

INDEX

- Acarinina densa* Zone, 316, 367
 Acoustic anisotropy, 711
 impedance, 695
 Age determination, basis for, 20
 Ahe Atoll, 318
 Alkalinity of carbonate sediments, 564
 Ammonia in carbonate sediments, 564
Amphirhopalum ypsilon Zone, 426, 427
 Amusiidae ecology, 509
 Angular unconformity, 186
 Anisotropic susceptibility measurements, 639, 681
 Antarctic Bottom Water, 435
Anthocyrtidium angulare Zone, 426, 427
 Aquagene tuffs, 733, 779, 780, 783
Arkhangelskiella cymbiformis Zone, 384, 385
 Arutua Atoll, 302, 318, 683
 Atoll, formation of, 302
 Authigenic reactions, 563
 Baked contact, 393
 Basalt, *See also* specific sites
 alteration of, 566
 flow units, 9
 K-Ar ages of, 549
 Line Islands Chain, 915
 magnetization of, 573
 mineral analyses, 583
 petrology of, 571
 paleomagnetization of, 631
 X-ray diffraction analyses, 574
 Bathyal benthonic mollusc association, 507
 Bivalves, 169, 876, 881
 Blake Plateau, 391
 Bohemite, synthetic, 789
 Bonin Trench, 744
 Bottom Water activity, 655, 679
 Brecciation, 859, 875
 Bryozoa, 44, 467, 507
Buccinosphaera invaginata Zone, 426
 Bulk density, defined, 695
 Burrows, 44, 112, 168, 507, 510, 837, 847, 867, 882
 as related to chertification, 859
 Calcium carbonate, recrystallization of, 565
 Calcium, dissolved, 565
 Caldera collapse, 779
Calocyclus costata Zone, 59, 123, 184, 317, 426, 427, 430, 431, 434
 virginis Zone, 59, 123, 184, 317, 426, 427, 430, 434
 Campanian-Maestrichtian boundary, 59, 370
 reefal phase, 11
Cannartus laticonus Zone, 59
 petterssoni Zone, 59, 184, 426, 427, 431, 434
 Carbon and carbonate analyses, methods of, 18
 Carbonate compensation depth, 503, 506, 507, 510
 Site 314, 8, 34
 Caroline Islands, 735
Cassigerinella chipolensis/Pseudohastigerina micra
 Zonal Boundary, 361, 362
Catapsydrax dissimilis Zone, 391
Catinaster calyculus Subzone, 496
 coalithus Zone, 496
 Celestite, 726
 Cementation, 702
 Central Basin, 681, 682, 695
Ceratolithus primus Subzone, 496
 rugosus Subzone, 495
 rugosus Zone, 57, 387
 tricorniculatus Zone, 495
 Chemical composition of basalts, 582, 893
 Chert, 26, 308, 369, 434, 855
 bedded, 873
 formation of, 886
 nodules, 44, 46, 112, 169, 305, 317, 681, 790, 855
 textures, 878
Chiasmolithus danicus/Ellipsolithus macellus Zonal
 Boundary, 384, 389
 Chondrites, 44, 509
 Christmas Island, 123, 733, 739, 744, 781, 922
 Christmas Island Trough, 681
 Chromite, 893
 Ciperio Formation, 391
 Clarion Fracture Zone, 679, 731, 739, 922
 Clipperton Fracture Zone, 735, 739
 Clipperton Oceanic Formation, 109, 849, 850
Coccolithus miopelagicus Subzone, 497
Collosphaera tuberosa Zone, 426, 427
 Consolidation curves, 703
 Copper, native, 169, 186, 878, 881
 Core handling, method of, 17
Coscinodiscus yabei Partial-Range Zone, 491
 Cretaceous stratigraphic hiatus, 390
 Cretaceous/Tertiary boundary, 118, 128, 181, 374, 387, 389, 430, 790, 796
 Cristobalite, 30, 855
 Cross-bedding, 45, 781
 Cross-Trend Arch, 739
 Cruise results, Leg 33, 8
 Current laminations, 45
 Current structures, 919
 Cyclic oozes, 43
 Danger Island, 187, 923
 Danger Island Trough, 891, 894, 923
