

I

- Iapetus Ocean
 Atlantic Ocean N, Precambrian features, 801107
 basement, main features, 801111
 Goban Spur, evolution, 801200
 regional tectonics, deformation, 801154
 Iapetus Suture, 801154
 Iberian Basin, 120930, 390973
 Iberian continental block, 120079, 480038
 Iberian margin W, evolution, 47B0761
 Iberian Cordillera Basin, 760871
 Iberian margin, 47B0005, 47B0417, 47B0633, 480035, 480036, 760871, 801206
 Atlantic Ocean, opening, 47B0667
 Atlantic Ocean N, Paleozoic, 801110
 Atlantic Ocean W, subsidence, 47B0029, 47B0667
 carbonate
 carbon isotope, 47B0477
 oxygen isotope, 47B0477
 evolution, structural, sedimentary, Mesozoic, 47B0649
 foreland province, 130043
 Atlantic suite, 130770
 Galicia, continental margin, 47B0633
 Goban Spur, evolution, 801206
 Iberian margin W, evolution, 47B0766
 Jurassic sedimentation, Tethys, 760871
 Moroccan Basin, margin, 500813
 regional geology, physiography, 801188
 sedimentation and tectonics, 47B0663
 stratigraphy, 47B0633
 structural history, 47B0633
 Iberian margin NW
 tectonics and sedimentation, 47B0663, 47B0671
 acoustic stratigraphy, 47B0663, 47B0665
 Atlantic Ocean, 47B0667, 47B0674
 compression, 47B0675
 first tensional phases, 47B0671, 47B0673, 47B0674
 margin subsidence, 47B0667
 rifting, 47B0663
 subsequent tensional movements, 47B0674
 tectonics, 47B0667, 47B0669, 47B0671
 tension tectonics, 47B0666, 47B0667, 47B0776
 Iberian margin W, 47B0768, 47B0770
 Biscay, Bay of N, continental margin, 481039
 evolution, 47B0761, 47B0764, 47B0768, 47B0770
 acoustic stratigraphy, 47B0761, 47B0764
 African Plate, 47B0761
 American Plate, 47B0761
 Aptian, 47B0768
 Atlantic Ocean, 47B0764
 Atlantic Ocean N, 47B0761, 47B0766, 47B0768
 Biscay, Bay of, 47B0761
 circulation, oceanic, 47B0761
 compression, 47B0768
 continental margins, vertical evolution, 47B0761
 Eurasian Plate, 47B0761
 fault block, 47B0768
 Flemish Cap, 47B0761
 Galicia Bank, 47B0761, 47B0768
 Iberian continental block, 47B0761
 Iberian Peninsula, 47B0761, 47B0768
 Jurassic-Cretaceous tensional episode, 47B0766
 Magnetic Anomaly, 34, 47B0766, 47B0768
 magnetic data, 47B0764
 microcontinent, 47B0761
 ocean opening, Jurassic-Cretaceous, 47B0768
 paleoenvironmental data, 47B0761
 passive margin, 47B0768, 47B0770
 rifting, 47B0768
 sea level, 47B0770
 second tensional episode, 47B0768
 sediment, water load, 47B0770
 stratigraphy, 47B0761, 47B0762, 47B0764
 structural, tectonic processes, 47B0770
 subsidence, 47B0770
 Triassic-Liassic tensional episode, 47B0764, 47B0766
 vertical movement, 47B0770
 Vigo Seamount, 47B0761
 Iberian Meseta, 131079, 42A0953
 Moroccan Basin, margin, 500808, 500809
 Iberian Peninsula, 130033, 131409, 140871, 42A0889, 42A0945, 430802, 430867, 47B0025, 47B0525, 47B0753, 47B0761, 47B0768, 480036, 480641, 480873, 481004, 481025, 481058, 760842, 760870, 760871, 800005, 801110, 801115, 801153, 801158, 801162, 801189, 801198, 801200
 Ammonoidea, Cretaceous, 47B0361
 Atlantic Ocean
 Cenozoic sediments, 47B0429
 Cretaceous sediments, 47B0429
 Atlantic Ocean C, basin, 511506, 511507
 Atlantic Ocean N
 paleogeography, 121173, 121177
 Paleozoic, 801108, 801109, 801110
 Precambrian features, 801106
 bathymetry, 47B0753
 Biscay, Bay of N, continental margin, 481025
 clay, 47B0440
 compression, Mediterranean Sea, 131011
