

V

- V, 820041
abyssal plain
 cyclic sedimentation, 801078
 inorganic geochemistry, 801074
Angola Basin, geochemistry, 750847
Atlantic Ocean S, history, 740715, 740718,
 740723, 740726
basalt, 240785
 celadonite, 511271
 chemical composition, 320568
 chemical variation, 340303, 340305
 chemistry, 820035, 820038
 Costa Rica Rift Zone, 830155, 830201,
 830205, 830206
 Cretaceous, 511087
 geochemistry, 550599, 550603, 590754
 Mid-Atlantic Ridge, 820422, 820442
 midocean ridge, 820396, 820408
 petrology, 220463, 320568
basement, petrology, 370696, 370700, 370701
Brazil Basin, geochemistry, 720421, 720422
California, Gulf of, gulf mouth, 650406,
 650407, 650410, 650416
chemistry, 650419
clay, trace elements, 170511, 170512, 170513
clay minerals, celadonite, 511271
claystone, basalt, 550707
Cocos Plate, geochemistry, 660684
continental margin, inorganic geochemistry,
 801073
Costa Rica Rift, chalk, 690403, 690404
crystallization, fractional, melting,
 partial, 370543, 370546
deposition, models, 750840
diabase, trace elements, 240785
Emperor Seamounts
 petrology, 550533
 trace elements, 550587
euxinic sediment, shale, black, 750852
geochemical component grouping, 801074
geochemical variation, 810799
geochemistry, 340218, 340220, 370696,
 370700, 370701, 390477, 390490, 620851,
 660684, 720429, 720438, 750951, 801079
accumulation rate, 340561
andesite, 220463
Angola Basin, 750924, 750929, 750933
basalt, 380719
carbon, organic, 720430
Cenozoic sediments, 42B0543, 42B0545,
 42B0551, 42B0562, 42B0599
comparison, other oceanic rocks, 220459
comparison, other rock types, 220463
Cretaceous and Cenozoic sediments, 480708
Guaymas Basin, 640701, 640702
Hess Rise, 620692, 620693
major oxides, 540359
mathematical treatment, 500701
Mid-Pacific Mountains W, 620688
mineral chemistry, 160628
mineralogical, geochemical relationships,
 370702
organic matter separation, 720430
Ti, 720430
trace elements, 220459
Walvis Ridge, 750925
glass, chemical variation, 510977
heavy metals, Cenozoic sediments, 450350
Hess Rise, pyrite-marcasite, 620859
Hess Rise N, post-Jurassic, 620806, 620807
hygromagmaphile element, 820460, 820461,
 820463, 820467
Indian Ocean W, geochemistry, 250405
Japan Trench, sediments, 271223, 271226
major element, geochemistry, 42B0533
melting, partial, 460247
Mid-Atlantic Ridge, basalt, 450495
mineralogy, 650419
 Cretaceous and Cenozoic sediments, 480708
 minor element, geochemistry, 42B0533
 Pacific Ocean SE, basalt, 340218, 340220
 petrology
 geochemical variation, 740757
 geochemistry, 430731, 430732
 rare earth, 460243
 Red Sea, geochemistry, 230981
 Rio Grande Rise, sediment, 720426
 Rockall Plateau, basalt, 810796
 Ross Sea, diamict, 280789
 sediment chemistry, trace elements, 350451
 shale, black, chemical composition, 410875
 Sr isotope, trace elements, 590724
 tetrapyrrole, geochemistry, 630813
 trace elements, 460243
 Cretaceous, 511087
 distribution, 42A0504, 42A0505
 trace elements, incompatible, 820487
 Walvis Ridge, basalt, 740743, 740757
 see also vanadium
V/Fe ratio, Emperor Seamounts, mineralogy,
 550470
V/Pb ratio, basalt, Rb-Sr, 550704
Vaca Muerta Formation, 710881, 710882
 Argentina, 710040, 710448
Valdivia Seamount, 400230, 400365, 750484,
 750503, 750539
Valence, plain, 131252
Valencia, geological, geophysical setting,
 rifting, 42A0889
Valencia Basin, 131430, 131431, 131436
 gypsum, 131436
 marl ooze, 131436
 Mediterranean Sea, lithostratigraphy, 131029
 sand, 131436
 silt, 131436
Valencia Channel
 lithology, 130125
 age, 130104
Valencia, Gulf of, 130673, 130689, 130691,
 131029, 131034, 131039, 131431, 42A0059,
 42A1042, 42A1045
 continental margin, 42A0029
 erosion surface, 42A1045
 geological, geophysical setting
 rifting, 42A0889
 sedimentary cover, 42A0890
 thermal swelling, 42A0889
Mediterranean Sea
 lithostratigraphy, 131034
 Messinian, 130673, 130675, 130676,
 130677, 130678
 mineralogy, 130673
Valencia Ridge, 131036, 131038
Valencia Trough, 130007, 130010, 130091,
 130093, 130104, 130111, 130407, 130470,
 130492, 130607, 130666, 130770, 130772,
 130773, 130806, 131011, 131012, 131015,
 131036, 131217, 131266, 131341, 131343,
 42A0962
alboranite, 130770
alkalinity, 130770
ash, 130767, 130773
ankerite, 130769
dolomite, 130769
layering, 130769
micropegmatite, 130770
montmorillonite, 130769
opal, 130769
plagioclase, 130769
sanidine, 130769
silicon dioxide, 130769
trace elements, 130772
tuff, 130768
basalt, 130767, 130770
basalt, alkali, 130772
basalt, aphanitic, 130768
basalt, vesicular, 130767
compression, Mediterranean Sea, 131011
dacite, 130770
evaporite mineral, isotopes, stable, 130788
geochemistry, volcanic rocks, 130767, 130770
interstitial water, 130806, 130807
magnesium, 130770
Mediterranean Sea, extension, 131011, 131012
Messinian environments, Lago Mare, 42A1025
mineralogy
 calcite, 130607
 chlorite, 130607, 130667
 dolomite, 130607, 130667
 evaporites, 130673
 gravel, 130673
 K-feldspar, 130607, 130667
 kaolinite, 130607, 130667
 mica, 130607, 130667
 montmorillonite, 130607, 130667
 phillipsite, 130667
 plagioclase, 130667
 quartz, 130607, 130667
 petrology, igneous rocks, 130767, 130768,
 130769, 130770, 130772, 130773, 130775
 radiometric age, 130773
 sulfate mineral, 130792
 crystallization, 130793
 isotopes, 130792
 tectonics, 131011, 131012
 trace elements, 130772
 tuff, 130768
 volcanics, 130767, 130770, 130773
 water content, 130770
Valenzuela Formation, 42A0901
Valesco, formations, 400784
Valle Formation, Cretaceous, 630958
Valle Noriga, 641281
Valles Penedes
 geological, geophysical setting
 rifting, 42A0889
 sedimentary cover, 42A0890
Valley of Saucats, 110501
Valparaiso, 710253
Southeast Pacific Basin, evolution,
 geologic, 350724
Valudavur Formation, 220807
vanadium, 540727, 540738
alteration minerals, trace elements, 920496
Angola Basin, petrochemistry, 751101
Assemblage IA(+), 710394
B, trace elements, 920491
basalt
 chemical composition, 320567
 chemistry, 920472
 geochemistry, 430731, 430732
 petrology, 160628, 220459, 220463, 320567
basalt, altered
 chemistry, 511324
 geochemistry, 580792, 580802
basalt, oceanic, petrochemistry, 610642
basement, petrology, 370695, 370702
Blake Basin, 760774
bulk-rock compositions, 540741
carbon, organic, geochemistry, 750828
chemical composition, trace elements, 600461
chemical and mineral composition,
 chemistry, 070967
clay minerals, microelements, 560987
Cretaceous/Tertiary boundary, mineralogy,
 620851
crust, oceanic, hygromagmatophile (HYG)
 elements, 650623

- East Pacific Rise, silicate, hydrothermal, 920375
- Emperor Seamounts
mineralogy, 550470
trace elements, 550586
geochemical history
Jurassic-Cretaceous, 710406
sedimentation, 710405
geochemistry
California, Gulf of, 640696
differentiation, 220463
Guaymas Basin, 640708, 640711
trace elements, 060840
glass, chemical variation, 510979
heavy metals, Cenozoic sediments, 450352
- Hess Rise
post-Jurassic sedimentation, 620820, 620821
rocks, 620863, 620864
- Hess Rise N, sedimentary sequences, 620765
- hygromagmatophile (HYG) elements,
geochemistry, 650631
- igneous rocks, chemical composition, 590724
Indian Ocean SE, sediments, 260542, 260547
Indian Ocean W, basalt, 250548
- inorganic geochemistry, sediments, rocks,
Walvis Ridge, 750950
- Japan Trench
clay minerals, 560987
sediments, 271225, 271228, 571213
- Li, trace elements, 920491
- low partition coefficient elements,
hygromagmatophile (HYG) elements, 600664
- major element, geochemistry, 630694
- mantle, upper, trace elements, 460247
- Mariana Islands, basement, 600615
- Melanesian Basin, ash, 610637
- Mellish Seamount, post-Jurassic
sedimentation, 620834, 620835
- metalliferous sediment, Eocene-Oligocene,
850799
- mineralogy
clinopyroxene, 540762
opaque oxides, 540744
- Pacific Ocean NW, geochemical history,
620786, 620787, 620800
- petrogenesis, modeling, 920444
- Red Sea, geochemistry, 230976
- sediments, Blake Ridge, 760421
- Sr isotope, 600679
- tetrapyrrole, geochemistry, 630813
- tetrapyrrole, diagenetic, pigment, 410835
- trace elements, 850785, 850789
distribution, 42A0493
geochemistry, 630694
iron, 850786
manganese, 850786
partitioning, 850796
transition elements, 920495
- see also V*
- vanadyl
chlorophyll, diagenesis, 571391
limestone, Albian, 620933
- tetrapyrrole, geochemistry, 630787, 630813,
640809
- tetrapyrrole, diagenetic, pigment, 410832,
410834, 410835
- Vancouver Island, 180233, 180549, 180551,
180588, 180633, 180880, 180964, 180969,
181015, 660421
- Indian Ocean W, mineralogy, 181018
northern, 180987
sand, mineral, heavy, 180880, 180881
- Vandfoldsdalen formation, 810918
- Vanuatu, 901161
- lithologies, minor, tephra, vitric, 901483
- tephra, source, 901170
- Vardar River, 42A0945
- Moroccan Basin, margin, 500815
- ocean, 500815
- ophiolite, trough, 42A0946
- Tethys, Mediterranean Sea, 42A0945, 42A0946
- variole
basalt
chemical composition, 320563
petrology, 160620, 320563
basalt, altered, geochemistry, 580810
geochemistry
moderate-relief, 160620
sheaflike intergrowth, 160620
- variolite
alteration, basalt, 300483
basalt, 450423
Blake Basin, 760713
crystallization, basalt,
augite-plagioclase, 450423
- Variscan Front
Goban Spur, continental margin, 801158
regional tectonics, deformation, 801154,
801155
- Variscan orogeny
Goban Spur, continental margin, 801156,
801158
- Moroccan Basin, margin, 500805
- Pyrenean orogeny, 801153
- regional tectonics, 801153
- Varna
basin, 480447
Paratethys, paleogeography, 42A0988
- Varswater Formation, continental shelf,
onshore geology, 400967
- varve, 47B0452
- Black Sea Basin, chronology, 42B0499,
42B0500, 42B0501
- ¹³C, 42B0620
carbonate, 42B0435, 42B0437, 42B0446,
42B0449, 42B0486
¹⁸O, 42B0620
- Cenozoic sediments, mineral composition,
42B0420
- chondrites, 42B0505
- chronology, Black Sea, 42B0499
- clay, 42B0435, 42B0437, 42B0449
- Guaymas Basin, palynology, 641230
- kerogen, sediment cores, 42B0739
- laminated/nonlaminated sediments, organic
geochemistry, 640921
- lithology, 42B0130, 42B0134, 42B0137,
42B0138, 42B0141, 42B0143
- clay, 42B0130
sedimentary structure, 47A0030
magnetic field, secular variation, 42B1069
- Messinian environments, salinity crisis,
42A1009
- mud, diatomaceous, Guaymas Basin, 641207
- origin, 42B0503, 42B0506
- patterns, 42B0501
Scandinavia, 42B0502
sedimentation rate, 42B0502
seekreide, 42B0502
- sedimentation rate, 42B0501
anoxic conditions, 42B0501
sapropel, 42B0501
turbidity current, 42B0501
- Vasco da Gama Seamount, 47B0026, 47B0639,
47B0641, 47B0646, 47B0649, 47B0663,
47B0753
- Iberian margin W, evolution, 47B0770
- Vatnajökull, 120369
- Vatmandry, volcanism, Madagascar, 250532
- Vavilov Seamount, 130407, 130428
- Veidivotn, 220463
- vein, 050533, 060297, 120365, 130196,
130264, 130340, 140058, 140224, 150368,
160058, 180935, 180936, 180938, 180939,
180940, 180941, 190329, 210037, 220216,
230041, 230121, 230297, 230298, 230387,
240330, 260466, 260471, 270134, 270552,
270553, 280220, 280864, 290321, 291103,
291104, 300242, 300414, 320048, 320197,
330030, 330045, 340028, 340087, 340088,
340118, 340218, 370029, 390241, 390337,
400069, 42A0157, 42A0509, 42A0517,
460299, 47B0053, 500045, 510363
- alteration
mineralogy, 340385, 340386, 340389, 340390
temperature, 920499, 920500
- alteration, low-temperature
formation, 340407
mineral, transparent, 460301
- alteration minerals, trace elements,
920495, 920496
- alteration, nonoxidative, formation, 340407
- andesite, 180936, 180937
- clay minerals, 180937
- phillipsite, 180937
- aragonite filled, 180939, 180941
- ash, ore deposit, 870685
- B, trace elements, 920491
- Barbados Ridge, basalt, 780385
- Barremian-Aptian, ⁸⁶Sr/⁸⁷Sr ratio, 620782
- basalt, 050533, 270553, 291103, 300414,
411107, 42A0509
- alteration, 411107
- Barbados Ridge, 780385
- basement, 270552
- calcite, 42A0509
- clay, 42A0509
- clinopyroxene, 42A0509, 42A0510
- formation, 340385
- gas, 450649
- K/Ar age, 160651
- Melanesian Basin, 610647
- Mid-Atlantic Ridge, 820422, 820423,
820430, 820431, 820440, 820442, 820506
- Middle America Trench, 840796, 840804
- mineral, opaque, 42A0509
- mineral, secondary, 340407, 340408,
340409, 340410, 340411, 340413, 340414,
340415, 340416
- mineralogy, 370825, 370826
- petrography, 260466, 260471, 291103,
291104, 340218, 460301
- petrology, 160618, 160639, 180937,
180941, 330579
- pillow, 411107
- plagioclase, 42A0509
- sill, 270553
- basalt, altered
carbonate, 580913, 580914
major element, 580891
trace elements, 580891
- basalt, oceanic, Melanesian Basin, 610647,
610648, 610649, 610650, 610654, 610657,
610658, 610659, 610662
- basalt, pillow, Middle America Trench,
840796, 840804
- basement
basalt, 050533, 260466, 260471, 42A0509,
42A0517
calcite, 920502
petrology, 220420, 220422
- Bauer Basin, formation, 340407
- Bermuda Rise, sulfur isotope, 511147
- bitumen, serpentine, 450649
- calcite, 070030, 070056, 140090, 150368,
160416, 160418, 170059, 170106, 170250,
210037, 260301, 291104, 38S0224,