 Delectopecten ecology, 509
 Depth, method of recording, 655
 Diachronous facies, 851
 Diagenesis
 Manihiki Plateau sediments, 884, 888
 mollusc shell, 505
 volcanogenic sediments, 801, 850
 Diagenetic potential, 925
 Diatoms
 Diatom biostratigraphy, Leg 33, 491
 Coscinodiscus yabei Partial-Range Zone, 491
 Nitzschia miocenica Partial-Range Zone, 491
 Nitzschia porteri Zone, 440, 491
 Nitzschia reinholdii Partial-Range Zone, 440, 491
 Dictyocha aculeata Zone, 439, 440

- epiodon* Zone, 58, 123
fibula Zone, 58, 439, 440
rhombica Zone, 58, 123, 439
triacantha Zone, 58, 439
Dictyococcites bisectus Subzone, 498
 Diffusional barrier, 567
 communication, 566
 Discoasters, preservation of, 394
Discoaster asymmetricus Zone, 57, 387, 391, 393
 barbadiensis Zone, 498
 bifax Subzone, 493, 498
 brouweri Zone, 494
 calcaris Zone, 440
 diastypus Zone, 498
 druggi Zone, 394
 exilis Zone, 497
 hamatus Zone, 496
 neohamatus Zone, 496
 quinqueramus Zone, 57, 122, 387, 389, 440, 496
 saipanensis Subzone, 493, 498
 Saipanensis/Chiasmolithus oamaruensis Zonal
 Boundary, 183, 383, 391
 tamalis Subzone, 494
 Dissolution of shell material, 503
 Disturbance, drilling, 17
 Dolomite rhombs, 112
Dorcadospyrus alata Zone, 59, 123, 184, 426, 427, 430, 431
 ateuchus Zone, 59, 122, 184, 317, 426, 427, 431, 434
 Drill pipe pinger, 13
 Drilling rates, regional correlation of, 702
 Duke of Gloucester Islands, 922
 Dunites, 757, 763
 East Pacific Rise, 796
Eiffellithus eximus Zone, 123, 393, 652, 920
 turriseiffeli Zone, 499
Emiliana ovata Subzone, 494
 Emperor Seamount Chain, 62, 653
 Eocene/Oligocene boundary, 182, 387, 391, 465
 Eocene stratigraphic hiatus, 108
 Epirogenic uplift, 919
 Erosional features, 680, 682
 Evolution of deep-sea benthonic communities, molluscs, 512
 Fanning Island, 38, 59, 128, 369, 572, 649, 681, 733, 734, 790, 922
 Fans, turbidites, 5
 Farallon plate, 739, 915
 Fish debris, 168
 Flame structures, 45, 790
 Flat-topped seamounts, 779
 Flow volcanism, 919
 Foraminifera
 Cenozoic, 120, 181, 361, 451
 Cretaceous, 369, 371, 372
 Eocene, 315, 365, 366
 larger, 126, 370, 467, 469
 Mesozoic, 122, 183
 Miocene, 313, 367
 Miocene-Pliocene, 182, 366
 Oligocene, 182, 315, 361, 362, 366, 367
 Paleocene, 365
 Pleistocene, 182, 366
 Pliocene, 313, 367
 preservation of, 361, 363, 365, 366
 Quaternary, 313, 367
 shallow-water, 467
 Site 314, 33, 363
 Site 315, 58, 365, 464, 467
 Site 316, 120, 365, 578, 467
 Site 317, 181, 366, 464
 Site 318, 313, 366, 465, 467
 Solution depth, 187
 species list, 451
 zonation, 361
 Acarinina densa Zone, 316, 367
 Cassigerinella chipolensis/Pseudohastigerina micra Zone, 361, 362
 Catapsydrax dissimilis, Zone, 391
 Globigerapsis kugleri, 182, 366
 mexicana Zone, 182, 315, 366, 367
 Globigerina ampliapertura, 121, 361
 ciperoensis Zone, 314, 362, 366, 367
 Globigerinelloides algerianus Zone, 183, 373, 374
 Globigerinoides bisphericus-Globigerinella insueta Zone, 58, 365
 Globoquadrina conglomerata Zone, 183, 361, 366
 pseudofoliata Zone, 362, 366
 Globorotalia acostaensis Zone, 58, 120, 182, 313, 365, 366, 367, 440
 cerroazulensis Zone, 181, 315, 308, 366