 continental margin
 evolution, 47B0761, 47B0768
 structural evolution, 481058
 tectonics, 47B0753
 continental shelf, 801106
 edge, 47B0049
 continental slope, 47B0636
 Galicia Bank, 47B0026
 geochemistry, 47B0429
 geological, geophysical setting, sedimentary cover, 42A0891
 geology, 47B0095
 Goban Spur
 continental margin, 801162
 evolution, 801200
 Grand Banks of Newfoundland, separation, 47B0030
 Iberian margin W, evolution, 47B0761, 47B0764, 47B0766, 47B0768
 Jurassic, 760870
 Jurassic sedimentation, Tethys, 760870, 760871
 lithology
 abyssal plain, 120695
 Cenozoic deposits, 47B0049
 Magnetic Anomaly J, 47B0094
 magnetism, 47B0764
 Mediterranean Sea, extension, 131011
 mineralogy, 47B0429
 Moroccan Basin, margin, 500807, 500808, 500813
 Newfoundland
 seaway, 47B0057
 separation, 47B0030
 North America, 130019, 130033
 position, 47B0766
 North America E, 130019, 130033
 position, 47B0766
 plate, 130019, 131011, 47B0096, 47B0675, 47B0761, 800920
 compression, 47B0768
 tectonic history, 941149
 tectonics, 131011
 Pyrenean phase, 47B0659
 rifting, 47B0753
 separation, Grand Banks of Newfoundland, 47B0030
 shelf margin, 47B0049
 tensional episode, Jurassic-Cretaceous, 47B0094
 Tethys, Mediterranean Sea, 42A0945
 Iberian Peninsula NW
 Galicia Bank, tectonics, 47B0663
 sedimentation, margin, 47B0663
 Iberian Peninsula S, 801109
 Moroccan Basin, margin, 500808
 Iberian Peninsula W, 750502
 passive margin, evolution, 47B0761, 47B0768
 Iberian Plain, 120673, 47B0095, 47B0633, 47B0636, 47B0641, 47B0646, 47B0658, 47B0673, 47B0764
 acoustic reflector, 47B0080
 Galicia, continental margin, 47B0633
 magnetic anomaly, 941151
 Iberian Ranges, 930914
 Ibero-Armorican Arc, 801110
 Atlantic Ocean N
 Paleozoic, 801108
 Precambrian features, 801106
 trends, 801106
 Ibiza, 131115, 131436
 geological, geophysical setting, rifting, 42A0889
 ice
 accumulation, 280939, 850749, 901356
 Antarctica, 850749
 land, 390249
 Arctic, accumulation, 860600
 Atlantic Ocean, margin, 481106
 Atlantic Ocean N, clay, 481096, 481097
 Atlantic Ocean NE, stable isotope, 480477, 480484, 480486
 Atlantic Ocean S
 Argentine Basin, 391120
 hiatuses, 391104
 Atlantic Ocean SW, basin, evolution, 361009
 biostratigraphic zonation, Quaternary
 bioclimatic subdivisions, 800692
 biostratigraphy, 280926, 280927
 calcium carbonate, stable isotope, 850746
 Cape Bojador, magnetic polarity reversal, 47A0479
 carbon isotope
 benthic foraminifers, 800814
 Neogene, 901402
 Pliocene, 901403
 volume, 850771
 carbonate
 isotope stratigraphy, 850733
 isotopes, 960671
 CCD, history, 920302
 Cenozoic paleoceanography
 accumulation, 901493
 Antarctica E, 901493
 Challenger Plateau, Quaternary, 901421, 901422
 Chatham Rise, Quaternary, 901434
 climate, 280936
 diatom paleoceanography, paleoclimatology, increase, 850944
 Eocene-Oligocene volume increase, 850775
 eolian record, polar cooling, 920337
 gas hydrate
 crystal geometry, 670591
 formation, 670591
 water, 670611
 geochemistry, inclusion, 660547, 660549

- glacial cycles, deep-sea environment, 800809, 800811
- glacial sedimentation
- climatic interpretation, 280763
 - Ohio, 280765
- glaciation, Pliocene, 850730, 850731
- Goban Spur, evolution, 801212
- ice rafting, 280927
- isotopic paleotemperature estimates, 710415
