes for the San Andreas, San Jacinto, and Imperial faults, California, 1984-2003. J. Geophys. Res.; 1984; v. 89(n. B7): p. 5905-5927.

3631. Goldstein, S.L., R.K. O'Nions, and P.J. Hamilton. A Sm-Nd isotopic study of atmospheric dusts and particulates from major river systems. Earth Planet. Sci. Lett.; 1984; v. 70: p. 221-236.

3632. Ou, H-W. Wind-driven motion near a shelf-slope front. J. Phys. Oceanogr.; 1984; v. 14(n. 6): p. 985-993.

3633. Ou, H-W. Geostrophic adjustment: a mechanism for frontogenesis. J. Phys. Oceanogr.; 1984; v. 14(n. 6): p. 994-1000.

3634. Mutter, J.C. Seaward dipping reflectors and the continent-ocean boundary at passive continental margins. Tectonophysics; 1985; v. 114: p. 117-131.

3635. Batiza, R., D.J. Fornari, D.A. Vanko, and P. Lonsdale. Craters, calderas, and hyaloclastites on young Pacific seamounts. J. Geophys. Res.; 1984; v. 89(n. B10): p. 8371-8390.

3636. Evans, K. and F. Wyatt. Water table effects on the measurement of earth strain. Tectonophysics; 1984; v. 108: p. 323-337.

3637. Yuan, A.T.E., S.R. McNutt, and D.H. Harlow. Seismicity and eruptive activity at Fuego Volcano, Guatemala: February 1975-January 1977. *J. Volcanol. Geotherm. Res.*; 1984; v. 21: p. 277-296.

3638. McNutt, S.R. and D.H. Harlow. Seismicity at Fuego, Pacaya, Izalco, and San Cristobal volcanoes, Central America 1973-1974. *Bull. Volcanol.*; 1983; v. 46(n. 3): p. 283-297.

3639. Staudigel, H. and H-U Schmincke. The Pliocene Seamount Series of La Palma/Canary Islands. *J. Geophys. Res.*; 1984; v. 89(n. B13): p. 11,195-11,215.

3640. Burckle, L.H. Ecology and paleoecology of the marine diatom *Eucampia antarctica* (Castr.) Mangin. *Mar. Micropaleontol.*; 1984; v. 9: p. 77-86.

3641. Mutter, J.C., R. S. Detrick, and North Atlantic Transect Study Group. Multichannel seismic evidence for anomalously thin crust at Blake Spur fracture zone. *Geology*; 1984; v. 12: p. 534-537.

3642. Seeber, L. and J.G. Armbruster. Continental subduction along the northwestern and central portions of the Himalayan Arc. *Boll. Geof. Teorica Appl.*; 1983; v. 25(n. 99-100): p. 409-425.

3643. Li, Y-H, H. Teraoka, T-S Yang, and J-S Chen. The elemental composition of suspended particles from the Yellow and Yangtze Rivers. *Geochim. Cosmochim. Acta*; 1984; v. 48: p. 1561-1564.

3644. Piola, A.R. and A.L. Gordon. Pacific and Indian Ocean upper-layer salinity budget. *J. Phys. Oceanogr.*; 1984; v. 14(n. 4): p. 747-753.

3645. Kolla, V. and R.T. Buffler. Morphologic, acoustic, and sedimentologic characteristics of the Magdalena Fan. *Geo-Marine Lett.*; 1983/1984; v. 3: p. 85-91.

3646. Kolla, V. and F. Coumes. Morpho-acoustic and sedimentologic characteristics of the Indus Fan. *Geo-Mar. Lett.*; 1983/1984; v. 3: p. 133-139.

3647. Anderson, O.R. and S. Tuntivate-Choy. Cytochemical evidence for peroxisomes in planktonic foraminifera. *Foraminiferal Res.*; 1984; v. 14(n. 3): p. 203-205.

3648. Nyffeler, U. P. , Y-H Li, and P. H. Santschi. A kinetic approach to describe trace-element distribution between particles and solution in natural aquatic systems. *Geochim. Cosmochim. Acta*; 1984; v. 48: 1513-1522.

3649. Katz, E.J. and S.L. Garzoli. Thermocline displacement across the Atlantic North Equatorial Countercurrent during 1983. *Geophys. Res. Lett.*; 1984; v. II(n. 8): p. 737-740.
3650. Bonatti, E., J.R. Lawrence, and N. Morandi. Serpentinization of oceanic periodotites: temperature dependence of mineralogy and boron content. *Earth Planet. Sci. Lett.*; 1984; v. 70: p. 88 - 94.
3651. Miller, K.G., G.S. Mountain, and B.E. Tucholke. Oligocene glacio-eustasy and erosion on the margins of the North Atlantic. *Geology*; 1985; v. 13: p. 10-13.
3652. Sancetta, C., L. Heusser, L. Labeyrie, A.S. Naidu, and S.W. Robinson. Wisconsin-Holocene palaeoenvironment of the Bering Sea: evidence from diatoms, pollen, oxygen isotopes and clay minerals. *Mar. Geol.*; 1985; v. 62: p. 55-68.
3653. McCoy, F.W. and D.J. Stanley . Formation of sapropels in the Tyro Basin. *Nature*; 1984; v. 309(n. 5970): p. 727-728.
3654. Fornari, D.J., W.B.F. Ryan, and P.J. Fox. The evolution of craters and calderas on young seamounts: insights from Sea MARC I and Sea Beam sonar surveys of a small seamount group near the axis of the East Pacific Rise at  $\sim 10^\circ$  N. *J. Geophys. Res.*; 1984; v. 89(n. B13): p. 11,069-11,083.
3655. Katz, E.J. Basin wide thermocline displacements along the equator of the Atlantic in 1983. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 729-732.
3656. Katz, E.J. A note on indirect wind speed measurements from ambient noise. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 726-728.
3657. Khan, M.J., D.V. Kent, and K.G. Miller. Magnetostratigraphy of Oligocene to Pleistocene sediments sites 558 and 563. in: *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U.S. Government Printing Office; 1985; V. 82: p. 385-392.
3658. Gardner, W.D., L.G. Sullivan, and E.M. Thorndike. Long-term photographic, current, and nephelometer observations of manganese nodule environments in the Pacific. *Earth Planet. Sci. Lett.*; 1984; v. 70: p. 95-109.
3659. Houghton, R.W. Seasonal variation of the Gulf of Guinea thermal structure. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 783-786.

3660. Rossignol-Strick, M. A marine anoxic event on the Brittany coast, July 1982. *J. Coastal Res.*; 1985; v. 1(n. 1): p. 11-20.

3661. Bilham, R., J. Beavan, K. Evans and K. Hurst. Crustal deformation metrology at Lamont-Doherty Geological Observatory. *Earthq. Predict. Res.*; 1985; v. 3: P. 391-411.

3662. Mutter, J. C. . Cenozoic and late Mesozoic stratigraphy and subsidence history of the Norwegian margin. *Geol. Soc. Am. Bull.*; 1984; v. 95: p. 1135-1149.

3663. Watts, A.B. and J. Thorne. Tectonics, global changes in sea level and their relationship to stratigraphical sequences at the US Atlantic continental margin. *Mar. Pet. Geol.*; 1984; v. 1: p. 319-339.

3664. Seeber, L. and K.S. Coles. Seismicity in the Central Adirondacks with emphasis on the Goodnow, October 7, 1983 epicentral zone and its geology. in: D.B. Potter, Ed. *New York State Geological Association Field Trip Guidebook. 56th Annual Meeting* ed. Clinton, NY.: Hamilton College; 1984: p. 334-352.

3665. Garzoli, S.L. and E.J. Katz. Winds at St. Peter and St. Paul rocks during the first SEQUAL year. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 715-718.

3666. Mori, J. Short- and long-period subevents of the 4 February 1965 Rat Islands earthquake. *Bull. Seimol. Soc. Am.*; 1984; v. 74(n. 4): p. 1331-1347.

3667. Simpson, H.J., R.F. Bopp, B.L. Deck, and R.J. Larsen. Regional accumulation amounts per unit area of persistent pollutants derived from analyses of recent sediments. *Mem. Soc. Geol. It.*; 1984; v. 27: p. 423-445.

3668. Jones, L.M. . Foreshocks (1966-1980) in the San Andreas system, California. *Bull. Seismol. Soc. Am.*; 1984; v. 74(n. 4): p. 1361-1380.

3669. Jones, L.M., W. Han, E. Hauksson, A. Jin, Y. Zhang, and Z. Luo. Focal mechanisms and aftershock locations of the Songpan earthquakes of August 1976 in Sichuan, China. *J. Geophys. Res.*; 1984; v. 89(n. B9): p. 7697-7707.

3670. Garzoli, S.L. High frequency oscillations and their correlation with the wind forcing during the first SEQUAL year. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 795-798.

3671. Garzoli, S.L. Modes of variability of the 1983 thermocline signal. *Geophys. Res. Lett.*; 1984; v. 11(n. 8): p. 741-744.

3672. Stoffa, P.L., P. Buhl, and J.B. Diebold. The seismic reflection/refraction method: wide aperture data obtained in multiship experiments. in: M.H.P. Bott, S. Saxov, M. Talwani, and J. Thiede, Eds. Structure and Development of the Greenland and Scotland Ridge: New Methods and Concepts. NY: Plenum Publishing Corp.; 1983: p. 219-255.

3673. Manley, T.O. and D. Perti. Helicopter-based high resolution C/STD observations in the marginal ice zone--field analysis and results on the ocean data equipment model 302. in: Oceans '84 : "Industry, Government, Education--Designs for the Future". Washington, DC: Mar. Technol. Soc.; 1984: p. 234-241.

3674. Clement, B.M. and D.V. Kent. Latitudinal dependency of geomagnetic polarity transition durations. Nature; 1984; v. 310(n. 5977): p. 488-491.

3675. McCann, W.R. On the earthquake hazards of Puerto Rico and the Virgin Islands. Bull. Seismol. Soc. Am.; 1985; v. 75(n. 1): p. 251-262.

3676. Peng, T-H and W.S. Broecker. Ocean life cycles and the atmospheric CO<sub>2</sub> content. J. Geophys. Res.; 1984; v. 89(n. C5): p. 8170-8180.

3677. Lambert, C.E., J.K.B. Bishop, P.E. Biscaye, and R. Chesselet. Particulate aluminium, iron and manganese chemistry at the deep Atlantic boundary layer. Earth Planet. Sci. Lett.; 1984; v. 70: p. 237-248.

3678. Santschi, P.H., S. Nixon, M. Pilson, and C. Hunt. Accumulation of sediments, trace metals (Pb,Cu) and total hydrocarbons in Narragansett Bay, Rhode Island. Estuarine Coastal Shelf Sci.; 1984; v. 19: p. 427-449.

3679. Shackleton, N.J. and N.G. Pisias. Atmospheric carbon dioxide, orbital forcing, and climate. in: E.T. Sundquist and W.S. Broecker, Eds. The Carbon Cycle and Atmospheric CO<sub>2</sub>: Natural Variations Archean to Present. Geophysical Monograph 32 ed. Washington, DC: American Geophysical Union; 1985: p. 303-317.

3680. Simpson, H.J., R.M. Trier, Y-H Li, R.F. Anderson, and A.L. Herczeg. Field experiment determinations of distribution coefficients of actinide elements in alkaline lake environments. NUREG/CR-3940 ed. Washington, DC: U.S. Nuclear Regulatory Commission; 1984: p. 1-114.

3681. Dalziel, I.W.D. Tectonic evolution of a forearc terrane, southern Scotia Ridge, Antarctica. Special Paper 200 ed. Boulder, CO.: Geological Society of America; 1984: p. 1-32.



3682. Bonatti, E., P. Colantoni, B. Della Vedova, and M. Taviani . Geology of the Red Sea transitional region (22° N-25° N) . *Oceanol. Acta*; 1984; v. 7(n. 4): p. 385-398.

3683. Hayes, D.E. and S.D. Lewis . A geophysical study of the Manila trench, Luzon, Philippines 1. Crustal structure, gravity, and regional tectonic evolution. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9171-9195.

3684. Lewis, S.D. and D.E. Hayes. A geophysical study of the Manila Trench, Luzon, Philippines 2. Fore arc basin structural and stratigraphic evolution. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9196-9214.

3685. Sancetta, C. and S. Silvestri. Diatom stratigraphy of the late Pleistocene (Brunhes) subarctic Pacific. *Mar. Micropaleontol.*; 1984; v. 9: p. 263-274.

3686. Wesnousky, S.G., L.M. Jones, C.H. Scholz, and Q. Deng. Historical seismicity and rates of crustal deformation along the margins of the Ordos block, North China. *Bull. Seismol. Soc. Am.*; 1984; v. 74(n. 5): p. 1767-1783.

3687. Marra, J. and D.C. Boardman. Late winter chlorophyll a distributions in the Weddell Sea. *Mar. Ecol. Prog. Ser.*; 1984; v. 19: p. 197-205.

3688. Morley, J.J. and J.C. Stepien. Siliceous microfauna in waters beneath Antarctic sea ice. *Mar. Ecol. Prog. Ser.*; 1984; v. 19: p. 207-210.

3689. Nishenko, S. P. Seismic potential for large and great interplate earthquakes along the Chilean and southern Peruvian margins of South America: a quantitative reappraisal. *J. Geophys. Res.*; 1985; v. 90(n. B5): p. 3589-3615.

3690. Bond, G. C., P. A. Nickeson, and M. A. Kominz. Breakup of a supercontinent between 625 Ma and 555 Ma: new evidence and implications for continental histories. *Earth Planet. Sci. Lett.*; 1984; v. 70: p. 325-345.

3691. Swanberg, N. R. and O. R. Anderson. The nutrition of radiolarians: trophic activity of some solitary Spumellaria. *Limnol. Oceanogr.*; 1985; v. 30(n. 3): p. 646-652.

3692. Kent, D. V. Statistical structure of geomagnetic reversals. *Nature*; 1985; v. 313(n. 5997): p. 15.

3693. Anderson, O. R., N. R. Swanberg, and P. Bennett. Laboratory studies of the ecological significance of host-algal nutritional associations in solitary and colonial radiolaria. *J. Mar. Assoc. U.K.*; 1985; v. 65: p. 263-272.
3694. Li, Y-H, L. Burkhardt, M. Buchholtz, P. O'Hara, and P.H. Santschi. Partition of radiotracers between suspended particles and seawater. *Geochim. Cosmochim. Acta*; 1984; v. 48: p. 2011-2019.
3695. Li, Y-H, L. Burkhardt, and H. Teraoka. Desorption and coagulation of trace elements during estuarine mixing. *Geochim. Cosmochim. Acta*; 1984; v. 48: p. 1879-1884.
3696. Burckle, L.H. Diatom distribution and paleoceanographic reconstruction in the Southern Ocean--present and last glacial maximum. *Mar. Micropaleontol.*; 1984; v. 9: p. 241-261.
3697. Sbar, M.L., R.M. Richardson, and C. Flaccus and T. Engelder. Near-surface in situ stress I. Strain relaxation measurements along the San Andreas fault in southern California. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9323-9332.
3698. Plumb, R., T. Engelder, and M. Sbar. Near-surface in situ stress 2. A comparison with stress directions inferred from earthquakes, joints, and topography near Blue Mountain Lake, New York. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9333-9349.
3699. Plumb, R., T. Engelder, and D. Yale. Near-surface in situ stress 3. Correlation with microcrack fabric within the New Hampshire granites. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9350-9364.
3700. Engelder, T. and P. Geiser. Near-surface in situ stress 4. Residual stress in the Tully Limestone Appalachian Plateau, New York. *J. Geophys. Res.*; 1984; v. 89(n. B11): p. 9365-9370.
3701. Michael, P.J. Chemical differentiation of the Cordillera Paine granite (southern Chile) by in situ fractional crystallization. *Contrib. Mineral. Petrol.*; 1984; v. 87: p. 179-195.
3702. Newmark, R.L., M.D. Zoback, and R.N. Anderson. Orientation of in situ stresses in the oceanic crust. *Nature*; 1984; v. 311(n. 5985): p. 424-428.
3703. Anderson, O.R. and W.W. Faber, Jr. An estimation of calcium carbonate deposition rate in a planktonic foraminifer *Globigerinoides sacculifer* using  $^{45}\text{Ca}$  as a tracer: a recommended procedure for improved accuracy. *J. Foraminiferal. Res.*; 1984; c. 14(n. 4): p. 303-308.

3704. Bilham, R. Subsurface radar imagery of near-surface fractures associated with the Borah Peak earthquake, Idaho. in: R.S. Stein and R.C. Bucknam, Eds. Proceedings of the Workshop XXVIII on the Borah Peak, Idaho Earthquake. Open File Report OF-85-0290 ed.: U. S. Geological Survey; 1985: p. 182-194.

3705. Thorne, J. and A. B. Watts. Seismic reflectors and unconformities at passive continental margins. *Nature*; 1984; v. 311(n. 5984): p. 365-368.

3706. Lawrence, J. R. and J. W. C. White. Growing season precipitation from D/H ratios of Eastern White Pine. *Nature*; 1984; v. 311(n. 5986): p. 558-560.

3707. Hauksson, E. Structure of the Benioff zone beneath the Shumagin Islands, Alaska: relocation of local earthquakes using three-dimensional ray tracing. *J. Geophys. Res.*; 1985; v. 90(n. B1): p. 635-649.

3708. Watts, A. B. and N. M. Ribe. On geoid heights and flexure of the lithosphere at seamounts. *J. Geophys. Res.*; 1984; v. 89(n. B13): p. 11,152-11,170.

3709. Frignani, M., M. Ravaoli, R. F. Bopp, and H. J. Simpson. Contribution to the study of pollution and recent marine sedimentation in front of the Tiber River. in : F. Cinelli and M. Fabiano, Eds. *Atti Del 6o Congresso Della Associazione Italiana Di Oceanologia E Limnologia*. Genoa, Italia: Universita di Genova; 1985: p. 329-336.

3710. Mutter, J. C., K. A. Hegarty, S. C. Cande, and J. K. Weissen. Breakup between Australia and Antarctica: a brief review in the light of new data. *Tectonophysics*; 1985; v. 114: p. 255-279.

3711. Albertazzi, S., R.F. Bopp, M. Frignani, O.H. Merlin, L. Menegazzo Vitturi, M. Ravaoli, H.J. Simpson, L.T. Pelati, and C. Triulzi. Cs-137 as a tracer for processes of marine sedimentation in the vicinity of the Po River delta (northern Adriatic Sea). *Mem. Soc. Geol. It.*; 1984; v. 27: p. 447-459.

3712. Bé , A. W. H., J. K. B. Bishop, M. S. Sverdløve, and W. D. Gardner. Standing stock, vertical distribution and flux of planktonic foraminifera in the Panama Basin. *Mar. Micropaleontol.* ; 1985; v. 9: p. 307-333.

3713. Wood, K. C., K. G. Miller, and G. P. Lohmann. Middle Eocene to Oligocene benthic foraminifera from the Oceanic Formation, Barbados. *Micropaleontology*; 1985; v. 31(n. 2): p. 181-197.

3714. Staudigel, H. and S. R. Hart. Dating of ocean crust hydrothermal alteration: strontium isotope ratios from Hole 504B carbonates and a reinterpretation of Sr isotope data from Deep Sea Drilling Project Sites 105, 332, 417, and 418. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1985; V. 83: p. 297-303.

3715. Jacoby, G. C. Jr., E. R. Cook, and L. D. Ulan. Reconstructed summer degree days in central Alaska and northwestern Canada since 1524. *Quat. Res.*; 1985; v. 23: p. 18-26.

3716. Hauksson, E., J. Armbruster, and S. Dobbs. Seismicity patterns (1963-1983) as stress indicators in the Shumagin seismic gap, Alaska. *Bull. Seismol. Soc. Am.* ; 1984; v. 74(n. 6): p. 2541-2558.

3717. Bopp, R. F., H. J. Simpson, B. L. Deck, and N. Kostyk. The persistence of PCB components in sediments of the lower Hudson. *Northeastern Environ. Sci.*; 1984; v. 3(n. 3/4): p. 179-183.

3718. Simpson, H.J., R F. Bopp, B.L. Deck, S. Warren, and N. Kostyk. Polychlorinated biphenyls in the Hudson River: the value of individual packed-column peak analyses. *Northeastern Environ. Sci.*; 1984; v. 3(n. 3/4): p. 159-165.

3719. Houtz, R. E. and D. E. Hayes. Seismic refraction data from Sunda shelf. *Am. Assoc. Pet. Geol. Bull.*; 1984; v. 68(n. 12): p. 1870-1878.

3720. Ducklow, H. W., S. M. Hill, and W. D. Gardner. Bacterial growth and the decomposition of particulate organic carbon collected in sediment traps. *Contin. Shelf Res.*; 1985; v. 4(n. 4): p. 445-464.

3721. Richards, P. G. . On wave fronts and interfaces in anelastic media. *Bull. Seismol. Soc. Am.*; 1984; v. 74(n. 6): p. 2157-2165.

3722. Sancetta, C. . Late Pleistocene (Brunhes) diatom record at Site 580. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office ; 1985; V. 86: p. 423-427.

3723. Walker, D. and W. S. Kiefer. Xenolith digestion in large magma bodies. in : *J. Geophys. Res., Proceedings of the Fifteenth Lunar and Planetary Science Conference. Part 2 ed.*; 1985; v. 90, Supplement: p. C585-C590.

3724. Simpson, H. J., R. M. Trier, A. L. Herczeg, and R. F. Anderson. Field experiment determinations of distribution coefficients of actinide elements in sulfate lake environments. in : NUREG/CR-4094. Washington, DC: U. S. Nuclear Regulatory Commission; 1985: p. 1-60.

3725. LaBrecque, J. L. and S. C. Cande. Intermediate-wavelength magnetic anomalies over the central Pacific. *J. Geophys. Res.*; 1984; v. 89(n. B13): p. 11,123-11,134.
3726. Lomando, A. J. and T. Engelder. Strain indicated by calcite twinning: implications for deformation of the early Mesozoic northern Newark Basin, New York. *Northeast. Geol.* ; 1984; v. 6(no. 4): p. 192-195.
3727. Lazarus, D., R. P. Scherer, and D. R. Prothero. Evolution of the radiolarian species-complex *Pterocanium*: a preliminary survey. *J. Paleontol.* ; 1985; v. 59(n. 1): p. 183-220.
3728. Takahashi, K. and A. W. H. Be. Planktonic foraminifera: factors controlling sinking speeds. *Deep-Sea Res.*; 1984; v. 31(n. 12): p. 1477-1500.
3729. Ruddiman, W. F. . Climate studies in ocean cores. in : A. D. Hecht, Ed. *Paleoclimate Analysis and Modeling*. New York: John Wiley & Sons, Inc.; 1985: p. 197-257.
3730. Robinson, D., K. Kunzi, G. Kukla, and H. Rott. Comparative utility of microwave and shortwave satellite data for all-weather charting of snow cover. *Nature*; 1984; v. 312(n. 5993): p. 434-435.
3731. Ruddiman, W. F. and J.-C. Duplessy. Conference on the last deglaciation: timing and mechanism. *Quat. Res.*; 1985; v. 23: p. 1-17.
3732. Marvin, U. B. and D. Walker. A transient heating event in the history of a highlands troctolite from Apollo 12 soil 12033. *J. Geophys. Res.*; 1985; v. 90(Supplement): p. C421-C429.
3733. Egan, W. G. and A. W. Hogan. Comparison of observed and calculated Antarctic polar aerosol scattering. in : G. Fiocco, Ed. . *Current Problems in Atmospheric Radiation*. Hampton, VA: A. Deepak Pub. Co.; 1984: p. 85-88.
3734. Gardner, W. D. . The effect of tilt on sediment trap efficiency. *Deep-Sea Res.*; 1985; v. 32(n. 3): p. 349-361.
3735. Miller, K. G., M.-P. Aubry, M. J. Khan, A. J. Melillo, D. V. Kent, and W. A. Berggren. Oligocene-Miocene biostratigraphy, magnetostratigraphy, and isotopic stratigraphy of the western North Atlantic. *Geology*; 1985; v. 13: p. 257-261.

3736. Michael, P. J. and E. Bonatti. Peridotite composition from the North Atlantic: regional and tectonic variations and implications for partial melting. *Earth Planet. Sci. Lett.*; 1985; v. 73: p. 91-104.

3737. Mountain, G. S. and B. E. Tucholke. Mesozoic and Cenozoic geology of the U. S. Atlantic continental slope and rise. in : C. W. Poag, Ed. *Geologic Evolution of the United States Atlantic Margin*. New York: Van Nostrand Reinhold Co.; 1985: p. 293-341.

3738. Assumpcao, M., G. Suarez, and J. A. Veloso. Fault plane solutions of intraplate earthquakes in Brazil: some constraints on the regional stress field. *Tectonophysics*; 1985; v. 113: p. 283-293.

3739. White, J. W. C., E. R. Cook, J. R. Lawrence, and W. S. Broecker. The D/H ratios of sap in trees: implications for water sources and tree ring D/H ratios. *Geochim. Cosmochim. Acta*; 1985; v. 49: p. 237-246.

3740. Smythe, F. W. Jr., W. F. Ruddiman, and D. N. Lumsden. Ice-rafted evidence of long-term North Atlantic circulation. *Mar. Geol.* ; 1985; v. 64: p. 131-141.

3741. Das, S. and B. V. Kostrov. An elliptical asperity in shear: fracture process and seismic radiation. *Geophys. J. R. astr. Soc.*; 1985; v. 80: p. 725-742.

3742. Miller, K. G. and R. G. Fairbanks. Oligocene to Miocene carbon isotope cycles and abyssal circulation changes. in : E. T. Sundquist and W. S. Broecker, Eds. *The Carbon Cycle and Atmospheric CO<sub>2</sub>: Natural Variations Archean to Present*. Geophysical Monograph 32 ed. Washington, DC: American Geophysical Union; 1985: p. 469-486.

3743. Zimmerman, H. B., A. Boersma, and F. W. McCoy. Carbonaceous sediments and palaeoenvironment of the Cretaceous South Atlantic Ocean. in: J. Brooks and A. J. Fleet, Eds. *Marine Petroleum Source Rocks*. London: Blackwell Scientific Pub.; 1987; Spec. Pub. No. 26: p. 271-286.

3744. Scholz, C. H. Earthquake prediction and seismic hazard. *Earthquake Predict. Res.* ; 1985; v. 3(n. 1): p. 11-23.

3745. Scientific Staff of Cruise Bannock 1984-12. Gypsum precipitation from cold brines in an anoxic basin in the eastern Mediterranean. *Nature*; 1985; v. 314: p. 152-154.

3746. Kastens, K. A. and A. N. Shor. Depositional processes of a meandering channel on Mississippi fan. *Am. Assoc. Pet. Geol. Bull.*; 1985; v. 69(n. 2): p. 190-202.

3747. Stein, C. A. and J. R. Cochran. The transition between the Sheba Ridge and Owen Basin: rifting of old oceanic lithosphere. *Geophys. J. R. astr. Soc.* ; 1985; v. 81: p. 47-74.

3748. Jacobs, S. S., R. G. Fairbanks, and Y. Horibe. Origin and evolution of water masses near the Antarctic continental margin: evidence from H<sub>2</sub> 18O/H<sub>2</sub>16O ratios in seawater. in : S. S. Jacobs, Ed. *Oceanology of the Antarctic Continental Shelf*. Antarctic Res. Ser. 43 ed. Washington, DC: American Geophysical Union; 1985.

3749. Robinson, D. A. and G. Kukla. Albedo of a dissipating snow cover. *J. Clim. Appl. Meteorol.*; 1984; v. 23(n. 12): p. 1626-1634.

3750. Ebbesmeyer, C. C., B. A. Taft, J. C. McWilliams, C. Y. Sheen, S. C. Riser, H. T. Rossby, P. E. Biscaye, and H. G. Ostlund. Detection, structure, and origin of extreme anomalies in a western Atlantic oceanographic section. *Am. Meteorol. Soc. Bull.*; 1986; v. 16(n. 3): p. 591-612.

3751. Freeman-Lynde, R. P. and W. B. F. Ryan. Erosional modification of Bahama Escarpment. *Geol. Soc. Am. Bull.*; 1985; v. 96: p. 481-494.

3752. LaBrecque, J. L. and C. A. Raymond. Seafloor spreading anomalies in the Magsat field of the North Atlantic. *J. Geophys. Res.*; 1985; v. 90(n. B3): p. 2565-2575.

3753. Anderson, R. N., M. D. Zoback, S. H. Hickman, and R. L. Newmark. Permeability versus depth in the upper oceanic crust: in situ measurements in DSDP Hole 504B, eastern equatorial Pacific. *J. Geophys. Res.*; 1985; v. 90(n. B5): p. 3659-3669.

3754. Broecker, W., A. Mix, M. Andree, and H. Oeschger. Radiocarbon measurements on coexisting benthic and planktic foraminifera shells: potential for reconstructing ocean ventilation times over the past 20,000 years. *Nucl. Instrum. Methods Phys. Res.*; 1984; v. B5: p. 331-339.

3755. Peng, T-H and W. S. Broecker. The impacts of bioturbation on the age difference between benthic and planktonic foraminifera in deep sea sediments. *Nucl. Instrum. Methods Phys. Res.*; 1984; v. B5: p. 346-352.

3756. Engelder, T. Loading paths to joint propagation during a tectonic cycle: an example from the Appalachian Plateau, U.S.A. *J. Struct. Geol.*; 1985; v. 7(n. 3/4): p. 459-476.

3757. Heusser, L. E. and J. J. Morley. Correlative 90 kyr northeast Asia - northwest Pacific climate records. *Nature*; 1985; v. 313(n. 6002): p. 470-472.

3758. LaBrecque, J. L., S. C. Cande, and R. D. Jarrard. Intermediate-wavelength magnetic anomaly field of the North Pacific and possible source distributions. *J. Geophys. Res.*; 1985; v. 90(n. B3): p. 2549-2564.

3759. Hayes, D. E. and S. D. Lewis. Structure and tectonics of the Manila Trench system, western Luzon, Philippines. *Energy*; 1985; v. 10(n. 3/4): p. 263-279.

3760. Bogen, N. L., D. V. Kent, and R. A. Schweickert. Paleomagnetism of Jurassic rocks in the western Sierra Nevada metamorphic belt and its bearing on the structural evolution of the Sierra Nevada block. *J. Geophys. Res.*; 1985; v. 90(n. B6): p. 4627-4638.

3761. Leith, W. . A mid-Mesozoic extension across Central Asia? *Nature*; 1985; v. 313(n. 6003): p. 567-570.

3762. Ling, H-Y, R. D. Forsythe, and R. C. Douglass. Late Paleozoic microfaunas from southernmost Chile and their relation to Gondwanaland forearc development. *Geology*; 1985; v. 13: p. 357-360.

3763. Gordon, A. L. . Indian-Atlantic transfer of thermocline water at the Agulhas retroflection. *Science*; 1985; v. 227: p. 1030-1033.

3764. Fornari, D. J., W B. F. Ryan, and P. J. Fox. Sea-floor lava fields on the East Pacific Rise. *Geology*; 1985; v. 13: p. 413-416.

3765. Engelder, T. and S. Marshak. Disjunctive cleavage formed at shallow depths in sedimentary rocks. *J. Struct. Geol.* ; 1985; v. 7(nos. 3/4): p. 327-343.

3766. Marshak, S. and T. Engelder. Development of cleavage in limestones of a fold-thrust belt in eastern New York. *J. Struct. Geol.*; 1985; v. 7(n. 3/4): p. 345-359.

3767. Sverdløve, M. S. and A. W. H. Be. Taxonomic and ecological significance of embryonic and juvenile planktonic foraminifera. *J. Foraminiferal Res.*; 1985; v. 15(n. 4): p. 235-241.

3768. Das, S. . Application of dynamic shear crack models to the study of the earthquake faulting process. *Int. J. Fract.*; 1985; v. 27: p. 263-276.

3769. Wanninkhof, R., J. R. Ledwell, and W. S. Broecker. Gas exchange - wind speed relation measured with sulfur hexafluoride on a lake. *Science*; 1985; v. 227: p. 1224-1226.



3770. LaBrecque, J. L. and N. Zitellini. Continuous sea-floor spreading in Red Sea: an alternative interpretation of magnetic anomaly pattern. *Am. Assoc. Pet. Geol. Bull.*; 1985; v. 69(n. 4): p. 513-524.

3771. Bond, G. C. Comment on "Continental Hypsography" by C.G.A. Harrison, et al. *Tectonics*; 1985; v. 4(n. 2): p. 251-255.

3772. Manley, T. O. and K. Hunkins. Mesoscale eddies of the Arctic Ocean. *J. Geophys. Res.*; 1985; v. 90(n. C3): p. 4911-4930.

3773. Rossignol-Strick, M. Mediterranean Quaternary sapropels, an immediate response of the African monsoon to variation of insolation. *Palaeogeogr., Palaeoclimatol, Palaeocol.*; 1985; v. 49: p. 237-263.

3774. Aikman, F. III and E. S. Posmentier. Stratification and shelf-slope interaction in the Middle Atlantic Bight: a numerical study. *J. Geophys. Res.*; 1985; v. 90(n. C3): p. 4895-4905.

3775. Cande, S. C. and D. V. Kent. Comment on "Tectonic rotations in extensional regimes and their paleomagnetic consequences for Ocean Basalts" by K. L. Verosub and E. M. Moores. *J. Geophys. Res.*; 1985; v. 90(n. B6): p. 4647-4651.

3776. Gardner, W. D., J. B. Southard, and C. D. Hollister. Sedimentation, resuspension and chemistry of particles in the Northwest Atlantic. *Mar. Geol.*; 1985; v. 65: p. 199-242.

3777. Donn, W. L. . Terrestrial climate change from the Triassic to Recent. in : M. R. Rampino, et al., Eds. *Climate, History, Periodicity and Predictability*. New York: Van Nostrand Reinhold Co.; 1987: p. 343-352.

3778. Takahashi, T., J. Olafsson, W. S. Broecker, J. Goddard, D. W. Chipman, and J. White. Seasonal variability of the carbon-nutrient chemistry in the ocean areas west and north of Iceland. *Rit Fiskideildar*; 1985; v. 9: p. 20-36.

3779. Takahashi, T., W. S. Broecker, and S. Langer. Red-field ratio based on chemical data from isopycnal surfaces. *J. Geophys. Res.*; 1985; v. 90(n. C4): p. 6907-6924.

3780. Broecker, W. S., T. Takahashi, and T. Takahashi. Sources and flow patterns of deep-ocean waters as deduced from potential temperature, salinity, and initial phosphate concentration. *J. Geophys. Res.*; 1985; v. 90(n. C4): p. 6925-6939.

3781. Leith, W. and W. Alvarez. Structure of the Vakhsh fold-and-thrust belt, Tadjik SSR; geologic mapping on a Landsat image base. *Geol. Soc. Am. Bull.*; 1985; v. 96: p. 875-885.

3782. Watts, A. B., J. R. Cochran, P. Patriat, and M. Doucoure. A bathymetry and altimetry profile across the Southwest Indian Ridge crest at 31oS latitude. *Earth Planet. Sci. Lett.*; 1985; v. 73: p. 129-139.

3783. Miller, K. G. and E. Thomas. Late Eocene to Oligocene benthic foraminiferal isotopic record, site 574, equatorial Pacific. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1985: p. 771-777.

3784. Stoll, R. D. Marine sediment acoustics. *J. Acoust. Soc. Am.* ; 1985; v. 77(n. 5): p. 1789-1799.

3785. Morley, J. J. and J. C. Stepien. Antarctic radiolaria in late winter/early spring Weddell Sea waters. *Micropaleontology*; 1985; v. 31(n. 4): p. 365-371.

3786. Hayes, D. E. Margins of the southwest sub-basin of the South China Sea - a frontier exploration target? *Energy*; 1985; v. 10(no. 3/4): p. 373-382.

3787. Lewis, S. D. and D. E. Hayes. Forearc basin development along western Luzon, Philippines. *Energy*; 1985; v. 10(n. 3/4): p. 281-296.

3788. Goldberg, D., D. Moos, and R. N. Anderson. Attenuation changes due to diagenesis in marine sediments. in : *Transactions of the SPWLA Twenty-Sixth Annual Logging Symposium*. Houston, TX: The Society of Professional Well Log Analysts, Inc.; 1985; V. II: p. 1-18.

3789. Li, Y-H. Why are the chemical compositions of living organisms so similar? *Schweiz. Z. Hydrol.* ; 1984; v. 46(n. 2): p. 177-184.

3790. Swanberg, N. R., O. R. Anderson, and P. Bennett. Spongiöse spumellarian radiolaria: the functional morphology of the radiolarian skeleton with a description of *Spongostaurus*, a new genus. *Mar. Micropaleontol.*; 1985; v. 9: p. 455-464.

3791. Linsalata, P., H. J. Simpson, C. R. Olsen, N. Cohen, and R. M. Trier. Plutonium and radiocesium in the water column of the Hudson River estuary. *Environ. Geol. Water Sci.* ; 1985; v. 7(n. 4): p. 193-204.

3792. Zwally, H. J., J. C. Comiso, and A. L. Gordon. Antarctic offshore leads and polynyas and oceanographic effects. in : S. S. Jacobs, Ed. *Oceanology of the Antarctic Continental Shelf*. Antarctic Res. Series 43 ed. Washington, DC: American Geophysical Union; 1985: p. 203-226.

3793. Simpson, H. J., A. L. Herczeg, R. F. Anderson, R. M. Trier, G. G. Mathieu, and B. L. Deck. Mobility of radionuclides in high chloride environments. in : NUREG/CR 4237. Washington, DC: Nuclear Regulatory Commission; 1985: p. 1-65.

3794. Fox, C. G. and D. E. Hayes. Quantitative methods for analyzing the roughness of the seafloor. *Rev. Geophys.*; 1985; v. 23(n. 1): p. 1-48.

3795. Devlin, W. J., G. C. Bond, and H. K. Brueckner. An assessment of the age and tectonic setting of volcanics near the base of the Windermere Supergroup in northeastern Washington: implications for latest Proterozoic - earliest Cambrian continental separation. *Can. J. Earth Sci.*; 1985; v. 22: p. 829-837.

3796. Nicholson, C. and D. W. Simpson. Changes in  $V_p/V_s$  with depth: implications for appropriate velocity models, improved earthquake locations, and material properties of the upper crust. *Bull. Seismol. Soc. Am.*; 1985; v. 75(n. 4): p. 1105-1123.

3797. Watts, A. B., U. S. ten Brink, P. Buhl, and T. M. Brocher. A multichannel seismic study of lithospheric flexure across the Hawaiian-Emperor seamount chain. *Nature*; 1985; v. 315(n. 6015): p. 105-111.

3798. Farre, J. A. and W. B. F. Ryan. 3-D view of erosional scars on U. S. Mid-Atlantic continental margin. *Am. Assoc. Pet. Geol. Bull.*; 1985; v. 69(n. 6): p. 923-932.

3799. Kent, D. V. and N. D. Opdyke. Multicomponent magnetizations from the Mississippian Mauch Chunk Formation of the central Appalachians and their tectonic implications. *J. Geophys. Res.* ; 1985; v. 90(n. B7): p. 5371-5383.

3800. Das, S. and J. Boatwright. The breaking of a single asperity: analysis of an aftershock of the 1975 Oroville, California, earthquake. *Bull. Seismol. Soc. Am.*; 1985; v. 75(n. 3): p. 677-687.

3801. Robinson, D. A. and G. Kukla. Maximum surface albedo of seasonally snow-covered lands in the Northern Hemisphere. *J. Clim. Appl. Meteorol.*; 1985; v. 24: p. 402-411.

3802. Bishop, J. K. B., D. Schupack, R. M. Sherrell, and M. Conte. A multiple-unit large-volume in situ filtration system for sampling oceanic particulate matter in mesoscale

environments. in : A. Zirino, Ed. Mapping Strategies in Chemical Oceanography. Advances in Chemistry Series No. 209 ed. Washington, DC: American Chemical Society; 1985: p. 155-175.

3803. Cane, M. A. and S. E. Zebiak. A theory for El Nino and the southern oscillation. Science; 1985; v. 228: p. 1085-1087.

3804. Brown, S. R. and C. H. Scholz. Closure of random elastic surfaces in contact. J. Geophys. Res.; 1985; v. 90(n. B7): p. 5531-5545.

3805. Herczeg, A. L., W. S. Broecker, R. F. Anderson, S. L. Schiff, and D. W. Schindler. A new method for monitoring temporal trends in the acidity of fresh waters. Nature; 1985; v. 315(n. 6015): p. 133-135.

3806. Broecker, W. S., C. Rooth, and T-H Peng. Ventilation of the deep northeastern Atlantic. J. Geophys. Res.; 1985; v. 90(n. C4): p. 6940-6944.

3807. Dunbar, R. B., J. B. Anderson, E. W. Domack, and S. S. Jacobs. Oceanographic influences on sedimentation along the Antarctic continental shelf. in : S. S. Jacobs, Ed. Oceanology of the Antarctic Continental Shelf. Antarctic Res. Series 43 ed. Washington, DC: American Geophysical Union; 1985: p. 291-312.

3808. Pokras, E. M. and A. C. Mix. Eolian evidence for spatial variability of late Quaternary climates in tropical Africa. Quat. Res.; 1985; v. 24: p. 137-149.

3809. Simpson, D. W. and W. Leith. The 1976 and 1984 Gazli, USSR, earthquakes - were they induced? Bull. Seismol. Soc. Am. ; 1985; v. 75(n. 5): p. 1465-1468.

3810. Andrews, J. A. . True polar wander: an analysis of Cenozoic and Mesozoic paleomagnetic poles. J. Geophys. Res.; 1985; v. 90(n. B9): p. 7737-7750.

3811. Dalziel, I. W. D. Collision and Cordilleran orogenesis: an Andean perspective. in : M. P. Coward and A. C. Ries, Eds. Collision Tectonics. Geol. Soc. London Spec. Pub. No. 19 ed. London: Blackwell Scientific Pub.; 1986: p. 389-404.

3812. Bilham, R. . Southern San Andreas Fault geometry and fault-zone deformation: implications for earthquake prediction in the Coachella Valley, California. in : C. F. Shearer, Ed. U. S. Geological Survey Open File Report OF-85-507; 1985: p. 44-65.

3813. Caulfield, J. B. D., A. P. LeHuray, and D. M. Rye. A review of lead and sulphur isotope investigations of Irish sediment-hosted base metal deposits with new data from the Keel,

Ballinalack, Moyvoughly and Tatestown deposits. in : C. J. Andrew, et al., Eds. *Geology and Genesis of Mineral Deposits in Ireland*. Dublin, Ireland: Irish Assoc. for Economic Geology ; 1986: p. 591-615.

3814. Anderson, O. R. and P. Bennett. A conceptual and quantitative analysis of skeletal morphogenesis in living species of solitary Radiolaria: *Euchitonia elegans* and *Spongaster tetras*. *Mar. Micropaleontol.* ; 1985; v. 9: p. 441-454.

3815. Marra, J., K. Heinemann, and G. Landriau, Jr. . Observed and predicted measurements of photosynthesis in a phytoplankton culture exposed to natural irradiance. *Mar. Ecol. Prog. Ser.*; 1985; v. 24: p. 43-50.

3816. Heusser, L. E. and J. J. Morley. Pollen and radiolarian records from deep-sea core RC14-103: climatic reconstructions of northeast Japan and northwest Pacific for the last 90,000 years. *Quat. Res.*; 1985; v. 24(p. 60-72).

3817. Mutter, J. C. and North Atlantic Transect Study Group. Multichannel seismic images of the oceanic crust's internal structure: evidence for a magma chamber beneath the Mesozoic Mid-Atlantic Ridge. *Geology*; 1985; v. 13: p. 629-632.

3818. Broecker, W. S., T-H Peng, G. Ostlund, and M. Stuiver. The distribution of bomb radiocarbon in the ocean. *J. Geophys. Res.*; 1985; v. 90(n. C4): p. 6953-6970.

3819. Kastens, K. A., K. C. Macdonald, S. P. Miller, and P. J. Fox. Deep tow studies of the Vema Fracture Zone 2. Evidence for tectonism and bottom currents in the sediments of the transform valley floor. *J. Geophys. Res.*; 1986; v. 91(n. B3): p. 3355-3367.

3820. Ruddiman, W. F., D. Cameron, and B. M. Clement. Sediment disturbance and correlation of offset holes drilled with the hydraulic piston corer: Leg 94. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 615-634.

3821. Simpson, H. J., P. Linsalata, C. R. Olsen, N. Cohen, and R. M. Trier. Transport of fallout and reactor radionuclides in the drainage basin of the Hudson River estuary. in : J. E. Pinder, III, et al., Eds. *Environmental Research on Actinide Elements*; 1983; Hilton Head, SC. Oak Ridge, TN: Office of Sci. & Tech. Info, Dept. Energy; 1987: p. 273-279.

3822. Ruddiman, W. F., N. J. Shackleton, and A. McIntyre. North Atlantic sea-surface temperatures for the last 1.1 million years. in : C. P. Summerhayes and N. J. Shackleton, Eds. *North Atlantic Palaeoceanography*. Geol. Soc. Spec. Pub. No. 21 ed. London: Blackwell Scientific Pub.; 1986: p. 155-173.

3823. Brueckner, H. K. and W. S. Snyder. Chemical and Sr-isotopic variations during diagenesis of Miocene siliceous sediments of the Monterey Formation, California. *J. Sediment. Petrol.*; 1985; v. 55(n. 4): p. 553-568.

3824. Smethie, W. M. Jr., T. Takahashi, D. W. Chipman, and J. R. Ledwell. Gas exchange and CO<sub>2</sub> flux in the tropical Atlantic Ocean determined from <sup>222</sup>Rn and CO<sub>2</sub> measurements. *J. Geophys. Res.*; 1985; v. 90(n. C4): p. 7005-7022.

3825. Goldman, J. C. and D. A. Caron. Experimental studies on an omnivorous microflagellate: implications for grazing and nutrient regeneration in the marine microbial food chain. *Deep-Sea Res.*; 1985; v. 32(n. 8): p. 899-915.

3826. Pillsbury, R. D. and S. S. Jacobs. Preliminary observations from long-term current meter moorings near the Ross Ice Shelf, Antarctica. in : S. S. Jacobs, Ed. *Oceanology of the Antarctic Continental Shelf*. Antarctic Res. Series 43 ed. Washington, DC: American Geophysical Union ; 1985: p. 87-107.

3827. Neale, P. J. and J. Marra. Short-term variation of P<sub>max</sub> under natural irradiance conditions: a model and its implications. *Mar. Ecol. Prog. Ser.*; 1985; v. 26: p. 113-124.

3828. Stoll, R. D. Acoustic waves in marine sediments. in : T. Akal and J. M. Berkson, Eds. *Ocean Seismo-Acoustics*. New York: Plenum Pub. Corp.; 1986: p. 417-434.

3829. Coles, K. S. and W. S. Snyder. Significance of lower and middle Paleozoic phosphatic chert in the Toquima Range, central Nevada. *Geology*; 1985; v. 13: p. 573-576.

3830. Bond, G. C., N. Christie-Blick, M. A. Kominz, and W. J. Devlin. An early Cambrian rift to post-rift transition in the Cordillera of western North America. *Nature*; 1985; v. 316(n. 6022): p. 742-745.

3831. Christie-Blick, N. . Upper Proterozoic glacial-marine and subglacial deposits at Little Mountain, Utah. *Brigham Young Univ. Geol. Stud.*; 1985; v. 32(part 1): p. 9-18.

3832. Piper, D. J. W., A. N. Shor, J. A. Farre, S. O'Connell, and R. Jacobi. Sediment slides and turbidity currents on the Laurentian Fan: sidescan sonar investigations near the epicenter of the 1929 Grand Banks earthquake. *Geology*; 1985; v. 13: p. 538-541.

3833. Bonatti, E. . Punctiform initiation of seafloor spreading in the Red Sea during transition from a continental to an oceanic rift. *Nature*; 1985; v. 316(n. 6023): p. 33-37.

3834. Gardner, W. D., P. E. Biscaye, J. R. V. Zaneveld, and M. J. Richardson. Calibration and comparison of the LDGO nephelometer and the OSU transmissometer on the Nova Scotian Rise. *Mar. Geol.* ; 1985; v. 66: p. 323-344.
3835. Goldman, J. C., D. A. Caron, O. K. Andersen, and M. R. Dennett. Nutrient cycling in a microflagellate food chain: I. Nitrogen dynamics. *Mar. Ecol. Prog. Ser.*; 1985; v. 24: p. 231-242.
3836. Caron, D. A., J. C. Goldman, O. K. Andersen, and M. R. Dennett. Nutrient cycling in a microflagellate food chain: II. Population dynamics and carbon cycling. *Mar. Ecol. Prog. Ser.*; 1985; v. 24: p. 243-254.
3837. Clement, B. M. and D. V. Kent. A comparison of two sequential geomagnetic polarity transitions (upper Olduvai and lower Jaramillo) from the Southern Hemisphere. *Earth Planet. Inter.* ; 1985; v. 39: p. 301-313.
3838. Wanninkhof, R. . Kinetic fractionation of the carbon isotopes  $^{13}\text{C}$  and  $^{12}\text{C}$  during transfer of  $\text{CO}_2$  from air to seawater. *Tellus*; 1985; v. 37B: p. 128-135.
3839. Richardson, M. J. and W. D. Gardner. Analysis of suspended-particle-size distributions over the Nova Scotian Continental Rise. *Mar. Geol.* ; 1985; v. 66: p. 189-203.
3840. Fornari, D. J. The geomorphic and structural development of Hawaiian submarine rift zones. in: R. W. Decker, T. L. Wright, and P. H. Stauffer, Eds. *Volcanism in Hawaii*. U.S.G.S. Prof. Paper 1350 ed. Washington, DC: U. S. Government Printing Office; 1987; V. 1: p. 125-132.
3841. Fornari, D. J. and J. F. Campbell. Submarine topography around the Hawaiian Islands. in: R. W. Decker, T. L. Wright, and P. H. Stauffer, Eds. *Volcanism in Hawaii*. U.S.G.S. Professional Paper 1350 ed. Washington, DC: US Govt. Printing Office; 1987; V. 1: p. 109-124.
3842. Flood, R. D., D. V. Kent, A. N. Shor, and F. R. Hall. The magnetic fabric of surficial deep-sea sediments in the HEBBLE area (Nova Scotian Continental Rise). *Mar. Geol.* ; 1985; v. 66: p. 149-167.
3843. Sarmiento, J. L. and P. E. Biscaye. Radon  $^{222}$  in the benthic boundary layer. *J. Geophys. Res.*; 1986; v. 91(n. C1): p. 833-844.
3844. Janecek, T. R. and D. K. Rea. Quaternary fluctuations in the northern hemisphere trade winds and westerlies. *Quat. Res.* ; 1985; v. 24: p. 150-163.

3845. McCoy, F. W. Mid-core flow-in: implications for stretched stratigraphic sections in piston cores. *J. Sediment. Petrol.*; 1985; v. 55(n. 4): p. 608-610.
3846. Raisbeck, G. M., F. Yiou, D. Bourles, and D. V. Kent. Evidence for an increase in cosmogenic  $^{10}\text{Be}$  during a geomagnetic reversal. *Nature*; 1985; v. 315(n. 6017): p. 315-317.
3847. Simpson, D. W. Triggered earthquakes. *Ann. Rev. Earth Planet. Sci.*; 1986; v. 14: p. 21-42.
3848. Abbott, D.H., R.W. Embley, and M.A. Hobart. Correlation of shear strength, hydraulic conductivity, and thermal gradients with sediment disturbance: South Pass region, Mississippi Delta. *Geo-Mar. Lett.*; 1985; v. 5: p. 113-119.
3849. Davis, D.M. and T. Engelder. The role of salt in fold-and-thrust belts. *Tectonophysics*; 1985; v. 119: p. 67-88.
3850. Robinson, D. A. and G. J. Kukla. Anthropogenic increase of winter surface albedo. *Catena*; 1985; v. 12(n. 2/3): p. 215-225.
3851. Mix, A. C. and R. G. Fairbanks. North Atlantic surface-ocean control of Pleistocene deep-ocean circulation. *Earth Planet. Sci. Lett.*; 1985; v. 73: p. 231-243.
3852. Ou, H. W. and L. Maas. Tidal-induced buoyancy flux and mean transverse circulation. *Contin. Shelf Res.*; 1986; v. 5(n. 6): p. 611-628.
3853. Watts, A. B., D. P. McKenzie, B. E. Parsons, and M. Rofosse. The relationship between gravity and bathymetry in the Pacific Ocean. *Geophys. J. R. astr. Soc.*; 1985; v. 83: p. 263-298.
3854. Toggweiler, J. R. and S. Trumbore. Bomb-test  $^{90}\text{Sr}$  in Pacific and Indian Ocean surface water as recorded by banded corals. *Earth Planet. Sci. Lett.*; 1985; v. 74: p. 306-314.
3855. Stahle, D. W., E. R. Cook, and J. W. C. White. Tree-ring dating of baldcypress and the potential for millennia-long chronologies in the southeast. *Am. Antiq.*; 1985; v. 50(n. 4): p. 796-802.
3856. Brueckner, H. K. and W. S. Snyder. Structure of the Havallah sequence, Golconda allochthon, Nevada: evidence for prolonged evolution in an accretionary prism. *Geol. Soc. Am. Bull.*; 1985; v. 96: p. 1113-1130.



3857. Santschi, P. H., U. Nyffeler, R. Anderson, and S. Schiff. The enclosure as a tool for the assessment of transport and effects of pollutants in lakes. in : H. H. White, Ed. Concepts in Marine Pollution Measurements. College Park, MD: Maryland Sea Grant College, Univ. of Maryland; 1984: p. 549-562.

3858. Davison, Jr., F. C. and C. H. Scholz. Frequency-moment distribution of earthquakes in the Aleutian Arc: a test of the characteristic earthquake model. Bull. Seismol. Soc. Am.; 1985; v. 75(n. 5): p. 1349-1361.

3859. Bilham, R. and P. Williams. Sawtooth segmentation and deformation processes on the southern San Andreas fault, California. Geophys. Res. Lett.; 1985; v. 12(n. 9): p. 447-560.

3860. Worner, G., H. Staudigel, and A. Zindler. Isotopic constraints on open system evolution of the Laacher See magma chamber (Eifel, West Germany). Earth Planet. Sci. Lett.; 1985; v. 75: p. 37-49.

3861. Garzoli, S. L. and S. G. H. Philander. Validation of an equatorial Atlantic simulation model using inverted echo sounder data. J. Geophys. Res.; 1985; v. 90(n. C5): p. 9199-9201.

3862. Mori, J. and T. Boyd. Seismological evidence indicating rupture along an eastward dipping fault plane for the 1964 Niigata, Japan earthquake. J. Phys. Earth; 1985; v. 33: p. 227-240.

3863. Moos, D., D. Goldberg, M. A. Hobart, and R. N. Anderson. Elastic wave velocities in Layer 2A from full waveform sonic logs at Hole 405B. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 92: p. 563-570.

3864. Steckler, M. S. Uplift and extension at the Gulf of Suez: indications of induced mantle convection. Nature; 1985; v. 317(n. 6033): p. 135-139.

3865. Santschi, P. H. The MERL mesocosm approach for studying sediment-water interactions and ecotoxicology. Environ. Technol. Lett.; 1985; v. 6: p. 335-350.

3866. Staudigel, H., P. Doyle, and A. Zindler. Sr and Nd isotope systematics in fish teeth. Earth Planet. Sci. Lett.; 1985/86; v. 76: p. 45-56.

3867. Singh, S. K., G. Suarez, and T. Dominguez. The Oaxaca, Mexico, earthquake of 1931: lithospheric normal faulting in the subducted Cocos plate. Nature; 1985; v. 317(n. 6032): p. 56-58.

3868. Kent, D. V. and F. M. Gradstein. A Cretaceous and Jurassic geochronology. Geol. Soc. Am. Bull.; 1985; v. 96: p. 1419-1427.

3869. Staudigel, H., K. Gillis, and R. Duncan. K/Ar and Rb/Sr ages of celadonites from the Troodos ophiolite, Cyprus. *Geology*; 1986; v. 14: p. 72-75.
3870. Staudigel, H., M. Kastner, and A. Sturz.  $^{180}\text{Th}$  and  $^{87}\text{Sr}/^{86}\text{Sr}$  of calcites from the basaltic basement of Deep Sea Drilling Project Site 597: timing and temperature of alteration. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 92: p. 499-503.
3871. Bonatti, E., P. Colantoni, F. Luccini, P. Rossi, M. Taviani, and J. White. Chemical and stable isotope aspects of the Nereus Deep (Red Sea) metal-enriched sedimentation. *Mem. Soc. Geol. It.*; 1984; v. 27: p. 59-72.
3872. North Atlantic Transect Study Group (NAT Study Group) P. Buhl, J.B. Diebold, J.W. Ladd and J.C. Mutter, et al. North Atlantic Transect: a wide-aperture, two-ship multichannel seismic investigation of the oceanic crust. *J. Geophys. Res.*; 1985; v. 90-(n. B11): p. 10,321-10,341.
3873. Bishop, J. K. B. The correction and suspended particulate matter calibration of Sea Tech transmissometer data. *Deep-Sea Res.*; 1986; v. 33(n. 1): p. 121-134.
3874. Nyffeler, U. P., P. H. Santschi, and Y-H Li. The relevance of scavenging kinetics to modeling of sediment-water interactions in natural waters. *Limnol. Oceanogr.*; 1986; v. 31(n. 2): p. 277-292.
3875. Santschi, P. H., Y-H Li, P. O'Hara, and M. Amdurer. Removal and backdiffusion processes of radiotracers in shallow coastal marine ecosystems (MERL) of Narragansett Bay, RI, USA. *Rapp. P.-v. Reun. Cons. int. Explor. Mer*; 1986; v. 186: p. 212-218.
3876. Santschi, P. H., U. P. Nyffeler, Y-H Li, and P. O'Hara. Radionuclide cycling in natural waters: relevance of scavenging kinetics. in : P. G. Sly, Ed. *Sediments and Water Interactions*. New York: Springer-Verlag; 1986: p. 183-191.
3877. Santschi, P. Radionuclides as tracers for sedimentation and remobilization processes in the ocean and in lakes. in : P. G. Sly, Ed. *Sediments and Water Interactions*. New York: Springer-Verlag; 1986: p. 437-449.
3878. McNutt, S. R. Observations and analysis of B-type earthquakes, explosions, and volcanic tremor at Pavlof Volcano, Alaska. *Bull. Seismol. Soc. Am.*; 1986; v. 76(n. 1): p. 153-175.
3879. Scholz, C. H. The Black Mountain asperity: seismic hazard of the southern San Francisco Peninsula, California. *Geophys. Res. Lett.*; 1985; v. 12(n. 10): p. 717-719.

3880. Brown, S. R. and C. H. Scholz. Broad bandwidth study of the topography of natural rock surfaces. *J. Geophys. Res.*; 1985; v. 90(p. B14): p. 12,575-12,582.
3881. Sykes, L. R. and L. Seeber. Great earthquakes and great asperities, San Andreas fault, southern California. *Geology*; 1985; v. 13: p. 835-838.
3882. Byrne, D. B., G. Suarez, and W. R. McCann. Muertos Trough subduction - microplate tectonics in the northern Caribbean? *Nature*; 1985; v. 317(n. 6036): p. 420-421.
3883. Cane, M. A. El Nino. *Ann. Rev. Earth Planet. Sci.*; 1986; v. 14: p. 43-70.
3884. McCann, W. R. and L. R. Sykes. Reply to comment by Stein, et al. on "Subduction of aseismic ridges beneath the Caribbean Plate: implications for the tectonics and seismic potential of the northeastern Caribbean". *J. Geophys. Res.*; 1986; v. 91(n. B1): p. 787-791.
3885. ten Brink, U. S. and A. B. Watts. Seismic stratigraphy of the flexural moat flanking the Hawaiian Islands. *Nature*; 1985; v. 317(n. 6040): p. 421-424.
3886. O'Connell, S., B. Alonso, K. A. Kastens, A. Maldonado, A. Malinverno, C. H. Nelson, A. Palanques, and W. B. F. Ryan. Morphology and downslope sediment displacement in a deep-sea valley, the Valencia Valley (Northwestern Mediterranean). *Geo-Mar. Lett.*; 1985; v. 5: p. 149-156.
3887. Leith, W. and D. W. Simpson. Seismic domains within the Gissar-Kokshal seismic zone, Soviet Central Asia. *J. Geophys. Res.*; 1986; v. 91(n. B1): p. 689-699.
3888. Swanberg, N., P. Bennett, J. L. Lindsey, and O. R. Anderson. The biology of a coelodendrid: a mesopelagic phaeodarin radiolarian. *Deep-Sea Res.*; 1986; v. 33(n. 1): p. 15-25.
3889. Santschi, P. H., U. P. Nyffeler, R. F. Anderson, S. L. Schiff, P. O'Hara, and R. H. Hesslein. Response of radioactive trace metals to acid - base titrations in controlled experimental ecosystems: evaluation of transport parameters for application to whole-lake radiotracer experiments. *Can. J. Fish. Aquat. Sci.*; 1986; v. 43(n. 1): p. 60-77.
3890. Richards, P.G. Seismic wave propagation effects - development of theory and numerical modeling. in : A. U. Kerr, Ed. *The VELA Program: A Twenty-Five Year Review of Basic Research*. Rosslyn, VA: Executive Graphic Services; 1985: p. 183-251.

3891. Denman, K.L. and J. Marra. Modelling the time dependent photoadaptation of phytoplankton to fluctuating light. in : J. C. Nihoul, Ed. . *Marine Interfaces Ecohydrodynamics*. New York, NY: Elsevier Pub. Co., Inc.; 1986: p. 341-359.
3892. Pokras, E. M. and B. Molfino. Oceanographic control of diatom abundances and species distributions in surface sediments of the tropical and southeast Atlantic. *Mar. Micropaleontol.* ; 1986; v. 10: p. 165-188.
3893. Kent, D. V. Thermoviscous remagnetization in some Appalachian limestones. *Geophys. Res. Lett.*; 1985; v. 12(n. 12): p. 805-808.
3894. Cox, S. J. D. and C. H. Scholz. A direct measurement of shear fracture energy in rocks. *Geophys. Res. Lett.*; 1985; v. 12(n. 12): p. 813-816.
3895. Mix, A. C. and W. F. Ruddiman. Structure and timing of the last deglaciation: oxygen-isotope evidence. *Quat. Sci. Rev.* ; 1985; v. 4: p. 59-108.
3896. Robinson, D. A., E. Matthews, and G. Kukla. Human-induced changes in winter surface albedo. *Arch. Met. Geoph. Biocl. A.*; 1986; Bd. 34: p. 427-434.
3897. Staudigel, H., M. McCulloch, A. Zindler, and M. Perfit. Complex ridge subduction and island arc magmatism: an isotopic study of the New Georgia forearc and the Woodlark Basin. in: B. Taylor, and N.F. Exon, Eds. "*Marine Geology, Geophysics, and Geochemistry of the Woodlark Basin—Solomon Islands*". Houston, TX: Circum-Pacific Council for Energy and Mineral Resources; 1987; V. 7: p. 227-240.
3898. Smethie, Jr., W. M. and G. Mathieu. Measurement of krypton-85 in the ocean. *Mar. Chem.* ; 1986; v. 18: p. 17-33.
3899. Houghton, R. W., D. B. Olson, and P. J. Celone. Observation of an anticyclonic eddy near the continental shelf break south of New England. *J. Phys. Oceanogr.*; 1986; v. 16(n. 1): p. 60-71.
3900. Leinen, M., D. Cwienik, G. R. Heath, P. E. Biscaye, V. Kolla, J. Thiede, and J. P. Dauphin. Distribution of biogenic silica and quartz in recent deep-sea sediments. *Geology*; 1986; v. 14: p. 199-203.
3901. Donn, W. L., R. Goldberg, and J. Adem. Experiments in monthly temperature forecasting. *Am. Meteorol. Soc. Bull.*; 1986; v. 67(n. 2): p. 165-169.

3902. Cande, S. C. and R. B. Leslie. Late Cenozoic tectonics of the southern Chile Trench. *J. Geophys. Res.*; 1986; v. 91(n. B1): p. 471-496.

3903. Hunkins, K. . Anomalous diurnal tidal currents on the Yermak Plateau. *J. Mar. Res.*; 1986; v. 44: p. 51-69.

3904. Bonatti, E., G. Ottonello, and P. R. Hamlyn. Peridotites from the island of Zabargad (St. John), Red Sea: petrology and geochemistry. *J. Geophys. Res.*; 1986; v. 91(n. B1): p. 599-631.

3905. Jacob, K. H. Seismicity, tectonics, and geohazards of the Gulf of Alaska regions. in: D. W. Hood and S. T. Zimmerman, Eds. *The Gulf of Alaska: Physical Environment and Biological Resources*. Washington, DC: U. S. Dept. Interior, U. S. Dept. Commerce; 1986: p. 145-184.

3906. Eldholm, O. and J. C. Mutter. Basin structure on the Norwegian margin from analysis of digitally recorded sonobuoys. *J. Geophys. Res.*; 1986; v. 91(n. B3): p. 3763-3783.

3907. Piper, D. Z., T. R. Swint-Iki, and F. W. McCoy. Distribution of ferromanganese nodules in the Pacific Ocean. *Chem. Erde*; 1987; v. 46: p. 171-184.

3908. Scholz, C. H., C. A. Aviles, and S. G. Wesnousky. Scaling differences between large interplate and intraplate earthquakes. *Bull. Seismol. Soc. Am.*; 1986; v. 76(n. 1): p. 65-70.

3909. Mortlock, R. A. and P. N. Froelich. Hydrothermal germanium over the southern East Pacific Rise. *Science*; 1986; v. 231(p. 43-45).

3910. Christie-Blick, N. and K. T. Biddle. Deformation and basin formation along strike-slip faults. in : *Spec. Pub. No. 37: The Society of Economic Paleontologists and Mineralogists*; 1985: p. 1-34.

3911. Pitman, III, W. C. and J. A. Andrews. Subsidence and thermal history of small pull-apart basins. in : *Spec. Pub. No. 37: The Society of Economic Paleontologists and Mineralogists*; 1985: p. 45-49.

3912. Harding, T. P., R. C. Vierbuchen, and N. Christie-Blick. Structural styles, plate-tectonic settings, and hydrocarbon traps of divergent (transtensional) wrench faults. in : *Special Pub. No. 37: The Society of Economic Paleontologists and Mineralogists*; 1985: p. 51-77.

3913. Biddle, K. T. and N. Christie-Blick. Glossary - strike-slip deformation basin formation and sedimentation . in : Spec. Pub. No. 37: The Society of Economic Paleontologists and Mineralogists; 1985: p. 375-386.

3914. Ou, H. W. and W. P. M. De Ruijter. Separation of an inertial boundary current from a curved coastline. *J. Phys. Oceanogr.*; 1986; v. 16(n. 2): p. 280-289.

3915. Perfit, M.R., C.H. Langmuir, M. Baekisapa, B. Chappell, R.W. Johnson, and H. Staudigel. Geochemistry and petrology of volcanic rocks from the Woodlark Basin: addressing questions of ridge subduction. in: B. Taylor, and N.F. Exon, Eds. "Marine Geology, Geophysics, and Geochemistry of the Woodlark Basin—Solomon Islands. Houston, TX: Circum-Pacific Council for Energy and Mineral Resources; 1987; V. 7: p. 113-154.

3916. Nabelek, P. I. and C. H. Langmuir. The significance of unusual zoning in olivines from FAMOUS area basalt 527-1-1. *Contrib. Mineral. Petrol.*; 1986; v. 93: p. 1-8.

3917. Sykes, L. R. and G. C. Wiggins. Yields of Soviet underground nuclear explosions at Novaya Zemlya, 1964-1976, from seismic body and surface wave. in : *Proc. Natl. Acad. Sci.*; 1986; v. 83, n. 2: p. 201-205.

3918. Gu, G-X, K-R Liu, C-C Chang, J. T. Kuo, and W. E. Brown. The variation of gravity and the occurrence of earthquakes in the Beijing-Tianjin-Tangshan-Zhangjiakou (BTTZ) region. in : R. Vieira, Ed. *Proc. of the Tenth International Symposium on Earth Tides*. Madrid: Consejo Superior de Investigaciones Cientificas; 1986: p. 775-795.

3919. Moore, W. S. and P. H. Santschi. Ra-228 in the deep Indian Ocean. *Deep-Sea Res.*; 1986; v. 33(n. 1): p. 107-120.

3920. Haxby, W. F. and J. K. Weissel. Evidence for small-scale mantle convection from Seasat altimeter data. *J. Geophys. Res.*; 1986; v. 91(n. B3): p. 3507-3520.

3921. Chapman, D. C., J. A. Barth, R. C. Beardsley, and R. G. Fairbanks. On the continuity of mean flow between the Scotian Shelf and the Middle Atlantic Bight. *J. Phys. Oceanogr.*; 1986; v. 16: p. 758-772.

3922. Keigwin, L. D., M.-P. Aubry, and D. V. Kent. North Atlantic late Miocene stable-isotope stratigraphy, biostratigraphy, and magnetostratigraphy. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 935-963.

3923. Anderson, O.R. Silicification in radiolaria - deposition and ontogenetic origins of form. in : B. S. C. Leadbeater and R. Riding, Eds. *Biomineralization in Lower Plants and Animals*. England: Oxford University Press; 1986: p. 375-391.

3924. Kastens, K. A. and A. N. Shor. Evolution of a channel meander on the Mississippi deep-sea fan. *Mar. Geol.* ; 1986; v. 71: p. 165-175.

3925. Beavan, J., K. Hurst, R. Bilham, and L. Shengold. A densely spaced array of sea level monitors for the detection of vertical crustal deformation in the Shumagin seismic gap. *J. Geophys. Res.*; 1986; v. 91(n. B9): p. 9067-9080.

3926. Mix, A. C., W. F. Ruddiman, and A. McIntyre. Late Quaternary paleoceanography of the tropical Atlantic, 1: spatial variability of annual mean sea-surface temperatures, 0-20,000 years B.P. *Paleoceanography*; 1986; v. 1(n. 1): p. 43-66.

3927. Malinverno, A. and W. B. F. Ryan. Extension in the Tyrrhenian Sea and shortening in the Apennines as result of arc migration driven by sinking of the lithosphere. *Tectonics*; 1986; v. 5(n. 2): p. 227-245.

3928. Bower, P. M., C. A. Kelly, E. J. Fee, J. A. Shearer, D. R. DeClercq, and D. W. Schindler. Simultaneous measurement of primary production by whole-lake and bottle radiocarbon additions. *Limnol. Oceanogr.*; 1987; v. 32(n. 2): p. 299-312.

3929. Cook, E. R. The use and limitations of dendrochronology in studying effects of air pollution on forests. in : T. C. Hutchinson and K. M. Meema, Eds. *Effects of Atmospheric Pollutants on Forests, Wetlands and Agricultural Ecosystems*. Germany: Springer-Verlag; 1987; V. G16: p. 277-290. (NATO ASI Series; V. G16).

3930. Brown, S. R. and C. H. Scholz. Closure of rock joints. *J. Geophys. Res.*; 1986; v. 91(n. B5): p. 4939-4948.

3931. Clement, B. M. and D. V. Kent. Geomagnetic polarity transition records from five hydraulic piston core sites in the North Atlantic. in : *Initial Reports of the Deep Sea Drilling Projects*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 831-852.

3932. Kent, D. V. . Paleocontinental setting for the Catskill Delta. in : *Special Paper 201*. Boulder, CO: Geological Society of America; 1985: p. 9-13.

3933. Farre, J. A. and W. B. F. Ryan. Surficial Geology of the continental margin offshore New Jersey in the vicinity of Deep Sea Drilling Project Sites 612 and 613. in: C. W. Poag, A. B.

Watts, et al., Eds. Washington, DC: US Govt. Printing Office; 1987: p. 725-759. (Initial Reports of the Deep Sea Drilling Project; ICV).

3934. Clement, B. M. and F. Robinson. The magnetostratigraphy of Leg 94 sediments. in : Initial Reports of the Deep Sea Drilling Project. Washington , DC: U. S. Government Printing Office; 1986; V. 94: p. 635-650.

3935. Kastens, K., W. B. F. Ryan, and P. J. Fox. Structural and volcanic expression of a fast slipping ridge-transform-ridge-plate boundary: Sea MARC I and photographic surveys at the Clipperton transform fault. *J. Geophys. Res.*; 1986; v. 91(n. B3): p. 3469-3488.

3936. Staudigel, H., G. Feraud, and G. Giannerini. The history of intrusive activity on the island of LaPalma (Canary Islands). *J. Volcanol. Geotherm. Res.*; 1986; v. 27: p. 299-322.

3937. Walker, D. Melting equilibria in multicomponent systems and liquidus/solidus convergence in mantle peridotite. *Contrib. Mineral. Petrol.*; 1986; v. 92: p. 303-307.

3938. Gordon, A. L. and C. L. Greengrove. Geostrophic circulation of the Brazil-Falkland confluence. *Deep-Sea Res.*; 1986; v. 33(n. 5): p. 573-585.

3939. Buck, W. R. Small-scale convection induced by passive rifting: the cause for uplift of rift shoulders. *Earth Planet. Sci. Lett.*; 1986; v. 77: p. 362-372.

3940. Egan, W. G. and A. W. Hogan. Meteorological variation of atmospheric optical properties in an Antarctic storm. *App. Opt.*; 1986; v. 25(n. 7): p. 1155-1165.

3941. Zindler, A. and S. Hart. Chemical geodynamics. *Ann. Rev. Earth Planet. Sci.*; 1986; v. 14: p. 493-570.

3942. Boyd, T. M. and K. Jacob. Seismicity of the Unalaska region, Alaska. *Bull. Seismol. Soc. Am.*; 1986; v. 76(n. 2): p. 463-481.

3943. Morley, J. J., L. E. Heusser, and T. Sarro. Latest Pleistocene and Holocene palaeoenvironment of Japan and its marginal sea. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1986; v. 53: p. 349-358.

3944. Cochran, J. R., F. Martinez, M. S. Steckler, and M. A. Hobart. Conrad Deep: a new northern Red Sea deep. Origin and implications for continental rifting. *Earth Planet. Sci. Lett.*; 1986; v. 78: p. 18-32.