 fohsi lobata Zone, 58, 365
 kugleri Zone, 58, 315, 365, 366, 367
 lehneri Zone, 182, 316, 366, 367
 menardii zone, 120, 313, 365, 367
 opima Zone, 315, 361, 362, 365, 366
 opima opima Zone, 361
 pseudomenardii Zone, 122, 365
 vêlascoensis Zone, 122, 365
 Globotruncana arca Zone, 59, 122, 370, 371, 372, 374
 concovata Zone, 374
 elevata Zone, 59, 122, 370, 372, 374
 gansseri Zone, 59, 122, 372, 374
 Globotruncanella mayaroensis Zone, 374
 Hantkenina aragonensis Zone, 316, 367
 Hedbergella trocoidea Zone, 183, 373
 Leupoldina cabri Zone, 183, 374
 N4, 464, 465
 N4/N5 boundary, 464
 N5, 464, 465
 N6, 464
 N6/N7, 464
 N8, 464
 N9, 465
 N14, 464, 465
 N15, 464
 N15/N16 boundary, 465
 N16, 365, 464
 N17, 365, 464, 465
 N18, 464
 N19, 61, 361
 N21, 61, 361
 N21/N22 boundary, 464

- N22, 361, 464
 N23, 361
 P7, 465
 P13, 465
 P14, 465
 P15, 465
 P16, 465
 P17/P18 boundary, 465
 P18, 361, 464
 P18/P19 boundary, 182, 361
 P19, 464, 465
 P19/P20 boundary, 464
 P20, 361, 464, 465
 P20/P21 boundary, 464, 559
 P21, 464
 P22, 464, 465
 P22/N4 boundary, 464
Ticinella roberti Zone, 183, 373
- French Frigate Shoals, 123
 Galapagos Island, 784
 Gambier Islands, 922
 Geochemistry of sediments, 557
 Geophysical data, underway, 655
Gephyrocapsa oceanica Zone, 183, 366, 494
 /*Emiliana huxleyi* Zonal Boundary, 390
Globigerapsis kugleri Zone, 182, 366
mexicana Zone, 182, 315, 366, 367
Globigerina ampliapertura Zone, 121, 361
ciperoensis Zone, 315, 362, 366, 367
Globigerinelloides algerianus Zone, 183, 373, 374
Globigerinoides bisphericus/*Globigerinotella insueta*
 Zonal Boundary, 58, 365
Globoquadrina conglomerata Zone, 183, 361, 366
pseudofoliata Zone, 361, 366
Globorotalia acostaensis Zone, 58, 120, 182, 313, 365,
 366, 367, 440
cerroazulensis Zone, 181, 315, 308, 366
fohsi lobata Zone, 58, 365
kugleri Zone, 58, 315, 365, 366, 367
lehneri Zone, 182, 316, 366, 367
menardii Zone, 120, 313, 365, 367
opima Zone, 315, 361, 362, 365, 366
opima opima Zone, 361
pseudomenardii Zone, 122, 365
velascoensis Zone, 122, 365
Globotruncana arca Zone, 59, 374
calcarata Zone, 59, 122, 370, 371, 372, 374
concovata Zone, 374
elevata Zone, 59, 122, 370, 372, 374
gansseri Zone, 59, 122, 372, 374
Globotruncanella mayaroensis Zone, 374
 Graded beds, 10, 44, 61, 305, 309, 315, 367, 507, 790,
 794, 838, 849, 862, 875, 880, 919
 Grain-size analyses, method of, 18
 Great Magnetic Bight, 639
Hantkenina aragonensis Zone, 316, 367
 Hawaiian Arch, 655
 Hawaiian-Emperor Chain, 11
 Hawaiian Islands, 790, 792
 Hawaiian shield volcanoes, 763, 782
 Hawaiites, 574, 750, 759, 779, 918
 Heave compensation system, 5, 8, 10, 12, 107, 164, 303
Hedbergella trocoidea Zone, 183, 373
Helicopontosphaera ampliapertura Zone, 497
 /*Sphenolithus heteromorphus* Zonal Boundary, 390
 Hermes Reef, 123
 High Plateau, 875
 Homotaxial pattern of stratigraphic units, 849
 Horizon Guyot, 655, 731, 739, 758, 761, 781, 784
 Hot spots, 6, 10, 11, 123, 361, 391, 649, 651, 731, 761,
 763, 849, 852, 920
 Hyaloclastites, 750
 Hydrostatic pressure in sediments, 719
 Igneous rocks, chemical analyses of, 784
 Manihiki Plateau, 170, 891