- calcite (Cont.)
38S0241, 38S0266, 410172
- carbon isotope, stable
carbonate, 410947
vein filling, 410938
- carbonate
stable isotope, 580905
ultramafic rocks, 820525
- carbonate mineral, stable isotopes, 550653, 550655
- carbonate, secondary, stable-isotope
evidence, 580905, 580906, 580907, 580908, 580909, 580910
- chemical and mineral composition, basalt, 350473
- chemistry
carbonate, 370825
clay, 370826
zeolite, 370825
- chert
calcite, 320439
carbonate, 320439
chalcedony, 320439
formation, 320444
opal-CT, 320439
porcellanite, 320439, 320444
quartz, 320439
- claystone, basalt, 550707
- Costa Rica Rift, basalt, 690528, 690529, 690574, 690576
- Costa Rica Rift Zone
basalt, 830236, 830261, 830283, 830284
stockwork-like zone, 830266, 830269, 830274
- crust, oceanic, carbonate, 830299, 830300
dewatering, hydrocarbon, C₁-C₇, 571349
diagenesis, nonoxidative, 340407
- East Pacific Rise, basalt, 540406
- Falkland Plateau, basement, 360896
- flow, basalt, 411107
- geochemistry, calcite, 160618, 160639, 390490
- gneiss, petrology, 360896
- Goban Spur, copper, native, 800851
- Guatemala
slope sediment, 840629
upper slope, 840928
- interstitial water, geochemistry, Baja California, 640679
- Japan Trench, structural feature, 870809, 870825
- K/Ar age, celadonite, 920511
- Li, trace elements, 920491
- limestone
Caribbean Sea C, 150775
stable isotope, 150799
- lithology, 060196, 060297, 060299, 060352, 130124, 160058, 230121, 230298, 230387, 240330, 250196, 250266, 250295, 260028, 260080, 260303, 260331, 290048, 290125, 290231, 320048, 320197, 330030, 330169, 350042, 360216, 380178, 390107, 390108, 390118, 410240, 42A0157
- ash, 130122
- basalt, 140224, 170059, 170106, 270134, 300242, 340028, 340087, 340088, 340118
burrow mottling, 370029
calcite, 150368, 500045
chert, 320197
dolomite, 130264
evaporites, 130196
limestone, 130264
marl, dolomitic, 130340
Mesozoic deposits, 47B0053
network, 290231
ooze, dolomitic, 130340
quartz, 330045
sandstone, 400069
sandstone, volcanic, 120365
shale, 400069
- Magdalena Bay, sulfide chemistry, 630679
- major element, chemistry, 370646, 370647, 370651, 920492, 920493
- Melanesian Basin, ash, 610637
- Mendoza Rise, lithology, 920436
- Mid-Atlantic Ridge, basalt, 460301
- Middle America Trench
structural features, 660801
structure, 640645, 640646, 670645, 670648
mineral, diagenetic, nodule, dolomitic
silicified, 801085
mineral, secondary
laumontite, 670551
petrography, 920506
mineral, transparent, petrography, 460301
- Nankai Trough, structural features, 870798, 870806
- network, 290231
- ocean basin
basalt, 050533
petrography, 42A0509
- ore, deposit, 540803, 540804
- oxygen isotope, geochemistry, 340338, 350510
- oxygen isotope, stable
carbonate, 410947
vein filling, 410938
- Pacific Ocean, basalt, 340385
petrology, 180937, 180941
gravels, 960494
igneous rocks, 291103, 291104, 42A0509, 42A0517
sand, 960496
- Philippine Sea, lithology, 061172
- physical properties, ooze, carbonate, 061172
- pillow lava, basalt, 411107
- porcellanite, 320439
- sandstone, source, 840931
- sediment-interstitial water interaction
ankerite, secondary, 571270
calcite, secondary, 571270
- sedimentary structure, 840950
- Shikoku Basin
basalt, 580905
structure, 870802
- ⁸⁶Sr/⁸⁷Sr ratio, carbonate, 920502
- stable isotope
basalt, 350502, 350503, 350504
clay, 350504
- tholeiite
basalt, 050533
petrography, 42A0509
- trace elements, 920493, 920494, 920495
- uranium, distribution, 370555
- volcanics, Pacific Ocean C, 291103, 291104
- volcanism, basalt, 050533
- zeolite, ophiolite, 840804
- vein, calcite
alteration, temperature, 511183, 920500
Atlantic Ocean NE, evolution, 411220
basement, calcite, 920502
carbonate, secondary, vein, 580908, 580909
- Indian Ocean W, regional aspects, 250754
- ⁸⁶Sr/⁸⁷Sr ratio, formation, 920502
- vein, carbonate
basalt
petrology, 580847
Philippine Sea, 580913
basalt, altered
carbonate, 580913, 580914
geochemistry, 580792, 580802
petrochemistry, 580792, 580802
carbonate, secondary, vein, 580907, 580909
- Daito Ridge, isotope composition, 580913
formation temperature, 580913
origin, Philippine Sea, 580905
- Philippine Sea
carbon isotope, 580913
oxygen isotope, 580913
- Shikoku Basin, basalt, 580913
- vein, en echelon, Guatemala, slope sediment, 840629, 840630
- vein filling
alteration, mineralogy, 370799, 370801, 370802
- carbon isotope, stable, carbonate, 410938
- Guatemala, slope sediment, 840626, 840628, 840630
- Japan Trench, structural feature, 870825
- oxygen isotope, stable, carbonate, 410938
- Philippine Sea, lithology, 061215
- physical properties
chert, 061215
mudstone, radiolarian, 061215
- sedimentary structure, 840950
- structure, 870822
- vein, hydrothermal
Pacific Ocean, 340377
- Pacific Ocean E, ore minerals, 540805
- vein, imbricated, sandstone, volcanic, 120365
- vein mineral
alteration, temperature, 920500
- Costa Rica Rift Zone
basalt, 830233
deposition, 830201, 830297
stockwork-like zone, 830268
- crust, flux, 830261
- K/Ar age, celadonite, 920511
- Layer 2, crust, oceanic, 340767
- ⁸⁶Sr/⁸⁷Sr ratio, deposition, 920500
- vein, quartz
basalt, altered, carbonate, 580913
- physical properties
chert, 061216
mudstone, radiolarian, 061216
- Ross Sea, basement, 280864
- vein structure, 840811, 840818
- accretionary complex, Lesser Antilles, 780542
- bedding dip, 870823
- bedding, parallel, 870821
- bedding plane, 840815, 840819
- Boso Peninsula, 870821
- clay minerals, 840813
- consolidation, 870823
- development, 840812, 840814
- dewatering, 870821
- displacement, 870821
- distribution, 840815
- dragging, 840815, 840819
- fault, normal, 870821
- faulting, 870824
- formation, 840818, 840820
- Guatemala, 840811
origin, 670645
- hydrofracturing, 870823, 870824
- Japan Trench, 870821, 870823, 870824, 870825
- layering, 870822
- Lesser Antilles, accretionary complex, 780542
- lithology, 840812
- Mexico S, 870821
- Middle America Trench, 840811
origin, 670645
- mineral grains, alignment, 870821
- mudstone, 840812
- Nankai Trough, 870802, 870806, 870824
- offsets, 870821
- rotation, 840815, 840819

- shear stress, 840815
 shearing, 840815, 840819
 Shikoku Basin, 870802, 870806
 smectite, 840813
 solution effects, 870822
 stress, formation, 840818
 tilting, 870823
 vein filling, 870822
 veining
 amphibolite, Middle America Trench, 840800
 basalt, Mid-Atlantic Ridge, 820506
 basalt, altered
 geochemistry, 580840
 major element, 580890
 trace elements, 580890
 Guatemala, upper slope, 840928
 Hess Rise, pyrite-marcasite, 620861
 mantle, 820422, 820430
 volcanic sediment, lithostratigraphy, 901176
 veinlet, 060045, 110318, 140054, 160023,
 160025, 170059, 170106, 170153, 170267,
 170288, 170393, 200047, 220723, 260365,
 270020, 270134, 270135, 270283, 280125,
 280374, 280863, 280864, 280867, 290368,
 290369, 380528, 42A0182, 430117, 47A0028
 alteration, products, 450615, 450616,
 511278, 511281
 Atlantic Ocean
 Cenozoic sediments, 140813
 Cretaceous sediment, 140813
 basalt, petrography, 270552, 270553, 42A0516
 basalt, altered, chemistry, 511326
 basement
 basalt, 42A0516
 petrography, 270552, 270553
 petrology, 180941, 220420
 calcite, 170020
 Caribbean Sea, sedimentary structure, 150834
 chert, textures, 330859
 Costa Rica Rift Zone, basalt, 830236
 diagenesis, Mesozoic, 271014
 geochemistry, mineral, secondary, 450615,
 450616
 Hess Rise, pyrite-marcasite, 620855
 Indian Ocean NE, Cretaceous, 220723
 Japan, forearc, 870920
 lithology, 060045, 160025, 260365, 270283,
 280125, 280374, 290368, 290369, 42A0182,
 430117, 670557
 ash, 140054
 basalt, 170020, 170153, 170288, 270020,
 270134, 270135
 chlorite, 670558
 clay, 140054
 mudstone, nannofossil, 170106
 Pliocene to Eocene, 110318
 quartz, 040151
 sedimentary structure, 47A0028
 ocean basin, petrography, 42A0517
 Pacific Ocean NW, basement, 200047
 Patton Escarpment, petrography, 630687
 petrology
 40S0663, 40S0665
 igneous rocks, 270552, 270553
 quartz, 040151
 Ross Sea, basement, 280863, 280864, 280867
 Shikoku Basin, 870915
 sill, petrography, 270553
 tholeiite, petrology, 180941
 volcanism, clay, 870636
 veinlet, dewatering
 Guatemala, upper slope, 840928
 Japan Trench, 870778
 Velasco Formation, 240861, 400784
 Velez Blanco, Spain, 260773
 Vella Gulf, Messinian environments, Lago
 Mare, 42A1022
 Vema Channel
 Atlantic Ocean S, Paleogene, 720983, 720984
 carbon, organic, carbonate, 720833
 hydrocarbon, aliphatic, alkane, 720834
 lithology
 Antarctic Bottom Water, 721021, 721022
 microfossil assemblages, 721020
 Northern Hemisphere, glaciation, 720988
 organic matter, Quaternary, Pliocene, 720837
 regional tectonics, ridge jump, 720959
 thermohaline flow, Quaternary, 720989,
 720990
 Vema Fracture Zone, 040006, 040077, 040078,
 040589, 040662, 050502, 130056, 140261,
 140859, 370329, 390027, 390507, 430235,
 430816, 690504, 820525
 accumulation rate, 040670
 Amazon Fan, source, 040662
 Atlantic Ocean S, 391099
 Atlantic Ocean W
 sedimentation rate, 040662
 turbidites, 040662
 basalt
 failure, 390507, 390511
 K/Ar age, 390547
 petrology, 390547
 basement, basalt, 390507, 390509, 390511
 basement reflector, 040662
 breccia, basalt, 390547
 crystallization
 olivine, 390507, 390509
 plagioclase, 390509
 Demerara Plain, 040662
 gabbro, 390547
 Guiana Basin, 040662
 lithology, valley, 390039
 major element, 390509
 basalt, 390509
 Mid-Atlantic Ridge, 040662
 axis, 040662
 mineral, heavy, 040662
 peridotite, serpentinized, 390511, 390547
 petrology, 390547
 rare earth elements, 390509
 sand, 040662
 sea floor spreading, 040662
 sedimentary structure, Pleistocene, 390407
 sedimentation rate, 040662
 oldest sediment, 040670
 serpentinite, 390511
 South America NE, origin, 040662
 terrigenous sediment, Guiana Basin, 390453,
 390465
 transform fault, 780027
 transport, Pleistocene sediment, 040662
 Vema Gap, 510036, 510040, 510360, 720485,
 720809
 Bermuda Rise, 510006, 510028, 510030
 Vema Ridge, 780051
 Vema Terrace, 720516
 Vema Transverse Valley, 390039
 Vema Trench, 080864, 240607
 Indian Ocean, geophysical measurements,
 240607
 Vena del Gesso Basin, 42A1071
 Vendee, 801111
 Venetian Alps, 930881
 Venezuela, 030441, 040593, 040597, 080040,
 131349, 131395, 140283, 150696, 151019,
 151084, 151096, 151100, 151101, 220765,
 270589, 270993, 410661, 430577, 47B0362,
 600575, 660661, 660662, 801002
 Atlantic Ocean S, mineralogy, 040326
 Barquisimeto, 151002
 coast, 150034, 150169, 150848, 151104
 coastal lowlands, 360909
 Colombia, coast, 040598
 continental margin, 780084
 continental shelf, 200907, 210909, 660863,
 780094
 Dutch Antilles, continental rise, 150937
 eastern, 151103
 Guacharo limestone, 770586
 northern, 150929, 151105
 northern coast, 151046
 Venezuela N, limestone, metamorphosed,
 Caraquito Formation, 790653
 Venezuelan Basin, 131360, 151051, 151078,
 151081, 200816, 200856, 200891, 440589,
 610705, 720859, 780027, 780084, 780096
 anomalous oceanic areas, 040665
 Antilles, 040665, 040666
 Aves Ridge, 040666
 basalt, compressional wave velocities,
 151013, 151015
 Beata Ridge, 040668
 fault, 040666
 carbonate, solution fluctuations, 150805
 Carib beds, deformation, 040666
 Caribbean Sea
 basin, 040665
 crust, 040665
 history, 040666
 Caribbean Sea E, magnetic anomaly, 151023
 Central America, 040665
 Oligocene-Miocene, 040666
 chert, 040666
 clay, carbonate-free red, 040666
 clay, zeolitic, ooze, radiolarian, 040666
 Colombian Basin, 040665
 compressional wave velocities, 151013
 crust, 151002
 discontinuous reflector, 040666
 dolerite, 040003, 040008, 040009, 040010,
 040145, 040215, 040243, 040592, 040665,
 040666, 151096, 200107, 390616
 compressional wave velocities, 151013,
 151015
 eastern, 140391
 Eocene-Miocene disconnection, 040666
 hiatuses, 151051
 lithology, 150282
 Magdalena, 040665
 magnetic anomaly, 151023
 Mesozoic/Cenozoic boundary, 040666
 Pacific Ocean NE, cruise synthesis, 151090
 Panama, Costa Rica, 040666
 Pliocene connection, 040666
 sedimentary hiatus, 151051
 bottom current, 151060, 151061
 calcium, 151058
 dissolution, 151061
 sedimentation rate, 040670
 CCD, 040670
 Miocene-Recent sediments, 040670
 siliceous sediments, accumulation, 040666
 turbidites, burial, 040666
 Venezuelan Plain, 151058, 151103
 Venice, Messinian environments, Lago Mare,
 42A1022
 Vening Meinesz Fracture Zone
 South Fiji Basin
 geology, 300619, 300625, 300626
 history, 300629, 300630
 Venta la Virgen, exposed land, 42A0899
 venting
 dike, crust, oceanic, 830465
 Galapagos Fracture Zone, hydrothermal
 activity, 540408
 hydrothermal deposits, origin, 540419
 Ventura Basin, 230767, 630025, 630042,