3945. Ruddiman, W. F., J. Backman, J. Baldauf, P. Hooper, L. Keigwin, K. Miller, M. Raymo, and E. Thoms. Leg 94 paleoenvironmental synthesis. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: American Geophysical Union ; 1986; V. 94: p. 1207-1215.
3946. Nicholson, C., L. Seeber, P. Williams, and L. R. Sykes. Seismicity and fault kinematics through the eastern Transverse Ranges, California: block rotation, strike-slip faulting and low-angle thrusts. *J. Geophys. Res.*; 1986; v. 91(n. B5): p. 4891-4908.
3947. Kominz, M. A. and G. C. Bond. Geophysical modelling of the thermal history of foreland basins. *Nature*; 1986; v. 320(n. 6059): p. 252-256.
3948. Scholz, C. H. and C. A. Aviles. The fractal geometry of faults and faulting. in: S. Das, J. Boatwright, and C. H. Scholz, Eds. *Earthquake Source Mechanics. Geophysical Monograph 37* ed. Washington, DC: American Geophysical Union ; 1986; Maurice Ewing 6: p. 147-155.
3949. Ruddiman, W. F. and A. Esmay. A streamlined foraminiferal transfer function for the subpolar North Atlantic. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 1045-1057.
3950. Alonso, B., K.A. Kastens, A. Maldonado, A. Malinverno, C.H. Nelson, S. O'Connell, A. Palanques, and W.B.F. Ryan. Morphology of the Ebro Fan Valleys from SeaMARC and Sea Beam profiles. *Geo-Mar. Lett.*; 1985; v. 5: p. 141-148.
3951. Maldonado, A., A. Palanques, B. Alonso, K. A. Kastens, C. H. Nelson, S. O'Connell, and W. B. F. Ryan. Physiography and deposition on a distal deep-sea system: the Valencia Fan (northwestern Mediterranean). *Geo-Mar. Lett.*; 1985; v. 5: p. 157-164.
3952. Pokras, E. M. Preservation of fossil diatoms in Atlantic sediment cores: control by supply rate. *Deep-Sea Res.*; 1986; v. 33(n. 7): p. 893-902.
3953. Mutter, J. C. and R. L. Newmark. Seismic response of detailed structure in Deep Sea Drilling Project Hole 504B: synthetic seismograms in the domain of intercept time and ray parameter. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 92: p. 571-582.
3954. Newmark, R. L., R. N. Anderson, and M. D. Zoback. Orientation of in situ stresses in the Pacific plate: Deep Sea Drilling Project Hole 597C. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 92: p. 519-525.

3955. Newmark, R. L. and D. Moos. Physical properties of basalt samples from Deep Sea Drilling Project Site 597. in : Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Government Printing Office; 1986; V. 92: p. 537-543.

3956. McNutt, S. R. and K. H. Jacob. Determination of large-scale velocity structure of the crust and upper mantle in the vicinity of Pavlof Volcano, Alaska. *J. Geophys. Res.*; 1986; v. 91(n. B5): p. 5013-5022.

3957. Jarrard, R. D. Relations among subduction parameters. *Rev. Geophys.*; 1986; v. 24(n. 2): p. 217-284.

3958. Steckler, M. S. and U. S. ten Brink. Lithospheric strength variations as a control on new plate boundaries: examples from the northern Red Sea region. *Earth Planet. Sci. Lett.*; 1986; v. 79: p. 120-132.

3959. Bell, R. E. and A. B. Watts. Evolution of the BGM-3 sea gravity meter system onboard R/V Conrad. *Geophysics*; 1986; v. 51(n. 7): p. 1480-1493.

3960. Das, S. and B. V. Kostrov. Fracture of a single asperity on a finite fault: a model for weak earthquakes? in : S. Das, J. Boatwright, and C. H. Scholz, Eds. *Earthquake Source Mechanics*. Geophysical Monograph 37 ed. Washington, DC: American Geophysical Union ; 1986; Maurice Ewing 6: p. 91-96.

3961. Das, S. Comparison of the radiated fields generated by the fracture of a circular crack and a circular asperity. *Geophys. J. R. astr. Soc.*; 1986; v. 85: p. 601-615.

3962. Gordon, A. L. . Interocean exchange of thermocline water. *J. Geophys. Res.*; 1986; v. 91(n. C4): p. 5037-5046.

3963. Gordon, A. L. and C. L. Greengrove. Abyssal eddy in the southwest Atlantic. *Deep-Sea Res.*; 1986; v. 33(n. 6): p. 839-847.

3964. Leshner, C. E. Effects of silicate liquid composition on mineral-liquid element partitioning from Soret diffusion studies. *J. Geophys. Res.*; 1986; v. 91(n. B6): p. 6123-6141.

3965. Tucholke, B. E. and F. W. McCoy. Paleogeographic and paleobathymetric evolution of the North Atlantic Ocean. in : P. R. Vogt and B. E. Tucholke, Eds. *The Western North Atlantic Region. The Geology of North America* ed. Boulder, CO 80301: The Geological Society of America; 1986: p. 589-602.

3966. Katz, E. J., P. Hisard, J.-M. Verstraete, and S. L. Garzoli. Annual change of sea surface slope along the Equator of the Atlantic Ocean in 1983 and 1984 . *Nature*; 1986; v. 322(n. 6076): p. 245-247.

3967. Hisard, P., C. Henin, R. Houghton, B. Piton, and P. Rual. Oceanic conditions in the tropical Atlantic during 1983 and 1984. *Nature*; 1986; v. 322(n. 6076): p. 243-245.

3968. Kostrov, B. V. and S. Das. On the elastic contact modeling of faults with variable stiffness. in : S. Das, J. Boatwright, and C. H. Scholz, Eds. *Earthquake Source Mechanics. Geophysical Monograph 37* ed. Washington, DC: American Geophysical Union; 1986; Maurice Ewing V. 6: p. 65-70.

3969. Alvarez, W. . Toward a theory of impact crises. *EOS*; 1986; v. 67(n. 35): p. 649-658.

3970. Hobart, M. A. and J. K. Weissel. Geothermal surveys in the Solomon Islands—Woodlark Basin region. in : B. Taylor, and N.F. Exon, Eds. "Marine Geology, Geophysics, and Geochemistry of the Woodlark Basin—Solomon Islands. Houston, TX: Circum-Pacific Council for Energy and Mineral Resources; 1987; V. 7(): p. 49-66.

3971. Schneider, D. A. and D. V. Kent. Influence of non-dipole field on determination of Plio-Pleistocene True Polar Wander. *Geophys. Res. Lett.*; 1986; v. 13(n. 5): p. 471-474.

3972. Robinson, D. A. Initiation of spring snowmelt over Arctic lands. in: D. L. Kane, Ed. *Proceedings of the Cold Regions Hydrology Symposium: American Water Resources Association*; 1986: p. 547-554.

3973. Swanberg, N. R., O. R. Anderson, J. L. Lindsey, and P. Bennett. The biology of *Physematium muelleri*: trophic activity. *Deep-Sea Res.*; 1986; v. 33(n. 7): p. 913-922.

3974. Hinz, K., J. C. Mutter, C. M. Zehnder and the NGT Study Group. Symmetric conjugation of continent—ocean boundary structures along the Norwegian and East Greenland Margins. *Mar. Pet. Geol.*; 1987; v. 4(n. 3): p. 166-187.

3975. Worner, G., A. Zindler, H. Staudigel, and H.-U. Schmincke. Sr, Nd, and Pb isotope geochemistry of Tertiary and Quaternary alkaline volcanics from West Germany . *Earth Planet. Sci. Lett.*; 1986; v. 79: p. 107-119.

3976. Diebold, J. B., P. L. Stoffa, and The LASE Study Group. A large aperture seismic experiment in the Baltimore Canyon Trough. in : R. E. Sheridan and J. S. Grow, Eds. *The Geology of North America. The Atlantic Continental Margin, U.S.* ed. Boulder, CO: Geological Society of America; 1988; V1-2: p. 387-398.

3977. Coffin, M. F., P. D. Rabinowitz, and R. E. Houtz. Crustal structure in the Western Somali Basin. *Geophys. J. R. astr. Soc.*; 1986; v. 86: p. 331-369.

3978. Nicholson, C., L. Seeber, P. Williams, and L. R. Sykes. Seismic evidence for conjugate slip and block rotation within the San Andreas fault system, southern California. *Tectonics*; 1986; v. 5(n. 4): p. 629-648.

3979. Sancetta, C. and S. Silvestri. Pliocene-Pleistocene evolution of the North Pacific Ocean-atmosphere system, interpreted from fossil diatoms. *Paleoceanography*; 1986; v. 1(n. 2): p. 163-180.

3980. Ou, H-W and A. L. Gordon. Spin-down of baroclinic eddies under sea ice. *J. Geophys. Res.*; 1986; v. 91(n. C6): p. 7623-7630.

3981. Aviles, C. A. , C. H. Scholz, and J. Boatwright. Fractal analysis applied to characteristic segments of the San Andreas fault. *J. Geophys. Res.*; 1987; v. 92(n. B1): p. 331-344.

3982. Suarez, G. and S. K. Singh. Tectonic interpretation of the Trans-Mexican Volcanic Belt - discussion. *Tectonophysics*; 1986; v. 127: p. 155-160.

3983. Langseth, M. G., G. K. Westbrook, and M. A. Hobart. Geophysical survey of a mud volcano seaward of the Barbados Ridge Accretionary Complex. *J. Geophys. Res.*; 1988; v. 93(n. B2): p. 1049-1061.

3984. Broecker, W. S. Oxygen isotope constraints on surface ocean temperatures. *Quat. Res.*; 1986; v. 26: p. 121-134.

3985. Miller, K. G., R. G. Fairbanks, and E. Thomas. Benthic foraminiferal carbon isotopic records and the development of abyssal circulation in the eastern North Atlantic. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 981-996.

3986. Raymo, M. E., W. F. Ruddiman, and B. M. Clement. Pliocene-Pleistocene paleoceanography of the North Atlantic at Deep Sea Drilling Project Site 609. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 895-901.

3987. Flood, R. D. and H. J. Bokuniewicz. Bottom morphology in the Hudson River estuary and New York Harbor. *Northeast Geol.*; 1986; v. 8(n. 3): p. 130-140.

3988. Tucholke, B. E. and G. S. Mountain. Tertiary paleoceanography of the western North Atlantic Ocean. in: P. R. Vogt and B. E. Tucholke, Eds. *The Western North Atlantic Region, The Geology of North America*. Boulder, CO 80301: The Geological Society of America; 1986; V. M: p. 631-650.

3989. Ruddiman, W. F., A. McIntyre, and M. Raymo. Paleoenvironmental results from North Atlantic Sites 607 and 609. in : *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 94: p. 855-878.

3990. Leshner, C. E. and D. Walker. Solution properties of silicate liquids from thermal diffusion experiments. *Geochim. Cosmochim. Acta*; 1986; v. 50: p. 1397-1411.

3991. Kent, D. V., G. Xu, K. Huang, W. Y. Zhang, and N. D. Opdyke. Paleomagnetism of upper Cretaceous rocks from South China. *Earth Planet. Sci. Lett.*; 1986; v. 79: p. 179-184.

3992. LASE Study Group. Deep structure of the US East Coast passive margin from large aperture seismic experiments (LASE). *Mar. Pet. Geol.*; 1986; v. 3: p. 234-242.

3993. Broecker, W. S. and T-H Peng. Carbon cycle: 1985 glacial to interglacial changes in the operation of the global carbon cycle. *Radiocarbon*; 1986; v. 28(n. 2A): p. 309-327.

3994. Martinson, D. G., N. G. Pisias, J. D. Hays, J. Imbrie, T. C. Moore, Jr., and N. J. Shackleton. Age dating and the orbital theory of the ice ages: development of a high-resolution 0 to 300,000-year chronostratigraphy. *Quat. Res.*; 1987; v. 27: p. 1-29.

3995. Jarrard, R. D. Terrane motion by strike-slip faulting of forearc slivers. *Geology*; 1986; v. 14: p. 780-783.

3996. Corliss, B. H., D. G. Martinson, and T. Keffer. Late Quaternary deep-ocean circulation. *Geol. Soc. Am. Bull.*; 1986; v. 97: p. 1106-1121.

3997. Hurst, K. and R. Bilham. Hydrostatic levels in precision geodesy and crustal deformation measurement. *J. Geophys. Res.*; 1986; v. 91(n. B9): p. 9202-9216.

3998. Opdyke, N. D., K. Huang, G. Xu, W. Y. Zhang, and D. V. Kent. Paleomagnetic results from the Triassic of the Yangtze platform. *J. Geophys. Res.*; 1986; v. 91(n. B9): p. 9553-9568.

3999. Manley, T. O., R. A. Shuchman, and B. A. Burns. Star ice floe kinematics and correlation with mesoscale oceanic structure within the marginal ice zone. in : Proceedings of IGARSS '86 Symposium: ESA; 1986; ESA SP-254: p. 363-366.
4000. Shor, A. N. and C. E. McClennen. Marine physiography of the U. S. Atlantic margin. in : R.E. Sheridan and J.A. Grow, Eds. "The Geology of North America, V. 1-2, The Atlantic Continental Margin: U.S.". Boulder, CO: Geological Society of America; 1988: p. 9-18.
4001. Manley, T. O., K. L. Hunkins, and R. D. Muench. Current regimes across the East Greenland Polar Front at 78 40' north latitude during summer 1984. *J. Geophys. Res.*; 1987; v. 92(n. C7): p. 6741-6753.
4002. Raleigh, B. and C. Marone. Dilatancy of quartz gouge in pure shear. in : B. E. Hobbs and H. C. Heard, Eds. *Geophysical Monograph 36*. Washington, DC: American Geophysical Union; 1986: p. 1-10.
4003. Laine, E. P., J. E. Damuth, and R. Jacobi. Surficial sedimentary processes revealed by echo-character mapping in the western North Atlantic Ocean. in : P. R. Vogt and B. E. Tucholke, Eds. *The Western North Atlantic Region, The Geology of North America*. Boulder, CO 80301: The Geological Society of America; 1986; V. M: p. 427-436.
4004. Cane, M. A., S. E. Zebiak, and S. C. Dolan. Experimental forecasts of El Nino. *Nature*; 1986; v. 322(n. 6073): p. 827-832.
4005. Simpson, H. J., M. Hamza, and J. R. Brownell. Wheat and oil in the Middle East: the growing interdependency with other regions. in : *Binational Fulbright Occasional Paper Series*. Cairo, Egypt: American University in Cairo; 1986; V. 1: p. 77-103.
4006. Christie, D. M., I. S. E. Carmichael, and C. H. Langmuir. Oxidation states of mid-ocean ridge basalt glasses. *Earth Planet. Sci. Lett.*; 1986; v. 79: p. 397-411.
4007. Poag, C. W. and K. G. Miller. Neogene marine microfossil biofacies of the western North Atlantic. in : P. R. Vogt and B. E. Tucholke, Eds. *The Western North Atlantic Region, The Geology of North America*. Boulder, CO 80301: The Geological Society of America; 1986; V. M: p. 547-654.
4008. Ruddiman, W. F., M. Raymo, and A. McIntyre. Matuyama 41,000-year cycles: North Atlantic Ocean and northern hemisphere ice sheets. *Earth Planet. Sci. Lett.*; 1986; v. 80: p. 117-129.

4009. Zhao, W-L, D. M. Davis, F. A. Dahlen, and J. Suppe. Origin of convex accretionary wedges: evidence from Barbados. *J. Geophys. Res.*; 1986; v. 91(n. B10): p. 10,246-10,258.
4010. Swanberg, N. R., P. Bennett, J. L. Lindsey, and O. R. Anderson. A comparative study of predation in two Caribbean radiolarian populations. *Mar. Microbial Food Webs*; 1986; v. 1(n. 2): p. 105-118.
4011. Morley, J. J. and S. W. Robinson. Improved method for correlating late Pleistocene/Holocene records from the Bering Sea: application of a biosiliceous/geochemical stratigraphy. *Deep-Sea Res.*; 1986; v. 33(n. 9): p. 1203-1211.
4012. Jacobs, S. S., D. R. MacAyeal, and J. L. Ardai, Jr. The recent advance of the Ross Ice Shelf, Antarctica. *J. Glaciol.* ; 1986; v. 32(n. 112): p. 464-474.
4013. Zebiak, S. E. Atmospheric convergence feedback in a simple model for El Nino. *Mon. Weather Rev.*; 1986; v. 114(n. 7): p. 1263-1271.
4014. Zindler, A. and S. Hart. Helium: problematic primordial signals. *Earth Planet. Sci. Lett.*; 1986; v. 79: p. 1-8.
4015. Smethie Jr., W. M., H. G. Ostlund, and H. H. Loosli. Ventilation of the deep Greenland and Norwegian seas: evidence from krypton-85, tritium, carbon-14 and argon-39. *Deep-Sea Res.*; 1986; v. 33(n. 5): p. 675-703.
4016. Kappel, E. S. and W. B. F. Ryan. Volcanic episodicity and a non-steady state rift valley along northeast Pacific spreading centers: evidence from Sea MARC I. *J. Geophys. Res.*; 1986; v. 91(n. B14): p. 13,925-13,940.
4017. Anderson, O.R., N.R. Swanberg, J.L. Lindsey, and P. Bennett. Functional morphology and species characteristics of a large, solitary radiolarian *Physematium muelleri*. *Biol. Bull.*; 1986; v. 171: p. 175-187.
4018. Garzoli, S. L. and M. E. Clements. Indirect wind observations in the southwestern Atlantic. *J. Geophys. Res.*; 1986; v. 91(n. C9): p. 10,551-10,556.
4019. Moos, D., R. N. Anderson, C. Broglia, D. Goldberg, C. F. Williams, and M. D. Zoback. The Ocean Drilling Program V: logging for the Ocean Drilling Program - results from the first two legs. in : *Oceans '85: Ocean Engineering and the Environment*. Washington, DC: Mar. Technol. Soc. & IEEG; 1985; V. 1: p. 160-169.

4020. Broecker, W. S., J. R. Ledwell, T. Takahashi, R. Weiss, L. Merlivat, L. Memery, T-H Peng, B. Jahne, and K. O. Munnich. Isotopic versus micrometeorologic ocean Co<sub>2</sub> fluxes: a serious conflict. *J. Geophys. Res.*; 1986; v. 91(n. C9): p. 10,517-10,527.

4021. Miller, K. G. and M. E. Katz. Eocene benthic foraminiferal biofacies of the New Jersey Transect. in: C. W. Poag, A. B. Watts, et al., Eds. Washington, DC: U. S. Govt. Printing Office; 1987: p. 267-298. (Initial Reports of the Deep Sea Drilling Project; V. XCV).

4022. Mix, A. C., W. F. Ruddiman, and A. McIntyre. Late Quaternary paleoceanography of the tropical Atlantic, 2: the seasonal cycle of sea surface temperatures, 0-20,000 years B.P. *Paleoceanography*; 1986; v. 1(n. 3): p. 339-353.

4023. Donn, W. L. Experiments in long-range climate control. *Geol. J.*; 1986; v. 21: p. 307-318.

4024. Brocher, T. M. and U. S. ten Brink. Variations in oceanic Layer 2 elastic velocities near Hawaii and their correlation to lithospheric flexure. *J. Geophys. Res.*; 1987; v. 92(n. B3): p. 2647-2661.

4025. Evans, K. F. and J. T. Engelder. A study of stress in Devonian shale: part I - 3D stress mapping using a wireline microfrac system. in: SPE #15609, 61st Annual Technical Conference and Exhibition: Soc. Petrol. Eng.; 1986: p. 1-12.

4026. Scharfen, G., R. G. Barry, D. A. Robinson, G. Kukla, and M. C. Serreze. Large-scale patterns of snow melt on Arctic sea ice mapped from meteorological satellite imagery. *Annals of Glaciology*; 1987; v. 9: p. 1-6.

4027. Kukla, G., J. Gavin, and T. R. Karl. Urban warming. *J. Clim. Appl. Meteorol.*; 1986; v. 25(n. 9): p. 1265-1270.

4028. Egan, W. G. Proposed design of an imaging spectropolarimeter/photometer for remote sensing of earth resources. *Optical Engineering*; 1986; v. 25(n. 10): p. 1155-1159.

4029. Cochran, J. R. Variations in subsidence rates along intermediate and fast spreading mid-ocean ridges. *Geophys. J. R. astr. Soc.*; 1986; v. 87: p. 421-454.

4030. Leith, W. and W. Alvarez. Structure of the Vakhsh fold-and-thrust belt, Tadjik SSR: geologic mapping on a Landsat image base: Reply. *Geol. Soc. Am. Bull.*; 1986; v. 97: p. 906-908.



4031. Reisberg, L. and A. Zindler. Extreme isotopic variations in the upper mantle: evidence from Ronda. *Earth Planet. Sci. Lett.*; 1986/87; v. 81: p. 29-45.

4032. McNutt, S. R. Eruption characteristics and cycles at Pavlof Volcano, Alaska, and their relation to regional earthquake activity. *J. Volcanol. Geotherm. Res.*; 1987; v. 31: p. 239-267.

4033. Schiff, S. L. and R. F. Anderson. Alkalinity production in epilimnetic sediments: acidic and non-acidic lakes. *Water, Air, Soil Pollut.*; 1986; v. 31: p. 941-948.

4034. Piola, A. R. and A. L. Gordon. On oceanic heat and freshwater fluxes at 30oS. *J. Phys. Oceanogr.*; 1986; v. 16(n. 12): p. 2184-2190.

4035. Houghton, R. W. and C. Colin. Thermal structure along 4oW in the Gulf of Guinea during 1983-1984. *J. Geophys. Res.*; 1986; v. 91(n. C10): p. 11,727-11,739.

4036. Ledwell, J. R., A. J. Watson, and W. S. Broecker. A deliberate tracer experiment in Santa Monica Basin. *Nature*; 1986; v. 323(n. 6086): p. 322-324.

4037. Ou, H-W. On the energy conversion during geostrophic adjustment. *J. Phys. Oceanogr.*; 1986; v. 16(n. 12): p. 2203-2204.

4038. Lutjeharms, J. R. E. and A. L. Gordon. Shedding of an Agulhas ring observed at sea. *Nature*; 1987; v. 325(n. 6100): p. 138-140.

4039. Seeber, L. and J. G. Armbruster. The 1886-1889 aftershocks of the Charleston, South Carolina, earthquake: a widespread burst of seismicity. *J. Geophys. Res.*; 1987; v. 92(n. B3): p. 2663-2696.

4040. Halgedahl, S.L. and R.D Jarrard. Paleomagnetism of the Kuparuk River Formation from oriented drill core: evidence for rotation of the Arctic Alaska Plate. in : I. Tailleux and P. Weimer, Eds. "Alaskan North Slope Geology": Society Economic Paleontologists and Mineralogists; The Alaska Geological Society; 1987; V. 2: p. 581-618.

4041. Leith, W. and D. W. Simpson. Earthquakes related to active salt doming near Kulyab, Tadjikistan, USSR. *Geophys. Res. Lett.*; 1986; v. 13(n. 10): p. 1019-1022.

4042. Anderson, O. R., C. Hemleben, M. Spindler, and J. L. Lindsey. A comparative analysis of the morphogenesis and morphometric diversity of mature skeletons of living *Didymocyrtis tetrathalamus tetrathalamus* and *Hexalonche amphisiphon*. *Mar. Micropaleontol.*; 1986; v. 11: p. 203-215.

4043. Miller, J. D. and D. V. Kent. Synfolding and pre-folding magnetizations in the Upper Devonian Catskill Formation of eastern Pennsylvania: implications for the tectonic history of Acadia. *J. Geophys. Res.*; 1986; v. 91(n. B12): p. 12,791-12,803.

4044. Thurow, J. and O. R. Anderson. An interpretation of skeletal growth patterns of some Middle Cretaceous and modern radiolarians. *Micropaleontology*; 1986; v. 32(n. 4): p. 289-302.

4045. Swanberg, N. R. and K. R. Bjorklund. The radiolarian fauna of western Norwegian fjords: patterns of abundance in the plankton. *Mar. Micropaleontol.* ; 1986; v. 11: p. 231-241.

4046. Taber, J. J. and J. Beavan. 14 February 1983 earthquake sequence in the Shumagin Islands, Alaska. *Bull. Seismol. Soc. Am.*; 1986; v. 76(n. 6): p. 1588-1596.

4047. Katz, M. E. and K. G. Miller. Neogene benthic foraminiferal biofacies of the New Jersey transect. in: C. W. Poag, A. B. Watts, et al., Eds. *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Govt. Printing Office; 1987; V. XCV: p. 299-311.

4048. Burckle, L. H. and J. Cirilli. Origin of diatom ooze belt in the Southern Ocean: implications for late Quaternary paleoceanography. *Micropaleontology*; 1987; v. 33(n. 1): p. 82-86.

4049. Burckle, L. H., S. S. Jacobs, and R. B. McLaughlin. Late austral spring diatom distribution between New Zealand and the Ross Ice Shelf, Antarctica: hydrographic and sediment correlations. *Micropaleontology*; 1987; v. 33(n. 1): p. 74-81.

4050. Fornari, D. J. Submarine lava tubes and channels. *Bull. Volcanol.*; 1986; v. 48: p. 291-298.

4051. Swanberg, N. R. and K. R. Bjørklund. Radiolaria in the plankton of some fjords in western and northern Norway: the distribution of species. *Sarsia*; 1987; v. 72: p. 231-244.

4052. Bjorklund, K. R. and N. R. Swanberg. The distribution of two morphotypes of the radiolarian *Amphimelissa setosa* Cleve (Nassellarida): a result of environmental variability? *Sarsia*; 1987; v. 72: p. 245-254.

4053. Sykes, L. R. Seismic monitoring for a nuclear test ban. *Mod. Geol.*; 1986; v. 10: p. 293-295.

4054. Sykes, L. R. Verification of a Comprehensive Nuclear Test Ban Treaty, Soviet compliance with the Threshold Test Ban Treaty, and the sizes of Soviet strategic nuclear weapons. *Mod. Geol.* ; 1986; v. 10: p. 303-321.
4055. Bennett, T.J., Jr., and K. Hunkins. Atmospheric boundary layer modification in the marginal ice zone. *J. Geophys. Res.*; 1986; v. 91(n. C11): p. 13,033-13,044.
4056. Christie, D. M. and J. M. Sinton. Major element constraints on melting, differentiation and mixing of magmas from the Galapagos 95.5° W propagating rift system. *Contrib. Mineral. Petrol.* ; 1986; v. 94: p. 274-288.
4057. Coffin, M. F., H. L. Davies, and W. F. Haxby. Structure of the Kerguelen Plateau province from Seasat altimetry and seismic reflection data. *Nature*; 1986; v. 324(n. 6093): p. 134-136.
4058. Conte, M. H., J. K. B. Bishop, and R. H. Backus. Nonmigratory, 12-kHz, deep scattering layers of Sargasso Sea origin in warm-core rings. *Deep-Sea Res.*; 1986; v. 33(n. 11/12): p. 1869-1884.
4059. Bishop, J. K. B. , M. H. Conte, P. H. Wiebe, M. R. Roman, and C. Langdon. Particulate matter production and consumption in deep mixed layers: observations in a warm-core ring. *Deep-Sea Res.*; 1986; v. 33(n. 11/12): p. 1813-1841.
4060. Clement, B. M. and D. V. Kent. Short polarity intervals within the Matuyama: transitional field records from hydraulic piston cored sediments from the North Atlantic. *Earth Planet. Sci. Lett.*; 1986/87; v. 81: p. 253-264.
4061. Miller, J. D. and D. V. Kent. Paleomagnetism of the Upper Devonian Catskill Formation from the southern limb of the Pennsylvania Salient: possible evidence of oroclinal rotation. *Geophys. Res. Lett.*; 1986.; v. 13(n. 11): p. 1172-1176.
4062. Miller, K. G. and M. B. Hart. Cenozoic planktonic foraminifers and hiatuses on the New Jersey slope and rise: Deep Sea Drilling Project Leg 95, northwest Atlantic. in : C. W. Poag, A. B. Watts, et al., Eds. *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Govt. Printing Office; 1987; V. XCV: p. 253-265.
4063. Andree, M., H. Oeschger, W. Broecker, N. Beavan, M. Klas, A. Mix, G. Bonani, H. J. Hofmann, M. Suter, W. Woelfli, and T-H Peng. Limits on the ventilation rate for the deep ocean over the last 12,000 years. *Clim. Dyn.*; 1986; v. 1: p. 53-62.

4064. Hart, S. R. and A. Zindler. In search of a bulk-Earth composition. *Chem. Geol.*; 1986; v. 57: p. 247-267.

4065. Newcomb, K. R. and W. R. McCann. Seismic history and seismotectonics of the Sunda Arc. *J. Geophys. Res.*; 1987; v. 92(n. B1): p. 421-439.

4066. Olsen, P. E. A 40 million-year lake record of early Mesozoic orbital climatic forcing. *Science*; 1986; v. 234: p. 842-848.

4067. Abbott, D. H., M. A. Hobart, and R. W. Embley. Heat flow and mass wasting in the Wilmington Canyon region: U. S. continental margin. *Geo-Mar. Lett.*; 1986; v. 6(n. 3): p. 131-138.

4068. Scholz, C. H., G. Boitnott, and S. Nemat-Nasser. The Bridgman ring paradox revisited. *Pageoph*; 1986; v. 124(n. 3): p. 587-599.

4069. Jarrard, R. D. Causes of compression and extension behind trenches. *Tectonophysics*; 1986; v. 132: p. 89-102.

4070. Broecker, W. S., T-H Peng, and G. Ostlund. The distribution of bomb tritium in the ocean. *J. Geophys. Res.*; 1986; *J. Geophys. Res.*(v. 91): n. C12; ISSN p. 14,331-14,344.

4071. O'Connell, S. and W. R. Normark. Acoustic facies and sediment composition of the Mississippi Fan drill sites, Deep Sea Drilling Project Leg 96. in: *Initial Reports of the Deep Sea Drilling Project*. Washington, DC: U. S. Government Printing Office; 1986; V. 96(p. 457-473).

4072. Cande, S. C., R. B. Leslie, J. C. Parra, and M. Hobart. Interaction between the Chile Ridge and Chile Trench: geophysical and geothermal evidence. *J. Geophys. Res.*; 1987; v. 92(n. B1): p. 495-520.

4073. Barone, A. M. and W. B. F. Ryan. Morphology from subaerial erosion of a Mediterranean seamount. *Mar. Geol.*; 1987; v. 74(p. 159-172).

4074. Kent, D. V. and S. R. May. Polar wander and paleomagnetic reference pole controversies. *Rev. Geophys.*; 1987; v. 25(n. 5): p. 961-970.

4075. Forsythe, R. D., D. V. Kent, C. Mpodozis, and J. Davidson. Paleomagnetism of Permian and Triassic rocks, central Chilean Andes. in : G. D. McKenzie, Ed. *Gondwana Six: Structure, Tectonics, and Geophysics*. *Geophys. Monograph 40* ed. Washington, DC: American Geophysical Union; 1987: p. 241-252.

4076. Broecker, W. S., W. C. Patzert, J. R. Toggweiler, and M. Stuiver. Hydrography, chemistry, and radioisotopes in the Southeast Asian basins. *J. Geophys. Res.*; 1986; v. 91(n. C12): p. 14,345-14,354.
4077. Bishop, J. K. B. and T. M. Joyce. Spatial distributions and variability of suspended particulate matter in warm-core ring 82B. *Deep-Sea Res.*; 1986; v. 33(n. 11/12): p. 1741-1760.
4078. Christensen, J. P., W. M. Smethie, Jr., and A. H. Devol. Benthic nutrient regeneration and denitrification on the Washington continental shelf. *Deep-Sea Res.*; 1987; v. 34(n. 5/6): p. 1027-1047.
4079. Scholz, C. H. Wear and gouge formation in brittle faulting. *Geology*; 1987; v. 15: p. 493-495.
4080. Vera, E. E. . On the connection between the Herglotz-Wiechert-Bateman and tau-sum inversions. *Geophysics*; 1987; v. 52(no. 4): p. 568-570.
4081. Kent, D V., X. Zeng, W.Y. Zhang, and N.D. Opdyke. Widespread late Mesozoic to Recent remagnetization of Paleozoic and lower Triassic sedimentary rocks from South China. *Tectonophysics*; 1987; v. 139: p. 133-143.
4082. Das, S. and B. V. Kostrov. On the numerical boundary integral equation method for three-dimensional dynamic shear crack problems. *J. Appl. Mech.*; 1987; v. 109: p. 99-104.
4083. Bishop, J. K. B., J. C. Stepien, and P. H. Wiebe. Particulate matter distributions, chemistry and flux in the Panama Basin: response to environmental forcing. *Prog. Oceanog.*; 1986; v. 17: p. 1-59.
4084. Swanberg, N. R. and K. R. Bjørklund. The pre-cephalic development of the skeleton of *Amphimelissa setosa* (Actinopoda: Nassellarida). *Mar. Micropaleontol.*; 1987; v. 11: p. 333-341.
4085. McFadden, P. L., R. T. Merrill, W. Lowrie, and D. V. Kent. The relative stabilities of the reverse and normal polarity states of the Earth's magnetic field. *Earth Planet. Sci. Lett.*; 1987; v. 82: p. 373-383.
4086. Pokras, E. M. and A. C. Mix. Earth's precession cycle and Quaternary climatic change in tropical Africa. *Nature*; 1987; v. 326(n. 6112): p. 486-487.

4087. Herczeg, A. L. and R. G. Fairbanks. Anomalous carbon isotope fractionation between atmospheric CO<sub>2</sub> and dissolved inorganic carbon induced by intense photosynthesis. *Geochim Cosmochim Acta*; 1987; v. 51: p. 895-899.

4088. Gedzelman, S. D., J. R. Lawrence, J. W. C. White, and D. Smiley. The isotopic composition of precipitation at Mohonk Lake, New York: the amount effect. *J. Geophys. Res.*; 1987; v. 92(n. D1): p. 1033-1040.

4089. Garzoli, S. L. and A. Bianchi. Time-space variability of the local dynamics of the Malvinas-Brazil confluence as revealed by inverted echo sounders. *J. Geophys. Res.*; 1987; v. 92(n. C2): p. 1914-1922.

4090. Miller, K. G., R. G. Fairbanks, and G. S. Mountain. Tertiary oxygen isotope synthesis, sea level history, and continental margin erosion. *Paleoceanography*; 1987; v. 2(n. 1): p. 1-19.

4091. Morley, J. J., N. G. Pisias, and M. Leinen. Late Pleistocene time series of atmospheric and oceanic variables recorded in sediments from the subarctic Pacific. *Paleoceanography*; 1987; v. 2(n. 1): p. 49-62.

4092. Caron, D. A., W. W. Faber, Jr., and A. W. H. Be. Effects of temperature and salinity on the growth and survival of the planktonic foraminifer *Globigerinoides sacculifer*. *J. Mar. Biol. Assoc. U. K.*; 1987; v. 67: p. 323-341.

4093. Caron, D. A., W. W. Faber, Jr., and A. W. H. Be. Growth of the spinose planktonic foraminifer *Obulina universa* in laboratory culture and the effect of temperature on life processes. *J. Mar. Biol. Assoc. U. K.*; 1987; v. 67: p. 343-358.

4094. Katz, E. J. Equatorial Kelvin waves in the Atlantic. *J. Geophys. Res.*; 1987; v. 92(n. C2): p. 1894-1898.

4095. Katz, E. J. Seasonal response of the sea surface to the wind in the Equatorial Atlantic. *J. Geophys. Res.*; 1987; v. 92(n. C2): p. 1885-1893.

4096. Hudnut, K. W. and J. J. Taber. Transition from double to single Wadati-Benioff seismic zone in the Shumagin Islands, Alaska. *Geophys. Res. Lett.*; 1987; v. 14(n. 2): p. 143-146.

4097. Flood, R. D. Side echoes from a sinuous fan channel obscure the structure of submarine fan channel/levee systems, Amazon Fan. *Geo-Mar. Lett.*; 1987; v. 7: p. 15-22.

4098. Gordon, A. L., J. R. E. Lutjeharms, and M. L. Gründlingh. Stratification and circulation at the Agulhas Retroflection. *Deep-Sea Res.*; 1987; v. 34(n. 4): p. 565-599.
4099. Ladd, J. W. and R. E. Sheridan. Seismic stratigraphy of the Bahamas. *Am. Assoc. Pet. Geol. Bull.*; 1987; v. 71(n. 6): p. 719-736.
4100. Buck, W. R. Analysis of the cooling of a variable-viscosity fluid with applications to the Earth. *Geophys. J. R. astr. Soc.*; 1987; v. 89: p. 549-577.
4101. Kolla, V. and F. Coumes. Morphology, internal structure, seismic stratigraphy, and sedimentation of Indus Fan. *Am. Assoc. Pet. Geol. Bull.*; 1987; v. 71(no. 6): p. 650-677.
4102. Richardson, M. J., P. E. Biscaye, W. D. Gardner, and N. G. Hogg. Suspended particulate matter transport through the Vema Channel. *Mar. Geol.*; 1987; v. 77: p. 171-184.
4103. Seeber, L. and J. G. Armbruster. Seismicity along the Atlantic seaboard of the U. S.; intraplate neotectonics and earthquake hazard. in : R.E. Sheridan and J.A. Grow, Eds. "The Geology of North America, V. 1-2, The Atlantic Continental Margin: U.S.". Boulder, CO: Geological Society of America; 1988: p. 565-582.
4104. Flood, R. D. and J. E. Damuth. Quantitative characteristics of sinuous distributary channels on the Amazon Deep-Sea Fan. *Geol. Soc. Am. Bull.*; 1987; v. 98: p. 728-738.
4105. Comiso, J. C. and A. L. Gordon. Recurring polynyas over the Cosmonaut Sea and the Maud Rise. *J. Geophys. Res.*; 1987; v. 92(n. C3): p. 2819-2833.
4106. Anderson, R. F. and S. L. Schiff. Alkalinity generation and the fate of sulfur in lake sediments. *Can. J. Fish. Aquat. Sci.*; 1987; v. 44: p. 188-193.
4107. Mithal, R. and J. B. Diebold. A method of obtaining a velocity-depth envelope from wide-angle seismic data. *Geophys. J. R. astr. Soc.*; 1987; v. 89: p. 965-985.
4108. Dworetzky, B. A. and J. J. Morley. Vertical distribution of radiolaria in the eastern equatorial Atlantic: analysis of a multiple series of closely-spaced plankton tows. *Mar. Micropaleontol.*; 1987; v. 12: p. 1-19.
4109. Miller, K. G., A. J. Melillo, G. S. Mountain, J. A. Farre, and C. W. Poag. Middle to late Miocene canyon cutting on the New Jersey continental slope: biostratigraphic and seismic stratigraphic evidence. *Geology*; 1987; v. 15: p. 509-512.

4110. Richards, P. G. and A. Lindh. Toward a new test ban regime. *Issues Sci. Technol.*; 1987; v. III(n. 3): p. 101-108.
4111. Simpson, H. J. and M. Pedini. Acidity impacts on brackish-water aquaculture. *Water Quality Bull.*; 1987; v. 12: p. 145-148, 167-168.
4112. Kent, D. V. and J. D. Miller. Redbeds and thermoviscous magnetization theory. *Geophys. Res. Lett.*; 1987; v. 14(n. 4): p. 327-330.
4113. Anderson, R. F., S. L. Schiff, and R. H. Hesslein. Determining sediment accumulation and mixing rates using  $^{210}\text{Pb}$ ,  $^{137}\text{Cs}$ , and other tracers: problems due to postdepositional mobility or coring artifacts. *Can. J. Fish. Aquat. Sci.*; 1987; v. 44: p. 231-250.
4114. Anderson, R. F., P. H. Santschi, U. P. Nyffeler, and S. L. Schiff. Validating the use of radiotracers as analogs of stable metal behaviour in enclosed aquatic ecosystem experiments. *Can. J. Fish. Aquat. Sci.*; 1987; v. 44: p. 251-259.
4115. Broecker, W. S. and T-H Peng. The role of  $\text{CaCo}_3$  compensation in the glacial to interglacial atmospheric  $\text{CO}_2$  change. *Global Biogeochem. Cycles*; 1987; v. 1(n. 1): p. 15-29.
4116. Simpson, H. J., M. S. Hamza, J. W. White, A. Nada, and M. A. Awad. Evaporative enrichment of deuterium and  $^{18}\text{O}$  in arid zone irrigation. in: *Isotope Techniques in Water Resources Development Proceeding Series*; March 30 - April 3, 1987; Vienna, Austria: International Atomic Energy Agency; 1987: p. 241-256.
4117. Schiff, S. L. and R. F. Anderson. Limnocorral studies of chemical and biological acid neutralization in two freshwater lakes. *Can. J. Fish. Aquat. Sci.*; 1987; v. 44: p. 173-187.
4118. Churchill, J. H., P. E. Biscaye, and F. Aikman III. The character and motion of suspended particulate matter over the shelf edge and upper slope off Cape Cod. *Contin. Shelf Res.*; 1988; v. 8(n. 5-7): p. 789-809.
4119. Smethie, W. M., Jr. Nutrient regeneration and denitrification in low oxygen fjords. *Deep-Sea Res.*; 1987; v. 34(n. 5/6): p. 983-1006.
4120. Sykes, L. R. Underground nuclear explosions: verifying limits on underground testing, yield estimates, and public policy. *Rev. Geophys.*; 1987; v. 25(n. 6): p. 1209-1214.
4121. Manley, T. O. Effects of sub-ice mesoscale features within the Marginal Ice Zone of Fram Strait. *J. Geophys. Res.*; 1987; v. 92(n. C4): p. 3944-3960.



4122. Brueckner, H. K., W. S. Snyder, and M. Boudreau. Diagenetic controls on the structural evolution of siliceous sediments in the Golconda allochthon, Nevada, U.S.A. *J. Struct. Geol.*; 1987; v. 9(n. 4): p. 403-417.

4123. Sack, R. O., D. Walker, and I. S. E. Carmichael. Experimental petrology of alkalic lavas: constraints on cotectics of multiple saturation in natural basic liquids. *Contrib. Mineral. Petrol.*; 1987; v. 96: p. 1-23.

4124. Manley, T. O., R. A. Shuchman, and B. A. Burns. Use of synthetic aperture radar-derived kinematics in mapping mesoscale ocean structure within the interior marginal ice zone. *J. Geophys. Res.*; 1987; v. 92(n. C7): p. 6837-6842.

4125. Halgedahl, S. L. Domain pattern observations in rock magnetism: progress and problems. *Phys. Earth Planet. Inter.*; 1987; v. 46: p. 127-163.

4126. Colin, C. and S. L. Garzoli. In situ wind measurements and the ocean response in the Equatorial Atlantic during the Programme Francais Ocean et Climat dans l'Atlantique equatorial and seasonal response of the Atlantic Ocean experiment. *J. Geophys. Res.*; 1987; v. 92(n. C4): p. 3729-3740.

4127. Armbruster, J. G. and L. Seeber. The 23 April 1984 Martic earthquake and the Lancaster seismic zone in eastern Pennsylvania. *Bull. Seismol. Soc. Am.*; 1987; v. 77(n. 3): p. 877-890.

4128. Berelson, W. M., M. R. Buchholtz, D. E. Hammond, and P. H. Santschi. Radon fluxes measured with the MANOP Bottom Lander. *Deep-Sea Res.*; 1987; v. 34(n. 7): p. 1209-1228.

4129. Garzoli, S. L. Forced oscillations on the equatorial Atlantic basin during the Seasonal Response of the Equatorial Atlantic program (1983-1984). *J. Geophys. Res.*; 1987; v. 92(n. 5): p. 5089-5100.

4130. Karner, G. D., J. K. Weissel, J. F. Dewey, and T. J. Munday. Geotectonic imaging of the north-western European continent and shelf. *Mar. Pet. Geol.*; 1987; v. 4(n. 2): p. 94-102.

4131. Manley, T. O., J. Z. Villanueva, J. C. Gascard, P. F. Jeannin, K. L. Hunkins, and J. Van Leer. Mesoscale oceanographic processes beneath the ice of Fram Strait. *Science*; 1987; v. 236: p. 432-434.

4132. Steckler, M. S., A. B. Watts, and J. A. Thorne. Subsidence and basin modeling at the U. S. Atlantic passive margin. in: R. E. Sheridan and J. A. Grow, Eds. *The Atlantic Continental*

Margin, U. S. *The Geology of North America* ed. Boulder, CO: Geological Society of America; 1988; V. 1-2: p. 399-416.

4133. Anderson, R. F. Redox behavior of uranium in an anoxic marine basin. *Uranium*; 1987; v. 3: p. 145-164.

4134. Herczeg, A. L. A stable carbon isotope study of dissolved inorganic carbon cycling in a softwater lake. *Biogeochemistry*; 1987; v. 4: p. 231-263.

4135. Klein, E. M. and C. H. Langmuir. Global correlations of ocean ridge basalt chemistry with axial depth and crustal thickness. *J. Geophys. Res.*; 1987; v. 92(n. B8): p. 8089-8115.

4136. Freeman-Lynde, R. P. and W.B.F. Ryan. Subsidence history of the Bahama Escarpment and the nature of the crust underlying the Bahamas. *Earth Planet. Sci. Lett.*; 1987; v. 84: p. 457-470.

4137. Peng, T-H, T. Takahashi, W. S. Broecker, and J. Olafsson. Seasonal variability of carbon dioxide, nutrients and oxygen in the northern North Atlantic surface water: observations and a model. *Tellus*; 1987; v. 39B: p. 439-458.

4138. Burckle, L. H. Diatom distribution in the Weddell Gyre region during late winter. *Micropaleontology*; 1987; v. 33(n. 2): p. 177-184.

4139. Nelson, D. M., W. O. Smith, Jr., L. I. Gordon, and B. A. Huber. Spring distributions of density, nutrients, and phytoplankton biomass in the ice edge zone of the Weddell-Scotia Sea. *J. Geophys. Res.*; 1987; v. 92(n. C7): p. 7181-7190.

4140. McLaughlin, S. B., D. J. Downing, T. J. Blasing, E. R. Cook, and H. S. Adams. An analysis of climate and competition as contributors to decline of red spruce in high elevation Appalachian forests of the eastern United States. *Oecologia*; 1987; v. 72: p. 487-501.

4141. Hekinian, R. and D. Walker. Diversity and spatial zonation of volcanic rocks from the East Pacific Rise near 21° N. *Contrib. Mineral. Petrol.*; 1987; v. 96: p. 265-280.

4142. Miller, K. G. and M. E. Katz. Oligocene to Miocene benthic foraminiferal and abyssal circulation changes in the North Atlantic. *Micropaleontology*; 1987; v. 33(n. 2): p. 97-149.

4143. Pokras, E. M. Diatom record of Late Quaternary climatic change in the eastern equatorial Atlantic and tropical Africa. *Paleoceanography*; 1987; v. 2(n. 3): p. 273-286.

4144. Ryan, J. G. and C. H. Langmuir. The systematics of lithium abundances in young volcanic rocks. *Geochim Cosmochim Acta*; 1987; v. 51: p. 1727-1741; ISSN NSF.
4145. Cook, E. R., A. H. Johnson, and T. J. Blasing. Forest decline: modeling the effect of climate in tree rings. *Tree Phys.*; 1987; v. 3: p. 27-40.
4146. Langdon, C. On the causes of interspecific differences in the growth - irradiance relationship for phytoplankton. Part I. a comparative study of the growth - irradiance relationship of three marine phytoplankton species: *Skeletonema costatum*, *Olisthodiscus luteus* and *Gonyaulax tamarensis*. *J. Plankton Res.*; 1987; v, 9(n. 3): p. 459-482.
4147. Opdyke, N. D., K. Huang, G. Xu, W. Y. Zhang, and D. V. Kent. Paleomagnetic results from the Silurian of the Yangtze paraplatform. *Tectonophysics*; 1987; v. 139: p. 123-132.
4148. Peng, T-H and W. S. Broecker. C/P ratios in marine detritus. *Global Biogeochem. Cycles*; 1987; v. 1(n. 2): p. 155-161.
4149. Cheng, Q., K.-H. Park, J. D. Macdougall, A. Zindler, G. W. Lugmair, H. Staudigel, J. Hawkins, and P. Lonsdale. Isotopic evidence for a hotspot origin of the Louisville Seamount Chain. in : B. H. Keating et al., Eds. *Seamounts, Islands and Atolls. Geophysical Monograph 43 ed.* Washington, DC: American Geophysical Union; 1987: p. 283-296.
4150. Marra, J., P. H. Wiebe, J. K. B. Bishop, and J. C. Stepien. Primary production and grazing in the plankton of the Panama Bight. *Bull. Mar. Sci.*; 1987; v. 40(n. 2): p. 255-270.
4151. Ruddiman, W. F. Northern oceans. in: W. F. Ruddiman and H. E. Wright, Jr., Eds. "The Geology of North America, V. K-3, North America and Adjacent Oceans During the Last Deglaciation". Geological Society of America: Boulder, CO; 1987: p. 137-154.
4152. Fornari, D. J., R. Batiza, and J. F. Allan. Irregularly shaped seamounts near the East Pacific Rise: implications for seamount origin and rise axis processes. in : B. H. Keating, et al., Eds. *Seamounts, Islands and Atolls. Geophysical Monograph 43 ed.* Washington, DC: American Geophysical Union; 1987: p. 35-47.
4153. Fornari, D. J., R. Batiza, and M. A. Luckman. Seamount abundances and distribution near the East Pacific Rise 0° -24° N based on Seabeam data. in : B. H., Keating, et al., Eds. *Seamounts, Islands and Atolls. Geophysical Monograph 43 ed.* Washington, DC: American Geophysical Union ; 1987: p. 13-21.

4154. Rossignol-Strick, M. Rainy periods and bottom water stagnation initiating brine accumulation and metal concentrations: 1. The Late Quaternary. *Paleoceanography*; 1987; v. 2(n. 3): p. 333-360.
4155. Raymond, C. A. and J. L. LaBrecque. Magnetization of the oceanic crust: thermoremanent magnetization or chemical remanent magnetization? *J. Geophys. Res.*; 1987; v. 92(n. B8): p. 8077-8088.
4156. Sancetta, C. Cycles, steps and CO<sub>2</sub>: *Paleoceanography in the United States from 1983-1986. Rev. Geophys.*; 1987; v. 25(n. 6): p. 1363-1375.
4157. Burckle, L. H. and N. Abrams. Regional late Pliocene-early Pleistocene hiatuses of the Southern Ocean— diatom evidence. *Mar. Geol.*; 1987; v. 77: p. 207-218.
4158. Coffin, M. F. and P. D. Rabinowitz. Reconstruction of Madagascar and Africa: evidence from the Davie Fracture Zone and Western Somali Basin. *J. Geophys. Res.*; 1987; v. 92(n. B9): p. 9385-9406.
4159. Mortlock, R. A. and P. N. Froelich. Continental weathering of germanium: Ge/Si in the global river discharge. *Geochim Cosmochim Acta*; 1987; v. 51: p. 2075-2082.
4160. Diebold, J. B. Three-dimensional travelttime equation for dipping layers. *Geophysics*; 1987; v. 52(n. 11): p. 1492-1500.
4161. Sancetta, C. and S. E. Calvert. The annual cycle of sedimentation in Saanich Inlet, British Columbia: implications for the interpretation of diatom fossil assemblages. *Deep-Sea Res.*; 1988; v. 35(n. 1): p. 71-90.
4162. Kastens, K. A. . A compendium of causes and effects of processes at transform faults and fracture zones. *Rev. Geophys.*; 1987; v. 25(n. 7): p. 1554-1562.
4163. Anderson, O. R. Fine structure of a silica-biomineralizing testate amoeba, *Netzelia tuberculata* . *J. Protozool.*; 1987; v. 34(n. 3): p. 302-309.
4164. ten Brink, U. S. and T. M. Brocher. Multichannel seismic evidence for a subcrustal intrusive complex under Oahu and a model for Hawaiian volcanism. *J. Geophys. Res.*; 1987; v. 92(n. B13): p. 13,687-13,707.

4165. Hart, M. B. and G. S. Mountain. Ichthyolith evidence for the age of reflector Au, Deep Sea Drilling Project Site 603. in : van Hinte, J. E., S. W. Wise, Jr., et al', Eds. Deep Sea Drilling Project. Washington, DC: U. S. Govt. Printing Office ; 1987; XCIII: p. 739-750.

4166. Mountain, G. S. Underway geophysics during Leg 95. in : Paog, C. W., A. B. Watts, et al., Eds. Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Govt. Printing Office; 1987; V. XCV: p. 601-631.

4167. Tarafa, M. E., J. K. Whelan, and G. S. Mountain. Sediment slumps in the middle and lower Eocene of Deep Sea Drilling Project Holes 605 and 613: chemical detection by pyrolysis techniques. in : C. W. Poag, A. B. Watts, et al., Eds. Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Govt. Printing Office; 1987; V. XCV: p. 661-669.

4168. Poag, C. W. and G. S. Mountain. Late Cretaceous and Cenozoic evolution of the New Jersey Continental Slope and Upper Rise: an integration of borehole data with seismic reflection profiles. in :C. W. Poag, A. B. Watts, et al., Eds. Initial Reports of the Deep Sea Drilling Project. Washington, DC: U. S. Govt. Printing Office; 1987; V. XCV: p. 673-724.

4169. Mountain, G. Cenozoic margin construction and destruction offshore New Jersey. Cushman Foundation for Foraminiferal Res.; 1987; Special Pub. 24: p. 57-83.

4170. Mutter, J.C. and C.M. Zehnder. Deep crustal structure and magmatic processes: the inception of seafloor spreading in the Norwegian--Greenland Sea. in: A.C. Morton, and L.M. Parson, Eds. Early Tertiary Volcanism and the Opening of the NE Atlantic. Geol. Soc. Spec. Pub. No. 39 ed. Oxford: Blackwell Pub.; 1988: p. 35-48.

4171. Bopp, R.F., B.L. Deck, H.J. Simpson, and S.D. Warren. Chlorinated hydrocarbons and water quality issues in the New York City municipal water supply. in: R.L. Jolley, et al, Eds. "Water Chlorination: Chemistry, Environmental Impact and Health Effects", V. 6,. Proceedings of the Sixth Conference on Water Chlorination, Environmental Impact and Health Effects, Oak Ridge, TN, May 3-8, 1987 ed. Chelsea, MI: Lewis Publishers; 1990: p. 61-74.

4172. Evans, K. A laboratory study of two straddle-packer systems under simulated hydrofrac stress-measurement conditions. J. Energy Resour. Technol.; 1987; v. 109(n. 4): p. 180-190; ISSN DOE.

4173. Kappel, E. S. and W. R. Normark. Morphometric variability within the axial zone of the southern Juan de Fuca Ridge: interpretation from Sea MARC II, Sea MARC I, and deep-sea photography. J. Geophys. Res.; 1987; v. 92(n. b11): p. 11,291-11,302.

4174. Weissen, J. K. Tectonics of the Pacific Ocean basin using gravity anomalies recovered from Seasat altimeter data. in : Proc. Pacific Rim congress ; 1987; Austr. Inst. Min. & Metal.; 1987: p. 705-708.

4175. Lorenzo, J.M. and J.C. Mutter. Seismic stratigraphy and tectonic evolution of the Falkland/Malvinas Plateau. *Revista Brasileira de Geociencias*; 1988; v. 18(n. 2): p. 191-200.

4176. Miller, K. G. and D. V. Kent. Testing Cenozoic eustatic changes: the critical role of stratigraphic resolution. in : Cushman Foundation for Foraminiferal Research; 1987; Spec. Pub. 24: p. 51-56.

4177. Houghton, R. W. and C. Colin. Wind-driven meridional eddy heat flux in the Gulf of Guinea. *J. Geophys. Res.*; 1987; v. 92(n. c10): p. 10,777-10,786.

4178. McNutt, S. R. and R. J. Beavan. Eruptions of Pavolf Volcano and their possible modulation by ocean load and tectonic stresses. *J. Geophys. Res.*; 1987; v. 92(n. B11): p. 11,509-11,523.

4179. Mithal, R. and E. E. Vera. Comparison of plane-wave decomposition and slant stacking of point-source seismic data. *Geophysics*; 1987; v. 52(n. 12): p. 1631-1638.

4180. Grunow, A. M., D. V. Kent, and I. W. D. Dalziel. Mesozoic evolution of West Antarctica and the Weddell Sea Basin: new paleomagnetic constraints. *Earth Planet. Sci. Lett.*; 1987; v. 86: p. 16-26.

4181. Rossignol-Strick, M. Rainy periods and bottom water stagnation initiating brine accumulation and metal concentrations: 2. Precambrian gold—uranium ore beds and banded iron formations. *Paleoceanography*; 1987; v. 2(n. 4): p. 379-394.

4182. Simpson, D.W. and D.H. Johnson. Distributed intelligence in regional networks. in : J.J. Litehiser, Ed. "Observatory Seismology," Berkeley Centennial Volume., Berkeley, CA: University of California Press; 1989: p. 99-108.

4183. Anderson, O.R., M.L. Moss, and R. Skalak. The cytoskeletal and biomineralized supportive structures in radiolaria. in : J. Bereiter-Hahn, O.R. Anderson, and W.-E. Reif, Eds. *Cytomechanics*. Germany: Springer-Verlag; 1987: p. 200-211.

4184. Steucek, G. L., R. R. Archer, and O. R. Anderson. Use of finite element methods in cytomechanics: study of the mechanical stability of the skeletal basal plate of *Callimitra*, a biomineralizing protozoan. in : J. Bereiter-Hahn, O. R. Anderson, and W.-E. Reif, Eds. *Cytomechanics*. Germany: Springer-Verlag; 1987: p. 47-53.

4185. O'Connell, S., W. B. F. Ryan, and W. R. Normark. Modes of development of slope canyons and their relation to channel and levee features on the Ebro sediment apron, off-shore northeastern Spain. *Mar. Pet. Geol.*; 1987; v. 4: p. 308-320.

4186. Bonatti, E. and M. Seyler. Crustal underplating and evolution in the Red Sea rift: uplifted gabbro gneiss crustal complexes on Zabargad and Brothers Islands. *J. Geophys. Res.*; 1987; v. 92(n. B12): p. 12,803-12,821.

4187. Cane, M. A. and S.E. Zebiak. Prediction of El Niño events using a physical model. In: H. Cattle, Ed. "Atmospheric and Oceanic Variability". England: Royal Meteorological Society; 1987: p. 153-182.

4188. Kukla, G. J. and D. A. Robinson. Variability of summer cloudiness in the Arctic Basin. *Meteorol. Atmos. Phys.*; 1988; v. 39: p. 42-50.

4189. Olsen, P. E., N. H. Shubin, and M. H. Anders. New Early Jurassic tetrapod assemblages constrain Triassic-Jurassic tetrapod extinction event. *Science*; 1987; v. 237: p. 1025-1029.

4190. Jacoby, G. C. Potentials and limits for dating prehistoric earthquakes using tree-ring analysis. in : *Proceedings of the Conference on Directions in Paleoseismology XXXIX: USGS Open-File Report 87-673*; 1987: p. 18-22.

4191. Sancetta, C. Three species of *Coscinodiscus* Ehrenberg from North Pacific sediments examined in the light and scanning electron microscopes. *Micropaleontology*; 1987; v. 33(n. 3): p. 230-241.

4192. Zebiak, S. E. and M. A. Cane. A model El Niño - Southern Oscillation. *Mon. Weather Rev.*; 1987; v. 115(n. 10): p. 2262-2278

4193. Hayes, D. E. Age-depth relationships and depth anomalies in the Southeast Indian Ocean and South Atlantic Ocean. *J. Geophys. Res.*; 1988; v. 93(n. B4): p. 2937-2954; ISSN ONR, Guggenheim.

4194. Oppo, D. W. and R. G. Fairbanks . Variability in the deep and intermediate water circulation of the Atlantic Ocean during the past 25,000 years: northern hemisphere modulation of the Southern Ocean. *Earth Planet. Sci. Lett.*; 1987; v. 86: p. 1-15.

4195. Ruddiman, W. F. Synthesis; The ocean ice/sheet record. in : W. F. Ruddiman and H. E. Wright, Jr., Eds. "The Geology of North America, V. K-3, North America and Adjacent Oceans

During the Last Deglaciation". Boulder, CO: The Geological Society of America; 1987: p. 463-488.

4196. Balsam, W. L. and F. W. McCoy, Jr. Atlantic sediments: glacial/interglacial comparisons. *Paleoceanography*; 1987; v. 2(n. 5): p. 531-542.

4197. Bishop, J. K. and M. Q. Fleisher. Particulate manganese dynamics in Gulf Stream warm-core rings and surrounding waters of the N. W. Atlantic. *Geochim. Cosmochim. Acta*; 1987; v. 51: p. 2807-2825.

4198. Gedzelman, S. D. Deuterium in water vapor above the atmospheric boundary layer. *Tellus*; 1988; v. 40B: p. 134-147; ISSN NSF.

4199. Walker, D., C. B. Agee, and Y. Zhang. Fusion curve slope and crystal/liquid buoyancy. *J. Geophys. Res.*; 1988; v. 93(n. B1): p. 313-323.

4200. D'Arrigo, R., G. C. Jacoby, and I. Y. Fung. Boreal forests and atmosphere-biosphere exchange of carbon dioxide. *Nature*; 1987; v. 329(n. 6137): p. 321-323.

4201. Bond, G. C., M. A. Kominz, and J. P. Grotzinger. Cambro-Ordovician eustasy: evidence from geophysical modelling of subsidence in Cordilleran and Appalachian passive margins. in : K.L. Kleinspehn and C. Paola, Eds. *New Perspectives in Basin Analysis*: Springer-Verlag, New York; 1988: p. 129-160.

4202. Wanninkhof, R., J. R. Ledwell, W. S. Broecker, and M. Hamilton. Gas exchange on Mono Lake and Crowley Lake, California . *J. Geophys. Res.* ; 1987; v. 92(n. C13): p. 14,567-14,580.

4203. Marra, J. and K. R. Heinemann. Primary production in the North Pacific Central Gyre: some new measurements based on <sup>14</sup>C. *Deep-Sea Res.*; 1987; v. 34(n. 11): p. 1821-1829.

4204. LeHuray, A. P. . U-Pb and Th-Pb whole-rock isochrons from metavolcanic rocks of the Carolina slate belt. *Geol. Soc. Am. Bull.*; 1987; v. 99: p. 354-361.

4205. LeHuray, A. P., J. B. D. Caulfield, D. M. Rye, and P. R. Dixon. Basement controls on sediment-hosted Zn-Pb deposits: a Pb isotope study of carboniferous mineralization in central Ireland. *Econ. Geol.*; 1987; v. 82: p. 1695-1709.

4206. Bender, M., K. Grande, K. Johnson, J. Marra, P.J. LeB. Williams, J. Sieburth, M. Pilson, C. Langdon, G. Hitchcock, J. Orchardo, C. Hunt, and P. Donaghay. A comparison of four



methods for determining planktonic community production. *Limnol. Oceanogr.*; 1987; v. 32(n. 5): p. 1085-1098.

4207. Ammerman, J. W. and F. Azam. Characteristics of cyclic AMP transport by marine bacteria. *Appl. Environ. Microbiol.*; 1987; v. 53(n. 12): p. 2963-2966.

4208. Opdyke, B. N., G. Gust, and J. R. Ledwell. Mass transfer from smooth alabaster surfaces in turbulent flows. *Geophys. Res. Lett.*; 1987; v. 14(n. 11): p. 1131-1134.

4209. von der Borch, C. C., N. Christie-Blick, and A. E. Grady. Depositional sequence analysis applied to Late Proterozoic Wilpena Group, Adelaide Geosyncline, South Australia. *Australian J. Earth Sci.*; 1988; v. 35: p. 59-71.

4210. ten Brink, U. S. and T. M. Brocher. Multichannel seismic evidence for variations in crustal thickness across the Molokai Fracture Zone in the mid-Pacific. *J. Geophys. Res.*; 1988; v. 93(n. B2): p. 1119-1130.

4211. Stoll, R. D., G. M. Bryan, R. Flood, D. Chayes, and P. Manley. Shallow seismic experiments using shear waves. *J. Acoust. Soc. Am.*; 1988; v. 83(n. 1): p. 93-102.

4212. Lerner-Lam, A. L. and T. H. Jordan. How thick are the continents? *J. Geophys. Res.*; 1987; v. 92(n. B13): p. 14,007-14,026.

4213. Decima, A., J. A. McKenzie, and B. C. Schreiber. The origin of "evaporative" limestones: an example from the Messinian of Sicily (Italy). *J. Sediment. Petrol.*; 1988; v. 58(n. 2): p. 256-272.

4214. Anderson, O. R. Some enzyme activities in the testate amoeba *Netzelia tuberculata*. *J. Protozool.*; 1988; v. 35(n. 1): p. 19-20; ISSN NSF.

4215. Miller, J. D. and D. V. Kent. Paleomagnetism of the Silurian-Devonian Andreas redbeds: evidence for an Early Devonian supercontinent? *Geology*; 1988; v. 16: p. 195-198.

4216. Zindler, A. and E. Jagoutz. Mantle cryptology. *Geochim. Cosmochim. Acta*; 1988; v. 52(n. 2): p. 319-333.

4217. Goldberg, D. and W. T. Gant. Shear-wave processing of sonic log waveforms in a limestone reservoir. *Geophysics*; 1988; v. 53(n. 5): p. 668-676.

4218. Devlin, W. J. and G. C. Bond. The initiation of the early Paleozoic Cordilleran miogeocline: evidence from the uppermost Proterozoic - Lower Cambrian Hamill Group of southeastern British Columbia. *Can. J. Earth Sci.*; 1988; v. 25: p. 1-19.

4219. Hurst, K. and J. Beavan. Improved sea level monitors for measuring vertical crustal deformation in the Shumagin seismic gap, Alaska. *Geophys. Res. Lett.*; 1987; v. 14(n. 12); ISSN p. 1234-1237.

4220. Christie-Blick, N., J. P. Grotzinger, and C. C. von der Borch. Sequence stratigraphy in Proterozoic successions. *Geology*; 1988; v. 16: p. 100-104; ISSN *Pet. Res. Fund, Geol. Surv. Canada, NSF*.

4221. Wessel, P. and A. B. Watts. On the accuracy of marine gravity measurements. *J. Geophys. Res.*; 1988; v. 93(n. B1): p. 393-413.

4222. Miller, K. G., T. R. Janecek, M. E. Katz, and D. J. Keil. Abyssal circulation and benthic foraminiferal changes near the Paleocene/Eocene boundary. *Paleoceanography*; 1987; v. 2(n. 6): p. 741-761.

4223. Fornari, D. J., M. R. Perfit, J. F. Allan, and R. Batiza. Small-scale heterogeneities in depleted mantle sources: near-ridge seamount lava geochemistry and implications for mid-ocean-ridge magmatic processes. *Nature*; 1988; v. 331(n. 6156): p. 511-513.

4224. Evans, K. Assessing regional potential for induced seismicity from crustal stress measurements: an example from northern Ohio. in : K. H. Jacob, Ed. *Proc. from the Symposium on Seismic Hazards, Ground Motions, Soil-Liquefaction and Engineering Practice in Eastern North America*; October 1987; Sterling Forest Conference Center, Tuxedo, NY. Buffalo, NY: National Center for Earthquake Engineering Research; 1987: p. 99-126.

4225. Jacoby, G. C., I. S. Ivanciu, and L. D. Ulan. A 263-year record of summer temperature for northern Quebec reconstructed from tree-ring data and evidence of a major climatic shift in the early 1800's. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1988; v. 64: p. 69-78.

4226. Witte, W. K. and D. V. Kent. Revised magnetostratigraphies confirm low sedimentation rates in Arctic Ocean cores. *Quat. Res.*; 1988; v. 29: p. 43-53.

4227. Scholz, C. H. Mechanisms of seismic quiescences. *Pageoph*; 1988; v. 126(n. 2-4): p. 701-718.

4228. Grousset, F. E., P. E. Biscaye, A. Zindler, J. Prospero, and R. Chester. Neodymium isotopes as tracers in marine sediments and aerosols: North Atlantic. *Earth Planet. Sci. Lett.*; 1988; v. 87: p. 367-378.

4229. Ruddiman, W. F. and M. E. Raymo. Northern hemisphere climate regimes during the past 3 Ma: possible tectonic connections. *Phil. Trans. R. Soc. London B*; 1988; v. 318: p. 411-430.

4230. Burckle, L. H., R. I. Gayley, M. Ram, and J.-R. Petit. Diatoms in Antarctic ice cores: some implications for the glacial history of Antarctica. *Geology*; 1988; v. 16: p. 326-329.

4231. Smethie, W. M. Jr., D. W. Chipman, J. H. Swift, and K. P. Koltermann. Chlorofluoromethanes in the Arctic Mediterranean seas: evidence for formation of bottom water in the Eurasian Basin and deep water exchange through Fram Strait. *Deep Sea Res.*; 1988; v. 35(n. 3): p. 347-369.

4232. Jacobs, S.S. Marine controls on modern sedimentation on the Antarctic continental shelf. *Mar. Geol.*; 1989; v. 85: p. 121-153.

4233. Herczeg, A. L., H. J. Simpson, R. F. Anderson, R. M. Trier, G. G. Mathieu, and B. L. Deck. Uranium and radium mobility in groundwaters and brines within the Delaware Basin, southeastern New Mexico, U.S.A. *Chem. Geol.; Isotope Geoscience Section*; 1988; v. 72(n. 2): p. 181-196.

4234. Herczeg, A. L. and D. M. Imboden. Tritium hydrologic studies in four closed-basin lakes in the Great Basin, U.S.A. *Limnol. Oceanogr.*; 1988; v. 33(n. 2): p. 157-173.

4235. LeHuray, A. P., S. E. Church, R. A. Koski, and R. M. Bouse. Pb isotopes in sulfides from mid-ocean ridge hydrothermal sites. *Geology*; 1988; v. 16: p. 362-365.

4236. Manley, T. O., W. B. Owens, and J.-C. Gascard. Arctic SOFAR: accomplishments, current developmental programs and the future. in : *Instrumentation and Measurements in the Polar Regions*; January 27 and 28, 1988; Monterey Bay Aquarium. Berkeley, CA: Marine Technology Society; 1988: p. 1-8.

4237. Ryan, J. G. and C. H. Langmuir. Beryllium systematics in young volcanic rocks: implications for  $^{10}\text{Be}$ . *Geochim Cosmochim Acta*; 1988; v. 52: p. 237-244.

4238. Cook, E. R. The decomposition of tree-ring series for environmental studies. *Tree Ring Bull.*; 1987; v. 47: p. 37-59.

4239. Assumpcao, M. and G. Suarez. Source mechanisms of moderate-size earthquakes and stress orientation in mid-plate South America. *Geophys. J.*; 1988; v. 92: p. 253-267.

4240. Seager, R., S. E. Zebiak, and M. A. Cane. A model of the tropical Pacific sea surface temperature climatology. *J. Geophys. Res.*; 1988; v. 93(n. C2): p. 1265-1280.

4241. Mutter, J. C., W. R. Buck, and C. M. Zehnder. Convective partial melting 1. A model for the formation of thick basaltic sequences during the initiation of spreading. *J. Geophys. Res.*; 1988; v. 93(n. B2): p. 1031-1048.

4242. Anderson, O. R., J. D. Hays, and M. Gross. An ontogenetic analysis of changes in morphology during phylogeny of some *Lamprocyrtis* spp. from deep sea sediments. *Micropaleontology*; 1988; v. 34(n. 1): p. 41-51.

4243. Robinson, D. A. and G. Kukla. Comments on "Comparison of Northern Hemisphere Snow Cover Datasets". *J. Clim.* ; 1988; v. 1(n. 4): p.435-440.

4244. Das, S. Relation between average slip and average stress drop for rectangular faults with multiple asperities. *Bull. Seismol. Soc. Am.*; 1988; v. 78(n. 2): p. 924-930.

4245. Marra, J., L. W. Haas, and K. R. Heinemann. Time course of C assimilation and microbial food web. *J. Exp. Mar. Biol. Ecol.*; 1988; v. 115: p. 263-280.

4246. Broecker, W. S. and T-H Peng. The oceanic salt pump: does it contribute to the glacial-interglacial difference in atmospheric CO<sub>2</sub> content? *Global Biogeochem. Cycles*; 1987; v. 1(n. 3): p. 251-259.

4247. Boyd, T. M. and A. Lerner-Lam. Spatial distribution of turn-of-the-century seismicity along the Alaska-Aleutian Arc. *Bull. Seismol. Soc. Am.*; 1988; v.78(n. 2): p.636-650.

4248. Sykes, L. R. Some notes on comprehensive test ban verification. *Mod. Geol.*; 1988; v. 13: p. 13-20.

4249. Ou, H-W and L. R. M. Maas. Tides near a shelf—slope front. *Contin. Shelf Res.*; 1988; v. 8(n. 5-7): p. 729-736.

4250. Ou, H-W, F. Aikman,III, and R. W. Houghton. Complex empirical orthogonal function analysis of thermistor chain data near a shelf-slope front. *Contin. Shelf Res.*; 1988; v. 8,(n. 5-7): p. 687-710.

4251. Houghton, R. W., F. Aikman III, and H-W. Ou. Shelf-slope frontal structure and cross-shelf exchange at the New England shelf-break. *Contin. Shelf. Res.*; 1988; v. 8(n. 5-7): p. 687-710.

4252. Aikman, F. III, H-W Ou, and R. W. Houghton. Current variability across the New England continental shelf-break and slope. *Contin. Shelf Res.*; 1988; v. 8(n. 5-7): p. 625-651.

4253. Buck, W. R., F. Martinez, M. S. Steckler, and J. R. Cochran. Thermal consequences of lithospheric extension: pure and simple. *Tectonics*; 1988; v. 7(n. 2): p. 213-234.

4254. Fornari, D. J., M. R. Perfit, J. F. Allan, R. Batiza, R. Haymon, A. Barone, W. B. F. Ryan, T. Smith, T. Simkin, and M. Luckman. Geochemical and structural studies of the Lamont seamounts: seamounts as indicators of mantle processes. *Earth Planet. Sci. Lett.*; 1988; v. 89: p. 63-83.

4255. Watts, A. B., J. K. Weissel, R. A. Duncan, and R. L. Larson. Origin of the Louisville Ridge and its relationship to the Eltanin Fracture Zone system. *J. Geophys. Res.*; 1988; v. 93(n. B4): p. 3051-3077.

4256. Broecker, W. S., M. Andree, W. Wolfli, H. Oeschger, G. Bonani, J. Kennett, and D. Peteet. The chronology of the last deglaciation: implications to the cause of the Younger Dryas event. *Paleoceanography*; 1988; v. 3(n. 1): p. 1-19.

4257. Agee, C. B. and D. Walker. Static compression and olivine flotation in ultrabasic silicate liquid. *J. Geophys. Res.*; 1988; v. 93(n. B4): p. 3437-3449.