- latitudinal thermal gradients, accumulation, 901359
- lithology, 280926, 280927
- Lord Howe Rise, ^{18}O , 901386
- Middle America Trench, transect, 670611
- Miocene, Antarctica, 720985, 720986
- Miocene events, 850767
- nearshore environment, 280933, 280934
- Neogene oceanography, Antarctica, 901380
- New Jersey Transect, 950805
- Northern Hemisphere, glaciation, 720987, 720988
- oceanography, 280937
- offshore environments, 280935
- organic matter, source, 380805
- oxygen, Paleogene, 710409
- oxygen isotope, 800814
- Miocene, 901398
 - Pliocene, 901399
 - volume, 800814
- Pacific continental margin, geomorphology, 350279, 350281, 350285, 350287
- Pacific Ocean C, oxygen isotope, 850771
- Pacific Ocean SW
- Cenozoic, 901513, 901514
 - paleoceanography, 901502, 901506, 901512
- paleoceanography, 280933
- Red (13.5-14.5 Ma), 850964
- pebble characteristics, melting, 280769
- Peter I Island, geology, 350341
- Quaternary, Pleistocene, 801181
- Quaternary isotopic record, 680464
- global volume, 680455
 - sea level, 680462
 - volume, 680459
- sea level, fall, 850775
- seismic modeling, paleoceanography, conclusions, Antarctica, 850968
- stable isotope
- Miocene paleoceanography, 850745
 - oxygen isotope, 800801
 - Pleistocene surface temperature changes, 800800
- temperature, 901355
- thermohaline flow, Quaternary, 720991
- unconformity, Polar Front Zone, 710467
- volume, Goban Spur, 801210
- Walvis Ridge, geologic evolution, 750534
- ice cap
- Antarctica, 280939, 350535, 400972, 480477, 500717, 660545
 - Antarctica E, 481107
 - Arctic, 500717
 - Atlantic Ocean, margin, 481107
 - Atlantic Ocean NE
 - climate, 800805
 - stable isotope, 480477, 480484
- carbonate, secondary, vein, 580906
- continental shelf, onshore geology, 400972
- cooling, Miocene, 850936
- eolian record, Antarctica, 920337
- glacial cycles, deep-sea environment, 800811
- Goban Spur, evolution, 801210, 801213
- Greenland, 131400
- mineralogy, Goban Spur, 801032
- Miocene changes, Antarctica, 850943
- Northern Hemisphere, 480477
- organic facies origin, Antarctica, 660545
- organic sediments, origin, 660545
- Pacific continental margin, geomorphology, 350285, 350287
- Pacific Ocean S, eolian sedimentation history, 920601
- Peter I Island, geology, 350343
- Quaternary isotopic record, 680464
- transition between modes, 680462
- sedimentary record, effects, 850765
- South Pole, 280938
- stable isotope analysis, oxygen isotope, 800801
- ice rafting, 120048, 120168, 120261, 120411, 120766, 130064, 180409, 190023, 190171, 190281, 190417, 190418, 190466, 280052, 280082, 280083, 280089, 280123, 280125, 280126, 280155, 280156, 280157, 280159, 280220, 280221, 280223, 280232, 280340, 280374, 280379, 280738, 280739, 280740, 280743, 280915, 290123, 290125, 290272, 291041, 350030, 350042, 350066, 350086, 350131, 350163, 350164, 350171, 350305, 360022, 360023, 360031, 360091, 360156, 38S0021, 380027, 38S0028, 380029, 380037, 380120, 380160, 380169, 380173, 38S0251, 38S0265, 38S0269, 38S0270, 380391, 380457, 380538, 480132, 480175, 480178, 480220, 480222, 480767, 490025, 490026, 490163, 810871
- accumulation rate, 280930
- aggregate, clay, 280738
- Alaska, Gulf of
- erratics, 180835