- 630814, 630950, 630951, 870620
 accumulation rate, California Borderland S, 630949
 Philippine Sea, Paleogene-Neogene, 310852
 Southern California Borderland, volcanic rocks, 630951
 tetrapyrrole, geochemistry, 630813, 630814
 Veracruz, 790653
 Mexico, Gulf of, regional aspects, 010625
 Tabasco, diapir, salt, 010108, 010625
 Veracruz Basin, 100071, 42A0745
 Veracruz Gap, 100071
 lithology, 100072
 Verdun Formation, 340747
 Vergons, France, 47B0728
 vermiculite, 340617, 580670, 580671, 580672, 590598, 590600
 Asia, source, 580669, 580673, 580676
 Atlantic Ocean N, clay, 481094
 chlorite, 220016
 mineralogy, 220416
 clay, 960580
 stratigraphy, 870639
 clay minerals, 590598
 source, 590600, 590602
 Costa Rica Rift Zone
 basalt, 830225, 830226, 830228, 830230, 830235, 830238, 830284
 stockwork-like zone, 830268
 East Pacific Rise, 540308
 Falkland Plateau, basement, 360905
 fossils, minerals, rare and unusual, 340617
 Indian Ocean W, mineralogy, 42B0457
 mineralogy
 basalt, amygdaloidal, 220428
 basalt, vesicular, 220428
 mudstone, petrology, 180904, 180909, 180911
 origin
 alteration, 580673
 transport, 580673
 Philippine Basin W, 590598
 Philippine Sea N, 580673
 Philippine Sea S, clay minerals, 590600, 590602
 sandstone, petrology, 180920
 sediments, Atlantic Ocean NE, 941097
 Shikoku Basin, 580670, 580671, 580672
 source, 580673
 smectite, mineralogy, 220425
 smectite, mineralogy, 220419, 220428, 220429
 sources, 590600, 590602
 stratigraphy
 clay minerals, 600469
 Mariana Trough, 600468
 Pacific Plate, 600468
 volcanism, clay, 870636
 West Mariana Basin, 590598, 590600
 Verona, 110806
 Verrill Canyon Formation, 930945
 Moroccan Basin, margin, 500812
 vesicle, 120366, 120368, 150333, 160235, 160305, 160370, 170059, 170288, 180018, 190630, 200391, 200395, 210061, 210202, 230121, 230171, 250196, 250266, 250295, 260080, 260160, 260331, 260332, 270094, 280022, 280085, 280125, 280374, 290125, 300242, 300407, 300414, 320048, 320319, 330576, 330577, 330578, 330589, 340118, 42A0157, 430043, 430045, 430117, 430165, 430166, 480177, 490186
 alteration
 mineralogy, 540776
 products, 450615, 511278, 511281
 remnant arc debris, 590737
 andesite, alkalic, 180937
 petrology, 180937
 Baja California Seamount Province
 basalt, 630716
 petrography, 630689
 basalt, 300414, 42A0509, 810744, 810745
 alteration, 411107
 calcite, 42A0509
 clay, 42A0509
 clinopyroxene, 42A0509, 42A0510
 glass, 450551
 Mid-Atlantic Ridge, 820440
 midocean ridge, 820396, 820397, 820413
 mineral, opaque, 42A0509
 mineralogy, 370825, 370826, 540695, 540700
 petrochemistry, 630711, 630727
 petrography, 260466, 291103, 340190, 340218, 42A0516, 540695, 540700, 670577
 petrology, 160622, 160639, 330576, 330577, 330578, 330579, 330581, 330589, 580846
 pillow, 411107
 plagioclase, 42A0509
 basalt, alkali andesine, petrology, 180943
 basalt, altered
 chemistry, 511326
 geochemistry, 540673, 580813
 basalt, sparsely phyrlic, crystal morphologies, 540627
 basement, 180937
 basalt, 42A0509, 42A0516
 petrology, 180937, 220427, 220428, 220431
 California, Gulf of, basalt, 650530
 chemistry
 carbonate, 370825
 clay, 370826
 zeolite, 370825
 Cocos Plate, basalt, 660707
 conglomerate, andesitic, 300408
 cooling unit, petrography, 511022
 Costa Rica Rift, basalt, 690574, 690576
 Cretaceous sediments, basalt, 250736
 crystallization, fractional, basalt, oceanic, 460283, 460284, 460286
 dolerite, 630713, 630714
 filling, 630713
 East Pacific Rise, crest, 540812
 Emperor Seamounts, petrology, 550511, 550516, 550522, 550576, 550582
 ferromanganese sediment, 190630
 flow, basalt, 411107
 flow unit, petrography, 511022
 Galapagos Islands, hydrothermal field, 540812
 geochemistry, 160639
 geologic setting, 160622
 mineral, secondary, 450615
 glass, basalt, 450551
 Guadalupe Island, alteration, 630714
 hydrothermal alteration, 920505
 igneous rocks, chemistry, 630733
⁴⁰K/⁴⁰Ar age, Goban Spur, 800944
 lithology, 160235, 160305, 160370, 170288, 180018, 180040, 210061, 230121, 250196, 250266, 250295, 260160, 260332, 280022, 280085, 280125, 280374, 290125, 320048, 320319, 42A0157, 430043, 430045, 430165, 430166, 540756
 basalt, 170059, 270094, 300242, 310069, 340118
 filling, 800940
 sandstone, volcanic, 120366
 major element, characteristics, 920438
 Mariana Trough, 600614
 basalt, 600602
 Mendoza Rise, lithology, 920436
 mineral, secondary, formation sites, 540807
 mineralogy, 330589
 ocean basin, petrography, 42A0509, 42A0517
 OCP Ridge, basalt, 540811
 ore, deposit, 540804
 Patton Escarpment
 alteration, 630713
 petrography, 630687
 petrography, 330578, 330581, 330589, 540740
 petrology, 540796
 igneous rocks, 291103, 42A0509, 42A0517
 iron oxide, 540801
 OCP Ridge, 540637
 Siqueiros Fracture Zone, 540638
 physical properties, abundance, 920539
 pillow lava, basalt, 411107
 segregation, 460283, 460284, 460286
 basalt, oceanic, 460283, 460284, 460286
 Shikoku Basin, basalt, 580895, 580896, 580897, 580898
 Siqueiros Fracture Zone, basalt, 540810
 spherule, 450551
 tholeiite
 genesis, 920447
 geochemistry, 590682
 petrography, 42A0509
 petrology, 590682
 volcanoclasts, 810636
 volcanics
 Pacific Ocean C, 291103
 petrology, 180937, 180943
 vesicle, filled
 geochemistry, 160639
 lithology, 670557
 vesicle, pipe
 Pacific Ocean W, volcanic rocks, 210491
 South Fiji Basin, geology, 300623
 vesicularity
 basalt
 geochemistry, 490606
 pyroxene, 590700, 590703, 590705
 carbonate mineral, stable isotopes, 550653
 drilling
 basement, 490833
 Reykjanes Ridge, 490828
 lithology, 230171, 330171, 430117, 490186
 sandstone, volcanic, 120368
 Mendoza Rise, basalt, 920537
 Pacific Ocean NW, clay, 200391
 tephra, petrography, 901164
 tholeiite
 geochemistry, 590682
 petrology, 590682
 vesiculation
 basalt, petrology, 340190
 basalt, altered, geochemistry, 540673
 basement, basalt, 490609, 490611, 490715
 eruption, 490715
 hyaloclastite, 460343
 igneous rocks, geochemistry, 370659
 petrology
 ilmenite, 540801
 mineralogy, 540800
 Vesuvius, 130124
 Monte Somma, 131034
 Vibla Formation, 760874
 Viborg Formation, 38S0141
 Victoria, Australia, 210713, 38S0689, 900498
 boninite, geothermometry, 600695
 Browns Creek clay, Eocene, 710862
 ultramafic rocks, petrology, 450592
 Victoria Falls, 131215, 131217
 continental shelf, onshore geology, 400973
 Victoria Land, 280727, 280746, 280752, 280772, 280835, 280861, 280862, 280867, 280890, 280901, 280906, 290237, 290271, 290284, 291117, 291119, 291157, 360858
 Antarctica, dry valleys, 280933