4258. Scholz, C. H. The brittle-plastic transition and the depth of seismic faulting. *J. Geologische Rundschau*; 1988; v. 77/1: p. 319-328.

4259. Grousset, F. E., J. L. Joron, P. E. Biscaye, C. Latouche, M. Treuil, N. Maillet, J. C. Faugeres, E. Gonthier. Mediterranean outflow through the Strait of Gibraltar since 18,000 years B.P.: mineralogical and geochemical arguments. *Geo. Mar. Lett.*; 1988; v. 8: p. 25-34.

4260. Bonatti, E. and C. G. A. Harrison. Eruption styles of basalt in oceanic spreading ridges and seamounts: effect of magma temperature and viscosity. *J. Geophys. Res.*; 1988; v. 93(n. B4): p. 2967-2980.

4261. Ledwell, J. R. and A. J. Watson. The use of deliberately injected tracers for the study of diapycnal mixing in the ocean. in : J.C.J. Nihoul and B.M. Jamart, Eds. "Small-Scale Turbulence and Mixing in the Ocean," *Proceedings of the 19th International Liege Colloquium on Ocean Hydrodynamics*. Amsterdam: Elsevier; 1988: p. 11-20.

4262. Boyd, T. M., J. Taber, A. L. Lerner-Lam, and J. Beavan. Seismic rupture and arc segmentation within the Shumagin Islands Seismic Gap, Alaska. *Geophys. Res. Lett.*; 1988; v. 15(n. 3): p. 201-204.
4263. Anderson, O.R. Fine structure of silica deposition and the origin of shell components in a testate amoeba *Netzelia tuberculata*. *J. Protozool.*; 1988; v. 35(n. 2): p. 204-211.
4264. Cox, S.J.D. and C.H. Scholz. On the formation and growth of faults: an experimental study. *J. Struct. Geol.*; 1988; v. 10(n. 4): p. 413-430.
4265. Cox, S.J.D. and C.H. Scholz. Rupture initiation in shear fracture of rocks: an experimental study. *J. Geophys. Res.*; 1988; v. 93(n. B4): p. 3307-3320.
4266. Coffin, M.F. and P.D. Rabinowitz. Evolution of the conjugate East African--Madagascan margins and the western Somali Basin. Boulder, CO: Geological Society of America; 1988; Special Paper 226: p. 1-78.
4267. Anderson, R.F., R.F. Bopp, K.O. Buesseler, and P.E. Biscaye. Mixing of particles and organic constituents in sediments from the continental shelf and slope off Cape Cod: SEEP—I results. *Contin. Shelf Res.*; 1988; v. 8(n. 5-7): p. 925-946.
4268. Biscaye, P.E., R.F. Anderson, and B.L. Deck. Fluxes of particles and constituents to the eastern United States continental slope and rise: SEEP—I. *Contin. Shelf Res.*; 1988; v. 8(n. 5-7): p. 855-904.
4269. Barone, A.M. and W.B.F. Ryan. Along-axis variations within the plate boundary zone of the southern segment of the Endeavour Ridge. *J. Geophys. Res.*; 1988; v. 93(n. B7): p. 7856-7868.
4270. Miller, J. D. and D. V. Kent. Regional trends in the timing of Alleghenian remagnetization in the Appalachians. *Geology*; 1988; v. 16: p. 588-591.
4271. Christie-Blick, N., G.S. Mountain, and K.G. Miller. Seismic stratigraphic record of sea-level change. in : *Studies in Geophysics: Sea-Level Change*, National Research Council: National Academy Press, Wasington, DC; 1990: p. 116-140.
4272. Bishop, J. K. B. The barite-opal-organic carbon association in oceanic particulate matter. *Nature*; 1988; v. 332(n. 6162): p. 341-343.

4273. Evans, K. F., C. H. Scholz, and T. Engelder. An analysis of horizontal fracture initiation during hydrofrac stress measurements in granite at North Conway, New Hampshire. *Geophys. J.*; 1988; v. 93: p. 251-264.

4274. Cormier, V. F. and P. G. Richards. Spectral synthesis of body waves in earth models specified by vertically varying layers. in : D. J. Doornbos, Ed. "Seismological Algorithms". London: Academic Press ; 1988: p. 3-45.

4275. Ou, H-W. A time-dependent model of a coastal polynya. *J. Phys. Oceanogr.*; 1988; v. 18(n. 4): p. 584-590.

4276. Broecker, W. S., R. Wanninkhof, G. Mathieu, T-H Peng, S. Stine, S. Robinson, A. Herczeg, and M. Stuiver. The radiocarbon budget for Mono Lake: an unsolved mystery. *Earth Planet. Sci. Lett.*; 1988; v. 88: p. 16-26.

4277. Raymo, M. E., W. F. Ruddiman, and P. N. Froelich. Influence of late Cenozoic mountain building on ocean geochemical cycles. *Geology*; 1988; v. 16: p. 649-653.

4278. Walker, D. and C. B. Agee. Ureilite compaction. *Meteoritics*; 1988; v. 23: p. 81-91.

4279. Iturriaga, R. and J. Marra. Temporal and spatial variability of chroococcoid cyanobacteria *Synechococcus* spp. specific growth rates and their contribution to primary production in the Sargasso Sea. *Mar. Ecol. Prog. Ser.*; 1988; v. 44: p. 175-181.

4280. Stein, C. A., M. A. Hobart, and D. H. Abbott. Has the Wharton Basin's heat flow been perturbed by the formation of a diffuse plate boundary in the Indian Ocean? *Geophys. Res. Lett.*; 1988; v. 15(n. 5): p. 455-458.

4281. Hunkins, K. Mean and tidal currents in Baltimore Canyon. *J. Geophys. Res.*; 1988; v. 93(n. C6): p. 6917-6929.

4282. Vera, E. E. and J. C. Mutter. Crustal structure in the ROSE area of the East Pacific Rise: one-dimensional travel time inversion of sonobuoys and expanded spread profiles. *J. Geophys. Res.*; 1988; v. 93(n. B6): p. 6635-6648.

4283. Richards, P. G. 4 Stages towards a new test ban. in : "Verification and Compliance: A Problem-Solving Approach". London: MacMillan Press; 1988: p. 73-79.

4284. Flood, R. D. A lee wave model for deep-sea mud wave activity. *Deep-Sea Res.*; 1988; v. 35(n. 6): p. 973-983.

4285. Flood, R. D. and A. N. Shor. Mud waves in the Argentine Basin and their relationship to regional bottom circulation patterns. *Deep-Sea Res.*; 1988; v. 35(n. 6): p. 943-971.

4286. Froelich, P. N., M. A. Arthur, W. C. Burnett, M. Deakin, V. Hensley, R. Jahnke, L. Kaul, K.-H. Kim, K. Roe, A. Soutar, and C. Vathakanon. Early diagenesis of organic matter in Peru continental margin sediments: phosphorite precipitation. in : W. C. Burnett and P. N. Froelich, Eds. *The Origin of Marine Phosphorite. The Results of the R. V. Robert D. Conrad Cruise 23-06 to the Peru Shelf. Mar. Geol. ed.*; 1988; v. 80: p. 309-343.

4287. Froelich, P. N. Kinetic control of dissolved phosphate in natural rivers and estuaries: a primer on the phosphate buffer mechanism. *Limnol. Oceanogr.* ; 1988; v. 33(n. 4 (part 2)): p. 649-668.

4288. Miller, K. G., M. D. Feigenson, D. V. Kent, and R. K. Olsson. Upper Eocene to Oligocene isotope ( $^{87}\text{Sr}/^{86}\text{Sr}$ ,  $\delta^{18}\text{O}$ ,  $\delta^{13}\text{C}$ ) standard section, Deep Sea Drilling Project Site 522. *Paleoceanography*; 1988; v. 3(n. 2): p. 223-233.

4289. Bryan, G. M. and R. D. Stoll. The dynamic shear modulus of marine sediments. *J. Acoust. Soc. Am.*; 1988; v. 83(n. 6): p. 2159-2164.

4290. Martinez, F. and J. R. Cochran. Structure and tectonics of the northern Red Sea: catching a continental margin between rifting and drifting. *Tectonophysics*; 1988; v. 150: p. 1-32.

4291. Watts, A. B. Gravity anomalies, crustal structure and flexure of the lithosphere at the Baltimore Canyon Trough. *Earth Planet. Sci. Lett.*; 1988; v. 89: P. 221-238.

4292. Conte, M. H. and J. K. B. Bishop. Nanogram quantification of nonpolar lipid classes in environmental samples by high performance thin layer chromatography. *Lipids*; 1988; v. 23(n. 5): p. 493-500.

4293. Leshner, C. E. and D. Walker. Cumulate maturation and melt migration in a temperature gradient. *J. Geophys. Res.*; 1988; v. 93(n. B9): p. 10,295-10,311.

4294. Charles, C. D. and J. J. Morley. The paleoceanographic significance of the radiolarian *Didymocyrtis tetrathalamus* in eastern Cape Basin sediments. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1988; v. 66: p. 113-126.

4295. Kent, D. V. Further paleomagnetic evidence for oroclinal rotation in the central folded Appalachians from the Bloomsburg and the Mauch Chunk Formations. *Tectonics*; 1988; v. 7(n. 4): p. 749-759.



4296. Brueckner, H. K., A. Zindler, M. Seyler, and E. Bonatti. Zabargad and isotopic evolution of the sub-Red Sea mantle and crust. *Tectonophysics*; 1988; v. 150: p. 163-176.
4297. Walker, D., S. Jurewicz, and E. B. Watson. Adcumulus dunite growth in a laboratory thermal gradient. *Contrib. Mineral. Petrol.*; 1988; v. 99: p. 306-319.
4298. Bell, R. E., G. D. Karner, and M. S. Steckler. Early Mesozoic rift basins of eastern North America and their gravity anomalies: the role of detachments during extension. *Tectonics*; 1988; v. 7(n. 3): p. 447-462.
4299. Keffer, T., D. G. Martinson, and B. H. Corliss. The position of the Gulf Stream during Quaternary glaciations. *Science*; 1988; v. 241: p. 440-442.
4300. Haxby, W. F. and E. M. Parmentier. Thermal contraction and the state of stress in the oceanic lithosphere. *J. Geophys. Res.*; 1988; v. 93(n. B6): p. 6419-6429.
4301. Broecker, W. S., M. Andree, M. Klas, G. Bonani, W. Wolfli, and H. Oeschger. New evidence from the South China Sea for an abrupt termination of the last glacial period. *Nature*; 1988; v. 333(n. 6169): p. 156-158.
4302. Byrne, D. E., D. M. Davis, and L. R. Sykes. Loci and maximum size of thrust earthquakes and the mechanics of the shallow region of subduction zones. *Tectonics*; 1988; v. 7(n. 4): p. 833-857.
4303. Sorhannus, U., E.J. Fenster, L.H. Burckle, and A. Hoffman. Cladogenetic and anagenetic changes in the morphology of *Rhizosolenia praebergonii* Mukhina. *Historical Biol.*; 1988; v. 1: p. 185-205.
4304. Marone, C. and C. H. Scholz. The depth of seismic faulting and the upper transition from stable to unstable slip regimes. *Geophys. Res. Lett.*; 1988; v. 15(n. 6): p. 621-624.
4305. Broecker, W. S., M. Andree, G. Bonani, W. Wilfli, H. Oeschger, and M. Klas. Can the Greenland climatic jumps be identified in records from ocean and land? *Quat. Res.*; 1988; v. 30: p. 1-6.
4306. Kastens, K. A., J. Mascle, C. Auroux, E. Bonatti, C. Broglia, J. Channell, P. Curzi, K-C Emeis, G. Glaçon, S. Hasegawa, W. Hieke, G. Mascle, F. McCoy, J. McKenzie, J. Mendelson, C. Müller, J.-P. Réhault, A. Robertson, R. Sartori, R. Sprovieri, and M. Torii. ODP Leg 107 in the Tyrrhenian Sea: insights into passive margin and back-arc basin evolution. *Geol. Soc. Am. Bull.*; 1988; v. 100: p. 1140-1156.

4307. McCarthy, J., J. C. Mutter, J. L. Morton, N. H. Sleep, and G. A. Thompson. Relic magma chamber structures preserved within the Mesozoic North Atlantic crust? *Geol. Soc. Am. Bull.*; 1988; v. 100: p. 1423-1436.
4308. Klein, E. M., C. H. Langmuir, A. Zindler, H. Staudigel, and B. Hamelin. Isotope evidence of a mantle convection boundary at the Australian-Antarctic Discordance. *Nature*; 1988; v. 333(n. 6174): p. 623-629.
4309. Simpson, D. W., W. S. Leith, and C. H. Scholz. Two types of reservoir-induced seismicity. *Bull. Seismol. Soc. Am.*; 1988; v. 78(n. 6): p. 2025-2040.
4310. Duplessy, J. C., N. J. Shackleton, R. G. Fairbanks, L. Labeyrie, D. Oppo, and N. Kallel. Deepwater source variations during the last climatic cycle and their impact on the global deepwater circulation. *Paleoceanography*; 1988; v. 3(n. 3): p. 343-360.
4311. Cember, R. . On the sources, formation, and circulation of Red Sea deep water. *J. Geophys. Res.*; 1988; v. 93(n. C7): p. 8175-8191.
4312. Das, S. and B. V. Kostrov. An investigation of the complexity of the earthquake source time function using dynamic faulting models. *J. Geophys. Res.*; 1988; v. 93(n. B7): p. 8035-8050.
4313. Scholz, C.H. Mechanics of faulting. *Ann. Rev. Earth Planet. Sci.* ; 1989; v. 17: p. 309-334.
4314. Manley, P. L. and R. D. Flood. Cyclic sediment deposition within Amazon Deep-Sea Fan. *Am. Assoc. Pet. Geol. Bull.*; 1988; v. 72(n. 8): p. 912-925.
4315. Kukla, G., F. Heller, L-X. Ming, X-T. Chun, L-T. Sheng, and A-Z. Sheng. Pleistocene climates in China dated by magnetic susceptibility. *Geology*; 1988; v. 16: p. 811-814.
4316. Cochran, J. R. and F. Martinez. Evidence from the northern Red Sea on the transition from continental to oceanic rifting. *Tectonophysics*; 1988; v. 153: p. 25-53.
4317. Hegarty, K. A., J. K. Weissel, and J. C. Mutter. Subsidence history of Australia's southern margin: constraints on basin models. *Am. Assoc. Pet. Geol. Bull.*; 1988; v. 72(n. 5): p. 615-633.
4318. Westbrook, G. K., J. W. Ladd, P. Buhl, N. Bangs, and G. Tiley. Cross section of an accretionary wedge: Barbados Ridge complex. *Geology*; 1988; v. 16: p. 631-635.

4319. Schneider, D. A. and D. V. Kent. Inclination anomalies from Indian Ocean sediments and the possibility of a standing nondipole field. *J. Geophys. Res.*; 1988; v. 93(n. B10): p. 11,621 - 11,630.

4320. Damuth, J. E., R. D. Flood, R. O. Kowsmann, R. H. Belderson, and M. A. Gorini. Anatomy and growth pattern of Amazon Deep-Sea Fan as revealed by long-range side-scan sonar (GLORIA) and high-resolution seismic studies. *Am. Assoc. Pet. Geol. Bull.*; 1988; v. 72(n. 8): p. 885-911.

4321. Johnson, A.H., E.R. Cook, and T.G. Siccama. Climate and red spruce growth and decline in the northern Appalachians. in: "Proceedings of the National Academy of Sciences, USA"; 1988; v. 85: p. 5369-5373.

4322. Cochran, J. R. Somali Basin, Chain Ridge and origin of the Northern Somali Basin gravity and geoid low. *J. Geophys. Res.*; 1988; v. 93(n. B10): p. 11,985-12,008.

4323. Agee, C. B. and D. Walker. Mass balance and phase density constraints on early differentiation of chondritic mantle. *Earth Planet. Sci. Lett.*; 1988; v. 90: p. 144-156.

4324. Buck, W. R. . Flexural rotation of normal faults. *Tectonics*; 1988; v. 7(n. 5): p. 959-973.

4325. Malinverno, A., W.B.F. Ryan, G. Auffret, and G. Pautot. Sonar images of the path of recent failure events on the continental margin off Nice, France. H. Edward Clifton, Ed. "Special Paper 229". Boulder, CO: Geol. Soc. Am.; 1988: p. 59-74.

4326. Jacoby, G. C. Jr., P. R. Sheppard, and K. E. Sieh. Irregular recurrence of large earthquakes along the San Andreas Fault: evidence from trees . *Science*; 1988; v. 241: p. 196-199; ISSN .

4327. Wessel, P. Xover: a cross-over error detector for track data. *Comput. Geosci.*; 1989; v. 15(n. 3): p. 333-346.

4328. Lewis, S. D., J. W. Ladd, and T. R. Bruns. Structural development of an accretionary prism by thrust and strike-slip faulting: Shumagin region, Aleutian Trench. *Geol. Soc. Am. Bull.*; 1988; v. 100: p. 767-782.

4329. Buchholtz, M.R., P.H. Santschi, and W.S. Broecker. Comparison of radiotracer KD values from batch equilibration experiments with in situ determinations in the deep sea using the MANOP Lander: the importance of geochemical mechanisms in controlling ion uptake and

migration. in: T.H. Sibley and C. Myttenaere, Eds. London: Elsevier Applied Science Pub.; 1985: p. 192-206.

4330. Sheppard, P. R., J. E. Means, and J. P. Lassoie. Cross-dating cores as a nondestructive method for dating living, scarred trees. *Forest Science*; 1988; v. 34(n. ): p. 781-789.

4331. Cook, E. R., M. A. Kablack, and G. C. Jacoby. The 1986 drought in the southeastern United States: how rare an event was it? *J. Geophys. Res.*; 1988; v. 93(n. D11): p. 14,257-14,260.

4332. Steckler, M. S., F. Berthelot, N. Lyberis, and X. LePichon. Subsidence in the Gulf of Suez: implications for rifting and plate kinematics. *Tectonophysics*; 1988; v. 153: p. 249-270.

4333. Burckle, L. H. and R. W. Burak. Fluctuations in Late Quaternary diatom abundances: stratigraphic and paleoclimatic implications from subantarctic deep sea cores. *Palaeogeogr., Palaeoclimatol., Palaeoecol.*; 1988; v. 67: p. 147-156.

4334. Richards, P. G. . Seismic methods for verifying test ban treaties. in : Schroeer, D. and D. Hafemeister, Eds. *Nuclear Arms Technologies in the 1990s*. NY: American Institute of Physics; 1988: p. 54-108.

4335. Gordon, A. L. . Spatial and temporal variability within the Southern Ocean. in : D. Sahrhage, Ed. *Antarctic Ocean and Resources Variability*. Heidelberg, Germany: Springer-Verlag; 1988: p. 41-56.

4336. Schneider, D. A. An estimate of the long-term non-dipole field from marine magnetic anomalies. *Geophys. Res. Lett.*; 1988; v. 15(n. 10): p. 1105-1108.

4337. Ou, H-W. Termination of an equatorial jet in a gulf. *J. Phys. Oceanogr.*; 1988; v. 18(n. 12): p. 1899-1905.

4338. Boyd, T. M. and J. L. Nabelek. Rupture process of the Andreanof Islands earthquake of May 7, 1986. *Bull. Seismol. Soc. Am.*; 1988; v. 78(n. 5): p. 1653-1673.

4339. Coles, K.S. and R.J. Varga. Early to middle paleozoic phosphogenic province in terranes of the southern Cordillera, western United States. *Am. J. of Sci.*; 1988; v. 288: p. 891-924.

4340. Garvine, R.W., K.C. Wong, G.G. Gawarkiewicz, R.K. McCarthy, R.W. Houghton, and F. Aikman, III. The morphology of shelfbreak eddies. *J. Geophys. Res.*; 1988; v. 93(n. C12): p. 15,593-15,607.

4341. Fornari, D. J., M. O. Garcia, R. C. Tyce, and D. G. Gallo. Morphology and structure of Loihi Seamount based on seamount sonar mapping. *J. Geophys. Res.*; 1988; v. 93(n. B12): p. 15,227-15238.

4342. Bopp, R.F. and H.J. Simpson. Contamination of the Hudson River - the sediment record. Marine Board of the National Research Council: Proceedings of the Symposium on Contaminated Marine Sediments--Assessment and Remediation; May 31 - June 2, 1988; Tampa, FL., Washington, DC: National Academy Press; 1989: p. 401-416.

4343. Hanson, R.E., T.J. Wilson, H.K. Brueckner, T.C. Onstott, M.S. Wardlaw, C.C. Johns, and K.C. Hardcastle. Reconnaissance geochronology, tectonothermal evolution, and regional significance of the Middle Proterozoic Choma-Kalomo block, southern Zambia. *Precambrian Res.*; 1988; v. 42: p. 39-61.

4344. Plank, T. and C. H. Langmuir. An evaluation of the global variations in the major element chemistry of arc basalts. *Earth Planet. Sci. Lett.*; 1988; v. 90: p. 349-370.

4345. Mutter, J.C. and R.L. Larson. Extension of the Exmouth Plateau, offshore northwestern Australia: deep seismic reflection/refraction evidence for simple and pure shear mechanisms. *Geology*; 1989; v. 17: p. 15-18.

4346. Goldberg, D. and B. Zinszner. P-wave attenuation measurements from laboratory resonance and sonic waveform data. *Geophysics*; 1989; v. 54(n. 1): p. 76-81.

4347. Broecker, W. S., D. Oppo, T-H Peng, W. Curry, M. Andree, W. Wolfli, and G. Bonani. Radiocarbon based chronology for the 18 0/16 0 record for the last deglaciation. *Paleoceanography*; 1988; v. 3(n. 4): p. 509-515.

4348. Faber, W.W., Jr., O.R. Anderson, J.L. Lindsey and D.A. Caron. Algal-foraminiferal symbiosis in the planktonic foraminifer *Globigerinella aequilateralis*: I. Occurrence and stability of two mutually exclusive chrysophyte endosymbionts and their ultrastructure. *J. Foraminiferal Res.*; 1988; v. 18(n. 4): p. 334-343.

4349. Tucker, S. and D. V. Kent. Multiple remagnetizations of lower Paleozoic limestones from the Taconics of Vermont. *Geophys. Res. Lett.*; 1988; v. 15(n. 11): p. 1251-1254.

4350. Schneider, D. A. and D. V. Kent. The paleomagnetic field from equatorial deep-sea sediments: axial symmetry and polarity asymmetry. *Science*; 1988; v. 242: p. 252-256.

4351. Langdon, C. On the causes of interspecific differences in the growth—irradiance relationship for phytoplankton. II. A general review. *J. Plankton. Res.*; 1988; v. 10(n. 6): p. 1291-1312.

4352. Cande, S., J. L. LaBrecque, and W. F. Haxby. Plate kinematics of the south Atlantic: chron C34 to present. *J. Geophys. Res.*; 1988; v. 93(n. B11): p. 13,479-13,492; ISSN .

4353. Cook, E. and J. Innes. Tree-ring analysis as an aid to evaluating the effects of air pollution on tree growth. in: "Biologic Markers of Air-Pollution Stress and Damage in Forests". ed. Washington, DC: National Academy Press; 1989; Proceedings of the National Research Council Workshop on Markers of Air Pollution Effects in Forests.; p. 157-168.

4354. Pavlis, T. L., D. H. Monteverde, J. R. Bowman, J. L. Rubenstone, and M. D. Reason. Early Cretaceous near-trench plutonism in southern Alaska: a tonalite-trondhjemite intrusive complex injected during ductile thrusting along the Border Ranges fault system. *Tectonics*; 1988; v. 7(n. 6): p. 1179-1199.

4355. LeHuray, A.P. and E.S. Johnson. Rb-Sr systematics of Site 642 volcanic rocks and alteration minerals. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1989; V. 104: p. 437-448.

4356. LeHuray, A.P. Native copper in ODP Site 642 tholeiites. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1989; V. 104: p. 411-417.

4357. Breen, N.A. Structural effect of Magdalena Fan deposition on the northern Colombia convergent margin. *Geology*; 1989; v. 17: p. 34-37.

4358. Miller, J.D. and D.V. Kent. Paleomagnetism of selected Devonian age plutons from Maine, Vermont, and New York. *Northeast. Geol.*; 1989; v. 11(n. 2): p. 66-76.

4359. Shen, G.T. and E.A. Boyle. Thermocline ventilation of anthropogenic lead in the western North Atlantic. *J. Geophys. Res.*; 1988; v. 93(n. C12): p. 15,715-15,732.

4360. Hart, S. and A. Zindler. Constraints on the nature and development of chemical heterogeneities in the mantle. in: W.R. Peltier, Ed. *Mantle Convection: Plate Tectonics and Global Dynamics* . New York: Gordon and Breach Science Publishers; 1989; V. 4: p.261-387.

4361. Marone, C., J. Rubenstone, and T. Engelder. An experimental study of permeability and fluid chemistry in an artificially jointed marble. *J. Geophys. Res.*; 1988; v. 93(n. B11): p. 13,763-13,775.
4362. Broecker, W. S., M. Andree, G. Bonani, W. Wolfli, M. Klas, A. Mix, and H. Oeschger. Comparison between radiocarbon ages obtained on coexisting planktonic foraminifera. *Paleoceanography*; 1988; v. 3(n. 6): p. 647-657.
4363. Cember, R. . Bomb radiocarbon in the Red Sea: a medium-scale gas exchange experiment. *J. Geophys. Res.*; 1989; v. 94(n. C2): p. 2111-2123.
4364. Gilbert, L. E. and A. Malinverno. A characterization of the spectral density of residual ocean floor topography. *Geophys. Res. Lett.*; 1988; V. 15(n. 12): p. 1401-1404; ISSN .
4365. Steckler, M.S. The role of the thermal-mechanical structure of the lithosphere in the formation of sedimentary basins. in: T.A. Cross, Ed. *Quantitative Dynamic Stratigraphy*: Prentice Hall; 1989: p. 89-112.
4366. Mathieu, G. G., P. E. Biscaye, R. A. Lupton, and D. E. Hammond. System for measurement of  $^{222}\text{Rn}$  at low-levels in natural waters. *Health Physics*; 1988; v. 55(n. 6): p. 989-992.
4367. Cande, S.C., J.L. LaBrecque, R.L. Larson, W.C. Pitman, III, X. Golovchenko, and W.F. Haxby. Magnetic lineations of the world's ocean basins. *Am. Assoc. Petrol. Geol.*; 1989: Map-Available AAPG Bookstore, P.O. Box 979, Tulsa,OK 74101.
4368. Scholz, C.H. Comments on models of earthquake recurrence. D. Schwartz and R. Sibson, Eds. *Proceedings of the Workshop on Fault Segmentation and Controls of Rupture Initiation and Termination.* ed.; 1989; U. S. Geological Survey Open File Report 89-315: p. 350-360.
4369. Manley, T.O., J-C Gascard, and W.B. Owens. The Polar Floats Program. *IEEE J. Oceanic Eng.*; 1989; v. 14(n. 2): p. 186-194.
4370. Shemesh, A., R. A. Mortlock, R. J. Smith, and P. N. Froelich. Determination of Ge/Si in marine siliceous microfossils: separation, cleaning and dissolution of diatoms and radiolaria. *Mar. Chem.*; 1988; v. 25: p. 305-323.
4371. Bond, G. C., S. D. Lewis, J. Taber, M. S. Steckler, and M. A. Kominz. Evidence for formation of a flexural backarc basin by compression and crustal thickening in the central Alaska Peninsula. *Geology*; 1988; v. 16: p. 1147-1150.

4372. Bond, G.C. and M.A. Kominz. Evolution of thought on passive continental margins from the origin of geosynclinal theory (~1860) to the present. *Geol. Soc. Am. Bull.*; 1988; v. 100: p. 1909-1933.

4373. Pacheco, J. and J. Nabelek. Source mechanisms of three moderate California earthquakes of July 1986. *Bull. Seismol. Soc. Am.*; 1988; v. 78(n. 6): p. 1907-1929.

4374. Broecker, W. S., M. Andree, G. Bonani, W. Wolfli, H. Oeschger, M. Klas, A. Mix, and W. Curry. Preliminary estimates for the radiocarbon age of deep water in the glacial ocean. *Paleoceanography*; 1988; v. 3(n. 6): p. 659-669.

4375. Mutter, J.C., G.A. Barth, P. Buhl, R.S. Detrick, J. Orcutt, and A. Harding. Magma distribution across ridge-axis discontinuities on the East Pacific Rise from multichannel seismic images. *Nature*; 1988; v. 336(n. 6195): p. 156-158.

4376. Sheppard, P.R. and G.C. Jacoby. Application of tree-ring analysis to paleoseismology: two case studies. *Geology*; 1989; v. 17: p. 226-229.

4377. Lao, Y. and L. Benson. Uranium-series age estimates and paleoclimatic significance of Pleistocene Tufas from the Lahontan Basin, California and Nevada. *Quat. Res.*; 1988; v. 30: p. 165-176.

4378. Pindell, J.L., S.C. Cande, W.C. Pitman III, D.B. Rowley, J.F. Dewey, J. LaBrecque, and W. Haxby. A plate-kinematic framework for models of Caribbean evolution. *Tectonophysics*; 1988; v. 155: p. 121-138.

4379. Seyler, M. and E. Bonatti. Petrology of a gneiss—amphibolite lower crustal unit from Zabargad Island, Red Sea. *Tectonophysics*; 1988; v. 150: p. 177-207.

4380. Petrini, R., J.L. Joron, G. Ottonello, E. Bonatti, and M. Seyler. Basaltic dykes from Zabargad Island, Red Sea: petrology and geochemistry. *Tectonophysics*; 1988; v. 150: p. 229-248.

4381. Jacoby, G.C. and R. D'Arrigo. Reconstructed Northern Hemisphere annual temperature since 1671 based on high-latitude tree-ring data from North America. *Climatic Change*; 1989; v. 14: p. 39-59.

4382. Bard, E. Correction of accelerator mass spectrometry <sup>14</sup>C ages measured in planktonic foraminifera: paleoceanographic implications. *Paleoceanography*; 1988; v. 3(n. 6): p. 635-645.



4383. Bard, E., M. Arnold, J.R. Toggweiler, P. Maurice, and J-C. Duplessy. Bomb 14C in the Indian Ocean measured by accelerator mass spectrometry: oceanographic implications. *Radiocarbon*; 1989; v. 31(n. 3): p. 510-522.

4384. Scholz, C.H. The critical slip distance for seismic faulting. *Nature*; 1988; v. 336(n. 6201): p. 761-763.

4385. Bishop, J.K.B. Regional extremes in particulate matter composition and flux: effects on the chemistry of the ocean interior. in : W.H. Gerger, V.S. Smetacek, and G. Wefer, Eds. "Productivity of the Ocean: Present and Past,"; John Wiley & Sons, Ltd., NY; 1989: p. 117-137.

4386. Devlin, W. J., H. K. Brueckner, and G. C. Bond. New isotopic data and a preliminary age for volcanics near the base of the Windermere Supergroup, northeastern Washington, U.S.A. *Canadian J. Earth Sci.*; 1988; v. 25: p. 1906-1911.

4387. Flood, R.D. Submersible studies of current-modified bottom topography in Lake Superior. *J. Great Lakes Res.*; 1989; v. 15(n. 1): p. 3-14.

4388. Richards, P.G. Seismic monitoring of nuclear explosions. in: D.E. James, Ed. *The Encyclopedia of Solid Earth Geophysics*. Reinhold, NY: Van Nostrand Reinhold Co.; 1989: p. 1071-1089.

4389. Miller, J.D. and D.V. Kent. Paleomagnetism of the Upper Ordovician Juniata Formation of the central Appalachians revisited again. *J. Geophys. Res.*; 1989; v. 94(n. B2): p. 1843-1849.

4390. Bonatti, E. and P.J. Michael. Mantle peridotites from continental rifts to ocean basins to subduction zones. *Earth Planet. Sci. Lett.*; 1989; v. 91: p. 297-311.

4391. McIntyre, A. , W.F. Ruddiman, K. Karlin, and A.C. Mix. Surface water response of the equatorial Atlantic ocean to orbital forcing. *Paleoceanography*; 1989; v. 4(n. 1): p. 19-55.

4392. Aubry , M.-P., W. A. Berggren, D. V. Kent, J. J. Flynn, K. D. Klitgord, J. D. Obradovich, and D. W. Prothero. Paleogene geochronology: an integrated approach. *Paleoceanography*; 1988; v. 3(n. 6): p. 707-742.

4393. Hudnut, K.W., L. Seeber, and J. Pacheco. Cross-fault triggering in the November 1987 Superstition Hills earthquake sequence, southern California. *Geophys. Res. Lett.*; 1989; v. 16(n. 2): p. 199-202.

4394. Berggren, W.A. and K.G. Miller. Paleogene tropical planktonic foraminiferal biostratigraphy and magnetobiochronology. *Micropaleontology*; 1988; v. 34(n. 4): p. 362-380.
4395. Stoll, R.D. Stress-induced anisotropy in sediment acoustics. *J. Acoust. Soc. Am.*; 1989; v. 85(n. 2): p. 702-708.
4396. Piola, A.R. and A.L. Gordon. Intermediate waters in the southwest South Atlantic. *Deep-Sea Res.*; 1989; v. 36(n. 1): p. 1-16.
4397. Garzoli, S. and P.L. Richardson. Low-frequency meandering of the Atlantic North Equatorial Countercurrent. *J. Geophys. Res.*; 1989; v. 94(n. C2): p. 2079-2090.
4398. Martinson, D.G. Eastern Weddell Sea ocean/meteorological drifters. *Antarctic J. U.S./Review*; 1988; v. 23(n. 5): p. 73-74.
4399. Morley, J.J. Radiolarian-based transfer functions for estimating paleoceanographic conditions in the south Indian Ocean. *Mar. Micropaleontol.*; 1989; v. 13: p. 293-307.
4400. Cook, E.R. and A.H. Johnson. Threshold responses and climatic change: possible contributors to the decline of red spruce. *Proceedings of the US/FRG Research Symposium: Effects of Atmospheric Pollutants on the Spruce-fir Forests of the Eastern United States and the Federal Republic of Germany*: U. S. Department of Agriculture, Forest Service; 1989: p. 311-322.
4401. Gordon, A.L. Brazil—Malvinas Confluence—1984. *Deep-Sea Res.*; 1989; v. 36(n. 3): p. 359-384.
4402. Karlin, K., W.F. Ruddiman, and A. McIntyre. Comparison of late Pliocene and late Pleistocene sea-surface temperatures of the equatorial Atlantic divergence. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1989; V. 108: p. 187-210.
4403. Ruddiman, W.F. and T.R. Janecek. Pliocene-Pleistocene biogenic and terrigenous fluxes at equatorial Atlantic Sites 662, 663, and 664. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1989; V. 108: p. 211-240.
4404. Malinverno, A. and L.E. Gilbert. A stochastic model for the creation of Abyssal Hill topography at a slow spreading center. *J. Geophys. Res.*; 1989; v. 94(n. B2): p. 1665-1675.

4405. Wacongne, S. Dynamical regimes of a fully nonlinear stratified model of the Atlantic equatorial undercurrent. *J. Geophys. Res.*; 1989; v. 94(n. C4): p. 4801-4815.

4406. Jacobi, R.D. and D.E. Hayes. Sedimentary effects of the interplay between the Kuroshio Extension and Pacific plate motion. *Geol. Soc. Am. Bull.*; 1989; v. 101: p. 549-560.

4407. Mountain, G.S. and W.L. Prell. Geophysical reconnaissance survey for ODP Leg 117 in the northwest Indian Ocean. *Proc. ODP, Init. Repts. College Station, TX (Ocean Drilling Program)*; 1989; V. 117: p. 51-64.

4408. Watts, A.B. and K.G. Cox. The Deccan Traps: an interpretation in terms of progressive lithospheric flexure in response to a migrating load. *Earth Planet. Sci. Lett.*; 1989; v. 93: p. 85-97.

4409. Houghton, R.W. Influence of local and remote wind forcing in the Gulf of Guinea. *J. Geophys. Res.*; 1989; v. 94(n. C4): p. 4816-4828.

4410. Zehnder, C.M., J.C. Mutter, and P. Buhl. Deep seismic and geochemical constraints on the nature of rift-induced magmatism during breakup of the North Atlantic. *Tectonophysics*; 1990; v. 173: p. 545-565.

4411. Bond, G.C., M.A. Kominz, M.S. Steckler, and J.P. Grotzinger. Role of thermal subsidence, flexure, and eustasy in the evolution of early Paleozoic passive-margin carbonate platforms. in : P. Crevello, J. Wilson, J.F. Sarq, and J.F. Read, Eds. "Controls on Carbonate Platform and Basin Development": The Society of Economic Paleontologists and Mineralogists; 1989; (n. 44): p. 39-61; ISBN 0-918985-79-X.

4412. Mountain G.S. and W.L. Prell. A multiphase plate tectonic history of the southeast continental margin of Oman. in: A.H.F. Robertson, M.P. Searle, and A.C. Ries, Eds. "The Geology and Tectonics of the Oman Region," Special Publication No. 49. London: Geological Society; 1990: p. 725-743.

4413. Bard, E., L. Labeyrie, M. Arnold, M. Labracherie, J-J. Pichon, J. Duprat, and J-C Duplessy. AMS- <sup>14</sup>C ages measured in deep sea cores from the Southern Ocean: implications for sedimentation rates during isotope Stage 2. *Quat. Res.*; 1989; v. 31: p. 309-317.

4414. Shemesh, A. L.H. Burckle, and P.N. Froelich. Dissolution and preservation of Antarctic diatoms and the effect on sediment thanatocoenoses. *Quat. Res.*; 1989; v. 31: p. 288-308.

4415. Malinverno, A. Testing linear models of sea-floor topography. *Pure Appl. Geophys.*; 1989; v. 131(nos. 1/2): p. 139-155.

4416. Klein, E.M. and C.H. Langmuir. Local versus global variations in ocean ridge basalt composition: a reply. *J. Geophys. Res.*; 1989; v. 94(n. B4): p. 4241-4252.

4417. Hudnut, K.W. and K.E. Sieh. Behavior of the Superstition Hills fault during the past 330 years. *Bull. Seismol. Soc. Am.*; 1989; v. 79(n. 2): p. 304-329.

4418. Sancetta, C. Spatial and temporal trends of diatom flux in British Columbian Fjords. *J. Plankton. Res.*; 1989; v. 11(n. 3): p. 503-520.

4419. Hudnut, K.W. and M.M. Clark. New slip along parts of the 1968 Coyote Creek Fault Rupture, California. *Bull. Seismol. Soc. Am.*; 1989; v. 79(n. 2): p. 451-465.

4420. Hudnut, K.W., L. Seeber, and T. Rockwell. Slip on the Elmore Ranch fault during the past 330 years and its relation to slip on the Superstition Hills fault. *Bull. Seismol. Soc. Am.*; 1989; v. 79(n. 2): p. 330-341.

4421. Burckle, L.H. Distribution of diatoms in sediments of the northern Indian Ocean: relationship to physical oceanography. *Mar. Micropaleontol.*; 1989; v. 15: p. 53-65.

4422. Broecker, W.S. The salinity contrast between the Atlantic and Pacific Oceans during glacial time. *Paleoceanography*; 1989; v. 4(n. 2): p. 207-212.

4423. Broecker, W.S. Some thoughts about the radiocarbon budget for the glacial Atlantic. *Paleoceanography*; 1989; v. 4(n. 2): p. 213-220.

4424. Zebiak, S.E. Oceanic heat content variability and El Niño cycles. *J. Phys. Oceanogr.*; 1989; v. 19(n. 4): p. 475-486.

4425. Cane, M.A. A mathematical note on Kawase's study of the deep-ocean circulation. *J. Phys. Oceanogr.*; 1989; v. 19(n. 4): p. 548-540.

4426. Froelich, P.N., R.A. Mortlock, and A. Shemesh. Inorganic germanium and silica in the Indian Ocean: biological fractionation during (Ge/Si) Opal formation. *Global Geochem. Cycles*; 1989; v. 3(n. 1): p. 79-88.

4427. Maccio, M. and C. Landgon. Description of conversion of an EG&G VMCM into a MVMS (Multi—Variable Moored Sensor). in: Proceedings of the Oceans '88 Conference, Baltimore, MD, Oct. 31- Nov. 2, 1988: IEEE, NY; 1988: p. 1181-1187.

4428. Seager, R. Modeling Tropical Pacific Sea surface temperature: 1970—87. *J. Phys. Oceanogr.*; 1989; v. 19(n. 4): p. 419-434.

4429. Hudnut, K., L. Seeber, T. Rockwell, J. Goodmacher, R. Klinger, S. Lindvall, and R. McElwain. Surface ruptures on the cross-faults in the 24 November 1987 Superstition Hills, California, earthquake sequence. *Bull. Seismol. Soc. Am.*; 1989; v. 79(n. 2): p. 282-296.

4430. Devlin, W.J. Stratigraphy and sedimentology of the Hamill Group in the northern Selkirk Mountains, British Columbia: evidence for latest Proterozoic - Early Cambrian extensional tectonism. *Can. J. Earth Sci.*; 1989; v. 26: p. 515-533.

4431. Kent, D.V. and R. Van der Voo. Palaeozoic palaeogeography from palaeomagnetism of the Atlantic-bordering continents. in: W.S. McKerrow and C.R. Scotese, Eds. "Palaeozoic Palaeogeography and Biogeography". *Memoir No. 12 ed.: Geological Society of London*; 1990: p. 49-56.

4432. Kappel, E.S. and J.M. Franklin. Relationships between geologic development of ridge crests and sulfide deposits in the northeast Pacific Ocean. *Econ. Geol.*; 1989; v. 84(n. 3): p. 485-505.

4433. Manley, P.L. and R.D. Flood. Anomalous sound velocities in near-surface, organic-rich, gassy sediments in central Argentine Basin. *Deep-Sea Res.*; 1989; v. 36( n. 4): p. 611-623.

4434. Johnson, D.A., D.A. Schneider, C.A. Nigrini, J.P. Caulet, and D.V. Kent. Pliocene-Pleistocene radiolarian events and magnetostratigraphic calibrations for the tropical Indian Ocean. *Mar. Micropaleontol.*; 1989; v. 14: p. 33-66.

4435. Rosing, M.T., C.E. Leshner, and D.K. Bird. Chemical modification of east Greenland Tertiary magmas by two-liquid interdiffusion. *Geology*; 1989; v. 17: p. 626-629.

4436. Mithal, R. and J.C. Mutter. A low-velocity zone within the layer 3 region of 118 Myr old oceanic crust in the western North Atlantic. *Geophys. J.*; 1989; v. 97: p. 275-294.

4437. Bagriantsev, N.V., A.L. Gordon, and B.A. Huber. Weddell Gyre: temperature maximum stratum. *J. Geophys. Res.*; 1989; v. 94(n. C6): p. 8331-8334.

4438. Evans, K.F., T. Engelder, and R.A. Plumb. Appalachian stress study I. a detailed description of in-situ stress variations in Devonian shales of the Appalachian Plateau. *J. Geophys. Res.*; 1989; v. 94(n. B6): p. 7129-7154.

4439. Evans, K.F., G. Oertel, and T. Engelder. Appalachian stress study 2. analysis of Devonian shale core: some implications for the nature of contemporary stress variations and Alleghanian deformation in Devonian rocks. *J. Geophys. Res.*; 1989; v. 94(n. B6): p. 7155-7170.

4440. Trumbore, S.E., J.S. Vogel, and J.R. Southon. AMS  $^{14}\text{C}$  measurements of fractionated soil organic matter: an approach to deciphering the soil carbon cycle. *Radiocarbon*; 1989; v. 31(n. 3): p. 644-654.

4441. Bard, E., R. Fairbanks, M. Arnold, P. Maurice, J. Duprat, J. Moyes, and J-C Duplessy. Sea-level estimates during the last deglaciation based on  $^{18}\text{O}$  and accelerator mass spectrometry  $^{14}\text{C}$  ages measured in *Globigerina bulloides*. *Quat. Res.*; 1989; v. 31: p. 381-391.

4442. Raymo, M.E., W.F. Ruddiman, J. Backman, B.M. Clement, and D.G. Martinson. Late Pliocene variation in northern hemisphere ice sheets and North Atlantic deep water circulation. *Paleoceanography*; 1989; v. 4(n. 4): p. 413-446.

4443. Jacoby, G.C. Overview of tree-ring analysis in tropical regions. *Int. Assoc. Wood Anat. Bull.*; 1989; v. 10(n. 2): p. 99-108.

4444. Gedzelman, S.D., J.M. Rosenbaum, and J.R. Lawrence. The megalopolitan snowstorm of 11-12 February 1983: isotopic composition of the snow. *J. Atmos. Sci.*; 1989; v. 46(n. 12): p. 1637-1649.

4445. Smethie, W.M., Jr. and J.H. Swift. The tritium: Krypton-85 Age of Denmark Strait overflow water and Gibbs Fracture Zone water just south of Denmark Strait. *J. Geophys. Res.*; 1989; v. 94(C6): p. 8265-8275.

4446. Olsen, P.E., R.W. Schlische, P.J.W. Gore, B. Comet, P. Gallagher, W. Hoffman, A.R. McCune, N.G. McDonald, J.P. Smoot, R.P. Tollo, D.U. Wise, and W.K. Witte. Tectonic, Depositional, and Paleoecological History of Early Mesozoic Rift Basins, Eastern North America. P.E. Olsen, R.W. Schlische, and P.J.W. Gore, Eds. 28th International Geological Congress Field Trip Guidebook T351 ed.: American Geophysical Union, Washington, D.C.; 1989: p. 1-174.

4447. Garzoli, S.L. and Z. Garraffo. Transports, frontal motions and eddies at the Brazil—Malvinas currents confluence. *Deep-Sea Res.*; 1989; v. 36(n. 5): p. 681-703.

4448. Lerner-Lam, A.L. and J.J. Park. Frequency-dependent refraction and multipathing of 10-100 second surface waves in the western Pacific. *Geophys. Res. Lett.*; 1989; v. 16(n. 6): p. 527-530.

4449. Shemesh, A., R.A. Mortlock, and P.N. Froelich. Late Cenozoic Ge/Si record of marine biogenic opal: implications for variations of riverine fluxes to the ocean. *Paleoceanography*; 1989; v. 4(n. 3): p. 221-234.

4450. Overpeck, J.T., L.C. Peterson, N. Kipp, J. Imbrie, and D. Rind. Climate change in the circum-North Atlantic region during the last deglaciation. *Nature*; 1989; v. 338(n. 6216): p. 553-557.

4451. Oppo, D.W. and R.G. Fairbanks. Carbon isotope composition of tropical surface water during the past 22,000 years. *Paleoceanography*; 1989; v. 4(n. 4): p. 333-351.

4452. Sykes, L.R. and G. Ekström. Comparison of seismic and hydrodynamic yield determinations for the Soviet joint verification experiment of 1988. *Proc. Natl. Acad. Sci. USA*; 1989; v. 86: p. 3456-3460.

4453. LeHuray, A.P. U-PB and TH-PB whole rock studies in the southern Appalachian Piedmont. *Southeast. Geol.*; 1989; v. 30(n. 2): p. 77-94.

4454. Ruddiman, W.F., M.E. Raymo, D.G. Martinson, B.M. Clement, and J. Backman. Pleistocene evolution: northern hemisphere ice sheets and North Atlantic Ocean. *Paleoceanography*; 1989; v. 4(n. 4): p. 353-412.

4455. Donn, W.L. . Paleoclimate and polar wander. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1989; v. 71: p. 225-236.

4456. Fenster, E.J., U. Sorhannus, L.H. Burckle, and A. Hoffman. Patterns of morphological change in the neogene diatom *Nitzschia jouseae* Burckle. *Hist. Biol.*; 1989; v. 2: p. 197-211.

4457. Anderson, O.R., P. Bennett, and M. Bryan. Experimental and observational studies of radiolarian physiological ecology: 1. growth, abundance and opal productivity of the Spongiose radiolarian *Spongaster tetras tetras*. *Mar. Micropaleontol.*; 1989; v. 14: p. 257-265.

4458. Anderson, O.R., P. Bennett, D. Angel, and M. Bryan. Experimental and observational studies of radiolarian physiological ecology: 2. trophic activity and symbiont primary productivity of *Spongaster tetras tetras* with comparative data on predatory activity of some Nassellarida. *Mar. Micropaleontol.*; 1989; v. 14: p. 267-273.

4459. Anderson, O.R., P. Bennett, and M. Bryan. Experimental and observational studies of radiolarian physiological ecology: 3. effects of temperature, salinity, and light intensity on the growth and survival of *Spongaster tetras tetras* maintained in laboratory culture. *Mar. Micropaleontol.*; 1989; v. 14: p. 275-282.

4460. Kukla, G. Long continental records of climate—an introduction. *Palaeogr., Palaeoclimatol., Palaeocol.*; 1989; v. 72: p. 1-9.

4461. Blumenthal, M.B. and M.A. Cane. Accounting for parameter uncertainties in model verification: an illustration with tropical sea surface temperature. *J. Phys. Oceanogr.*; 1989; v. 19(n. 7): p. 815-830.

4462. Hough, S.E., K.H. Jacob, and P.A. Friberg. The 11/25/88, M=6 Saguenay earthquake near Chicoutimi, Quebec: evidence for anisotropic wave propagation in northeastern North America. *Geophys. Res. Lett.*; 1989; v. 16(n. 7): p. 645-648.

4463. Pickart, R.S., N.G. Hogg, and W.M. Smethie, Jr. Determining the strength of the deep western boundary current using the chlorofluoromethane ratio. *J. Phys. Oceanogr.*; 1989; v. 19(n. 7): p. 940-951.

4464. Ou, H-W. Why does the Amazon water flow to the North after its discharge? *J. Phys. Oceanogr.*; 1989; v. 19(n. 8): p. 1102-1107.

4465. Witte, W.K. and D.V. Kent. A middle Carnian to early Norian (~225 Ma) paleopole from sediments of the Newark Basin, Pennsylvania. *Geol. Soc. Am. Bull.*; 1989; v. 101: p. 1118-1126.

4466. Broecker, W.S., T-H. Peng, J. Jouzel, and G. Russell. The magnitude of global freshwater transports of importance to ocean circulation. *Clim. Dynamics*; 1990; v. 4: p. 73-79.

4467. Hough, S.E. On the use of spectral methods for the determination of fractal dimension. *Geophys. Res. Lett.*; 1989; v. 16(n. 7): p. 673-676.

4468. Posmentier, E.S., M.A. Cane, and S.E. Zebiak. Tropical Pacific climate trends since 1960. *J. Clim.*; 1989; v. 2(n. 7): p. 731-736.

4469. Hamelin, B., F.E. Grousset, P.E. Biscaye, A. Zindler, and J.M. Prospero. Lead isotopes in trade wind aerosols at Barbados: the influence of European emissions over the North Atlantic. *J. Geophys. Res.*; 1989; v. 94(n. C11): p. 16,243-16,250.



4470. Miller, K.G., J.D. Wright, and A.N. Brower. Oligocene to Miocene stable isotope stratigraphy and planktonic foraminifer biostratigraphy of the Sierra Leone Rise (DSDP Site 366 and ODP Site 667). Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1989; V. 108: p. 279-294.

4471. Faber, W.W., Jr., O.R. Anderson, and D.A. Caron. Algal-foraminiferal symbiosis in the planktonic foraminifer *Globigerinella aequilateralis*: II. effects of two symbiont species on foraminiferal growth and longevity. J. Foraminiferal Res.; 1989; v. 19(n. 3): p. 185-193.

4472. Christie-Blick, N. Sequence stratigraphy and sea-level changes in Cretaceous time. in: R.N. Ginsburg and B. Beaudoin, Eds. Cretaceous Resources, Events and Rhythms. NATO ASI C-Series held in Digne, France, Sept. 1988 ed. Netherlands: Kluwer Academic Publishers; 1990: p. 1-21.

4473. Pokras, E.M. and W.F. Ruddiman. Evolution of South Saharan/Sahelian aridity based on freshwater diatoms (genus *Melosira*) and opal phytoliths: Sites 662 and 664. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1989; V. 108: p. 143-148.

4474. Diebold, J. Tau-p analysis in one, two and three dimensions. in: P.L. Stoffa, Ed. "Tau-p: A Plane Wave Approach to the Analysis of Seismic Data". Dordrecht, Netherlands: Kluwer Academic Publishers; 1989: p. 71-117.

4475. Curry, W.B. and K.G. Miller. Oxygen and carbon isotopic variation in Pliocene benthic foraminifers of the equatorial Atlantic. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1989; V. 108: p. 157-166.

4476. Martinez, F. and J.R. Cochran. Geothermal measurements in the northern Red Sea: implications for lithospheric thermal structure and mode of extension during continental rifting. J. Geophys. Res.; 1989; v. 94(n. B9): p. 12,239-12,265.

4477. Hudnut, K.W. and J. Beavan. Vertical deformation (1952-1987) in the Salton Trough, California, from water level recordings. J. Geophys. Res.; 1989; v. 94(n. B7): p. 9463-9476.

4478. Omar, G.I., M.S. Steckler, W.R. Buck, and B.P. Kohn. Fission-track analysis of basement apatites at the western margin of the Gulf of Suez rift, Egypt: evidence for synchronicity of uplift and subsidence. Earth Planet. Sci. Lett.; 1989; v. 94: p. 316-328.

4479. Christie-Blick, N., J.F. Mount, M. Levy, P.W. Signor, and P.K. Link. Late Proterozoic and Cambrian Tectonics, Sedimentation, and Record of Metazoan Radiation in the Western United States. N. Christie-Blick and M. Levy, Eds. 28th International Geological Congress Field Trip Guidebook T331 ed.: American Geophysical Union, Washington, DC; 1989: p. 1-113.

4480. Alexandrovich, J.M. Radiolarian biostratigraphy of ODP Leg 111, Site 677, eastern equatorial Pacific, late Miocene through Pleistocene. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1989; V.111: p. 245-262.
4481. Damuth, J.E. and D.A. Johnson. Morphology, sediments and structure of the Amirante Trench, western Indian Ocean: implications for trench origin. Mar. Pet. Geol.; 1989; v. 6: p. 232-242.
4482. Cook, E.R. and J. Cole. Spatial patterns of climatic response for eastern hemlock and the potential impact of future climatic change . R. D. Nobel, J.L. Martin, and K.F. Jensen, Eds. Proceedings of the Second US-USSR Symposium on: Air Pollution Effects on Vegetation Including Forest Ecosystems: Northeastern Forest Experiment Station, Broomall, PA.; 1989: p. 27-36.
4483. Buck, W.R. and W. Su. Focused mantle upwelling below mid-ocean ridges due to feedback between viscosity and melting. Geophys. Res. Lett.; 1989; v. 16(n. 7): p. 641-644.
4484. Zhang, Y., D. Walker, and C.E. Lesher. Diffusive crystal dissolution. Contrib. Mineral. Petrol.; 1989; v. 102: p. 492-513.
4485. Kukla, G. and Z. An. Loess stratigraphy in central China. Palaeogr., Palaeoclimatol., Palaeoecol.; 1989; v. 72: p. 203-225.
4486. Pokras, E.M. Pliocene history of South Saharan/Sahelian aridity: record of freshwater diatoms (genus *Melosira*) and opal phytoliths, ODP Sites 662 and 664 . in: M. Leinen and M. Sarnthein, Eds. "Paleoclimatology and Paleometeorology: Modern and Past Patterns of Global Atmospheric Transport,". Dordrecht, The Netherlands: Kluwer Academic Publishers; 1989: p. 795-804.
4487. Dixon, P.R., A.P. LeHuray, and D.M. Rye. Basement geology and tectonic evolution of Ireland as deduced from Pb isotopes. J. Geol. Soc. London; 1990; v. 147: p. 121-132.
4488. Pratson, L.F. and E.P. Laine. The relative importance of gravity-induced versus current-controlled sedimentation during the quaternary along the mideast U.S. outer continental margin revealed by 3.5 kHz echo character. Mar. Geol.; 1989; v. 89: p. 87-126.
4489. Zhang, Y. and A. Zindler. Noble gas constraints on the evolution of the Earth's atmosphere. J. Geophys. Res.; 1989; v. 94(n. B10): p. 13,719-13,737.
4490. Cook, E.R. and A.H. Johnson. Climate change and forest decline : a review of the red spruce case. J. Water, Air, Soil Pollut.; 1989; v. 48: p. 127-140.

4491. Wessel, P. and W.F. Haxby. Geoid anomalies at fracture zones and thermal models for the oceanic lithosphere. *Geophys. Res. Lett.*; 1989; v. 16(n. 8): p. 827-830.

4492. Marone, C. and C.H. Scholz. Particle-size distribution and microstructures within simulated fault gouge. *J. Struct. Geol.*; 1989; v. 11(n. 7): p. 799-814.

4493. Lewis, B.L., M.O. Andreae, and P.N. Froelich. Sources and sinks of methylgermanium in natural waters. *Mar. Chem.*; 1989; v. 27: p. 179-200.

4494. Smith, W.H.F., H. Staudigel, A.B. Watts, and M.S. Pringle. The Magellan Seamounts: early Cretaceous record of the South Pacific isotopic and thermal anomaly. *J. Geophys. Res.*; 1989; v. 94(n. B8): p. 10,501-10,523.

4495. Hough, S.E., A. Lerner-Lam, J.C. Gariel, P.A. Friberg, and K.H. Jacob. Seismic ground motion and attenuation relationships. in: A. H-S. Ang, M. Shinozuka, and G.I. Schueller, Eds. "Structural Safety and Reliability," V. 1, Proceedings of ICOSSAR '89, the 5th International Conference on Structural Safety and Reliability, San Francisco, August 7-11, 1989. New York, NY: American Society of Civil Engineers; 1989: p. 311-318.

4496. Watts, A.B. and U.S. ten Brink. Crustal structure, flexure, and subsidence history of the Hawaiian Islands. *J. Geophys. Res.*; 1989; v. 94(n. B8): p. 10,473-10,500.

4497. Charles, C.D. and R.G. Fairbanks. Glacial to interglacial changes in the isotopic gradients of Southern Ocean surface water. in: U. Bleil and J. Thiede, Eds. "Geological History of The Polar Oceans: Arctic Versus Antarctic". Netherlands: Kluwer Academic Publishers; 1990: p. 519-538.

4498. Malinverno, A. Segmentation of topographic profiles of the seafloor based on a self-affine model. *IEEE J. Oceanic Eng.*; 1989; v. 14(n. 4): p. 348-359.

4499. Anderson, O.R. Some observations of feeding behavior, growth, and test particle morphology of a silica-secreting testate amoeba *Netzelia tuberculata* (Wallich) (Rhizopoda, Testacea) grown in laboratory culture. *Arch. Protistenkd.*; 1989; v. 137: p. 211-221.

4500. Anderson, R.F., A.P. LeHuray, M.Q. Fleisher, and J.W. Murray. Uranium deposition in Saanich Inlet sediments, Vancouver Island. *Geochim. Cosmochim. Acta*; 1989; v. 53: p. 2205-2213.

4501. Anderson, R.F., M.Q. Fleisher, and A.P. LeHuray. Concentration, oxidation state, and particulate flux of uranium in the Black Sea. *Geochim. Cosmochim. Acta*; 1989; v. 53: p. 2215-2224.

4502. Langmuir, C.H. Geochemical consequences of in situ crystallization. *Nature*; 1989; v. 340(n. 6230): p. 199-205.

4503. Frankignoul, C., C. Duchene, and M.A. Cane. A statistical approach to testing equatorial ocean models with observed data. *J. Phys. Oceanogr.*; 1989; v.19(n. 9): p. 1191-1207.

4504. Stoll, R.D. Geoacoustic properties of a marine silt. in: R.H. Bennett, W.R. Bryant, and M.H. Hulbert, Eds. "Microstructure of Fine-Grained Sediments" . New York: Springer-Verlag; 1991: p. 395-402.

4505. Mortlock, R.A. and P.N. Froelich. A simple method for the rapid determination of biogenic opal in pelagic marine sediments. *Deep-Sea Res.*; 1989; v. 36(n. 9): p. 1415-1426.

4506. Levy, M. and N. Christie-Blick. Pre-Mesozoic palinspastic reconstruction of the eastern Great Basin (western United States). *Science*; 1989; v. 245: p. 1454-1462.

4507. Morley, J.J. and L.E. Heusser. Late quaternary atmospheric and oceanographic variations in the western Pacific inferred from pollen and radiolarian analyses. *Quat. Sci. Rev.*; 1989; v. 8: p. 263-276.

4508. Broecker, W.S., J.P. Kennett, B.P. Flower, J.T. Teller, S. Trumbore, G. Bonani, and W. Wolfli. Routing of meltwater from the Laurentide Ice Sheet during the Younger Dryas cold episode. *Nature*; 1989; v. 341: p. 318-321.

4509. Broecker, W.S., S. Trumbore, G. Bonani, W. Wolfli, and M. Klas. Anomalous AMS radiocarbon ages for foraminifera from high-deposition-rate ocean sediments. *Radiocarbon*; 1989; v. 31(n. 2): p. 157-162.

4510. Simpson, D.W. and T.N. Narasimhan. Inhomogeneities in rock properties and their influence on reservoir induced seismicity. *Gerlands Beitr. Geophysik*; 1990; Band 99(Heft 3): p. 205-219.

4511. Reisberg, L., A. Zindler, and E. Jagoutz. Further Sr and Nd isotopic results from peridotites of the Ronda Ultramafic Complex. *Earth Planet. Sci. Lett.*; 1989; v. 96: p. 161-180.

4512. Yoshioka, N. and C.H. Scholz. Elastic properties of contacting surfaces under normal and shear loads, 1. Theory. *J. Geophys. Res.*; 1989; v. 94(n. B12): p. 17,681-17,690.

4513. Yoshioka, N. and C.H. Scholz. Elastic properties of contacting surfaces under normal and shear loads. 2. Comparison of theory with experiments. *J. Geophys. Res.*; 1989; v. 94(n. B12): p. 17,691-17,700.

4514. Weissel, J.K. and G.D. Karner. Flexural uplift of rift flanks due to mechanical unloading of the lithosphere during extension. *J. Geophys. Res.*; 1989; v. 94(n. B10): p. 13,919-13,950.

4515. Morley, J.J. Variations in high-latitude oceanographic fronts in the southern Indian Ocean: an estimation based on faunal changes. *Paleoceanography*; 1989; v. 4(n. 5): p. 547-554.

4516. Broecker, W.S. and G.H. Denton. The role of ocean-atmosphere reorganizations in glacial cycles. *Geochim. Cosmochim. Acta*; 1989; v. 53(n. 10): p. 2465-2501.

4517. Muller-Karger, F.E., C.R. McClain, R.N. Sambrotto, and G.C. Ray. A comparison of ship and coastal zone color scanner mapped distribution of phytoplankton in the southeastern Bering Sea. *J. Geophys. Res.*; 1990; v. 95(n. C7): p. 11,483-11,499.

4518. Sambrotto, R.N. and A.V. Tsyban. Fluxes and assimilative capacity as characteristics of marine ecosystems. in: P.F. Roscigno, Ed. "Results of the Second Joint U.S.-U.S.S.R. Bering Sea Expedition, Summer, 1984". Washington, DC: U.S. Fish and Wildlife Service; 1990: p. 15-26.

4519. Martinson, D.G. and C. Wamser. Ice drift and momentum exchange in winter Antarctic pack-ice. *J. Geophys. Res.*; 1990; v. 95(n. C2): p. 1741-1755.

4520. Kastens, K. and J. Mascle. The geological evolution of the Tyrrhenian Sea: an introduction to the scientific results of ODP Leg 107. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1990; V. 107: p. 3-26.

4521. Fornari, D.J., D.G. Gallo, M.H. Edwards, J.A. Madsen, M.R. Perfit, and A.N. Shor. Structure and topography of the Siqueiros transform fault system: evidence for the development of intra-transform spreading centers. *Mar. Geophys. Res.*; 1989; v. 11: p. 263-299.

4522. Gilbert, L.E. Are topographic data sets fractal? *Pure Appl. Geophys.*; 1989; v. 131(nos. 1/2): p. 241-254.

4523. Stoll, R.D. Sediment Acoustics. S. Bhattacharji, G.M. Friedman, H.J. Neugebauer and A. Seilacher, Eds. Lecture Notes in Earth Sciences (Series No. 26). Berlin: Springer-Verlag; 1989: p.1-153.

4524. Allan, J.F., R. Batiza, M.R. Perfit, D.J. Fornari, and R.O. Sack. Petrology of lavas from the Lamont seamount chain and adjacent East Pacific Rise, 10° N. J. Petrol.; 1989; v. 30(Part 5): p.1245-1298.

4525. Alexandrovich, J.M. and J.D. Hays. High-resolution stratigraphic correlation of ODP Leg 111 Holes 677A and 677B and DSDP Leg 69 Hole 504. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1989; V. 111: p. 263-276.

4526. Ho, C. and J. Marra. A numerical routine for the seasonal evolution of open-ocean water column temperature for use in biogeochemical studies. Comput. Geosci.; 1989; v. 15(n. 8): p. 1303-1313.

4527. Ekström, G. and E.R. Engdahl. Earthquake source parameters and stress distribution in the Adak Island region of the central Aleutian Islands, Alaska. J. Geophys. Res.; 1989; v. 94(n. B11): p. 15,499-15,519.

4528. Evans, K. and T. Engelder. Some problems in estimating horizontal stress magnitudes in "thrust" regimes. Int. J. Rock Mech. Min. Sci. & Geomech. Abstr.; 1989; v. 26(n. 6): p. 647-660.

4529. Zebiak, S.E. On the 30 - 60 day oscillation and the prediction of El Nino. J. Clim.; 1989; v. 2(n. 11): p. 1381-1387.

4530. Hamelin, B., F. Grousset, and E.R. Sholkovitz. Pb isotopes in surficial pelagic sediments from the North Atlantic. Geochim. Cosmochim. Acta; 1990; v. 54: p. 37-47.

4531. Broecker, W.S. and T-H Peng. The cause of the glacial to interglacial atmospheric CO<sub>2</sub> change: a polar alkalinity hypothesis. Global Biogeochem. Cycles; 1989; v. 3(n. 3): p. 215-239.

4532. Walker, D. and C. Agee. Partitioning "equilibrium", temperature gradients, and constraints on Earth differentiation. Earth Planet. Sci. Lett.; 1989; v. 96: p. 49-60.

4533. Overpeck, J.T., D. Rind, and R. Goldberg. Climate-induced changes in forest disturbance and vegetation. Nature; 1990; v. 343(n. 6253): p. 51-53.

4534. Evans, K.F. Appalachian stress study. 3. Regional scale stress variations and their relation to structure and contemporary tectonics. *J. Geophys. Res.*; 1989; v. 94(n. B12): p. 17,619-17,645.
4535. Bonatti, E., M. Seyler, J. Channell, J. Giraudeau, and G. Mascle. Peridotites drilled from the Tyrrhenian Sea, ODP Leg 107. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1990; V. 107: p. 37-47.
4536. Anderson, R.F., Y. Lao, W.S. Broecker, S.E. Trumbore, H.J. Hofmann, and W. Wolfli. Boundary scavenging in the Pacific Ocean: a comparison of  $^{10}\text{Be}$  and  $^{231}\text{Pa}$ . *Earth Planet. Sci. Lett.*; 1990; v. 96: p. 287-304.
4537. Jacobs, S.S. and J.C. Comiso. Sea ice and oceanic processes on the Ross Sea continental shelf. *J. Geophys. Res.*; 1989; v. 94(n. C12): p. 18,195-18,211.
4538. Malinverno, A., M.H. Edwards, and W.B.F. Ryan. Processing of SeaMARC swath sonar data. *IEEE J. Oceanic Eng.*; 1990; v. 15(n. 1): p. 14-23.
4539. Weaver, J.S. and C.H. Langmuir. Calculation of phase equilibrium in mineral-melt systems. *Comput. Geosci.*; 1990; v. 16(n. 1): p.1-19.
4540. Longhi, J. Silicate liquid immiscibility in isothermal crystallization experiments. *Proceedings of the 20th Lunar and Planetary Science Conference. Houston, TX: Lunar and Planetary Institute*; 1990: p.13-24.
4541. Miller, K.G., D.V. Kent, A.N. Brower, L.M. Bybell, M.D. Feigenson, R.K. Olsson, and R.Z. Poore. Eocene-Oligocene sea-level changes on the New Jersey coastal plain linked to the deep-sea record. *Geol. Soc. Am. Bull.*; 1990; v. 102: p. 331-339.
4542. Wessel, P. and W.F. Haxby. Thermal stresses, differential subsidence, and flexure at oceanic fracture zones. *J. Geophys. Res.*; 1990; v. 95(n. B1): p. 375-391.
4543. Pacheco, J.F., C.H. Estabrook, D.W. Simpson, and J.L. Nabelek. Teleseismic body wave analysis of the 1988 Armenian earthquake. *Geophys. Res. Lett.*; 1989; v. 16(n. 12): p. 1425-1428.
4544. Ruddiman, W.F., W.L. Prell, and M.E. Raymo. Late Cenozoic uplift in southern Asia and the American West: rationale for general circulation modeling experiments. *J. Geophys. Res.*; 1989; v. 94(n. D15): p. 18,379-18,391.

4545. Ruddiman, W.F. and J.E. Kutzbach. Forcing of late Cenozoic northern hemisphere climate by plateau uplift in southern Asia and the American west. *J. Geophys. Res.*; 1989; v. 94(n. D15): p. 18,409-18,427.
4546. Kutzbach, J.E., P.J. Guetter, W.F. Ruddiman, and W.L. Prell. Sensitivity of climate to late Cenozoic uplift in southern Asia and the American west: numerical experiments. *J. Geophys. Res.*; 1989; v. 94(n. D15): p. 18,393-18,407.
4547. Witte, D.C. and P.G. Richards. The pseudospectral method for simulating wave propagation. in: D. Lee, A. Cakmak, and R. Vichnevetsky, Eds. . "Computational Acoustics," V. 3, Proceedings of the Second IMACS Symposium on Computational Acoustics II, Princeton University, Mar. 15-17, 1989. Netherlands: Elsevier Science Publishers; 1990: p. 1-18.
4548. Olson, D.B., R.A. Fine, and A.L. Gordon. Convective modifications of water masses in the Agulhas. *Deep-Sea Res.*; 1992; v. 39 (Suppl. 1): p. S163-S181.
4549. Tuttle, M., K.T. Law, L. Seeber, and K. Jacob. Liquefaction and ground failure induced by the 1988 Saguenay, Quebec, earthquake. *Can. Geotech. J.*; 1990; v. 27: p. 580-589.
4550. Wanninkhof, R., P.J. Mulholland, and J.W. Elwood. Gas exchange rates for a first-order stream determined with deliberate and natural tracers. *Water Resour. Res.*; 1990; v. 26(n. 7): p. 1621-1630.
4551. Leshner, C.E. and D. Walker. Thermal diffusion in petrology. in: J. Ganguly, Eds. Diffusion, Atomic Ordering, and Mass Transport: Selected Topics in Geochemistry. New York: Springer-Verlag; 1991; V. 8, Advances in Physical Geochemistry: p. 396-451.
4552. Fairbanks, R. G. A 17,000-year glacio-eustatic sea level record: influence of glacial melting rates on the Younger Dryas event and deep-ocean circulation. *Nature*; 1989; v. 342(n. 6250): p. 637-642.
4553. Cardone, V.J., J.G. Greenwood, and M.A. Cane. On trends in historical marine wind data. *J. Climate*; 1990; v. 3: p. 113-127.
4554. Berggren, W.A. and K.G. Miller. Cenozoic bathyal and abyssal calcareous benthic foraminiferal zonation. *Micropaleontology*; 1989; v. 35(n. 4): p. 308-320.
4555. Smith, W.H.F. and P. Wessel. Gridding with continuous curvature splines in tension. *Geophysics*; 1990; v. 55(n.3): p. 293-305.



4556. Hunkins, K. A review of the physical oceanography of Fram Strait. in: L. J. Pratt, Ed. "The Physical Oceanography of Sea Straits,". Netherlands: Kluwer Academic Publishers; 1990: p. 61-93.

4557. Williams, P.L., L.R. Sykes, C. Nicholson, and L. Seeber. Seismotectonics of the easternmost transverse ranges, California: relevance for seismic potential of the southern San Andreas fault. *Tectonics*; 1990; v. 9(n. 1): p.185-204.

4558. Schneider, D.A. and D.V. Kent. Ivory Coast microtektites and geomagnetic reversals. *Geophys. Res. Lett.*; 1990; v. 17(n. 2): p. 163-166.

4559. Schneider, D.A. and D.V. Kent. The time-averaged paleomagnetic field. *Rev. Geophys.*; 1990; v. 28(n. 1): p. 71-96.

4560. Marone, C., C.B. Raleigh, and C.H. Scholz. Frictional behavior and constitutive modeling of simulated fault gouge. *J. Geophys. Res.*; 1990; v. 95(n. B5): p. 7007-7025.

4561. Anderson, O.R. Effects of silicate deficiency on test morphology, cytoplasmic fine structure, and growth of the testate amoeba *Netzelia tuberculata* (WALLICH) NETZEL (Rhizopoda, Testacea) grown in laboratory culture. *Arch. Protistenkd.*; 1990; v. 138: p. 17-27.

4562. Caron, D.A., O.R. Anderson, J.L. Lindsey, W.W. Faber, Jr., and Ee Lin Lim. Effects of Gametogenesis on test structure and dissolution of some spinose planktonic foraminifera and implications for Test preservation. *Mar. Micropaleontol.*; 1990; v. 16: p. 93-116.

4563. Verardo, D.J., P.N. Froelich, and A. McIntyre. Determination of organic carbon and nitrogen in marine sediments using the Carlo Erba NA-1500 analyzer. *Deep-Sea Res.*; 1990; v. 37(n. 1): p. 157-165.

4564. Bidigare, R.R., J. Marra, T.D. Dickey, R. Iturriaga, K.S. Baker, R.C. Smith, and H. Pak. Evidence for phytoplankton succession and chromatic adaptation in the Sargasso Sea during Spring 1985. *Mar. Ecol. Prog. Ser.*; 1990; v. 60: p. 113-122.

4565. Smith, R.C., J. Marra, M.J. Perry, K.S. Baker, E. Swift, E. Buskey, and D.A. Kiefer. Estimation of a photon budget for the upper ocean in the Sargasso Sea. *Limnol. Oceanogr.*; 1989; v. 34(n. 8): p. 1673-1693.

4566. Jacoby, G.C., Jr. and R. D'Arrigo. Spatial patterns of tree-growth anomalies from the North American boreal treeline in the early 1800s, including the year 1816. in: C.R. Harington, Ed. "The Year Without a Summer? World Climate in 1816". Ottawa, Canada: Canadian Museum of Nature; 1992: p. 255-265.