 - glaciation, 080041, 180005, 180288, 180295, 180407, 180556, 180592, 180835, 180897, 180904, 180961, 180974, 190005, 190019, 190414, 190569, 190731, 190831, 190887, 190898, 190899, 190908, 260709, 291163, 360849, 38S0235
- Aleutian Islands, 561095
- Antarctica, 280738, 280927
- glaciation, 291039, 291041, 291042, 291043
 - ice sheet, 280752
- Argentine Basin, 710307
- Atlantic Ocean, margin, 481108
- Atlantic Ocean C, hiatuses, 391104
- Atlantic Ocean N, 490859, 490869, 941091, 941093, 941095, 941098
- glaciation, 490869
 - mineral grains, 490869
 - sedimentation, 120920, 120925
- Atlantic Ocean NE, 941091, 941093, 941095, 941098
- stable isotope, 480486
- Atlantic Ocean S, hiatuses, 391104
- Atlantic Ocean SW, 710307, 710309, 710315
- accumulation rate, 710313, 710314
 - Antarctic influence, 710314
 - basin, evolution, 360993, 360994, 361007
 - deposition rate, 710307
 - lag deposits, 710313
- biostratigraphic zonation, Quaternary
- bioclimatic subdivisions, 800692
- biostratigraphy, 280922, 280927
- Biscay, Bay of, evolution, 480796
- bottom current, 280752
- Atlantic Ocean N, 490859
 - biogenic sedimentation reduction, 280752
 - bottom water, 280752
 - ice shelf, 280752
 - manganese nodules, 280752
 - Miocene, 280752
 - Pliocene, 280752
- Brunhes-Matuyama, 280752
- deposition rate, 280752
- ice shelf, 280754
- sand, 280752
- calcareous facies, Pleistocene-Pliocene ooze, 291151
- carbonate, isotope stratigraphy, 850733
- chronology, 860647
- climate, 860650
 - Gauss/Matuyama boundary, 860651
 - paleopositions, 860649
 - "rare" zone, 860651
- clay minerals, 38S0021, 38S0028, 810688
- climate, 810861, 810867, 810870, 810871
- continental margin sedimentation, 280728
- detrital petrology, transport, 280746
- diamictite, 280740
- diatoms, 280738
- dispersal patterns, 350294
- eolian sedimentation, glaciation, 860600
- erosion, continental, 280752
- Beacon Group, 280752
 - source rocks resistance, 280752
- erratics, 180835, 180836, 180839
- age determinations, 180836
 - erratic abundance curves, 180836
 - fluctuations, 180836
 - glaciation, 180836, 180839
 - granite, 180835
 - granodiorite, 180835
 - graywacke, 180835
 - Malaspina Glacier, 180835
 - measurements, abundance, 180835
 - metavolcanic rock, 180835
 - mica, 180835
 - rafted origins, pebbles, 180836
 - sand, 180835, 180839
 - sedimentation rate, 180839
 - slate, 180835
 - exotic pebbles, 561089, 561095
 - Feni Ridge, sediments, 941107
 - ferromanganese nodules, 280738
 - Gardar Ridge, sediments, 941107
 - Gauss Chron, 280752
 - ice shelf, 280754
 - Ross Sea, 280754
 - sedimentation rate, 280752
- Geisha Guyots, 200684
- Gilbert Chron
- ice shelf, 280754
 - iceberg, 280754
 - sand, 280754
 - sedimentation rate, 280754
 - warm water temperatures, 280754
- glacial sedimentation, sand, 280763
- glaciation, 280739, 280740
- acid residues, 280740
 - Alaska, Gulf of, 180835
 - biogenous component, 280739
 - chertification, 280740
 - continental rise, 280740
 - detritus, 360858
 - granite, 280740
 - Miocene, 280740
 - Oligocene, 280740, 280752
 - ooze, carbonate, 280740
 - Pliocene, 280740, 850730
 - Pliocene-Pleistocene, 280739
 - Quaternary, 280740
 - Ross Sea, 280740
 - sand, 280740
 - sand, quartzose, 280740
 - siliceous organisms, 280740
 - structural trough, 280739
 - turbidites, 280739
 - Wilkes Land, 280740
- Goban Spur
- evolution, 801212

- Goban Spur (Cont.)