- general synthesis
 climate, 280936
 lithology, 280922
 ice rafting, sources, 280752
 lithology, 280374, 280379
 Ross Sea, basement, 280867
 Ross Sea W, Miocene, 280771
 sand, petrology, 280746
 Vienna Basin, 080998, 131224, 131257,
 42B0518, 42B1206, 800669, 900962
 Austria, 110615, 410501
 Mediterranean Sea E, history, 42B1206
 Messinian environments, Lago Mare, 42A1020
 Vigla Limestone, 110813
 Vigo Seamount, 120079, 47B0005, 47B0025,
 47B0029, 47B0080, 47B0663, 480641,
 720723, 800959
 acoustic stratigraphy, 47B0091
 bitumen, 47B0543
 calcareous nannofossils, biostratigraphy,
 47B0327
 carbon, 47B0555
 alkane, 47B0554
 ammonium, 47B0553
 carbon isotope, 47B0554, 47B0559
 gas, 47B0559
 petroleum, 47B0559
 carbonate
 iron, 47B0497
 isotopes, 47B0497, 47B0501
 manganese, 47B0497
 ¹⁸O, ¹³C, ³⁴S, 47B0493, 47B0494
 oxygen isotope, 47B0477, 47B0497
 stable isotopes, 47B0477, 47B0479,
 47B0485, 47B0488, 47B0489
 strontium, 47B0497
 Cenozoic, sedimentary evolution, 47B0054
 continental block, 47B0757
 correspondence analysis, 47B0469, 47B0472
 Cretaceous carbonaceous facies, palynology,
 47B0451
 Cretaceous formations
 chronostratigraphy, 47B0287
 ecostratigraphy, 47B0296
 Cretaceous sediments, lipid, 47B0565,
 47B0566, 47B0567, 47B0569
 deposition, Cretaceous and Cenozoic, 47B0373
 eroded surfaces, 47B0770
 evolution, structural, 47B0648, 47B0651
 Galicia, continental margin, 47B0651
 gas pocket, 47B0561
 geophysical data, 47B0613
 Goban Spur
 Cenomanian-Turonian, 800979
 evolution, 801205
 Hauterivian, sedimentology, 47B0403
 hydrocarbon, C₂-C₇
 Cape Bojador, 47B0561
 distribution, 47B0561
 methane, 47B0562
 toluene, 47B0561
 Iberian margin W, evolution, 47B0761,
 47B0766, 47B0770
 interstitial water, 47B0577, 47B0578
 limestone, 47B0026
 lithology, Cenozoic deposits, 47B0047,
 47B0049
 morphology, 47B0766
 organic geochemistry, Goban Spur, 800959
 paleomagnetic results
 demagnetization, 47B0602, 47B0604
 hematite, 47B0604
 magnetic inclinations, 47B0599, 47B0607,
 47B0608, 47B0609
 natural remanent magnetization, 47B0599
 porosity, 47B0609
 palynomorphs, sedimentology, 47B0451
 Pendragon Escarpment, regional
 implications, 800979
 planktonic foraminiferal biostratigraphy
 Neogene, 47B0255
 Paleogene, 47B0237
 sedimentation, bottom current, 47B0047
 sedimentology, 47B0403
 sediments, petroleum generating potential,
 410817, 410818, 47B0547, 47B0548, 47B0550
 shale
 Cretaceous, 47B0513, 47B0514, 47B0517,
 47B0523, 47B0524, 47B0525, 47B0526
 organic petrology, 47B0523
 shale, black, 47B0719
 Cretaceous, 47B0533, 47B0534, 47B0535,
 47B0536
 stratigraphy, 47B0639
 structure, 47B0651
 tetrapyrrole, pigment, 47B0572, 47B0573,
 47B0574, 040431, 040435, 380785, 380786,
 380787, 430657, 430658, 430660, 430661,
 47B0571
 Viking Graben, 38S0285, 38I210
 North Sea, rifting, 480006
 Viking Seachannel, 120930
 Villa Cisneros, 140962
 Vinales Formation, 110222, 110616
 Moroccan Basin, margin, 500812
 Vincentown Formation, 120435, 120974, 931351,
 931352, 931353, 931396, 950784
 Vindobonian molasse, formations drilled,
 exposed land, 42A0897, 42A0898
 Vinorama Canyon, 641072, 641073, 641077,
 641081
 Viqueque Formation, Timor, 270567
 Virgin Islands, 140345, 780097, 820325
 Virgin Rocks, 120036
 Virginia, 020004, 930789, 930946, 930947,
 930957, 931353, 950015, 950766, 950800,
 950802
 lower continental rise hills, 440023,
 440024, 440028
 Visakhapatnam, 220407
 Vishnu Fault, Arabian Sea, plate tectonics,
 230530
 Vishnu Fracture Zone, 230530
 vitrinite
 Angola Basin, organic geochemistry, 750984
 Atlantic Ocean N, petroleum generating
 potential, 38S0671, 440600, 440602,
 480952
 basalt, intrusion, 580741
 Blake Basin, reflectance, 760930
 Brazil Basin, 720823
 Cape Basin, shale, black, 711030
 Cape Bojador
 hydrocarbon, extractable, 47A0512
 sediments, 410817, 47B0548
 clay, black, geochemistry, 430638
 coal
 petrology, 220485
 reflectance, 790494
 contact metamorphism, kerogen, 410821,
 410824
 diagenesis, thermally controlled, 630945,
 630947
 Falkland Plateau, kerogen, 711006
 gas, reflectance, 870884
 hydrocarbon, low molecular weight, 711034
 hydrocarbon, extractable, organic
 petrology, 580756, 580758, 580759,
 630820, 630825, 630829, 630833, 640841,
 640851
 Japan Trench, sediments, 870897, 870902
 kerogen
 electron paramagnetic resonance, 410835,
 410845
 reflectance, 870898
 sediments, 410845, 410847
 limestone, Albian, 620930, 620934
 maceral, 870881
 inertinite, 870881
 maturation, reflectance, 870884
 Mazagan Escarpment, 790782, 790796
 reflectance, 790796
 Mesozoic sediments, organic matter, 360943
 Mid-Pacific Mountains W, Aptian sediments,
 620910
 New Jersey, continental margin, 950654,
 950655
 organic analyses, reflectance, 440618
 organic chemistry, 870888
 organic geochemistry
 Angola Basin, 750461, 750463, 750464
 Baja California, 640941
 reflectance, 410815, 571299, 720827,
 800987
 sandstone, 571297
 Walvis Ridge, 750465
 organic matter, 950655
 Aptian-Jurassic, 711016
 geochemistry, 640858, 640862
 maturity, 800984
 petrology, 40S0663,, 500568, 500610,
 500612
 vertical distribution, 711006
 organic petrography, reflectance, 800987
 paleoenvironmental comparison, euxinic
 condition, 711030
 palynological residue, organic matter,
 maturation index, 640747
 petroleum generating potential
 Magdalena Fan, 630958
 organic matter, 640872
 reflectance, 640871, 640875
 sediments, 42B0729, 42B0731, 430664,
 430665
 thermal history, 380801, 380802
 thermal maturity, 640874
 Quaternary sediments
 protokerogen, 640930
 reflectance, 640926
 reflectance
 Blake Basin, 760930
 Mazagan Escarpment, 790796
 Rio Grande Rise, 720823
 recycling, 720824
 Rockall Plateau, sediments, 810812, 810815
 sapropel, Cretaceous, 620891, 620896
 sediments
 Blake Basin, 760930
 kerogen, 410824
 reflectance, 410821, 410824
 shale, black
 thermal history, 711021, 711024
 thermal maturation, 711021, 711025
 tetrapyrrole, diagenetic, pigment, 410825,
 410835, 410836, 410837
 transport, organic matter, 870882
 Vigo Seamount
 sediments, 410817, 47B0548
 shale, 47B0525
 Walvis Ridge, sediments, 751058, 751063
 vitrinite, autochthonous
 limestone, Albian, 620923
 sapropel, Cretaceous, 620895
 vitrinite, primary
 petroleum generating potential
 sediments, 42B0732
 thermal maturity, 640874
 vitrinite, recycled

- Brazil Basin, 720823
organic matter maturity, reflectance values, 800984
vitrinite-huminite
kerogen, reflectance, 870898
Nankai Trough, thermal maturity, 870900
organic matter, petrology, 500609, 500610
vitrophyre
alteration, remnant arc debris, 590739
Horizon Tablemount, 200668
lithology, 280022
Vityaz Trench, 300003
vivianite, diagenesis, slope sediments, 840575
Vizcaino Bay, 630024
Vizcaino Desert, Baja California C, 641090
Vizcaino Massif, 670792
Vizcaino Peninsula, 630269, 630958, 670750
Baja California SW, tectonics, 630958
Vocantian Basin, 770340, 770343, 770344, 770347, 770348, 770359, 770360, 770365, 770368, 931328
Cretaceous cyclic sedimentation, 770339
Vocantian Trough, 620675, 620676, 770348, 770361, 931096, 931326
Mid-Pacific Mountains, Cretaceous, 620669
Vogel Seamount, 430009, 430012, 430015, 430032, 430438, 430474, 430477, 430479, 430515, 430734, 430735, 430743, 430847, 430877, 430890, 440504, 760168
Atlantic Ocean C, basin, 511507
Balearic Plain, 430173
basalt, 430728
radiometric age, 430739
Cenozoic silicoflagellate, coccolith stratigraphy, 440778
clinoptilolite, Atlantic Ocean NW, 430470, 430471, 430472
lithology, volcanic activity, 430176
Mesozoic variegated, red sediments, 440504
petrology, 430725
phillipsite, Atlantic Ocean NW, 430470, 430471, 430472
volcanism, 430155
volcano, height, 430877
void ratio, 650675, 720520, 720521
Atlantic Ocean NW, physical properties, 410031
Brazil Basin S, 720521, 720524
clay, Pacific Ocean NW, 860738, 860741, 860748
deformed sediments, physical properties, 180898
Japan Trench, 870843, 870844
Middle America Trench, 840745
Nankai Trough, 870844
Pacific Ocean NW, 860738, 860741, 860748
Rio Grande Rise, 720539
sediment composition, compaction, 751131
shear strength, 270427
Volador lineament, formation, 621067
volcanic, Cape Bojador, continental margin, 47A0797
Volcanic Highlands
geologic setting, 840923
sandstone, source, 840932
volcaniclast, 670524
volcaniclastics, 330875, 550503, 590621, 670524
alteration
Cretaceous, 890529
remnant arc debris, 590737
analcite, 330876
Angola Basin, geologic evolution, 750518
ash, 550504
Assemblage IIIA(+), basalt, 710395
Atlantic Ocean N, clay, 481096
Atlantic Ocean SE
Cretaceous, 740765, 740767, 740768, 740770, 740771, 740773, 740774, 740775, 740776, 740778, 740779, 740780, 740781
paleoenvironmental evolution, 740666
basalt, 550504
geochemistry, 590754, 590781
pyroxene, 590697
volcanism, 550504
basalt, epiclastic, 550504
basement, geochemistry, 590743
bivalves, 330876
calcite, 330876
carbonate, diagenetic, isotopic survey, 630596
chemistry, 330876
hydration, 330877
clast, clay, 330876
claystone, red variegated, 440506
Cretaceous
origin, 890529
primary composition, 890529
Walvis Ridge, 740765
East Mariana Basin
alteration, 890529
primary phase chemistry, 890459
secondary phase chemistry, 890433
Emperor Seamounts, mineralogy, 550466
enriched sediments, basalt, 710400
fan, submarine, Toyama Trough, 310490
ferruginous rind, 330876
geochemical history, sedimentation, 710406, 710436, 710437
geochemistry, 550503
basalt, 550461
laterite, 550461
ooze, siliceous calcareous, 550458
Guatemala, trench, 670518, 670525
heavy metals, Cenozoic sediments, 450350
Hess Rise, post-Jurassic sedimentation, 620820, 620821, 620825, 620826, 620831
Hess Rise N, post-Jurassic, 620809, 620812, 620813, 620817
hyaloclastite, 330876
Indian Ocean NE
Cretaceous, 220733
sediment history, 220720
Indian Ocean W, mineralogy, 170518
Japan, source, 580706
Kyushu-Palau Ridge, source, 580706
limestone, siliceous, 330875
lithification, 330875
lithology, 38S0119, 250242, 330045, 430215, 480176
basalt, 170059
calcite, 250243
glass, volcanic, 250243
palagonite, 250243
Lofoten Islands, Oligocene-Miocene, 38S0071
Manihiki Plateau, 330881
lava/seawater derivation, 330879
Mariana Islands, fore arc, 600651
Mariana Ridge W, Miocene, 580706
Melanesian Basin, Cretaceous, 610542, 610543
Mellish Seamount, post-Jurassic
sedimentation, 620834, 620835, 620839
mineral, heavy, 440510
mineralogy, 550503, 600457
sediment history, 38S0119
Neogene sedimentation, lithology, 47A0610
Norwegian Basin, Oligocene-Miocene, 38S0071
oceanic basalt resemblances
Ba, 330877
niobium, 330878
yttrium, 330878
zirconium, 330878
Pacific Ocean N, abyssal floor sediments, 550504
Pacific Ocean NW, geochemical history, 620787, 620789, 620797, 620799, 620802
Pacific Ocean SE, Sr isotope, 920400
Pacific Ocean W, mineralogy, 200324
Paleogene shallow-water sediments, 550504
paragenetic assemblages, Assemblages IIIA(+), 710428
Philippine Basin, genesis, 310863, 310864, 310868
Philippine Sea, 590621
acoustic properties, 590519, 590520
Philippines, genesis, 310876
primary phase chemistry, East Mariana Basin, 890459
rare earth elements, tuff, 590653
Rockall Rise SW, structure, 481078
Saint Martin, Eocene, 780089
sediment accumulation, basalt, 710402
sedimentation, geochemical aspects, 710428
seismic velocity, elastic constants, 430769
sideromelane, 330876
slump fold, 330875
smectite, mechanisms of formation, 590600
South Fiji Basin
geology, 300627
history, 300629
Southern California Borderland, volcanic rocks, 630951
stratigraphy, Paleocene-pre-Oligocene interval, 481078
structure
cross-lamination, 330875
deformation, 330875
grading, 330875
tephra, 550504
tholeiite
geochemistry, 590682
petrology, 590682
Ti/Zr ratio
basalt, 710400
distribution, 710398
geochemical significance, 710397
volcaniclastic matter, distribution, 550503, 550504
volcanism, Neogene, 47A0703, 47A0714
Walvis Ridge
Cretaceous, 740765
transect, 740658
zeolite, 220733
volcaniclastics, acid
Hess Rise N, post-Jurassic, 620812
Mellish Seamount, post-Jurassic sedimentation, 620841
Ti/Zr ratio, distribution, 710398
volcanics, 170429, 170430, 170431, 170444, 170485, 180935, 180936, 180937, 180938, 180939, 180940, 180941, 180942, 180943, 180944, 190615, 190616, 190625, 190633, 190634, 210523, 210530, 210538, 300407, 330750, 340289, 450479, 600709, 670557, 810913, 810918
actinolite, 670563
age, 330761, 330766
ages, 550660
Aira, 870624
alkane, C₄-C₇, 380807
alteration, 180937, 190619, 190621, 190634
temperature, 210538
altered, mineral, secondary, 620971
amygdale, 180937, 180939
andesite, 300407
petrography, 300407
andesite, alkalic, 330766
andesitic composition, 670557