4567. Marra, J., R.R. Bidigare, and T.D. Dickey. Nutrients and mixing, chlorophyll and phytoplankton growth. *Deep-Sea Res.*; 1990; v. 37(n. 1): p. 127-143.
4568. Olsen, P.E. Tectonic, climatic, and biotic modulation of Lacustrine ecosystems—examples from Newark Supergroup of eastern North America. in: B.J. Katz, Ed. "Lacustrine Basin Exploration Case Studies and Modern Analogs". Tulsa, OK: Am. Assoc. Pet. Geol.; 1990: p. 209-224, Memoir 50.
4569. Oppo, D.W., R.G. Fairbanks, A.L. Gordon, and N.J. Shackleton. Late Pleistocene Southern Ocean  $\delta^{13}C$  variability. *Paleoceanography*; 1990; v. 5 (n. 1): p. 43-54.
4570. Simpson, D.W., A.A. Gharib, and R.M. Kebeasy. Induced seismicity and changes in water level at Aswan Reservoir, Egypt. *Gerlands Beitr. Geophysik*; 1990; Band 99(Heft 3): p. 191-204.
4571. Schneider, D.A. and D.V. Kent. Paleomagnetism of Leg 115 sediments: implications for neogene magnetostratigraphy and paleolatitude of the reunion hotspot. *Proc. ODP, Sci. Results. College Station TX (Ocean Drilling Program)*; 1990; V. 115: p. 717-736.
4572. Driscoll, N.W., G.D. Karner, J.K. Weissel, and the Shipboard Scientific Party. Stratigraphic and tectonic evolution of broken ridge from seismic stratigraphy and Leg 121 drilling. *Proc. ODP, Init. Repts. College Station, TX (Ocean Drilling Program)*; 1989; V. 121: p. 71-91.
4573. Flood, R.D., P.L. Manley, R.O. Kowsmann, C.J. Appi, and C. Pirmez. Seismic facies and Late Quaternary growth of Amazon submarine fan. in: P. Weimer and M.H. Link, Eds. "Seismic Facies and Sedimentary Processes of Submarine Fans and Turbidite Systems,". New York: Springer-Verlag; 1991: p. 415-433.
4574. Shaw, P.R. and S.C. Cande. High-resolution inversion for South Atlantic plate kinematics using joint altimeter and magnetic anomaly data. *J. Geophys. Res.*; 1990; v. 95(n. B3): p. 2625-2644.
4575. Schlische, R.W. and P.E. Olsen. Quantitative filling model for continental extensional basins with applications to early Mesozoic rifts of eastern North America. *J. Geol.*; 1990; v. 98(n. 2): p. 135-155.
4576. Baldauf, J.G. and E.M. Pokras. Diatom biostratigraphy of Leg 108 sediments: eastern tropical Atlantic Ocean. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1989; V. 108: p. 23-34.

4577. Backman, J., D.A. Schneider, D. Rio, H. Okada, and members of the ODP Leg 115 Shipboard Scientific Party. Neogene low-latitude magnetostratigraphy from Site 710 and revised age estimates of Miocene nannofossil datum events. Proc. ODP, Sci. Results. College Station TX (Ocean Drilling Project); 1990; V. 115: p. 271-276.

4578. Richards, P.G. and J. Zavales. Seismic discrimination of nuclear explosions. Annu. Rev. Earth Planet. Sci.; 1990; v. 18: p. 257-286.

4579. Leshner, C.E. Decoupling of chemical and isotopic exchange during magma mixing. Nature; 1990; v. 344(n. 6263): p. 235-237.

4580. Bishop, J.K.B. Determination of barium in seawater using vanadium/silicon modifier and direct injection graphite furnace atomic absorption spectrometry. Anal. Chem.; 1990; v. 62(n. 6): p.553-557.

4581. Raymo, M.E., W.F. Ruddiman, N.J. Shackleton, and D.W. Oppo. Evolution of Atlantic—Pacific  $\delta^{13}C$  gradients over the last 2.5 m.y. Earth Planet. Sci. Lett.; 1990; v. 97: p. 353-368.

4582. Menke, W., A. L. Lerner-Lam, B. Dubendorff, and J. Pacheco. Polarization and coherence of 5-30 Hz seismic wavefields at a hard-rock site and their relevance to velocity heterogeneities in the crust. Bull. Seismol. Soc. Am.; 1990; v. 80(n. 2): p. 430-449.

4583. Malinverno, A. A quantitative study of the axial topography of the Mid-Atlantic Ridge. J. Geophys. Res.; 1990; v. 95(n. B3): p. 2645-2660.

4584. Gordon, A.L. and W.F. Haxby. Agulhas eddies invade the South Atlantic: evidence from Geosat altimeter and shipboard conductivity-temperature-depth survey. J. Geophys. Res. ; 1990; v. 95(n. C3): p. 3117-3125.

4585. deMenocal, P., J. Bloemendal, and J. King. A rock-magnetic record of monsoonal dust deposition to the Arabian Sea: evidence for a shift in the mode of deposition at 2.4 Ma. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program); 1991; V. 117: p. 389-407.

4586. Ruddiman, W.F., M. Sarnthein, J. Backman, J.G. Baldauf, W. Curry, L.M. Dupont, T. Janecek, E.M. Pokras, M.E. Raymo, B. Stabell, R. Stein, and R. Tiedemann. Late Miocene to Pleistocene evolution of climate in Africa and the low-latitude Atlantic: overview of Leg 108 results. Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program).; 1989; V. 108: p. 463-484.

4587. Olsen, P.E. and R.W. Schlische. Transtensional arm of the early Mesozoic Fundy rift basin: penecontemporaneous faulting and sedimentation. *Geology*; 1990; v. 18: p. 695-698.

4588. McNeil, D.H. and K.G. Miller. High-latitude application of  $^{87}\text{Sr}/^{86}\text{Sr}$ : correlation of Nuwok beds on North Slope Alaska to standard Oligocene chronostratigraphy. *Geology*; 1990; v. 18: p. 415-418.

4589. Bijma, J., W.W. Faber, Jr., and C. Hemleben. Temperature and salinity limits for growth and survival of some planktonic foraminifers in laboratory cultures. *J. Foraminiferal Res.*; 1990; v. 20(n. 2): p. 95-116.

4590. Martinson, D.G. Evolution of the Southern Ocean winter mixed layer and sea ice: open ocean deepwater formation and ventilation. *J. Geophys. Res.*; 1990; v. 95(n. C7): p. 11,641-11,654.

4591. Weissel, J.K. Long-term erosional development of rifted continental margins: toward a quantitative understanding. *Proceedings of the Pacific Rim Congress 90, V. III. Parkville Victoria, Australia : The Australasian Institute of Mining & Metallurgy*; 1990: p. 63-70.

4592. Lu, G., S. Marshak, and D.V. Kent. Characteristics of magnetic carriers responsible for Late Paleozoic remagnetization in carbonate strata of the mid-continent, U.S.A. *Earth Planet. Sci. Lett.*; 1990; v. 99: p. 351-361.

4593. Kominz, M.A. and G.C. Bond. A new method of testing periodicity in cyclic sediments: application to the Newark Supergroup. *Earth and Planet. Sci. Lett.*; 1990; v. 98: p.233-244.

4594. Bonatti, E. Subcontinental mantle exposed in the Atlantic Ocean on St Peter—Paul islets. *Nature*; 1990; v. 345(n. 6278): p. 800-802.

4595. Greengrove, C.L. and S.E. Rennie. South Atlantic density ratio distribution. *Deep-Sea Res.*; 1991; v. 38(Suppl. 1A): p. S345-S354.

4596. Malinverno, A. and R.A. Pockalny. Abyssal hill topography as an indicator of episodicity in crustal accretion and deformation. *Earth Planet. Sci. Lett.*; 1990; v. 99: p. 154-169.

4597. Overpeck, J.T. Century- to millennium-scale climatic variability during the Late Quaternary. in: R.S. Bradley, Ed. "Global Changes of the Past,". Boulder, CO: UCAR/Office for Interdisciplinary Earth Studies; 1991: p. 139-173.

4598. Das, S. and B.V. Kostrov. Inversion for seismic slip rate history and distribution with stabilizing constraints: Application to the 1986 Andreanof Islands earthquake. *J. Geophys. Res.*; 1990; v. 95(n. B5): p. 6899-6913.

4599. Barone, A.M. and W.B.F. Ryan. Single plume model for asynchronous formation of the Lamont Seamounts and adjacent East Pacific Rise terrains. *J. Geophys. Res.*; 1990; v. 95(n. B7): p. 10,801-10,827.

4600. deMenocal, P.B., W.F. Ruddiman, and D.V. Kent. Depth of post-depositional remanence acquisition in deep-sea sediments: a case study of the Brunhes—Matuyama reversal and oxygen isotopic Stage 19.1. *Earth Planet. Sci. Lett.*; 1990; v. 99: p. 1-13.

4601. Bishop, J.K.B., R.C. Smith, and K.S. Baker. Springtime distributions and variability of biogenic particulate matter in Gulf Stream warm-core ring 82B and surrounding N.W. Atlantic waters. *Deep-Sea Res.*; 1992; v. 39 (Suppl. 1): p. S295-S325.

4602. Joyce, T. M., J.K.B. Bishop, and O.B. Brown. Observations of offshore shelf-water transport induced by a warm-core ring. *Deep-Sea Res.*; 1992; v. 39(Suppl. 1): p. S97-S113.

4603. Bangs, N.L.B., G.K. Westbrook, J.W. Ladd, and P. Buhl. Seismic velocities from the Barbados Ridge Complex: indicators of high pore fluid pressures in an accretionary complex. *J. Geophys. Res.*; 1990; v. 95(n. B6): p. 8767-8782.

4604. Hough, S., P.A. Friberg, R. Busby, E.F. Field, K.H. Jacob, and R.D. Borchardt. Sediment-induced amplification and the collapse of the Nimitz Freeway. *Nature*; 1990; v. 344(n. 6269): p. 853-855.

4605. Ekström, G. and B. Romanowicz. The 23 May 1989 Macquarie Ridge Earthquake: a very broad band analysis. *Geophys. Res. Lett.*; 1990; v. 17(n. 7): p. 993-996.

4606. Trumbore, S.E., M. Keller, S.C. Wofsy, and J.M. da Costa. Measurements of soil and canopy exchange rates in the Amazon rain forest using <sup>222</sup>Rn. *J. Geophys. Res.*; 1990; v. 95(n. D10): p. 16,865-16,873.

4607. Tans, P.P., I.Y. Fung, and T. Takahashi. Observational constraints on the global atmospheric CO<sub>2</sub> budget. *Science*; 1990; v. 247: p. 1431-1438.

4608. Martinson, D.G. Southern ocean—sea-ice interaction: implications for climate and modelling. *Trans. R. Soc. Edinburgh: Earth Sci.*; 1990; v. 81: p. 397-405.

4609. Stine, S. and M. Stine. A record from Lake Cardiel of climate change in southern South America. *Nature*; 1990; v. 345(n. 6277): p. 705-708.

4610. Halgedahl, S.L. Magnetic domain patterns observed on synthetic Ti-rich titanomagnetite as a function of temperature and in states of thermoremanent magnetization. *J. Geophys. Res.*; 1991; v. 96(n. B3): p. 3943-3972.

4611. White, R.S., R.S. Detrick, J.C. Mutter, P. Buhl, T.A. Minshull, and E. Morris. New seismic images of oceanic crustal structure. *Geology*; 1990; v. 18: p. 462-465.

4612. Heusser, L.E. and J.J. Morley. Climatic change at the end of the last glaciation in Japan inferred from pollen in three cores from the northwest Pacific Ocean. *Quat. Res.*; 1990; v. 34: p. 101-110.

4613. Oppo, D.W. and R.G. Fairbanks. Atlantic Ocean thermohaline circulation of the last 150,000 years: relationship to climate and atmospheric CO<sub>2</sub>. *Paleoceanography*; 1990; v. 5(n. 3): p. 277-288.

4614. Schneider, D.A. and D.V. Kent. Testing models of the tertiary paleomagnetic field. *Earth Planet. Sci. Lett.*; 1990; v. 101: p. 260-271.

4615. Ravelo, A.C., R.G. Fairbanks, and S.G.H. Philander. Reconstructing tropical Atlantic hydrography using planktonic foraminifera and an ocean model. *Paleoceanography*; 1990; v. 5(n. 3): p. 409-431.

4616. Keys, H.J.R., S.S. Jacobs, and D. Barnett. The calving and drift of iceberg B-9 in the Ross Sea, Antarctica. *Antarctic Sci.*; 1990; v. 2(n. 3): p. 243-257.

4617. Raymo, M.E., D. Rind, and W.F. Ruddiman. Climatic effects of reduced Arctic sea ice limits in the GISS II general circulation model. *Paleoceanography*; 1990; v. 5(n. 3): p. 367-382.

4618. Garzoli, S. and C. Simionato. Baroclinic instabilities and forced oscillations in the Brazil/Malvinas confluence front. *Deep-Sea Res.*; 1990; v. 37(n. 6): p. 1053-1074.

4619. Langseth, M.G., G.K. Westbrook, and M. Hobart. Contrasting geothermal regimes of the Barbados Ridge Accretionary Complex. *J. Geophys. Res.*; 1990; v. 95(n. B6): p. 8829-8843.

4620. Bard, E., B. Hamelin, R.G. Fairbanks, and A. Zindler. Calibration of the 14C timescale over the past 30,000 years using mass spectrometric U-Th ages from Barbados corals. *Nature*; 1990; v. 345(n. 6274): p. 405-410.

4621. Cook, E.R., D.W. Stahle, and M.K. Cleaveland. Dendroclimatic evidence from eastern North America. in: R. S. Bradley and P.D. Jones, Eds. "Climate Since A.D. 1500". London : Routledge; 1992: p. 331-348.

4622. Cane, M.A., M. Mü nnich, and S.E. Zebiak. A study of self-excited oscillations of the tropical ocean—atmosphere system. Part I: linear analysis. *J. Atmos. Sci.*; 1990; v. 47(n. 13): p. 1562-1577.

4623. Cook, E.R. and J. Cole. On predicting the response of forests in eastern North America to future climatic change. *Clim. Change*; 1991; v. 19: p. 271-282.

4624. D'Arrigo, R.D. and G.C. Jacoby, Jr. Dendroclimatic evidence from northern North America. in: R.S. Bradley and P.D. Jones, Eds. "Climate Since A.D. 1500". London: Routledge; 1992: p. 296-311.

4625. Langseth, M.G. and J.C. Moore. Introduction to special section on the role of fluids in sediment accretion, deformation, diagenesis, and metamorphism in subduction zones. *J. Geophys. Res.*; 1990; v. 95(n. B6): p. 8737-8741.

4626. Taber, J.J., S. Billington, and E.R. Engdahl. Seismicity of the Aleutian Arc. in: D.B. Slemmons, et al., Eds. "Neotectonics of North America," *The Geology of North America Decade Map Volume 1*. Boulder, CO.: Geological Society of America; 1991: p. 29-46.

4627. Monaco, A., P. Biscaye, J. Soyer, R. Pocklington, and S. Heussner. Particle fluxes and ecosystem response on a continental margin: the 1985—1988 Mediterranean ECOMARGE experiment . *Contin. Shelf Res.*; 1990; v. 10(n. 9-11): p. 809-839.

4628. Molfino, B. and A. McIntyre. Precessional forcing of nutricline dynamics in the equatorial Atlantic. *Science*; 1990; v. 249( ): p. 766-769.

4629. Cochran, J.R. Himalayan uplift, sea level and the record of Bengal Fan sedimentation at the ODP Leg 116 Sites. *Proc. ODP, Sci. Results*. College Station, TX (Oceans Drilling Program).; 1990; V. 116 : p. 397-413.

4630. Karner, G.D. and J.K. Weissel. Compressional deformation of oceanic lithosphere in the central Indian Ocean: why it is where it is. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1990; V. 116: P. 279-289.

4631. Broecker, W.S. Salinity history of the northern Atlantic during the last deglaciation. *Paleoceanography*; 1990; v. 5(n. 4): p. 459-467.

4632. Cowie, P.A. and G.D. Karner. Gravity effect of sediment compaction: examples from the North Sea and the Rhine Graben. *Earth Planet. Sci. Lett.*; 1990; v. 99: p. 141-153.

4633. Gordon, A.L. and B.A. Huber. Southern Ocean winter mixed layer. *J. Geophys. Res.*; 1990; v. 95(n. C7): p. 11,655-11,672.

4634. Hough, S.E. Constraining sediment thickness in the San Francisco Bay area using observed resonances and P-to-S conversions. *Geophys. Res. Lett.*; 1990; v. 17(n. 9): p. 1469-1472.

4635. Agee, C.B. and D. Walker. Aluminum partitioning between olivine and ultrabasic silicate liquid to 6 GPa. *Contrib. Mineral. Petrol.*; 1990; v. 105: p. 243-254.

4636. Bell, R.E., J.M. Brozena, W.F. Haxby, and J.L. LaBrecque. Continental margins of the western Weddell Sea: insights from airborne gravity and Geosat-derived gravity. in: "Contributions to Antarctic Research I," . Washington, DC.: American Geophysical Union; 1990; Antarctic Research Series, V. 50: p. 91-102.

4637. Ladd, J.W., G.K. Westbrook, P. Buhl, and N. Bangs. Wide-aperture seismic reflection profiles across the Barbados Ridge Complex. *Proc. ODP, Sci. Results . College Station TX (Ocean Drilling Program)*; 1990; V. 110: p. 3-6.

4638. Hecker, B. Photographic evidence for the rapid flux of particles to the sea floor and their transport down the continental slope. *Deep-Sea Res.*; 1990; v. 37(n. 12): p. 1773-1782.

4639. Vera, E.E., J.C. Mutter, P. Buhl, J.A. Orcutt, A.J. Harding, M.E. Kappus, R.S. Detrick, and T.M. Brocher. The structure of O-to O.2-m.y.-old oceanic crust at 9oN on the East Pacific Rise from expanded spread profiles. *J. Geophys. Res.*; 1990; v. 95(n. B10): p. 15,529-15,556.

4640. Anderson, O.R., C.C. Perry, and N.P. Hughes. Transmission and scanning electron microscopic evidence for cytoplasmic deposition of strontium sulphate crystals in colonial radiolaria. *Phil. Trans. R. Soc. London B*; 1990; 329: p. 81-86.

4641. Cook, E.R. Bootstrap confidence intervals for red spruce ring-width chronologies and an assessment of age-related bias in recent growth trends. *Can. J. Forest Res.*; 1990; v. 20(n. 9): p. 1326-1331.

4642. Broecker, W.S., G. Bond, M. Klas, G. Bonani, and W. Wolfli. A salt oscillator in the glacial Atlantic? I. The concept. *Paleoceanography*; 1990; v. 5(n. 4): p. 469-477.



4643. Christie-Blick, N., C.C. von der Borch, and P.A. DiBona. Working hypothesis for the origin of the Wonoka Canyons (Neoproterozoic), South Australia. *Am. J. Sci.*; 1990; v. 290-A: p. 295-332.

4644. Scholz, C.H. and P.A. Cowie. Determination of total strain from faulting using slip measurements. *Nature*; 1990; v. 346(n. 6287): p. 837-839.

4645. Repak, A.J. and O.R. Anderson. The fine structure of the encysting salt marsh heterotrich ciliate *Fabrea salina*. *J. Morphol.*; 1990; v. 205: p. 335-341.

4646. Tuttle, M., P. Cowie, J. Tinsley, M. Benett, and J. Berrill. Liquefaction and foundation failure of Chevron oil and gasoline tanks at Moss Landing, California. *Geophys. Res. Lett.*; 1990; v. 17(n. 10): p. 1797-1800.

4647. Seeber, L. and J.G. Armbruster. Fault kinematics in the 1989 Loma Prieta rupture area during 20 years before that event. *Geophys. Res. Lett.*; 1990; v. 17(n. 9): p. 1425-1428.

4648. Mutter, J. Margins: a new conceptual approach to continental margin research. *EOS*; 1990; v. 71(n. 18): p. 679-688.

4649. Mitchell, N.C. Improving GLORIA images using Sea Beam data. *J. Geophys. Res.*; 1991; v. 96(n. B1): p. 337-351.

4650. Broecker, W.S., T-H Peng, S. Trumbore, G. Bonani, and W. Wolfli. The distribution of radiocarbon in the glacial ocean. *Global Biogeochem. Cycles*; 1990; v. 4(n. 1): p. 103-117.

4651. Raymond, C.A., J.L. LaBrecque and Y. Kristoffersen. Islas Orcadas Rise and Meteor Rise: the tectonic and depositional history of two aseismic plateaus from Sites 702, 703, and 704. *Proc. ODP, Sci. Results*, . College Station, TX (Ocean Drilling Program); 1991; V. 114: p. 5-22.

4652. An, Z.S., G. Kukla, S.C. Porter, and J.L. Xiao. Late Quaternary dust flow on the Chinese Loess Plateau. *Catena*; 1991; v. 18: p. 125-132.

4653. Pitman, W.C. III and X. Golovchenko. Modelling sedimentary sequences. in: D.W. Muller, et al., Eds. "Controversies in Modern Geology: Evolution of Geological Theories in Sedimentology, Earth History and Tectonics". London: Academic Press; 1991: p. 279-309.

4654. Bard, E., B. Hamelin, and R.G. Fairbanks. U-Th ages obtained by mass spectrometry in corals from Barbados: sea level during the past 130,000 years. *Nature*; 1990; v. 346(n. 6283): p. 456-458.

4655. Ruddiman, W.F. Changes in climate and biota on geologic time scales. *Trends Ecol. Evol.*; 1990; v. 5(n. 9): p. 285-288.

4656. Langseth, M.G., A.H. Lachenbruch, and B.V. Marshall. Geothermal observations in the Arctic region. in : A. Grantz, L. Johnson, and J. F. Sweeney, Eds. "The Geology of North America, V. L, The Arctic Ocean Region". Boulder, CO: Geological Society of America; 1990: p. 133-151.

4657. Langseth, M.G. and J.C. Moore. Fluids in accretionary prisms. *EOS*; 1990; v. 71(n. 5): p. 235, 245-246.

4658. Karner, G.D. and J.K. Weissel. Factors controlling the location of compressional deformation of oceanic lithosphere in the Central Indian Ocean. *J. Geophys. Res.*; 1990; v. 95(n. B12): p. 19,795-19,810.

4659. Walker, D., M.A. Carpenter, and C.M. Hitch. Some simplifications to multianvil devices for high pressure experiments. *Am. Mineral.*; 1990; v. 75: p. 1020-1028.

4660. Cole, J.E. and R.G. Fairbanks. The southern oscillation recorded in the  $\delta^{18}O$  of corals from Tarawa Atoll. *Paleoceanography*; 1990; v. 5(n. 5): p. 669-683.

4661. Malinverno, A. A simple method to estimate the fractal dimension of a self-affine series. *Geophys. Res. Lett.*; 1990; v. 17(n. 11): p. 1953-1956.

4662. Witte, W.K. and D.V. Kent. The paleomagnetism of red beds and basalts of the Hettangian extrusive zone, Newark basin, New Jersey. *J. Geophys. Res.*; 1990; v. 95(n. B11): p. 17,533-17,545.

4663. Van Fossen, M.C. and D.V. Kent. High-latitude paleomagnetic poles from Middle Jurassic plutons and Moat volcanics in New England and the controversy regarding Jurassic apparent Polar Wander for North America. *J. Geophys. Res.*; 1990; v. 95(n. B11): p. 17,503-17,516.

4664. Birchfield, G.E. and W.S. Broecker. A salt oscillator in the glacial Atlantic? 2. A "scale analysis" model. *Paleoceanography*; 1990; v. 5(n. 6): p. 835-843.

4665. Bonatti, E. Not so hot "hot spots" in the oceanic mantle. *Science*; 1990; v. 250: p. 107-111.

4666. Molfino, B. and A. McIntyre. Nutrieline variation in the equatorial Atlantic coincident with the Younger Dryas. *Paleoceanography*; 1990; v. 5(n. 6): p. 997-1008.

4667. Simpson, H.J. and A.L. Herczeg. Salinity and evaporation in the River Murray Basin, Australia. *J. Hydrol.*; 1991; v. 124: p. 1-27.

4668. McNutt, S.R., T.P. Miller, and J.J. Taber. Geological and seismological evidence of increased explosivity during the 1986 eruptions of Pavlof volcano, Alaska. *Bull. Volcanol.*; 1991; v. 53: p. 86-98.

4669. Boitnott, G.N. and C.H. Scholz. Direct measurement of the effective pressure law: deformation of joints subject to pore and confining pressures. *J. Geophys. Res.*; 1990; v. 95(n. B12): p. 19279-19298.

4670. Anderson, O.R., M. Bryan, and P. Bennett. Experimental and observational studies of radiolarian physiological ecology: 4. Factors determining the distribution and survival of *Didymocytis tetrathalamus tetrathalamus* with implications for paleoecological interpretations. *Mar. Micropaleontol.*; 1990; v. 16: p. 155-167.

4671. Goldberg, D., C. Broglia, and K. Becker. Fracturing, alteration, and permeability: in-situ properties in Hole 735B. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1991; V. 118: p. 261-269.

4672. Goldberg, D., M. Badri, and W. Wepfer. Ultrasonic attenuation measurements in Gabbros from Hole 735B. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1991; V. 118: p. 253-259.

4673. Pezard, P.A., J.J. Howard, and D. Goldberg. Electrical conduction in oceanic Gabbros, Hole 735B, Southwest Indian Ridge. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1991; V. 118: p. 323-331.

4674. Field, E.H., S.E. Hough, and K.H. Jacob. Using microtremors to assess potential earthquake site response: a case study in Flushing Meadows, New York City. *Bull. Seismol. Soc. Am.*; 1990; v. 80(n. 6): p. 1456-1480.

4675. Swanberg, N.R., O.R. Anderson, and P. Bennett. Skeletal and cytoplasmic variability of large spongiöse spumellarian radiolaria (Actinopodea: Polycystina). *Micropaleontology*; 1990; v. 36(n. 4): p.379-387.

4676. Trumbore, S.E., S.S. Jacobs, and W.M. Smethie, Jr. Chlorofluorocarbon evidence for rapid ventilation of the Ross Sea. *Deep-Sea Res.*; 1991; v. 38(n. 7): p. 845-870.

4677. Jones, J.H. and D. Walker. Thermal diffusion in metal-sulfide liquids: early results. *Proceedings of the 21st Lunar and Planetary Science Conference*. Houston, TX: Lunar and Planetary Institute; 1991: p. 367-373.

4678. Ruddiman, W.F. and J.E. Kutzbach. Late Cenozoic plateau uplift and climate change. *Trans. R. Soc. Edinburgh: Earth Sci.*; 1990; v. 81: p. 301-314.

4679. Hough, S.E., K.H. Jacob, and L. Seeber. High-frequency seismic wave propagation in northeastern North America. *Seismol. Res. Lett.*; 1990; v. 61(n. 3/4): p. 193-208.

4680. Bard, E., B. Hamelin, R.G. Fairbanks, A. Zindler, G. Mathieu, and M. Arnold. U/Th and <sup>14</sup>C ages of corals from Barbados and their use for calibrating the <sup>14</sup>C time scale beyond 9000 years B.P. *Nucl. Instrum. Methods Phys. Res.*; 1990; v. B52: p. 461-468.

4681. Pitman, W.C. III and X. Golovchenko. The effect of sea level changes on the morphology of mountain belts. *J. Geophys. Res.*; 1991; v. 96(n. B4): p. 6879-6891.

4682. Kominz, M.A. and G.C. Bond. Unusually large subsidence and sea-level events during middle Paleozoic time: new evidence supporting mantle convection models for supercontinent assembly. *Geology*; 1991; v. 19: p. 56-60.

4683. Wanninkhof, R.H. and L.F. Bliven. Relationship between gas exchange, wind speed, and radar backscatter in a large wind-wave tank. *J. Geophys. Res.*; 1991; v. 96(n. C2): p. 2785-2796.

4684. Froelich, P.N., P.N. Malone, D.A. Hodell, P.F. Ciesielski, D.A. Warnke, F. Westall, E.A. Hailwood, D.C. Nobes, J. Fenner, J. Mienert, C.J. Mwenifumbo, and D.W. Müller. Biogenic opal and carbonate accumulation rates in the subantarctic South Atlantic: the Late Neogene of Meteor Rise Site 704. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1991; V. 114: p. 515-550.

4685. Froelich, P.N., R.A. Mortlock, M. Mefferd, and J. Powers. Interstitial-water chemistry: abyssal South Atlantic and East Georgia Basins, Islas Orcadas and Meteor rises. *Proc. ODP, Sci. Results*. College Station, TX (Ocean Drilling Program); 1991; V. 114: p. 719-731.

4686. Longhi, J. Complex magmatic processes on Mars: inferences from the SNC meteorites. Proceedings of the 21st Lunar and Planetary Science Conference. Houston, TX: Lunar and Planetary Institute; 1991: p. 695-709.

4687. Boyd, T.M. and K.C. Creager. The geometry of Aleutian Subduction: three-dimensional seismic imaging. *J. Geophys. Res.*; 1991; v. 96(n. B2): p. 2267-2291.

4688. Creager, K.C. and T.M. Boyd. The geometry of Aleutian subduction: three-dimensional kinematic flow model. *J. Geophys. Res.*; 1991; v. 96(n. B2): p. 2293-2307.

4689. Richards, P.G. Progress in seismic verification of test ban treaties. *IEEE-Technol. Soc. Mag.*; 1990/1991; v. 9(n. 4): p.40-52.

4690. Anderson, O.R. Neurocognitive models of information processing and knowledge acquisition. *Prog. Sens. Physiol.*; 1991; v. 12: p. 115-192.

4691. Coakley, B.J. and A.B. Watts. Tectonic controls on the development of unconformities: the north slope, Alaska. *Tectonics*; 1991; v. 10(n. 1): p. 101-130.

4692. Stoll, R.D. Shear waves in marine sediments - bridging the gap from theory to field applications. in: , Eds. J.M. Hovem, et al. "Shear Waves in Marine Sediments". Netherlands: Kluwer Academic Publishers; 1991: p. 3-12.

4693. Watts, A.B., M. Torné , P. Buhl, A. Mauffret, G. Pascal, and B. Pinet. Evidence for reflectors in the lower continental crust before rifting in the Valencia trough. *Nature*; 1990; v. 348(n. 6302): p. 631-635.

4694. Fairbanks, R.G. The age and origin of the "Younger Dryas climate event" in Greenland ice cores. *Paleoceanography*; 1990; v. 5(n. 6): p. 937-948.

4695. Miller, K.G., M.D. Feigenson, J.D. Wright, and B.M. Clement. Miocene isotope reference section, Deep Sea Drilling Project Site 608: an evaluation of isotope and biostratigraphic resolution . *Paleoceanography*; 1991; v. 6(n. 1): p. 33-52.

4696. Dawers, N.H. and L. Seeber. Intraplate faults revealed in crystalline bedrock in the 1983 Goodnow and 1985 Ardsley epicentral areas, New York . *Tectonophysics*; 1991; v. 186: p. 115-131.

4697. Gordon, A.L. and K.T. Bosley. Cyclonic gyre in the tropical South Atlantic. *Deep-Sea Res.*; 1991; v. 31(Suppl. 1A): p. S323-S343.

4698. Pokras, E.M. Source areas and transport mechanisms for freshwater and brackish-water diatoms deposited in pelagic sediments of the equatorial Atlantic. *Quat. Res.*; 1991; v. 35: p. 144-156.

4699. Garzoli, S. and Confluence Principal Investigators. Confluence 1988-1990 an intensive study of the southwestern Atlantic. *EOS*; 1990; v. 71(n. 41): p. 1131-1137.

4700. Clement, B.M. and D.V. Kent. A southern hemisphere record of the Matuyama-Brunhes polarity reversal. *Geophys. Res. Lett.*; 1991; v. 18(n. 1): p. 81-84.

4701. O'Connell, S., W.B.F. Ryan, and W.R. Normark. Evolution of a fan channel on the surface of the outer Mississippi Fan: evidence from side-looking sonar. in: P. Wiemer and M.H. Link, Eds. "Seismic Facies and Sedimentary Processes of Submarine Fans and Turbidite Systems. New York: Springer-Verlag; 1991: p. 365-381.

4702. Brueckner, H.K., L.G. Medaris, Jr., and N. Bakun-Czubarow. Nd and Sr age and isotope patterns from Variscan eclogites of the eastern Bohemian Massif. *N. Jb. Miner. Abh.* ; 1991; v. 163(n. 2/3): p. 169-196.

4703. Peng, T-H and W.S. Broecker. Dynamical limitations on the Antarctic iron fertilization strategy. *Nature*; 1991; v. 349(n. 6306): p. 227-229.

4704. Jacoby, G.C., Jr. and R.D. D'Arrigo. Teak (*Tectona grandis* L.F.), a tropical species of large-scale dendroclimatic potential. *Dendrochronologia* ; 1990; v. 8: p. 83-98.

4705. Tuttle, M. and L. Seeber. Historic and prehistoric earthquake-induced liquefaction in Newbury, Massachusetts. *Geology*; 1991; v. 19: p. 594-597.

4706. Richards, P.G., D.C. Witte, and G. Ekström. Generalized ray theory for seismic waves in structures with planar nonparallel interfaces. *Bull. Seismol. Soc. Am.*; 1991; v. 81(n. 4): p. 1309-1331.

4707. Crusius, J. and R.F. Anderson. Immobility of <sup>210</sup>Pb in Black Sea sediments. *Geochim. Cosmochim. Acta*; 1991; v. 55: p. 327-333.

4708. Sykes, L.R. and S.C. Jaumé. Seismic activity on neighboring faults as a long-term precursor to large earthquakes in the San Francisco Bay area. *Nature*; 1990; v. 348(n. 6302): p. 595-599.

4709. Jacobs, S.S. Sea-level response to ice sheet evolution: an ocean perspective. in : R.A. Bindshadler, Ed. "West Antarctic Ice Sheet Initiative", NASA Conference Publication 3115, V. 2, Proceedings of the SeaRISE workshop, NASA/Goddard Space Flight Center, Greenbelt, Maryland, October 16-18, 1990. Washington, DC: NASA/NSF; 1991: p. 23-47.

4710. Broecker, W.S., A. Virgilio, and T-H Peng. Radiocarbon age of waters in the deep Atlantic revisited. *Geophys. Res. Lett.*; 1991; v. 18(n. 1): p. 1-3.

4711. Broecker, W.S., S. Blanton, W.M. Smethie, Jr., and G. Ostlund. Radiocarbon decay and oxygen utilization in the deep Atlantic Ocean. *Global Biogeochem. Cycles*; 1991; v. 5(n. 1): p. 87-117.

4712. Malinverno, A. Reply to a comment on "A quantitative study of the axial topography of the Mid-Atlantic Ridge", by D.W. Forsyth. *J. Geophys. Res.*; 1991; v. 96(n. B2): p. 2049-2056.

4713. Marra, J., R.W. Houghton, and C. Garside. Phytoplankton growth at the shelf-break front in the Middle Atlantic Bight. *J. Mar. Res.*; 1990; v. 48: p. 851-868.

4714. Zebiak, S.E. Diagnostic studies of Pacific surface winds. *J. Clim.*; 1990; v. 3(n. 9): p. 1016-1031.

4715. Miller, K.G., J.D. Wright, and R.G. Fairbanks. Unlocking the ice house: Oligocene-Miocene oxygen isotopes, eustasy and margin erosion. *J. Geophys. Res.*; 1991; v. 96(n. B4): p. 6829-6848.

4716. Seager, R. A simple model of the climatology and variability of the low-level wind field in the tropics. *J. Clim.*; 1991; v. 4(n. 2): p. 164-179.

4717. Bangs, N.L. and G.K. Westbrook. Seismic modeling of the decollement zone at the base of the Barbados Ridge accretionary complex. *J. Geophys. Res.*; 1991; v. 96(n. B3): p. 3853-3866.

4718. Kuo, J.T. Synoptic prediction of tides and currents everywhere in the ocean waters. in: B.B. Parker, Ed. "Tidal Hydrodynamics". New York : John Wiley & Sons; 1991: p. 61-76.

4719. Wang, C-Y, K. Kastens, and W-T Hwang. Rapid subsidence of small oceanic basins: a study of the Marsili Basin, Central Mediterranean. *J. Geophys. Res.*; 1991; v. 96(n. B3): p. 4413-4421.

4720. Menke, W., L. Shengold, H. Guo, G. Hu, and A. Lerner-Lam. Performance of the short-period geophones of the IRIS/PASSCAL array. *Bull. Seismol. Soc. Am.*; 1991; v. 81(n. 1): p.232-242.

4721. Gordon, A.L. Two stable modes of Southern Ocean winter stratification. in: P.C. Chu and J.C. Gascard, Eds. "Deep Convection and Deep Water Formation in the Oceans". Netherlands: Elsevier Science Publishers; 1991: p. 17-35.

4722. Estabrook, C.H. and K.H. Jacob. Stress indicators in Alaska. in: D.B. Slemmons, et al., Eds. "Neotectonics of North America," The Geology of North America Decade Map Volume 1,. Boulder, Co. : Geological Society of America ; 1991: p. 387-399.

4723. Vigliotti, L. and D.V. Kent. Paleomagnetic results of Tertiary sediments from Corsica: evidence of post-Eocene rotation. *Phys. Earth Planet. Inter.*; 1990; v. 62: p. 97-108.

4724. Mitchell, N.C. An evolving ridge system around the Indian Ocean triple junction. *Mar. Geophys. Res.*; 1991; v. 13: p. 173-201.

4725. Stoll, R.D., G.M. Bryan, R. Mithal, and R. Flood. Field experiments to study seafloor seismoacoustic response. *J. Acoust. Soc. Am.*; 1991; v. 89(n. 5): p. 2232-2240 .

4726. Klein, E.M., C.H. Langmuir, and H. Staudigel. Geochemistry of basalts from the Southeast Indian Ridge, 115° E-138° E. *J. Geophys. Res.*; 1991; v. 96(n. B2): p. 2089-2107.

4727. Martinson, D.G. Open ocean convection in the Southern Ocean. in: P.C. Chu and J.C. Gascard, Eds. "Deep Convection and Deep Water Formation in the Oceans". Netherlands: Elsevier Science Publishers; 1991: p. 37-52.

4728. Reynolds, D.J., M.S. Steckler, and B.J. Coakley. The role of the sediment load in sequence stratigraphy: the influence of flexural isostasy and compaction. *J. Geophys. Res.*; 1991; v. 96(n. B4): p. 6931-6949.

4729. Salters, V.J.M., and S.R. Hart. The mantle sources of ocean ridges, islands and arcs: the Hf-isotope connection. *Earth Planet. Sci. Lett.*; 1991; v. 104: p. 364-380.

4730. Salters, V.J.M., M. Storey, J.H. Sevigny, and H. Whitechurch. Trace element and isotopic characteristics of Kerguelen-Heard Plateau basalts. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1992; V. 120: p. 55-62.



4731. Morley, J.J., L.E. Heusser, and N.J. Shackleton. Late Pleistocene/Holocene radiolarian and pollen records from sediments in the sea of Okhotsk. *Paleoceanography*; 1991; v. 6(n. 1): p. 121-131.

4732. Altabet, M.A., J.K.B. Bishop, and J.J. McCarthy. Differences in particulate nitrogen concentration and isotopic composition for samples collected by bottles and large-volume pumps in Gulf Stream warm-core rings and the Sargasso Sea. *Deep-Sea Res.*; 1992; v. 39 (Suppl. 1): p. S405-S417.

4733. Anderson, R.F. and M.Q. Fleisher. Uranium precipitation in Black Sea sediments. in: E. Izdar and J.W. Murray, Eds. "Black Sea Oceanography". Netherlands: Kluwer Academic Publishers; 1991: p. 443-458.

4734. Menke, W. Applications of the POCS inversion method to interpolating topography and other geophysical fields. *Geophys. Res. Lett.*; 1991; v. 18(n. 3): p. 435-438.

4735. Bjarnason, I. Th. and P. Einarsson. Source mechanism of the 1987 Vatnafjöll earthquake in South Iceland. *J. Geophys. Res.*; 1991; v. 96(n. B3): p. 4313-4324.

4736. Menke, W. and A. Lerner-Lam. Observations of the transition from linear polarization to complex polarization in short-period compressional waves. *Bull. Seismol. Soc. Am.*; 1991; v. 81(n. 2): p. 611-621.

4737. Fischer, K.M., K.C. Creager, and T.H. Jordan. Mapping the Tonga Slab. *J. Geophys. Res.*; 1991; v. 96(n. B9): p. 14,403-14,427.

4738. Levy, M. and N. Christie-Blick. Tectonic subsidence of the early Paleozoic passive continental margin in eastern California and southern Nevada. *Geol. Soc. Am. Bull.*; 1991; v. 103: p. 1590-1606.

4739. Bond, G.C. and M.A. Kominz. Disentangling middle Paleozoic sea level and tectonic events in cratonic margins and cratonic basins of North America. *J. Geophys. Res.*; 1991; v. 96(n. B4): p. 6619-6639.

4740. Leshner, C.E. and M.B. Baker. Recent developments in igneous petrology. *Rev. Geophys.*; 1991; Supplement, U.S National Report to IUGG 1987-1990: p. 471-485.

4741. Abbott, D. and W. Menke. Length of the global plate boundary at 2.4 Ga. *Geology*; 1990; v. 18: p. 58-61.

4742. Levy, M. and N. Christie-Blick. Late Proterozoic paleogeography of the eastern Great Basin. in: J.D. Cooper, and C.H. Stevens, Eds. "Paleozoic Paleogeography of the Western United States - II," Los Angeles, CA: The Pacific Section Society Economic Paleontologists and Mineralogists; 1991; Book 67, V. 1: p. 371-386.

4743. O'Connell, S., W.R. Normark, W.B.F. Ryan, and N.H. Kenyon. An entrenched thalweg channel on the Rhone Fan: interpretation from a SeaBeam and SeaMARC I survey. The Society of Economic, Paleontologists and Mineralogists, Spec. Pub. No. 46; 1991: p. 259-270.

4744. Stine, S. Geomorphic, geographic, and hydrographic basis for resolving the Mono Lake controversy. Environ. Geol. Water Sci.; 1991; v. 17(n. 2): p. 67-83.

4745. Wright, J.D., K.G. Miller, and R.G. Fairbanks. Evolution of modern deepwater circulation: evidence from the late Miocene Southern Ocean. Paleoceanography; 1991; v. 6(n. 2): p. 275-290.

4746. Mü nch, M., M.A. Cane, and S.E. Zebiak. A study of self-excited oscillations of the tropical ocean—atmosphere system. Part II: nonlinear cases. J. Atmos. Sci.; 1991; v. 48(n. 10): p. 1238-1248.

4747. Bopp, R.F., M.L. Gross, H. Tong, H.J. Simpson, S.J. Monson, B.L. Deck, and F.C. Moser. A major incident of dioxin contamination: sediments of New Jersey estuaries. Environ. Sci. Technol.; 1991; v. 25(n. 5): p. 951-956.

4748. Ebinger, C.J., G.D. Karner, and J.K. Weissel. Mechanical strength of extended continental lithosphere: constraints from the Western rift system, East Africa. Tectonics; 1991; v. 10(n. 6): p. 1239-1256.

4749. Schlosser, P., G. Bö nisch, M. Rhein, and R. Bayer. Reduction of deepwater formation in the Greenland Sea during the 1980s: evidence from tracer data. Science; 1991; v. 251: p. 1054-1056.

4750. Kastens, K. Did the onset of extension in the Aegean Basin accelerate the rate of growth of the Mediterranean Ridge accretionary complex?. M.Y. Savascin and A.H. Eronat, Eds. Proceedings of the International Earth Sciences Congress on Aegean Regions, 1-6 October 1990, V. II ed. Izmir, Turkey: D.E. University; 1992: p. 173-192.

4751. D'Arrigo, R.D. and G.C. Jacoby. A 1000-year record of winter precipitation from northwestern New Mexico, USA: a reconstruction from tree-rings and its relation to El Niño and the Southern Oscillation. The Holocene; 1991; v. 1(n. 2): p. 95-101.

4752. Christie-Blick, N. Onlap, offlap, and the origin of unconformity-bounded depositional sequences. *Mar. Geol.*; 1991; v. 97: p. 35-56.

4753. Abbott, D. The case for accretion of the tectosphere by buoyant subduction. *Geophys. Res. Lett.*; 1991; v. 18(n. 4): p. 585-588.

4754. Driscoll, N.W., J.K. Weisell, G.D. Karner, and G.S. Mountain. Stratigraphic response of a carbonate platform to relative sea level changes: Broken Ridge, southeast Indian Ocean. *Am. Assoc. Pet. Geol. Bull.*; 1991; v. 75(n. 4): p. 808-831.

4755. Simpson, H.J. and A.L. Herczeg. Stable isotopes as an indicator of evaporation in the River Murray, Australia. *Water Resour. Res.*; 1991; v. 27(n. 8): p. 1925-1935.

4756. Mitchell, N.C. Distributed extension at the Indian Ocean triple junction. *J. Geophys. Res.*; 1991; v. 96(n. B5): p. 8019-8043.

4757. Karner, G.D., N.W. Driscoll, and J.W. Peirce. Gravity and magnetic signature of broken ridge, southeast Indian Ocean. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1991; V. 121: p. 681-695.

4758. Ledwell, J.R. and A.J. Watson. The Santa Monica Basin tracer experiment: a study of diapycnal and isopycnal mixing. *J. Geophys. Res.*; 1991; v. 96(n. C5): p. 8695-8718.

4759. Watson, A.J., J.R. Ledwell, and S.C. Sutherland. The Santa Monica Basin tracer experiment: comparison of release methods and performance of perfluorodecalin and sulfur hexafluoride. *J. Geophys. Res.*; 1991; v. 96(n. C5): p. 8719-8725.

4760. Wanninkhof, R., J.R. Ledwell, and A.J. Watson. Analysis of sulfur hexafluoride in seawater. *J. Geophys. Res.*; 1991; v. 96(n. C5): p. 8733-8740.

4761. Ledwell, J.R., A.J. Watson, K.W. Doherty, and W.M. Berelson. Integrating samplers for the deep sea. *J. Geophys. Res.*; 1991; v. 96(n. C5): p. 8727-8732.

4762. Gordon, A.L. The Southern Ocean: its involvement in global change. G. Weller, C.L. Wilson, and B.A.B. Severin, Eds. *Proceedings of the International Conference on the Role of the Polar Regions in Global Change, Held June 11-15, 1990. Fairbanks, AK: University of Alaska Fairbanks*; 1991; V. I: p. 249-255.

4763. Haymon, R.M., D.J. Fornari, M.H. Edwards, S. Carbotte, D. Wright, and K.C. Macdonald. Hydrothermal vent distribution along the East Pacific Rise crest (9° 09' - 54'N) and

its relationship to magmatic and tectonic processes on fast-spreading mid-ocean ridges. *Earth Planet. Sci. Lett.*; 1991; v. 104: p. 513-534.

4764. Pokras, E.M. A displaced neritic diatom (*Delphineis karstenii*) in pelagic sediments of the southeast Atlantic. *Mar. Micropaleontol.*; 1991; v. 17: p. 311-317.

4765. Lorenzo, J.M., J.C. Mutter, R. Larson and Northwest Australia Study Group. Development of the continent-ocean transform boundary of the southern Exmouth Plateau. *Geology*; 1991; v. 19: p. 843-846.

4766. Palanques, A. and P.E. Biscaye. Patterns and controls of the suspended matter distribution over the shelf and upper slope south of New England. *Contin. Shelf Res.*; 1992; v. 12(n. 5/6): p. 577-600.

4767. Marone, C.J., C.H. Scholz, and R. Bilham. On the mechanics of earthquake afterslip. *J. Geophys. Res.*; 1991; v. 96(n. B5): p. 8441-8452.

4768. Lorenzo, J.M. and E.E. Vera. Correlation between diverse seismic and physical properties data sets: Site 763, southern Exmouth Plateau. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program).*; 1992; V. 122: p. 393-409.

4769. Caress, D.W. Structural trends and back-arc extension in the Havre Trough. *Geophys. Res. Lett.*; 1991; v. 18(n. 5): p. 853-856.

4770. Jones, J.H. and D. Walker. Partitioning of siderophile elements in the Fe-Ni-S system: 1 bar to 80 kbar. *Earth Planet. Sci. Lett.*; 1991; v. 105: p. 127-133.

4771. Mü ench, R.D., B.A. Huber, J.T. Gunn, D.M. Husby and D.G. Mountain. The Weddell—Scotia marginal ice zone: physical oceanographic conditions, geographical and seasonal variability. *J. Mar. Syst.*; 1992; v. 3: p. 169-182.

4772. Hough, S.E., L. Seeber, A. Lerner-Lam, J.G. Armbruster, and H. Guo. Empirical Green's function analysis of Loma Prieta aftershocks. *Bull. Seismol. Soc. Am.*; 1991; v. 81(n. 5): p. 1737-1753.

4773. Miller, K.G., W.A. Berggren, J. Zhang, and A.A. Palmer-Julson. Biostratigraphy and isotope stratigraphy of upper Eocene microtektites at Site 612: how many impacts? *Palaios*; 1991; v. 6(): p. 17-38.

4774. Edwards, M.H., D.J. Fornari, J.A. Madsen, A. Malinverno, and W.B.F. Ryan. The regional tectonic fabric of the East Pacific Rise from 12° 50'N to 15° 10'N. *J. Geophys. Res.*; 1991; v. 96(n. B5): p.7995-8017.

4775. Martinson, D.G. The role of the Southern Ocean/sea ice interaction in global climate change. G. Weller, C.L. Wilson, and B.A.B. Severin, Eds. *Proceedings of the International Conference on the Role of the Polar Regions in Global Change, Held June 11-15, 1990.* Fairbanks, AK: University of Alaska Fairbanks; 1991; V. I: p. 269-274.

4776. Crusius, J. and R.F. Anderson. Core compression and surficial sediment loss of lake sediments of high porosity caused by gravity coring. *Limnol. Oceanogr.*; 1991; v. 36(n. 5): p. 1021-1031.

4777. Bond, G.C., M.A. Kominz, and J. Beavan. Evidence for orbital forcing of Middle Cambrian peritidal cycles: Wah Wah range, south-central Utah. in: E.K. Franseen, et al., Eds. "Sedimentary Modeling: Computer Simulations and Methods for Improved Parameter Definition". Lawrence, KS.: Kansas Geological Survey; 1991; Bull, 233,: p. 293-317.

4778. Bond, G.C. and M.A. Kominz. Some comments on the problem of using vertical facies changes to infer accommodation and eustatic sea-level histories with examples from Utah and the southern Canadian Rockies. in: E.K. Franseen, et al., Eds. "Sedimentary Modeling: Computer Simulations and Methods for Improved Parameter Definition". Lawrence, KS.: Kansas Geological Survey; 1991; Bull. 233,: p. 273-291.

4779. Thetford, R.D., R.D. D'Arrigo, and G.C. Jacoby. An image analysis system for determining densitometric and ring-width time series. *Can. J. For. Res.*; 1991; v. 21(n. 10): p. 1544-1549.

4780. Cochran, J.R., J-M Gaulier, and X. LePichon. Crustal structure and the mechanism of extension in the northern Red Sea: constraints from gravity anomalies. *Tectonics*; 1991; v. 10(n. 5): p. 1018-1037.

4781. Longhi, J. Comparative liquidus equilibria of hypersthene-normative basalts at low pressure. *Am. Mineral.*; 1991; v. 76: p. 785-800.

4782. Driscoll, N.W., G.D. Karner, and J.K. Weissel. Stratigraphic response of carbonate platforms and terrigenous margins to relative sea-level changes: are they really that different? *Proc. ODP, Sci. Results.* College Station, TX (Ocean Drilling Program); 1991; V. 121: p. 743-761.

4783. Minshull, T.A., R.S. White, J.C. Mutter, P. Buhl, R.S. Detrick, C.A. Williams and E. Morris. Crustal structure at the Blake Spur Fracture Zone from expanding spread profiles. *J. Geophys. Res.*; 1991; v. 96(n. B6): p. 9955-9984.

4784. Stein, C.A. and D.H. Abbott. Heat flow constraints on the South Pacific superswell. *J. Geophys. Res.*; 1991; v. 96(n. B10): p. 16,083-16,099.

4785. Scholz, C.H. Earthquakes and faulting: self-organized critical phenomena with a characteristic dimension. in: T. Riste and D. Sherrington, Eds. "Spontaneous Formation of Space-Time Structures and Criticality". Netherlands: Kluwer Academic Publishers; 1991: p. 41-56.

4786. Bishop, J.K.B. Getting good weight. in : D.W. Spencer and D. Hurd, Eds. *Marine Particles: Analysis and Characterization Geophysical Monograph 63*. Washington, DC: American Geophysical Union; 1991: p. 229-234.

4787. Chayes, D.N. Hydrosweep-DS on the R/V Ewing. in: *IEEE Oceans '91 "Ocean Technologies and Opportunities in the Pacific for the 90's"*. Piscataway, NJ: Institute of Electrical and Electronic Engineers; 1991; V. II: p. 737-742.

4788. Hamelin, B., E. Bard, A. Zindler and R.G. Fairbanks.  $^{234}\text{U}/^{238}\text{U}$  mass spectrometry of corals: how accurate is the U-Th age of the last interglacial period? *Earth Planet. Sci. Lett.*; 1991; v. 106: p. 169-180.

4789. Evans, K., J. Beavan, and D. Simpson. Estimating aquifer parameters from analysis of forced fluctuations in well level: an example from the Nubian Formation near Aswan, Egypt: 1. Hydrogeological background and large-scale permeability estimates. *J. Geophys. Res.*; 1991; v. 96(n. B7): p. 12,127-12,137.

4790. Beavan J., K. Evans, S. Mousa, and D. Simpson. Estimating aquifer parameters from analysis of forced fluctuations in well level: an example from the Nubian Formation near Aswan, Egypt: 2. Poroelastic properties. *J. Geophys. Res.*; 1991; v. 96(n. B7): p. 12,139-12160.

4791. Evans, K., J. Beavan, D. Simpson, and S. Mousa. Estimating aquifer parameters from analysis of forced fluctuations in well level: an example from the Nubian formation near Aswan, Egypt: 3. Diffusivity estimates for saturated and unsaturated zones. *J. Geophys. Res.*; 1991; v. 96(n. B7): p. 12,161-12,191.

4792. Mello, G.A., R.D. Flood, T.H. Orsi, and A. Lowrie. Southern Brazil basin: sedimentary processes and features and implications for continental-rise evolution. in: C.W. Poag and P.C. de Graciansky, Eds. "Geologic Evolution of Atlantic Continental Rises". New York, NY.: Van Nostrand Reinhold; 1992: p. 189-213.

4793. Wright, J.D. and K.G. Miller. Miocene stable isotope stratigraphy, Site 747, Kerguelen Plateau. Proc. ODP, Sci. Results. College Station TX (Ocean Drilling Program); 1992; V. 120: p. 855-866.

4794. Brunel, J.P., H.J. Simpson, A.L. Herczeg, R. Whitehead and G.R. Walker. Stable isotope composition of water vapor as an indicator of transpiration fluxes from rice crops. Water Resour. Res.; 1992; v. 28(n. 5): p. 1407-1416.

4795. Smethie, W.M., Jr., D.K. Solomon, S.L. Schiff, and G.G. Mathieu. Tracing groundwater flow in the Borden aquifer using Krypton-85. J. Hydrol.; 1992; v. 130: p. 279-297.

4796. Jacoby, G.C. and R.D. D'Arrigo. Global change and thermal history as recorded by northern North American tree-ring data. G. Weller, C.L. Wilson, and B.A.B. Severin, Eds. Proceedings of the International Conference on the Role of the Polar Regions in Global Change, Held June 11-15, 1990. Fairbanks, AK: University of Alaska Fairbanks; 1991; V. II: p. 599-605.

4797. Anderson, O.R. Radiolarian Algal Symbioses. in: W. Reisser, Ed. Algal Symbioses: Plants, Animals, Fungi, Viruses, Interactions Explored. Bristol, England: BioPress Ltd. ; 1992: p. 93-109.

4798. Kominz, M.A., J. Beavan, G.C. Bond, and J. McManus. Are cyclic sediments periodic? Gamma analysis and spectral analysis of Newark Supergroup lacustrine strata. in: E.K. Franseen, et al., Eds. "Sedimentary Modeling: Computer Simulations and Methods for improved Parameter Definition". Lawrence, KS.: Kansas Geological Survey; 1991: Bull. 233, p. 319-334.

4799. Malinverno, A. Inverse square-root dependence of mid-ocean-ridge flank roughness and spreading rate. Nature; 1991; v. 352(n. 6330): p. 58-60.

4800. Mortlock, R.A., C.D. Charles, P.N. Froelich, M.A. Zibello, J. Saltzman, J.D. Hays, and L.H. Burckle. Evidence for lower productivity in the Antarctic Ocean during the last glaciation. Nature; 1991; v. 351(n. 6323): p. 220-222.

4801. Walker, D. Lubrication, gasketing, and precision in multianvil experiments. Am. Mineral.; 1991; v. 76: p. 1092-1100.

4802. Hayes, D.E. and K.A. Kane. The dependence of seafloor roughness on spreading rate. Geophys. Res. Lett.; 1991; v. 18(n. 8): p. 1425-1428.

4803. Houghton, R.W. The relationship of sea surface temperature to thermocline depth at annual and interannual time scales in the tropical Atlantic Ocean. J. Geophys. Res.; 1991; v. 96(n. C8): p. 15,173-15,185.

4804. Clark, J.F., H.J. Simpson, R.F. Bopp, and B. Deck. Geochemistry and loading history of phosphate and silicate in the Hudson estuary. *Estuarine, Coastal Shelf Sci.*; 1992; v. 34: p. 213-233.

4805. Morley, J.J. and B.A. Dworetzky. Evolving Pliocene—Pleistocene climate: a North Pacific perspective. *Quat. Sci. Rev.*; 1991; v. 10: p. 225-237.

4806. Martinson, D.G. and J.R. Hopper. Nonlinear seismic trace interpolation. *Geophysics*; 1992; v. 57(n. 1): p. 136-145.

4807. Miller, D.M., C.H. Langmuir, S.L. Goldstein, and A.L. Franks. The importance of parental magma composition to calc-alkaline and tholeiitic evolution: evidence from Umnak Island in the Aleutians. *J. Geophys. Res.*; 1992; v. 97(n. B1): p. 321-343.

4808. Driscoll, N.W. and G.D. Karner. Deconvolving water-gun seismic data. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1991; V. 121: p. 663-679.

4809. Jacobs, S.S. On the nature and significance of the Antarctic Slope Front. *Mar. Chem.*; 1991; v. 35: p. 9-24.

4810. Bishop, J.K.B. and W.B. Rossow. Spatial and temporal variability of global surface solar irradiance. *J. Geophys. Res.*; 1991; v. 96(n. C9): p. 16,839-16,858.

4811. Glass, B.P., D.V. Kent, D.A. Schneider, and L. Tauxe. Ivory Coast microtektite strewn field: description and relation to the Jaramillo geomagnetic event. *Earth Planet. Sci. Lett.*; 1991; v. 107: p. 182-196.

4812. Burckle, L.H. and E.M. Pokras. Implications of a Pliocene stand of *Nothofagus* (southern beech) within 500 kilometres of the South Pole. *Antarct. Sci.*; 1991; v. 3(n. 4): p. 389-403.

4813. Schlosser, P., J.L. Bullister, and R. Bayer. Studies of deep water formation and circulation in the Weddell Sea using natural and anthropogenic tracers. *Mar. Chem.*; 1991; v. 35: p. 97-122.

4814. Bayer, R. and P. Schlosser. Tritium profiles in the Weddell Sea. *Mar. Chem.*; 1991; v. 35: p. 123-136.



4815. Sipkin, S.A. and A.L. Lerner-Lam. Pulse-shape distortion introduced by broadband deconvolution. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 1): p. 238-258.

4816. Kastens, K.A. Rate of outward growth of the Mediterranean Ridge accretionary complex. *Tectonophysics*; 1991; v. 199: p. 25-50.

4817. Berggren, W.A., D.V. Kent, J.D. Obradovich, and C.C. Swisher III. Toward a revised Paleogene geochronology. in: D.R. Prothero and W.A. Berggren, Eds. "Eocene-Oligocene Climatic and Biotic Evolution". Princeton, NJ : Princeton University Press; 1992: p. 29-45.

4818. Miller, K.G. Middle Eocene to Oligocene stable isotopes, climate, and deep-water history: the terminal Eocene event? in: D.R. Prothero and W.A. Berggren, Eds. "Eocene-Oligocene Climatic and Biotic Evolution". Princeton, NJ: Princeton University Press; 1992: p. 160-177.

4819. Denton, G.H., M.L. Prentice, and L.H. Burckle. Cainozoic history of the Antarctic Ice Sheet. in: R.J. Tingey, Ed. "The Geology of Antarctica", Oxford monographs on geology and geophysics, no. 17,. Oxford: Clarendon Press; 1991: p. 365-433.

4820. Barth, G.A., J.C. Mutter, and J.A. Madsen. Upper-mantle seismic reflections beneath the East Pacific Rise. *Geology*; 1991; v. 19: p. 994-996.

4821. Bell, R.E., B.J. Coakley, and R.W. Stemp. Airborne gravimetry from a small twin engine aircraft over the Long Island Sound. *Geophysics*; 1991; v. 56(n. 9): p. 1486-1493.

4822. Broecker, W.S., M. Klas, E. Clark, G. Bonani, S. Ivy, and W. Wolfli. The influence of CaCO<sub>3</sub> dissolution on core top radiocarbon ages for deep-sea sediments. *Paleoceanography*; 1991; v. 6(n. 5): p. 593-608.

4823. Bard, E., R.G. Fairbanks, B. Hamelin, A. Zindler, and C-T Hoang. Uranium-234 anomalies in corals older than 150,000 years. *Geochim. Cosmochim. Acta*; 1991; v. 55: p. 2385-2390.

4824. Cook, E., T. Bird, M. Peterson, M. Barbetti, B. Buckley, R. D'Arrigo, R. Francey, and P. Tans. Climatic change in Tasmania inferred from a 1089-year tree ring chronology of Huon Pine. *Science*; 1991; v. 253: p. 1266-1268.

4825. Moore, J.C., J. Diebold, M.A. Fisher, J. Sample, T. Brocher, M. Talwani, J. Ewing, R. von Huene, C. Rowe, D. Stone, C. Stevens and D. Sawyer. EDGE deep seismic reflection transect of the eastern Aleutian arc-trench layered lower crust reveals underplating and continental growth. *Geology*; 1991; v. 19: p. 420-424.

4826. Katz, M.E. and K.G. Miller. Early Paleogene benthic foraminiferal assemblages and stable isotopes in the Southern Ocean. Proc. ODP, Sci. Results. College Station, TX. (Ocean Drilling Program); 1991; V. 114: p.481-512.

4827. Madsen, J.A., D.J. Fornari, M.H. Edwards, D.G. Gallo, and M.R. Perfit. Kinematic framework of the Cocos-Pacific plate boundary from 13° N to the Orozco transform fault: results from an extensive magnetic and seaMARC II survey. J. Geophys. Res.; 1992; v. 97(n. B5): p. 7011-7024.

4828. Peng, T-H., W.S. Broecker, and H.G. Ostlund. Dynamic constraints on CO<sub>2</sub> uptake by an iron-fertilized Antarctic. in: D. Ojima, Ed. "Modeling The Earth System," from the 1990 Global Change Institute V. 3, Snowmass, Colorado, July 16-27, 1990. Boulder, CO.: OIES/University Corporation for Atmospheric Research; 1992: p. 77-105.

4829. Petersen, M.D., L. Seeber, L.R. Sykes, J.L. Nabelek, J.G. Armbruster, J. Pacheco, and K.W. Hudnut. Seismicity and fault interaction, southern San Jacinto fault zone and adjacent faults, southern California: implications for seismic hazard. Tectonics; 1991; v. 10(n. 6): p. 1187-1203.

4830. Hough, S.E. and L. Seeber. Seismological constraints on source properties of the mb=4.0, 1985 Ardsley, New York Earthquake: a characteristic rupture? J. Geophys. Res.; 1991; v. 96(n. B11): p. 18,183-18,195.

4831. Broecker, W.S. and F. Woodruff. Discrepancies in the oceanic carbon isotope record for the last fifteen million years? Geochim. Cosmochim. Acta ; 1992; v. 56: p. 3259-3264.

4832. Menke, W., P. Friberg, A. Lerner-Lam, D. Simpson, R. Bookbinder, and G. Karner. Sharing data over Internet with the Lamont view-server system. EOS; 1991; v. 72(n. 38): p. 409, 413-414.

4833. Zaucker, F. and W.S. Broecker. The influence of atmospheric moisture transport on the fresh water balance of the Atlantic drainage basin: general circulation model simulations and observations. J. Geophys. Res.; 1992; v. 97(n. D3): p. 2765-2773.

4834. Blichert-Toft, J., C.E. Lesher, and M.T. Rosing. Selectively contaminated magmas of the Tertiary East Greenland macrodiike complex. Contrib. Mineral. Petrol.; 1992; v. 110: p. 154-172.

4835. Lorenzo, J.M. and E.E. Vera. Thermal uplift and erosion across the continent—ocean transform boundary of the southern Exmouth Plateau. Earth Planet. Sci. Lett.; 1992; v. 108: p. 79-92.

4836. Oxburgh, R., W.S. Broecker, and R.H. Wanninkhof. The carbon budget of Mono Lake. *Global Biogeochem. Cycles*; 1991; v. 5(n. 4): p. 359-372.

4837. Lee, J.J., O.R. Anderson, B. Karim, and J. Beri. Additional insight into the structure and biology of *Abyssotherma pacifica* (Brönnimann, Van Dover and Whittaker) from the East Pacific Rise. *Micropalontology* ; 1991; v. 37(n. 3): p. 303-312.

4838. Overpeck, J.T., P.J. Bartlein, and T. Webb III. Potential magnitude of future vegetation change in Eastern North America: comparisons with the past. *Science*; 1991; v. 254: p. 692-695.

4839. Witte, W.K., D.V. Kent, and P.E. Olsen. Magnetostratigraphy and paleomagnetic poles from Late Triassic—earliest Jurassic strata of the Newark basin. *Geol. Soc. Am. Bull.*; 1991; v. 103: p. 1648-1662.

4840. Stoll, R. D. Using seafloor arrays to measure sediment seismoacoustic and geotechnical properties. in: *IEEE Oceans '91: "Ocean Technologies and Opportunities in the Pacific for the 90's"*. Piscataway, NJ: Institute of Electrical and Electronic Engineers; 1991; V. I: p. 97-101.

4841. Witte, W.K. and D.V. Kent. Tectonic implications of a remagnetization event in the Newark Basin. *J. Geophys. Res.*; 1991; v. 96(n. B12): p. 19,569-19,582.

4842. Buck, W.R. Modes of continental lithospheric extension. *J. Geophys. Res.*; 1991; v. 96(n. B12): p. 20,161-20,178.

4843. Karner, G.D. Sediment blanketing and the flexural strength of extended continental lithosphere. *Basin Res.*; 1991; v. 3: p. 177-185.

4844. Abers, G.A. Possible seismogenic shallow-dipping normal faults in the Woodlark-D'Entrecasteaux extensional province, Papua New Guinea. *Geology*; 1991; v. 19: p. 1205-1208.

4845. Cande, S.C. and W.F. Haxby. Eocene propagating rifts in the Southwest Pacific and their conjugate features on the Nazca plate. *J. Geophys. Res.*; 1991; v. 96(n. B12): p. 19,609-19,622.

4846. Estabrook, C.H. and T.M. Boyd. The Shumagin Islands, Alaska, earthquake of 31 May 1917. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 2): p. 755-773.

4847. Estabrook, C.H., J.L. Nábelek, and A.L. Lerner-Lam. Tectonic model of the Pacific-North American plate boundary in the Gulf of Alaska from broadband analysis of the 1979 St.

Elias, Alaska, earthquake and its aftershocks. *J. Geophys. Res.*; 1992; v. 97 (n. B5): p. 6587-6612.

4848. Clement, B.M. and D.G. Martinson. A quantitative comparison of two paleomagnetic records of the Cobb Mountain subchron from North Atlantic deep-sea sediments. *J. Geophys. Res.*; 1992; v. 97(n. B2): p. 1735-1752.

4849. Byrne, D.E., L.R. Sykes, and D.M. Davis. Great thrust earthquakes and aseismic slip along the plate boundary of the Makran subduction zone. *J. Geophys. Res.*; 1992; v. 97(n. B1): p. 449-478.

4850. Stein, C.A. and D.H. Abbott. Implications of estimated and measured thermal conductivity for oceanic heat flow studies. *Mar. Geophys. Res.*; 1991; v. 13: p. 311-329.

4851. Mitchell, B.G., E. Brody, O. Holm-Hansen, C. McClain, and J. Bishop. Light limitation of phytoplankton biomass and macronutrient utilization in the Southern Ocean. *Limnol. Oceanogr.*; 1991; v. 36(n. 8): p. 1662-1677.

4852. Longhi, J. Origin of picritic green glass magmas by polybaric fractional fusion. *Proceedings of Lunar and Planetary Science. Houston, TX.: Lunar and Planetary Institute; 1992; V. 22: p. 343-353.*

4853. Blumenthal, M.B. Predictability of a coupled ocean—atmosphere model. *J. Clim.*; 1991; v. 4(n. 8): p. 766-784.

4855. Schreiber, B.C. and D. Walker. Halite pseudomorphs after gypsum: a suggested mechanism. *J. Sediment. Petrol.*; 1992; v. 62(n. 1): p. 61-70.

4856. Green, H.W., II, T.E. Young, D. Walker, and C.H. Scholz. The effect of nonhydrostatic stress on the  $a \leftrightarrow b$  and  $a \leftrightarrow g$   $a - b$  and  $a - g$  olivine phase transformations. in: Y. Syono and M. Manghnani, Eds. "High Pressure Research: Applications to Earth and Planetary Sciences": Terra Scientific Pub. Co., Tokyo/American Geophysical Union, Washington, DC; 1992; *Geophysical Monograph 67: p. 229-235.*

4857. Broecker, W., G. Bond, M. Klas, E. Clark, and J. McManus. Origin of the northern Atlantic's Heinrich events. *Clim. Dynamics*; 1992; v. 6: p. 265-273.

4858. Karner, G.D., S.S. Egan, and J.K. Weissel. Modeling the tectonic development of the Tucano and Sergipe-Alagoas rift basins, Brazil. *Tectonophysics*; 1992; v. 215: p. 133-160 .

4859. Field, A. and A.L. Gordon. Vertical mixing in the Indonesian thermocline. *J. Phys. Oceanogr.*; 1992; v. 22(n. 2): p. 184-195.
4860. Broecker, W.S. The great ocean conveyor. *Oceanography*; 1991; v. 4(n. 2): p. 79-89.
4861. Marra, J., T.D. Dickey, and L. Mueller. Global surveys of bio-optical ocean properties. *EOS, Transactions*; 1991; v. 72(n. 51): p. 577-581.
4862. Pacheco, J.F., C.H. Scholz, and L.R. Sykes. Changes in frequency-size relationship from small to large earthquakes. *Nature*; 1992; v. 355: p. 71-73.
4863. Charles, C.D., P.N. Froelich, M.A. Zibello, R.A. Mortlock, and J.J. Morley. Biogenic opal in Southern Ocean sediments over the last 450,000 years: implications for surface water chemistry and circulation. *Paleoceanography*; 1991; v. 6(n. 6): p. 697-728.
4864. Van Fossen, M.C. and D.V. Kent. Reply to comment by R.F. Butler, et al., on "High latitude paleomagnetic poles from Middle Jurassic plutons and Moat volcanics in New England and the controversy regarding Jurassic apparent Polar Wander for North America". *J. Geophys. Res.*; 1992; v. 97(n. B2): p. 1803-1805.
4865. Chamberlin, S. and J. Marra. Estimation of photosynthetic rate from measurements of natural fluorescence: analysis of the effects of light and temperature. *Deep-Sea Res.*; 1992; v. 39(n. 10): p. 1695-1706.
4866. Van Fossen, M.C. and D.V. Kent. Paleomagnetism of the Front Range (Colorado) Morrison Formation and an alternative model of Late Jurassic North American apparent polar wander. *Geology*; 1992; v. 20: p. 223-226.
4867. Langseth, M.G., K. Becker, R.P. Von Herzen, and P. Schultheiss. Heat and fluid flux through sediment on the western flank of the Mid-Atlantic Ridge: a hydrogeological study of North Pond. *Geophys. Res. Lett.*; 1992; v. 19(n. 5): p. 517-520.
4868. Manley, T.O., R.H. Bourke, and K.L. Hunkins. Near-surface circulation over the Yermak Plateau in northern Fram Strait. *J. Mar. Syst.*; 1992; v. 3: p. 107-125.
4869. Simpson, H.J., A.L. Herczeg, and W.S. Meyer. Stable isotope ratios in irrigation water can estimate rice crop evaporation. *Geophys. Res. Lett.*; 1992; v. 19(n. 4): p. 377-380.