 Inoceramus, 169, 503, 510, 882
 Interstitial water analyses, 563
 Iron-manganese nodules, 887
 Iron-titanium-rich sediments, 833
Isthmolithus recurvus/*Sphenolithus pseudoradians* Zonal
 Boundary, 383, 387
 Jarvis Island, 735, 740
 Johnston Island, 731
 Johnston Island Trough, 8, 25, 34, *See also* Site 314
 K-feldspar, alteration of, 799
 diagenetic, 796, 797, 800
 Kingman Reef, 5, 651, 731, 733, 922
 Kōko Seamount, 5
 LePerouse Pinnacle, 123
 Lahers, 783
 Larger foraminifera, 126, 370, 467, 463, 467, 468, 469
 Lepispheres, 858
Leupoldina cabri Zone, 183, 374
 Lherzolites, 757, 759, 763
 Limestone, 308
 Limopsis ecology, 509, 510
 Line Islands Chain, 5, 10, 25, 34, 186, 361, 369, 571, 651,
 655, 679, 695, 726, 731, 749, 789, 833, 837, 849,
 850, 855, 915, 918, 919
 Central Province, 732
 genesis of, 5
 igneous rocks, 754
 Islands Province, 733
 Northern Province, 731
 stratigraphic framework, 849
 volcanism, 25, 652, 653, 780
 uplift of, 780
 Line Islands Cross Trend, 731
 Line Island Oceanic Formation, 849
 Line Islands Ridge, 6, 11, 681, 682, 738, 750
 Line Islands Seamounts, 123, 126, 790
 Line Islands Trough, 105, 106
 Lithologic nomenclature, 19
Lithraphidites quadratus Zone, 57, 384, 387, 389
 Lucinidae ecology, 509
Lychnocanium bipes Zone, 426
Lychnocanoma elongata Zone, 59, 123, 184, 317, 426,
 427, 430, 431, 434
 Lysocline, 883
 Macrofossils, 43, 169, 184, 503, 876
 Magellan Rise, 7, 162, 186, 187, 740
 Magnesium, dissolved, 565
 Magnetism, method of recording, 655
 reversals, 641
 Magnetic Quiet Era, 737
 Main Line Islands, 734

- Major element chemistry of sediments, 557
Makatea Island, 683
Malden Island, 733, 735, 742
Manganese, 893
 nodules, 893
Manihiki Island, 11, 187, 369, 923
Manihiki Plateau, 5, 7, 8, 11, 161, 162, 361, 369, 372, 491, 507, 571, 573, 649, 682, 695, 696, 738, 742, 744, 867
 geologic history of, 923
 paleolatitude of, 923
 subsidence of, 11, 505, 923
 sediment accumulation rates, 925
 volcaniclastic sediments on, 875
 uplift of, 187
Marcasite, 576, 867, 869
Marquesas Fracture Zone, 682
Marquesas Oceanic Formation, 849
Marshall Islands, 744
Marthasterites furcatus Zone, 123, 386, 393, 650, 920
 tribrachiatatus Zone, 183, 390, 391, 394
Meiji Guyot, 743, 836
Mesocena quadrangula Zone, 58, 123, 439
Microlites, 579
Micula mura Zone, 493, 498
Mid-Pacific Mountains, 731, 739, 740, 744, 749, 918
Mineral analyses, basalt, 583
Minor elements in basalt, 583
Miocene/Pliocene boundary, 465
Miocene stratigraphic hiatus, 10, 122, 391, 850
Molluscs, 184, 920
 aragonitic, 503
 biostratigraphy, 503, 510
 associations, 505, 507, 508, 509, 510
 preservation of, 505
 shell structure, 503, 505
 systematic paleontology, 513
Molokai Fracture Zone, 655, 739, 915, 922
Mudflow textures, 838
Mugearites, 574, 750, 759, 918
Mururoa Atoll, 922
Musician Seamounts, 742
Nassau Island, 923
Nannofossils, calcareous
 preservation of, 384
 Site 314, 33, 387
 Site 315, 57, 387
 Site 316, 122, 387
 Site 317, 183, 390, 491
 Site 318, 316, 391
 taxonomy, 497
 zonation, 383, 493
 Arkhangelskiella cymbiformis Zone, 384, 385
 Catinaster calyculus Subzone, 496