- apatite, 150969, 180943
 Aracena, 801109
 aragonite, 180939, 180941
 argillization, 210530, 210535, 210538
 Atlantic Ocean N
 eastern, 480771
 Mediterranean Sea, 110805, 110819
 Atlantic Ocean NC, Mesozoic sequences,
 410992
 Atlantic Ocean S
 history, 740728
 Rio Grande Rise, 391125
 Sierra Leone Rise, 391123
 Atlantic Ocean SW, basin, evolution, 360998
 augite, 180935, 180937, 180943
 autobrecciation, 210530, 210535
 barite, Hess Rise, 620971, 620972, 620973
 basalt, 190634
 acoustic basement, 180941
 California, Gulf of, 650579
 geochemistry, 590783, 590790, 590794
 norm, 180940, 180941, 180943, 180944
 olivine, tholeiitic, 180942
 petrochemistry, 630711, 630727
 Rb-Sr, 550696
 basalt, alkali, 330758, 330766
 basalt, alkali olivine, 190618
 basalt, altered
 major element, 580888
 trace elements, 580888
 basalt, crystalline, 180935
 basalt, porphyritic, 180939
 basement, geochemistry, 590746, 590747,
 590750, 590751
 biotite, 150969, 340606
 breccia, 210530
 formation, 330750
 breccia, volcanic, 330750
 calcite, 180939, 180941, 190634
 Hess Rise, 620971, 620972
 California, offshore, 630960
 Cape Bojador, continental margin, 47A0798,
 47A0801
 carbon isotope, Hess Rise, 620972
 chemical and mineral composition, 350468,
 350469
 chlorite, 180939
 clay, 190634, 210535
 clay mineralogy, 750865
 clay minerals, Hess Rise, 620973
 clinopyroxene, mineralogy, 190620, 190621,
 340606
 Cocos Plate, 610557
 crust, oceanic, 670557
 comparisons, other volcanic provinces, MAR,
 540825, 540826
 cooling unit, 210535
 Coral Sea E, geology, 300660
 cracks, 190634
 Cretaceous, Line Islands, 330789
 crystallization, 210523, 210524, 210530
 Cu, 190634
 dacite, conglomerate, 571285, 571286
 deposition, Equatorial Plateau, 300440
 detrital modal analysis, turbidites, 870624
 devitrification, 210524, 210525, 210530,
 210535
 diagenesis, sediments, 750857
 distribution, 810913
 dolerite, 630714, 630719
 alteration, 630711
 Dominica, eruption, 780303
 elastic wave velocities
 bulk density, 310607
 Central Basin Fault, 310609
 compressional wave velocity, 310607
 Philippine Sea, 310609
 velocity-density, 310608
 Emperor Seamounts, petrology, 550509
 emplacement, 190616, 190617, 190618, 210523
 eruption, 210524, 210535, 210538
 extrusion, 210535
 Falkland Plateau, basement, 360897
 feldspar, 150969, 190622
 age, 190622
 feldspar, alkali, 180943
 feldspar, potassium, 190619, 190621
 ferromanganese sediment
 alteration, 190634, 190635
 iron-rich sediment, 190633, 190634
 fluidal banding, 210525, 210535
 fluxing, 190634
 fore arc, petrology, 600721, 600722
 geochemistry, 190619, 190620, 190621,
 190625, 670557
 glaciation, detritus, 360858, 360860
 glass, 150970, 180936, 180937, 180941,
 180943, 210524, 210525, 210535, 340605
 basalt, 150970, 340605
 glass, volcanic
 composition, 600495
 Mariana Trough, 600494
 Tonga, 600494
 globule, 210530
 Goban Spur
 continental margin, 801131
 evolution, 801202
 goethite, 180943
 groundmass, 210525
 Guadeloupe, eruption, 780303
 Guatemala, continental slope, 670557, 670569
 Guatemala Trench, 610557, 670569
 halloysite, 210535, 210538
 hawaiite, 330758, 330765
 hawaiite, sodic, 330758, 330766
 hematite, 180943
 Hess Rise, 620967, 621035, 621041
 mineral composition, 620971
 pore water, 620973
 seismic reflection, 621051
 stable isotope, 620971
 hornblende, 150969, 340606
 hydrogen isotope, Hess Rise, 620973
 hydrothermal activity, fluctuation, 920598
 hypersthene, 180937, 180943
 igneous rocks, chemical composition,
 590719, 590725
 illite, 210538
 ilmenite, 180939, 180941
 Indian Ocean C, noncarbonate sediment,
 220492
 iron, 180940
 iron oxide, 190634
 iron-titanium oxide, 180935
 Jingu Seamount, age, 550685, 550686,
 550687, 550688
 K-feldspar, 340605, 340606
 K-feldspar, diagenetic, Pacific Ocean,
 330801
 kaolinite, 210538
 Kyushu, 870613
 lithology, 170474, 170475, 170477, 170480,
 170481, 170482, 170483, 170485, 170487,
 170490, 170492, 170496, 170498, 210523,
 210525, 210530, 230297, 310030, 670557
 low-grade metasomatism and spilites,
 170476
 sand, 100092
 sandstone, volcanic, 120366, 120368
 Lord Howe Rise, rhyolite, 210523
 magma, original types, 170438
 magmatic affinity, 670557
 magmatic texture, 190625
 magnetic anomaly, basement, 820026
 magnetite, 180939, 180941, 180943
 major element, 180935
 argillaceous sediments, 580724
 distribution, 670557, 670558
 Mariana Islands, fore arc, 600709, 600735
 Martinique, eruption, 780303
 Melanesian Basin, geological evaluation,
 610844, 610845, 610848, 610849, 610850
 Mellish Seamount, post-Jurassic
 sedimentation, 620843
 Mexico, Gulf of, regional aspects, 100744
 microcrystalline matrix, 180937
 microlite, 180937, 180939, 180943
 Mid-Pacific Mountains, 200667
 composition, 621079, 621081
 Middle America Trench, Costa Rica, 840552
 mineral, opaque, 180939, 180941, 180943
 mineral, secondary, 210535, 210538
 mineralogy, 180935, 180936, 190618, 190621,
 190625, 210523, 210525, 210530, 670557,
 670559
 montmorillonite, 210535, 210538
 mugearite, 180943, 330758, 330765, 330766
 muscovite, 340606
 nephelinite, potassic, 330756
 olivine, 180937, 180939
 mineralogy, 180935, 180939, 180941,
 180942, 180943, 190620
 organic crust, behavior, 670557
 orthopyroxene, mineralogy, 340606
 oxygen isotope, Hess Rise, 620972
 Pacific Ocean C, 170429, 291103, 291104,
 291105
 alteration, diagenetic, 170443
 chlorite, 170433
 Cretaceous, 330789
 deformational features, 170444
 feldspar, 170432
 major element, 170443
 mica, 170433
 mineralogy, 291103, 291104
 minor element, 170443
 Pb, 170431
 petrochemistry, 170434, 170436, 170437,
 170438, 170439, 170440, 170441, 170442,
 170443
 petrography, 291103, 291104
 phyllosilicate, 170432
 plagioclase, 170432
 rare earth elements, 170431, 291104,
 291105, 291106
 sedimentary components, 170443
 serpentine, 170434
 trace elements, 170430
 volcanism, 170443
 Pacific Ocean N, 170429
 Meiji Guyot, 190900
 Pacific Ocean SW, 210481
 Eastern Marginal Basin Province, 210904
 island arcs, 300702
 Pacific Ocean W, elastic wave velocity,
 310607
 palagonite, 180935
 Patton Escarpment, alteration, 630714
 petrochemistry, 170434, 450479
 alteration, diagenetic, 170434, 170437
 isotopic relationships, 170440, 170441
 magma, 170438, 170439, 170440
 petrography, 330754, 330756, 330758,
 330765, 330766, 330767
 petrology, 180936, 180938, 180942, 190615,
 190616, 190625, 330750, 600709
 age, 330761
 alteration, 180937, 180939, 180940,

petrology (Cont.)

- 180941, 180943, 190619, 190621
 amygdale, 180937
 chilled margins, 180941
 crystal, 180937, 180939, 180941, 180943
 crystallization, 180935
 emplacement, 190616, 190617, 190623
 eruption, 180937
 fault zone, 180938
 fractures, 180939
 groundmass, 180941
 inclusions, 180937
 magmatic texture, 190625
 phenocryst, 180936, 180937, 180939
 sand, 180943, 960498
 sill, 180939
 tholeiitic similarities, 190625
 veinlet, 180941
 vesicle, 180937, 180943
 xenocrysts, 180937
 zoning, 180937, 180939, 180943
 Philippines, genesis, 310875, 310876
 phillipsite, 180935, 340606
 phonolite, 330766
 plagioclase, 150969, 150971, 150972,
 180937, 180939, 340605
 mineralogy, 150971, 180935, 180939,
 180941, 180943, 190620, 190621, 210530,
 340605
 polymict breccia, clast, 600648
 Porcupine Plain, age, 801197
 pore water, Hess Rise, 620973
 potassium, 210523, 210525
 pumice, 210523, 210530
 pyrite, Hess Rise, 620971, 620972, 620973
 pyroxene, 150969, 180939, 340606
 mineralogy, 150969, 180935, 180939,
 180941, 190621
 quartz, 150969, 210523, 210530, 340606
 rare earth, Southern Ocean, 291103
 rare earth elements, geochemistry, 600735,
 600742
 Red Sea, geology, 230817
 rhyolite, conglomerate, 571285, 571286
 rhyolite, vitrophyric, 210523, 210525
 Rio Grande Rise, subsidence, 720974
 Rio Grande Rise N, regional setting, 250692
 Rivera Plate, alteration, 630719
 Ross Sea W, basalt, 280772
 sand, Pacific Ocean NW, 310508
 sandstone, limestone-cemented, 330766
 sea floor
 anorthite, 540819
 East Pacific Rise, 540819
 magma, 540819
 Siqueiros Fracture Zone, 540819
 spreading rate, 540819
 seamounts, 190622
 seismic stratigraphy, 901336
 South Mernoo Knolls, 901334
 serpentine, mineralogy, 180941
 Siletz River, 340381
 silicate, authigenic, 340606
 smectite, Hess Rise, 620973
 Snake River, 430032
 Somali Basin, volcanism, 250539
 South Fiji Basin
 geology, 300624, 300625
 history, 300630
 Southern California Borderland, volcanic
 rocks, 630951
 Southern Ocean, rare earth, 291103
 spherule, formation, 210530
 spinel, 180939
 mineralogy, 180941
 Sr isotope
 arc, 590725
 eruption, submarine, 590719
 stable isotope, Hess Rise, 620971
 sulfur, basalt, 370561
 sulfur isotope, Hess Rise, 620972
 tachylite, 180943
 tholeiite, 180935, 180936, 190618, 330766
 geochemistry, 590682
 tholeiitic similarities, 190625
 trace elements, 180936, 180937, 180938,
 180940, 180942, 180943, 180945, 340289,
 670563
 distribution, 670557, 670563, 670564,
 670567, 670570
 eruption, 340289
 evolutionary history, 340289
 Valencia Trough, 130772
 weathering, 340291
 trachyte, 330767
 tuff, 210523, 210525, 210530
 ultramafic rocks, 330750
 Valencia Trough, 130767, 130770, 130773
 vesicle, 180937
 volcanic deposit, Lord Howe Rise, 901185
 volcanism, Eocene-Oligocene, 901183
 Walvis Ridge, basalt, 740739
 Yellow River, Snake River, 430746
 Yellowstone, 430032
 zeolite, 150970, 150971, 180943
 zircon, 150970, 340606
 Zn, 190634
 zoning, 190617, 190620, 190621
 volcanics, acidic, Tohoku Arc, geology, 870716
 volcanics, intrarift
 Goban Spur, evolution, 801204
 gravity anomaly, modeling, 801143
 volcanics, shoshonitic, Pacific Ocean SW,
 island arcs, 300703
 volcanism, 040305, 040325, 040666, 050017,
 050058, 050109, 050205, 050257, 050277,
 050298, 050311, 050369, 050423, 050529,
 050531, 050532, 050533, 050590, 050613,
 060044, 060059, 060070, 060072, 060146,
 060172, 060174, 060197, 060198, 060223,
 060225, 060247, 060248, 060295, 060296,
 060298, 060350, 060351, 060390, 060449,
 060450, 060493, 060495, 060540, 060541,
 060558, 060559, 060587, 060588, 060682,
 061132, 061135, 061138, 061139, 061218,
 070029, 070056, 070327, 070727, 070823,
 070988, 071010, 080289, 080623, 080677,
 090040, 090408, 090452, 090617, 090941,
 100025, 100026, 100030, 100057, 100071,
 100072, 100092, 100121, 100126, 100189,
 100197, 100198, 100203, 100204, 100261,
 100266, 100298, 100301, 100708, 110012,
 110013, 110016, 110227, 110819, 110820,
 110905, 110918, 110924, 110946, 110947,
 120049, 120054, 120167, 120168, 120259,
 120260, 120261, 120265, 120321, 120365,
 120366, 120369, 120370, 120682, 120764,
 120766, 130122, 130124, 130195, 130227,
 130338, 130369, 130423, 130491, 131034,
 131035, 140058, 140139, 140140, 140187,
 140221, 140819, 140861, 150021, 150022,
 150153, 150218, 150224, 150279, 150280,
 150282, 150302, 150333, 150337, 150368,
 150408, 150926, 160050, 160057, 160061,
 160154, 160155, 160159, 160234, 160237,
 170055, 170059, 170106, 170152, 170253,
 170267, 170288, 170295, 180020, 180033,
 180034, 180040, 180172, 180288, 180295,
 180378, 180412, 180912, 190025, 190095,
 190096, 190097, 190171, 190220, 190281,
 190292, 190329, 190375, 190417, 190418,
 190466, 190468, 190556, 190633, 190889,
 200011, 200033, 200037, 200039, 200053,
 200067, 200068, 200069, 200071, 200074,
 200101, 200341, 200361, 200391, 210018,
 210020, 210021, 210024, 210036, 210037,
 210038, 210041, 210059, 210060, 210061,
 210062, 210106, 210110, 210200, 210201,
 210202, 210216, 210335, 210336, 210337,
 210481, 210488, 210709, 210713, 220015,
 220016, 220017, 220038, 220039, 220041,
 220042, 220086, 220120, 220122, 220196,
 220215, 220270, 220271, 220492, 220495,
 220497, 220720, 220723, 220731, 220733,
 220743, 220745, 230039, 230120, 230171,
 230297, 230387, 240018, 240021, 240128,
 240129, 240199, 240251, 240284, 240291,
 240329, 240330, 240394, 240395, 240404,
 240472, 240474, 240480, 250031, 250032,
 250093, 250193, 250194, 250243, 250266,
 250294, 250295, 260080, 260160, 260161,
 260237, 260243, 270016, 270019, 270020,
 270027, 270091, 270094, 270132, 270199,
 280022, 280027, 280053, 280370, 280372,
 280374, 290048, 290125, 290134, 290195,
 290196, 290321, 290367, 300030, 300032,
 300044, 300071, 300072, 300075, 300134,
 300143, 300193, 300233, 300239, 300241,
 300243, 300446, 300459, 310029, 310030,
 310031, 310053, 310078, 310133, 310136,
 310138, 310173, 310193, 310194, 310197,
 310198, 310204, 310280, 310281, 310320,
 310354, 310355, 310410, 310443, 310487,
 310490, 310508, 310511, 320020, 320048,
 320080, 320162, 320196, 320198, 320217,
 320220, 320230, 320238, 320239, 320298,
 320325, 330043, 330045, 330059, 330112,
 330123, 330305, 330309, 330318, 330780,
 330781, 330919, 340025, 340113, 350174,
 360020, 360031, 360148, 360214, 360261,
 360262, 360890, 370028, 370205, 370241,
 370242, 370365, 380027, 380035, 380037,
 38S0067, 38S0070, 38S0071, 38S0073,
 38S0081, 38S0087, 38S0089, 38S0092,
 38S0117, 38S0119, 38S0248, 38S0261,
 38S0285, 38S0054, 38S0120, 380120, 380161,
 380163, 380164, 380166, 380168, 380170,
 380172, 380176, 380177, 380178, 38S0197,
 38S0198, 38S0200, 38S0205, 38S0214,
 38S0217, 38S0238, 38S0242, 380391,
 380453, 380455, 380524, 380525, 380528,
 380530, 380597, 380598, 380600, 380656,
 380657, 390110, 390147, 390165, 390239,
 390241, 390243, 390333, 390336, 390376,
 390377, 390381, 390399, 390403, 400233,
 410237, 410251, 410329, 410332, 410428,
 410497, 410992, 411099, 411111, 411117,
 411133, 42A0036, 42B0144, 42A0155,
 42A0156, 42A0226, 42A0233, 42A0234,
 42A0235, 42A0239, 42A0327, 42A0328,
 42A0478, 430041, 430043, 430044,
 430045, 430046, 430056, 430163, 430164,
 430165, 430166, 430168, 430176, 430177,
 430201, 430204, 430211, 430215, 430225,
 430232, 430334, 430445, 430469, 430470,
 430811, 430814, 440491, 440971, 47A0027,
 47A0028, 47A0032, 47B0033, 47B0038,
 47A0603, 47A0613, 47A0647, 47A0658,
 47A0666, 47A0703, 47A0704, 47A0707,
 47A0710, 47A0714, 47A0742, 47A0745,
 47A0746, 47A0780, 47A0781, 47A0796,
 47A0797, 47A0026, 480069, 480175,
 480176, 480177, 480178, 480179, 480222,
 480711, 480839, 481145, 490025, 490026,
 490027, 490029, 490059, 490102, 490104,
 490163, 490232, 490237, 490319, 490343,
 490427, 510043, 510047, 510360, 510753,
 650329, 730796, 810633, 810640, 810913,