4870. Anderson, O.R. A fine structure study of *Physarum polycephalum* during transformation from sclerotium to plasmodium: a six-stage description. *J. Protozool.*; 1992; v. 39(n. 1): p. 213-223.
4871. Anderson, O.R. The effects of silicate depletion and subsequent replenishment on the cytoplasmic fine structure of the silica-secreting testate amoeba *Netzelia tuberculata* in laboratory culture. *J. Morphol.*; 1992; v. 211: p. 285-293.
4872. Langdon, C. Community respiration measurements using a pulsed O<sub>2</sub> electrode. in: P.F. Kemp, et al., Eds. *Handbook of Methods in Aquatic Microbial Ecology*. Boca Raton, FL.: Lewis Publishers; 1993: p. 447-453.
4873. Kelly, P.E., E.R. Cook, and D.W. Larson. Constrained growth, cambial mortality, and dendrochronology of ancient *Thuja occidentalis* on cliffs of the Niagara Escarpment: an eastern version of bristlecone pine? *Int. J. Plant Sci.*; 1992 ; v. 153(n. 1): p. 117-127.
4874. Pacheco, J.F. and L.R. Sykes. Seismic moment catalog of large shallow earthquakes, 1900 to 1989. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 3): p. 1306-1349.
4875. Jacobs, S. The Voyage of iceberg B-9. *Am. Sci.*; 1992; v. 80: p. 32-42.
4876. Crusius, J. and R.F. Anderson. Inconsistencies in accumulation rates of Black Sea sediments inferred from records of laminae and <sup>210</sup>Pb. *Paleoceanography*; 1992; v. 7(n. 2): p. 215-227.
4877. Spiegelman, M. and P. Kenyon. The requirements for chemical disequilibrium during magma migration. *Earth Planet. Sci. Lett.*; 1992; v. 109: p. 611-620.
4878. Pratson, E.L., R.N. Anderson, R.E. Dove, M. Lyle, L.T. Silver, E.W. James, and B.W. Chappell. Geochemical logging in the Cajon Pass Drill Hole and its application to a new, oxide, igneous rock classification scheme. *J. Geophys. Res.*; 1992; v. 97(n. B4): p. 5167-5180.
4879. Jaumé, S.C. and C.H. Estabrook. Accelerating seismic moment release and outer-rise compression: possible precursors to the next great earthquake in the Alaska Peninsula region. *Geophys. Res. Lett.*; 1992; v. 19(n. 4): p. 345-348.
4880. Longhi, J., E. Knittle, J.R. Holloway, and H. Wänke. The bulk composition, mineralogy and internal structure of Mars. in: H. H. Kieffer, B.M. Jakosky, and C.W. Snyder, Eds. *Mars*. Tucson, AZ: University of Arizona Press; 1992: p. 184-208.

4881. Dorobek, S.L., S.K. Reid, M. Elrick, G.C. Bond, and M.A. Kominz. Subsidence across the Antler foreland of Montana and Idaho: tectonic versus eustatic effects. in: E.K. Franseen, et al., Eds. "Sedimentary Modeling: Computer Simulations and Methods for Improved Parameter Definition". Lawrence, KS: Kansas Geological Survey; 1991: p. 231-251.

4882. Charles, C.D. and R.G. Fairbanks. Evidence from southern ocean sediments for the effect of North Atlantic deep-water flux on climate. *Nature*; 1992; v. 355(n. 6359): p. 416-419.

4883. Biegel, R.L., W. Wang, C.H. Scholz, G.N. Boitnott, and N. Yoshioka. Micromechanics of rock friction: 1. effects of surface roughness on initial friction and slip hardening in westerly granite. *J. Geophys. Res.*; 1992; v. 97(n. B6): p. 8951-8964.

4884. Ou, H-W. Some effects of a seamount on oceanic flows. *J. Phys. Oceanogr.*; 1991; v. 21(n. 12): p. 1835-1845.

4885. Gordon, A.L., S.E. Zebiak, and K. Bryan. Climate variability and the Atlantic Ocean. *EOS*; 1992; v. 73(n. 15): p. 161,164-165.

4886. Bonatti, E., A. Peyve, P. Kepezhinskas, N. Kurentsova, M. Seyler, S. Skolotnev, and G. Udintsev. Upper mantle heterogeneity below the Mid-Atlantic Ridge, 0° - 15° N. *J. Geophys. Res.*; 1992; v. 97(n. B4): p. 4461-4476.

4887. Gordon, A.L., R.F. Weiss, W.M. Smethie, Jr., and M.J. Warner. Thermocline and intermediate water communication between the South Atlantic and Indian Oceans. *J. Geophys. Res.*; 1992; v. 97(n. C5): p. 7223-7240.

4888. Jacobi, R.D. and D.E. Hayes. Northwest African continental rise: effects of near-bottom processes inferred from high-resolution seismic data. in: C.W. Poag and P.C. de Graciansky, Eds. "Geologic Evolution of Atlantic Continental Rises". New York, NY: Van Nostrand Reinhold ; 1992: p. 293-326.

4889. Chipman, D.W., J. Marra, and T. Takahashi. Primary production at 47° N and 20° W in the North Atlantic Ocean: a comparison between the 14C incubation method and the mixed layer carbon budget. *Deep-Sea Res.*; 1993; Part II, v. 40(n. 1/2): p. 151-169.

4890. deMenocal, P.B., D.W. Oppo, R.G. Fairbanks, and W.L. Prell. Pleistocene δ 13C variability of North Atlantic intermediate water. *Paleoceanography*; 1992; v. 7(n. 2): p. 229-250.

4891. Richards, P.G., D.A. Anderson, and D.W. Simpson. A survey of blasting activity in the United States. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 3): p. 1416-1433.

4892. Byrne, D.E., W-H. Wang, and D.M. Davis. Mechanical role of backstops in the growth of forearcs. *Tectonics*; 1993; v. 12(n. 1): p. 123-144.

4893. Hu, G. and W. Menke. Formal inversion of laterally heterogeneous velocity structure from P-wave polarization data. *Geophys. J. Int.*; 1992; v. 110: p. 63-69.

4894. Hayes, D.E. Marine geological and geophysical atlas of the circum-Antarctic to 30° S: Introduction and general comments. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 1-4.

4895. Hayes, D.E. Bathymetry: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 5-9.

4896. Haxby, W.F. and D.E. Hayes. Free-air gravity of the southern ocean derived from Seasat and Geosat altimeter data: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 11-19.

4897. Hayes, D.E., P.L. Manley, J.W. Malin, and R.E. Houtz. Crustal structure: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 21-24.

4898. Hayes, D.E., S.C. Cande, and J.L. LaBrecque. Magnetic anomalies: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 25-28.

4899. Hayes, D.E. and J.L. LaBrecque. Sediment isopachs: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 29-35.

4900. McCoy, F.W. Southern Ocean sediment: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,". Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 37-46.

4901. Hayes, D.E. Tectonics and age of the oceanic crust: circum-Antarctic to 30° S. in: D.E. Hayes , Ed. "Marine Geological and Geophysical Atlas of the Circum-Antarctic to 30° S,".



Washington, DC: American Geophysical Union; 1991; Antarctic Research Series, V. 54: p. 47-56.

4902. Fram, M.S. and J. Longhi. Phase equilibria of dikes associated with Proterozoic anorthosite complexes. *Am. Mineral.*; 1992; v. 77: p. 605-616.

4903. Fairbanks, R.G., C.D. Charles, and J.D. Wright. Origin of global meltwater pulses. in: R.E. Taylor, et al., Eds. "Radiocarbon After Four Decades". New York, NY: Springer-Verlag; 1992: p. 473-500.

4904. McHugh, C.M., W.B.F. Ryan, and B. Hecker. Contemporary sedimentary processes in the Monterey Canyon—fan system. *Mar. Geol.*; 1992; v. 107: p. 35-50.

4905. Richards, P.G., W-Y. Kim, and G. Ekström. Borovoye Geophysical Observatory, Kazakhstan. *EOS*; 1992; v. 73(n. 18): p. 201 and 205-206.

4906. Broecker, W.S. and T-H. Peng. What caused the glacial to interglacial CO<sub>2</sub> change? in: M. Heimann, Ed. "The Global Carbon Cycle" V. 15. Heidelberg: Springer-Verlag; 1993; NATO ASI Series I: Global Environmental Change, : p. 95-115.

4907. Stute, M., C. Sonntag, J. Deák, and P. Schlosser. Helium in deep circulating groundwater in the Great Hungarian Plain: flow dynamics and crustal and mantle helium fluxes. *Geochim. Cosmochim. Acta*; 1992; v. 56: p. 2051-2067.

4908. Green, H.W.,II, C.H. Scholz, T.N. Tingle, T.E. Young, and T.A. Koczyński. Acoustic emissions produced by anticrack faulting during the olivine ' spinel transformation. *Geophys. Res. Lett.*; 1992; v. 19(n. 8): p. 789-792.

4909. Morley, J.J. and B.A. Dworetzky. Holocene temperature patterns in the South Atlantic, Southern, and Pacific Oceans. in : H.E. Wright, Jr., et al., Eds. "Global Climates Since the Last Glacial Maximum". Minneapolis, MN: University Minnesota Press; 1993 : p.125-135.

4910. Marra, J., T. Dickey, W.S. Chamberlin, C. Ho, T. Granata, D.A. Kiefer, C. Langdon, R. Smith, K. Baker, R. Bidigare, and M. Hamilton. Estimation of seasonal primary production from moored optical sensors in the Sargasso Sea. *J. Geophys. Res.*; 1992; v. 97(n. C5): p. 7399-7412.

4911. Cook, E.R. and S. M. Zedaker. The dendroecology of red spruce decline. in: C. Eagar and M.B. Adams, Eds. "Ecology and Decline of Red Spruce in the Eastern United States,". New York, NY: Springer-Verlag, Inc.; 1992; V. 96: p. 192-231.

4912. Cowie, P.A. and C.H. Scholz. Growth of faults by accumulation of seismic slip. *J. Geophys. Res.*; 1992; v. 97(n. B7): p. 11,085-11,095.

4913. Cowie, P.A. and C.H. Scholz. Displacement-length scaling relationship for faults: data synthesis and discussion. *J. Struct. Geol.*; 1992; v. 14(n. 10): p. 1149-1156.

4914. Cowie, P.A. and C.H. Scholz. Physical explanation for the displacement-length relationship of faults using a post-yield fracture mechanics model. *J. Struct. Geol.*; 1992; v. 14(n. 10): p. 1133-1148.

4915. Bond, G., W. Broecker, R. Lotti, and J. McManus. Abrupt color changes in isotope stage 5 in North Atlantic deep sea cores: implications for rapid change of climate-driven events. in: G.J. Kukla and E. Went, Eds. "Start of a Glacial," V. 3. Heidelberg : Springer-Verlag; 1992; NATO ASI Series I: Global Environmental Change: p. 185-205.

4916. Broecker, W.S. and T-H. Peng. Interhemispheric transport of carbon dioxide by ocean circulation. *Nature*; 1992; v. 356(n. 6370): p. 587-589.

4917. Goldberg, D. and D. Moos. Physical properties of 110 MA oceanic crust at Site OSN-1: implications for emplacement of a borehole seismometer. *Geophys. Res. Lett.*; 1992; v. 19(n. 8): p. 757-760.

4918. Grousset, F.E., P.E. Biscaye, M. Revel, J-R. Petit, K. Pye, S. Joussaume, and J. Jouzel. Antarctic (Dome C) ice-core dust at 18 k.y. B.P.: isotopic constraints on origins. *Earth Planet. Sci. Lett.*; 1992; v. 111: p. 175-182.

4919. Boitnott, G.N., R.L. Biegel, C.H. Scholz, N. Yoshioka, and W. Wang. Micromechanics of rock friction: 2. quantitative modeling of initial friction with contact theory. *J. Geophys. Res.*; 1992; v. 97(n. B6): p. 8965-8978.

4920. Stocker, T.F. and W.S. Broecker. North Atlantic Deep Water formation as a branch of the hydrological cycle. *EOS*; 1992; v. 73(n. 18): p. 202-203.

4921. Katz, E.J. An interannual study of the Atlantic North Equatorial Countercurrent. *J. Phys. Oceanogr.*; 1993; v. 23(n. 1): p. 116-123.

4922. Hough, S.E., L. Seeber, A. Rovelli, L. Malagnini, A. DeCesare, G. Selveggi, and A. Lerner-Lam. Ambient noise and weak-motion excitation of sediment resonances: results from the Tiber Valley, Italy. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 3): p. 1186-1205.

4923. Menke, W., L. Shengold, and R. Busby. Precision of broadband velocity measurements made with IRIS/PASSCAL instrumentation. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 5): p. 2256-2262.

4924. Houghton, R.W. and Y.M. Tourre. Characteristics of low-frequency sea surface temperature fluctuations in the tropical Atlantic. *J. Clim.*; 1992; v. 5(n. 7): p. 765-771.

4925. Caress, D.W., M.S. Burnett, and J.A. Orcutt. Tomographic image of the axial low-velocity zone at 12° 50'N on the East Pacific Rise. *J. Geophys. Res.*; 1992; v. 97(n. B6): p. 9243-9263.

4926. Longhi, J. Experimental petrology and petrogenesis of mare volcanics. *Geochim. Cosmochim. Acta*; 1992; v. 56: p. 2235-2251.

4927. Clark, J.F., H.J. Simpson, W.M. Smethie, Jr., and C. Toles. Gas exchange in a contaminated estuary inferred from chlorofluorocarbons. *Geophys. Res. Lett.*; 1992; v. 19(n. 11): p. 1133-1136.

4928. Stute, M., P. Schlosser, J.F. Clark, and W.S. Broecker. Paleotemperatures in the southwestern United States derived from noble gases in ground water. *Science*; 1992; v. 256: p. 1000-1003.

4929. Kastens, K.A. Did glacio-eustatic sea level drop trigger the Messinian salinity crisis? New evidence from Ocean Drilling Program Site 654 in the Tyrrhenian Sea. *Paleoceanography*; 1992; v. 7(n. 3): p. 333-356.

4930. Anderson, O.R. and A. Matsuoka. Endocyttoplasmic microalgae and bacteroids within the central capsule of the radiolarian *Dictyocoryne truncatum*. *Symbiosis* ; 1992; v. 12: p. 237-247.

4931. deMenocal, P.B., J.F. Bristow, and R. Stein. Paleoclimatic applications of downhole logs: Pliocene-Pleistocene results from Hole 798B, Sea of Japan. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program).*; 1992; V. 127/128, Pt. 1: p. 393-407 .

4932. Kastens, K.A., N.A. Breen, and M.B. Cita. Progressive deformation of an evaporite-bearing accretionary complex: SeaMARC I, SeaBeam and piston-core observations from the Mediterranean Ridge. *Mar. Geophys. Res.*; 1992; v. 14: p. 249-298.

4933. Hunkins, K. and J.A. Whitehead. Laboratory simulation of exchange through Fram Strait. *J. Geophys. Res.*; 1992; v. 97(n. C7): p. 11,299-11,321.

4934. Simpson, H.J., M.A. Cane, S.K. Lin, S.E. Zebiak, and A.L. Herczeg. Forecasting annual discharge of River Murray, Australia, from a geophysical model of ENSO. *J. Clim.*; 1993; v. 6(n. 2): p. 386-390.

4935. Langdon, C., R.N. Sambrotto, and I. Bitte. In situ sampler-incubator for simultaneous biological rate measurements via tracers and net chemical change. *Limnol. Oceanogr.*; 1992; v. 37(n. 8): p. 1823-1830.

4936. Miller, K.G., M.E. Katz, and W.A. Berggren. Cenozoic deep-sea benthic foraminifera: a tale of three turnovers. in: . "Studies in Benthic Foraminifera BENTHOS '90". Sendai, Japan: Tokai University Press; 1992: p. 67-75.

4937. Schneider, D.A., D.V. Kent, and G.A. Mello. A detailed chronology of the Australasian impact event, the Brunhes-Matuyama geomagnetic polarity reversal, and global climate change. *Earth Planet. Sci. Lett.*; 1992; v. 111: p. 395-405.

4938. Wright, J.D., K.G. Miller, and R.G. Fairbanks. Early and middle miocene stable isotopes: implications for deepwater circulation and climate. *Paleoceanography*; 1992; v. 7(n. 3): p. 357-389.

4939. Bell, R.E. and W.R. Buck. Crustal control of ridge segmentation inferred from observations of the Reykjanes Ridge. *Nature*; 1992; v. 357(n. 6379): p. 583-586.

4940. Tuttle, M.P. and L.R. Sykes. Re-evaluation of several large historic earthquakes in the vicinity of Loma Prieta and Peninsular segments of the San Andreas fault, California. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 4): p. 1802-1820.

4941. Mitchell, N.C. and L.M. Parson. The tectonic evolution of the Indian Ocean triple junction, anomaly 6 to present. *J. Geophys. Res.*; 1993; v. 98(n. B2): p. 1793-1812.

4942. Lao, Y., R.F. Anderson, W.S. Broecker, S.E. Trumbore, H.J. Hofmann, and W. Wolfli. Increased production of cosmogenic  $^{10}\text{Be}$  during the Last Glacial Maximum. *Nature*; 1992; v. 357(n. 6379): p. 576-578.

4943. Garraffo, Z., S.L. Garzoli, W. Haxby, and D. Olson. Analysis of a general circulation model: 2. distribution of kinetic energy in the South Atlantic and Kuroshio/Oyashio systems. *J. Geophys. Res.*; 1992; v. 97(n. C12): p. 20,139-20,153.

4944. Mountain, G.S. and K.G. Miller. Seismic and geologic evidence for early Paleogene deepwater circulation in the western North Atlantic. *Paleoceanography*; 1992; v. 7(n. 4): p. 423-439.

4945. Hopper, J.R., J.C. Mutter, R.L. Larson, C.Z. Mutter, and Northwest Australia Study Group. Magmatism and rift margin evolution: evidence from northwest Australia. *Geology*; 1992; v. 20(): p. 853-857.

4946. Garzoli, S.L. The Atlantic North Equatorial Countercurrent: models and observations. *J. Geophys. Res.*; 1992; v. 97(n. C11): p. 17,931-17,946.

4947. Foucher, J.P., A. Mauffret, M. Steckler, M.F. Brunet, A. Maillard, J.P. Reault, B. Alonso, P. Deseqaulx, J. Murillas, and G. Ouillon. Heat flow in the Valencia trough: geodynamic implications. *Tectonophysics*; 1992; v. 203: p. 77-97.

4948. Matsuoka, A. and O.R. Anderson. Experimental and observational studies of radiolarian physiological ecology: 5. temperature and salinity tolerance of *Dictyocoryne truncatum*. *Mar. Micropaleontol.*; 1992; v. 19: p. 299-313.

4949. Pak, D.K. and K.G. Miller. Paleocene to Eocene benthic foraminiferal isotopes and assemblages: implications for deepwater circulation. *Paleoceanography*; 1992; v. 7(n. 4): p. 405-422.

4950. Wallace, D.W.R., P. Schlosser, M. Krysell, and G. Bö nisch. Halocarbon ratio and tritium/<sup>3</sup>He dating of water masses in Nansen Basin, Arctic Ocean. *Deep-Sea Res.*; 1992; v. 39(Suppl. 2): p. S435-458.

4951. Cande, S.C. and D.V. Kent. A new geomagnetic polarity time scale for the Late Cretaceous and Cenozoic. *J. Geophys. Res.*; 1992; v. 97(n. B10): p. 13,917-13,951.

4952. Cande, S.C. and D.V. Kent. Ultrahigh resolution marine magnetic anomaly profiles: a record of continuous paleointensity variations? *J. Geophys. Res.*; 1992; v. 97(n. B11): p. 15,075-15,083.

4953. Lao, Y., R.F. Anderson, W.S. Broecker, S.E. Trumbore, H.J. Hofmann, and W. Wolfli. Transport and burial rates of <sup>10</sup>Be and <sup>231</sup>Pa in the Pacific Ocean during the Holocene period. *Earth Planet. Sci. Lett.*; 1992; v. 113: p. 173-189.

4954. Colodner, D.C., E.A. Boyle, J.M. Edmond, and J. Thomson. Post-depositional mobility of platinum, iridium and rhenium in marine sediments. *Nature*; 1992; v. 358(n. 6385): p. 402-404.

4955. D'Arrigo, R.D., G.C. Jacoby, and R.M. Free. Tree-ring width and maximum latewood density at the North American tree line: parameters of climate change. *Can. J. For. Res.*; 1992; v. 22(n. 9): p. 1290-1296.

4956. Hellmer, H.H. and S.S. Jacobs. Ocean interactions with the base of Amery Ice Shelf, Antarctica. *J. Geophys. Res.*; 1992; v. 97 (n. C12): p. 20,305-20,317.

4957. Mutter, J.C. and J.A. Karson. Structural processes at slow-spreading ridges. *Science*; 1992; v. 257: p. 627-634.

4958. Stocker, T.F., D.G. Wright, and W.S. Broecker. The influence of high-latitude surface forcing on the global thermohaline circulation. *Paleoceanography*; 1992; v. 7(n. 5): p. 529-541.

4959. Spiegelman, M. Physics of melt extraction: theory, implications and applications. *Phil. Trans. R. Soc. Lond. A*; 1993; v. 342: p. 23-41.

4960. Tibor, G., Z. Ben-Avraham, M. Steckler, and H. Fligelman. Late Tertiary subsidence history of the southern Levant margin, eastern Mediterranean Sea, and its implications to the understanding of the Messinian event. *J. Geophys. Res.*; 1992; v. 97 (n. B12): p. 17,593-17,614.

4961. Greenlee, S.M., W.J. Devlin, K.G. Miller, G.S. Mountain, and P.B. Flemings. Integrated sequence stratigraphy of Neogene deposits, New Jersey continental shelf and slope: comparison with the Exxon model. *Geol. Soc. Am. Bull.*; 1992; v. 104: p. 1403-1411.

4962. Field, E.H., K.H. Jacob, and S.E. Hough. Earthquake site response estimation: a weak-motion case study. *Bull. Seismol. Soc. Am.*; 1992; v. 82(n. 6): p. 2283-2307.

4963. Kominz, M.A. and G.C. Bond. Documenting the reliability and utility of the g method as applied to cyclic sections using forward modeling. *Earth Planet. Sci. Lett.*; 1992; v. 113: p. 449-457.

4964. D'Arrigo, R.D. and G.C. Jacoby. A tree-ring reconstruction of New Mexico winter precipitation and its relation to El Niño/southern oscillation events. in: H.F. Diaz and V. Markgraf, Eds. "El Niño: Historical and Paleoclimatic Aspects of the Southern Oscillation,". Cambridge: Cambridge University Press; 1992: p. 243-257.

4965. Cleaveland, M.K., E.R. Cook, and D.W. Stahle. Secular variability of the Southern Oscillation detected in tree-ring data from Mexico and the southern United States. in: H. F. Diaz and V. Markgraf, Eds. "El Niño: Historical and Paleoclimatic Aspects of the Southern Oscillation,". Cambridge: Cambridge University Press; 1992: p. 271-291.

4966. Sambrotto, R.N, J.H. Martin, W.W. Broenkow, C. Carlson, and S.E. Fitzwater. Nitrate utilization in surface waters of the Iceland Basin during spring and summer of 1989. *Deep-Sea Res.*; 1993; Part II, v. 40( n. 1/2): p. 441-457.

4967. Weissel, J.K., V.A. Childers, and G.D. Karner. Extensional and compressional deformation of the lithosphere in the light of ODP drilling in the Indian Ocean. in: R. A. Duncan, et al., Eds. "Synthesis of Results from Scientific Drilling in the Indian Ocean," *Geophysical Monograph 70*, . Washington, DC: American Geophysical Union; 1992: p. 127-156.

4968. Jacobs, S.S. Is the Antarctic ice sheet growing? *Nature*; 1992; v. 360(n. 6399): p. 29-33.

4969. Hunkins, K. Laboratory studies of exchange between a polar and a subpolar basin. G. Weller, C.L. Wilson, and B.A.B. Severin, Eds. *Proceedings of the International Conference on the Role of the Polar Regions in Global Change, Held June 11-15, 1990*. Fairbanks, AK: University of Alaska Fairbanks; 1991; V. 1: p. 304-309.

4970. Broecker, W.S. and E. Maier-Reimer. The influence of air and sea exchange on the carbon isotope distribution in the sea. *Global Biogeochem. Cycles*; 1992; v. 6(n. 3): p. 315-320.

4971. Van Fossen, M.C. and D.V. Kent. Paleomagnetism of 122 Ma plutons in New England and the mid-Cretaceous paleomagnetic field in North America: true polar wander or large-scale differential mantle motion? *J. Geophys. Res.*; 1992; v. 97(n. B13): p. 19,651-19,661.

4972. Reynolds, J.R., C.H. Langmuir, J.F. Bender, K.A. Kastens, and W.B.F. Ryan. Spatial and temporal variability in the geochemistry of basalts from the East Pacific Rise. *Nature*; 1992; v. 359(n. 6395): p. 493-499.

4973. Goldberg, D., M. Badri, and W. Wepfer. Acoustic attenuation in oceanic gabbro. *Geophys. J. Int.*; 1992; v. 111: p. 193-202.

4974. Kane, K.A. and D.E. Hayes. Tectonic corridors in the South Atlantic: evidence for long-lived mid-ocean ridge segmentation. *J. Geophys. Res.*; 1992; v. 97(n. B12): p. 17,317-17,330.

4975. Cook, E.R. Using tree rings to study past El Niño/Southern Oscillation influences on climate. in: H.F. Diaz and V. Markgraf, Eds. "El Niño: Historical and Paleoclimatic Aspects of the Southern Oscillation". Cambridge: Cambridge University Press; 1992: p. 203-214.

4976. Cole, J.E., G.T. Shen, R.G. Fairbanks, and M. Moore. Coral monitors of El Niño/southern oscillation dynamics across the equatorial Pacific. in: H.F. Diaz and V. Markgraf,

Eds. "El Nino: Historical and Paleoclimatic Aspects of the Southern Oscillation". Cambridge: Cambridge University Press; 1992: p. 349-375.

4977. Cook, E., T. Bird, M. Peterson, M. Barbetti, B. Buckley, R. D'Arrigo, and R. Francey. Climatic change over the last millennium in Tasmania reconstructed from tree-rings. *The Holocene*; 1992; v. 2,3: p. 205-217.

4978. Jacobs, S.S., H.H. Hellmer, C.S.M. Doake, A. Jenkins, and R.M. Frolich. Melting of ice shelves and the mass balance of Antarctica. *J. Glaciol.*; 1992; v. 38(n. 130): p. 375-387.

4979. Wanninkhof, R., W. Asher, R. Weppernig, H. Chen, P. Schlosser, C. Langdon, and R. Sambrotto. Gas transfer experiment on Georges Bank using two volatile deliberate tracers. *J. Geophys. Res.*; 1993; v. 98(n. C11): p. 20,237-20,248.

4980. Goldberg, D. Crosshole lithotectonic correlation in high-grade metamorphic rocks, central southern Connecticut. *Geophys. Res. Lett.*; 1992; v. 19(n. 18): p. 1879-1882.

4981. Bell, R.E., B.J. Coakley, D.D. Blankenship, S.M. Hodge, J.M. Brozena, and J. Jarvis. Airborne gravity from a light aircraft: Casertz 1990—1991. in: Y. Yoshida, et al., Eds. *Recent Progress in Antarctic Earth Science*. Tokyo, Japan: Terra Scientific Publishing Co.; 1992: p. 571-577.

4982. Plank, T. and C.H. Langmuir. Effects of the melting regime on the composition of the oceanic crust. *J. Geophys. Res.*; 1992; v. 97(n. B13): p. 19,749-19,770.

4983. Abbott, D.H., C.A. Stein, and O. Diachok. Topographic relief and sediment thickness: their effects on the thermal evolution of the oceanic crust. *Geophys. Res. Lett.*; 1992; v. 19(n. 19): p. 1975-1978.

4984. Takahashi, T., P.P. Tans, and I. Fung. Balancing the budget carbon dioxide sources and sinks, and the effects of industry. *Oceanus Magazine*; 1992; v. 35(n. 1): p. 18-28.

4985. Garzoli, S.L. Geostrophic velocity and transport variability in the Brazil—Malvinas Confluence. *Deep-Sea Res. I*; 1993; v. 40(n. 7): p. 1379-1403.

4986. Cane, M.A., S.E. Zebiak, and Y. Xue. Model studies of the long-term behavior of ENSO. in: D.G. Martinson, K. Bryan, M. Ghil, M.M. Hall, T.R. Karl, E.S. Sarachik, S. Sorooshian, and L.D. Talley, Eds. "Natural Climate Variability on Decade-to-Century Time Scales," *Proceeding of the National Research Council*, Sept. 1992. Washington, D.C.: National Academy Press; 1995: p. 442-457.



4987. England, J., L. Reisberg, F. Marcantonio, and A. Zindler. Comparison of one- and two-color ionization schemes for the analysis of Osmium and Rhenium isotopic ratios by sputter-induced resonance ionization mass spectrometry. *Anal. Chem.*; 1992; v. 64(n. 21): p. 2623-2627.

4988. Marra, J. and C. Ho. Initiation of the spring bloom in the northeast Atlantic (47° N, 20° W): a numerical simulation. *Deep-Sea Res.*; 1993; Part II, v. 40(n. 1/2): p. 55-73.

4989. England, J.G., A. Zindler, L.C. Reisberg, J.L. Rubenstone, V. Salters, F. Marcantonio, B. Bourdon, H. Brueckner, P.J. Turner, S. Weaver, and P. Read. The Lamont-Doherty Geological Observatory Isotop 54 isotope ratio mass spectrometer. *Int. J. Mass Spectrom. Ion Processes*; 1992; v. 121: p. 201-240.

4990. Abers, G.A. Relationship between shallow- and intermediate-depth seismicity in the eastern Aleutian subduction zone. *Geophys. Res. Lett.*; 1992; v. 19(n. 20): p. 2019-2022.

4991. Stute, M. and P. Schlosser. Principles and applications of the noble gas paleothermometer. in: P.K. Swart, et al., Eds. "Climate Change in Continental Isotopic Records". *Geophysical Monograph 78* ed. Washington, DC: American Geophysical Union; 1993: p. 89-100.

4992. Barth, G.A., K.A. Kastens, and E.M. Klein. The origin of bathymetric highs at ridge-transform intersections: a multi-disciplinary case study at the Clipperton Fracture Zone. *Mar. Geophys. Res.*; 1994; v. 16: p. 1-50.

4993. Barth, G.A. Oceanic crust thickens approaching the Clipperton Fracture Zone. *Mar. Geophys. Res.*; 1994; v. 16: p. 51-64.

4994. Fischer, K.M and S.E. Hough. Site response in Providence, Rhode Island: constraints from ambient noise measurements. *Seism. Res. Lett.*; 1992; v. 63(n. 4): p. 525-532.

4995. Lao, Y., R.F. Anderson, and W.S. Broecker. Boundary scavenging and deep-sea sediment dating: constraints from excess <sup>230</sup>Th and <sup>231</sup>Pa. *Paleoceanography*; 1992; v. 7(n. 6): p. 783-798.

4996. Kent, D.V. and W.K. Witte. Slow apparent polar wander for North America in the Late Triassic and large Colorado Plateau rotation. *Tectonics*; 1993; v. 12(n. 1): p. 291-300.

4997. Abers, G.A., G. Ekström, M.S. Marlow, and E.L. Geist. Bering Sea earthquake of February 21, 1991: active faulting along the Bering Shelf edge. *J. Geophys. Res.*; 1993; v. 98(n. B2): p. 2155-2165.

4998. Lao, Y., R.F. Anderson, W.S. Broecker, H.J. Hofmann, and W. Wolfli. Particulate fluxes of  $^{230}\text{Th}$ ,  $^{231}\text{Pa}$  and  $^{10}\text{Be}$  in the northeastern Pacific Ocean. *Geochim. Cosmochim. Acta*; 1993; v. 57: p. 205-217.

4999. Buck, W.R. Global decoupling of crust and mantle: implications for topography, geoid and mantle viscosity on Venus. *Geophys. Res. Lett*; 1992; v. 19(n. 21): p. 2111-2114.

5000. Ravelo, A.C. and R.G. Fairbanks . Oxygen isotopic composition of multiple species of planktonic foraminifera: recorders of the modern photic zone temperature gradient. *Paleoceanography*; 1992; v. 7(n. 6): p. 815-831.

5001. Spiegelman, M. Flow in deformable porous media. Part I. simple analysis. *J. Fluid Mech.*; 1993; v. 247: p. 17-38.

5002. Spiegelman, M. Flow in deformable porous media. Part 2. numerical analysis—the relationship between shock waves and solitary waves. *J. Fluid Mech.*; 1993; v. 247: p. 39-63.

5003. Bond, G.C., W.J. Devlin, M.A. Kominz, J. Beavan, and J. McManus. Evidence of astronomical forcing of the Earth's climate in Cretaceous and Cambrian time. *Tectonophysics*; 1993; v. 222: p. 295-315.

5004. Bond, G., H. Heinrich, W. Broecker, L. Labeyrie, J. McManus, J. Andrews, S. Huon, R. Jantschik, S. Clasen, C. Simet, K. Tedesco, M. Klas, G. Bonani, and S. Ivy. Evidence for massive discharges of icebergs into the North Atlantic ocean during the last glacial period. *Nature*; 1992; v. 360(n. 6401): p. 245-249.

5005. D'Arrigo, R.D., G.C. Jacoby, and E.R. Cook. Impact of recent North Atlantic anomalies on surrounding land areas based on dendroclimatic evidence. *Geophys. Res. Lett.*; 1992; v. 19(n. 23): p. 2321-2324.

5006. Marra, J., W.S. Chamberlin, and C. Knudson. Proportionality between in situ carbon assimilation and bio-optical measures of primary production in the Gulf of Maine in summer. *Limnol. Oceanogr.*; 1993; v. 38(n. 1): p. 232-238.

5007. Karner, G.D., N.W. Driscoll, and J.K. Weissel. Response of the lithosphere to in-plane force variations. *Earth Planet. Sci. Lett.*; 1993; v. 114: p. 397-416.

5008. Tingle, T.N., H.W. Green II, C.H. Scholz, and T.A. Koczyński. The rheology of faults triggered by the olivine—spinel transformation in  $\text{Mg}_2\text{GeO}_4$  and its implications for the mechanism of deep-focus earthquakes. *J. Struct. Geol.*; 1993; v.15(n. 9/10): p. 1249-1256.

5009. Garzoli, S.L., Z. Garraffo, G. Podesta, and O. Brown. Analysis of a general circulation model product: 1. frontal systems in the Brazil/Malvinas and Kuroshio/Oyashio regions. *J. Geophys. Res.*; 1992; v. 97(n. C12): p. 20,117-20,138.

5010. deMenocal, P.B., W.F. Ruddiman, and E.M. Pokras . Influences of high- and low-latitude processes on African terrestrial climate: Pleistocene eolian records from equatorial Atlantic Ocean Drilling Program Site 663. *Paleoceanography* ; 1993; v. 8(n. 2): p. 209-242.

5011. deMenocal, P.B. and D. Rind. Sensitivity of Asian and African climate to variations in seasonal insolation, glacial ice cover, sea surface temperature, and Asian orography. *J. Geophys. Res.* ; 1993; v. 98(n. D4): p. 7265-7287.

5012. Wamser, C. and D.G. Martinson. Drag coefficients for winter Antarctic pack ice. *J. Geophys. Res.*; 1993; v. 98(n. C7): p. 12,431-12,437.

5013. Cochran, J.R., J.A. Goff, A. Malinverno, D.J. Fornari, C. Keeley, and X. Wang. Morphology of a "Superfast" Mid-Ocean Ridge crest and flanks: the East Pacific Rise 7° -9° S. *Mar. Geophys. Res.*; 1993; v. 15: p. 65-75.

5014. Froelich, P.N., V. Blanc, R.A. Mortlock, S.N. Chillrud, W. Dunstan, A. Udomkit, and T-H. Peng. River fluxes of dissolved silica to the ocean were higher during glacials: Ge/Si in diatoms, rivers, and oceans. *Paleoceanography*; 1992; v. 7(n. 6): p. 739-767.

5015. Anderson, O.R. Fine structure observations of phagotrophic activity by plasmodia of *Physarum polycephalum*. *J. Euk. Microbiol.*; 1993; v. 40(n. 1): p. 67-71.

5016. Jaumé, S.C. and L.R. Sykes. Changes in state of stress on the southern San Andreas Fault resulting from the California earthquake sequence of April to June 1992. *Science*; 1992; v. 258: p. 1325-1328.

5017. Sambrotto, R.N., D.A. Hinckley, R.B. Hanson, and N.V. Mamaeva. Effects of hexachlorocyclohexane on nitrogen cycling in natural plankton communities. P.A. Nagel, Ed. *Results of the third Joint US-USSR Bering and Chukchi Seas Expedition (BEARPAC), Summer, 1988*. Washington, DC: U.S. Fish and Wildlife Service; 1992: p. 364-369 & 377-378.

5018. Jacoby, G.C., P.L. Williams, and B.M. Buckley. Tree ring correlation between prehistoric landslides and abrupt tectonic events in Seattle, Washington. *Science*; 1992; v. 258: p. 1621-1623.

5019. Brandsdóttir, B. and W.H. Menke. Thin low-velocity zone within the Krafla caldera, NE-Iceland attributed to a small magma chamber. *Geophys. Res. Lett.*; 1992; v. 19(n. 24): p. 2381-2384.

5020. Agee, C.B. and D. Walker. Olivine flotation in mantle melt. *Earth Planet. Sci. Lett.*; 1993; v. 114: p. 315-324.

5021. Cane, M.A. Comments on "The fast-wave limit and interannual oscillations". *J. Atmos. Sci.*; 1992; v. 49(n. 20): p. 1947-1949.

5022. Bopp, R.F., H.J. Simpson, S.N. Chillrud, and D.W. Robinson. Sediment-derived chronologies of persistent contaminants in Jamaica Bay, New York. *Estuaries*; 1993; v. 16(n. 3B): p. 608-616.

5023. Mutter, J.C. Seismic imaging of sea-floor spreading. *Science*; 1992; v. 258: p. 1442-1443.

5024. McHugh, C.M., W.B.F. Ryan, and B.C. Schreiber. The role of diagenesis in exfoliation of submarine canyons. *Am. Assoc. Pet. Geol. Bull.*; 1993; v. 77(n. 2): p. 145-172.

5025. Sugarman, P.J., K.G. Miller, J.P. Owens, and M.D. Feigenson. Strontium isotope and sequence stratigraphy of the Miocene Kirkwood Formation, southern New Jersey. *Geol. Soc. Am. Bull.*; 1993; v. 105: p. 423-436.

5026. Takahashi, T., J. Olafsson, J.G. Goddard, D.W. Chipman, and S.C. Sutherland. Seasonal variation of CO<sub>2</sub> and nutrients in the high-latitude surface oceans: a comparative study. *Global Biogeochem. Cycles*; 1993; v. 7(n. 4): p. 843-878.

5027. Wright, J.D. and K.G. Miller. Southern ocean influences on late Eocene to Miocene deepwater circulation. in: Kennett, J.P. and D.A. Warnke, Eds. "The Antarctic Paleoenvironment: A Perspective on Global Change". . Washington, DC: American Geophysical Union; 1993; Antarctic Research Series, V. 60: p. 1-25.

5028. Haymon, R.M., D.J. Fornari, K.L. Von Damm, M.D. Lilley, M.R. Perfit, J.M. Edmond, W.C. Shanks II, R.A. Lutz, J.M. Grebmeir, S. Carbotte, D. Wright, E. McLaughlin, M. Smith, N. Beedle, and E. Olson. Volcanic eruption of the mid-ocean ridge along the East Pacific Rise crest at 9° 45-52'N: direct submersible observations of seafloor phenomena associated with an eruption event in April, 1991. *Earth Planet Sci. Lett.*; 1993; v. 119: p. 85-101.

5029. Johnson, M.C. and D. Walker. Brucite [Mg(OH)<sub>2</sub>] dehydration and the molar volume of H<sub>2</sub>O to 15 GPa. *Am. Mineral.*; 1993; v. 78: p. 271-284.

5030. Van Fossen, M.C. and D.V. Kent. A palaeomagnetic study of 143 Ma kimberlite dikes in central New York State. *Geophys. J. Int.*; 1993; v. 113: p. 175-185.
5031. Harrison, K., W. Broecker, and G. Bonani. A strategy for estimating the impact of CO<sub>2</sub> fertilization on soil carbon storage. *Global Biogeochem. Cycles*; 1993; v. 7(n. 1): p. 69-80.
5032. Gilbert L.E., J. Beavan, and C. H. Scholz. Analysis of a 100 year geodetic record from northern California. in: D.E. Smith and D.L. Turcotte, Eds. "Contribution of Space Geodesy to Geodynamics: Crustal Dynamics". Washington, DC.: American Geophysical Union; 1993; *Geodynamics Series 23*: p. 215-232.
5033. Imbrie, J., A.C. Mix, and D.G. Martinson. Milankovitch theory viewed from Devils Hole. *Nature*; 1993; v. 363(n.6429): p. 531-533.
5034. Su, W. and R. Buck. Buoyancy effects on mantle flow under mid-ocean ridges. *J. Geophys. Res.*; 1993; v. 98(n. B7): p. 12,191-12,205.
5035. Ryan, J.G. and C.H. Langmuir. The systematics of boron abundances in young volcanic rocks. *Geochim. Cosmochim. Acta*; 1993; v. 57: p. 1489-1498.
5036. Bjarnason, I. Th., P. Cowie, M.H. Anders, L. Seeber, and C.H. Scholz. The 1912 Iceland earthquake rupture: growth and development of a nascent transform system. *Bull. Seismol. Soc. Am.*; 1993; v. 83(n. 2): p. 416-435.
5037. Martinson, D.G. Ocean heat and seasonal sea ice thickness in the southern ocean. in: W.R. Peltier, Ed. "Ice in the Climate System," V. 12. Heidelberg: Springer-Verlag; 1993; NATO ASI Series I: Global Environmental Change: p. 597-609.
5038. Archer, D., M. Lyle, K. Rodgers, and P. Froelich. What controls opal preservation in tropical deep-sea sediments? *Paleoceanography*; 1993; v. 8(n. 1): p. 7-21.
5039. Grousset, F.E., L. Labeyrie, J.A. Sinko, M. Cremer, G. Bond, J. Duprat, E. Cortijo, and S. Huon. Patterns of ice-rafted detritus in the glacial North-Atlantic (40-55° N). *Paleoceanography*; 1993; v. 8(n. 2): p. 175-192.
5040. Bjarnason, I. Th., W. Menke, O.G. Flovenz, and D. Caress. Tomographic image of the Mid-Atlantic plate boundary in southwestern Iceland. *J. Geophys. Res.*; 1993; v. 98(n. B4): p. 6607-6622.

5041. Meko, D., E.R. Cook, D.W. Stahle, C.W. Stockton, and M.K. Hughes. Spatial patterns of tree-growth anomalies in the United States and southeastern Canada. *J. Clim.*; 1993; v. 6(n. 9): p. 1773-1786.

5042. Bjarnason, I. Th. and W. Menke. Application of the POCS inversion method to cross-borehole imaging. *Geophysics*; 1993; v.58(n. 7): p. 941-948.

5043. Goff, J.A., D.J. Fornari, J.R. Cochran, C. Keeley, and A. Malinverno. Wilkes Transform system and "nannoplate". *Geology*; 1993; v. 21: p. 623-626.

5044. Kumar, N., R. Gwiazda, R.F. Anderson, and P.N. Froelich.  $^{231}\text{Pa}/^{230}\text{Th}$  ratios in sediments as a proxy for past changes in Southern Ocean productivity. *Nature*; 1993; v. 362(n. 6415): p. 45-48.

5045. Miller, K.G., P.R. Thompson, and D.V. Kent. Integrated late Eocene-Oligocene stratigraphy of the Alabama coastal plain: correlation of hiatuses and stratal surfaces to glacioeustatic lowerings. *Paleoceanography*; 1993; v. 8(n. 2): p. 313-331.

5046. Malinverno, A. Transition between a valley and a high at the axis of mid-ocean ridges. *Geology*; 1993; v. 21: p. 639-642.

5047. Burckle, L.H. Is there direct evidence for late Quaternary collapse of the West Antarctic ice sheet? *J. Glaciol.*; 1993; v. 39(n. 133): p. 491-494.

5048. Steckler, M.S., D.J. Reynolds, B.J. Coakley, A.B. Swift, and R. Jarrard. Modelling passive margin sequence stratigraphy. in: H.W. Posamentier, C.P. Summerhayes, B.U. Haq, and G.P. Allen, Eds. "Sequence Stratigraphy and Facies Associations". Oxford, England: Blackwell Scientific Publication; 1993; Special Publication Number 18 of the International Association of Sedimentologists: p. 19-41.

5049. Steckler, M.S., G.I. Omar, G.D. Karner, and B. P. Kohn. Pattern of hydrothermal circulation within the Newark basin from fission-track analysis. *Geology*; 1993; v. 21: p. 735-738.

5050. Smethie, Jr., W.M. Tracing the thermohaline circulation in the western North Atlantic using chlorofluorocarbons. *Prog. Oceanogr.*; 1993; v. 31: p. 51-99.

5051. Jacoby, G.C. and R.D. D'Arrigo. Indicators of climatic and biospheric change: evidence from tree rings. in: G.M. Woodwell and F.T. Mackenzie, Eds. *Biotic Feedbacks in the Global Climatic System—Will the Warming Feed the Warming?* Oxford: Oxford University Press; 1995: p. 108-118.

5052. Witte, W.K., D.V. Kent, and P.E. Olsen. Reply to the Discussion by S.G. Lucas, et al. of "Magnetostratigraphy and paleomagnetic poles from Late Triassic—earliest Jurassic strata of the Newark Basin". *Geol. Soc. Am. Bull.*; 1993; v. 105: p. 1260-1262.

5053. Blankenship, D.D., R.E. Bell, S.M. Hodge, J.M. Brozena, J.C. Behrendt and C.A. Finn. Active volcanism beneath the West Antarctic ice sheet and implications for ice-sheet stability. *Nature*; 1993; v. 361(n. 6412): p. 526-529.

5054. Katz, M.E. and K.G. Miller. Neogene subsidence along the northeastern Australian margin: benthic foraminiferal evidence. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling Program)*; 1993; V. 133: p. 75-92.

5055. Broecker, W.S., Y. Lao, M. Klas, E. Clark, G. Bonani, S. Ivy, and C. Chen. A search for an early Holocene CaCO<sub>3</sub> preservation event. *Paleoceanography*; 1993; v.8(n. 3): p. 333-339.

5056. Kuo, J.T. and Y-F. Sun. Modeling gravity variations caused by dilatancies. *Tectonophysics*; 1993; v. 227: p. 127-143.

5057. Colodner, D.C., E.A. Boyle, and J.M. Edmond. Determination of rhenium and platinum in natural waters and sediments, and iridium in sediments by flow injection isotope dilution inductively coupled plasma mass spectrometry. *Anal. Chem.*; 1993; v. 65(n. 10): p. 1419-1425.

5058. Sambrotto, R.N, G. Savidge, C. Robinson, P. Boyd, T. Takahashi, D.M. Karl, C. Langdon, D. Chipman, J. Marra, and L. Codispoti. Elevated consumption of carbon relative to nitrogen in the surface ocean. *Nature*; 1993; v. 363(n. 6426): p. 248-250.

5059. Colodner, D., J. Sachs, G. Ravizza, K. Turekian, J. Edmond, and E. Boyle. The geochemical cycle of rhenium: a reconnaissance. *Earth Planet. Sci. Lett.*; 1993; v. 117: p. 205-221.

5060. Cole, J.E., R.G. Fairbanks, and G.T. Shen. Recent variability in the southern oscillation: isotopic results from a Tarawa Atoll coral. *Science*; 1993; v. 260: p. 1790-1793.

5061. Mutter, C.Z. and J.C. Mutter. Variations in thickness of layer 3 dominate oceanic crustal structure. *Earth Planet. Sci. Lett.*; 1993; v. 117: p. 295-317.

5062. Fang, W.W., M.G. Langseth, and P.J. Schultheiss. Analysis and application of in situ pore pressure measurements in marine sediments. *J. Geophys. Res.*; 1993; v. 98(n. B5): p. 7921-7938.

5063. Zhang, Y. and A. Zindler. Distribution and evolution of carbon and nitrogen in Earth. *Earth Planet. Sci. Lett.*; 1993; v. 117: p. 331-345.
5064. Peteet, D., D. Rind, and G. Kukla. Wisconsinan ice-sheet initiation: Milankovitch forcing, paleoclimatic data, and global climate modeling. in: P.U. Clark and P.D. Lea, Eds. *The Last Interglacial-Glacial Transition in North America*. Boulder, CO: Geological Society of America; 1992; Special Paper 270: p. 53-69.
5065. Peteet, D.M. Major contributions of radiocarbon dating to palynology: past and future. in: R.E. Taylor, et al., Eds. "Radiocarbon After Four Decades". New York: Springer-Verlag; 1992: p. 454-472.
5066. Peteet, D.M. The palynological expression and timing of the Younger Dryas event — Europe versus eastern North America. in: E. Bard and W.S. Broecker, Eds. "The Last Deglaciation: Absolute and Radiocarbon Chronologies," V. 2. Heidelberg: Springer-Verlag; 1992; NATO ASI Series I: Global Environmental Change: p. 327-344.
5067. Zebiak, S.E. Air—sea interaction in the equatorial Atlantic region. *J. Clim.*; 1993; v. 6(n. 8): p. 1567-1586.
5068. Pacheco, J.F., L.R. Sykes, and C. H. Scholz. Nature of seismic coupling along simple plate boundaries of the subduction type. *J. Geophys. Res.*; 1993; v. 98(n. B8): p. 14,133-14,159.
5069. Goff, J.A., A. Malinverno, D.J. Fornari, and J.R. Cochran. Abyssal hill segmentation: quantitative analysis of the East Pacific Rise flanks 7° S-9° S. *J. Geophys. Res.*; 1993; v. 98(n. B8): p. 13,851-13,862.
5070. Stute, M., J.F. Clark, F.M. Phillips, and D. Elmore. Reconstruction of late glacial climates from the groundwater archive: C1 and 36 C1 in the Carrizo aquifer, Texas. "Isotope techniques in studying past and current environmental changes in the hydrosphere and the atmosphere". Proceedings of.. ed. Vienna: International Atomic Energy Agency; 1993: p. 259-270.
5071. Anderson, R.F., M.Q. Fleisher, and P.M. Manley. Uranium-series tracers of mudwave migration in the Argentine Basin. *Deep-Sea Res. II*; 1993; v. 40(n. 4/5): p. 889-909.
5072. Spiegelman, M. and T. Elliott. Consequences of melt transport for uranium series disequilibrium in young lavas. *Earth Planet. Sci. Lett.*; 1993; v. 118: p. 1-20.



5073. Nishenko, S.P. and L.R. Sykes. Comment on "Seismic Gap Hypothesis: Ten Years After" by Y.Y. Kagan and D.D. Jackson. *J. Geophys. Res.*; 1993; v. 98(n. B6): p. 9909-9919.

5074. Kukla, G., R. Knight, J. Gavin, and T. Karl. Recent temperature trends: are they reinforced by insolation shifts? in: G.J. Kukla and E. Went, Eds. "Start of a Glacial," V. 3. Heidelberg: Springer-Verlag; 1992; NATO ASI Series I: Global Environmental Change: p. 291-305.

5075. Kukla, G. and J. Gavin. Insolation regime of the warm to cold transitions. in: G.J. Kukla and E. Went, Eds. "Start of a Glacial," V. 3. Heidelberg: Springer-Verlag; 1992; NATO ASI Series I: Global Environmental Change: p. 307-339.

5076. Jacobs, S.S. and J.C. Comiso. A recent sea-ice retreat west of the Antarctic Peninsula. *Geophys. Res. Lett.*; 1993; v. 20(n. 12): p. 1171-1174.

5077. Manley, P.L. and R.D. Flood. Paleoflow history determined from mudwave migration: Argentine Basin. *Deep-Sea Res. II*; 1993 ; v. 40(n. 4/5): p. 1033-1055.

5078. Archer, D. and E. Maier-Reimer. Effect of deep-sea sedimentary calcite preservation on atmospheric CO<sub>2</sub> concentration. *Nature*; 1994; v. 367(n.6460): p. 260-263.

5079. Simpson, H.J. and A.L. Herczeg. Delivery of marine chloride in precipitation and removal by rivers in the Murray/Darling Basin, Australia. *J. Hydrol.*; 1994; v. 154: p. 323-350.

5080. Levy, M., N. Christie-Blick and P.K. Link. Neoproterozoic incised valleys of the eastern Great Basin, Utah and Idaho: fluvial response to changes in depositional base level. in: R.W. Dalrymple, R. Boyd, B.A. Zaitlin and P.A. Scholle , Eds. "Incised-Valley Systems: Origin and Sedimentary Sequences". Tulsa, OK: SEPM, Spec. Pub. No. 51; 1994: p. 369-382.

5081. Sowers, T., M. Bender, L. Labeyrie, D. Martinson, J. Jouzel, D. Raynaud, J.J. Pichon, and Y.S. Korotkevich. A 135,000 Year Vostok - SPECMAP common temporal framework. *Paleoceanography*; 1993; v. 8(n. 6): p. 737-766.

5082. Gee, J., R. Varga, Y. Gallet, and H. Staudigel. Reversed-polarity overprint in dikes from the Troodos ophiolite: implications for the timing of alteration and extension. *Geology*; 1993; v. 21: p. 849-852.

5083. Kim, W-Y., D.W. Simpson, and P.G. Richards. Discrimination of earthquakes and explosions in the eastern United States using regional high-frequency data. *Geophys. Res. Lett.*; 1993; v. 20 (n. 14): p. 1507-1510.

5084. D'Arrigo, R.D. and G.C. Jacoby. Secular trends in high northern latitude temperature reconstructions based on tree rings. *Clim. Change*; 1993; v. 25: p. 163-177.

5085. Sykes, L.R., J. Deng, and P. Lyubomirskiy. Accurate location of nuclear explosions at Azgir, Kazakhstan, from satellite images and seismic data: implications for monitoring decoupled explosions. *Geophys. Res. Lett.*; 1993; v. 20(n. 18): p. 1919-1922.

5086. Langdon, C. The significance of respiration in production measurements based oxygen. *ICES mar. Sci. Symp.*; 1993; v. 197: p. 69-78.

5087. Hu, G., W. Menke, and S. Rognvaldsson. A demonstration of the joint use of P-wave polarization and travel-time data in tomographic inversion: crustal velocity structure near the south Iceland lowland network. *Geophys. Res. Lett.*; 1993; v. 20(n. 13): p. 1407-1410.

5088. Plank, T. and C.H. Langmuir. Tracing trace elements from sediment input to volcanic output at subduction zones. *Nature*; 1993; v. 362(n. 6422): p. 739-742.

5089. Sambrotto, R.N. and C. Langdon. Water column dynamics of dissolved inorganic carbon (DIC), nitrogen and O<sub>2</sub> on Georges Bank during April, 1990. *Contin. Shelf Res.*; 1994; v. 14(n. 7/8): p. 765-789.

5090. D'Arrigo, R.D. and G.C. Jacoby. Tree growth-climate relationships at the northern boreal forest treeline of North America: evaluation of potential response to increasing carbon dioxide. *Global Biogeochem. Cycles*; 1993; v. 7(n. 3): p. 525-535.

5091. McGinnis, J.P., N.W. Driscoll, G.D. Karner, W.D. Brumbaugh, and N. Cameron. Flexural response of passive margins to deep-sea erosion and slope retreat: implications for relative sea-level change. *Geology*; 1993; v. 21: p. 893-896.

5092. Simpson, H.J., M.A. Cane, A.L. Herczeg, S.E. Zebiak, and J.H. Simpson. Annual river discharge in southeastern Australia related to El Niño—Southern Oscillation forecasts of sea surface temperatures. *Water Resour. Res.*; 1993; v. 29(n. 11): p. 3671-3680.

5093. Hopper, J.R. and W.R. Buck. The initiation of rifting at constant tectonic force: role of diffusion creep. *J. Geophys. Res.*; 1993; v. 98(n. B9): p. 16,213-16,221.

5094. Walker, D. and T. Grove. Ureilite smelting. *Meteoritics*; 1993; v. 28(n. 5): p. 629-636.

5095. Oxburgh, R. and W.S. Broecker. Pacific carbonate dissolution revisited. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1993; v. 103: p. 31-39.

5096. Marcantonio, F., A. Zindler, L. Reisberg, and E.A. Mathez. Re-Os isotopic systematics in chromitites from the Stillwater Complex, Montana, USA. *Geochim. Cosmochim. Acta*; 1993; v. 57: p. 4029-4037.

5097. Broecker, W.S. and T-H Peng. Evaluation of the  $^{13}\text{C}$  constraint on the uptake of fossil fuel  $\text{CO}_2$  by the ocean. *Global Biogeochem. Cycles*; 1993; v. 7(n. 3): p. 619-626.

5098. Ferguson, I.J., G.K. Westbrook, M.G. Langseth, and G.P. Thomas. Heat flow and thermal models of the Barbados Ridge accretionary complex. *J. Geophys. Res.*; 1993; v. 98(n. B3): p. 4121-4142.

5099. Gregory, K.M. and C.G. Chase. Stable isotope study of fluid inclusions in fluorite from Idaho: implications for continental climates during the Eocene: *Comment. Geology*; 1994; v. 22(n. 3): p. 275-276.

5100. Bonatti, E., M. Seyler, and N. Sushevskaya. A cold suboceanic mantle belt at the Earth's equator. *Science*; 1993; v. 261: p. 315-320.

5101. Gordon, A.L., B.A. Huber, H.H. Hellmer, and A. Field. Deep and bottom water of the Weddell Sea's western rim. *Science*; 1993; v. 262: p. 95-97.

5102. Longhi, J., M.S. Fram, J.V. Auwera, and J.N. Montieith. Pressure effects, kinetics, and rheology of anorthositic and related magmas. *Am. Mineral.*; 1993; v. 78: p. 1016-1030.

5103. Buck, W.R. Effect of lithospheric thickness on the formation of high- and low-angle normal faults. *Geology*; 1993; v. 21( p. 933-936).

5104. Malinverno, A. and P.A. Cowie. Normal faulting and the topographic roughness of mid-ocean ridge flanks. *J. Geophys. Res.*; 1993; v. 98(n. B10): p. 17,921-17,939.

5105. DeVeaux, R.D., A.L. Gordon, J.C. Comiso, and N.E. Bacherer. Modeling of topographic effects on Antarctic sea ice using multivariate adaptive regression splines. *J. Geophys. Res.*; 1993; v. 98(n. C11): p. 20,307-20,319.

5106. Katz, M.E. and K.G. Miller. Miocene-Pliocene bathyal benthic foraminifera and the uplift of Buff Bay, Jamaica. in: R.M. Wright and E. Robinson, Eds. "Biostratigraphy of Jamaica," . Boulder, CO: Geological Society of America; 1993: p. 219-254, Memoir 182.

5107. Mortlock, R.A. , P.N. Froelich, R.A. Feely, G.J. Massoth, and D.A. Butterfield, and J.E. Lupton. Silica and germanium in Pacific Ocean hydrothermal vents and plumes. *Earth Planet. Sci. Lett.*; 1993; v. 119: p.365-378.

5108. Anderson, O.R. The trophic role of planktonic foraminifera and radiolaria. *Mar. Microbiol. Food Webs*; 1993; v. 7(n. 1): p. 31-51.

5109. Sparks, D.W., E.M. Parmentier, and J.P. Morgan. Three-dimensional mantle convection beneath a segmented spreading center: implications for along-axis variations in crustal thickness and gravity. *J. Geophys. Res.*; 1993; v. 98(n. B12): p. 21,977-21,995.

5110. Dawers, N.H., M.H. Anders, and C.H. Scholz. Growth of normal faults: displacement-length scaling. *Geology*; 1993; v. 21: p.1107-1110.

5111. Molino, B. Palaeoecology of marine systems. in: P.S. Giller, A.G. Hildrew and D.G. Raffaelli, Eds. *The British Ecological Societies 34th Symposium "Aquatic Ecology: Scale, Pattern and Process"*. U.K.: Blackwell Scientific Publications; 1994: p. 517-546.

5112. Watson, S. and M. Spiegelman. Geochemical effects of magmatic solitary waves—I. Numerical analysis. *Geophys. J. Int.*; 1994; v. 117: p. 284-295.

5113. Spiegelman, M. Geochemical effects of magmatic solitary waves—II. Some analysis. *Geophys. J. Int.*; 1994; v. 117: p. 296-300.

5114. Bond, G., W. Broecker, S. Johnsen, J. McManus, L. Labeyrie, J. Jouzel, and G. Bonani. Correlations between climate records from North Atlantic sediments and Greenland ice. *Nature*; 1993; v. 365(n. 6442): p. 143-147.

5115. Scholz, C.H. and F.J. Saucier. What do the Cajon Pass stress measurements say about stress on the San Andreas fault? Comment on "In situ stress measurements to 3.5 km depth in the Cajon Pass scientific research borehole: implications for the mechanics of crustal faulting" by Mark D. Zoback and John H. Healy. *J. Geophys. Res.*; 1993; v. 98(n. B10): p. 17,867-17,869.

5116. Kneller, M., and D. Peteet. Late-Quaternary climate in the ridge and valley of Virginia, U.S.A.: changes in vegetation and depositional environment. *Quat. Sci. Rev.*; 1993; v. 12: p. 613-628.

5117. Wang, X. and J.R. Cochran. Gravity anomalies, isostasy, and mantle flow at the East Pacific Rise Crest. *J. Geophys. Res.*; 1993; v. 98(n. B11): p. 19,505-19,531.

5118. Peteet, D.M., R.A. Daniels, L.E. Heusser, J.S. Vogel, J.R. Southon, and D.E. Nelson. Late-glacial pollen, macrofossils and fish remains in northeastern USA—the Younger Dryas oscillation. *Quat. Sci. Res.*; 1993; v. 12( ): p. 597-612.
5119. Scholz, C.H., N.H. Dawers, J-Z. Yu, M.H. Anders, and P.A. Cowie. Fault growth and fault scaling laws: preliminary results. *J. Geophys. Res.*; 1993; v. 98(n. B12): p. 21,951-21,961.
5120. Holmes, A.E. and N. Christie-Blick. Origin of sedimentary cycles in mixed carbonate-siliciclastic systems: an example from the Canning basin, Western Australia. in: R.G. Loucks and J.F. Sarg, Eds. "Carbonate Sequence Stratigraphy: Recent Developments and Applications". Tulsa, OK: American Association of Petroleum Geologists; 1993; AAPG Memoir 57: p. 181-212.
5121. Fram, M.S. and C.E. Leshner. Geochemical constraints on mantle melting during creation of the North Atlantic basin. *Nature*; 1993; v. 363(n. 6431): p. 712-715.
5122. D'Arrigo, R.D., E.R. Cook, G.C. Jacoby, and K.R. Briffa. NAO and sea surface temperature signatures in tree-ring records from the North Atlantic sector. *Quat. Sci. Rev.*; 1993; v. 12: p. 431-440.
5123. Mahoney, J.J., W.B. Jones, F.A. Frey, V.J.M. Salters, D.G. Pyle, H.L. Davies. Geochemical characteristics of lavas from Broken Ridge, the Naturaliste Plateau and southernmost Kerguelen Plateau: Cretaceous plateau volcanism in the southeast Indian Ocean. *Chem. Geol.*; 1995; v. 120: p. 315-345.
5124. Salters, V.J.M. and A. Zindler. Extreme  $^{176}\text{Hf}/^{177}\text{Hf}$  in the sub-oceanic mantle. *Earth Planet. Sci. Lett.*; 1995; v. 129: p. 13-30.
5125. Field, E.H. and K.H. Jacob. Monte-Carlo simulation of the theoretical site response variability at Turkey Flat, California, given the uncertainty in the geotechnically derived input parameters. *Earthquake Spectra*; 1993; v. 9(n. 4): p.669-701.
5126. Kukla, G. and T.R. Karl. Nighttime warming and the greenhouse effect. *Environ. Sci. Technol.*; 1993; v. 27: p. 1468-1474.
5127. Abers, G.A. Three-dimensional inversion of regional P and S arrival times in the East Aleutians and sources of subduction zone gravity highs. *J. Geophys. Res.*; 1994; v. 99(n. B3): p. 4395-4412.
5128. Harrison, K.G., W.S. Broecker, and G. Bonani. The effect of changing land use on soil radiocarbon. *Science*; 1993; v. 262: p. 725-726.

5129. Reisberg, L., A. Zindler, F. Marcantonio, W. White, D. Wyman, and B. Weaver. Os isotope systematics in ocean island basalts. *Earth Planet. Sci. Lett.*; 1993; v. 120: p. 149-167.
5130. Mello, U.T., G.D. Karner and R.N. Anderson. A physical explanation for the positioning of the depth to the top of overpressure in shale-dominated sequences in the Gulf Coast Basin, United States. *J. Geophys. Res.*; 1994; v. 99,(no. B2): p. 2775-2789.
5131. Mitchell, N.C. A model for attenuation of backscatter due to sediment accumulations and its application to determine sediment thicknesses with GLORIA sidescan sonar. *J. Geophys. Res.*; 1993; v. 98(n. B12): p. 22,477-22,493.
5132. Seager, R. and S.E. Zebiak. Convective interaction with dynamics in a linear primitive equation model. *J. Atmos. Sci.*; 1994; v. 51(n. 10): p. 1307-1331.
5133. Malagnini, L., A. Rovelli, S.E. Hough, and L. Seeber. Site amplification Estimates in the Garigliano Valley, central Italy, based on dense array measurements of ambient noise. *Bull. Seismol. Soc. Am.*; 1993; v. 83(n. 6): p. 1744-1755 .
5134. Imbrie, J., A. Berger, E.A. Boyle, S.C. Clemens, A. Duffy, W.R. Howard, G. Kukla, J. Kutzbach, D.G. Martinson, A. McIntyre, A.C. Mix, B. Molino, J.J. Morley, L.C. Peterson, N.G. Pisias, W.L. Prell, M.E. Raymo, N.J. Shackleton, and J.R. Toggweiler. On the structure and origin of major glaciation cycles 2. the 100,000-year cycle. *Paleoceanography*; 1993; v. 8(n. 6): p. 699-735.
5135. Vera, E.E. and J.B. Diebold. Seismic imaging of oceanic layer 2A between 9° 30'N and 10° N on the East Pacific Rise from two-ship wide-aperture profiles. *J. Geophys. Res.*; 1994; v. 99(n. B2): p. 3031-3041.
5136. Hu, G., W. Menke, and C. Powell . Polarization tomography for P wave velocity structure in southern California. *J. Geophys. Res.*; 1994; v. 99(n. B8): p. 15,245-15,256.
5137. Stocker, T.F., W.S. Broecker, and D.G. Wright. Carbon uptake experiments with a zonally-averaged global ocean circulation model. *Tellus* ; 1994; v 46B(n. 2): p. 103-122.
5138. Field, E. and K. Jacob. The theoretical response of sedimentary layers to ambient seismic noise. *Geophys. Res. Lett.*; 1993; v. 20(n. 24): p. 2925-2928.
5139. Kelly, P.E., E.R. Cook, and D.W. Larson. A 1397-year tree-ring chronology of *Thuja occidentalis* from cliff-faces of the Niagara Escarpment, southern Ontario, Canada. *Can. J. For. Res.*; 1994; v. 24(n. 5): p. 1049-1057.

5140. Koczyński, T. and E. Scholz. An improved sealing system for triaxial sample columns. *Pure Appl. Geophys.*; 1993; v. 141(n. 2/3/4): p. 653-657.

5141. Marcantonio, F., L. Reisberg, A. Zindler, D. Wyman, and L. Hulbert. An isotopic study of the Ni-Cu-PGE-rich Wellgreen intrusion of Wrangellia Terrane: evidence for hydrothermal mobilization of rhenium and osmium. *Geochim. Cosmochim. Acta*; 1994; v. 58(n. 2): p. 1007-1018.

5142. Lynch-Stieglitz, J., R.G. Fairbanks and C.D. Charles. Glacial-interglacial history of Antarctic intermediate water: relative strengths of Antarctic versus Indian Ocean sources. *Paleoceanography*; 1994; v. 9(n. 1): p. 7-29 .

5143. McPhee, M.G. and D.G. Martinson. Turbulent mixing under drifting pack ice in the Weddell Sea. *Science*; 1994; v. 263: p. 218-221.

5144. Kushnir, Y. Interdecadal variations in North Atlantic sea surface temperature and associated atmospheric conditions. *J. Clim.*; 1994; v. 7(n. 1): p. 141-157.

5145. Pratson, L.F., W.B.F. Ryan, G.S. Mountain, and D.C. Twichell. Submarine canyon initiation by downslope-eroding sediment flows: evidence in late Cenozoic strata on the New Jersey continental slope. *Geol. Soc. Am. Bull.*; 1994; v. 106: p. 395-412.

5146. Su, W., C.Z. Mutter, J.C. Mutter and W.R. Buck. Some theoretical predictions on the relationships among spreading rate, mantle temperature, and crustal thickness. *J. Geophys. Res.*; 1994; v. 99(n. B2): p. 3215-3227.

5147. Walker, D., L. Norby, and J.H. Jones. Superheating effects on metal-silicate partitioning of siderophile elements. *Science*; 1993; v. 262: p. 1858-1861.

5148. Katz, M.E. and K.G. Miller. Latest Oligocene to Earliest Pliocene benthic foraminiferal biofacies of the northeastern Gulf of Mexico. *Micropaleontology*; 1993; v. 39(n. 4): p. 367-403.

5149. Zhang, J., K.G. Miller, and W.A. Berggren. Neogene planktonic foraminiferal biostratigraphy of the northeastern Gulf of Mexico. *Micropaleontology*; 1993; v. 39(n. 4): p. 299-326.

5150. Anderson, R.F., T.W. Lyons, and G.L. Cowie. Sedimentary record of a shoaling of the oxic/anoxic interface in the Black Sea. *Mar. Geol.*; 1994; v. 116: p. 373-384.

5151. Krupitsky, A. and M.A. Cane. On topographic pressure drag in a zonal channel. *Mar. Res.*; 1994; v. 52(n. 1): p. 1-23.

5152. Scholz, C.H. A reappraisal of large earthquake scaling. *Bull. Seismol. Soc. Am.*; 1994; v. 84(n. 1): p. 215-218.

5153. Seeber, L. and J.G. Armbruster. Natural and induced seismicity in the Lake Erie-Lake Ontario region: reactivation of ancient faults with little neotectonic displacement. *Geographie physique et Quaternaire*; 1993; v. 47(n. 3): p. 363-378.

5154. Mello, U.T., R.N. Anderson, and G.D. Karner. Salt restrains maturation in subsalt plays. *Oil & Gas J.*; 1994; v.92(n. 5): p.101-107.

5155. Verardo, D.J. and A. McIntyre. Production and destruction: control of biogenous sedimentation in the tropical Atlantic 0-300,000 years B.P. *Paleoceanography*; 1994; v. 9(n. 1): p. 63-86.

5156. Yamaguchi, T. and O.R. Anderson. Fine structure of laboratory cultured *Distigma proteus* and cytochemical localization of acid phosphatase. *J. Morphol.*; 1994; v. 219: p. 89-99.

5157. Gee, J. and D.V. Kent. Variations in layer 2A thickness and the origin of the central anomaly magnetic high. *Geophys. Res. Lett.*; 1994; v. 21(n. 4): p. 297-300.

5158. Estabrook, C. H., K.H. Jacob, and L.R. Sykes. Body wave and surface wave analysis of large and great earthquakes along the Eastern Aleutian arc, 1923-1993: implications for future events. *J. Geophys. Res.*; 1994; v, 99(n. B6): p. 11,643-11,662.

5159. Abers, G.A. and R. McCaffrey. Active arc-continent collision: earthquakes, gravity anomalies, and fault kinematics in the Huon-Finisterre collision zone, Papua New Guinea. *Tectonics*; 1994; v. 13(n. 2): p. 227-245.

5160. Ekström, G. and P.G. Richards. Empirical measurements of tectonic movement release in nuclear explosions from teleseismic surface waves and body waves. *Geophys. J. Int.*; 1994; v. 117: p. 120-140.

5161. Bryant, J.D., B. Luz, and P.N. Froelich. Oxygen isotopic composition of fossil horse tooth phosphate as a record of continental paleoclimate. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1994; v. 107: p. 303-316.



5162. Cook, E.R., K.R. Briffa, and P.D. Jones. Spatial regression methods in dendroclimatology: a review and comparison of two techniques. *Int. J. Climatol.*; 1994; v.14: p. 379-402.

5163. Perfit, M.R., D.J. Fornari, M.C. Smith, J.F. Bender, C.H. Langmuir, and R.M. Haymon. Small-scale spatial and temporal variations in mid-ocean ridge crest magmatic processes. *Geology*; 1994; v. 22: p. 375-379.

5164. Bü rger, G. and M. A. Cane. Interactive Kalman filtering. *J. Geophys. Res.*; 1994; v. 99(n. C4): p. 8015-8031.

5165. Severinghaus, J.P., W.S. Broecker, W.F. Dempster, T. MacCallum and M. Wahlen. Oxygen loss in Biosphere 2. *EOS*; 1994; n. 3(): p. 33, 35-37.

5166. Guilderson, T.P., R.G. Fairbanks, and J.L. Rubenstone. Tropical temperature variations since 20,000 years ago: modulating interhemispheric climate change. *Science*; 1994; v. 263: p. 663-665.

5167. Muttoni, G. and D.V. Kent. Paleomagnetism of latest Anisian (Middle Triassic) sections of the Prezzo Limestone and Buchenstein Formation, Southern Alps, Italy. *Earth Planet. Sci. Lett.*; 1994; v. 122: p. 1-18.

5168. Anderson, O.R. Fine structure of the marine amoeba *Vexillifera telmathalassa* collected from a coastal site near Barbados with a description of salinity tolerance, feeding behavior and prey. *J. Euk. Microbiol.*; 1994; v. 41(n. 2): p. 124-128.

5169. Pfirman, S.L., D. Bauch and T. Gammelsrød. The northern Barents Sea: water mass distribution and modification. in: O.M. Johannassen, R.D. Muench and J.E. Overland, Eds. "The Polar Oceans and Their Role in Shaping the Global Environment", *Geophysical Monograph 85*,. Washington, DC: American Geophysical Union; 1994: p. 77-94.

5170. White, J., B. Molino, L. Labeyrie, B. Stauffer, and G. Farquhar. How reliable and consistent are paleodata from continents, oceans, and ice? in: J.A. Eddy and H. Oeschger, Eds. *Global Changes in the Perspective of the Past*. NY: John Wiley & Sons Ltd.; 1993: p. 73-102.

5171. Houghton, R.W., C.N. Flagg, and L.J. Pietrafesa. Shelf-slope water frontal structure, motion and eddy heat flux in the southern Middle Atlantic Bight. *Deep-Sea Res.*; 1994; v. 41(n. 2/3): p. 273-306.

5172. Ekwurzel, B., P. Schlosser, W. Smethie, Jr., L. Niel Plummer, E. Busenberg, R.L. Michel, R. Weppernig, and M. Stute. Dating of shallow groundwater: comparison of the transient

tracers  $3\text{H}/3\text{He}$ , chlorofluorocarbons and  $85\text{Kr}$ . *Water Resour. Res.*; 1994; v. 30(n. 6): p. 1693-1708.

5173. Anderson, R.F., G.T. Rowe, P.F. Kemp, S. Trumbore, and P. E. Biscaye. Carbon budget for the mid-slope depocenter of the Middle Atlantic Bight. *Deep-Sea Res. II*; 1994; v/ 41(n. 2/3): p. 669-703.