 coalithus Zone, 496
 Ceratolithus primus Subzone, 496
 rugosus Subzone, 495
 rugosus Zone (NN13), 57, 387
 tricorniculatus Zone, 495
 Chiasmolithus danicus/*Ellipsolithus* Zonal Boundary (NP3/4), 384, 389
 Coccolithus miopelagicus Subzone, 497
 Dictyococcites bisectus Subzone, 498
 Discoaster asymmetricus Zone (NN14), 57, 387, 391, 393
 barbadiensis Zone, 498
 bifax Subzone, 493, 498
 brouweri Zone, 494
 calcaris Zone (NN10), 440
 diastypus Zone, 498
 druggi Zone, 394
 exilis Zone, 497
 hamatus Zone, 496
 neohamatus Zone, 496
 quinqueramus Zone (NN11), 57, 122, 387, 389, 440, 496
 saipanensis Subzone, 493, 498
 saipanensis/*Chiasmolithus oamaruensis* Zonal Boundary (NP17/18), 183, 383, 391
 tamalis Subzone, 494
 Eiffellithus eximus Zone, 123, 393, 562, 920
 turriseiffeli Zone, 499
 Emiliana ovata Subzone, 494
 Gephyrocapsa oceanica Zone, 183, 366, 494
 /*Emiliana huxleyi* Zonal Boundary (NN20/21), 390
 Helicopontosphaera ampliapertura Zone, 497
 /*Sphenolithus heteromorphus* Zonal Boundary (NN 4/5), 390
 Isthmolithus recurvus/*Sphenolithus pseudoradians* Zonal Boundary (NP 19/20), 383, 387
 Lithraphidites quadratus Zone, 57, 384, 387, 389
 Marthasterites furcatus Zone, 123, 386, 393, 650, 920
 tribrachiatatus Zone, 183, 390, 391, 394
 Micula mura Zone, 493, 498
 Nephrolithus frequens Zone, 384
 NN4, 57, 390, 383, 387
 NN4/5, 383
 NN6, 122, 387
 NN9, 316, 390, 391
 NN15, 57, 61, 387, 391
 NN18, 57, 61, 387
 NN19, 57, 122, 126, 387, 389, 440
 NN20, 57, 61, 383, 387, 389
 NN21, 56, 57, 183, 383, 387, 389, 391
 NP3, 122, 384
 NP4, 122, 384
 NP8, 57, 387
 NP9, 47, 387
 NP13, 313, 316, 391, 922
 NP15, 183, 390
 NP16, 122, 183
 NP17, 383
 NP18, 383
 NP19, 57, 383
 NP20, 57, 183, 383
 NP20/21, 391
 NP21, 57, 122, 387
 NP22, 57, 121, 122, 387, 389
 NP23/24 boundary, 559
 NP24, 57, 387
 Reticulofenestra pseudoumbilica Zone, 494
 umbilica Zone, 493, 498

- Sphenolithus ciperoensis* Zone, 383, 391, 498
heteromorphus Zone, 57, 122, 383, 387, 394, 439, 497
predistentus Zone, 394, 498
Tetralithus aculeus Zone, 123, 386, 387, 393, 920
othicus Zone, 386, 393
murus Zone, 384
trifidus Zone, 385, 652
Triquetrorhabdulus carinatus Zone (NN1), 57, 122, 183, 316, 387, 391, 393, 394, 493, 497
rugosus Subzone, 495
Navigation, methods of, 655
Necker Ridge, 739, 916
Nephrolithus frequens Zone, 384
Nitzschia miocenica Partial-Range Zone, 491
porteri Partial-Range Zone, 440, 491
reinholdii Partial-Range Zone, 440, 491
Nodule, chert, 44, 46, 112, 169, 305, 317, 706, 794, 855
manganese, 893
Nova-Canton Trough, 735, 737, 739, 743, 744
Nuculidae ecology, 509
Oligocene/Miocene boundary, 464, 465
Ommatartus antepenultimus Zone, 59, 122, 184, 317, 426, 427, 431, 440
penultimus Zone, 59, 184, 317, 426, 427, 431, 434
Ontong-Java Plateau, 11, 180, 186, 187, 574, 923
Opal-CT, 858
Operations, Leg 33, 11
Pacific Fracture Zone, 743
Pacific plate, 739, 851, 883, 915, 923
motion of, 302, 434, 639, 743
Paleobiogeography, molluscan, 503
Paleocene/Eocene boundary, 464, 850
Paleoclimatology, 172
Paleolatitudes, 634
Paleomagnetic stability indexes (PSI), 631
Paleomagnetism, Leg 33 sediments and basalts, 631