 upper slope, 801195
 Greenland, 810873
 Greenland Sea, regional conclusions, 38S0251
 insoluble residue, Quaternary, 480767
 Japan Trench, 561089, 561095
 Kuril Islands, 561095
 lithology, 180409, 190281, 190417, 190418, 190466, 280082, 280083, 280123, 280125, 280126, 280155, 280159, 280220, 280221, 280223, 280232, 280340, 280379, 280922, 280927, 290123, 290125, 350066, 350086, 350131, 350163, 350171, 360022, 360023, 360031, 360091, 360156, 38S0021, 380027, 38S0028, 380029, 380037, 380120, 380160, 380169, 380173, 380391, 380457, 380538, 480132, 480175, 480178, 480220, 480222, 490025, 490026, 490163
 chalk, 120411
 clast, 280374, 350042
 clay, 120261, 120766
 clay, glacial, 120048
 erratics, 180295, 190023, 280130, 290272
 glacial debris, 380030
 Miocene, 350174
 ooze, diatomaceous, 280052
 ooze, limestone, 120411
 ooze, marl, 130064
 paleoclimatic curve, 380029
 petrology, 280156, 280157
 Pliocene sediment, 120168
 Pliocene to Pleistocene sediments, 120168
 provenance, 280157
 quartz, 290195
 radiolarian indices, 380029
 sand, 280089, 350030
 sedimentation, 350164
 volcanic components, 190171
 lithostratigraphy, clay minerals, 810688
 Malvinas Outer Basin, 710314
 manganese, 291084
 Matuyama Chron, 280752
 sand, 280752
 sedimentation rate, 280752
 Maurice Ewing Bank, 710307
 micronodule, manganese, 291085
 mineral, heavy, characteristics, 350294
 mineralogy, 350305
 Rockall Rise, 801033
 Miocene, 280739
 nearshore environment, 280933, 280934
 Northern Hemisphere, glaciation, 720987
 Norwegian Sea
 Greenland Sea, 38S0265, 38S0269, 38S0270, 38S0285, 38S0286
 regional conclusions, 38S0251
¹⁸O, trends, 901372
 oceanography, 280937
 offshore environments, 280935
 Oligocene, 280739
 sand, 280739
 ooze, carbonate, 280739
 ooze, siliceous, 291150
 organic matter, source, 380805, 380806
 oxygen isotope, Pliocene, 901399
 Pacific continental margin, geomorphology, 350285
 Pacific Ocean N
 Aleutian Plain, 190897
 ash, 190909
 Bering Sea, 190909
 clay, 190908
 Meiji Guyot, 190900
 Pacific Ocean NE, sand, 860647, 860649, 860651
 Pacific Ocean NW
 chronology, 860647, 860649, 860650, 860651
 eolian sedimentation, 860600
 paleoceanography, Reflector Green, 850966
 paleoclimate, diachronous biogenic facies, 280915, 280916
 pebbles, petrography, 801039, 801040, 801041
 plant organic matter, terrigenous material, 380820
 Pliocene, 810871
 qualitative chronologies, 860649
 Quaternary calcareous benthic foraminifers, 800745
 Quaternary nannofossils, reworking, coccolith structure, 800768
 Quaternary to Miocene, 280739
 sand, 280739
 Radiolaria, 280738
 red beds
 sediment history, 38S0285, 38S0286
 sedimentary structure, 38S0265
 turbidites, 38S0269, 38S0270
 sand, 280738, 280740
 chronology, 860647
 indicator, 860649, 860651
 petrology, 280746
 sediment history, 280785, 280787
 sediment mixing, 280743
 sediment record
 Miocene, 710469
 Southern Ocean, 710476
 sedimentation rate
 Brunhes sediments, 280746
 deposition, 280746
 erosion, continental, 280752
 Gauss Chron, 280744, 280746
 Gilbert Chron, 280744
 glacier, 280752
 ice shelf, 280752
 iceberg, 280746
 Matuyama Chron, 280746
 Miocene, 280744, 280746
 offshore distance relation, 280746
 paleontology, 280744
 Ross Sea, 280744
 sand, 280744, 280746
 sea temperatures, 280752
 Wilkes Land, 280744
 sediments
 Feni Ridge, 941107
 Gardar Ridge, 941107
 sources
 Ross Sea, 280752
 sedimentation rate, 280752
 Shackleton Ice Shelf, 280752
 Victoria Land, 280752
 Southeast Pacific Basin
 evolution, geologic, 350731, 350735, 350738, 350739
 sediment distribution, 350206, 350226
 temperature
 Antarctic Convergence, 901356
 Antarctica, 901356
 Tertiary, Pliocene, 801181
 unconformity, Pliocene-Pleistocene, 710467, 710468
 upper slope
 bathymetry, 800734
 sand, quartz, 800732
 weathering, 280743
 winnowing, 280743
see also glaciation
 ice sheet
 Angola Basin, evolution, geologic, 750530
 Antarctica, 390343, 391071
 continental, 480746, 480816
 formation, 931415
 glaciation, 290752
 oxygen isotope, 780499
 Antarctica E, 750763
 Antarctica W, 720918
 Antigua Formation, limestone, 780088
 Arctic, 42A1074