5174. Weissel, J.K., L.F. Pratson, and A. Malinverno. The length-scaling properties of topography. *J. Geophys. Res.*; 1994; v. 99(n. B7): p. 13,997-14,012.

5175. Stoll, R.D., G.M. Bryan and E.O. Bautista. Measuring lateral variability of sediment geoaoustic properties. *J. Acoust. Soc. Am.*; 1994; v. 96(n. 1): p. 427-438.

5176. Anderson, O.R. and A.J. Cowling. The fine structure of the euglyphid testate amoeba *Assulina muscorum* (Rhizopoda: Euglyphidae) with observations of growth rate in culture, morphometrics, and siliceous scale deposition. *European J. of Protistology*; 1994; v. 30: p. 451-461.

5177. Burckle, L.H. Late Quaternary interglacial stages warmer than present. *Quat. Sci. Rev.*; 1993; v. 12: p. 825-831.

5178. Gwiazda, R.H. and W.S. Broecker. The separate and combined effects of temperature, soil  $\text{pCO}_2$ , and organic acidity on silicate weathering in the soil environment: formulation of a model and results. *Global Biogeochem. cycles*; 1994; v. 8(n. 2): p. 141-155.

5179. Kim, W.Y., D.W. Simpson, and P.G. Richards. High-frequency spectra of regional phases from earthquakes and chemical explosions. *Bull. Seismol. Soc. Am.*; 1994; v. 84(n. 5): p. 1365-1386.

5180. Broecker, W.S. and T-H. Peng. Stratospheric contribution to the global bomb radiocarbon inventory: model versus observation. *Global Biogeochem. Cycles*; 1994; v. 8(n. 3): p. 377-384.

5181. Anderson, R.F., M.Q. Fleisher, P.E. Biscaye, N. Kumar, B. Dittrich, P. Kubik and M. Suter. Anomalous boundary scavenging in the Middle Atlantic Bight: evidence from  $^{230}\text{Th}$ ,  $^{231}\text{Pa}$ ,  $^{10}\text{Be}$  and  $^{210}\text{Pb}$ . *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 537-561.

5182. D'Arrigo, R.D., G.C. Jacoby, and P.J. Krusic. Progress in dendroclimatic studies in Indonesia. *Terr. Atmos. Oceanic Sci.*; 1994; v. 5(n. 3): p. 349-363.

5183. Oslick, J.S., K.G. Miller, M.D. Feigenson, and J.D. Wright. Oligocene-Miocene strontium isotopes: stratigraphic revisions and correlations to an inferred glacioeustatic record. *Paleoceanography*; 1994; v. 9(n. 3): p. 427-443 .

5184. Abbott, D., L. Burgess, J. Longhi, and W.H.F. Smith. An empirical thermal history of the Earth's upper mantle. *J. Geophys. Res.*; 1994; v. 99(n. B7): p. 13,835-13,850.

5185. Schlosser, P., B. Kromer, R. Weppernig, H. H. Loosli, R. Bayer, G. Bonani, and M. Suter. The distribution of <sup>14</sup>C and <sup>39</sup>Ar in the Weddell Sea. *J. Geophys. Res.*; 1994; v. 99(n. C5): p. 10,275-10,287.

5186. Whiting, B.M., G.D. Karner, and N.W. Driscoll. Flexural and stratigraphic development of the west Indian continental margin. *J. Geophys. Res.*; 1994; v. 99(n. B7): p. 13,791-13,811.

5187. Langseth, M., T. Delaca, G. Newton, B. Coakley, R. Colony, J. Gossett, C. May, P. McRoy, J. Morison, W. Smethie, D. Steele, and W. Tucker. SCICEX-93: Arctic cruise of the U.S. Navy nuclear powered submarine USS Pargo. *Mar. Technol. Soc. J.*; 1993 / 1994; v. 27(n. 4): p. 4-12.

5188. Seager, R. and M.B. Blumenthal. Modeling tropical Pacific sea surface temperature with satellite-derived solar radiative forcing. *J. Clim.*; 1994; v. 7(n.12): p. 1943-1957.

5189. Ou, H-W. Flow near a continental boundary driven by an oceanic jet. *J. Phys. Oceanogr.*; 1994; v. 24(n. 5): p. 966-978.

5190. Rosenbaum, J.M., T.K. Kyser, and D. Walker. High temperature oxygen isotope fractionation in the enstatite-olivine-BaCO<sub>3</sub> system. *Geochim. Cosmochim. Acta*; 1994; v. 58(n. 12): p. 2653-2660.

5191. Clark, J.F., R. Wanninkhof, P. Schlosser, and H.J. Simpson. Gas exchange rates in the tidal Hudson River using a dual tracer technique. *Tellus*; 1994; v. 46B: p. 274-285.

5192. Steckler, M.S. and G.I. Omar. Controls on erosional retreat of the uplifted rift flanks at the Gulf of Suez and northern Red Sea. *J. Geophys. Res. (special issue)*; 1994; v. 99(n. B6): p. 12,159-12,173.

5193. Garzoli, S.L. and C. Giulivi. What forces the variability of the southwestern Atlantic boundary currents? *Deep-Sea Res. I*; 1994; v. 41(n. 10): p. 1527-1550.

5194. Miller, D.M., S. L. Goldstein, and C.H. Langmuir. Cerium/lead and lead isotope ratios in arc magmas and the enrichment of lead in the continents. *Nature*; 1994; v. 368(n. 6471): p. 514-520.

5195. Schlosser, P., D. Bauch, R. Fairbanks, and G. Bö nisch. Arctic river-runoff: mean residence time on the shelves and in the halocline. *Deep-Sea Res. I*; 1994; v. 41(n. 7): p. 1053-1068.

5196. Wang, W. and C. H. Scholz. Wear processes during frictional sliding of rock: a theoretical and experimental study. *J. Geophys. Res.*; 1994; v. 99(n. B4 ): p. 6789-6799.

5197. Archer, D., S. Emerson, T. Powell, and C.S. Wong. Numerical hindcasting of sea surface pCO<sub>2</sub> at Weathership Station Papa. *Prog. Oceanogr.*; 1993; v. 32: p. 319-351.

5198. Zaucker, F., T.F. Stocker, and W.S. Broecker. Atmospheric freshwater fluxes and their effect on the global thermohaline circulation. *J. Geophys. Res.*; 1994; v. 99(n. C6): p. 12,443-12,457.

5199. Gordon, A.L., A. Ffield, and A. Gani Ilahude. Thermocline of the Flores and Banda Seas. *J. Geophys. Res.*; 1994; v. 99(n. C9): p. 18,235-18,242.

5200. Gordon, A.L., K.T. Bosley and F. Aikman III. Tropical Atlantic water within the Benguela upwelling system at 27° S. *Deep-Sea Res.*; 1995; v. 42(n. 1): p. 1-12.

5201. Lynch-Stieglitz, J. and R.G. Fairbanks. A conservative tracer for glacial ocean circulation from carbon isotope and palaeonutrient measurements in benthic foraminifera. *Nature*; 1994; v. 369(n. 6478): p. 308-310.

5202. Reverdin, G., D. Cayan, H.D. Dooley, D.J. Ellett, S. Levitus, Y. du Penhoat, and A. Dessier. Surface salinity of the North Atlantic: can we reconstruct its fluctuations over the last one hundred years? *Prog. Oceanogr.*; 1994; v. 33: p. 303-346.

5203. Pratson, L.F. and W.B.F. Ryan. Pliocene to recent infilling and subsidence of intraslope basins offshore Louisiana. *Am. Assoc. Pet. Geol. Bull.*; 1994; v. 78(n. 10): p. 1483-1506.

5204. DiVenere, V.J., D.V. Kent, and I.W.D. Dalziel. Mid-Cretaceous paleomagnetic results from Marie Byrd Land, West Antarctica: a test of post-100 Ma relative motion between East and West Antarctica. *J. Geophys. Res.*; 1994; v. 99(n. B8): p. 15,115-15,139.

5205. Eshel, G., M.A. Cane, and M.B. Blumenthal. Modes of subsurface, intermediate and deep water renewal in the Red Sea. *J. Geophys. Res.*; 1994; v. 99(n. C8): p. 15,941-15,952.

5206. Burckle, L.H. A critical review of the Micropaleontological evidence used to infer a major drawdown of the East Antarctic ice sheet during the Early Pliocene. in: E.S. Vrba, G.H. Denton, T.C. Partridge, and L.H. Burckle, Eds. "Paleoclimate and Evolution, with Emphasis on Human Origins". New Haven, CT.: Yale University Press; 1995: p. 230-241.

5207. Rosenbaum, J.M., D. Walker, and T.K. Kyser. Oxygen isotope fractionation in the mantle. *Geochim. Cosmochim. Acta*; 1994; v. 58(n. 21): p. 4767-4777.

5208. Reverdin, G. C. Frankignoul, E. Kestenare, and M.J. McPhaden. Seasonal variability in the surface currents of the equatorial Pacific. *J. Geophys. Res.*; 1994; v. 99(n. C10): p. 20,323-20,344.

5209. Xue, Y., M.A. Cane, S.E. Zebiak and M. B. Blumenthal. On the prediction of ENSO: a study with a low-order Markov model. *Tellus*; 1994; v. 46A(n. 4): p. 512-528.

5210. deMenocal, P.B. and J. Bloemendal. Plio-Pleistocene climatic variability in subtropical Africa and the Paleoenvironment of hominid evolution: a combined data-model approach. in: E.S. Vrba, G.H. Denton, T.C. Partridge, and L.H. Burckle, Eds. "Paleoclimate and Evolution, with Emphasis on Human Origins,". New Haven, CT: Yale University Press; 1995: p. 262-288.

5211. Cane, M.A., G. Eshel, and R.W. Buckland. Forecasting Zimbabwean maize yield using eastern equatorial Pacific sea surface temperature. *Nature*; 1994; v. 370(n. 6486): p. 204-205.

5212. Tang, B. Periods of linear development of the ENSO cycle and POP forecast experiments. *J. Clim.*; 1995; v. 8(n. 4): p. 682-691.

5213. Levin, V., W-Y Kim, and W. Menke. Seismic velocities in the shallow crust of western New England and northern New York. *Bull. Seismol. Soc. Am.*; 1995; v. 85(n. 1): p. 207-219.

5214. Manley, P.L. and D.W. Caress. Mudwaves on the Gardar Sediment Drift, NE Atlantic. *Paleoceanography*; 1994; v. 9(n. 6): p. 973-988.

5215. Cook, E.R., B.M. Buckley, and R.D. D'Arrigo. Interdecadal temperature oscillations in the southern hemisphere: evidence from Tasmanian tree rings since 300 B.C. in: D.G. Martinson, K. Bryan, M. Ghil, M.M. Hall, T.R. Karl, E.S. Sarachik, S. Sorooshian, and L.D. Talley, Eds. "Natural Climate Variability on Decade-To-Century Time Scales, Proceeding of the National Research Council, Sept. 1992. Washington, D.C.: National Academy Press,; 1995: p. 523-532.

5216. Stoll, R.D., E. Bautista, and R. Flood. New tools for studying seafloor geotechnical and geoacoustic properties. *J. Acoust. Soc. Am.*; 1994; v. 96(n. 5): p. 2937-2944.

5217. Marra, J. and R. R. Bidigare. The question of a nutrient effect on the bio-optical properties of phytoplankton. *Proceedings of the Society of Photo-Optical Instrumentation Engineers*, June 13-15, 1994, Bergen, Norway. Bellingham, WA: The International Society for Optical Engineering; 1994; V. 2258 *Ocean Optics XII*: p. 152-162.

5218. Buck, R. and D. Sokoutis. Analogue model of gravitational collapse and surface extension during continental convergence. *Nature*; 1994; v. 369(n. 6483): p. 737-740.

5219. Richards, P.G. Blasting activity of the mining industry in the United States. *Proceedings of the Symposium on the: M. D. Denny and S.P. Stull, Eds. Non-Proliferation Experiment: Results and Implications for Test Ban Treaties*, April 19-21, 1994, Rockville, MD.: U.S. Department of Energy; 1994: p. 16-35.

5220. Goldberg, D. and C.-S. Yin. Attenuation of P-waves in oceanic crust: multiple scattering from observed heterogeneities. *Geophys. Res. Lett.*; 1994; v. 21(n. 21): p. 2311-2314.

5221. Menke, W. and V. Levin. Cold crust in a hot spot. *Geophys. Res. Lett.*; 1994; v. 21(n. 18): p. 1967-1970.

5222. Chillrud, S.N., F.L. Pedrozo, P.F. Temporetti, H.F. Planas, and P.N. Froelich. Chemical weathering of phosphate and germanium in glacial meltwater streams: effects of subglacial pyrite oxidation. *Limnol. Oceanogr.*; 1994; v. 39(n. 5): p. 1130-1140.

5223. Field, E., A.C. Clement, K.H. Jacob., V. Aharonian, S.E. Hough, P. A. Friberg, T.O. Babaian, S.S. Karapetian, S. Hovanessian and H. Abramian. Earthquake Site-response study in Giumri (formerly Leninakan), Armenia using ambient noise observations. *Bull. Seismol. Soc. Am.*; 1995; v. 85(n. 1): p. 349-353.

5224. Anders, M.H. and N. Christie-Blick. Is the Sevier Desert reflection of west-central Utah a normal fault? *Geology*; 1994; v. 22: p. 771-774.

5225. Anderson, O.R. Cytoplasmic origin and surface deposition of siliceous structures in *Sarcodina*. *Protoplasma*; 1994; v. 181: p. 61-77.

5226. Scott, B.A., E.Y. Suard, C.C. Tsuei, D.B. Mitzi, T.R. McGuire, B-H. Chen, and D. Walker. Layer dependence of the superconducting transition temperature of  $\text{HgBa}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{2n+2+d}$ . *Physica C*; 1994; v. 230: p. 239-245.

5227. Vander Auwera, J. and J. Longhi. Experimental study of a jotunite (hypersthene monzodiorite): constraints on the parent magma composition and crystallization conditions (P,T, f02) of the Bjerkreim-Sokndal layered intrusion (Norway). *Contrib. Mineral. Petrol.*; 1994; v. 118: p. 60-78.

5228. Kent, D.V. and J. Gee. Grain size-dependent alteration and the magnetization of oceanic basalts. *Science*; 1994; v. 265: p. 1561-1563.

5229. Carbotte, S.M. and K.C. Macdonald. The axial topographic high at intermediate and fast spreading ridges. *Earth Planet. Sci. Lett.*; 1994; v. 128: p. 85-97.

5230. Biscaye, P.E., C.N. Flagg, and P.G. Falkowski. The shelf-edge exchange processes experiment, SEEP-II: an introduction to hypotheses, results and conclusions. *Deep-sea Res. II*; 1994; v. 41(n. 2/3): p. 231-252.

5231. Falkowski, P.G., P.E. Biscaye, and C. Sancetta. The lateral flux of biogenic particles from the eastern North American continental margin to the North Atlantic Ocean. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 583-601.

5232. Lane, P.V.Z., S.L. Smith, J.L. Urban, and P.E. Biscaye. Carbon flux and recycling associated with zooplanktonic fecal pellets on the shelf of the Middle Atlantic Bight. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 437-457.

5233. Rowe, G.T., G.S. Boland, W.C. Phoel, R.F. Anderson, and P.E. Biscaye. Deep sea-floor respiration as an indication of lateral input of biogenic detritus from continental margins. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 657-668; ISSN n. 2/3.

5234. Biscaye, P.E. and R.F. Anderson. Fluxes of particulate matter on the slope of the southern Middle Atlantic Bight: SEEP II. *Deep-Sea Res. II*; 1994; v. 41(n/ 2/3): p. 5234.

5235. Macario, A., W.F. Haxby, J.A. Goff, W.B.F. Ryan, S.C. Cande, and C.A. Raymond. Flow line variations in abyssal hill morphology for the Pacific-Antarctic Ridge at 65oS. *J. Geophys. Res.*; 1994; v. 99(n. B9): p. 17,921-17,934.

5236. Driscoll, N.W. and G. D. Karner. Flexural deformation due to Amazon Fan loading: a feedback mechanism affecting sediment delivery to margins. *Geology*; 1994; v. 22: p. 1015-1018.

5237. Bonatti, E., M. Ligi, L. Gasperini, A. Peyve, Y. Raznitsin, and Y.J. Chen. Transform migration and vertical tectonics at the Romanche fracture zone, equatorial Atlantic. *J. Geophys. Res.*; 1994; v. 99(n. B11): p. 21,779-21,802.

5238. Bonatti, E., M. Ligi, L. Gasparini, G. Carrara, and E. Vera . Imaging crustal uplift, emersion, and subsidence at the Vema Fracture Zone . EOS; 1993; v. 75(n. 32): p. 371-372.
5239. Kane, K.A. and D.E. Hayes. Long-lived mid-ocean ridge segmentation: constraints on models. J. Geophys. Res.; 1994; v. 99(n. B10): p. 19,693-19,706.
5240. Hayes, D.E. and K.A. Kane. Long-lived mid-ocean ridge segmentation of the Pacific-Antarctic ridge and the Southeast Indian ridge. J. Geophys. Res.; 1994; v. 99(n. B10): p. 19,679-19,692.
5241. Niu, Y. and R. Batiza. Magmatic processes at a slow spreading ridge segment: 26° S Mid-Atlantic Ridge. J. Geophys. Res.; 1994; v. 99(n. B10): p. 19,719-19,740.
5242. Blumenthal, M.B. and Briscoe, M.G. Distinguishing propagating waves and standing modes: an internal wave model. J. Phys. Oceanogr.; 1995; v. 25(n. 6): p. 1095-1115.
5243. Dawers, N.H. and M.H. Anders. Displacement-length scaling and fault linkage. J. Struct. Geol.; 1995; v. 17(n. 5): p. 607-614.
5244. Driscoll, N.W. and J.R. Hogg. Stratigraphic response to basin formation: Jeanne d'Arc Basin, offshore Newfoundland. in: J. J. Lambiase, Ed. "Hydrocarbon Habitat in Rift Basins," Geological Society Special Publ. No. 80. UK: Geological Society Publishing House; 1995: p. 145-163.
5245. Clark, J.F., P. Schlosser, R. Wanninkhof, H.J. Simpson, W.S.F. Schuster, and D.T. Ho. Gas transfer velocities for SF<sub>6</sub> and 3He in a small pond at low wind speeds. Geophys. Res. Lett.; 1995; v. 22(n. 2): p. 93-96.
5246. Bender, M., T. Sowers, M-L. Dickson, P. Orchardo, P. Grootes, P.A. Mayewski, and D.A. Meese. Climate correlations between Greenland and Antarctica during the past 100,000 years. Nature; 1994; v. 372(n. 6507): p. 663-666.
5247. Gilbert, L.E., C.H. Scholz, and J. Beavan. Strain localization along the San Andreas Fault: consequences for loading mechanisms. J. Geophys. Res.; 1994; v. 99(n. B12): p. 23,975-23,984.
5248. Goldberg, D.S., D.J. Reynolds, C.F. Williams, W.K. Witte, P.E. Olsen, and D.V. Kent. Well logging results from the Newark Rift Basin Coring Project. Scientific Drilling; 1994; v. 4: p. 267-279.



5249. Weissel, J.K., A. Malinverno, D.J. Harding, and G.D. Karner. Erosional development of the Ethiopian plateau of northeast Africa from a fractal analysis of topography. in: C.C. Barton and P.R. La Pointe, Eds. "Fractals in Petroleum Geology and Earth Processes". New York: Plenum Press; 1995: p. 127-142.

5250. Kane, K. and D. Hayes. A new relationship between subsidence rate and zero-age depth. *J. Geophys. Res.*; 1994; v. 99(n. B11): p. 21,759-21,777.

5251. Kent, D.V. and D.A. Schneider. Correlation of paleointensity variation records in the Brunhes-Matuyama polarity transition interval. *Earth Planet. Sci. Lett.*; 1995; v. 129: p. 135-144.

5252. Vermilye, J.M. and C.H. Scholz. Relation between vein length and aperture. *J. Struct. Geol.*; 1995; v. 17(n. 3): p. 423-434.

5253. Malinverno, A. Fractals and ocean floor topography: a review and a model. in: C.C. Barton and P.R. La Pointe, Eds. "Fractal Geometry and Its use in the Earth Sciences". NY: Plenum Press; 1995: p. 107-130.

5254. Wang, X. and J.R. Cochran. Along-axis gravity gradients at mid-ocean ridges: implications for mantle flow and axial morphology. *Geology*; 1995; v. 23(n. 1): p. 29-32.

5255. Wang, W. and C.H. Scholz. Micromechanics of the velocity and normal stress dependence of rock friction. *Pure Appl. Geophys.*; 1994; v. 143(n. 1/2/3): p. 303-315.

5256. Driscoll, N.W., J.R. Hogg, N. Christie-Blick, and G.D. Karner. Extensional tectonics in the Jeanne d'Arc Basin, offshore Newfoundland: implications for the timing of break-up between Grand Banks and Iberia. in: R.A. Scrutton, M.S. Stoker, G.B. Shimmiel, and A.W. Tudhope, Eds. "The Tectonics, Sedimentation and Palaeoceanography of the North Atlantic Region": Special Publication No. 90 of the Geological Society of London ; 1995: p. 1-28.

5257. Christie-Blick, N. and N.W. Driscoll. Sequence Stratigraphy. *Ann. Rev. Earth Planet. Sci.*; 1995; v. 23: p. 451-478.

5258. Karner, G.D. and N.W. Driscoll. Rift flank topography and extensional basin architecture: formation of broken ridge, southeast Indian Ocean. *An. Acad. bras. Ci.*; 1993; v. 65 ((Supl. 2)): p. 263-294.

5259. Mountain, G.S. and W.B. Curry. Cruise Ew9209: Site survey for Leg 154. Proc. ODP, Init. Reports. College Station, TX. (Ocean Drilling Program); 1995; V.154: p. 39-52.

5260. Miller, K.G., J.D. Wright, M.C. Van Fossen, and D.V. Kent. Miocene stable isotopic stratigraphy and magnetostratigraphy of Buff Bay, Jamaica. *Geol. Soc. Am. Bull.*; 1994; v. 106: p. 1605-1620.

5261. Ho, C. and J. Marra. Early-spring export of phytoplankton production in the northeast Atlantic Ocean. *Mar. Ecol. Prog. Ser.*; 1994; v. 114: p. 197-202.

5262. Hodell, D.A., R.H. Benson, D.V. Kent, A. Boersma, and K. R-El. Bied. Magnetostratigraphic, Biostratigraphic, and stable isotope stratigraphy of an Upper Miocene drill core from the Sale' Briqueterie (northwestern Morocco): A high-resolution chronology for the Messinian stage. *Paleoceanography*; 1994; v. 9(n. 6): p. 835-855.

5263. Byrne, D.A., A.L. Gordon, and W.F. Haxby. Agulhas Eddies: a synoptic view using geosat ERM data. *J. Phys. Oceanogr.*; 1995; v. 25(n. 5): p. 902-917.

5264. McManus, J.F., G.C. Bond, W.S. Broecker, S. Johnsen, L. Labeyrie, and S. Higgins. High-resolution climate records from the North Atlantic during the last interglacial. *Nature*; 1994; v. 371(n. 6495): p. 326-329.

5265. Colodner, D., V. Salters, and D.C. Duckworth. Ion sources for analysis of inorganic solids and liquids by MS. *Anal. Chem.*; 1994; v. 66: p. 1079A-1089A.

5266. Menke, W., B. Brandsdottir, S. Jakobsdottir and R. Stefansson. Seismic anisotropy in the crust at the mid-Atlantic plate boundary in south-west Iceland. *Geophys. J. Int.*; 1994; v. 119: p. 783-790.

5267. Levin, V., A. Lerner-Lam, and W. Menke,. Anomalous mantle structure at the Proterozoic—Paleozoic boundary in northeastern US. *Geophys. Res. Lett.*; 1995; v. 22(n. 2): p. 121-124.

5268. Stute, M., J.F. Clark, P. Schlosser, W.S. Broecker, and G. Bonani. A 30,000 yr continental paleotemperature record derived from noble gases dissolved in groundwater from the San Juan Basin, New Mexico. *Quat. Res.*; 1995; v. 43: p. 209-220.

5269. Pfirman, S.L., H. Eicken, D. Bauch, and W.F. Weeks. The potential transport of pollutants by Arctic sea ice. *Sci. Total Environ.*; 1995; v. 159: p. 129-146.

5270. Christie-Blick, N., I.A. Dyson, C.C. von der Borch. Sequence stratigraphy and the interpretation of Neoproterozoic earth history. *Precambrian Res.*; 1995; v. 73: p. 3-26.

5271. Triep, E.G., G.A. Abers, A.L. Lerner-Lam, V. Mishatkin, N. Zakharchenko, and O. Starovoit. Active thrust front of the greater caucasus: the April 29, 1991 Racha earthquake sequence and its tectonic implications. *J. Geophys. Res.*; 1995; v. 100(n. B3): p. 4011-4033.
5272. Abbott, D., R. Drury, and W.H.F. Smith. Flat to steep transition in subduction style. *Geology*; 1994; v. 22: p. 937-940.
5273. Torgersen, T., S. Drenkard, K. Farley, P. Schlosser and A. Shapiro. Mantle helium in the groundwater of the Mirror lake Basin, New Hampshire, USA. in: J. Matsuda, Eds. "Noble Gas Geochemistry and Cosmochemistry". Japan: Terra Scientific Publ. Co.; 1994: p. 279-292.
5274. Sugarman, P.J., K.G. Miller, D. Bukry, and M.D. Feigenson. Uppermost Campanian—Maestrichtian strontium isotopic, biostratigraphic, and sequence stratigraphic framework of the New Jersey Coastal Plain. *Geol. Soc. Am. Bull.*; 1995; v. 107(n. 1): p. 19-37.
5275. Crusius, J. and R.F. Anderson. Evaluating the mobility of  $^{137}\text{Cs}$ ,  $^{239+240}\text{Pu}$  and  $^{210}\text{Pb}$  from their distributions in laminated lake sediments. *J. Paleolimnol.*; 1995; v. 13: p. 119-141.
5276. Crusius, J. and R.F. Anderson. Sediment focusing in six small lakes inferred from radionuclide profiles. *J. Paleolimnol.*; 1995; v. 13: p. 143-155.
5277. Scholz, C.H. Reply to comments on "A reappraisal of large earthquake scaling". *Bull. Seismol. Soc. Am.*; 1994; v. 84(n. 5): p. 1677-1678.
5278. Tuttle, M.P. and E.S. Schweig. Archeological and pedological evidence for large prehistoric earthquakes in the New Madrid seismic zone, central United States. *Geology*; 1995; v. 23(n. 3): p. 253-256.
5279. Pirmez, C. and R.D. Flood. Morphology and structure of Amazon Channel. *Proc. ODP, Init. Repts., V 155*. College Station, TX (Ocean Drilling Program); 1995: p. 23-45.
5280. Vidale, J.E., S. Goes, and P.G. Richards. Near-field deformation seen on distant broadband seismograms. *Geophys. Res. Lett.*; 1995; v. 22(n.1): p. 1-4.
5281. Langdon, C., J. Marra, and C. Knudson. Measurements of net and gross  $\text{O}_2$  production, dark  $\text{O}_2$  respiration and  $^{14}\text{C}$  assimilation at the Marine Light—Mixed Layers site ( $59^\circ\text{N}$ ,  $21^\circ\text{W}$ ) in the northeast Atlantic Ocean. *J. Geophys. Res.*; 1995; v. 100(n. C4): p. 6645-6653.

5282. Clark, J.F., H.J. Simpson, R.F. Bopp, and B.L. Deck. Dissolved oxygen in lower Hudson estuary: 1978-93. *J. Environ. Eng.*; 1995; October: p.760-763.
5283. Peteet, D.M. and D.H. Mann. Late-glacial vegetational, tephra, and climatic history of southwestern Kodiak Island, Alaska. *Ecoscience*; 1994; v. 1(n. 3): p. 255-267.
5284. Deng, J. and L.R. Sykes. Determination of Euler Pole for contemporary relative motion of Caribbean and North American plates using slip vectors of interplate earthquakes. *Tectonics*; 1995; v. 14(n. 1): p. 39-53.
5285. Houghton, R.W. The bottom boundary layer structure in the vicinity of the Middle Atlantic Bight shelfbreak front. *Contin. Shelf Res.*; 1995; v. 15(n. 10): p. 1173-1194.
5286. Mello, U.T., G.D. Karner, and R.N. Anderson. Role of salt in restraining the maturation of subsalt source rocks. *Mar. Pet. Geol.*; 1995; v. 12(n. 7): p. 697-716.
5287. Jacoby, G., G. Carver, and W. Wagner. Trees and herbs killed by an earthquake — 300 yr ago at Humboldt Bay, California. *Geology*; 1995; v. 23(n. 1): p. 77-80.
5288. Bryant, J.D., D.S. Jones, and P.A. Mueller. Influence of freshwater flux on  $^{87}\text{Sr}/^{86}\text{Sr}$  chronostratigraphy in marginal marine environments and dating of vertebrate and invertebrate faunas. *J. Paleontol.*; 1995; v. 69(n. 1): p. 1-6.
5289. Shaw, P-T., L.J. Pietrafesa, C.N. Flagg, R.W. Houghton and K-H. Su. Low-frequency oscillations on the outer shelf in the southern Mid-Atlantic Bight. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 253-271.
5290. Flagg, C.N., R.W. Houghton, and L.J. Pietrafesa. Summertime thermocline salinity maximum intrusions in the Mid-Atlantic Bight. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 325-340.
5291. Pietrafesa, L.J., J.M. Morrison, M.P. McCann, J. Churchill, E. Bö hm, and R.W. Houghton. Water mass linkages between the Middle and South Atlantic Bights. *Deep-Sea Res. II*; 1994; v. 41(n. 2/3): p. 365-389.
5292. Ilahude, A. G. and A.L. Gordon. Water masses of the Indonesian Seas throughflow. *Proceedings of the IOC-WESTPAC Third International Scientific Symposium, November 22-26, 1994, Bali, Indonesia* ed. Research and Development Centre for Oceanology, Indonesian Institute of Sciences; 1996: p. 572-587.

5293. Farley, K.A., E. Maier-Reimer, P. Schlosser, and W.S. Broecker. Constraints on mantle  $^3\text{He}$  fluxes and deep-sea circulation from an oceanic general circulation model. *J. Geophys. Res.*; 1995; v. 100(n. B3): p. 3829-3839.

5294. Sykes, L.R. Dealing with decoupled nuclear explosions under a comprehensive test ban treaty. in: E.S. Husebye and A.M. Dainty, Eds. "Monitoring a Comprehensive Test Ban Treaty". the Netherlands: Kluwer Academic Publishers; 1996: p. 247-293.

5295. Schlosser, P. and W.M. Smethie Jr. Transient tracers as a tool to study variability of ocean circulation. in: D.G. Martinson, K. Bryan, M. Ghil, M.M. Hall, T.R. Karl, E.S. Sarachik, S. Sorooshian, and L.D. Talley, Eds. "Natural Climate Variability on Decade-To Century Time Scales," Proceedings of the National Research Council, Sept. 1992,. Washington, D.C.: National Academy Press ; 1995: p. 274-289.

5296. Schlosser, P., B. Kromer, G. Östlund, B. Ekwurzel, G. Bö nisch, H.H. Loosli, and R. Purtschert. On the  $^{14}\text{C}$  and  $^{39}\text{Ar}$  distribution in the central Arctic Ocean: implications for deep water formation. *Radiocarbon*; 1994; v. 36(n. 3): p. 327-343.

5297. Schlosser, P., G. Bö nisch, B. Kromer, H.H. Loosli, R. Bü hler, R. Bayer, G. Bonani and K.P. Koltermann. Mid-1980s distribution of tritium,  $^3\text{He}$ ,  $^{14}\text{C}$  and  $^{39}\text{Ar}$  in the Greenland/Norwegian Seas and the Nansen Basin of the Arctic Ocean. *Prog. Oceanogr.* ; 1995; v. 35: p. 1-28.

5298. Bö nisch, G. and P. Schlosser. Deep water formation and exchange rates in the Greenland/Norwegian Seas and the Eurasian Basin of the Arctic Ocean derived from tracer balances. *Prog. Oceanogr.*; 1995; v. 35: p. 29-52.

5299. Bauch, D., P. Schlosser, and R.G. Fairbanks. Freshwater balance and the sources of deep and bottom waters in the Arctic Ocean inferred from the distribution of  $\text{H}_2^{18}\text{O}$ . *Prog. Oceanogr.*; 1995; v. 35: p. 53-80.

5300. Rind, D., R. Healy, C. Parkinson, and D. Martinson. The role of sea ice in  $2 \times \text{CO}_2$  climate model sensitivity: Part I. The total influence of sea ice thickness and extent. *J. Clim.*; 1995; v. 8(n. 3 ): p. 449-463.

5301. Richards, P. and J. Zavales. Seismological methods for monitoring a CTBT: the technical issues arising in early negotiations. in: E.S. Husebye and A.M. Dainty, Eds. "Monitoring a Comprehensive Test Ban Treaty". the Netherlands: Kluwer Academic Publishers; 1996: p. 53-81.

5302. Seager, R., M. Benno Blumenthal, and Y. Kushnir. An advective atmospheric mixed layer model for ocean modeling purposes: global simulation of surface heat fluxes. *J. Clim.*; 1995; v. 8(n. 8): p. 1952-1964.

5303. Preisig, H.R., O.R. Anderson, J.O. Corliss, Ø. Moestrup, M.J. Powell, R.W. Roberson, and R. Wetherbee. Terminology and nomenclature of protist cell surface structures. *Protoplasma*; 1994; v. 181: p. 1-28.

5304. Chen, B-H., D. Walker, E.Y. Suasrd, and B.A. Scott. High-pressure synthesis and structure of the new spinel-related series  $\text{LnCu}_2\text{O}_4$  (Ln = Nd, Gd, Er, Lu, Y). *Chem. Mater.*; 1995; v. 7(n. 2): p. 355-358.

5305. Torgersen, T., S. Drenkard, M. Stute, P. Schlosser, and A. Shapiro. Mantle helium in ground waters of eastern North America: time and space constraints on sources. *Geology*; 1995; v. 23(n. 8): p. 675-678.

5306. Takahashi, T., T.T. Takahashi, and S.C. Sutherland. An assessment of the role of the North Atlantic as a CO<sub>2</sub> sink. *Phil. Trans. R. Soc. Lond. B*; 1995; v. 348: p. 143-152.

5307. Wang, W. and C.H. Scholz. Micromechanics of rock friction: 3. quantitative modeling of base friction. *J. Geophys. Res.*; 1995; V. 100(N. B3): P. 4243-4247.

5308. Scholz, C.H., A. Léger, and S.L. Karner. Experimental diagenesis: exploratory results. *Geophys. Res. Lett.*; 1995; v. 22(n. 6): p. 719-722.

5309. Bond, G.C. and R. Lotti. Iceberg discharges into the North Atlantic on millennial time scales during the last glaciation. *Science*; 1995; v. 267: p. 1005-1010.

5310. Marra, J., C. Langdon, and C.A. Knudson. Primary production, water column changes, and the demise of a *Phaeocystis* bloom at the Marine Light—Mixed Layers site (59° N, 21° W) in the northeast Atlantic Ocean. *J. Geophys. Res.*; 1995; v. 100(n. C4): p. 6633-6643.

5311. Anderson, O.R. and A. Rogerson. Annual abundances and growth potential of gymnamoebae in the Hudson Estuary with comparative data from the Firth of Clyde. *Europ. J. Protistol.*; 1995; v. 31: p. 223-233.

5312. Wiggins, C. and M. Spiegelman. Magma migration and magmatic solitary waves in 3-D. *Geophys. Res. Lett.*; 1995; v. 22(n. 10): p. 1289-1292.

5313. Caress, D.W., M.K. McNutt, R.S. Detrick, and J.C. Mutter. Seismic imaging of hotspot-related crustal underplating beneath the Marquesas Islands. *Nature*; 1995; v. 373 n. 6515: p. 600-603.

5314. Cande, S.C. and D.V. Kent. Revised calibration of the geomagnetic polarity timescale for the Late Cretaceous and Cenozoic. *J. Geophys. Res.*; 1995; v. 100(n. B4): p. 6093-6095.

5315. Cook, E.R., K.R. Briffa, D.M. Meko, D.A. Graybill, and G. Funkhouser. The segment length curve in Long tree-ring chronology development for palaeoclimatic studies. *The Holocene*; 1995; v. 5(n. 2): p. 229-237.

5316. Bell, R.E. Advances in aerogeophysics and precise positioning: gravity, topography, and high resolution applications. *Rev. Geophys.*; 1995; Supplement to volume 33, part 1: p. 361-364.

5317. Mutter, J.C., S.M. Carbotte, W. Su, L. Xu, P. Buhl, R.S. Detrick, G.M. Kent, J.A. Orcutt and A.J. Harding. Seismic images of active magma systems beneath the East Pacific Rise 17° 05' to 17° 35'S. *Science*; 1995; v. 268: p. 391-395.

5318. Colodner, D., J. Edmond, and E. Boyle. Rhenium in the Black Sea: comparison with molybdenum and uranium. *Earth Planet. Sci. Lett.*; 1995; v. 131: p. 1-15.

5319. Gee, J. and D.V. Kent. Magnetic hysteresis in young mid-ocean ridge basalts: dominant cubic anisotropy? *Geophys. Res. Lett.*; 1995; v. 22(n. 5): p. 551-554.

5320. Isley, A.E. Hydrothermal plumes and the delivery of iron to banded iron formation. *The J. of Geol.*; 1995; v. 103: p. 169-185.

5321. Marra, J. Bioluminescence and optical variability in the ocean: an overview of the Marine Light—Mixed Layers Program. *J. Geophys. Res.*; 1995; v. 100(n. C4): p. 6521-6525.

5322. Johnson, J.M., Y. Tanioka, L.J. Ruff, K. Satake, H. Kanamori and L.R. Sykes. The 1957 great Aleutian earthquake. *Pageoph*; 1994; v. 142(n. 1): p. 3-28.

5323. Field, E.H. and K.H. Jacob. A comparison and test of various site-response estimation techniques, including three that are not reference-site dependent. *Bull. Seismol. Soc. Am.*; 1995; v. 85(n. 4): p. 1127-1143.

5324. van Geen, A., D.C. McCorkle, and G.P. Klinkhammer. Sensitivity of the phosphate-cadmium-carbon isotope relation in the ocean to cadmium removal by suboxic sediments. *Paleoceanography*; 1995; v. 10(n. 2): p. 159-169.

5325. D'Arrigo, R.D., B.M. Buckley, E.R. Cook and W.S. Wagner. Temperature-sensitive tree-ring width chronologies of pink pine (*Halocarpus biformis*) from Stewart Island, New Zealand. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1995; v. 119: p. 293-300.

5326. Seeber, L. and J.G. Armbruster. The San Andreas fault system through the Transverse Ranges as illuminated by earthquakes. *J. Geophys. Res.*; 1995; v. 100(n. B5): p. 8285-8310.

5327. Jones, J.H., D. Walker, D.A. Pickett, M.T. Murrell, and P. Beattie. Experimental investigations of the partitioning of Nb, Mo, Ba, Ce, Pb, Ra, Th, Pa, and U between immiscible carbonate and silicate liquids. *Geochim. Cosmochim. Acta*; 1995; v. 59(n. 7): p. 1307-1320.

5328. Hellmer, H.H. and S.S. Jacobs. Seasonal circulation under the eastern Ross Ice Shelf, Antarctica. *J. Geophys. Res.*; 1995; v. 100(n. C6): p. 10,873-10,885.

5329. Abbott, D. and W. Mooney. The structural and geochemical evolution of the continental crust: support for the oceanic plateau model of continental growth. *Rev. Geophys.*, Supplement to volume 33, part 1; 1995: p. 231-242.

5330. Krupitsky, A. Local and remote forcing of the barotropic transport through a periodic gap in a basin with bottom topography. *J. Mar. Res.*; 1995; v. 53: p. 201-210.

5331. Wiles, G.C., P.E. Calkin, and G.C. Jacoby. Tree-ring analysis and Quaternary geology: principles and recent applications. *Geomorphology*; 1996; v. 16: p. 259-272.

5332. Seager, R., Y. Kushnir and M.A. Cane. On heat flux boundary conditions for ocean models. *J. Phys. Oceanogr.*; 1995; v. 25(n. 12): p. 3221-3230.

5333. Abers, G.A., X. Hu, and L.R. Sykes. Source scaling of earthquakes in the Shumagin Region, Alaska: time domain inversions of regional waveforms. *Geophys. J. Int.*; 1995; v. 123: p. 41-58.

5334. Mü ench, R.D. and A.L. Gordon. Circulation and transport of water along the western Weddell Sea margin. *J. Geophys. Res.*; 1995; v. 100(n. C9): p. 18,503-18,515.



5335. DiVenere, V., D.V. Kent, and I.W.D. Dalziel. Early Cretaceous paleomagnetic results from Marie Byrd Land, West Antarctica: implications for the Weddellia collage of crustal blocks. *J. Geophys. Res.*; 1995; v. 100(n. B5): p. 8133-8151.

5336. Bautista, E.O. and R.D. Stoll. Remote determination of in-situ sediment parameters using love waves. *J. Acoust. Soc. Am.*; 1995; v. 98(n. 2, pt. 1): p. 1090-1096.

5337. Cook, E.R. Temperature histories from tree rings and corals. *Clim. Dynamics*; 1995; v. 11: p. 211-222.

5338. Chen, B-H., D. Walker, E. Suard, B.A. Scott, B. Mercey, M. Hervieu and B. Raveau. High pressure synthesis of NdCuO<sub>3</sub>—d Perovskites ( $0 \leq d \leq 0.5$ ). *Inorganic Chem.*; 1995; v. 34(n. 8): p. 2077-2083.

5339. Richards, P.G. and G. Ekström. Earthquake activity associated with underground nuclear explosions. in: R. Console and A. Nikolaev, Eds. "Earthquakes Induced by Underground Nuclear Explosions: Environmental and Ecological Problems". Berlin Heidelberg: Springer-Verlag; 1995: p. 21-34. (NATO ASI Series, Partnership Sub-Series, 2, Environment—V. 4).

5340. Jacoby, G.C. and R.D. D'Arrigo. Tree-ring width and density evidence of climatic and potential forest change in Alaska. *Global Biogeochem. Cycles*; 1995; v. 9(n. 2): p. 227-234.

5341. Broecker, W.S., S. Sutherland, W. Smethie, T-H. Peng, and G. Ostlund. Oceanic radiocarbon: separation of the natural and bomb components. *Global Biogeochem. Cycles*; 1995; v. 9(n. 2): p. 263-288.

5342. Kim, W-Y, V.V. Kazakov, A.G. Vanchugov, D.W. Simpson. Broadband and array observations at low noise sites in Kazakhstan: opportunities for seismic monitoring of a comprehensive test ban treaty. in: E.S. Husebye and A.M. Dainty, Eds. *Monitoring a Comprehensive Test Ban Treaty*. the Netherlands: Kluwer Academic Publishers; 1996: p. 467-482.

5343. Gee, J. and M. Nakanishi. Magnetic petrology and magnetic properties of western Pacific guyots: implications for seamount paleopoles. J.A. Heggerty, I. Premoli Silva, F. Rack, and M.K. McNutt, Eds. *Proc. ODP, Sci. Results*. College Station, Tx. (Ocean Drilling Program); 1995; 144: p. 615-630.

5344. Naik, N., M.A. Cane, S. Basin, and M. Israeli. A solver for the barotropic mode in the presence of variable topography and islands. *Mon. Weather Rev.*; 1995; v. 123(n. 3): p. 817-832.

5345. Christensen, B., K.G. Miller, and R.K. Olsson. Eocene-Oligocene benthic foraminiferal biofacies and depositional sequences at the ACGS #4 borehole, New Jersey coastal plain. *Palaios*; 1995; v. 10(n. 3): p. 103-132.

5346. D'Arrigo, R.D. and G.C. Jacoby. Past changes in climate and tree growth in the western Americas. in: R.G. Lawford, P.B. Alaback, and E. Fuentes, Eds. "High-Latitude Rain Forests and Associated Ecosystems of the West Coast of the Americas: Climate, Hydrology, Ecology, and Conservation". New York: Springer-Verlag; 1996: p. 75-88.

5347. Gordon, A. When is Appearance reality? A comment on why does the Indonesian throughflow appear to originate from the North Pacific. *J. Phys. Oceanogr.*; 1995; v. 25(n. 6 (part II)): p. 1560-1567.

5348. Menke, W., V. Levin, and R. Sethi. Seismic attenuation in the crust at the mid-Atlantic plate boundary in south-west Iceland. *Geophys. J. Int.*; 1995; v. 122: p. 175-182.

5349. Longhi, J. Liquidus equilibria of some primary lunar and terrestrial melts in the garnet stability field. *Geochem. Cosmochim. Acta*; 1995; v. 59(n. 11): p. 2375-2386.

5350. Pak, D.K. and K.G. Miller. Isotopic and faunal record of Paleogene deep-water transitions in the North Pacific. *Proc. ODP, Sci. Results. College Station, TX. (Oceans Drilling Program)*; 1995; V. 145: p. 265-281.

5351. Miller, K.G. and P.J. Sugarman. Correlating Miocene sequences in onshore New Jersey boreholes (ODP Leg 150X) with global d 18 0 and Maryland outcrops. *Geology*; 1995; v. 23(n. 8): p. 747-750.

5352. Macario, A., A. Malinverno, and W.F. Haxby. On the robustness of elastic thickness estimates obtained using the coherence method. *J. Geophys. Res.*; 1995; v. 100(n. B8): p. 15,163-15,172.

5353. Kent, D.V., P.E. Olsen, and W.K. Witte,. Late Triassic-earliest Jurassic geomagnetic polarity sequence and paleolatitudes from drill cores in the Newark rift basin, eastern North America. *J. Geophys. Res.*; 1995; v. 100(n. B8): p. 14,965-14,998.

5354. Marcantonio, F., A. Zindler, T. Elliott, and H. Staudigel. Os isotope systematics of La Palma, Canary Islands: evidence for recycled crust in the mantle source of HIMU ocean islands. *Earth Planet. Sci. Lett.*; 1995; v. 133: p. 397-410.

5355. Marcantonio, F., N. Kumar, M. Stute, R.F. Anderson, M.A. Seidl, P. Schlosser, and A. Mix. A comparative study of accumulation rates derived by He and Th isotope analysis of marine sediments. *Earth Planet. Sci. Lett.*; 1995; v. 133: p. 549-555.

5356. Burckle, L.H. and R. Burak. Relative abundance of *Eucampia antarctica* as a close proxy to  $\delta^{18}O$  in upper Quaternary sediments of the Southern Ocean. *PACT* ; 1996: p. 15-22.

5357. Ledwell, J.R. and B.M. Hickey. Evidence for enhanced boundary mixing in the Santa Monica Basin. *J. Geophys. Res.*; 1995; v. 100(n. C10): p. 20,665-20,679.

5358. Abers, G.A., J. Beavan, S. Horton, S. Jaumé, and E. Triep. Large accelerations and tectonic setting of the May, 1993 Shumagin Islands earthquake sequence. *Bull. Seismol. Soc. Am.*; 1995; v. 85(n. 6): p. 1730-1738.

5359. Menke, W. and D. Sparks. Crustal accretion model for Iceland predicts 'cold' crust. *Geophys. Res. Lett.*; 1995; v. 22(n. 13): p. 1673-1676.

5360. Anderson, O.R. Effects of caffeine treatment on the fine structure, silica secretion, and shell morphology of the testate amoeba *Assulina muscorum*. *J. Morphol.*; 1995; v. 225: p. 251-260.

5361. Smythe-Wright, D., A.L. Gordon, P. Chapman, and M.S. Jones. CFC-113 shows Brazil Eddy crossing the South Atlantic to the Agulhas retroflection region. *J. Geophys. Res.*; 1996; v. 101(n. C1): p. 885-895.

5362. Gordon, A.L. and B.A. Huber. Warm Weddell deep water west of Maud Rise. *J. Geophys. Res.*; 1995; v. 100(n.C7): p. 13,747-13,753.

5363. Kim, W-Y. and Göran Ekström. Instrument responses of digital seismographs at Borovoye, Kazakhstan by inversion of transient calibration pulses. *Bull. Seismol. Soc. Am.*; 1996; v. 86(no. 1A): p. 191-203.

5364. Van Orman, J., J.R. Cochran, J.K. Weissel, and F. Jestin. Distribution of shortening in the Indian and Australian plates in the central Indian Ocean. *Earth Planet. Sci. Lett.*; 1995; v. 133: p. 35-46.

5365. Upcott, N.M., R.K. Mukasa, C.J. Ebinger, and G.D. Karner. Along-axis segmentation and isostasy in the Western rift, East Africa. *J. Geophys. Res.*; 1996; v. 101(n. B2): p. 3247-3268.

5366. Ravelo, A.C. and R.G. Fairbanks. Carbon isotopic fractionation in multiple species of planktonic foraminifera from core-tops in the tropical Atlantic. *J. Foraminiferal Res.*; 1995; v. 25(n. 1): p. 53-74.

5367. Wiles, G.C., P.E. Calkin, and A. Post. Glacier fluctuations in the Kenai Fjords, Alaska, U.S.A: an evaluation of controls on iceberg-Calving Glaciers. *Arct. Alp. Res.*; 1995; v. 27(n. 3): p. 234-245.

5368. Sowers, T. and M. Bender. Climate records covering the last deglaciation. *Science*; 1995; v. 269: p. 210-214.

5369. Sheehan, A.F., G.A. Abers, C.H. Jones, and A.L. Lerner-Lam. Crustal thickness variations across the Colorado Rocky Mountains from teleseismic receiver functions. *J. Geophys. Res.*; 1995; v. 100(n. B10): p. 20,391-20,404.

5370. Peteet, D. Global younger dryas? *Quat. Int.*; 1995; v. 28: p. 93-104.

5371. Stute, M., M. Forster, H. Frischkorn, A. Serejo, J.F. Clark, P. Schlosser, W.S. Broecker, and G. Bonani. Cooling of tropical Brazil (5° C) during the last glacial maximum. *Science*; 1995; v. 269: p. 379-383.

5372. D'Arrigo, R.D., E.R. Cook, and G.C. Jacoby. Annual to decadal-scale variations in northwest Atlantic sector temperatures inferred from Labrador tree rings. *Can. J. For. Res.*; 1996; v. 26: p. 143-148.

5373. Katz, E.J., A. Busalacchi, M. Bushnell, F. Gonzalez, L. Gourdeau, M. McPhaden, and J. Picaut. A comparison of coincidental time series of the ocean surface height by satellite altimeter, mooring, and inverted echo sounder. *J. Geophys. Res.*; 1995; v. 100(n. C12): p. 25,101-25,108.

5374. Clark, J.F., W.M. Smethie, Jr., and H.J. Simpson. Chlorofluorocarbons in the Hudson Estuary during summer months. *Water Resour. Res.*; 1995; v. 31(n. 10): p. 2553-2560.

5375. Marra, John. Primary production in the North Atlantic: measurements, scaling, and optical determinants. *Phil. Trans. R. Soc. Lond. B*; 1995; v. 348: p. 153-160.

5376. Tourre, Y.M. and W.B. White. ENSO Signals in global upper-ocean temperature. *J. Phys. Oceanogr.*; 1995; v. 25: p. 1317-1332.

5377. Reverdin, G. The physical processes of open ocean upwelling systems. in: C.P. Summerhayes, K-C. Emeis, M.V. Angel, R.L. Smith and B. Zeitzschel, Eds. "Upwelling in the Ocean: Modern Processes and Ancient Records". Dahlem workshop ed.: John Wiley & Sons Ltd.; 1995: p. 125-148.

5378. Reverdin, G. Historical salinity data of the North Atlantic Ocean. *Ocean Challenge*; 1995; v. 6(n. 1): p. 40-47.

5379. DiVenere, V., D.V. Kent, and I.W.D. Dalziel. Summary of palaeomagnetic results from West Antarctica: implications for the tectonic evolution of the Pacific margin of Gondwana during the Mesozoic. in: B.C. Storey, E.C. King, and R.A. Livermore, Eds. "Weddell Sea Tectonics and Gondwana Break-up,". Geological Society of London: Geological Society Special Publication No. 108; 1996: p. 31-44.

5380. Scholz, C.H. and J. Campos. On the mechanism of seismic decoupling and back arc spreading at subduction zones. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,103-22,115.

5381. Seager, R. and S.E. Zebiak. Simulation of tropical climate with a linear primitive equation model. *J. Clim.*; 1995; v. 8(n. 10): p. 2497-2520.

5382. Gregory, K.M. and W.C. McIntosh. Paleoclimate and paleoelevation of the Oligocene Pitch-Pinnacle flora, Sawatch Range, Colorado. *Geol. Soc. Am. Bull.*; 1996; v. 108(n. 5): p. 545-561.

5383. Pearson, C.F., J. Beavan, D.J. Darby, G.H. Blick, and R.I. Walcott. Strain distribution across the Australian-Pacific plate boundary in the central South Island, New Zealand, from 1992 GPS and earlier terrestrial observations. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,071-22,081.

5384. Katz, E.J., J.A. Carton, and A. Chakraborty. Dynamics of the equatorial Atlantic from altimetry. *J. Geophys. Res.*; 1995; v. 100(n. C12): p. 25,061-25,067.

5385. Ledwell, J.R. and A. Bratkovich. A tracer study of mixing in the Santa Cruz Basin. *J. Geophys. Res.*; 1995; v. 100(n. C10): p. 20,681-20,704.

5386. deMenocal, P. Plio-Pleistocene African climate. *Science*; 1995; v. 270: p. 53-59.

5387. Stephens, M.P., G. Samuels, D.B. Olson, R.A. Fine and T. Takahashi. Sea-air flux of CO<sub>2</sub> in the North Pacific using shipboard and satellite data. *J. Geophys. Res.*; 1995; v. 100(n. C7): p. 13,571-13,583.

5388. Seeber, L. G. Ekström, S.K. Jain, C.V.R. Murty, N. Chandak, and J.G. Armbruster. The 1993 Killari earthquake in central India: A new fault in Mesozoic basalt flows? *J. Geophys. Res.*; 1996; v. 101(n. B4): p. 8543-8560.

5389. Berggren, W.A., D.V. Kent, C.C. Swisher III, and M.-P. Aubry. A revised Cenozoic geochronology and chronostratigraphy. in: W.A. Berggren, D.V. Kent, and J. Hardenbol, Eds. "Geochronology, Time Scales and Global Stratigraphic Correlation". Tulsa, OK: SEPM (Society of Economic Paleontologists and Mineralogists); 1995; Special Publication No. 54: p. 129-212.

5390. Berggren, W.A., F.J. Hilgen, C.G. Langereis, D.V. Kent, J.D. Obradovich, I. Raffi, M.E. Raymo, and N.J. Shackleton. Late Neogen chronology: new perspectives in high-resolution stratigraphy. *Geol. Soc. Am. Bull.*; 1995; v. 107(n. 11): p. 1272-1287.

5391. Chen, D., S.E. Zebiak, A.J. Busalacchi, and M.A. Cane. An improved procedure for El Niño forecasting: implications for predictability. *Science*; 1995; v. 269: p. 1699-1702.

5392. Small, C. Observations of ridge-hotspot interactions in the Southern Ocean. *J. Geophys. Res.*; 1995; v. 100(n. B9): p. 17,931-17,946.

5393. Bryant, J.D. and P.N. Froelich. A model of oxygen isotope fractionation in body water of large mammals. *Geochim. Cosmochim. Acta*; 1995; v. 59(n. 21): p. 4523-4537.

5394. Clark, J.F., P. Schlosser, H.J. Simpson, M. Stute, R. Wanninkhof, and D.T. Ho. Relationship between gas transfer velocities and wind speeds in the tidal Hudson River determined by the dual tracer technique. in: B. Jaehne and E. Monahan, Eds. "Air-Water Gas Transfer". Hanau, Germany: Aeon Verlag; 1995: p. 785-800.

5395. Brueckner, H.K., M.A. Elhaddad, B. Hamelin, S. Hemming, A. Kröner, L. Reisberg and M. Seyler. A Pan African origin and uplift for the gneisses and peridotites of Zabargad Island, Red Sea: A Nd, Sr, Pb, and Os isotope study. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,283-22,297.

5396. Cook, E.R., B.M. Buckley, and R.D. D'Arrigo. Inter-decadal climate oscillations in the Tasmanian sector of the Southern Hemisphere: evidence from tree rings over the past three millennia. in: P.D. Jones, R.S. Bradley, and J. Jouzel, Eds. "Climatic Variations and Forcing Mechanisms of the Last 2000 Years". Berlin : Springer-Verlag; 1996: p. 141-160. (NATO ASI Series, V. 141).

5397. Langseth, M.G. and K. Becker. Structure of igneous basement at Sites 857 and 858 based on Leg 139 downhole logging. *Proc. ODP, Sci. Results. College Station, TX (Ocean Drilling program)*; 1994; V. 139: p. 573-583.

5398. Wiles, G.C., R.D. D'Arrigo, and G.C. Jacoby. Temperature changes along the Gulf of Alaska and the Pacific Northwest coast modeled from coastal tree rings. *Can. J. For. Res.*; 1996; v. 26: p. 474-481.

5399. Bruecker, H.K., J. Blusztajn, and N. Bakun-Czubarow. Trace element and Sm—Nd 'age' zoning in garnets from peridotites of the Caledonian and Variscan Mountains and tectonic implications. *J. Metamorphic Geol.*; 1996; v. 14: p. 61-73.

5400. Belkin, I.M. and A.L. Gordon. Southern Ocean fronts from the Greenwich meridian to Tasmania. *J. Geophys. Res.*; 1996; v. 101(n. C2): p.3675-3696.

5401. Bü rger, G., S.E. Zebiak, and M.A. Cane. Quasi-fixed points and periodic orbits in the Zebiak-Cane ENSO model with applications in Kalman filtering. Part I: monthly quasi-fixed points. *Mon. Weather Rev.*; 1995; v. 123(n. 9): p. 2802-2813.

5402. Bü rger, G., S.E. Zebiak, and M.A. Cane. Quasi-fixed points and periodic orbits in the Zebiak-Cane ENSO model with applications in Kalman filtering. Part II: periodic orbits. *Mon. Weather Rev.*; 1995; v. 123(n. 9): p. 2814-2824.

5403. Bonatti, E., M. Ligi, G. Carrara, L. Gasperini, N. Turko, S. Perfiliev, A. Peyve, and P.F. Sciuto. Diffuse impact of the Mid Atlantic Ridge with the Romanche transform: an ultracold ridge-transform intersection. *J. Geophys. Res.*; 1996; v. 101(n. B4): p. 8043-8054.

5404. Pratson, L.F. and W. F. Haxby. What is the slope of the U.S. continental slope? *Geology*; 1996; v. 24(n. 1): p. 3-6.

5405. Mello, U.T. and G.D. Karner. Development of sediment overpressure and its effect on thermal maturation: application to the Gulf of Mexico basin. *Am. Assoc. Pet. Geol. Bull.*; 1996; v. 80(n. 9): p. 1367-1396.

5406. Clement, A.C. and A. L. Gordon. The absolute velocity field of Agulhas eddies and the Benguela Current. *J. Geophys. Res.*; 1995; v. 100(n. C11): p. 22,591-22,601.

5407. Song, Xiaodong. Anisotropy in central part of inner core. *J. Geophys. Res.*; 1996; v. 101(n. B7): p. 16,089-16,097.

5408. Shaw, B.E. Frictional weakening and slip complexity in earthquake faults. *J. Geophys. Res.*; 1995; v. 100(n. B9): p. 18,239-18,251.

5409. Ilahude, A. Gani and A.L. Gordon. Thermocline stratification within the Indonesian Seas. *J. Geophys. Res.*; 1996; v. 101(n. C5): p. 12,401-12,409.

5410. Putirka, K., M. Johnson, R. Kinzler, J. Longhi, and D. Walker. Thermobarometry of mafic igneous rocks based on clinopyroxene-liquid equilibria, 0—30 kbar. *Contrib. Mineral. Petrol.*; 1996; v. 123: p. 92-108.

5411. Revel, M., J-A. Sinko, F.E. Grousset, and P.E. Biscaye. Sr and Nd isotopes as tracers of North Atlantic lithic particles: paleoclimatic implications. *Paleoceanography*; 1996; v. 11(n. 1): p. 95-113.

5412. Spangler Nissen, S., D.E. Hayes, P. Buhl, J. Diebold, Y. Bochu, Z. Weijun, and C. Yongqin. Deep penetration seismic soundings across the northern margin of the South China Sea. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,407-22,433.

5413. Hayes, D.E., S. Spangler Nissen, P. Buhl, J. Diebold, Y. Bochu, Z. Weijun, and C. Yongqin. Throughgoing crustal faults along the northern margin of the South China Sea and their role in crustal extension. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,435-22,446.

5414. Spangler Nissen, S., D.E. Hayes, Y. Bochu, Z. Weijun, C. Yongqin, and N. Xiaupin. Gravity, heat flow, and seismic constraints on the processes of crustal extension: Northern margin of the South China Sea. *J. Geophys. Res.*; 1995; v. 100(n. B11): p. 22,447-22,483.

5415. McGinnis, J.P. and D.E. Hayes. The roles of downslope and long-slope depositional processes: southern Antarctic Peninsula continental rise. in: "Geology and Seismic Stratigraphy of the Antarctic Margin," American Geophysical Union, Washington, DC; 1995; Antarctic Research Series, V. 68: p. 141-156.

5416. Olsen, P.E., D.V. Kent, B. Cornet, W.K. Witte, and R.W. Schlische. High-resolution stratigraphy of the Newark rift basin (early Mesozoic, eastern North America). *Geol. Soc. Am. Bull.*; 1996; v. 108(n. 1): p. 40-77.

5417. Burckle, L.H., R. Mortlock, and S. Rudolph. No evidence for extreme, long term warming in early Pliocene sediments of the Southern Ocean. *Mar. Micropaleontol.*; 1996; v. 27: p. 215-226.

5418. Jaumé, S.C. and L.R. Sykes. Evolution of moderate seismicity in the San Francisco Bay region, 1850 to 1993: Seismicity changes related to the occurrence of large and great earthquakes. *J. Geophys. Res.*; 1996; v. 101(n. B1): p. 765-789.



5419. Cande, S.C., C.A. Raymond, J. Stock, and W.F. Haxby. Geophysics of the Pitman Fracture Zone and Pacific-Antarctic plate motions in the Cenozoic. *Science*; 1995; v. 270: p. 947-953.
5420. Mutter, J.C., C.Z. Mutter, and J. Fang. Analogies to oceanic behaviour in the continental breakup of the western Woodlark basin. *Nature*; 1996; v. 380(n. 6572): p. 333-336.
5421. Lynch-Stieglitz, J., T.F. Stocker, W.S. Broecker and R.G. Fairbanks. The influence of air-sea exchange on the isotopic composition of oceanic carbon: observations and modeling. *Global Biogeochem. Cycles*; 1995; v. 9(n. 4): p. 653-665.
5422. Reverdin, G. Upper Ocean temperature and salinity sections in the South Atlantic in 1911. *J. Geophys. Res.*; 1996; v. 101(n. C3): p. 6361-6376.
5423. Frankignoul, C., G. Reverdin, and F. Bonjean. Interannual variability of surface currents in the tropical Pacific during 1987-1993. *J. Geophys. Res.*; 1996; v. 101(n. C2): p. 3629-3647.
5424. Spiegelman, M. Geochemical consequences of melt transport in 2-D: the sensitivity of trace elements to mantle dynamics. *Earth Planet. Sci. Lett.*; 1996; v. 139: p. 115-132.
5425. Weissel, J.K. Airborne radar investigation of escarpment erosion across the New England section of the southeast Australian continental margin. A. K. Milne, Ed. *Proceedings of the International Workshop on Radar Image Processing and Applications*, Sydney, Australia: CSIRO/OSSA and University of New South Wales; 1997: p. 62-65.
5426. Pratson, L.F. and B.J. Coakley. A model for the headward erosion of submarine canyons induced by downslope-eroding sediment flows. *Geol. Soc. Am. Bull.*; 1996; v. 108(n. 2): p. 225-234.
5427. Gwiazda, R.H., S.R. Hemming, and W.S. Broecker. Tracking the sources of icebergs with lead isotopes: the provenance of ice-rafted debris in Heinrich layer 2. *Paleoceanography*; 1996; v. 11(n. 1): p. 77-93.
5428. Kumar, N., L. Reisberg, and A. Zindler. A major and trace element and strontium, neodymium and osmium isotopic study of a thick pyroxenite layer from the Beni Bousera Ultramafic Complex of northern Morocco. *Geochim. Cosmochim. Acta*; 1996; v. 60(n. 8): p. 1429-1444.

5429. Kent, D.V. and L.B. Clemmensen. Paleomagnetism and cycle stratigraphy of the Triassic Fleming Fjord and Gipsdalen Formations of East Greenland. *Bull. Geol. Soc. Denmark*; 1996; v. 42: p. 121-136.

5430. Schlosser, P., J.H. Swift, D. Lewis, and S.L. Pfirman. The role of the large-scale Arctic Ocean circulation in the transport of contaminants. *Deep-Sea Res. II*; 1995; v. 42(n. 6): p. 1341-1367.

5431. D'Arrigo, R.D., E.R. Cook, G.C. Jacoby, and B.M. Buckley. Tree-ring records of subantarctic climate over recent centuries to millennia. J.S. Dean, D.M. Meko, and T.W. Swetnam, Eds. *Proc. of the International Conference on Tree Rings, Environment and Humanity*. University of Arizona: Radiocarbon; 1996: p. 171-180.

5432. Clark, J.F., P. Schlosser, M. Stute, and H.J. Simpson. SF<sub>6</sub> - <sup>3</sup>He tracer release experiment: A new method of determining longitudinal dispersion coefficients in large rivers. *Environ. Sci. Technol.*; 1996; v. 30(n. 5): p. 1527-1532.

5433. Kamenkovich, V.M., Y.P. Leonov, D.A. Nechaev, D. Byrne, and A.L. Gordon. On the influence of bottom topography on the Agulhas eddy. *J. Phys. Oceanogr.*; 1996; v. 26(n. 6): p. 892-912.

5434. Garzoli, S.L. and A.L. Gordon. Origins and variability of the Benguela Current. *J. Geophys. Res.*; 1996; v. 101(n. C1): p. 897-906.

5435. Ricciardi, K. and D. Abbott. Increased mantle convection during the mid-Cretaceous: a comparative study of mantle potential temperature. *J. Geophys. Res.*; 1996; v. 101(n. B4): p. 8673-8684.

5436. Kumar, N., R.F. Anderson, R.A. Mortlock, P.N. Froelich, P. Kubik, B. Dittrich-Hannen and M. Suter. Increased biological productivity and export production in the glacial Southern Ocean. *Nature*; 1995; v. 378(n. 6558): p. 675-680.

5437. Duncombe Rae, C.M., S.L. Garzoli, and A.L. Gordon. The eddy field of the southeast Atlantic Ocean: a statistical census from the Benguela Sources and Transports project. *J. Geophys. Res.*; 1996; v. 101(n. C5): p. 11,949-11,964.

5438. Stoddard, P.R. and D. Abbott. The influence of the tectosphere upon plate motion. *J. Geophys. Res.*; 1996; v. 101(n. B3): p. 5425-5433.

5439. Savage, M.K., A.F. Sheehan, and A. Lerner-Lam. Shearwave splitting across the Rocky Mountain Front. *Geophys. Res. Lett.*; 1996; v. 23(n. 17): p. 2267-2270.

5440. Chen, B-H., D. Walker, B.A. Scott, and D.B. Mitzi. Synthesis and structure of a new perovskite, SrCuO 2.5. *J. Solid State Chem.*; 1996; v. 121: p. 498-501.
5441. Abbott, D.H. Plumes and hotspots as sources of greenstone belts. *Lithos*; 1996; v. 37: p. 113-127.
5442. van Geen, A. and D.M. Husby. Cadmium in the California current system: Tracer of past and present upwelling. *J. Geophys. Res.*; 1996; v. 101(n. C2): p. 3489-3507.
5443. Omar, G.I. and M. Steckler. Fission track evidence on the initial rifting of the Red Sea: two pulses, no propagation. *Science*; 1995: p. 1341-1344.
5444. Barbetti, M., T. Bird, G. Dolezal, G. Taylor, R. Francey, E. Cook and M. Peterson. Radiocarbon variations from Tasmanian conifers: results from three early Holocene logs. *Radiocarbon*; 1995; v. 37(n. 2): p. 361-369.
5445. Gordon, A.L. and R.A. Fine. Pathways of water between the Pacific and Indian oceans in the Indonesian seas. *Nature*; 1996; v. 379(n. 6561): p. 146-149.
5446. Teng, Y-C. and Y-F. Sun. Three-dimensional finite element modeling of wave propagation in transversely isotropic media. in: Lee, D., Y-H. Pao, M.H. Schultz, and Y-C. Teng, Eds. "Theoretical and Computational Acoustics": World Scientific Publishing Co.; 1996: p. 45-60.
5447. Burckle, L.H. and N. Potter, Jr. Pliocene-Pleistocene diatoms in Paleozoic and Mesozoic sedimentary and igneous rocks from Antarctica: A Sirius problem solved. *Geology*; 1996; v. 24(n. 3): p. 235-238.
5448. Sutton, G.H. and N. Barstow. Ocean bottom microseisms from a distant supertyphoon. *Geophys. Res. Lett.*; 1996; v. 23(n. 5): p. 499-502.
5449. Cook, E.R., D.M. Meko, D.W. Stahle, and M.K. Cleaveland. Tree-ring reconstructions of past drought across the coterminous United States: tests of a regression method and calibration/verification results. J.S. Dean, D.M. Meko, and T.W. Swetnam, Eds. *Proc. of the International Conference on Tree Rings, Environment and Humanity*. University of Arizona: *Radiocarbon*; 1996: p. 155-169.
5450. McHugh, C.M.G., S.W. Snyder, J-F. Deconinck, Y. Saito, M.E. Katz, and M-P. Aubry. Upper Eocene tektites of the New Jersey continental margin: ODP, Site 904. *Proc. ODP Sci. Results*. College Station, TX. (Ocean Drilling Program); 1996; V. 150: p. 241-265.

5451. McHugh, C.M.G., J.E. Damuth, S. Gartner, M.E. Katz, and G.S. Mountain. Oligocene to Holocene mass-transport deposits of the New Jersey continental margin and their correlation to sequence boundaries. Proc. ODP Sci. Results. College Station TX. (Ocean Drilling Program); 1996; V. 150: p. 189-228.

5452. Wright, J.D. and K.G. Miller. Control of North Atlantic Deep Water circulation by the Greenland-Scotland Ridge. *Paleoceanography*; 1996; v. 11(n. 2): p. 157-170.

5453. Xie, J, L. Cong, B.J. Mitchell, and J.M. Chiu. Complexities in high-frequency seismic waveforms due to three-dimensional structure in the New Madrid Seismic Zone. *J. Geophys. Res.*; 1996; v. 101(n. B3): p. 5751-5778.

5454. Muttoni, G., D.V. Kent, and J.E.T. Channell. Evolution of Pangea: paleomagnetic constraints from the Southern Alps, Italy. *Earth Planet. Sci. Lett.*; 1996; v. 140: p. 97-112.

5455. Longhi, J. and C.M. Bertka. Graphical analysis of pigeonite-augite liquidus equilibria. *Am. Mineral.*; 1996; v. 81: p. 685-695.

5456. Miller, K.G., G.S. Mountain, the Leg 150 Shipboard Party, and Members of the New Jersey Coastal Plain Drilling Project. Drilling and dating New Jersey Oligocene-Miocene sequences: ice volume, global sea level, and Exxon records. *Science*; 1996; v. 271: p. 1092-1095.

5457. Lynch-Stieglitz, J., A. van Geen, and R.G. Fairbanks. Inter-ocean exchange of glacial North Atlantic intermediate water: evidence from subantarctic Cd/Ca and carbon isotope measurements. *Paleoceanography*; 1996; v. 11(n. 2): p. 191-201.

5458. Bonatti, E., M. Ligi, A.M. Borsetti, L. Gasperini, A. Negri, and R. Sartori. Lower Cretaceous deposits trapped near the equatorial Mid-Atlantic Ridge. *Nature*; 1996; 380(n. 6572): p. 518-520.

5459. Bonatti, E. . Anomalous opening of the Equatorial Atlantic due to an equatorial mantle thermal minimum. *Earth Plant. Sci. Lett.*; 1996; v. 143: p. 147-160.

5460. deMenocal, P.B. and D. Rind. Sensitivity of subtropical African and Asian climate to prescribed boundary condition changes: model implications for the Plio-Pleistocene evolution of low-latitude climate. in: T. Johnson and E. Odada, Eds. "The Limnology, Climatology, and Paleoclimatology of West African Lakes". New York: Gordon and Breach; 1996: p. 57-77.

5461. Deng, J. and L.R. Sykes. Triggering of 1812 Santa Barbara earthquake by a great San Andreas shock: implications for future seismic hazards in southern California. *Geophys. Res. Lett.*; 1996; v. 23(n. 10): p. 1155-1158.

5462. Comiso, J.C. and A.L. Gordon. Cosmonaut polynya in the Southern Ocean: structure and variability. *J. Geophys. Res.*; 1996; v. 101(n. C8): p. 18,297-18,313.

5463. Marchese, P.J. and A.L. Gordon. The eastern boundary of the Gulf Stream recirculation. *J. Mar. Res.*; 1996; v. 54: p. 521-540.

5464. Hannah, F., A. Rogerson, and O.R. Anderson. A description of *Paulinella indentata* N.sp. (Filosea: Euglyphina) from subtidal coastal benthic sediments. *J. of Euk. Microbiol.*; 1996; v. 43(n. 1): p.1-4.

5465. Douglass, J., J-G. Schilling, R.H. Kingsley, and C. Small. Influence of the Discovery and Shona mantle plumes on the southern Mid-Atlantic Ridge: rare earth evidence. *Geophys. Res. Lett.*; 1995; v. 22(n. 21): p. 2893-2896.

5466. Horton, S. A fault model with variable slip duration for the 1989 Loma Prieta, California, earthquake determined from strong-ground-motion data. *Bull. Seismol. Soc. Am.*; 1996; v. 86(n. 1A): p. 122-132.

5467. Burckle, L.H., A. P. Stroeven, C. Bronge, U. Miller, and A. Wasell. Deficiencies in the diatom evidence for a Pliocene reduction of the East Antarctic Ice Sheet. *Paleoceanography*; 1996; v. 11(n. 4): p. 379-389 .