Paleoceanography, 7
Palmerston Island, 744
Palmyra Island, 733, 922
Penrhyn Basin, 682, 742
Petrography, Site 315 material, 578
Site 317 material, 579
Phoenix lineations, 737
Phoenix plate, 739, 915
Phonolites, 759, 782
Physical properties, correlation with seismic profiles, 713
Leg 33, 18, 695
Pitcairn Island, 922
Planalites, 44, 882
Picrite, 799
Pigeonite, 893
Pillow lavas, 753, 880
Pliocene/Pleistocene boundary, 57, 387
Podocyrtis ampla Zone, 426
chalara Zone, 426
goetheana Zone, 426
mitra Zone, 426
Poenites, 801
Porcellanite, 26, 30, 365
Poromya ecology, 509
Porosity, defined, 695
rebound, 717
Potassic nephelites, 749, 756, 761, 763
Primary objectives, Leg 33, 5
Prismatonaceous bivalves, 505
Pterocanium prismatium Zone, 59, 184, 426, 427, 431
Radiolaria
Cenozoic, 425
Eocene, 426
Miocene, 426
Oligocene, 426
Pliocene, 426
preservation of, 434
Quaternary, 426
Site 314, 33, 426
Site 315, 59, 427
Site 316, 122, 427
Site 317, 184, 430
Site 318, 317, 431
species list, 435
zonation
Amphirhopalum ypsilon Zone, 426, 427
Anthocyrtidium angulare Zone, 426, 427
Buccinosphaera invaginata Zone, 426
Calocycletta costata Zone, 59, 123, 184, 317, 426, 427, 430, 431, 434
virginis Zone, 59, 123, 184, 317, 426, 427, 430, 434
Cannartus laticonus Zone, 59
petterssoni Zone, 59, 184, 426, 427, 431, 434
Collosphaera tuberosa Zone, 426, 427
Dorcadospyris alata Zone, 59, 123, 184, 426, 427, 430, 431
ateuchus Zone, 59, 122, 184, 317, 426, 427, 431, 434
Lychnocanium bipes Zone, 426
Lychnocanoma elongata Zone, 59, 123, 184, 317, 426, 427, 430, 431, 434
Ommatartus antepenultimus Zone, 59, 122, 184, 317, 426, 427, 431, 440
penultimus Zone, 59, 184, 317, 426, 427, 431, 434
Podocyrtis ampla Zone, 426
chalara Zone, 426
goetheana Zone, 426
mitra Zone, 426
Pterocanium prismatium Zone, 59, 184, 426, 427, 431
Spongaster pentas Zone, 59, 184, 426, 427, 431
Stichocorys peregrina Zone, 59, 162, 317, 426, 427, 431, 434
Theocampe mongolfieri Zone, 426
Theocyrtis tuberosa Zone, 59, 123, 426, 427, 430, 431, 559
Thyrsocyrtis bromia Zone, 426, 427
triacantha Zone, 317, 427, 434
Rakahanga Island, 923
Rangiroa Atoll, 302, 318, 683
Recrystallization of calcium carbonate, 565
Reefs, 11, 743, 920
Reef debris, 318, 467

- Reflector stratigraphy, 680, 683
- Reticulofenestra pseudoumbilica* Zone, 494
 - umbilica* Zone, 493
- Reworked material, 837, 920
- Rip-up clasts, 45
- Samoan Island, 761
- Sandstones, volcanogenic, 10
- Scouring, 790, 837
- Sediment accumulation rates, 563, 652, 695, 792, 920
 - as related to interstitial water profiles, 568
 - Manihiki Plateau, 922
 - regional correlation of, 702
 - Site 314, 34
 - Site 315, 56, 57, 59, 61
 - Site 316, 10
 - Site 317, 181, 185
 - Site 318, 317
- Sedimentary history, Manihiki Plateau, 888
- Sedimentary structures, 45, 882, 886, 919, *See also*
 - Specific structures
- Seismic profiles, correlation with physical properties, 713
 - with sound velocities, 716
 - methodology, 655
- Serpulid holes, 876
- Shallow-water foraminifera, 467
- Shallow-water fossils, 12, 126, 305, 318, 467, 470, 880, 919, 922
- Shatsky Rise, 7, 162, 187