- 890385
 accumulation rate, metal, 340583
 acoustic stratigraphy, 061304
 adjusted volcanic height
 crust, 430877
 plate, 430877
 Africa
 ash, 411045
 climate, 411045
 dissolution, 411042, 411043 glass,
 volcanic, 411045 Miocene, 411033, 411045
 Pliocene-Pleistocene, 411033 pyrite,
 411033 sand, 411034, 411035, 411037,
 411039 sea level, 411045
 Africa NW, 411033 sand, 410497
 Africa SE, 250531 Cretaceous-Recent, 250532
 Jurassic, 250532
 Karroo, 250531, 250532
 Lebombo Range, 250532
 Precambrian, 250531
 age, Desirade, 780303
 alteration, remnant arc debris, 590737
 Angola Basin, 751103
 petrochemistry, 751103
 Antarctica, glaciation, 291040
 Antigonish Highlands, 801109
³⁹Ar/⁴⁰Ar age, boulders, 571281, 571282
 arc, Philippine Sea, 590621
 ash, 320546, 561027
 age, 050531, 050532
 Alaska, Gulf of, 180833
 biotite, 050531
 clay, 050531
 distribution, 660692, 660693
 geochemistry, 660690
 glass, 050531
 glass, volcanic, 561028
 hornblende, 050531
 Middle America Trench, 660688
 mud, vitric, 600475
 phillipsite, 050531
 pumice, 561028
 tuff, 561028
 Atlantic Ocean C, basin, 511510
 Atlantic Ocean N, 810913
 clay, 481095
 Paleozoic, 801109
 Atlantic Ocean NE
 evolution, 411221, 411234, 411237,
 411239, 411241
 Paleocene-Eocene, 810913
 Atlantic Ocean NW, sedimentary evolution,
 430806, 430811, 430815
 Atlantic Ocean S, 430853
 Argentine Basin, 391117, 391121
 Cretaceous, 720980
 Malvinas Outer Basin, 391110
 Paleogene, 720983
 Rio Grande Rise, 391124
 Atlantic Ocean SE, paleoenvironmental
 evolution, 740672, 740673, 740677
 Atlantic Ocean W, Aves Ridge, 040666
 authigenic minerals, chemistry, 600462
 autochthonous sediment, Neogene, 47A0666
 Azores, mantle, 370591
 basalt, 330922, 330923, 810896
 age, 050534
 alteration, 050533, 050534
³⁹Ar/⁴⁰Ar age, 340442
 chemistry, 450458
 fracture zone, 540719
 geochemistry, 590753, 590787, 590788,
 590789, 590790, 590791, 590792
 geochronology, 411116, 411117
 K/Ar age, 340442
 Line Islands, 330651
 mantle, 820395
 Middle America Trench, 660703
 midocean ridge, 820395
 mineral chemistry, 550615
 petrochemistry, 490736
 petrology, 580861, 580862, 580864,
 580865, 590669, 590674, 590679
 radiometric age, 430740, 430744
 Rb-Sr, 550695, 550703
 sill-pillow complex, 610675
 basalt, alkali, 330780, 330781, 330783
 basalt, altered
 major element, 580883
 trace elements, 580883
 Bermuda, 430232
 Oligocene, 510028
 Bermuda Rise, basalt, 340775
 Blake Basin, 760443, 760446
 Brazil Basin, sedimentation comparison,
 721004, 721005
 calcareous facies, 291151
 California, Gulf of, 650329
 Canary Islands, 430032, 430034
 origin, 47A0794
 Cape Bojador, continental margin, 47A0773,
 47A0794, 47A0795, 47A0796, 570795
 Cape Verde Islands, 38S0939
 carbonate, 061302
 carbon isotope, 170505
 oxygen isotope, 170505
 carbonate, secondary, vein, 580905
 Caribbean Sea, 020395, 150972, 150973,
 330779, 340608, 411117, 930981
 geochronology, 411117
 mineralogy, 150969, 150970, 150971,
 340605, 340606
 seamounts, 330779, 330780, 330781, 330783
 Caroline Abyssal Plain, chalk, 200074
 Cenozoic sediments, lithology, mineralogy,
 geochemistry, 450330
 Central America, 840892
 Pliocene-Pleistocene, 040665, 080041,
 090452, 090618, 090941, 150331, 150407,
 150513, 150974, 150989, 151077, 151103,
 160053, 160151, 160573, 160615, 160899,
 160904, 220507, 411240, 42A0943
 western continental slope, 840936
 Central Pacific Basin, 610823
 Challenger Plateau, 901183, 901185
 chemistry, 411108, 411111
 chlorophyll derivatives, geochemistry,
 610619
 clay, 870638
 Eocene to Pleistocene, 580683
 Miocene, 580669
 sedimentation influence, 870636, 870638
 clay mineralogy
 andesite-dacite, 650372
 stratigraphic evolution, 750863
 clay minerals
 Pacific Ocean NW, 200341
 stratigraphy, 720386, 720388
 Tertiary, 291081
 claystone, basalt, 550709
 Cocos Plate, geochemistry, 660683
 Columbia River, 810913
 Comodu, 630270
 Comoro Islands
 archipelago formation, 250533
 Khartala Volcano, 250533
 continental margin, structural evolution,
 481048
 Coral Sea E, geology, 300661
 Cretaceous, 890385
 Cretaceous sedimentation, 890413
 East Mariana Basin, 890413
 Cretaceous-Tertiary, unconformity, 390403
 Cretaceous/Tertiary boundary,
 paleoenvironmental history, 740690
 crust, 061302, 170911
 crust, oceanic, 481075
 currents, Oligocene, 901231
 dacite, conglomerate, 571286
 Daito Basin, 580634, 580683
 Daito Ridge, 580634, 580683
 Davie Ridge, 250539
 montmorillonite, 250539
 Deccan, 810913
 Deception Island, 490679
 deep-sea trench, sedimentary facies, 670609
 deposition
 chalk, nannofossil, 250495, 250496
 ooze, nannofossil, 250495, 250496
 diagenesis, worldwide changes, 020423
 distributions, basalt, 710403
 East Mariana Basin
 Albian to Campanian, 890425
 Cretaceous sedimentation, 890413
 sedimentary history, 890654, 890655,
 890666, 890667, 890668
 East Pacific Rise, 540059
 Deep-Tow studies, 540059
 magmatism, axial, 540839
 sediments, 650375
 East Pacific Rise C, biostratigraphy, 920255
 Easter Island, 700328
 Edoras Basin, 810634, 810640
 Emperor Range, 550008, 550019, 550660,
 550685
 Emperor Seamounts, 200700
 mineralogy, 550468, 550470, 550474
 Eocene, 390403, 720962
 Eocene-Oligocene
 continental rift system, 901184
 mid-oceanic ridge, 901185
 rifting, 901183
 subduction, 901183
 tuff, 901185
 euxinic sediment, shale, black, 750852
 Falkland Plateau E, sedimentation, 360890
 Faroe Islands, 810913
 age, 810919
 flow, 330919
 fossils, minerals, rare and unusual,
 340617, 340618
 Frio Ridge, 720960
 Galapagos Islands, 160615, 160899, 200687
 gas, organic, distribution, 490736
 general synthesis
 biostratigraphy, 280925
 lithology, 280925
 geochemical history
 Albian, 710406
 sedimentation, 710405
 geochemical variation, 810797
 geochemistry
 California, Gulf of, 640696
 Cenozoic, 450349
 comparison, 870699, 870700
 Coniacian-Santonian sediments, 720829
 continental compared, 840616, 840617
 magma, 840618
 onset, 840617, 840618
 geochronology, 411117
 geologic structure, accretionary prism,
 870810
 glass
 basalt, 650477
 OCP Ridge, 540710
 glass, volcanic, 670518
 Mariana Trough, 600494
 Tonga, 600494