5469. Szabo, Z., D.E. Rice, L.N. Plummer, E. Busenberg, S. Drenkard, and P. Schlosser. Age dating of shallow groundwater with chlorofluorocarbons, tritium/helium 3, and flow path analysis, southern New Jersey coastal plain. *Water Resour. Res.*; 1996; v. 32(n. 4): p. 1023-1038.

5470. Jacobs. S.S., H.H. Hellmer, and A. Jenkins. Antarctic ice sheet melting in the Southeast Pacific. *Geophys. Res. Lett.*; 1996; v. 23(n. 9): p. 957-960.

5471. Seidl, M.A., J.K. Weisell, and L.F. Pratson. The Kinematics and pattern of escarpment retreat across the rifted continental margin of SE Australia. *Basin Res.*; 1996; v. 12: p. 301-316.

5472. Sun, Y.F. and D. Goldberg. Estimation of aspect-ratio changes with pressure from seismic velocities. in: M.A. Lovell and P.K. Harvey, Eds. "Developments in Petrophysics". Boulder, CO: Geological Society; 1997; Special Paper No. 122: p. 131-139.

5473. Bonatti, E. Long-lived oceanic transform boundaries formed above mantle thermal minima. *Geology*; 1996; v. 24(n. 9): p. 803-806.
5474. Caress, D.W. and D.N. Chayes. Improved processing of hydrosweep DS multibeam data on the R/V Maurice Ewing. *Mar. Geophys. Res.*; 1996; v. 18: p. 631-650.
5475. Pratson, L.F. and W.B.F. Ryan. Automated drainage extraction in mapping the Monterey submarine drainage system, California margin. *Mar. Geophys. Res.*; 1996; v. 18: p. 757-777.
5476. Gregory, K.M. Are paleoclimate estimates biased by foliar physiognomic responses to increased atmospheric CO<sub>2</sub>? *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1996; v. 124: p. 39-51.
5477. Naqvi, W.A. and R.G. Fairbanks. A 27,000 yr record of Red Sea outflow: implication for timing of post-glacial monsoon intensification. *Geophys. Res. Lett.*; 1996; v. 23(n. 12): p. 1501-1504.
5480. Goff, J.A. and J.R. Cochran. The Bauer scarp ridge jump: a complex tectonic sequence revealed in satellite altimetry. *Earth Planet. Sci. Lett.*; 1996; v.141: p. 21-33.
5481. Pratson, L.F. and M.H. Edwards. Introduction to advances in seafloor mapping using sidescan sonar and multibeam bathymetry data. *Mar. Geophys. Res.*; 1996; v. 18: p. 601-605.
5482. Browning, J.V., K.G. Miller, and D.K. Pak. Global implications of lower to middle Eocene sequence boundaries on the New Jersey coastal plain: the icehouse cometh. *Geology*; 1996; v. 24(n. 7): p. 639-642.
5483. Pekar, S. and K.G. Miller. New Jersey Oligocene "Icehouse" sequences (ODP Leg 150X) correlated with global  $\delta^{18}O$  and Exxon eustatic records. *Geology*; 1996; v. 24(n. 6): p. 567-570.
5484. Bryden, H.L., M.J. Griffiths, A.M. Lavín, R.C. Millard, G. Parrilla, and W.M. Smethie. Decadal changes in water mass characteristics at 24° N in the subtropical North Atlantic Ocean. *J. Clim.*; 1996; v. 9(n. 12): p. 3162-3186.
5485. Kukla, G., J. Gavin, M. Schlesinger, and T. Karl. Comparison of observed seasonal temperature maxima, minima and diurnal range in North America with simulations from three global climate models. *Atmos. Res.*; 1995; v. 37: p. 267-275.

5486. Sykes, L.R. Intermediate- and long-term earthquake prediction. *Proc. Natl. Acad. Sci.*; 1996; V. 93: p. 3732-3739.

5487. Houghton, R.W. Subsurface quasi-decadal fluctuations in the North Atlantic. *J. Clim.*; 1996; v. 9(n. 6): p. 1363-1373.

5488. Kushnir, Y. and I.M. Held. Equilibrium atmospheric response to North Atlantic SST anomalies. *J. Clim.*; 1996; v. 9(n. 6): p. 1208-1220.

5489. Sirocko, F., D. Garbe-Schönberg, A. McIntyre, B. Molino. Teleconnections between the subtropical monsoons and high-latitude climates during the last deglaciation. *Science*; 1996; v. 272: p. 526-529.

5490. Kent, D.V. and J. Gee. Magnetic alteration of zero-age oceanic basalt. *Geology*; 1996; v. 24(n. 8): p. 703-706.

5491. Hopper, J.R. and W.R. Buck. The effect of lower crustal flow on continental extension and passive margin formation. *J. Geophys. Res.*; 1996; v. 101(n. B9): p. 20,175-20,194.

5492. Ma, Y. and J.R. Cochran. Transitions in axial morphology along the Southeast Indian Ridge. *J. Geophys. Res.*; 1996; v. 101(n. B7): p. 15,849-15,866.

5493. Kinoshita, M., O. Matsubayashi, and R.P. Von Herzen. Sub-bottom temperature anomalies detected by long-term temperature monitoring at the TAG hydrothermal mound. *Geophys. Res. Lett.*; 1996; v. 23(n. 23): p. 3467-3470.

5494. Kinoshita, M., S. Goto, and M. Yamano. Estimation of thermal gradient and diffusivity by means of long-term measurements of subbottom temperatures at western Sagami Bay, Japan. *Earth Planet. Sci. Lett.*; 1996; v.141: p. 249-258.

5495. Mountain, G.S., J.E. Damuth, C.M.G. McHugh, J.M. Lorenzo, and C.S. Fulthorpe. Origin, reburial and significance of a middle Miocene canyon, New Jersey continental slope. *Proc. ODP, Sci. Results. College Station, TX. (Ocean Drilling Program)*; 1996; V. 150: p. 283-292.

5496. Visbeck, M., J. Marshall, T. Haine, and M. Spall. Specification of eddy transfer coefficients in coarse-resolution ocean circulation models. *J. Phys. Oceanogr.*; 1997; v. 27(n. 3): p. 381-402.

5497. Miller, K.G., C. Liu, and M.D. Feigenson. Oligocene to middle Miocene Sr-isotopic stratigraphy of the New Jersey continental slope. Proc. ODP, Sci. Results. College Station TX. (Ocean Drilling program); 1996; V. 150: p. 97-114.

5498. Barth, G.A. and J.C. Mutter. Variability in oceanic crustal thickness and structure: multichannel seismic reflection results from the northern East Pacific Rise. J. Geophys. Res.; 1996; v. 101(n. B8): p. 17,951-17,975.

5499. Goldberg, D. and Y.F. Sun. Scattering attenuation as a function of depth in the upper oceanic crust. in: M.A. Lovell and P.K. Harvey, Eds. "Developments in Petrophysics," . Boulder, CO: Geological Society ; 1997; Special Publication No. 122: p. 367-375.

5500. Olsen, P.E. and D.V. Kent. Milankovitch climate forcing in the tropics of Pangaea during the Late Triassic. Palaeogr., Palaeoclimatol., Palaeoecol.; 1996; v. 122: p. 1-26.

5501. Gostev, M., G. Wiles, R. D'Arrigo, G. Jacoby, and P. Khomentovsky. Early summer temperatures reconstructed since 1670 A.D. for central Kamchatka reconstructed based on a Siberian larch tree-ring width chronology. Can. J. For. Res.; 1996; v. 26: p. 2048-2052.

5502. Jacoby, G.C., G. Wiles, and R.D. D'Arrigo. Alaskan dendroclimatic variations for the past 300 years along a north-south transect. J.S. Dean, D.M. Meko, and T.W. Swetnam, Eds. Proc. of the International Conference on Tree Rings, Environment, and Humanity. University of Arizona: Radiocarbon; 1996: p. 235-248.

5503. Garraffo, Z.D. and V.M. Kamenkovich. A note on the transport of the Brazil Current. Geophys. Res. Lett.; 1996; v. 23(n. 13): p. 1629-1632.

5504. Langseth, M.G. and E.A. Silver. The Nicoya convergent margin-a region of exceptionally low heat flow. Geophys. Res. Lett.; 1996; v. 23(n. 8): p. 891-894.

5505. Gwiazda, R.H., S.R. Hemming, and W.S. Broecker. Provenance of icebergs during Heinrich event 3 and the contrast to their sources during other Heinrich episodes. Paleoceanography; 1996; v. 11(n. 4): p. 371-378.

5506. Anderson, O.R. and C. Langdon. Respiratory rate and effects of heat stress in *Physarum polycephalum* during transformation from sclerotium to plasmodium. Arch. Protistenkd.; 1996; v. 147: p. 93-99.

5507. Katz, M.E. and K.G. Miller. Eocene to Miocene oceanographic and provenance changes in a sequence stratigraphic framework: benthic foraminifers of the New Jersey Margin. Proc. ODP Sci. Results. College Station TX. (Ocean Drilling Program); 1996; V. 150: p. 65-95.



5508. Pirmez, C., R.N. Hiscott and J.D. Kronen, Jr. Sandy Turbidite Successions at the Base of Channel-Levee Systems of the Amazon Fan Revealed by FMS Logs and cores: Unraveling the Facies Architecture of Large Submarine Fans. in: R.D. Flood, D.J.W. Piper, A. Klaus and L.C. Peterson, (Eds.). Proc. of the ODP, Sci. Res. College Station, TX: Texas A & M Univ.; 1997; v. 155: p. 7-34.

5509. Piper, D.J.W. C. Pirmez, D. Long, R.D. Flood, W. R. Normark and W. Showers. Mass-transport deposits of the Amazon Fan. in: Flood, R.D., D.J.W. Piper, A. Klaus and L.C. Peterson, (Eds.). Proc. ODP, Sci. Results. College Station, TX : Texas A & M; 1997; v. 155: p. 109-143.

5510. Flood, R. D, C. Pirmez and H. Yin. The compressional-wave velocity of Amazon Fan Sediments: Calculation from Index Properties and Variatio with Clay Content. in: Flood, R.D., D.J.W. Piper, A. Klaus and L.C. Peterson, (Eds.). Proc. ODP, Sci. Results., College Station, TX: Texas A & M; 1997; v. 155: p.p.477-493.

5511. Hiscott, R.N., F.R. Hall and C. Pirmez. Turbidity-current overspill from the Amazon Channel: Texture of the silt/sand load, paleoflow from anisotropy of magnetic susceptibility and implications for flow processes. in: Flood, R.D., D.J.W. Piper, A. Klaus and L.C. Peterson, (Eds.). Proc. ODP, Sci. Results. College Station, TX : Texas A & M; v. 155: p. 53-78.

5512. Manley, P., C.Pirmez, W. Busch and A. Cramp`. Grain-Size Characterization of Amazon Fan Deposits and Comparison to Seismic Facies Units. in: Flood, R.D., D.J.W. Piper, A. Klaus and L.C. Peterson, (Eds.). Proc. ODP, Sci. Results. College Station, TX : Texas A & M; 1997; v. 155: p. 35-51.

5513. Menke, W., B. Brandsdóttir, P. Einarsson, and I. Th. Bjarnason. Reinterpretation of the RRISP-77 Iceland shear-wave profiles. Geophys. J. Int. ; 1996; v. 126: p. 166-172.

5517. Goldberg, D. and Y-F. Sun. Seismic structure of the upper oceanic crust revealed by in situ Q logs. Geophys. Res. Lett.; 1997; v. 24(n. 3): p. 333-336.

5518. Wang, X., J.R. Cochran, and G.A. Barth. Gravity anomalies, crustal thickness and the pattern of mantle flow at the fast spreading East Pacific Rise, 9° -10° N: evidence for three-dimensional upwelling. J. Geophys. Res.; 1996; v. 101(n. B8): p. 17,927-.

5519. Anderson, O.R. The physiological ecology of planktonic sarcodines with applications to paleoecology: patterns in space and time. J. Euk. Microbiol.; 1996; v. 43(n. 4): p. 261-274.

5520. Kinzler, R.J. Melting of mantle peridotite at pressures approaching the spinel to garnet transition: application to mid-ocean ridge basalt petrogenesis. *J. Geophys. Res.*; 1997; v. 102(n. B1): p. 853-874.

5521. Rosenbaum, J.M., A. Zindler, and J.L. Rubenstone. Mantle fluids: evidence from fluid inclusions. *Geochim. Cosmochim. Acta*; 1996; v. 60(n. 17): p. 3229-3252.

5522. Jacoby, G.C., R.D. D'Arrigo, and T. Davaajamts. Mongolian tree rings and 20th century warming. *Science*; 1996; v. 273: p. 771-773.

5523. Field, A. and A.L. Gordon. Tidal mixing signatures in the Indonesian Seas. *J. Phys. Oceanogr.*; 1996; v. 26(n. 9): p. 1924-1937.

5524. Hemming, S.R., D.K. McDaniel, S.M. McLennan, and G.N. Hanson. Pb isotope constraints on the provenance and diagenesis of detrital feldspars from the Sudbury Basin, Canada. *Earth Planet. Sci. Lett.*; 1996; v. 142: p. 501-512.

5525. Lin, J.C., W.S. Broecker, R.F. Anderson, S. Hemming, J.L. Rubenstone, and G. Bonani. New  $^{230}\text{Th}/\text{U}$  and  $^{14}\text{C}$  ages from Lake Lahontan carbonates, Nevada, USA, and a discussion of the origin of initial thorium. *Geochim. Cosmochim. Acta*; 1996; v. 60(n. 15): p. 2817-2832.

5526. Chen, B-H. Introduction of a tolerance factor for the  $\text{Nd}_2\text{CuO}_4$  (T')-type structure. *J. Solid State Chem.*; 1996; v. 125: p. 63-66 .

5527. Jacoby, G.C. and R.D. D'Arrigo. Comment on "Comparison of proxy records of climate change and solar forcing," by T.J. Crowley and K. Kim. *Geophys. Res. Lett.*; 1996; v. 23(n. 16): p. 2197-2198.

5528. Anderson, O.R., A. Rogerson, and F. Hannah. A description of the testate amoeba *Ovulina parva* gen. nov., sp. nov. from coastal marine sediments. *J. Mar. Biol. Assoc., U.K.*; 1996; v. 76: p. 851-865.

5529. Reverdin, G., A. Kaplan, and M.A. Cane. Sea level from temperature profiles in the tropical Pacific Ocean 1975-1992. *J. Geophys. Res.*; 1996; v. 101(n. C8): p. 18,105-18,119.

5530. Guerin, G. and D. Goldberg. Acoustic and elastic properties of calcareous sediments across a siliceous diagenetic front on the eastern U.S. continental slope. *Geophys. Res. Lett.*; 1996; v. 23(n.19): p. 2697-2700.

5531. Kastens, K.A., D. Van Esselstyn, and R.O. McClintock. An interactive multimedia tool for helping students "translate" from maps to reality and vice versa. *J. Geosci. Edu.*; 1996; v. 44: p. 529-534.

5532. Schlosser, P., B. Kromer, B. Ekwurzel, G. Bö nisch, A. McNichol, R. Schneider, K. von Reden, H.G. Ö stlund, and J.H. Swift. The first trans-Arctic 14C section: comparison of the mean ages of the deep waters in the Eurasian and Canadian basins of the Arctic Ocean. *Nucl. Instrum. Methods Phys. Res. B*; 1997; v. 123: p. 431-437.

5533. Jenkins, A., D.G. Vaughan, S.S. Jacobs, H.H. Hellmer, and J.R. Keys. Glaciological and oceanographic evidence for rapid melting beneath Pine Island Glacier, West Antarctica. *J. Glaciology*; 1997; v. 43(n.143): p. 114-121.

5534. van Geen, A., R.G. Fairbanks, P. Dartnell, M. McGann, J.V. Gardner, and M. Kashgarian. Ventilation changes in the northeast Pacific during the last deglaciation. *Paleoceanography*; 1996; v. 11(n.5): p. 519-528.

5535. Kumar, N., R.F. Anderson, and P. Biscaye. Remineralization of particulate authigenic trace metals in the Middle Atlantic Bight: Implications for proxies of export production. *Geochim. Cosmochim. Acta.*; 1996; v. 60(n. 18 ): p. 3383-3397.

5536. Brunner, C.A. and P.E. Biscaye. Storm-driven transport of foraminifers from the shelf to the upper slope, southern Middle Atlantic Bight. *Contin. Shelf Res.*; 1997; v. 17(n. 5): p. 491-508.

5537. Gwiazda, R.H., S.R. Hemming, W.S. Broecker, T. Onsttot, and C. Mueller. Evidence from 40Ar/39Ar ages for a churchill province source of ice-rafted amphiboles in Heinrich layer 2. *J. Glaciol.*; 1996; v. 42(n. 142): p. 440-446.

5538. Sanyal, A., N.G. Hemming, W.S. Broecker, D.W. Lea, H.J. Spero, and G.N. Hanson. Oceanic pH control on the boron isotopic composition of foraminifera: evidence from culture experiments. *Paleoceanography*; 1996; v. 11(n. 5): p. 513-517.

5539. Sugiyama, K. and O.R. Anderson. Experimental and observational studies of radiolarian physiological ecology, 6. Effects of silicate-supplemented seawater on the longevity and weight gain of spongiöse radiolarians *Spongaster tetras* and *Dictyocoryne truncatum*. *Mar. Micropaleontol.*; 1997; v. 29: p. 159-172.

5540. Song, X. and P.G. Richards. Seismological evidence for differential rotation of the Earth's inner core. *Nature*; 1996; v. 382(n. 6588): p. 221-224.

5541. Shi, J., W-Y Kim, and P.G. Richards. Variability of crustal attenuation in the northeastern United States from Lg waves. *J. Geophys. Res.*; 1996; v. 101(n.B11): p. 25,231-25,242.
5542. Hennen, C.B., G.E. van der Vink, P.G. Richards, V.V. Adushkin, Y.F. Kopnichev, and R. Geary. Multi-use seismic stations offer strong deterrent to clandestine nuclear weapons testing. *EOS*; 1996; v. 77(n. 31): p. 289,-300-301.
5543. Weppernig, R., P. Schlosser, S. Khatiwala, and R.G. Fairbanks. Isotope data from Ice Station Weddell: Implications for deep water formation in the Weddell Sea. *J. Geophys. Res.*; 1996; v. 101(n. C10): p. 25,723-25,739.
5544. Olsen, P.E., R.W. Schlische, and M.S. Fedosh. 580 Ky duration of the Early Jurassic flood basalt event in eastern North America estimated using Milankovitch cyclostratigraphy. in: M. Morales, Ed. *The Continental Jurassic*. Flagstaff, Arizona: Museum of Northern Arizona Bulletin 60; 1996: p. 11-22.
5545. Kohfeld, K.E., R.G. Fairbanks, S.L. Smith, and I.D. Walsh. *Neogloboquadrina pachyderma* (sinistral coiling) as paleoceanographic tracers in polar oceans: evidence from Northeast Water Polynya plankton tows, sediment traps, and surface sediments. *Paleoceanography*; 1996; v. 11(n. 6): p. 679-699.
5546. Cormier, M-H. The ultrafast East Pacific Rise: instability of the plate boundary and implications for accretionary processes. *Phil. Trans. R. Soc. Lond. A*; 1997; v. 355: p. 341-367.
5547. Kukla, G. and V. Cilek. Plio-Pleistocene megacycles: record of climate and tectonics. *Palaeogr. Palaeoclimatol., Palaeoecol.*; 1996; v. 120: p. 171-194.
5548. Stocker, T.F. and D.G. Wright. Rapid changes in ocean circulation and atmospheric radiocarbon. *Paleoceanography*; 1996; v. 11(n. 6): p. 773-795.
5549. Muttoni, G., D.V. Kent, S. Meco, A. Nicora, M. Gaetani, M. Balini, D. Germani, and R. Rettori. Magnetobiostratigraphy of the Spathian to Anisian (Lower to Middle Triassic) Kcira section, Albania. *Geophys. J. Int.*; 1996; v. 127: p. 503-514.
5550. Ryan, W.B. and R.D. Flood. Side-looking sonar backscatter response at dual frequencies. *Mar. Geophys. Res.*; 1996; v. 18: p. 689-705.
5551. Gee, J., D.A. Schneider, and D.V. Kent. Marine magnetic anomalies as recorders of geomagnetic intensity variations. *Earth, Planet. Sci. Lett.*; 1996; v. 144: p. 327-335.

5552. McHugh, C.M.G. Effects of relative sea-level changes on the diagenesis of Eocene sediment: New Jersey Coastal Plain and Slope. in: Miller, K.G., and S.W. Snyder, (Eds). Proc. ODP, Sci. Results. College Station TX. (Ocean Drilling Program); 1997; V. 150X: p.25-48.

5553. Feinstein, S., B.P. Kohn, M.S. Stecker, and M. Eyal. Thermal history of the eastern margin of the Gulf of Suez: I. reconstruction from borehole temperature and organic maturity measurements. *Tectonophysics*; 1996; v. 266: p. 203-220.

5554. Stoll, R.D., E.O. Bautista, and T. Akal. Generating Interface waves using a freely falling, instrumented source. *IEEE J. Oceanic Eng.*; 1996; v. 21(no. 4): p.452-457.

5555. Burckle, L.H., D.E. Kellogg, T.B. Kellogg, and J.L. Fastook. A mechanism for emplacement and concentration of diatoms in glacial deposits. *Boreas*; 1997; v. 26: p. 55-60.

5556. Clark, J.F., M. Stute, P. Schlosser, S. Drenkard, and G. Bonani. A tracer study of the Floridan aquifer in southeastern Georgia: implications for groundwater flow and paleoclimate. *Water Resour. Res.*; 1997; v. 33(n. 2): p. 281-289.

5557. Cook, E.R., R.J. Francey, B.M. Buckley, and R.D. D'Arrigo. Recent increases in Tasmanian Huon pine ring widths from a sub-alpine stand: natural climate variability, CO<sub>2</sub> fertilization or greenhouse warming? *Proc. Royal Soc. of Tasmania*; 1996; V 130(part 2): p. 65-72.

5558. Garzoli, S.L., A.L. Gordon, V. Kamenkovich, D. Pillsbury, and C. Duncombe-Rae. Variability and sources of the southeastern Atlantic circulation. *J. Mar. Res.*; 1996; v. 54: p. 1039-1071.

5559. Richards, P. Seismological methods of verification and the International Monitoring System. in: Matthew McKinzie, (ed.). *The Comprehensive Test Ban Treaty: Issues and Answers*. Ithaca, NY: Cornell University; 1997: p.p. 71-89.

5560. Steckler, M.S., D.J.P. Swift, J.P. Syvitski, J.A. Goff, and A.W. Niedoroda. Modeling the sedimentology and stratigraphy of continental margins. *Oceanography*; 1996; v. 9(n. 3): p. 183-188.

5561. Karner, G. and N. Driscoll. Three-dimensional interplay of advective and diffusive processes in the generation of sequence boundaries. *J. Geol. Soc. London*; 1997; v. 154: p. 443-449.

5562. Krupitsky, A., V.M. Kamenkovich, N. Naik, and M.A. Cane. A linear equivalent barotropic model of the antarctic circumpolar current with realistic coastlines and bottom topography. *J. Phys. Oceanogr.*; 1996; v. 26(n. 9): p. 1804-1824.

5563. Slowey, N.C., G.M. Henderson, and W.B. Curry. Direct U—Th dating of marine sediments from the two most recent interglacial periods. *Nature*; 1996; v. 383(n. 6597): p. 242-244.

5564. Marcantonio, F., R.F. Anderson, M. Stute, N. Kumar, P. Schlosser, and A. Mix. Extraterrestrial  $^3\text{He}$  as a tracer of marine sediment transport and accumulation. *Nature*; 1996; v. 383(n. 6602): p. 705-707.

5565. Muttoni, G., D.V. Kent, P. Brack, A. Nicora, and M. Balini. Middle Triassic magnetostratigraphy and biostratigraphy from the Dolomites and Greece. *Earth Planet. Sci. Lett.*; 1997; v. 146: p. 107-120.

5566. Muttoni, G., D.V. Kent, and M. Gaetani. Magnetostratigraphy of a Lower—Middle Triassic boundary section from Chios (Greece). *J. Phys. Earth Planet. Inter.*; 1995; v. 92: p. 245-260.

5567. Rutberg, R.L., D.S. Schimel, I. Hajdas, and W.S. Broecker. The effect of tillage on soil organic matter using  $^{14}\text{C}$ : a case study. *Radiocarbon*; 1996; v. 38(n. 2): p. 209-217.

5568. Marra, J., R.T. Barber, C. Trees, Z. Johnson, and C. Kirkade. Primary production and irradiance during an intermonsoon cruise to the Arabian Sea (November, 1995). *Ocean Optics XIII, Proceeding of SPIE* ; 1997; 2963: p. 302-307.

5569. Wiles, G. North Pacific atmosphere-ocean variability over the past millennium inferred from coastal glaciers and tree rings. 8th Symposium on Global Change Studies, 2-7 Feb., 1997, Long Beach Calif. Boston, MA: American Meteorological Society; 1997: p. 218-220.

5571. Putirka, K. Magma transport at Hawaii: inferences based on igneous thermobarometry. *Geology*; 1997; v. 25(n. 1): p. 69-72.

5572. Clement, A.C., R. Seager, M.A. Cane, and S.E. Zebiak. An ocean dynamical thermostat. *J. Clim.*; 1996; v. 9(n. 9): p. 2190-2196.

5573. Takahashi, T., R.A. Feely, R. Weiss, R.H. Wanninkhof, D.W. Chipman, S.C. Sutherland and T.T. Takahashi. Global air-sea flux of  $\text{CO}_2$ : An estimate based on measurements of sea-air  $\text{pCO}_2$  difference. *Proceedings of the National Academy of Sciences*; 1997; Proc. Nat. Acad. Sci.(v. 94): p. 8292-8299.

5574. Basile, I., F.E. Grousset, M. Revel, J.R. Petit, P.E. Biscaye, and N.I. Barkov. Patagonian origin of glacial dust deposited in East Antarctica (Vostok, DomeC) during glacial stages 2,4, and 6. *Earth Planet. Sci. Lett.*; 1997; v. 146: p. 573-589.

5575. Kent, D.V. and P.E. Olsen. Paleomagnetism of Upper Triassic continental sedimentary rocks from the Dan River—Danville rift basin (eastern North America). *Geol. Soc. Am. Bull.*; 1997; v. 109(no. 3): p. 366-377.

5576. Olsen, P.E. Stratigraphic record of the Early Mesozoic breakup of Pangea in the Laurasia-Gondwana rift system. *Ann. Rev. of Earth Planet. Sci.*; 1997; v. 25: p.337-401.

5577. Pirmez, C., R.D. Flood, J. Baptiste, H. Yin, and P.L. Manley. Clay content, porosity and velocity of Amazon Fan sediments. *Geophys. Res. Lett.*; 1997; v. 24(n. 3): p. 317-320.

5578. Stute, M., J. Deak, K. Revesz, J.K. Bohlke, E. Deseo, R. Weppernig, and P. Schlosser. Tritium/<sup>3</sup>He Dating of River Infiltration: An Example from the Danube in the Szigetköz Area, Hungary. *Ground Water*; 1997; v. 35(n. 5): p. 905-911.

5579. McIntyre, A. and B. Molino. Forcing of Atlantic equatorial and subpolar millennial cycles by precession. *Science*; 1996; v. 274: p. 1867-1870.

5580. Anderson, O.R., A. Rogerson, and F. Hannah. Three new limax amoebae isolated from marine surface sediments: *Vahlkampfia caledonica* n. sp., *Saccamoeba marina* n. sp., and *Hartmannella vacuolata* n. sp. *J. Euk. Microbiol.*; 1997; v. 44(n. 1): p. 33-42.

5581. Eshel, G. and N. Naik. Climatological coastal jet collision, intermediate water formation and the general circulation of the Red Sea. *J. Phys. Oceanogr.*; 1997; 27: p. 1233-1257.

5582. Sugiyama, K. and O.R. Anderson. Correlated fine structural and light microscopic analyses of living nassellarians *Eucyrtidium hexagonatum* Haeckel, *Pterocorys zancleus* (Müller) and *Spirocyrtis scalaris* Haeckel. *News of Osaka Micropaleontologists*; 1997; Special Vol., 10: p. 311-337; ISSN .

5583. Cane, M.A., A. Kaplan, R.N. Miller, B. Tang, E.C. Hackert, and A.J. Busalacchi. Mapping tropical Pacific sea level: data assimilation via a reduced state space Kalman filter. *J. Geophys. Res.*; 1996; v. 101(n. C10): p. 22,599-22,617.

5584. Karl, T.R., P.D. Jones, R.W. Knight, G. Kukla, N. Plummer, V. Razuvayev, K.P. Gallo, J.A. Lindesay, and R.J. Charlson. Asymmetric trends of daily maximum and minimum temperature: empirical evidence and possible causes. in: D.G. Martinson, K. Bryan, M. Ghil,

M.M. Hall, T.R. Karl, E.S. Sarachik, S. Sorooshian, and L.D. Talley, Eds. "Natural Climate Variability on Decade-To-Century Time Scales," Proceedings of the National Research Council, Sept.1992. Washington, D.C: National Academy Press; 1995: p. 80-96.

5585. Cole, J.E., R.G. Fairbanks, and G.T. Shen. Monitoring the tropical ocean and atmosphere using chemical records from long-lived corals. in: D.G. Martinson, K. Bryan, M. Ghil, M.M. Hall, T.R. Karl, E.S. Sarachik, S. Sorooshian, and L.D. Talley, Eds. "Natural Climate Variability on Decade-To Century Time Scales," Proceeding of the National Research Council, Sept. 1992. Washington, D.C.: National Academy Press,; 1995: p. 495-505.

5586. Pérez, O.J. and C.H. Scholz. Long-Term seismic behavior of the focal and adjacent regions of great earthquakes during the time between two successive shocks. *J. Geophys. Res.*; 1997; v. 102(n. B4): p. 8203-8216.

5587. Kinoshita, M. and M. Yamano. Hydrothermal regime and constraints on reservoir depth of the Jade site in the Mid-Okinawa Trough inferred from heat flow measurements. *J. Geophys. Res.*; 1997; v. 102(n. B2): p. 3183-3194.

5588. Pickart, R.S., W.M. Smethie Jr., J.R.N. Lazier, E.P. Jones, and W.J. Jenkins. Eddies of newly formed upper Labrador Sea water. *J. Geophys. Res.*; 1996; v. 101(n. C9): p. 20,711-20,726.

5589. Reverdin, G., D. Cayan, and Y. Kushnir. Decadal variability of hydrography in the upper northern North Atlantic 1948-1990. *J. Geophys. Res.*; 1997; v. 102(n. C4): p. 8505-8531.

5590. Archer, D.E., T. Takahashi, S. Sutherland, J. Goddard, D. Chipman, K. Rodgers, and H. Ogura. Daily, seasonal and interannual variability of sea-surface carbon and nutrient concentration in the equatorial Pacific Ocean. *Deep-Sea Res II*; 1996; v.41(n. 4-6): p. 779-808.

5591. Villalba, R., E.R. Cook, R.D. D'Arrigo, G. Jacoby, P.D. Jones, M.J. Salinger, and J. Palmer. Sea-level pressure variability around Antarctica since A.D. 1750 inferred from subantarctic tree-ring records. *Clim. Dynamics*; 1997; v. 13: p. 375-390.

5592. Chen, D., S.E. Zebiak, M.A. Cane, and A.J. Busalacchi. Initialization and predictability of a coupled ENSO forecast model. *Mon. Weather Rev.*; 1997; v. 125(n. 5): p. 773-788.

5593. Langmuir, C., S. Humphris, D. Fornari, C. Van Dover, K. Von Damm, M.K. Tivey, D. Colodner, J.-L. Charlou, D. Desonie, C. Wilson, Y. Fouquet, G. Klinkhammer, and H. Bougault. Hydrothermal vents near a mantle Hot Spot: the Lucky Strike vent field at 37° N on the Mid-Atlantic Ridge. *Earth Planet. Sci. Lett.*; 1997; v. 148(n. 1-2): p. 69-91.



5594. Jacoby, G.C. and R.D. D'Arrigo. Tree-rings, carbon dioxide and climatic change. *Proc. Nat. Acad. Sci.*; 1997; v. 94: p. 8350-8353.

5595. Wang, Y., B.A. Scott, B-H. Chen, and D. Walker. The role of contamination in Sr-Cu-O reactions at high pressure. *Physica C*; 1997; v. 275: p. 52-64.

5596. Top, Z., A. Gordon, P. Jean-Baptiste, M. Fieux, G. Ilahude, and M. Muchtar. <sup>3</sup>He in Indonesian Seas: inferences on deep pathways. *Geophys. Res. Lett.*; 1997; v. 24(n. 5): p. 547-550.

5597. Jacobs, S.S. and J.C. Comiso. Climate variability in the Amundsen and Bellingshausen Seas. *J. Clim.*; 1997; v. 10(n. 4): p. 698-709.

5598. Ortiz, J.D. and A.C. Mix. Comparison of Imbrie-Kipp transfer function and modern analog temperature estimates using sediment trap and core top foraminiferal faunas. *Paleoceanography*; 1997; v. 12(n. 2): p. 191-205.

5599. Ortiz, J., A. Mix, S. Hostetler, and M. Kashgarian. The California Current of the last glacial maximum: reconstruction at 42° N based on multiple proxies. *Paleoceanography*; 1997; v. 12(n. 2): p. 191-205.

5600. Gregory, K.M. The late Eocene House Range flora, Sevier Desert, Utah: Paleoclimate and Paleoelevation. *Palaios*; 1997; v. 12: p. 552-567.

5601. Staples, R.K., R.S. White, B. Brandsdóttir, W. Menke, P. Maguire, J. McBride. Fä roe-Iceland Ridge Experiment—1. The crustal structure of northeastern Iceland. *J. Geophys. Res.*; 1997; v. 102(n. B4): p.7849-7866.

5603. Xie, J., Z. Liu, L. Cong, R.B. Herrmann and J.M. Chiu. Rupture properties of clustered microearthquakes near intersecting intraplate faults of New Madrid seismic zone; implications for fault weakening. *J. Geophys. Res.*; 1997; v. 102(n. B4): p. 8187-8202.

5604. Ryan, W.B.F., W.C. Pitman III, C.O. Major, K. Shimkus, v. Moskalenko, G.A. Jones, P. Dimitrov, N. Gorür, M. Sakiñç and H.Yü ce. An abrupt drowning of the Black Sea shelf. *Mar. Geol.*; 1997; v. 138: p. 119-126.

5606. Contreras, J., C.H. Scholz, and G.C.P. King. A model of rift basin evolution constrained by first-order stratigraphic observations. *J. Geophys. Res.*; 1997; v. 102(n. B4): p. 7673-7690.

5607. Steininger, F.F., W.A. Berggren, D.V. Kent, R.L. Bernor, S. Sen, and J. Agusti. Circum-Mediterranean Neogene (Miocene and Pliocene) marine—continental chronologic correlations of European mammal units. in: R.L. Bernor, V. Fahlbusch, and H-W. Mittmann, Eds. "The Evolution of Western Eurasian Neogene Mammal Faunas". New York: Columbia University Press; 1996: p. 7-46.

5608. Scholz, C.H. and C. Small. The effect of seamount subduction on seismic coupling. *Geology*; 1997; v.25(n. 6): p. 487-490.

5609. Bishop, J.K.B., W.B. Rossow, and E.G. Dutton. Surface solar irradiance from the international satellite cloud climatology project 1983-1991. *J. Geophys. Res.*; 1997; v. 102(n. D6): p. 6883-6910.

5610. Ho, D.T., L.F. Bliven, R. Wanninkhof, and P. Schlosser. The effect of rain on air-water gas exchange. *Tellus*; 1997; v. 49B: p. 149-158.

5611. Sanyal, A., N.G. Hemming, W.S. Broecker, and G.N. Hanson. Changes in pH in the eastern equatorial Pacific across stage 5-6 boundary based on boron isotopes in foraminifera. *Global Biogeochem. Cycles*; 1997; v. 11(n. 1): p. 125-133.

5612. Hiscott, R.N., C. Pirmez, and R.D. Flood. Amazon submarine fan drilling: a big step forward for deep-sea fan models. *Geoscience Canada*; 1997; c. 24(n. 1): P. 13-24.

5613. Gongxu, G., J.T. Kuo, L. Keren, Z. Jinhan, L. Hongyan, and L. Duanfa. Seismogenesis and occurrence of earthquakes as observed by temporally continuous gravity variations in China. *Chinese Sci. Bull.*; 1998; v. 43(n. 1): p. 8-21.

5614. Jacoby, G.C. Application of tree-ring analysis to Paleoseismology. *Rev. Geophys.*; 1997; v. 35(n. 2): p. 109-124.

5615. Triep, E.G. and L.R. Sykes. Frequency of occurrence of moderate to great earthquakes in intracontinental regions: implications for changes in stress, earthquake prediction, and hazards assessments. *J. Geophys. Res.*; 1997; v. 102(n. B5): p. 9923-9948.

5616. Deng, J. and L.R. Sykes. Evolution of the stress field in southern California and triggering of moderate-size earthquakes: a 200-year perspective. *J. Geophys. Res.*; 1997; v. 102(n. B5): p. 9859-9886.

5617. Scholz, C.H. Size distributions for large and small earthquakes. *Bull. Seismol. Soc. Am.*; 1997; v. 87(n. 4): p. 1074-1077.

5618. Wanninkhof, R. G. Hitchcock, W.J.. Wiseman, G. Vargo, P. Ortner, W. Asher, D.T. Ho, P. Schlosser, M-L Dickson, M. Anderson, R. Masserini, K. Fanning, and J-Z Zhang. Gas exchange, dispersion, and biological productivity on the west Florida Shelf: Results from a Lagrangian tracer study. *Geophys. Res. Lett.*; 1997; v.24(n. 14): p. 1767-1770.
5619. Jones, E.J.W., S.C. Cande, and F. Spathopoulos. Evolution of a major oceanographic pathway: the equatorial Atlantic. in: R.A. Scrutton, M.S. Stoker, G.B. Shimmiel, and A.W. Tudhope, Eds. "The Tectonics, Sedimentation and Palaeoceanography of the North Atlantic Region": Special Publication No. 90 of the Geological Society of London; 1995: p. 199-213.
5620. van Geen, A., J.F. Adkins, E.A. Boyle, C.H. Nelson, and A. Palanques. A 120 yr record of widespread contamination from mining of the Iberian pyrite belt. *Geology*; 1997; v. 25(n. 4): p. 291-294.
5621. Kim, W.-Y., V. Aharonian, A.L. Lerner-Lam and P.G. Richards. Discrimination of earthquakes and explosions in southern Russia using regional high-frequency three-component data from the IRIS/JSP Caucasus network. *Bull. Seismol. Soc. Am.*; 1977; v. 87(n. 3): p. 569-588.
5622. Carbotte, S.M., J.C. Mutter, and L. Xu. Contribution of volcanism and tectonism to axial and flank morphology of the southern East Pacific Rise, 17° 10'-17° 40'S, from a study of layer 2A geometry. *J. Geophys. Res.*; 1997; v. 102(n. B5): p. 10,165-10,184.
5623. Cook, E.R., D.M. Meko, and C.W. Stockton. A New Assessment of Possible Solar and Lunar Forcing of the Bidecadal Drought Rhythm in the Western United States. *J. Clim.*; 1997; v. 10: p.1343-1356.
5624. Goldberg, D. The role of downhole measurements in marine geology and geophysics. *Rev. Geophys.*; 1997; v. 35(n. 3): p.315-342.
5625. Abers, G.A., C.Z. Mutter, and J. Fang. Shallow dips of normal faults during rapid extension: Earthquakes in the Woodlark-D'Entrecasteaux rift system, Papua New Guinea. *J. Geophys. Res.*; 1997; v. 102(n. B7): p. 15,301-15,317.
5626. Horton, S. and dePolo, W. Source Parameters and Tectonic Setting of the 1990 Lee Vining, California Earthquake sSequence. *Bull. Seismol. Soc. Am.*; 1997; v. 87(n. 4): p. 1035-1045.
5628. Ligi, M., E. Bonatti, G. Bortoluzzi, G. Carrara, P. Fabretti, D. Penitenti, D. Gilod, A.A. Peyve, S. Skolotnev, N. Turko. Death and transfiguration of a triple junction in the South Atlantic. *Science*; 1997; v. 276: p. 243-245.

5629. Weissel, J.K. and M.A. Seidl. Influence of rock strength properties on escarpment retreat across passive continental margins. *Geology*; 1997; v. 25(n. 7): p. 631-634.

5630. Wiles, G.C., R.D. D'Arrigo and G.C. Jacoby. Gulf of Alaska atmosphere-ocean variability over recent centuries inferred from coastal tree-ring records. *Clim. Change*; 1998; v. 38: p. 289-306.

5631. Cane, M.A., A.C. Clement, A. Kaplan, Y. Kushnir, D. Pozdnyakov, R. Seager, S.E. Zebiak, and R. Murtugudde. Twentieth-century sea surface temperature trends. *Science*; 1997; v. 275: p. 957-960.

5632. Biscaye, P.E., F.E. Grousset, M. Revel, S. Van der Gaast, G.A. Zielinski & A. Vaars and G. Kukla. Asian provenance of glacial dust (stage 2) in the Greenland Ice Sheet Project 2 Ice Core, Summit, Greenland. *J. Geophys. Res.* ; 1997; v. 102(n. C12): p. 26,765-26,781.

5633. Kukla, G., J.F. McManus, D-D. Rousseau, and I. Chuine. How long and how stable was the last interglacial? *Quat. Sci. Rev.*; 1997; v. 16: p. 1-10.

5635. Kinkade, C., J. Marra, C. Langdon, C. Knudson, and A.G. Ilahude. Monsoonal differences in phytoplankton biomass and production in the Indonesian Seas: tracing vertical mixing using temperature. *Deep-Sea Res.*; 1997; v. 44(n. 4): p. 581-592.

5636. Gordon, A.L., M. Shubin, D.B. Olson, P. Hacker, A. Field, L.D. Talley, D. Wilson, and M. Baringer. Advection and diffusion of Indonesian throughflow within the Indian Ocean South Equatorial Current. *Geophys. Res. Lett.*; 1997; v. 24(n. 21): p. 2573-2576.

5637. Sempé ré , J-C., J.R. Cochran, and the SEIR Scientific Team). The Southeast Indian Ridge between 88° E and 118° E: Variations in crustal accretion at constant spreading rate. *J. Geophys. Res.*; 1997; v. 102(n. B7): p. 15,489-15,505.

5638. Cochran, J.R., J-C. Sempé ré , and SEIR Scientific Team. The Southeast Indian Ridge between 88° E and 118° E: gravity anomalies and crustal accretion at intermediate spreading rates. *J. Geophys. Res.*; 1997; v. 102(B 7): p. 15,463-15,487.

5640. Seager, R. and R. Murtugudde. Ocean dynamics, thermocline adjustment and regulation of tropical SST. *J. Clim.*; 1997; v. 10(n. 3): p. 521-534.

5641. McGinnis, J.P., D.E. Hayes and N.W. Driscoll. Sedimentary processes across the continental rise of the Southern Antarctic Peninsula. *Mar. Geol.*; 1997; v. 141: p. 91-109.

5642. Goff, J.A., Y. Ma, A. Shah, J.R. Cochran, and J-C Sempé ré . Stochastic analysis of seafloor morphology on the flank of the Southeast Indian Ridge: The influence of ridge morphology on the formation of abyssal hills. *J. Geophys. Res.*; 1997; v. 102(n. B7): p. 15,521-15,534.

5643. Saito, S. and D. Goldberg. Evolution of tectonic strain in the Barbados accretionary prism: Estimates from logging-while-drilling. *Earth Planet Sci. Lett.*; 1997; v.148: p. 423-432.

5644. Kushnir, Y., V.J. Cardone, J.G. Greenwood, and M.A. Cane. The recent increase in North Atlantic wave heights. *J. Clim.*; 1997; v. 10: p. 2107-2113.

5645. Fairbanks, R. G., M.N. Evans, J.L. Rubinstone, R.A. Mortlock, K. Broad, M.D. Moore, and C.D. Charles. Evaluating climate indices and their geochemical proxies measured in corals. *Coral Reefs*; 1997 ; v. 16(Suppl.): S93-S100.

5646. Abbott, D.H., R. Drury, and W.D. Mooney. Continents as lithological iceberg: the importance of buoyant lithospheric roots. *Earth Planet. Sci. Lett.*; 1997; 149: p.15-27.

5647. Charles, C.D., D. Hunter, and R.G. Fairbanks. Interaction Between the ENSO and the Asian Monsoon in a Coral Record of Tropical Climate. *Science*; 1997; v. 277: p. 925-928.

5648. Ffield, A., J. Toole, and D. Wilson. Seasonal circulation in the South Indian Ocean. *Geophys. Res. Lett.*; 1997; v. 24(n. 22): p. 2773-2776.

5649. Bö nisch, G., J. Blindheim, J.L. Bullister, P. Schlosser, and D.W.R. Wallace. Long term trends of temperature, salinity, density, and transient tracers in the Central Greenland Sea. *J. Geophys. Res.*; 1997; v. 102(n. C8): 18,553-18,571.

5652. Anderson, O.R. Annual abundances, diversity and growth potential of gymnamoebae in shallow freshwater pond. *J. Euk. Microbiol.*; 1997; v. 44(n. 5): p. 393-399.

5653. Broecker, W. Paleocean circulation during the last deglaciation: a bipolar seesaw? *Paleoceanography*; 1998; v. 13(n. 2): p. 119-121.

5654. D'Arrigo, R.D., D.K. Yamaguchi, G.C. Wiles, G.C. Jacoby, A. Osawa, and D.M. Lawrence. A kashiwa oak (*Quercus dentata*) tree-ring width chronology from northern coastal Hokkaido, Japan. *Can. J. For. Res.* ; 1997; v. 27(n. 4): p. 613-617.

5655. Withjack, M.O., R.W. Schlische, P. E. Olsen. Diachronous Rifting, Drifting, and Inversion on the Passive Margin of Central Eastern North America: An Analog for Other Passive Margins. AAPG Bull.; 1998; v. 82(n. 5A): p. 817-835.

5656. Chen, Bai-Hao and D. Walker. Lutetium and oxygen displacements in orthorhombic T'-Type Lu<sub>2</sub>PdO<sub>4</sub>-d. J. Solid State Chem.; 1997; v.131: p. 185-188.

5657. Rind, D., R. Healy, C. Parkinson, and D. Martinson. The role of sea ice in 2xCO<sub>2</sub> climate model sensitivity: Part II: Hemispheric dependencies. Geophys. Res. Lett.; 1997; v. 24(n. 12): p. 1491-1494.

5658. Class, C. and S.L. Goldstein. Plume-Lithosphere interactions in the ocean basins: constraints from the source mineralogy. Earth Planet. Sci. Lett.; 1997; v. 150: p. 245-260.

5660. Karner, G.D., N.W. Driscoll, J.P. McGinnis, W.D. Brumbaugh, and N.R. Cameron. Tectonic significance of syn-rift sediment packages across the Gabon-Cabinda continental margin. J. Mar. Petr. Geol.; 1997; v. 14(n. 7/8): p. 973-1000.

5661. Pekar, S., K. Miller, and R. Olsson. Data Report: The Oligocene Sewell Point and Atlantic City Formations, New Jersey Coastal Plain. in: Miller, K.G. and S.W. Snyder. Proc. ODP Sci. Results. College Station, TX. (Ocean Drilling Program); 1997; V. 150X: p.81-86.

5662. Jana, D. and D. Walker. The impact of carbon on element distribution during core formation. Geochim. Cosmochim. Acta; 1997; v. 61(n. 13): p. 2759-2763.

5663. Jana, D. and D. Walker. The influence of silicate melt composition on distribution of siderophile elements among metal and silicate liquids. Earth Planet. Sci. Lett.; 1997; v. 150(n. 3-4): p. 463-472.

5664. Pickart, R.S. and W.M. Smethie, Jr. Temporal evolution of the deep western boundary current where it enters the sub-tropical domain. Deep-Sea Res. I; 1998; v. 45: p. 1053-1083.

5665. Chen, B-H., D. Walker, and B.A. Scott. Crystal Chemistry of LuPd<sub>2</sub>O<sub>4</sub> and Other Spinel-Related NdCu<sub>2</sub>O<sub>4</sub>- LaPd<sub>2</sub>O<sub>4</sub>- Type Compounds. Chem. Mater.; 1997; v. 9(n. 7): 1700-1703.

5666. Broecker, W.S. and A. Sanyal. Magnitude of the CaCO<sub>3</sub> dissolution events marking the onset of times of glaciation. Paleoceanography; 1997; v. 12(n.4): p. 530-532.

5667. Rajagopalan, B., U. Lall, and M.A. Cane. Anomalous ENSO occurrences: an alternate view. *J. Clim.*; 1997; v.10: p. 2351-2357.

5668. Metzger, J.M., S.C. Remer, K.G. Miller, D.V. Kent, M.C. Van Fossen, J.V. Browning and D.S. Goldberg. Pass-through core measurements of magnetic susceptibility and natural gamma ray, New Jersey Coastal Plain. In: Miller, K.G. and S.W. Snyder. *Proc. ODP, Sci. Results* . College Station, TX. (Ocean Drilling Program); 1997; v. 150X: p. 65-74.

5669. Buckley, B., E. Cook, M. Peterson, and V. Barbetti. A changing temperature response with elevation for *Lagarostobos franklinii* in Tasmania, Australia. *Clim. Change*; 1997; v. 36: p. 477-498.

5670. Ma, L-Y. and J.R. Cochran. Bathymetric roughness of the southeast Indian Ridge: implications for crustal accretion at intermediate spreading rate Mid-Ocean ridges. *J. Geophys. Res.*; 1997; v.102(n. B8): p. 17,697-17,711.

5671. Goldberg, D. and Y-F. Sun. Attenuation differences in Layer 2A in intermediate and slow-spreading oceanic crust. *Earth Planet. Sci. Lett.*; 1997; v. 150: p. 221-231.

5672. Marra, J. Analysis of diel variability in chlorophyll fluorescence and particle attenuation. *J. Mar. Res.*; 1997; v. 55: p. 767-784.

5673. Owens, J.P., K.G. Miller, and P.J. Sugarman. Lithostratigraphy and paleoenvironments of the Island Beach borehole, New Jersey Coastal Plain Drilling Project. In: Miller, K.G. and S.W. Snuder. *Proc. ODP Sci. Results*. College Station Tx (Ocean Drilling Program); 1997; v. 150X: p. 15-24.

5674. Magde, L.S. and D.W. Sparks. Three-dimensional mantle upwelling, melt generation and melt migration beneath segmented slow-spreading ridges. *J. Geophys. Res.*; 1997; v. 102(n. B9): p. 20,571-20,514.

5675. Rodgers, K.B., M.A. Cane, and D.P. Schrag. Seasonal variability of sea surface Delta14C in the equatorial Pacific in an ocean circulation model. *J. Geophys. Res.*; 1997; v.102(n. C8): p. 18,627-18,639.

5676. Ffield, A. GRL Special Section: WOCE Indian Ocean expedition. *Geophys. Res. Lett.*; v. 24; n. 21(p. 2539-2540).

5677. Song, X.D., D.V. Helmberger. PkP differential travel times: implications for 3-D lower mantle structure. *Geophys. Res. Lett.*; 1997; v. 24(n. 15): p. 1863-1866.

5678. Miller, K.G., S. Rufolo, P.J. Sugarman, S.F. Pekar, J.V. Browning, and D.W. Gwynn. Early to middle Miocene sequences, systems tracts, and benthic foraminiferal biofacies, New Jersey Coastal Plain. In: Miller, K.G. and S.W. Snyder, (Eds.). Proc. ODP Sci. Results. College Station Tx (Ocean Drilling program); 1997; V. 150X: p. 169-186.

5679. Liu, C., J.V. Browning, K.G. Miller, and R.K. Olsson. Paleocene benthic foraminiferal biofacies and sequence stratigraphy, Island Beach borehole, New Jersey. In: Miller, K.g. and S.W. Snyder, (Eds.). Proc. ODP Sci. Results. College Station TX (Ocean Drilling Program); 1997; v. 150X: p. 267-275.

5681. Song, X. Anisotropy of the Earth's inner core. Rev. Geophys.; 1997; v. 35(n. 3): p. 297-313.

5682. Wills, S. and W.R. Buck. Stress-field rotation and rooted detachment faults: a Coulomb failure analysis. J. Geophys. Res. ; 1997; v. 102(n. B9): p. 20,503-20,514.

5683. Diebold, J. and N. Driscoll and the EW-9501 Science team. New Insights on the Formation of the CaribbeanBasalt Province Revealed by Multichannel Seismic Images of Volcanic Structures in the Venezuelan Basin. in: P. Mann, Ed. "Caribbean Basins," (Series) Sedimentary Basins of the World. Amsterdam: Elsevier Science....?; 1999; v. 4: p. 561-589.

5684. Driscoll, N.W. and J.B. Diebold. Tectonic and Stratigraphic Development of the Eastern Caribbean: New Constraints from Multichannel Seismic Data. in: P. Mann, Ed. "Caribbean Sedimentary Basins," (Series) Sedimentary Basins of the World. Amsterdam: Elsevier Science; 1999: p. 591-626.

5685. Shapiro, S., P. Schlosser, W. Smethie, and M. Stute. The use of  $^3\text{H}$  and tritogenic  $^3\text{He}$  to determine CFC degradation and vertical mixing rates in Framvaren Fjord, Norway. Mar. Chem.; 1997; v. 59: p. 141-157.

5686. Sugarman, P.J., L. McCartan, K.G. Miller, M.D. Feigenson, S. Pekar, R.W. Kistler, and A.G. Robinson. Strontium-isotopic correlation of Oligocene to Miocene sequences, New Jersey and Florida. in: Miller, K.G. and S.W. Snyder. Proc. ODP Sci. Results (spec. vol.). College Station TX (Ocean Drilling Program); 1997; v. 150X: p. 147-159.

5687. Miller, K.G. Coastal plain drilling and the New Jersey sea-level transect. in: Proc. ODP Sci. Results . Miller, K.G. and S.W. Snyder, (Eds). College Station, TX (Ocean Drilling Program); 1997; V. 150X: p. 3-12. (').

5688. Miller, K.G., J.V. Browning, S. Pekar, and P.J. Sugarman. Cenozoic evolution of the New Jersey Coastal Plain: Changes in sea level tectonics, and sediment supply. in: Miller, K.G.



and S.W. Snyder. Proc. ODP Sci. Results . College Station, TX (Ocean Drilling Program); 1997; V. 150X: p. 361-373.

5689. Browning, J.V., K.G. Miller, and R.K. Olsson. Lower to middle Eocene benthic foraminiferal biofacies, lithostratigraphic units, and their relationship to sequences New Jersey Coastal Plain. in: Miller, K.G and S.W. Snyder. Proc. ODP Sci. Results . College Station, TX (Oceans Drilling Program); 1997; V. 150X: p. 207-228.

5690. Martinson, D.G. and R.A. Iannuzzi. Antarctic ocean-ice interaction: Implications from ocean bulk property distributions in the Weddell Gyre. Antarctic Res. Series; 1998; v. 74: p. 243-271.

5692. Gardner, W.D., P.E. Biscaye, and M.J. Richardson. A sediment trap experiment in the Vema Channel to evaluate the effect of horizontal particulate fluxes on measured vertical fluxes. J. Mar. Res.; 1997; v. 55: p. 995-1028.

5693. Houghton, R.W. Lagrangian flow at the foot of a shelfbreak front using a dye tracer injected into the bottom boundary layer. Geophys. Res. Lett.; 1997; v. 24(n. 16): p. 2035-2038.

5694. Liu, C., J.V. Browning, K.G. Miller, and R.K. Olsson. Upper cretaceous to Miocene planktonic foraminiferal biostratigraphy: results of Leg 150X, the New Jersey Costal Plain Drilling project. in: Miller, R.G. and S.W. Snyder, (Eds.). Proc. ODP Sci. Results. College Station, TX (Ocean Drilling Program); 1997; V. 150X : p. 11-128.

5695. Browning, J.V., K.G. Miller, M. Van Fossen, C. Liu, D.K. Pak, M-P. Aubry, and L.M. Bybell. Lower to middle Eocene sequences of the New Jersey Coastal Plain and their significance for global climate change. in: Miller, K.G. and S.W. Snyder, (Eds.). Proc. ODP Sci. Results. College Station TX.(Ocean Drilling Project); 1997; V. 150X: p. 229-242.

5697. Pak, D., K. Miller, and J. Browning. Global significance of an isotopic record from the New Jersey Coastal Plain: linkage between the shelf and deep sea in the late Paleocene to early Eocene. in: Miller, K.g. and S.W. Snyder, (Eds.). Proc. ODP Sci. Results. College Station TX (Ocean Drilling Program); 1997; V. 150X: p. 305-315.

5698. Browning, J.V., K.G. Miller, and L.M. Bybell. Upper Eocene sequence stratigraphy and the Absecon inlet formation, New Jersey Coastal Plain. in: Miller, K.G. and S.W. Snyder, (eds.). Proc. ODP Sci. Results. College Station TX. (Oceans Drilling Program); 1997; V. 150X: p. 243-266.

5699. Deng, J. and L.R. Sykes. Stress evolution in southern California and triggering of moderate-, small-, and micro-size earthquakes. J. Geophys. Res.; 1997; v.102(n. B11): p. 24,411-24,435.

5700. Cook, E.R. and K. Peters. Calculating unbiased tree-ring indices for the study of climatic and environmental change. *The Holocene*; 1997; v. 7(n.3): p. 361-370.

5701. Shapiro, S.D., G. Rowe, P. Schlosser, A. Ludin and M. Stute. Tritium-helium 3 dating under complex conditions in hydraulically stressed areas of a buried-valley aquifer. *Water Resour. Res.*; 1998; v. 34(n. 5): p. 1165-1180.

5702. Jacoby, G.C. , D.E. Bunker and B.E. Benson. Tree-ring evidence for an A.D. 1700 Cascadia earthquake in Washington and northern Oregon. *Geology*; 1997; v. 25(n. 11): p. 999-1002.

5703. McHugh, C.M.G., W.B.F. Ryan, S. Eittreim, and D. Reed. The influence of the San Gregorio fault on the morphology of Monterey Canyon. *Mar. Geol.*; 1998; v.146: p. 63-91.

5704. Katz, E.J. Waves along the equator in the Atlantic; 1997; *J. Phys. Oceanog.*(v. 27): p. 2536-2544.

5705. Pekar, S., K.G. Miller and J.V. Browning. New Jersey Coastal Palyn Oligocene sequences. in: Miller, K.G. and S.W. Snyder, (Eds.). *Proc. ODP Sci. Results. College Station, TX (Ocean Drilling Program)*; 1997: p. 186-205.

5706. Peteet, D., A. Del Genio and K. Lo. Sensitivity of northern hemisphere air temperature and snow expansion to North Pacific sea surface temperatures in the Goddard Institute for Space Studies general circulation model. *J. Geophys. Res.*; 1997; v. 102(n. D20): p. 23,781-23,791.

5708. Gee, J. and D. Kent. Magnetization of axial lavas from the southern East Pacific Rise (14° - 23° S): Geochemical controls on magnetic properties. *J. Geophys. Res.*; 1997; v. 102(B11): p. 24,873-24,886.

5710. Comiso, J.C. and A. Gordon. Interannual variability in summer sea ice minimum, coastal Polynyas and bottom water formation in the Weddell Sea. *Antarctic Research Series*.

5711. Buck, W.R. Bending thin lithosphere causes localized "snapping" and not distributed "crunching:" Implications for abyssal hill formation. *Geophys. Res. Lett.*; 1997; v. 24(n. 20): p. 2531-2534.

5712. Brueckner, H., J. Gilotti and A. Nutman. Caledonian eclogite-facies metamorphism of Early Proterozoic protoliths from the North-East Greenland Eclogite Province. *Contrib. Mineral. Petrol.*; 1998; v. 130: p.103-120.

5713. Driscoll, N. and G. Karner. Lower crustal extension across the Northern Carnarvon basin, Australia: Evidence for an eastward dipping detachment. *J. Geophys. Res.*; 1998; v. 103(n. B3): p. 4975-4991.

5714. Bond, G., W. Showers, M. Cheseby, R. Lotti, P., Almasi, P de Menocal, P. Priore, H. Cullen, I. Hakdas and G. Bonani . A Pervasive Millennial-Scale Cycle in North Atlantic Holocene and Glacial Climates. *Science*; 1997; v. 278(n. 5341): p. 1257-1266.

5715. Muttoni, G. A. Argnani, D.V. Kent, N. Abrahamsen and U. Cibin. Paleomagnetic evidence for Neogene rotations in the northern Apennines, Italy. *Earth Planet. Sci. Lett.*; 1998; v.154: p. 25-40.

5716. Driscoll, N. and G. Karner. Three-dimensional quantitative clinofold development. in prep.

5717. Burckle, L. and R. Mortlock. Sea ice extent in the Southern Ocean during the last Glacial Maximum: another approach to the problem . *J. of Glaciology*; in prep.

5718. Anderson, O.R., T. Danelian and C. Langdon. Cytoplasmic and Shell Fine Structure of *Tetrapetalon elegans* (Polycystinea) and Comparisons to *Hexacotium* spp. with Implications for phylogeny and taxonomy of the Spumellarida. *Mar. Micropaleontol.*; 1998; v. 33: p, 299-307.

5719. Anderson, O.R. Densities and Diversity of Gymnoamoebae in Relation to Some Inshore Aquatic Habitats at Bermuda. *J. Euk. Microbiol.*; 1998; v. 45(n. 1): p. 151-155.

5720. Xue, Y., M. Cane, and S. Zebiak. Predictability of a Coupled Model of ENSO Using Singular Vector Analysis. Part I: Optimal Growth in Seasonal Background and ENSO Cycles. *Mon. Weather Rev.*; 1997; v. 125(p. 2043-2056).

5721. Xue, Y., M.A. Cane, S.E. Zebiak, and T.N. Palmer. Predictability of a coupled model of ENSO using singular vector analysis. Part II: optimal growth and forecast skill. *Mon. Weather Rev.*; 1997; v. 125: p.2057-2073.

5722. Buck, W.R., S. M. Carbotte, and C.Z. Mutter. Controls on extrusion at mid-ocean ridges. *Geology*; 1997; v. 25(n. 10): p. 935-938.

5723. Kaplan, A., Y. Kushnir, M.A. Cane and M.B. Blumenthal. Reduced space optimal analysis for historical data sets: 136 years of Atlantic sea surface temperatures. *J. Geophys. Res.*; 1997; v. 102(N. C13): p. 27,835-27,860.

5724. Kushnir, Y., B. Rajagopalan and Y.M. Tourre. Decadal climate variability in the Atlantic Basin. In: Ninth Conference on the Interaction of the Sea and Atmosphere, Phoenix, AZ, 11-16 January 1998: American Meteorological Society; 1998: p. 58-61.

5725. Seeber, L. Reply. *J. Geophys. Res.*; 1997; v. 102(n. B11): p. 24,575-24,570.

5726. Lavier, L., and M. Steckler. The effect of sedimentary cover on the flexural strength of continental lithosphere. *Nature*; 1997; v. 389: p. 476-478.

5727. Clement, A., M. Cane and R. Seager. Patterns and Mechanisms of Twentieth Century Climate Change. *World Resource Review*; 1998; v. 10(n. 2): p. 161-185.

5728. Jacobs, S. and C. Giulivi. Interannual Ocean and Sea Ice Variability in the Ross Sea. *Antarctic Res. Ser.*; 1998; v.75: p. 135-150.

5729. Hellmer, H.H., S.S. Jacobs and A Jenkins. Oceanic Erosion of a Floating Antarctic Glacier in the Amundsen Sea. In: Jacobs, S. and R.F. Weiss, (Eds.). *Ocean, Ice, and Atmosphere: Interactions at the ANtartic Continental Margin*. Washington, D.C.: AGU; 1998: p. 83-99.

5730. D'Arrigo, R. M. Barbetti, M. Watanasak, B. Buckley, P. Krusic, S. Boonchirdchoo, and S. Sarutanon. Progress in Dendroclimatic Studies of Mountain Pine in Northern Thailand. *IAWA Journal*; 1997; v.18(n. 4): p. 433-444.

5732. Broecker, W. Mountain glaciers: Recorder of Atmospheric Water Vapor Content? *Global Biogeochem. Cycles*; 1997; v. 11(n. 4): p. 589-597.

5733. Anderson, O.R., C. Langdon and T. Danelian. Fine Structure of a Large Dinoflagellate Symbiont Associated with a Colonial Radiolarian (*Collozoum* sp.) in the Banda Sea. *Symbiosis*; 1998; v. 24: p. 259-270.

5734. Cane, M.A., V.M. Kamenkovich, and A. Krupitsky. On the utility and disutility of JEBAR. *J. Phys. Oceanogr.*; 1998; v. 28 : p. 519-526.

5735. Krupitsky, A. and M. Cane. A Two Layer Wind Driven Ocean Model in a Multiply Connected Domain with Bottom Topography. *J. Phys. Oceanog.*; 1997; v. 27: p. 2395-2404.

5737. Jana, D. and D. Walker. The influence of sulfur on partitioning of siderophile elements. *Geochim. Cosmochim. Acta*; 1997; v. 61(n. 24): p. 5255-5277.

5738. Sykes, L.R. Anatomy of False Alarm: Silence Follows Hyped Leaks. F.A.S. Public Interest Report; 1997; v. 50(n. 6): p. 1-12.

5740. Anderson, O.R. and P. Bohle. Abundances and Diversity of Gymnamoebae Associated with Earthworm (*Lumbricus Terrestris*) Middens in an Northeastern U.S. Forest. *Soil Biol. Biochem.*; 1998; v. 30(n. 8/9): p. 1213-1216.

5741. Van der Auwera, K., J. Longhi, J-C. Duchesne. A Liquid Line Descent of the Jotunite (Hypersthene Monzodiorite) Suite. *J. Petrol.*; 1998; v. 39(n. 3): p. 439-468.

5742. Anderson, O.R. A neurocognitive perspective on current learning theory and science instructional strategies. *Science Education*; 1997; v. 81: P. 67-90.

5743. Scholz, C. Interest in Complexity in Brittle and Granular Systems Grows. *EOS*; 1998; v. 79(n. 2): p. 21.

5744. Heinze, C., E. Maier-Reimer and P. Schlosser. Transient tracers in global OGCM:- Source functions and simulated distributions. *J. Geophys. Res.* ; 1998; v.103(n. C8): p. 15,903-15,922.

5745. Gordon, A. Western Weddell Sea Thermohaline Stratification. In:: S. Jacobs and R. Weiss, (Eds.). *Ocean, Ice and Atmosphere: Interactions at the Antarctic Continental Margin*, Antarctic Research Series: AGU; 1998; V. 75: p. 215-140.

5746. Uvo, C. G., C.A. Repelli, S. E. Zebiak and Y. Kushnir. The Relationships between Tropical Pacific and Atlantic SST and Northeast Brazil Monthly Precipitation. *J. Clim.*; 1998; v. 11: p. 551-562.

5748. Broecker, W. Thermohaline Circulation: The Achilles Heel of Our Climate System: Will Man-Made CO<sub>2</sub> Upset the Current Balance? *Science*; 1997; v. 278: p. 1582-1588.

5749. Kominz, M., K.G. Miller and J.V. Browning. Long-term and short-term Cenozoic sea-level estimates from New Jersey coastal plain boreholes, Ocean Drilling Project Leg 150X. *Geology*.

5750. Shi, J. , W.-Y. Kim and P. Richards. The Corner Frequencies and Stress Drops of Intraplate Earthquakes in the Northeastern United States. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 2): p. 531-542.

5751. Scholz, C. Earthquakes and Friction Laws. *Nature*; 1997; v. 391: p. 37-42.

5752. D'Arrigo, R., E.R. Cook, M.J. Salinger, J. Palmer, P.J. Krusic, B.M. Buckley, and R. Villalba. Tree-ring records from New Zealand: long-term context for recent warming trend. *Climate Dynamics*; 1998; v. 14: p. 191-199.

5753. Richards, P. and W.-Y. Kim. Testing the nuclear test-ban treaty. *Nature*; 1997; v. 389(n. 6653): p. 781-782.

5754. Keys, J.R., S. Jacobs and L.W. Brigham. Continued northward expansion of the Ross Ice Shelf, Antarctica. *Annals of Glaciology*; 1998; v. 27: p. 93-98.

5755. Aeschback- Hertig, W., P. Achlosser, M. Stute, H.J. Simpson, A. Luden and J.F. Clark. A  $3\text{H}/3\text{He}$  Study of Grouondwater Flow in a Fractured Bedrock Aquifer. *Ground Water*; 1998; v. 36(n. 4): p. 661-670.

5756. Zheng, Y, P. Schlosser, and J.H. Swift. Oxygen utilization rates in the Nansen Basin, Arctic Ocean: Implications for new production. *Deep-Sea Res. I*; 1998; v. 44(n. 12): p. 1923-1943.

5758. Broecker, W., S.L. Peacock, W. Walker, R. Weiss, E. Fahrbach, M. Schroeder, U. Mikalajewicz, C. Heinze, R. Key, T.-H. Peng, and S. Rubin. How much deep water is formed in the Southern Ocean? *J. Geophys. Res.*; 1998; v. 103(C8): p.15,833-15,843.

5759. Mensch, M., W.M. Smethie, P. Schlosser, R. Weppernig and R. Bayer. Transient Tracer Observations from the Western Weddell Sea during the Drift and Recovery of Ice Station Weddell. *Ocean, Ice and Atmosphere: Interactions at the Antarctic Continental Margin*, Antarctic Research Series; 1998; v.75: p. 241-156.

5760. Carbotte, S., C. Mutter, J. Mutter, and G. Correa. The influence of magma supply and spreading rate on crustal magma bodies and emplacement of the extrusive layer: Insights from the East Pacific Rise at lat  $16^\circ$  N. *Geology*; 1998; v. 26(n. 5): p. 455-458.

5761. S. Jacobs and C. Giulivi. Thermohaline Data and Ocean Circulation on the Ross Sea Continental Shelf. in: Spezie, G. and G. Manella, (Eds.). *Oceanography in the Ross Sea*. Heidelberg: Springer-Verlag; 1999: pp.3-16.

5762. Bischoff, P. J. and O.R. Anderson. Abundance and Diveristy of Gymnamoebae at Varying Soil Sites in Northeastern U.S.A. *Acta Protozoologica*; 1998; v.37: p. 17-21.

5763. Villalba, R., E.R. Cook, G.C. Jacoby, R.D. D'Arrigo, T.T. Veblen, and P.D. Jones. Tree-ring based reconstructions of northern Patagonia precipitation since A.D. 1600. *Holocene*; 1998; v. 8(n. 6): p.659-674.
5764. Ajao, E.A. and R. Houghton. Coastal Ocean of Equatorial West Africa from 10° N to 10° I. In: A. Robinson and K. Brink, (Eds.). *The Sea*. New York: John Wiley; 1998; v. 11, Chapter 21: p. 605-631.
5765. Cook, E.R., R.D. D'Arrigo and K.R. Briffa. A reconstruction of the North Atlantic Oscillation using tree-ring chronologies from North America and Europe. *The Holocene*; 1998; v. 8 (n. 1): p. 9-17.
5766. Walker, W., B. Scott, B-H. Chen and Y. Wang. Anatomy of high pressure synthesis reactions in the Sr-Cu-O-Cl system. *Physica C*; 1998; v. 299: p. 52-28.
5767. Lin, J.C., W.S. Broecker, S.R. Hemming, R. Sidney I. Hajdas, R.F. Anderson, G.I. Smith, M. Kelley, and G. Bonani. A reassessment of U-Th and <sup>14</sup>C ages for late glacial high frequency hydrological events at Searles Lake, California. *Quat. Res.*; 1998; v. 49(n. 1): p. 11-23.
5769. Olson, M., C. Scholz and A. Léger. Healing and sealing of a simulated fault Gorge under hydrothermal conditions: Implications for fault healing. *J. Geophys. Res.*; 1998; v.103(n.B4): p.7421-7430.
5770. Liepert, B. Recent Changes in Solar Radiation under Cloudy Conditions in Germany. *Int. J. Climatology*; 1997; v.17: p. 1581-1593.
5771. Liepert, B. G. Kukla. Decline in Global Solar Radiation with Increase Horizontal Visibility in Germany between 1964 and 1990. *J. Clim.*; 1997; v. 10: p. 2391-2401.
5772. Kim, W-Y. The ML Scale in Eastern North America. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 4): p. 935-951.
5773. Witter, D. and C. Chelton. Eddy-Mean Flow Interaction in Zonal Oceanic Jet Flow Along Zonal Ridge Topography. *J. Phys. Oceanogr.*; 1998; v. 28: p. 2019-2039.
5774. Gordon, A.L. and J.L. McClean. Thermohaline Stratification of the Indonesian Seas: Model and Observations. *J. Phys. Oceanogr.*; 1999; v. 29(p. 198-216).

5775. Lebrun, J.-F., G.D. Karner and J.-Y Collot. Fracture zone subduction and reactivation across Physegur ridge/trench system, southern New Zealand. *J. Geophys. Res.*; 1998; v. 103(n. B4): p. 7293-7313.

5776. Sun, Y.F. and D. Goldberg. Seismic Wave Modeling in the Upper Oceanic Crust and Its Implications for Attenuation -Porosity Relations. in: Teng, T.-C., E.-C. Shang, Y.-H Pao, M.H. Schutlz and A.D. Pierce. *Theoretical and Computational Acoustics '97, Proceedings, Third International Conference*, (Eds.): World Scientific Publishing Co.; 1999: p. 103-113.

5777. Putirka, K. . Garnet + Liquid Equilibrium. *Contrib. Mineral. Petrol.*; 1998; v. 131: p. 273-288.

5778. McPhee, M.G., T. P. Stanton, J.H. Morison, and D.G. Martinson. Freshening of the Upper Ocean in the Arctic: Is perennial sea ice disappearing? *Geophys. Res. Lett.*; 1998; v. 25(n. 10): p. 1729-1732.

5779. Ou, H-W. A Model of Tidal Rectification by Potential Vorticity Mixing, Part I: Homogeneous Ocean. *J. Phys. Oceanogr.*; 1999; v. 29: p. 821-827.

5780. Brueckner, H. and L.G. Medaris, Jr. A tale of two orogens: the contrasting T-P-t history and geochemical evolution of mantle in high- and ultrahigh-pressure metamorphic terranes of the Norwegian Caledonides and the Czech Variscides. *Schweiz. Mineral. Petrogr. Mitt.*; 1998; v. 78: p. 293-307.