- Shell structure, molluscan, 503
- Sila Fracture Zone, 742
- Silicoflagellates
 - Neogene, 439
 - Quaternary, 439
 - Site 315, 58
 - Site 316, 123
 - surface ornamentation, 440
 - systematic paleontology, 441
 - zonation,
 - Dictyocha aculeata* Zone, 439, 440
 - epiodon* Zone, 58, 123
 - fibula* Zone, 58, 439, 440
 - rhombica* Zone, 58, 123, 439
 - triacantha* Zone, 58, 439
 - Mesocena quadrangula* Zone, 58, 123, 439
- Slumped beds, 837, 862
- Submarine volcanic breccias, formation of, 750
- Sulfate, dissolved in sediments, 564
- Site 314, Johnston Island Trough, 25
 - background and objectives, 25
 - biostratigraphic summary, 33
 - carbonate-compensation depth, 8, 34
 - chert, 855
 - correlation of reflection profiles with drilling results, 32
 - foraminifera, 33, 363
 - geochemistry, 30
 - lithologic summary, 30
 - nannofossils, 33, 387
 - operations, 26
 - physical properties, 32
 - Radiolaria, 33, 426
 - results, 8
 - reworked material, 427
 - sediment accumulation rate, 34
 - seismic reflection profiles, 25
 - site survey, 26
 - sonobuoy survey, 26
 - summary and conclusions, 33
- Site 315, Fanning Fan East, 37
 - background and objectives, 38
 - basalt, 572, 582, 649
 - biostratigraphic summary, 56
 - chert, 855
 - correlation of reflection profiles with drilling results, 55
 - foraminifera, 58, 369, 464, 467
 - geochemistry, 47
 - igneous rocks, 46, 578
 - iron-titanium rich sediments, 833
 - lithologic summary, 851
 - nannofossils, 57, 387
 - operations, 38
 - physical properties, 47
 - Radiolaria, 59, 427
 - results, 8
 - reworked sediments, 837
 - sediment accumulation rate, 56, 57, 59, 61
 - seismic survey, 38
 - silicoflagellates, 58
 - sonobuoy survey, 39
 - summary and conclusions, 59
- Site 316, Line Islands Trough, 105
 - background and objectives, 105
 - basalt, 589
 - biostratigraphic summary, 118
 - chert, 855
 - correlation of reflection profiles with drilling results, 117
 - drilling program, 107
 - foraminifera, 128, 365, 371, 464, 467, 468
 - geochemistry, 112
 - lithologic summary, 109
 - nannofossils, 122, 387
 - operations, 106
 - physical properties, 113
 - Radiolaria, 122, 427
 - results, 10
 - reworked sediments, 837
 - sedimentation rate, 10, 123
 - silicoflagellates, 123
 - site survey, 106
 - sonobuoy survey, 107
 - stratigraphic hiatuses, 108, 120, 122
 - summary and conclusions, 123
 - volcanism, 123
- Site 317, Manihiki Plateau, 162
 - basalt, 573, 582, 649
 - biostratigraphic summary, 180
 - correlation of reflection profiles with drilling results, 179
 - drilling program, 162
 - foraminifera, 181, 366, 372, 464
 - geochemical measurements, 172

- igneous rocks, 170, 579
- lithologic summary, 165
- nannofossils, 183
- operations, 162
- physical properties, 172
- presite survey, 162
- Radiolaria, 184, 439
- results, 10
- sediment accumulation rates, 181, 185
- sonobuoy survey, 162
- summary and conclusions, 185
- Site 318, Tuamotu Ridge, 301
 - background and objectives, 301
 - basalt, 589
 - biostratigraphic summary, 311
 - correlation of reflection profiles with drilling results, 311
 - drilling program, 302