- Goban Spur, 800419
 continental margin, 801138
 evolution, 801204, 801208, 801209, 801210
 Gondwana, dispersal, 260950
 gravity anomaly, modeling, 801143
 Greenland, 810913, 810918
 Guatemala, 670493
 mid-slope continental margin, 840929
 Hawaiian Islands, 550014
 Hawaiian-Emperor Chain, 330318
 Hess Rise, 620945, 620953, 620955, 620959,
 620964, 620971, 621038, 621039, 621040,
 621041, 621045, 621053, 621058
 pyrite-marcasite, 620861
 Hess Rise N, post-Jurassic, 620806, 620814,
 620817
 history, 920598
 Honshu, 560403
 hot spot, 720960
 hyaloclastite, ash, 650477
 hydrocarbon, C₁-C₈, Baja California,
 630775, 630781
 hydrothermal alteration, sediments, 650420
 hydrothermal deposits, origin, 540417
 Iceland, 490439, 490440, 941114
 Iceland Basin, Cenozoic sediments, 38S0089
 India, 250533
 Indian Ocean, 250513
 volcanogenic sediment, 250513
 Indian Ocean NE, Cretaceous, 220718
 Indian Ocean NW, volcanic components, 241061
 Indian Ocean S, geologic history, 260920,
 260924
 Indian Ocean SW, iron-rich sediment, 250401
 Indian Ocean W, 250541
 basalt, 250534
 Gondwana, 250540
 lithology, 250739, 250740
 magnetic anomaly, 250540
 mineralogy, 060759
 regional aspects, 250754, 250755, 250758
 spreading center, 250540
 tropical, 240641, 240646
 volcanic sediment, 250541
 influence
 basalt, 750850
 clay, 750850
 clay minerals, 750850
 metallization, 750850
 smectite, 750850
 island arc, 340617
 transport, 340618
 Ita Mai Tai Guyot, 890385
 Japan Trench
 minerals, 870638
 Miocene-Pliocene, 870921
 sediments, 571255, 571256
 tephra, 870703
⁴⁰K/⁴⁰Ar age, Goban Spur, 800945
 K/Ar age, Line Islands, 330651
 Karroo, 810913
 Kings Trough, 941251, 941257, 941258, 941259
 Koko, 550023
 Kuril Islands, 870861
 arc, 200033, 200389, 320928
 Kyushu-Palau Ridge, 590021, 600450
 cessation, 590425
 last stages, 200687
 lava, isotope geochemistry, 810778
 Lesser Antilles, 780025, 780618
 limestone
 Albian, 620935
 stable isotope, 150801
 limestone, oolitic, Ita Mai Tai Guyot,
 200101
 Line Islands, 330651, 610821
 tectonics, 330736, 330741, 330744
 lipid, cyclic components, 610616
 lithologies, minor
 pale green laminae, 901484
 turbidite, volcanic, 901483
 lithology, 110016, 150412, 160061, 170295,
 210041, 240474, 250295, 280027, 290134,
 290196, 300075, 300198, 310204, 310281,
 320220, 320230, 320325, 330059, 330318,
 380657, 390110, 390165, 400233, 430056,
 430166, 490059
 clay, red, 120766
 geologic events, 210038
 montmorillonite, 720996
 Lofoten Islands, 38S0070
 Lord Howe Rise, 901183, 901185
 pale green laminae, 901154, 901155,
 901156, 901157
 Lord Howe Rise C, Neogene evolution, 901452
 Madagascar, 250532
 Madagascar Basin, 250539
 ash, devitrified, 250539
 dispersal, 250539
 mid-oceanic ridge system, 250539
 terrigenous sediment, 250539
 Madagascar Plateau
 acoustic basement, 250539
 gabbro, 250539
 Natal Basin, 250539
 syenite, 250539
 tuff, basalt, 250539
 major element, argillaceous sediments,
 580721
 Manihiki Plateau, deposition, 330886
 margin, 810883
 Mariana Basin, 890385
 Mariana Islands, 600122, 600170, 600216,
 600483
 fore arc, 600709, 600735
 tectonic processes, 600916
 Mariana Trough
 Mariana Islands W, 600484
 Mariana Trough W, 600484
 Marquesas Oceanic Formation, 080677
 Marshall Islands, 610820
 Mascarene Basin
 basalt, 250536
 Chagos Fracture Zone, 250536
 Mid-Indian Ridge, 250536
 Natal Basin, 250536
 sea floor age, 250536
 tholeiite, 250536
 Mascarene Islands, 250533
 Chagos Fracture Zone, 250534
 Mauritius, 250533
 Reunion Island, 250533, 250534
 Rodriguez Island, 250533
 Mediterranean Sea, lithostratigraphy,
 131034, 131035
 Mediterranean Sea E, history, 42B1204
 Meiji Guyot, K/Ar age, 550679
 Melanesian Basin, 610857
 basalt, 610697
 geological evaluation, 610854
 igneous complex, 890676
 Melliish Seamount, post-Jurassic
 sedimentation, 620839, 620841, 620843,
 620845
 Mendoza Rise, East Pacific Rise, 920592
 Mexico, magmatic episodes, 660728
 Mid-Atlantic Ridge, 510987
 Mid-Indian Ridge, 220492
 Mid-Pacific Mountains, 610822, 621074,
 621079, 621081, 621085, 621110, 621113
 Mid-Pacific Mountains W, Aptian sediments,
 620915
 Middle America Trench, 670487
 ash, 660689
 tephra, 660687
 transect, 670609
 mineral and chemical composition, 38S0032,
 38S0043
 mineral evolution
 circulation, oceanic, 600451
 crystallized fraction, 600450
 evolved transformation minerals, 600450
 hydrothermal activity, 600450
 mineralogy
 chemistry, 480780
 composition, 660690
 sediment history, 38S0120
 Miocene, Messinian salinity crisis, 720987
 Miocene to Pleistocene, 300193
 Moroccan Basin, margin, 500805
 Mozambique Ridge, 250539
 basalt, 250539, 250540
 Cretaceous, 250540
 volcanic sediment, 250529
 Nankai Trough, 870739
 Natal Basin
 basalt, 250539
 volcanic sediment, 250528
 Neogene, 411033
 Canary Islands, 47A0703, 47A0704,
 47A0707, 47A0710, 47A0711, 47A0712,
 47A0713, 47A0714, 47A0715
 New England Seamounts, 430745
 testing origins, 430031, 430155, 430745,
 430847
 New Zealand, tectonics, 901231
 North Island, 901166
 Norwegian Basin, 38S0070
 oceanic plateaus, 620959
 ore, deposit, 540803, 540804
 organic geochemistry, 410815, 571299
 Pacific continental margin, geomorphology,
 350286
 Pacific Ocean C, 170443, 621045, 890385
 Pacific Ocean EC, geologic history, 090919,
 090921
 Pacific Ocean N, 050531
 Aleutian Ridge, 190903, 190906
 ash, 190909
 Meiji Guyot, 190900
 Pacific Ocean NE, 151104
 lithology, 050590, 050613
 Pacific Ocean NW
 clay, 200395
 geochemical history, 620785, 620793,
 620800, 620801, 620802
 Pacific Ocean SW, 210905
 Eastern Marginal Basin Province, 210902
 frequency, 210906
 island arcs, 300691, 300698, 300700,
 300703
 Mesozoic regional evolution, 210902
 Pacific Plate, 210897, 210904
 regional evolution, 210900
 tephra, vitric, 901161
 Western Marginal Basin Province, 210904
 Pacific Ocean W
 guyot, 200653
 volcanic rocks, 210488
 Pacific Plate, tectonic evolution, 320930
 Paleocene, 810640
 Paleocene-pre-Oligocene, 481078
 paleoenvironment, 47A0085
 Parana, 810913
 patterns, basalt, 710403
 Peru Basin, 340086
 Peter I Island, geology, 350356
 Philippine Basin, genesis, 310859, 310864,

- Philippine Basin (Cont.)
310868
- Philippine Sea, Paleogene-Neogene, 310848
- Philippine Sea S, petrology, 600902
- Philippines, genesis, 310874, 310875,
310876, 310878
- plate boundary, East Pacific Rise, 540061
- plateau formation, 621031
- Porcupine Plain, North Sea, 801197
- pumice, 050531
- pyroclastic, 810633
- rare earth elements, 590667
- geochemistry, 600742
- products, 590653
- trace elements, 590666
- tuff, 590655
- Red Sea, geology, 230813, 230814, 230816,
230817, 230818
- rhyolite, conglomerate, 571286
- rifting, 42A0889
- Rio Grande Rise, 720511, 720516, 720962,
721022
- basement, volcanic, 720955
- limestone, flaser, 721007
- Mesozoic, 721015
- regional setting, 390959
- sedimentation, 721017
- subsidence, 720963, 720964, 720969,
720971, 720974
- Rio Grande Rise N, regional setting, 250693
- Rockall Plateau, volcanogenic sediments,
480780
- Rockall Plateau W, stratigraphy, 481063
- Rockall Rise, 810633
- tholeiite, 810917
- transgression, 810918
- tuff, 810917
- Rockall Rise SW, structure, 481075, 481078
- St. Croix, U.S. Virgin Islands, 780093
- San Blas Oceanic Formation, 090939
- sandstone, source, 840934
- Santos Plateau
- origin, 390943
- Walvis Ridge, 390402
- Scotland, 810913
- sea floor spreading, 020426
- seamount chain, 170916, 330779, 330780,
330782, 330783
- hawaiite, 330779
- hyaloclastite, 330779
- lavas, 330780, 330781, 330783
- tuff, aquagene, 220779
- seamounts, 890385
- seamounts, ridges, volcanic origin, 330779,
330780, 330784
- sediment, 411033
- lithology, 38S0120
- sediment history, 430177
- sedimentary evolution, Cretaceous-Tertiary
 boundary, 430814
- sedimentation
- Cretaceous, 890413
- geochemical aspects, 710428
- sedimentology, Andes Mountains, 340793
- seismic stratigraphy, 901336
- South Mernoo Knolls, 901330, 901334
- Serra Geral basalt, 720959
- Serra Geral-Kaoko, 720961
- Shatskiy Plateau S, 200683
- Shikoku Basin, 580701, 580709, 600451
- silica, authigenic, 890389
- Skagerak, 480780
- Somali Basin, 250537
- Albania, 250539
- Cretaceous, 250539
- India, 250539
- Miocene to Recent, 250537
- tholeiite, 250537
- South America NE, history, 340779
- South Fiji Basin
- geology, 300622, 300626
- history, 300629, 300630, 300631
- South Island, New Zealand, 901185
- Southeast Pacific Basin
- evolution, geologic, 350738, 350739,
350740
- sediment distribution, 350197, 350204
- Southern California Borderland, volcanic
 rocks, 630951
- southwest regional unconformities, 210902
- frequency, 210906
- Miocene, 210900
- structural evolution, tectonic history,
481063
- subsidence, 721021
- Suiko Seamount, 550493
- trace elements, 550568
- Tasman Basin S, borderland, 291139
- tectonic, clay, 430811
- tectonic history
- Caribbean Sea, 430815
- Cretaceous, 430811
- J-Anomaly Ridge, 430806
- tephra
- Central America, 660692, 660693
- global control, 660693
- major pulses, 660693
- Neogene, 870703
- source, 901148
- tephrochronology, Central America, 680403
- Tertiary, 240291
- Tethys, Mediterranean Sea, 42A0944
- tholeiite, 330783
- basalt, alkali, 540720
- geochemistry, 590681, 590682, 590687
- petrology, 590681, 590682, 590687
- Ti/Zr ratio, basalt, 710402
- Tohoku Arc
- geology, 870714, 870715, 870716
- Neogene, 870703
- turbidites, 120766
- uranium, distribution, 370555
- Vogel Seamount, 430155
- volcanic components, 210488
- volcanic deposit, propagation, 901185
- volcanic sediment, 480780
- volcaniclastics
- basalt, 550504
- Eocene, 720957, 720959
- Voring Plateau, sedimentary/tectonic
 history, 380782
- West Mariana Basin, 580701, 580709, 600450
- metallogenesis, 590649
- West Mariana Ridge, 590607, 590609
- zeolite, distribution, 390429, 390432,
390436
- volcanism, acidic
- ash
- Miocene, 870684
- Pliocene, 870685
- Tohoku Arc, 870684
- Tohoku Arc, geology, 870714, 870715, 870716
- volcanism, active
- igneous rocks, island arc, 840948
- Pacific Ocean SW
- island arcs, 300693
- Pacific Plate, 210902
- Philippine Sea, Oligocene, 590621
- southwest regional unconformities, 210902
- volcanism, andesitic
- ash
- Miocene, 870685
- Tohoku Arc, 870684
- Atlantic Ocean SW, basin, evolution, 360998
- Pacific Ocean EC, geologic history, 090921
- Pacific Ocean N, Aleutian Ridge, 190906
- Philippine Sea, Paleogene-Neogene, 310848
- South Fiji Basin, geology, 300626
- Southeast Pacific Basin, evolution,
 geologic, 350740
- Tohoku Arc, geology, 870715
- volcanism, arc, 590621
- glass, volcanic, 600494
- lava, 600494
- Mariana Trough, 600483
- Philippine Sea, 590621
- Miocene, 590621, 590622
- Philippines, genesis, 310876
- tephra, Cenozoic, 901170
- volcanism, basaltic
- geochemical history, sedimentation, 710436
- Goban Spur, modeling, 801141
- sedimentation, geochemical aspects, 710430
- South Fiji Basin, geology, 300625
- Tohoku Arc, geology, 870715
- volcanism, calc-alkalic
- ash, geochemistry, 660691
- Atlantic Ocean SW, basin, evolution, 360998
- basalt, geochemistry, 590794
- geochemistry, volcanism, 840617, 840618
- Kyushu-Palau Ridge, 590687
- Lord Howe Rise, pale green laminae, 901157
- magma, calc-alkaline, 660701
- Pacific Ocean SW, island arcs, 300703
- South Fiji Basin
- geology, 300625
- history, 300630
- tholeiite
- geochemistry, 590681, 590692
- petrology, 590681, 590692
- volcanism, dacitic, Japan Trench, geology,
 870707
- volcanism, explosive, 561027, 561028, 561029
- ash, 561031, 870684, 870707
- Central America, 670484, 670486, 670487
- distribution, 561031, 561034, 660691,
 660692, 660693
- geochemistry, 870700
- global debate, 870707, 870708, 870709
- Tohoku Arc, 870681
- Bermuda Rise, oblique seismic experiment,
 510682, 510683
- Caribbean Sea, 150969
- Central America, Neogene, 670475, 670479,
 670480, 670482, 670483, 670484, 670486,
 670487
- diagenesis, 561030
- glass, volcanic
- Mariana Trough, 600494
- Tonga, 600494
- Goban Spur, evolution, 801209, 801213
- Japan, 561027
- fore-arc area, 560545
- Japan Trench, 561027
- ash, 561031, 561034
- diagenesis, 561030
- history, 870917
- Neogene, 870703
- plate movement, 561033
- redeposition, 561029
- sedimentary environment, 561028
- sedimentation, 561029
- subduction, 561033, 561034
- synchronous pulses, 561027
- tephra, 870703
- Lesser Antilles, 780369
- island arc, 780236
- lithologies, minor, tephra, vitric, 901483