5781. Ainley, D.G., S. S. Jacobs, C. A. Ribic and I. Gaffney . Seabird distribution and oceanic features of the Amundsen and southern Bellingshausen seas. *Antarct. Sci*; 1998; v. 10(n. 2): p. 111-123.

5782. Buck, W.R. and A. Poliakov. Abyssal hills formed by stretching oceanic lithosphere. *Nature*; 1998; v. 392: p. 272-275.

5783. Peteet, D., A. Andreev, W. Bardeen and F. Mistretta. Long-term Arctic peatland dynamics, vegetation and climate history of the Pur-Taz region, western Siberia. *Boreas*; 1998; v. 27: p. 115-126.

5785. Hunkins, K. T.O. Manley, P. Manley and J. Saylor. Numerical studies of the 4-day oscillation in Lake Champl. *J. Geophys. Res.*; 1998; v. 103(n. C9): p. 18,425-18,436.

5787. Major, C. C. Pirmez, D. Goldberg and Leg 166 Scientific Party. High resolution core-log integration techniques: examples from the Ocean Drilling Program. In: Harvey, P.K. and



M.A. Lovell, (Eds.). *Core-Log Integration* (Geol. Soc. London, Special Publication). London; 1998; V. 136: p. 285-295.

5788. Stoll, R.D. Comments on "Biot model on sound propagation in water-saturated sand" [J. Acoust. Soc. Am., vol. 97, 199-214 (1995)]. J. Acoust. Soc. Am.; 1998; v. 103(n. 5, Pt. 1): p.2723-2725.

5789. Broecker, W.S. and G. M. Henderson. The sequence of events surrounding Termination II and their implications for the cause of glacial-interglacial CO<sub>2</sub> change. *Paleoceanography*; 1998; v.13(n. 4): p. 352-364.

5790. Kent, D.V. and M.A. Smethurst. Shallow bias of paleomagnetic inclinations in the Paleozoic and Precambrian. *Earth Planet. Sci. Lett*; 1998; v. 160: p. 391-402.

5791. Ortiz, J., S. O'Connell, and A. Mix. Data Report: Spectral Reflectance Observations from Recovered Sediments. In: Raymo, M.E., E. Janse, P. Blum and T.D. Herbert, (Eds.). *Proc. ODP. Sci. Results*. College Station, TX; v. 162: p. 259-264.

5792. Ho, D.T., P. Schlosser, W.M. Smethie Jr. and H.J. Simpson. Variability in atmospheric Chlorofluorocarbons (CCl<sub>3</sub>F and CCl<sub>2</sub>F<sub>2</sub>) near a Large Urban Area: Implications for Groundwater Dating. *Environ. Sci. Technol.*; 1998; v. 32: p. 2377-2382.

5793. Villalba, R. and T.T. Veblen. Annual- versus decadal-scale climatic influences on tree establishment and mortality in northern Patagonia. in: Beniston, M. and J. Innes, (Eds.). *Past, Present and Future Climatic Variability and Extremes: The Impact on Forests*.

5794. Majewski, E. and D. Walker. S diffusivity in Fe-Ni-S-P melts. *Earth Planet. Sci. Lett.*; 1998; v. 160: p.823-830.

5795. Lerner-Lam, A. Sheehan, S. Grand, E. Huphreys, K. Dueker, E. Hessler, H. Guo, D-K Lee and M. Savage. Deep structure beneath the Southern Rocky Mountains from the Rocky Mountain Front Broadband Seismic Experiment.

5796. Marcantonio, S. Higgins, R.F. Anderson, M. Stute, P. Schlosser and E. Troy Rasbury. Terrigenous helium in deep-sea sediments. *Geochimica et Cosmochimica Acta*; 1998; v.62(n. 9): p. 1535-1543.

5797. Pirmez, C., L.F. Pratson, and M.S. Steckler. Clinoform development by advection-diffusion of suspended sediment: Modeling and comparison to natural systems. *J. Geophys. Res.*; 1998; v. 103(n. B10): p. 24,141-24,157.

5798. Hemming, S.R., P.E. Biscaye, W.S. Broecker, N.G. Hemming, M. Klas, and I. Hajdas. Provenance change coupled with increasing clay flux during deglacial times in the western equatorial Atlantic. *Palaeogr., Palaeoclimatol., Palaeoecol.*; 1998; v. 142: p. 217-230.

5799. Bopp, R.F., S. N. Chillrud, E.L. Shuster, H.J. Simpson, and F.D. Estabrooks. Trends in Chlorinated Hydrocarbon Levels in Hudson River Basin Sediments. *Environmental Health Perspectives*; 1998; v. 106(Suppl. 4): p. 1075-1081.

5800. Brueckner, H. Sinking intrusion model for the emplacement of garnet-bearing peridotites into continent collision orogens. *Geology*; 1998; v. 26(n. 7): p. 631-634.

5803. McHugh, C.M.G., S.W. Snyder, and K.G. Miller. Upper Eocene ejecta of the New Jersey continental margin reveal dynamics of Chesapeake Bay impact. *Eart Planet. Sci. Lett.*; 1998; v. 160: p. 353-367.

5804. Karner, G. D. and N.W. Driscoll. Tectonic and stratigraphic development of the West African and eastern Brazilian Margins: insights from quantitative basin modelling. In: Cameron, N.R., R.H. Bate and V.S Clure, Eds. *The Oil and Gas Habitats of the South Atlantic*. London: Geological Society Special Publications; 1999; v. 153: p. 11-40.

5805. Wild, M. and B. Liepert. Excessive transmission of solar radiation through cloud-free Atmosphere. *Geophys. Res. Lett.*; 1998; v. 25(n. 12): p. 2165-2168.

5806. Kaplan, A. , M.A. Cane, Y. Kushnir, A.C. Clement, M.B. Blumenthal, and B. Rajagopalan. Analyses of global sea surface temperature 1856-1991. *J. Geophys. Res.*; 1998; v. 103(C9): p. 18,567-18,589.

5808. Houghton, R. W. and M. Visbeck. Upwelling and convergence in the Middle Atlantic Bight shelfbreak front. *Geophys. Res. Lett.*; 1998; v. 25(n. 15): p. 2765-2768.

5810. Song, Xiadong. The earth's inner core and the dynamics of the Earth's deep interior. *Earth Science Frontiers*; 1998; v. 5 (Suppl.): p. 1-9.

5811. Villalba, R., H.R. Grau, J.A. Boninsegna, G. Jacoby and A. Ripalta. Tree-ring evidence of long-term precipitation changes in subtropical South America . *Int. J. Climatology*; 1998; v. 18: p. 1463-1478.

5812. Evans, M.N., R.G. Fairbanks and J.L. Rubenstone. A proxy index of ENSO teleconnections . *Nature*; 1998; v.394: p. 732-733.

5813. Evans, M.N., A. Kaplan, and M.A. Cane. Optimal sites for coral-based reconstruction of global sea surface temperature . *Paleoceanography*; 1998; v.13(n. 5): p. 502-516.

5814. Chen, D. M.A. Cane, S.E. Zebiak and A. Kaplan. The impact of sea level data assimilation on the Lamont model prediction of the 1997/98 El Niño. *Geophys. Res. Lett.*; 1998; v. 25(n. 15): p. 2837-2840.

5815. Xie, J. Spectral Inversion of Lg from Earthquakes: A Modified Method with Applications to the 1995, Western Texas Earthquake Sequence. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 6): p. 1525-1537.

5816. Hopper, J. and W.R. Buck. Styles of extensional decoupling. *Geology*; 1998; v. 26(n. 8): p. 699-702.

5817. Myers, G., D. Chayes, D. Goldberg and A. Maffei. SeaNet--Ship/Shore Communications; High-Speed Ship-to-Shore Transmission of Wireline Logging Data: Implementation on Ocean Drilling Program Improved Operations. *Sea Technology*; 1998; v. 39(n. 6): p. 80-92.

5819. Weissel, J.K. and M.A. Seidl. Inland Propagation Erosional Escarpments and River Profile Evolution Across the Southeast Australian Passive Continental Margin . *Rivers Over Rock: Fluvial Processes in Bedrock Channels*; 1998; *Geophysical Monograph 107*: p. 189-206.

5820. Jana, D. and D. Walker. Core formation in the presence of various C-H-O volatile species. *Geochim. Cosmochim. Acta*; 1999; v.63(n. 15): p. 2299-2310.

5821. Scholz, C. A Further Note on Earthquake Size Distributions. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 5): p. 1325-1326.

5822. Gastrich, M.D., O.R. Anderson, S.S. Benmayor and E.M. Coper. Ultrastructural analysis of viral infection in the brown-tide alga, *Aureococcus anophagefferens* (Pelagophyceae). *Phycologia*; 1998; v. 37(n. 4): p. 300-306.

5823. Seeber, L., J.G. Armbruster, W-Y Kim, N. Barstow and C. Scharnberger. The 1994 Cacoosing Valley earthquakes near Reading, Pennsylvania: A shallow rupture triggered by quarry unloading. *J. Geophys. Res.*; 1998; v.103(n. B10): p.24,505-24,521.

5824. Olsen, P.E., J.B. Smith, and N.G. McDonald. Type Material of the Types Species of the Classic Theropod Footprint Genera *Eubrotos Anchisauripus*, and *Grallator* (early Jurassic, Hartford and Deerfield Basins, Connecticut and Massachusetts, U.S.A.). *J. of Vertebrate Paleontology*; 1998; v.18(n. 3): p 586-601.

5825. Sugiyama and O.R. Anderson. The fine structure of some living Sphyrina (Nassellaria, Radiolaria) and their implications for nassellarian classification. *Paleontolog. Res.*; 1998; v. 2(n. 2): p. 75-88.

5826. Broecker, W. and A. Sanyal. Does atmospheric CO<sub>2</sub> police the rate of chemical weathering? *Global Biogeochem. Cycles*; 1998; v. 12(n. 3): p. 403-408.

5827. D'Arrigo, R.D. and G.C. Jacoby. Northern North American Tree-Ring Evidence for Regional Temperature Changes after Major Volcanic Events. *Clim. Change*; 1999; v. 41: p. 1-15.

5828. Scholz, C. and J. Contreras. Mechanics of continental rift architecture. *Geology*; 1998; v. 26(n. 11): p. 967-970.

5829. Bell, R.E., D.D. Blankenship, C.A. Finn, D.L. Morse, T.A. Scambos, J.M. Brozena, and S.M. Hodge. Influence of subglacial geology on the onset of a West Antarctic ice stream from aerogeophysical observations. *Nature*; 1998; v. 394: p. 58-62.

5832. Tourre, Y., B. Rajagopalan and Y. Kushnir. Dominant Patterns of Climate Variability in the Atlantic Ocean during the Last 136 years. *J. Clim.*; 1999; v.12: p. 2285-2299.

5833. Morozov, I.G., S.G. Smithson, L.S. Hollister and J.B. Diebold. Wide-angle seismic imaging across accreted terranes, southeastern Alaska and western British Columbia. *Tectonophysics*; 1998; v. 299: p. 281-296.

5834. Tourre, Y., Y. Kushnir and W.B. White. Evolution of Interdecadal Variability in Sea Level Pressure, Sea Surface Temperature and Upper Ocean Temperature over the Pacific Ocean. *J. Phys. Oceanog.*; 1999; v. 29: p.1528-1541.

5835. Anderson, R.F., N. Kumar, R.A. Mortlock, P.N. Froelich, P. Kubik, B. Dittrich-Hannen and M. Suter. Late-Quaternary changes in productivity of the Southern Ocean. *J. Mar. Syst.*; 1998; v. 17(p. 497-514).

5836. Gee, J. and D. Kent. Magnetic telechemistry and magmatic segmentation of the Southern East Pacific Rise. *Earth Planet. Sci. Lett.*; 1998; v.164: p. 379-385.

5837. Gregory-Wodzicki, K., W.C. McIntosh and K. Velasquez. Climatic and tectonic implications of the late Miocene Jakokota flora, Bolivian Altiplano. *J. S. Amer. Earth Sci.*; 1998; v. 11(n. 6): p.553-560.

5838. Tenthorey, E., C. H. Scholz, E. Aharonov, and A. Léger. Precipitation sealing and diagenesis 1. Experimental results. *J. Geophys. Res.*; 1998; v. 103(n. B10): p. 23,951-23,967.

5839. Aharonov, E., E. Tenthorey and C. Scholz. Precipitation sealing and diagenesis 2. Theoretical analysis. *J. Geophys. Res.*; 1998; v. 102(n. B10): p. 23,969-23,981.

5840. Driscoll, N.W. and J.B. Diebold. Deformation of the Caribbean Region: One plate or two? *Geology*; 1998; v. 26(n. 11): p. 1043-1046.

5841. Coakley, B.J. and J.R. Cochran. Gravity evidence of very thin crust at the Gakkel Ridge (Arctic Ocean). *Earth Planet. Sci. Lett.*; 1998; v. 162: p. 81-95.

5842. Nakatani, M. A new mechanism of slip-weakening and strength recovery of friction associated with the mechanical consolidation of ouge. *J. Geophys. Res.*; 1998; v. 103(n. B11): p.27,239-25,256.

5843. Frank, M., W.M. Smethie, Jr. and R. Bayer. Investigation fo the subsurface water flow along the continental margin of the Eurasian Basin using the transient tracers tritium, <sup>3</sup>He and CFCs. *J. Geophys. Res.*; 1998; v. 103(n. C13): p. 30,773-30,792.

5844. Cohen, J.E. and C. Small. Hypsographic demography: The distribution of human population by altitude. *Proc. Natl. Acad. Sci.*; 1998; v. 95(n. 24): p. 14,009-14,014.

5845. Xie, J. and H.J. Patton. Regional phase excitation and propagation in the Lop Nor region of central Asia: Implications for the physical basis of P/Lg discriminants . *J. Geophys. Res.*; 1999; v.104(n. B1): p. 941-954.

5846. Marra, J., T.D. Dickey, C. Ho, C.S. Kinkade, D.E. Sigurdson, R.A. Weller and R. T. Barber. Variability in primary production as observed from moored sensors in the central Arabian Sea in 1995. *Deep-Sea Res. II*; 1998; v. 45: p. 2253-2267.

5847. Chen, D., M.A. Cane, and S.E. Zebiak. The impact of NSCAT winds onPredicting the 1997/98 El Niño: A case study with the Lamont-Doherty Earth Observatory model. *J. Geophys. Res.*; 1999; v. 104(n. C5): p. 11,321-11,327.

5848. Chen, D., T.W. Liu, S.E. Zebiak, M.A. Cane, Y. Kushnir, and D. Witter. Sensitivity of the tropical Pacific Ocean simulations to the temporal and spatial resolution in wind forcing. *J. Geophys. Res.*; 1999; v. 104(n. C5): p. 11,261-11,271.

5849. Kneller, M., and D. Peteet. Late-Glacial to Early Holocene Climate Changes from a Central Appalachian Pollen and Macrofossil Record. *Quat. Res.*; 1999; v. 51: p. 133-147.

5850. Atkins, M.S., O.R. Anderson, and C.O. Wirsen. Effect of hydrostatic pressure on the growth rates and encystment of flagellated protozoa isolated from a deep-sea hydrothermal vent and a deep shelf region. *Mar. Ecol. Prog. Ser.*; 1998; v. 171: p. 85-95.

5851. Rogerson, A., F.J. Hannah and O.R. Anderson. A redescription of *Rhabdamoeba marina*, an inconspicuous marine amoeba from benthic sediments. *Invertebrate Biology*; 1998; v. 17(n. 4): p. 261-270.

5854. Rajagopalan, B., Y. Kushnir, and Y. Tourre. Observed decadal midlatitude and tropical Atlantic climate variability. *Geophys. Res. Lett.*; 1998; v. 25(n. 21): p. 3967-3970.

5855. Yuan, X., D.G. Martinson, and T. Liu. The effect of air-sea-ice on Winter 1996 Southern Ocean subpolar storm distribution. *J. Geophys. Res.*; 1999; v. 104(n. D2): p.1991-2007.

5856. Longhi, J., J. Vander Auwera, M.S. Fram, J.C. Duchesne. Some Phase Equilibrium Constraints on the Origin of Proterozoic (Masif) Anorthosites and Related Rocks. *J. Petrol.*; 1999; v. 40(n. 2): p. 339-362.

5859. Cane, M. A role for the Tropical Pacific. *Science*; 1998; v. 282: p. 59-61.

5860. Steckler, M. S., G. S. Mountain, K. Miller and N. Christie-Blick. Reconstruction of Tertiary progradation and clinoform development on the New Jersey passive margin by 2-D backstripping. *Mar. Geol.*; 1999; v. 154: p. 399-420.

5863. Sugiyama, K. and O.R. Anderson. Cytoplasmic organization and symbiotic associations of *Didymocystis tatrathalamus* (Haeckel) (Spumellaria, Radiolaria). *Micropaleontology*; 1998; v. 44(n. 3): p. 277-289.

5864. Hemming, S.R., W.S. Broecker, W.D. Sharp, G.C. Bond, R.H. Gwiazda, J.F. McManus, M. Klas and I. Hajdas. Provenance of Heinrich layers in core V28-82, Northeastern Atlantic:  $^{40}\text{Ar}/^{39}\text{Ar}$  Ages of Ice-rafted hornblende, Pb isotopies in feldspar grains and Nd-Sr-Pb isotopes in the fine sediment fraction. *Earth Planet. Sci. Lett.*; 1998; v. 164: p. 317-333.

5865. Song, X. and D.V. Helmberger. Seismic Evidence for an Inner Core Transition Zone. *Science*; 1998; v.282: p.924-927.

5866. Barker, B., M. Clark, P. Davis, M. Fisk, M. Hedlin, H. Israelsson, V. Khalturin, W-Y. Kim, K. McLaughlin, C. Meade, J. Murphy, R. North, J. Orcutt, C. Powell, P.G. Richards, R. Stead, J. Stevens, F. Vernon, and T. Wallace. Monitoring Nuclear Tests. *Science* ; 1998; v.281: p. 1967-1968.

5867. Karner, G.C. and N.W. Driscoll. Style, timing and distribution of tectonic deformation across the Exmouth Plateau, northwest Australia, determined from stratal architecture and quantitative basin modelling. In: Mac Niocaill, C. and P.D. Ryan, Eds. *Continental Tectonics*. London: Geological Society, London; 1999; v.164: p. 271-311. (Special Publications).

5868. Cole, J. and E. Cook. The changing relationship between ENSO variability and moisture balance in the continental United States. *Geophys. Res. Lett.*; 1998; v. 25(n. 24): p. 4529-4532.

5869. Steckler, M. High-Resolution Sequence Stratigraphic Modeling 1: The Interplay of Sedimentation, Erosion, and Subsidence. In: *Numerical Experiments in Stratigraphy: Recent Advances in Stratigraphic and Sedimentological Computer Simulations*. Harbaugh, J. , L. Watney, G. Ranky, R. Slingerland, R. Toldstein and E. Fraseen ed., (Eds.). Tulsa, OK: SEPM Special Publication ; 1999; No. 63: p. 139-148.

5870. Steckler, M., S. Feinstein, B. Kohn, L. Lavier and M. Eyal. Pattern of mantle-thinning from subsidence and heat-flow measurements in the Gulf of Suez: Evidence for the rotation of Sinai and along-strike flow from the Red Sea . *Tectonics*; 1998; v. 17(n. 6): p. 903-920.

5871. Khalturin, V.I., T.G. Rautian and P.G. Richard. The Seismological Signal Strength of Chemical Explosions. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 6): p. 1511-1524.

5872. Villalba, R., R. D'Arrigo, E.R. Cook, G. Wiles, and G.C. Jacoby. Inter-Decadal Climate Oscillations along the Extra-Tropical Western Coasts of the Americas: Evidence from Tree Rings over the Past Four Centuries. 10th Symposium on Global Change Studies , 10-15 Jan. 1999, Dallas Texas (American Meteorological Society); 1999: p. 13-16.

5873. Shaw, B.E. Far-Field Radiated Energy Scaling in Elastodynamic Earthquake Fault Models. *Bull. Seismol. Soc. Am.*; 1998; v. 88(n. 6): p. 1457-1465.

5874. Menke, W., M. West, B. Brandsdottir and D. Sparks. Compressional and Shear Velocity Structure of the Lithosphere in Northern Iceland. *Bull. Seismol. Soc. Am.*; 1998; v.88(n. 6): p. 1561-1571.

5875. Visbeck, M., H. Cullen, G. Krahnemann and N. Naik. An ocean model's response to North Atlantic Oscillation-like forcing. *Geophys. Res. Lett.*; 1998; v. 25(n. 24): p. 4521-4524.

5876. Holland, D.M. and A. Jenkins. Modeling Thermodynamic Ice-Ocean Interactions at the Base of an Ice Shelf. *J. Phys. Oceanogr.*; 1999; v. 29(n. 8): p. 1787-1800.

5878. Jacoby, G.C., K. W. Workman and R.D. D'Arrigo. Laki eruption of 1783, tree Rings, and disaster for northwest Alaska Inuit. *Quat. Sci. Rev.*; 1999; v. 18: p. 1365-1371.

5879. Anderson, O.R., M.D. Gastrich and L.A. Zettler. Fine structure of the colonial radiolarina *Collozoum serpentinum* (Polycystinea: Spumellaria) with a reconsideration of its taxonomic status and re-establishment of the genus *Collophidium* (Haeckel). *Mar. Micropaleontol.*; 1999; v. 36: p. 81-89.

5880. Fleisher, M., T. Liu, W. Broecker and W. Moore. A clue regarding the origin of rock varnish. *Geophys. Res. Lett.*; 1999; v. 26(n. 1): p. 103-106.

5881. Chillrud, S.N., R.F. Bopp, H.J. Simpson, J. M Ross, E.L. Shuster, D.a. Chaky, D.C. Walsh, C. Chin Choy, L-R. Tolley and A. Yarme. Twentieth Century Atmospheric Metal Fluxes into Central Park Lake, New York City. *Environ. Sci. Technol.*; 1999; v. 33(n. 5): p. 657-662.

5882. Kumar, K.K., R. Kleeman, M. A. Cane and B. Rajagopalan. Epochal changes in Indian monsoon-ENSO precursors. *Geophys. Res. Lett.*; 1999; v. 26(n. 1): p. 75-78.

5883. Broecker, W., E. Clark, D.C. McCorckle, I. Hajdas, and G. Bonani. Core tope 14C ages as a function of latitude and water depth on the Ontong-Java plateau. *Paleoceanography*; 1999; v. 14(n. 1): p. 13-22.

5884. Ortiz, J., A. Mix, S. Harris and S. O'Connell. Diffuse spectral reflectance as a proxy for percent carbonate content in North Atlantic sediments. *Paleoceanography*; 1999; v. 14(n. 2): p. 171-186.

5886. Kent, D.V. Impacts on earth in the Late Triassic. *Nature*; 1998; v.395(n. 6698): p. 126.

5889. Matsumoto, K. and J. Lynch-Stieglitz. Similar glacial and Holocene deep water circulation inferred from southeast Pacific benthic foraminiferal carbon isotope composition. *Paleoceanography*; 1999; v. 14(n. 2 ): p. 149-163.

5891. Zettler, L.A., O.R. Anderson, and D.A. Caron. Insights on the Diversity with a "Species" of *Thalassicolla* (Spumellarida) based on 16S-like Ribosomal RNA Gene Sequencing. *J. Euk. Microbiol.*; 1998; v.45(n. 5): p. 488-496.



5892. Henderson, G.M., F.N. Lindsay and N.C. Slowey. Variation in bioturbation with water depth on marine slopes: A study on the Slopes on the Little Bahamas Bank. *Mar. Geol.*; 1999; v. 160: p. 105-118.

5893. Villalba, R. Dendroclimatology: A Southern Hemisphere Perspective. in: *Southern Hemisphere Paleo and Neoclimates*.

5894. Small, C. and D. Abbott. Subduction obstruction and the crack-up of the Pacific plate. *Geology*; 1998; v. 26(n. 9): p. 795-798.

5895. Gordon, A.L., M. Mensch, Z.Q. Dong, W.M. Smethie, Jr., and J. deBettencourt. Deep and Bottom water of the Bransfield Strait eastern and central basins. *J. Geophys. Res.*; 2000; v. 105(n. C5): p. 11,337-11346.

5896. Cook, E. R., D.M. Meko, D.W. Stahle and M.K. Cleveland. Drought Reconstruction for the Continental United States. *J. Clim.*; 1999; v. 12: p. 1145-1162.

5897. Gordon, A.L., and D. Susanto. Makassar Strait Transport: Initial Estimate based on Arlindo Results. *Mar. Technol. Soc. J.*; 1999; v. 32(n. 4): p. 34-45.

5898. Small, C. Global Systematics of Mid-Ocean Ridge Morphology. in : Buck, W.R., P.T. Delaney, J.A. Karson, Y. Lagabrielle, (Eds.). *Faulting and Magmatism at Mid-Ocean Ridges*. Washington, D.C.: American Geophysical Union; 1998; Geophysical Monograph 106: p. 1-25.

5899. Lynch-Stieglitz, J., W.B. Curry and N. Slowey. A geostrophic transport estimate for the Florida Current from the oxygen isotope composition of benthic foraminifera. *Paleoceanography*; 1999; v. 14(n. 3): p. 360-373.

5900. Henderson, G.M., N.C. Slowey and G.A. Haddad. Fluid flow through carbonate platforms: constraints from  $^{234}\text{U}/^{238}\text{U}$  and Cl- in Bahamas pore-waters. *Earth Planet. Sci. Lett.*; 1999; v. 169: p. 99-111.

5901. Burckle, L. and J.S Delaney. Terrestrial microfossils in Antarctic ordinary chondrites. *Meteoritics and Planetary Science*; 1999; v. 34: p. 475-478.

5902. Witter, D. L. and A.L. Gordon. Interannual variability of South Atlantic circulation from 4 Years of TOPEX/POSEIDON satellite altimeter observations . *J. Geophys. Res.*; 1999; v. 104(n. C9 ): p. 20,927-20,948.

5903. Kent, D. and P.E. Olsen. Implications of an astronomical cycles to the chronology of the Triassic. In: *Epicontental Triassic International Symposium*, Halle, Germany, September 21-21, 1998. Stuttgart: Schwiezerbart'sche Verlagsbuchhandlung; 2000: p. 1463-1473. (Zbl. Geol. Palä ont.; v. 11-12).

5904. Jacoby, G.C., R.D. D'Arrigo and G. Juday. Tree-ring Indicators of Climatic Change at Northern Latitudes. *World Resources Review*; 1999; v.11(n. 1): p. 21-29.

5905. D'Arrigo, R.D., G. Jacoby, M. Free and A. Robock. Northern Hemisphere Temperature Variability for the Past Three Centuries: Tree-Ring and Model Estimates. *Clim. Change*; 1999; v. 42: p. 663-675.

5906. Gee, J. and D. Kent. Calibration of magnetic granulometric trends in oceanic basalts. *Earth Planet. Sci. Lett.*; 1999; v. 170: p. 377-390.

5907. Kent, D.V. Orbital tuning of geomagnetic polarity time scales. *Phil. Trans. R. Soc. London, A*; 1999; v. 357: p. 1995-2007.

5908. Broecker, W. The End of the Present Interglacial: How and When? *Quat. Sci. Rev.*; 1998; v. 17: p. 689-694.

5909. Cochran, J.R., D.J. Fornari, B.J. Coakley, R. Herr, and M.A. Tivey. Continuous near-bottom gravity measurement made with and BGM-3 gravimeter in DSV Alvin on the East Pacific Rise Crest near 9° 31' and 9° 50'N. *J. Geophys. Res.*; 1999; v. 104(n. B5): p. 10,841-10,861.

5911. Spyropoulos, W.J. Griffith, C.H. Scholz and B.E. Shaw. Experimental Evidence for Different Strain Regimes of Crack Populations in a Clay Model. *Geophys. Res. Lett.*; 1999; v. 26(n. 8): p. 1081-1084.

5912. Clement, A., and R. Seager. Climate and the Tropical Oceans. *J. Clim.*; 1999; v. 12: p. 3383-3401.

5913. Menke, W. Crustal isostasy indicates anomalous densities beneath Iceland. *Geophys. Res. Lett.*; 1999; v. 26(n. 9): p. 1215-1218.

5914. Heussner, S., X. Durrieu de Madron, O. Radakovitch, L. Beaufort, P.E. Biscaye, J. Carbonne, N. Delsaut, H. Etcheber, and A. Monaco. Spatial and temporal patterns of downward particle fluxes on the continental slope of the Bay of Biscay (northeastern Atlantic). *Deep-Sea Res. II*; 1999; v. 46: p. 2102-2146.

5915. Lagabrielle, Y and M-H. Cormier. Formation of large summit troughs along the East Pacific Rise as collapse calderas: An evolutionary model. *J. Geophys. Res.*; 1999; v. 104(n. B6): p. 12,971-12,988.

5916. Villalba, R., R.D. D'Arrigo, E.R. Cook, G. Wiles, G.C. Jacoby. Decadal-scale climate variability along the extratropical western coast of the Americas: evidences from tree-ring records. In: Markgraf, Vera. PEP-1 book.

5917. Kent, D.V and P.E. Olsen. Astronomically Tuned Geomagnetic Polarity Time Scale for the Late Tertiary. *J. Geophys. Res.*; in prep.

5918. Henderson, G.M., and K. W. Burton. Using ( $^{234}\text{U}/^{238}\text{U}$ ) to assess diffusion rates of isotopic tracers in ferromanganese crusts. *Earth Planet. Sci. Lett.*; 1999; v. 170: p. 169-170.

5919. Giannini, A., Y. Kushnir and M.A. Cane. Interannual Variability of Caribbean Rainfall, ENSO and the Atlantic Ocean. *J. Clim.*; 2000; v. 13: p. 297-311.

5920. Broecker, W. and E. Clark.  $\text{CaCO}_3$  size distributions: A paleocarbonate ion proxy? *Paleoceanography*; 1999; v. 14(n. 5): p. 596-604.

5921. Longhi, J. . Phase equilibrium constraint on angrite petrogenesis. *Geochim. Cosmochim. Acta*; 1999; v. 63(n. 3/4): p. 583-585.

5922. Bell, R.E., V.A. Childers, R.A. Arko, D.D. Blankenship, and J. M. Brozna. Airborne gravity and precise positioning of geologic applications. *J. Geophys. Res.*; 1999; v.104(B7): p. 15,281-15,191.

5923. Olsen, P. Giant Lava Flows, Mass Extinctions and Mantle Plumes. *Science*; 1999; v. 284: p. 604-605.

5924. Gastrich, M.D. O.R. Anderson, S. S. Benmayor and E.M. Coper. Fine Structure Analysis of viral infection in the harmful brown tide alga *aureococcus anophagefferens*. In: Reguera, B., J. Blanco, J., and T. Wyatt, (Eds.). 8th Annual International Harmful Algae Conference in Vigo, Spain: Xunta de Galicia and Intergovernmental Oceanographic Commission of UNESCO; 1998: p. 419-421.

5926. Scholz, C. and A. Gupta. Fault interactions and seismic hazard. *J. Geodynamics*; 2000; v. 29: p. 459-467.

5927. Jacoby, G., R. D'Arrigo N. Pederson, B. Buckley, C. Dugarjav, and R. Mijiddorj. Temperature and Precipitation in Mongolia based on Dendroclimatic Investigations. *IAWA J.*; 1999; v. 20(n. 3): p. 339-350.
5928. Sykes, L.R., B.E. Shaw and C.H. Scholz. Rethinking Earthquake Prediction. *Pure Appl. Geophys.*; 1999; v. 155(p. 207-232).
5929. Jaumé, S. and L. Sykes. Evolving Towards a Critical Point: A Review of Accelerating Seismic Moment/Energy Release Prior to Large and Great Earthquakes. *Pure Appl. Geophys.*; 1999; v. 155(n. 2-4): p.279-305.
5930. Broecker, W., K. Matsumoto, E. Clark, I. Hajdas, and G. Bonani. Radiocarbon age differences between coexisting foraminifera species. *Paleoceanography*; 1999; v. 14(n. 4): p. 431-436.
5931. Clement, A.C., R. Seager and M.A. Cane. Orbital controls on the El Niño/Southern Oscillation and the tropical climate. *Paleoceanography*; 1999; v. 14(n. 4): p.441-456.
5932. Khatiwala, S.P., R.G. Fairbanks and R. W. Houghton. Freshwater sources to the coastal ocean off northeastern North America: Evidence from H<sub>2</sub> 18O/H<sub>2</sub> 16O. *J. Geophys. Res.*; 1999; v.104(n. C8): p. 1,241-18,255.
5935. Shapiro, S. D., D. LeBlanc, P. Schlosser and A. Ludin. Characterizing a Sewage Plume Using the 3H-3He Dating Technique. *Groundwater*; 1999; v. 37(n. 6): p. 861-878.
5936. Ponce-Correa, G.J., J. C. Mutter and S. Carbotte. Fresnel zone: A pitfall in seismic imaging of mid-ocean ridge magma lenses. *Geophys. Res. Lett.*; 1999; v. 26(n. 19): p. 3021-3024.
5937. Kumar, K.K., B. Rajagopalan and M.A. Cane. On the Weakening Relationship between the Indian Monsoon and ENSO. *Science*; 1999; v.284: p. 2156-2159.
5938. Malinconico, M. A. L. Using reflectance crossplots and rotational polarization for determining first-cycle vitrinite for maturation studies. *Int. J. Coal Geol.*; 2000; v. 43: p. 105-120.
5940. Greene, A.M., W. S. Broecker and D. Rind. Swiss glacier recession since the Little Ice Age: Reconciliation with climate records. *Geophys. Res. Lett.*; 1999; v. 26(n. 13): p. 1909-1912.

5941. Guerin, G., D. Goldberg and A. Meltser. Characterization of in situ elastic properties of gas hydrate-bearing sediments on the Blake Ridge. *J. Geophys. Res.*; 1999; v. 104(n. B8): p. 17,181-17,195.

5942. Ou, H.W. A Model of Tidal Rectification by Potential Vorticity Mixing: Part II Frontal Regime. *J. Phys. Oceanogr.*; 2000; v. 30: p. 564-571.

5943. Henderson, G.M., C. Heinze, R. F. Anderson, and A. M.E. Winguth. Global distribution of the  $^{230}\text{Th}$  Flux to ocean sediments constrained by GCM modelling. *Deep-Sea Res. I*; 1999; v. 46: p. 1861-1893.

5944. Sun, Y.F. Core-log seismic integration in hemipelagic marine sediments of the eastern flank of the Juan de Fuca Ridge. In: Davis, E., E. A. Fisher, J.V. Firth, et al. *Proc. OCP, Sci. Res.*; v. 168.

5945. Hemming, N.G., T. P. Guilderson and R.G. Fairbanks. Seasonal variations in the boron isotopic composition of coral: A productivity signal? *Global Biogeochem. Cycles*; 1998; v. 12(n. 4 ): p. 581-586.

5946. Hemming, N.G., R.J. Reeder, and S.R. Hart. Growth-step-selective incorporation of boron on the calcite surface. *Geochim. Cosmochim. Acta*; 1998; v. 62(n. 17): p. 2915-2922.

5947. Stoll, R. and E.O. Bautista. Using the Biot theory to establish a baseline geoacoustic model for seafloor sediments. *Contin. Shelf Res.*; 1999; v. 18(n. 14-15): p.1839-1857.

5948. Ortiz, J.D. and F.R. Rack. Non-Invasive Sediment Monitoring Methods: Current and Future Tools for High-Resolution Climate Studies. In : Abrantes and Mix, (eds.). *Reconstructing Ocean History: A Window into the Future*. New York: Kluwer Academic/Plenum; 1999: p. 343-30.

5949. Peacock, S., M. Visbeck and W. Broecker. Deep Water Formation Rates Inferred from Global Tracer Distributions: An Inverse Approach. In: Kasibhatla, P., (Ed.). *Inverse Methods in Biogeochemical Cycles (AGU Monograph)*: AGU.

5950. Menke, W. Using Waveform Similarity to Constrain Earthquake Locations. *Bull. Seismol. Soc. Am.*; 1999; v. 89(n. 4): p. 1143-1146.

5951. D'Arrigo, R., G. Wiles, G. Jacoby and R. Villalba. North Pacific sea surface temperatures: Past variations Inferred from tree rings. *Geophys. Res. Lett.*; 1999; v. 26(n. 17): p. 2757-2760.

5952. Sohl, L., N. Christie-Blick, and D.V. Kent. Paleomagnetic polarity reversals in Marinoan (ca. 600 Ma) glacial deposits of Australia: Implications for the duration of low-latitude glaciation in the Neoproterozoic time. *GSA Bull.*; 1999; v.111(n. 8): p. 1120-1139.

5953. Kuo, J.T., J.H. Zheng, S.H. Song and K.R. Liu. Determination of earthquake epicentroids by inversion of gravity variation data in the BTTZ region, China. *Tectonophysics*; 1999; v. 312: p. 267-281.

5954. Olsen, P.E. and D.V. Kent. Long-period Milankovitch cycles from the Late Triassic and Early Jurassic of eastern North America and their implications for the calibration of the Early Mesozoic time-scale and the long-term behaviour of the planets. *Phil. Trans. R. Soc. Lond. A* ; 1999; v. 357: p. 1761-1786.

5955. Rodgers, K.B., M.A. Cane, N.H. Naik and D.P. Schrag. The role of the Indonesian Throughflow in equatorial Pacific thermocline ventilation. *J. Geophys. Res.*; 1999; v. 104(n. C9): p. 20,551-20,570.

5956. Griffin, K.L. and Y. Luo. Sensitivity and acclimation of *Glycine max* (L.) Merr. leaf gas exchange to CO<sub>2</sub> partial pressure. *Environmental and Experimental Botany*; 1999; v. 42: p.141-153.

5957. Kushnir, Y., M. Zuk, and B. Rajagopalan. Inter-Annual Variability of Temperature Spells in Northeast U.S. 1953-1998. In: Proceedings of the American Meteorological Society 8th Conference Climate Variations, Denver, Co, 13-17 September 1998.

5958. Kushnir, Y., R. Seager, M. Visbeck, N. Naik, and J. Miller. Modeling Atlantic Ocean SST Variability 1958-1998. In: Proceedings of the American Meteorological Society 8th Conference on Climate Variations, Denver, CO, 13-17 September, 1998.

5959. Ligi, M., E. Bonatti, G. Bortoluzzi, G. Carrara, P. Fabretti, D. Gilod, A.A. Peyve, S. Skolotnev, and N. Turko. Bouvet Triple Junction in the South Atlantic: Geology and evolution. *J. Geophys. Res.*; 1999; v.104(n. B12): p. 29,365-29,385.

5960. McHugh, C.M. and W.B.F. Ryan. Sedimentary features associated with channel overbank flow: examples from the Monterey Fan. *Mar. Geol.*; 2000; v. 163: p. 199-215.

5961. De Menocal, P., J. Ortiz, T. Guilderson, J. Adkns, M. Sarnthein, L. Baker and M. Yarusinsky. Abrupt onset and termination of the African Humid Period: rapid climate responses to gradual Insolation forcing. *Quat. Sci. Rev.*; 2000; v. 19: p. 347-361.

5962. Bond, G., W. Showers, M. Elliott, M. Evans, R. Lotti, I. Hajdas, G. Bonani and S. Johnson. The North Atlantic's 1-2 Kyr Climate Rhythm: Relations to Heinrich Events. In: , Eds. Dansgaard and Oeschger Cycles and the Little Ice Age. (Geophysical Monograph Series.).

5964. Broecker, W.S., E. Clark, D.C. McCorkle, T-H Peng, I. Hajdas and G. Bonani. Evidence for a reduction in the carbonate ion content of the deep sea during the course of the Holocene. *Paleoceanography*; 1999; v.14 (n. 6): p. 744-752.

5965. Visbeck, M. and M. Rhein. Is Bottom Boundary-Layer Mixing slowly Ventilating Greenland Sea Deep Water? *J. Phys. Oceanogr.*; 2000; v. 30: p. 215-224.

5966. Cane, M. and A.C. Clement. A Role for the Tropical Pacific Coupled Ocean-Atmosphere System on Milankovitch and Millennial Timescales. Part II: Global Impacts. In: Clark, P.U., R.S. Webb and L.D. Deigwin, Eds. *Mechanisms of Global Climate Change at Millennial Time Scales*; 1999: p. 373-383. (Geophysical Monograph Series; 112).

5967. Chiang, J.C.H. and S.E. Zebiak. Surface Wind over Tropical Oceans: Diagnosis of the Momentum Balance, and Modeling the Linear Friction Coefficient. *J. Clim.*; 2000; v. 13: p. 1735-1747.

5968. Ortiz, J.D., A.C. Mix, P. Wheeler and R.M. Key. Anthropogenic CO<sub>2</sub> invasion into the northeast Pacific based on concurrent  $\delta^{13}C_{DIC}$  and nutrient profiles from the California Current . *Global Biogeochem. Cycles*; 2000; v. 14(n. 3): p. 917-929.

5969. Sanyal, A., J. Bijma. A comparative study of the northwest Africa and eastern equatorial Pacific upwelling zones as sources of CO<sub>2</sub> during glacial periods based on boron isotope paleo-pH estimation. *Paleoceanography*; 1999; v. 14(n. 6): p. 753-759.

5970. Seager, R., A.C. Clement and M.A. Cane. Glacial Cooling in the Tropics: Exploring the Roles of Tropospheric Water Vapor, Surface Wind Speed and Boundary Layer Processes. *J. Atmos. Sci.*; 2000; v. 57: p. 2144-2157.

5972. Davis, D.M. and L.R. Sykes. Geologic constraints on clandestine nuclear testing in South Asia. *Proc. Nat. Acad. Sci.*; 1999; v.96: p. 11090-11095.

5973. Yuan, X. and D.D. Martinson. Antarctic Sea Ice Extent Variability and its Global Connectivity. *J. Clim.*; 2000; v. 13: p. 1697-1717.

5974. Brueckner, H. and L.G. Medaris. A general model for the intrusion and evolution of 'mantle, garnet peridotites in high-pressure and ultra-high-pressure metamorphic terranes. *J. Metamorphic Geol.*; 2000; v. 18: p. 123-133.

5976. Gordon, A., P. Susanto and A. Field. Throughflow within Makassar Straits. *Geophys. Res. Lett.*; 1999; v. 26(n. 21): p. 3325-3328.

5978. Carbotte, S.M., A. Solomon and G. Ponce-Correa. Evaluation of morphological indicators of magma supply and segmentation from a seismic reflection study of the East Pacific Rise 15° 30'-17° N. *J. Geophys. Res.*; 2000; v. 105(B2): p. 2737-2759.

5979. Wang, Y., D. Walker and B. Scott. Composition and structure of a new paladate Ca<sub>4</sub>-1.5x. Aux Pd<sub>4</sub>O<sub>8</sub> (x~0.54) synthesized at high pressure. *J. Alloys and Compounds*; 1999; v. 292: p. 77-83.

5981. Wills, S. and M.H. Anders. Tertiary Normal Faulting in the Canyon Ridge, Eastern Sevier Desert. *J. Geol.*; 1999; v.107: p. 659-681.

5982. Kaplan, A., Y. Kushnir and M.A. Cane. Reduced Space Optimal Interpolation of Historical Marine Sea Level Pressure: 1854-1992. *J. Clim.*; 2000; v. 13: p. 2987-3002.

5983. Bell, R.E. and D. M Karl. Lake Vostok - A Complex Sublacial Environment. *EOS* ; 1999; v. 80(n. 48): p.573, 579.

5985. Adkins, J. and E.A. Boyle. Age Screening of Deep-Sea Corals and the Record of Deep North Atlantic Circulation Change at 15.4 ka. In: Abrantes and Mix, Eds. *Reconstructing Ocean History: A Window into the Future*. New York: Kluwer Academic/Plenum Publishers; 1999: p. 103-120.

5986. Van Geen, L. and R. Takesui. Past and present coastal upwelling along the western Americas. in : , *Reconstructing Ocean History*; in prep.

5987. Smethie, W.M. Jr., P. Schlosser, T.S. Hopkins and G. Bö nisch. Renewal and circulation of intermediate waters in the Canadian Basin observed on the SCICEX-96 cruise. *J. Geophys. Res.*; 2000; v. 105(C 1): p. 1105-1121.

5988. Lynch-Steiglitz, J. and W.B. Curry. The Overturning Circulation of the Glacial Atlantic: A View from the Top. *Reconstructing Ocean History: A Window into the Future*: Kluwer/Plenum; v. 6. (International Conference of Paleoceanography).

5989. Hemming, S.R. and E.T. Rasbury. Pb isotope measurement of sanidine monitor standards: implications for provenance analysis and tephrochronology. *Chemical Geology*; 2000; v. 165: p. 331-337.



5990. Stieglitz, M., J. Hobbie, A. Giblin and G. Kling. Hydrologic modeling of an arctic tundra watershed: Toward Pan-Arctic predictions. *J. Geophys. Res.*; 1999; v. 104(n. D22): pp. 27,507-27,518.
5991. Cook, E. B.M. Buckley, R. D'Arrigo and M.J. Peterson. Warm season temperatures since 1600 BC reconstructed from Tasmanian tree rings and their relationship to large-scale sea surface temperature anomalies. *Clim. Dynamics*; 2000; v. 16: p. 7-91.
5992. Svensson, A., P. Biscaye, and F. Grousset. Characterization of late glacial continental dust in the Greenland Greenland Ice Core Project ice core. *J. Geophys. Res.*; 2000; v. 105(n. D4): pl 4637-4656.
5994. Broecker, W.S. , E. Clark, J. Lynch-Stieglitz, W. Beck, L. Stott, L.D. Stott, I. Hajdas, and G. Bonani. Late glacial diatom accumulation at 9° S in the Indian Ocean. *Paleoceanography*; 2000; v. 15(n. 3): p. 348-352.
5995. Higgins, S. W. Broecker, R. Anderson, D.C.McCorckle, and D. Timothy. Enhanced sedimentation along the Equator in the western Pacific. *Geophys. Res. Lett.*; 1999; v. 26(n. 23): p. 34849-3492.
5996. Lynch-Stieglitz, J., W. B. Curry, and N. Slowey. Weaker Gulf Stream in the Florida Straits during the Last Glacial Maximum. *Nature*; 1999; v. 402: p. 644-648.
5997. Monaco, A., P.E. Biscaye, and P. Laborde. The ECOFER (ECOsysteme du canyon du cap-FERret) experiment in the Bay of Biscay: Introduction, objectives and major results. *Deep-Sea Res. II*; 1999; v. 46: p. 1967-1977.
5998. Broecker, W. S. Sutherland, T.-H. Peng. A Possible 20th-Century Slowdown of Southern Ocean Deep Water Formation. *Science*; 1999; v. 286: p. 1132-1135.
5999. Scholz, C.H. Evidence for a strong San Andreas fault. *Geology*; 2000; v. 28(n. 2): p. 163-164.
6000. Olsen, P. and D. Kent. High resolution early Mesozoic Pangean climate transect in lacustrine environments. *Zbl. Geol. Paläont.*; 1998; Teil I(Heft 11-12): p. 1475-1495.
6001. Class, C., D. M. Miller, S.L. Goldstein and C. H. Langmuir. Distinguishing melt and fluid subduction components in Unmak Volcanic, Aleutian Arc. *Geochemistry Geophysics Geosystems*; 2000; v. 1: Paper no. 1999GC000010.

6003. Gregory-Wodzicki, K.M. Paleoclimatic implications of tree-ring growth characteristics of 35 Ma Sequoia affinis from Florissant, Colorado as compared to modern coast redwood and giant sequoia. *Proceedings of the Denver Natural History Museum*.

6004. Seager, R., Y. Kushnir, M. Visbeck, N. Naik, J. Miller, G. Krahnemann and H. Cullen. Causes of Atlantic Ocean climate variability between 1958 and 1998. *J. Climate*; 2000; v. 13: p. 2845-2862.

6005. Beal, L.M., A. Field and A.L. Gordon. Spreading of Red Sea overflow waters in the Indian Ocean. *J. Geophys. Res.*; 2000; v.105(n. C4): p. 8549-8564.

6006. Kohfeld, K.E., R.F. Anderson, and J. Lynch-Stieglitz. Carbon isotopic disequilibrium in polar planktonic foraminifera and its impact on modern and Last Glacial Maximum reconstructions. *Paleoceanography*; 2000; v. 15(n. 1): p. 53-64.

6009. Spiegelman, M. and J.R Reynolds. Combined dynamic and geochemical evidence for convergent melt flow beneath the East Pacific Rise. *Nature* ; 1999; v. 402: p. 282-285.

6010. Brueckner, H., W. D. Cunningham, F.F. Alkmin and S. Marshak. Tectonic implications of Precambrian Sm-Nd Dates from the Southern São Francisco Craton and adjacent Araçuaí Ribeira belts, Brazil. *Precambrian Res.*; 2000; v. 99: p. 255-269.

6011. Smethie, W.M. Jr. and R.A. Fine. Rates of North Atlantic Deep Water formation calculated from chlorofluorocarbon inventories. *Deep Sea Res. I*; 2000; v. 48: p. 189-215.

6012. Ou, H.-W., C.-M. Dong and D. Chen. On the Tide-Induced Property Flux: Can it be locally countergradient? *J. Phys. Oceanogr.*; 2000; v. 30(n. 6): p. 1472-1477.

6013. Field, A., K. Vranes, A.L. Gordon, R.D. Susanto and S.L. Garzoli. Temperature variability within Makassar Strait. *Geophys. Res. Lett.*; 2000; v. 27(n. 2): p. 237-240.

6014. Israeli, M., N.H. Naik, and M.A. Cane. An Unconditionally Stable Scheme for the Shallow Water Equations. *Mon. Weather Rev.*; 2000; v. 128: p. 810-823.

6015. Dickson, M-L., J. Orchardo, R.T. Barber, J. Marra, J.J. McCarthy and R.N. Sambrotto. Production and respiration rates in the Arabian Sea during the 1995 Northeast and Southwest Monsoons.

6016. Marra, J., C.C. Trees, R.R. Bidigare, and R.T. Barber. Pigment absorption and quantum yields in the Arabian Sea. *Deep-Sea Res. II*; 2000; v. 47: p. 1279-1299.

6017. Rodgers, K.B., D.P. Schrag, M.A. Cane and N.H. Naik. The Bomb-14C Transient in the Pacific Ocean. *J. Geophys. Res.*; 2000; v.105(n. C4): p. 8489-8512.

6018. Massell, C., M.F. Coffin, P. Mann, S. Mosher, C. Frohlich, C.S. Kuncan, G. Karner, D. Ramsay and J.F. Lebrun. Neotectonics of the Macquarie Ridge Complex, Australia-Pacific plate boundary. *J. Geophys. Res.*; 2000; v. 105(n. B6): p. 13457-13480.

6019. Bohnenstiehl, S.R., and M.C. Kleinrock. Fissuring near the TAG active hydrothermal mound, 26 ° N on the Mid-Atlantic Ridge. *J. of Vol. and Geoth. Res.*; 2000; v. 948: p. 33-48.

6020. Sambrotto, R.N. and B.J. Mace. Coupling of biological and physical regimes across the Antarctic Polar front as reflected by nitrogen production and recycling. *Deep-Sea. Res. II*; 2000; v. 47: p. 3339-3367.

6021. Sambrotto, R.N. Nitrogen production in the northern Arabian Sea during the spring intermonsoon and summer monsoon seasons. *Dee-Sea Res.*; in prep.

6022. Schlosser, P. , B. Ekwurzel, S. Khatiwala, B. Newton, W. Maslowski, S. Pfirman. Tracer Studies of the Arctic Freshwater Budget [In:]. *Freshwater Balance of the Arctic Ocean, Reporting on results presented at the NATO sponsored Advanced Research Workshop, Tallinn, Estonia, April 1998.*: Kluwer Academic Publishers, The Netherlands.

6025. Chen, D., M. Cane, S.E. Zebiak , R. Cañ izaes, and A. Kaplan. Bias correction of an ocean-atmosphere coupled model. *Geophys. Res. Lett.*; 2000; v. 27(n. 16): p. 2585-2588.

6028. Smethie, W.M. Jr., R.A. Fine, A. Putzka and E.P. Jones. Tracing the flow of North Atlantic Deep Water using chlorofluorocarbons. *J. Geophys. Res.*; 2000; v. 105(n. C6): p. 14,297-14,323.

6029. D'Arrigo, R.D., C.M. Malmstrom, G.C. Jacoby, S.O. Los and D.E. Bunker. Correlation between maximum latewood density of annual tree rings and NDVI based estimates of forest productivity. *Int. J. Remote Sensing*; 2000; v. 21(n. 11): p. 2329-2336.

6030. Khatiwala, S. and M. Visbeck. An estimate of the eddy-induced circulation in the Labrador Sea. *Geophys. Res. Lett.*; 2000; v. 27(n. 15): p. 2277-2280.

6031. Jacoby, G., M. V. Lovelius, O.I. Shumilov, O.M. Raspopov, J. M. Karbainov, and D.C. Frank. Long-term Temperature Trends and Tree Growth in the Taymir Region of Northern Siberia. *Quat. Res.*; 2000; v. 53: p. 312-318.

6032. Richards, P. Earth's inner core--discoveries and conjectures. *Astronomy and Geophysics*; 2000; v. 41.

6033. Schlosser, P., J.L. Bullister, R. Fine, W.J. Jenkins, R. Key, J. Lupton, W. Roether and W.M. Smethie, Jr. Transformation and Age of Water Masses. In: *Proceedings of the WOCE Conference, Halifax, 1998.*

6034. Vaughan, D.G., A.M. Smith, H. F. J. Corr, A. Jenkins, C. R. Bentley, M.D. Stenoien, S.S. Jacobs, T.B. Kellogg, E. Rignot and B.K. Lucchitta. A review of Pine Island Glacier, West Antarctica: Hypotheses of instability vs. observations of change". *Antarctic Research Series*; 2001; v. 77: p. 237-356.

6035. Gupta, A. and C. Scholz. A model of normal fault interaction based on observations and theory. *J. Struct. Geol.*; 2000; v. 22: p. 865-879.

6036. Driscoll, N., J. Weissel and J. Goff. Potential for large-scale submarine slope failure and tsunami generation along the U.S. mid-Atlantic coast. *Geology*; 2000; v. 28(n. 5): p. 407-410.

6037. Anderson, O.R. Abundance of Terrestrial Gymnamoebae at a Northeastern U.S. Site: A Four-year Study, Including the El Niño Winter of 1997-1998. *J. Eukaryot. Microbiol.*; 2000; v. 47(n. 2): p.148-155.

6038. Plummer, L.N., M.G. Rupert, E. Busenberg, P. Schlosser. Age of Irrigation Water in Ground Water from the Eastern Snake River Plain Aquifer, South-Central Idaho. *Ground water*.

6039. Castro, M.C., M. Stute and P. Schlosser. Comparison of  $4\text{He}$  Ages and  $14\text{C}$  Ages in simple aquifer systems: implications for groundwater flow and chronologies. *Appl. Geochem.*; 2000; v. 15: p. 1137-1167.

6040. Langdon, C., T. Takahashi, C. Sweeney, D. Chipman, J. Goddard, F. Marubini, H. Aceves, H. Barnett, and M.J. Atkinson. Effect of calcium carbonate saturation state on the calcification rate of an experimental coral reef. *Global Biogeochem. Cycles*; 2000; v. 14(n. 2): p. 639-654.

6041. Marchitto, R., G.A. Jones, G.A. Goodfriend, and C. R. Weidman. Precise Temporal Correlation of Holocene Mollusk Shells Using Sclerochronology. *Quat. Res.*; 2000; v. 53: p. 236-246.

6042. Evans, M.N., A. Kaplan, M.A. Cane and R. Villalba, Globality and Optimality in Climate Field Reconstructions from Proxy Data. In: V. Markgraf, Ed. Present and Past Inter-Hemispheric Climate Linkages in the Americas and Their Societal Effects. Cambridge, United Kingdom: Cambridge University Press; 2001: p. 53-72.

6043. D'Arrigo, R.D. and R. Villalba. Review of Dendroclimatic Research in South America: Indicators of Atmosphere-Ocean Climate Variability. In: South American Dendrochrology Handbook.

6044. Bohnenstiehl, D.R. and M.C. Kleinrock. Evidence for spreading-rate dependence in the displacement-length ratios of abyssal hill faults and mid-ocean ridges. *Geology*; 2000; v. 28(n. 5): p. 395-398.

6045. Shi, J., P.G. Richards and W-Y. Kim. Determination of Seismic Energy from Lg Waves. *Bull. Seismol. Soc. Am.*; 2000; v. 90: p. 1-11.

6046. Schlosser, P., R. Bayer, G. Bö nisch, L.W. Cooper, B. Ekwurzel, W.J. Jenkins, S. Khatiwala, S. Pfirman and W.M. Smethie. Pathways and mean residence times of dissolved pollutants in the ocean derived from transient tracers and stable isotopes. *The Science of the Total Environment*; 1999; v.237/238: p. 15-30.

6047. Seeber, L. and C. Sorlien. Listric thrusts in the western Transverse Ranges, California. *GSA Bull.*; 2000; v. 112(n. 7): p. 1067-1079.

6048. Liu, T., W.S. Broecker, J.W. Bell and C.W. Mandeville. Terminal Pleistocene wet event recorded in rock varnish from Las Vegas Valley, southern Nevada. *Paleogr., Palaeoclimatol., Palaeoecol.*; 2000; v. 161: p. 423-433.

6049. Berggren, W.A., M-P. Aubry, M. van Fossen, D.V. Kent, R.D. Norris and F. Quillé vé ré . Integrated Paleocene Calcareous Plankton Magnetobiochronology and Stable Isotope Stratigraphy: DSDP Site 384 (NW Atlantic Ocean). *Palaeogr., Palaeoclimatol., Palaeoecol.*; in prep.

6051. Broecker, W.S. Abrupt climate change: causal constraints provided by the paleoclimate record. *Earth Science Reviews*; 2000; v. 51: p. 137-154.

6052. Ho, D.T. and P. Schlosser. Atmospheric SF<sub>6</sub> near a Large Urban Area. *Geophys. Res. Lett.*; 2000; v. 27(n. 11): p. 1679-1682.

6054. Sambrotto, R. and D. Chayes. The Use of Nuclear Powered Submarines for Oceanographic Research in Ice Covered Regions. In: Proceeding of N'Ocean 2000 International Workshop on Utilization of Nuclear Power in Oceans, Feb. 21-24, 2000, Tokyo Japan. Tokyo: Ship Research Institute, Japan Ministry of Transport.

6055. Atkins, M.S. , A.P. Teske and O.R. Anderson. A Survey of Flagellate Diversity at Four Deep-Sea Hydrothermal Vents in the Eastern Pacific Ocean Using Structural and Molecular Approaches. *J. Eukaryotic Microbiol.*; 2000; v. 47(n. 4): p. 400-411.

6056. Guo, Z, P. Biscaye, L. Wei, X. Chen, S. Peng, T. Liu. Summer monsoon variations over the last 1.2 Ma from the weathering of loess-soil sequences in China. *Geophys. Res. Lett.*; 2000; v. 27(n. 12): p. 1751-1754.

6057. Gregory-Wodzicki, K.M. Uplift history of the Central and Northern Andes: A review . *GSA Bull.*; 2000; v. 112(n. 7): p. 1091-1105.

6058. Susanto, D., A.L. Gordon, J. Sprintall and B. Herunadi. Intraseasonal Variability and Tides in Makassar Strait. *Geophys. Res. Lett.*; 2000; v. 27(n. 10): p. 1499-1502.

6059. Kent, D.V. and P.E. Olsen. Magnetic polarity stratigraphy and paleolatitude of the Triassic-Jurassic Blomideon Fomration in the Funday Basin (Canada) :implications for early Mesozoic tropical climate gradients. *Earth Planet. Sci. Lett.*; 2000; v. 179: p. 311-324.

6061. Peteet, D. Sensitivity and rapidity of vegetational response to abrupt climate change. *Proc. Nat. Acad. Sci.*; 2000; v. 97(n. 4): p. 1359-1361.

6062. Cullen, H.M., P.B. deMenocal, S. Hemming, G. Hemming, F.H. Brown, T. Guilderson, and F. Sirocko. Climate change and the collapse of the Akkadian empire: Evidence from the deep sea. *Geology*; 2000; v. 28(n. 4): p.379-382.

6063. Henderson, G.M. and N.C. Slowey. Evidence from U-Th dating against Northern Hemisphere forcing of the penultimate deglaciation. *Nature*; 2000; v. 404(p.61-66).

6064. Abbott, D., D. Sparks, C. Herzberg, W. Mooney, A. Nikishin and Y. S. Zhang. Quantifying Precambrian crustal extraction: the root is the answer. *Tectonophysics*; 2000; v. 322: p. 163-190.

6065. Walker, D. Core participation in mantle geochemistry: Geochemical Society Ingerson Lecture, GSA Denver, October 1999. *Geochim. Cosmochim. Acta*; 2000; v. 64(n. 17) : p. 2897-2911.

6066. De Menocal, P., J. Ortiz, T. Guilderson, and M. Sarnthein. Coherent High and Low Latitude Climate Variability during the Holocene Warm Period. *Science*; 2000; v. 288: p. 2198-2202.

6067. Ou, H.-W. A Model of Buoyant Throughflow: With Application to Branching of the Tsushima Current. *J. Phys. Oceanog.*; 2001; v. 31: p. 115-126.

6069. Evans, M., A. Kaplan and M.A. Cane. Intercomparison of coral oxygen isotope data and historical sea surface temperature (SST): Potential for coral-based SST field reconstructions. *Paleoceanography*; 2000; v. 15(n. 2): p. 551-563.

6070. Gregory-Wodzicki, K. Relationships between leaf morphology and climate, Bolivia: implications for estimating paleoclimate from fossil floras. *Paleobiology*; 2000; v. 26(n. 4): p. 668-688.

6071. Zheng, Y., R.F. Anderson, A. van Geen and J. Kuwabara. Authigenic Molybdenum Formation in Marine Sediments: A Link to Pore Water Sulfide in the Santa Barbara Basin.

6076. Liepert, B. and U. Lohmann. A Comparison of Surface Observations and ECHAM4-GCM Experiments and Its Relevance to the Indirect Aerosol Effect. *J. Clim.*; 2001; v. 14: p. 1078-1091.

6078. Hemming, S.R., R.H. Gwiazda, J.T. Andrews, W.S. Broecker, A.E. Jennings, and T.C. Onstott. <sup>40</sup>Ar/<sup>39</sup>Ar and Pb-Pb Study of individual hornblende and feldspar grains from southeastern Baffin Island glacial sediments: implications for the provenance of the Heinrich Layers. *Can J. Earth Sci.*; 2000; v. 37 (n. 6): p. 879-849.

6079. Rutberg, R.L., S. R. Hemming and S.L. Goldstein. Reduced North Atlantic Deep Water flux to the glacial Southern Ocean inferred from neodymium isotope ratios. *Nature*; 2000; v. 405: p. 935-938.

6080. Griffin, K.L., D. T. Tissue, M.H. Turnbull and D. Whitehead. The onset of photosynthetic acclimation to elevated CO<sub>2</sub> partial pressure in field-grown *Pinus radiata* Don. after 4 years. *Plant, Cell and Environment*; 2000; v. 23: p. 1089-1098.

6081. Sykes, L. False and Misleading Claims about verification during the Senate Debate on the comprehensive Nuclear Test Ban Treaty. *J. F.A. S.*; 2000; v. 53(n. 3): p. 12.

6082. Kogan, M.G., G.M. Steblov, R.W King, T.A. Herring, D.I. Frolov, S.G. Egorov, V.Y. Levin, A. Lerner-Lam and A. Jones. Geodetic Constraints on the Rigidity and Relative Motion of Eurasia and North America. *Geophys. Res. Lett.*; 2000; v. 27(n. 4): p. 2041-2044.

6084. Giannini, A., Y. Kushnir and M.A. Cane. Seasonality in the Impact of ENSO and the North Atlantic High on Caribbean Rainfall. *Phys. Chem. Earth*; 2001; v. 26(n. 2): p. 143-147.

6087. Clement, A.C., R. Seager and M.A. Cane. Suppression of El Niño during the mid-Holocene by changes in the Earth's orbit. *Paleoceanography*; 2000; v. 15(n. 6): p. 731-737.

6090. Ho, D., W.E. Asher, L.F. Bliven, P. Schlosser and E.L. Gordan. On mechanisms of rain-induced air-water gas exchange. *J. Geophys. Res.*; 2000; v. 105(n. C10): p. 24,045-24,057.

6094. Pederson, N., G.C. Jacoby, R.D. D'Arrigo, E.R. Cook, B.M. Buckley, C. Dugarjav and R. Mijiddorj. Hydrometeorological Reconstructions for Northeastern Mongolia Derived from Tree Rings: AD 1651-1995. *J. Clim.*; 2001; v. 14: p. 872-881.

6095. Spiegelman, M., P. Keleman and E. Aharonov. Causes and consequences of flow organization during melt transport: The Reaction Infiltration Instability in compactible media. *J. Geophys. Res.*; 2001; v. 106(n. B2): p. 2061-2077.

6097. Broad, K and S. Agrawala. The Ethiopia Food Crisis--Uses and Limits of Seasonal Climate Forecasts. *Science*; 2000; v. 289: p. 1693-1694.

6100. Martinson, D.G. and M. Steele. Future of the Arctic Sea Ice Cover: Implications of an Antarctic Analog. *Geophys. Res. Lett.*; 2001; v. 28(n. 2): p. 307-310.

6101. Kent, D.V. and G. Muttoni. Mobility of Pangea: Implications for Late Paleozoic and Early Mesozoic Paleoclimate. In: P. le Tourneau and P. Olsen, Eds. *Tr/J*. New York: Columbia University Press.

6102. Peteet, D.M., Late Glacial Climate Variability and General Circulation Model (GCM) Experiments: An Overview. In: Markgraf, V., ed. *Interhemispheric Climate Linkages*. New York: Academic Press; 2001: p. 417-431.

6103. Gupta, A. and C.H. Scholz. A brittle strain regime transition in the Afar Depression: Implications for fault growth and seafloor spreading. *Geology*; 2000; v. 28(n. 12): p. 1087-1090.

6104. Sweeney, C., D.A. Hansell, C. A. Carlson, L.A. Codispoti, L.I. Gordon, J. Marra, F.J. Millero, W.O. Smith and T. Takahashi. Biogeochemical regimes, net community production and carbon export in the Ross Sea, Antarctica. *Deep Sea Res. II*; 2000; v. 47: p. 3369-3394.



6105. Sweeney, C., W.O. Smith, B. Hales, R.R. Bidigare, C.A. Carlson, L.A. Codispoti, L.I. Gordon, D.A. Hansell, F.J. Millero, Mi-OK Park, and T. Takahashi. Nutrient and carbon removal ratios and fluxes in the Ross Sea, Antarctica. *Deep-Sea Res. II*; 2000; v. 47: p. 3395-3421.

6109. Houghton, R. and R.G. Fairbanks. Water Sources for Georges Bank. *Deep Sea Res. II*; 2001; v. 48: p. 95-114.

6110. Smith, P.C. , R.W. Houghton, R.G. Fairbanks AND D.G. Mountain. Interannual variability of boundary fluxes and water mass properties in the Gulf of Maine and on Georges Bank: 1993-97. *Deep-Sea Res. II*; 2001; v. 48: p. 37-70.

6113. Carlucci, J. and D.V. Kent. Paleointensity record in zero-age submarine basalt glasses: testing a new dating technique for recent MORBs. *Earth Planet. Sci. Lett.*; 2000; v. 183: p. 389-401.

6115. Hemming, S.R., G. C. Bond, W.S. Broecker, W.D. Sharp and M. Klas-Mendelson. Evidence from  $^{40}\text{Ar}/^{39}\text{Ar}$  Ages of Individual Hornblende Grains for Varying Laurentide Sources of Iceberg Discharges 22,000 to 10,500 yr B.P. *Quat. Res.*; 2000; v. 54: p. 372-383.

6116. Houghton, R. and C. Ho. Diapycnal flow through the Georges Bank Tidal Front: A dye tracer study. *Geophys. Res. Lett.*; 2001; v. 28(n. 1): p. 33-36.

6117. Guilderson, T.P., L. Burckle, S. Hemming and W.R. Peltier. Late Pleistocene Sea Level Variations Derived from the Argentine Shelf. *Geochemistry Geophysics Geosystems*; 2000; v. 1: Paper no. 2000GC000098.

6121. D'Arrigo, R., G. Jacoby, D. Frank, N. Pederson, E. Cook, B. Buckley, B. Nachin, R. Mijiddorj and C. Dugarjav. 1738 Years of Mongolian Temperature Variability Inferred from a Tree-Ring Width Chronology of Siberian Pine. *Geophys. Res. Lett.*; 2001; v. 28(n. 3): p. 543-546.

6123. Karner, G.D., B.R. Byamungu, D.J. Ebinger, A.B. Kampunzu, R.K. Mukasa, J. Nyakaana, E.N.T. Rubondo and N.M. Upcott. Distribution of crustal extension and regional basin architecture of the Albertine Rift System, East Africa. *Mar. Pet. Geol.*; 2000; v. 17: p. 1131-1150.

6124. Buck, W. R. Accretional curvature of lithosphere at magmatic spreading centers and the flexural supported axial highs. *J. Geophys. Res.*; 2001; v. 106(n. B3): p. 3953-3960.

6125. Khalturin, V.I., T.G. Rautian and P.G. Richards. A study of small magnitude seismic events during 1961-1989 on and near the Semipalatinsk Test Site, Kazakhstan. *Pure Appl. Geophys.*; 2001.

6127. Hemming, S.R, and S. M. McLennan. Pb isotope compositions of modern deep sea urbidites. *Earth Planet. Sci. Lett.*; 2001; v. 184: p. 489-503.

6128. Seager, R., Y. Kushnir, P. Chang, N. Naik, J. Miller, and W. Hazeleger. Looking for the Role of the Ocean in Tropical Atlantic Decadal Climate Variability. *J. Clim.*; 2001; v. 14: p. 638-655.

6134. Plummer, L.M., E. Busenberg, J.K. Bohlke, R.W. Carmody, G.C. Casile, T.B. Coplen, M.W. Doughten, J.E. Hannon, W. Kirkland, R.L. Michel, D.L. Nelms, B.C. Norton, K.E. Plummer, H. Qi, R. Revesz, P. Schlosser, S. Spitzer, J.E. Wayland, P.K. Widman. Chemical and isotopic composition of water from springs, wells, and streams in parts of Shenandoah national Park, Virginia, and vicinity, 1995-1999. U.S. Geological Survey Water Resources Investigation Report 00-373; 2000.

6135. Sambrotto, R. Colour renewal from space. *Nature*; 1999; v. 397(n. ): pp. 301-302.

6144. Griffin, K.L., O.R. Anderson, M.D. Gastrich, J.D. Lewis, G. Lin, W. Schuster, J.R. Seeman, D.T. Tissue, M.H. Turnbull and D. Whitehead. Plant growth in elevated CO<sub>2</sub> alters mitochondrial number and chloroplast fine structure. *Proc. Nat. Acad. Sci*; 2001; v. 98(n. 5): p. 2473-2478.

6145. Wang, X., J.D. Lewis, D.T. Tissue, J.R. Seemann and K.L. Griffin. Effects of elevated atmospheric CO<sub>2</sub> concentration on leaf dark respiration of *Xanthium strumarium* in light and in darkness. *Proc. Nat. Acad. Sci.*; 2001; v. 98(n. 5): p. 2479-2484.

6158. D'Arrigo, R.D., G. Jacoby, N. Pederson, D. Frank, B. Buckley, B. Nachin, C. Dugarjav and R. Mijiddorj. Temperature Records for Mongolia Derived from Tree Rings. In: *Proceedings of the Conference on Mongolian Paleoclimatology and Environmental Research, 3-4 November 2000*. Palisades, NY : Lamont-Doherty Earth Observatory of Columbia University; 2001: p. 57-58.

6159. Pederson, N., G. Jacoby, R. D'Arrigo, E. Cook, B. Buckley, B. Nachin, R. Mijiddorj and C. Dugarjav. Decadal Drought and Streamflow Variability in East-central Mongolia. In: *Proceedings of the Conference on Mongolian Paleoclimatology and Environmental Research, 3-4 November, 2000*. Palisades, NY: Lamont-Doherty Earth Observatory of Columbia University; 2001: p. 59-68.

6160. Jacoby, G., N. Pederson, B. Nachin, R. D'Arrigo, B. Buckley, D. Frank, C. Dugarjav and R. Mijiddorj. The MATRIP Project and Tree-ring Applications in Mongolia. In: *Proceedings of the Conference on Mongolian Paleoclimatology and Environmental Research*. Palisades, NY: Lamont-Doherty Earth Observatory of Columbia University; 2001.

6168. Broecker, W.S. Converging Paths Leading to the Role of the Oceans in Climate Change. *Ann. Rev. Energy Environ.*; 2000; v. 25: p. 1-19.
6174. Kastens, K. How to identify the "best" resources for the reviewed collection of the Digital Library for Earth System Education. *Computers and Geosciences*; 2001; v, 27: p. 375-378.
6175. Shaw, B.E. and J.R. Rice. Existence of continuum complexity in the elastodynamics of repeated fault ruptures. *J. Geophys. Res.*; 2001; v.105(n. B10): p. 23,791-28,810.
6176. Shaw, B.E. The Edges of Large Earthquakes and the Epicenters of Future Earthquakes: Stress-induced Correlations in Elastodynamic Fault Models. *Pure Appl. Geophys.*; 2000; v. 157: p. 2149-2164.
6179. Greene, A.M. and W.S. Broecker. Utility of glacier observations in climate change detection and attribution studies. In: 12th Symposium of Global Change climate Variations, 14-19 January 2001, Albuquerque, New Mexico. Boston: American Meteorological Society; 2001.
6180. Broecker, W.S. Was the Medieval Warm Global? *Science*; 2001; v. 291: p. 1497-1499.
6184. Broecker, W.S. Are we headed for a thermohaline catastrophe? In: Lee C. Gerhard, William E. Harrison, and Bernold M. Hanson, Eds/. *Geological Perspectives Of Global Climate Change*; 2001: p. 83-95. (American Association of Petroleum Geologists Studies In Geology; v. 47).
6187. Edwards, M.H., G.J. Kurras, M. Tolstoy, D. Bohnenstiehl, B.J. Coakley and J.R. Cochran. Evidence of recent volcanic activity of the ultra-slow spreading Gakkel Ridge. *Nature*; 2001; v. 409(n. 6822): p. 808-812.