 - foraminifera, 313, 366, 465, 467, 468
 - geochemical measurements, 309
 - lithologic summary, 305
 - nannofossils, 316, 391
 - operations, 302
 - physical properties, 309
 - presite survey, 302
 - Radiolaria, 317, 431
 - results, 5
 - sediment accumulation rates, 317
 - sonobuoy survey, 302
 - summary and conclusions, 317
- Slumping, 682, 875
- Solution unconformities, 6
- Sonobuoy data, 26, 39, 107, 118, 162, 302, 713
- Sound velocity, defined, 695
 - regional correlation of, 700
- Sphenolithus ciproensis* Zone, 383, 391, 498
 - heteromorphus* Zone, 57, 122, 383, 387, 394, 439, 497
 - predistentus* Zone, 394, 498
- Spherules, 878
- Spilitization, 801
- Spongaster pentas* Zone, 59, 184, 426, 427, 431
- Spreading-ridge sediments, 835
- Starbuck Island, 735
- Stichocorys peregrina* Zone, 59, 162, 317, 426, 427, 431, 434
- Stratigraphic hiatuses, 440
 - Cretaceous, 390
 - Cretaceous/Tertiary boundary, 384
 - Eocene, 108
 - Miocene, 118, 122, 313, 316, 367, 391, 430, 435, 850
 - Miocene/Oligocene, 118, 435
 - Oligocene/Eocene, 435
 - Tertiary, 122, 389
- Styolites, 44
- Submarine canyons, 681
- Submarine erosion, 679
- Subsidence, Line Islands, 922
 - Manihiki Plateau, 11, 505, 922
- Survey data, Leg 33, 15
- Suvarov Island, 11, 187, 923
- Suvarov Trough, 891
- Systematic paleontology, molluscs, 513
 - silicoflagellates, 441
 - trace fossils, 512
- Tertiary stratigraphic hiatus, 389
- Theocampe mongolfieri* Zone, 426
- Theocyrtis tuberosa* Zone, 59, 123, 426, 427, 430, 431, 559
- Theralite, 759
- Tetralithus aculeus* Zone, 123, 386, 387, 393, 920
 - Gothicus* Zone, 386, 393
 - murus* Zone, 384
 - trifidus* Zone, 385, 652
- Thyrsocyrtis bromia* Zone, 426, 427
 - triacantha* Zone, 317, 426, 434
- Ticinella roberti* Zone, 183, 373
- Time-stability hypothesis, 312
- Tindaria ecology, 509
- Trace fossils, systematic paleontology of, 512
- Trachytes, 759, 782
- Triquetrorhabdulus carinatus* Zone, 57, 122, 183, 316, 387, 391, 393, 394, 493, 497
 - rugosus* Subzone, 495
- Tuamotu Islands, 5, 11, 361, 731, 735, 891, 922
- Tuamotu Ridge, 434, 682, 683, 695, 696, 726
- Turbidite fans, 5, 655
- Turbidites, 5, 33, 34, 317, 387, 434, 680, 731
- Turbidity currents, 880, 919
- Unconformity, angular, 186, *See also* Stratigraphic hiatuses
- Underway geophysical data, 655
- Uplift, Line Islands Chain, 922
- Veticordia ecology, 509
- Voight-Reuss velocity, 722
- Volcanism, 10, 11, 105, 123, 883, 915, 923
 - Line Islands Chain, 25, 38, 301, 741, 742, 744, 750, 780, 918, 919
- Volcaniclastic sediments, 10, 308, 507, 875
 - texture of, 876
 - mineralogy of, 878
- Volcanogenic grains, surface morphology of, 797
- Volcanogenic sediments, 789, 794, 796, 801
- Vostok Island, 735
- Wake Island, 918
- Wake Seamounts, 749, 756, 759, 762
- Washington Island, 733, 739, 882
- Water content, regional correlation of, 702
- Wet-bulk density, regional correlation of, 703
- Xenoliths, 757
- X-ray diffraction analyses, basalts, 574
 - iron-titanium-rich sediments, 833
- X-ray fluorescence, 582
 - iron-titanium-rich sediments, 833
- X-ray mineralogy, 19, 539
- Zoophycos, 44, 882