- lithology, 310031
 Lord Howe Rise C, Neogene evolution, 901449, 901452
 Mariana Trough, 600483
 Middle America Trench, 660687, 670475
 offshore, 840609
 tephra, 660687
 Neogene, 670475, 870700, 870703
 active margin, 870718
 ash, 870716
 Babuyan Islands, 310577
 Benham Rise, 310587
 Cagua Islands, 310577
 Caribbean Sea, 310587
 Central America, 310587
 glass, 870716
 granitoid, 870718
 Honshu W, 310587
 horizontal movement, 870716
 Izu, 310577, 310587
 Japan S, 310587
 Japan SW, 310577
 Japan Trench, 870703
 Kuroko, 870718
 Kyushu-Palau Ridge, 310577, 310587
 Luzon, 310577, 310586
 magma, 870718
 Middle America Trench, 670475
 Morocco, 310577, 310587
 Mount Mayon, 310577
 Pacific Ocean NE, 310587
 Pacific Ocean W, 310577
 Pacific Plate, 870716
 Philippine Trench, 310587
 Ryukyu Islands, 310577, 310587
 Sea of Japan, 310587
 sedimentation rate, 870716
 South America NE, 310587
 Pacific Ocean, Tertiary, 340605
 Pacific Ocean EC, geologic history, 090919
 Pacific Ocean W, Neogene, 310577
 physiography, felsic-intermediate type, 870613
 plate movement, 561033
 Porcupine Plain, 801197
 tephra
 Cenozoic, 901170
 Central America, 660693
 Quaternary increase, 660692
 tephra, vitric, 901483
 Tertiary
 Eocene, 801179
 Pacific Ocean E, 340605
 Tohoku Arc
 geology, 870716
 volcanism, 870703
 volcanism, intraplate
 ash, 870707
 distribution, 660693
 Atlantic Ocean, circulation, 720978
 basalt
 Melanesian Basin, 610698, 610699
 midocean ridge, 820459
 East Mariana Basin, sedimentary history, 890666
 Line Islands, tectonics, 330741, 330743, 330744
 Melanesian Basin, 610679, 610680
 two episodes, 610681
 Rio Grande Rise, subsidence, 720964
 volcanism, off-axis
 Bauer Basin, structure, 340162
 lithologies, minor, turbidite, volcanic, 901483
 Nankai Trough, heat flow, 870739
 regional tectonics, 720959
 change, 720960
 Eocene activity, 720962
 hot spot, 720960
 Rio Grande Rise
 basement, volcanic, 720955
 Eocene sedimentation, 721007
 subsidence, 720962, 720974
 Seabeam bathymetric surveys, 850837
 volcanism, pyroclastic
 Atlantic Ocean N, 810900
 Paleogene, 810633
 chemistry, 810635, 810636, 810637
 diagenesis, 810638, 810639
 mineralogy, 810635, 810636, 810637
 pyroclastic deposits, origins, 810639, 810640
 Rockall Rise, 810633
 Rockall Rise SW, 810633
 stratigraphy, 810633, 810634, 810635
 volcanism, seamount
 East Pacific Rise, 540061
 lithology, basalt, alkali, 190025
 volcanism, Mascarene Basin, 250536
 volcanism, subaerial
 Cenozoic sediments, lithology, mineralogy, geochemistry, 450330
 Cretaceous/Tertiary boundary, paleoenvironmental history, 740688
 East Mariana Basin
 Aptian to Albian, 890423
 sedimentary history, 890669
 Japan Trench, 870921
 tholeiite
 geochemistry, 590681
 petrology, 590681
 volcanism, submarine
 anoxia, organic richness, 801011
 clay, palygorskite sepiolite, 020417
 Coral Sea E, geology, 300659
 Eocene-Oligocene, Tasman Sea, 901182, 901183
 geochemistry, volcanism, 840616
 Indian Ocean W, 241051
 zeolite, 241061
 Lesser Antilles, 780094
 Line Islands, evolution, 330851
 manganese, carbonate, 801068
 mineralogy, sediment history, 38S0119
 Necker Ridge, 200678
 Tethys, Mediterranean Sea, 42A0948
 Tohoku Arc, geology, 870715
 volcanic deposit, basalt, 901185
 volcano, 200691
 ages, 550659, 550670, 550674
 Andes Mountains, 160615
 Andes Mountains N, magnetic arc, 690355
 Atlantic Ocean N
 Paleozoic, 801109
 Precambrian features, 801107
 Atlantic Ocean NW, height, 430877
 basalt
 geochemistry, 590753
 K/Ar age, 380758
 petrochemistry, 670580
 pyroxene, 590698
 Rb-Sr, 550696, 550699, 550702, 550703, 550704
 basement, basalt, 430877, 430878
 Bermuda, 430010, 930085, 930090, 930099, 931031, 931295, 931296, 931335, 931383, 931384, 931385, 950501
 Bermuda Seamount, height, 430877
 California, Gulf of, basalt, 650529
 Central America, magnetic arc, 690355
 Cretaceous/Tertiary boundary, paleoenvironmental history, 740689
 crust, volcanism, 430877, 430878
 Guatemala, offshore sediment, 840621
 Hawaii NW, magnetic lineation, 050531
 Hawaiian Islands, 200687, 550006, 550010, 550019, 550020, 550021, 550059, 550067, 550116, 550511, 550559, 550563, 550567, 550670, 550851
 height versus paleoplate thickness
 Bermuda Seamount, 430877
 New England Seamounts, 430877
 volcanic ages, 430877
 Iceland, 120909
 inner arc, Lesser Antilles, 780085
 Japan Trench, sediments, 271234
 Koolau, 550699
 Lesser Antilles, 780085
 island arc, 780085
 Line Islands, tectonics, 330734, 330744
 lithologies, minor, turbidite, volcanic, 901483
 lithology, 42B0144
 Lord Howe Rise, pale green laminae, 901157
 magnetic arc
 Andes Mountains N, 690355
 Central America, 690355
 manganese, hydrothermal activity, 801061
 Mariana Trough, West Mariana Ridge, 600484
 Meiji Guyot, 550677
 Melanesian Basin, igneous complex, 890675
 Mexico, 030441, 061285, 110224, 110565, 110611, 110616, 320952, 400784, 430599, 430806, 440007, 440337, 440413
 barrier reef, 110893
 Campeche, 100055
 continental rise, 100071, 100385
 continental slope, 100055, 100089, 100097, 100117, 100742
 east coast, 100003, 100071, 100089
 San Luis Potosi, 410501
 soda lake, 42A1017
 Tampico, 110893
 Mid-Pacific Mountains, 200691
 Middle America Trench, ash, 660690
 Nashville Seamounts, height, 430877
 Neogene formations, paleogeography, 42A0910
 New England Seamounts, testing origins, 430877
 Nintoku Seamount, 550011
 Ojin Seamount, 550010, 550067
 Pacific Ocean NW, clay, 200391
 Pacific Ocean SE, trade winds, 920331
 Pacific Ocean SW, unconformities, 280713
 Pacific Ocean W, guyot, 200666
 Penguin, 600897
 Peter I Island, geology, 350347, 350356
 Red Sea, geology, 230815
 Rio Grande Rise N, regional setting, 250689, 250691
 rock series, 200684
 seamount
 height, 430877
 spacing, 430878
 sediment geochemistry, ooze, siliceous
 calcareous, 550458
 Southeast Pacific Basin, evolution, geologic, 350739
 submergence, 200700
 Suiko Seamount, trace elements, 550559, 550568
 tholeiite
 basalt, alkali, 540721
 geochemistry, 590692
 petrology, 590692
 Towada, 870272
 turbidites, 090040
 Vogel Seamount, height, 430877
 volcaniclastics, Eocene, 720959

- Waianae Range, 550059, 550115, 550670
see also particular volcanoes
 volcano, andesitic
 dacite, conglomerate, 571287
 Pacific Ocean EC, geologic history, 090919
 rhyolite, conglomerate, 571287
 volcano, mud, geochemistry, Cenozoic
 sediments, 42B0598
 volcano, shield
 Atlantic Ocean S, Walvis Seamount, 391128
 basalt, Rb-Sr, 550696
 Hawaiian Islands, 330781, 550853
 seamounts, ridges, volcanic origin, 330781
 seismic stratigraphy, South Mernoo Knolls,
 901334
 volcanic rocks, ages, 550670
 volcano, submarine
 chemical composition, metal, 571263
 geological, geophysical setting, rifting,
 42A0889
 Grenada, 780094
 Grenada N, 780086
 lithology, 210021
 Pacific Ocean W, 200687
 Red Sea, geology, 230816
 regional, tectonic setting, 600613
 Saint Lucia, 780094
 Volga River, 38S0498
 basin, 710498
 Voring Basin, 810917
 Voring Plateau, 38S0101, 380152, 38S0197,
 38S0200, 380207, 38S0225, 38S0245,
 38S0252, 380758, 380781, 380805, 381110,
 381231, 381232, 381237, 480006, 480009,
 480169, 481102, 481145, 740837, 750537,
 810005, 810035, 810235, 810236, 810277,
 810525, 810886, 810887, 810888, 810914,
 810917, 810919
 ash, 38S0240, 38S0248
 Atlantic Ocean, margin, 481101
 Atlantic Ocean NE, stable isotope, 480483
 barite, 38S0031
 basalt, 810919
 chemistry, 380747
 basin, 380776
 bathymetry, 38S0451
 bulk mineral distribution, 38S0032
 aragonite, 38S0039
 quartz, 38S0040, 38S0041
 calcite, 38S0031
 Cambrian-Silurian, 38S0041
 chemical and mineral composition, 38S0031
 clast, mudstone, 38S0248
 clinzoisite, 38S0031
 diagenesis, organic Miocene sediments,
 380809
 diapir, 38S0197, 38S0200, 38S0248
 diapirism, 38S0451
 escarpment, 380780, 380781
 diatomite, 38S0031, 38S0041, 38S0248
 epidote, 38S0031
 erosion, glacial, 38S0041
 escarpment, 380003, 38S0215, 38S0241,
 380761, 380783, 381118, 381231
 feldspar, 38S0031
 ferrous sulfides, 38S0031
 garnet, 38S0031
 geologic setting, 38S0197, 38S0200,
 38S0202, 38S0205
 glacial sedimentation, 38S0031
 erosion, 38S0041
 glass, 38S0240
 glauconite, 38S0031
 Greenland Sea, 38S0266, 38S0270, 38S0284
 hornblende, 38S0031
 ilmenite, 38S0031
 inner, 38S0005, 38S0121, 38S0197, 38S0252,
 38S0451
 interstitial water, 38S0132
 lithology, origin, 380209, 380210
 magnetite, 38S0031
 mica, 38S0031
 mineral composition, authigenic materials,
 38S0031
 minerals, 38S0032
 mud, 38S0248
 mud, diatomaceous, 38S0248
 mud, terrigenous, 38S0041
 mudstone, 38S0248
 Norway, continental margin, 740837, 740839
 ooze, biogenic, 38S0041
 diatoms, 38S0043
 Eocene, 38S0043
 ooze, calcareous, 38S0248
 pyrite, 38S0248
 pyroxene, 38S0031
 quartz, 38S0031
 red beds
 sediment history, 38S0284
 sedimentary structure, secondary, 38S0266
 turbidites, 38S0270
 Rockall Rise SW, structure, 481082
 rutile, 38S0031
 sand, 38S0248
 sediment distribution, sediment thickness,
 380777
 sedimentary/tectonic history, 380781
 subsidence, 380782
 turbidity current, 380782
 shelf moraines, 38S0041
 siderite, 38S0031
 siliceous sediments, 38S0248
 siliceous/diatomaceous-spicules, 38S0031
 silt, 38S0248
 stratification, 38S0248
 stratigraphy, sea floor spreading, 481082
 tectonics, 381231, 381232, 381236, 381237
 basalt, 381233
 bathymetry, 381231
 diapirism, 381237
 magnetic anomaly, 381231
 Tertiary sediment, 380761
 tetrapyrrole, geochemistry, 630813
 titanomagnetite, 38S0031
 transport, minerals, 38S0041
 volcanic products, 38S0043
 Vostok Channel, Pacific continental margin,
 geomorphology, 350283
 Vostok Island, Line Islands, tectonics, 330735
 vug, 110873, 411107, 460299, 460304
 alteration, temperature, 920499
 alteration, low-temperature, mineral,
 transparent, 460304
 basalt, 110874
 alteration, 411107
 petrography, 460304
 pillow, 411107
 basement, basalt, 110874
 Bermuda Rise, oblique seismic experiment,
 510676
 flow, basalt, 411107
 limestone, Jurassic, 790452
 lithology, 160024, 320048, 320083, 320164,
 320165, 320197, 320198, 42A0328, 430166,
 440345
 chert, 320197
 porcellanite, calcareous, 320197
 tuff, 310194
 Mid-Atlantic Ridge, basalt, 460304
 mineral, transparent, petrography, 460304
 petrology, Siqueiros Fracture Zone, 540638
 pillow lava, basalt, 411107