 Atlantic Ocean NE, stable isotope, 480477, 480482
 Atlantic Ocean S, hiatuses, 391105
 Atlantic Ocean SW, basin, evolution, 361009
 carbon isotope, Antarctica, 290806
 carbonate
 isotope chronostratigraphy, 960675
 Quaternary, 901436
 stratigraphy, 901215
 Challenger Plateau, Quaternary, 901421, 901422, 901423
 climate, 280936
 coarse fraction variation, Antarctica, 901212
 deposition, bottom water, 250501, 250503
 Europe W, 120958
 euxinic sediment, Cenozoic organic sediments, 750852
 formation, Northern Hemisphere, 780504
 glacial sedimentation, climatic interpretation, 280765
 Greenland, 641253
 isotopic paleotemperature estimates, Antarctica, 710415
 lithologies, major, ooze, 901481
 lithology, deposition, 47A0036
 Lord Howe Rise, isotope stratigraphy, 901383
 Lord Howe Rise C, Neogene evolution, 901451, 901452
 major boundaries, hiatuses, 901467
 Miocene, 801180
 Antarctica, 720985
 Messinian salinity crisis, 720986
 Miocene ocean, isotopic change, evidence, Antarctica, 740697, 740699
 Miocene time series, statistical analysis, 850746
 Miocene-Pliocene isotope stratigraphy, Antarctica E, 901403
 nearshore environment, 280933
 North America E, 120958
 Northern Hemisphere, 290801, 290804
 formation, 780504
 glaciation, 720987, 780486
¹⁸O, trends, 901372, 901375
 oceanography, 280937
 oxygen isotope
 Antarctica, 290806, 780499
 continental, 901397
 Miocene, 901397, 901398
 thermal gradients, 901401
 Pacific Ocean SW
 Cenozoic, 901513, 901514
 oxygen isotope, 901347
 paleoceanography, 901503, 901506, 901507, 901513
 Peter I Island, geology, 350343
 Quaternary isotopic record, ¹⁸O, 680464
 sediment record, Southern Ocean, 710475
 sedimentation, 42B0608
 Southeast Pacific Basin, evolution, geologic, 350735, 350738
 stable isotope, Miocene paleoceanography, 850745
 strontium, 42B0608
 unconformity, Polar Front Zone, 710467
 ice sheet, continental
 calcium carbonate, stable isotope, 850746
 coalification, high pressure, 670602
 Guatemala, continental slope, 670602

- Northern Hemisphere, glaciation, 720987
ice sheet E, Antarctica, 290743, 290750, 290752, 410957
ice sheet W, Antarctica, 42A0829, 280651, 290780, 290801, 291167, 350008, 350028, 350064, 350360, 350392, 350738
iceberg, 290041
Antarctica, glaciation, 291039, 291041, 291042, 291043
biostratigraphy, 280922, 280925
Challenger Plateau, Quaternary, 901422
glacial sedimentation, Ross Ice Shelf, 280765
glaciation, detritus, 360858
ice rafting, 280927
Gilbert Chron, 280754
sedimentation rate, 280746
lithology, 280922, 280925, 290041
Miocene ocean, isotopic change, evidence, isotopic composition, 740697
nearshore environment, 280934
offshore environments, 280935
Pacific continental margin, geomorphology, 350281
Peter I Island, geology, 350343
sediment record, Southern Ocean, 710474
unconformity, Polar Front Zone, 710468
Iceland, 120003, 120313, 120368, 121130, 121155, 131397, 151000, 220463, 250757, 260505, 260549, 260567, 260571, 330784, 340284, 370436, 370591, 370599, 380037, 38S0041, 38S0105, 38S0215, 38S0241, 380600, 380721, 380752, 380959, 381201, 411103, 430013, 430101, 430734, 430803, 481102, 490007, 490101, 490551, 490841, 490859, 510974, 540765, 540845, 540846, 540848, 580892, 600880, 600897, 610697, 620600, 650579, 650667, 720461, 730611, 800823, 800832, 800833, 810565, 810670, 810801, 810803, 810805, 810870, 810918, 820006, 820395, 820418, 820431, 820460, 820492, 890507, 931031
actinolite, hydrothermal system, 830235
alteration, products, 810734
analcime, 810638
ash, 810666
aerial distribution, 490440
magma, 490437
Atlantic Ocean, margin, 481102
Atlantic Ocean N, paleogeography, 121178
Atlantic Ocean NE, evolution, 411221
basalt, 450671, 490604, 490658
flows, 820445
lead isotope, 490721
midocean ridge, 490843
penetration, 490185
rare earth, 380748, 380749
Tertiary flows, 830124
basalt, altered
geochemistry, 580800, 580811
major element, 580882, 580887, 580892
petrochemistry, 580800
trace elements, 580882, 580887, 580892
basement, chemical and magnetic stratigraphy, 450671
California, Gulf of, basalt, 650667
canyons south, 120909
Cape Reykjanes, 600763
chemical stratigraphy, 450658, 450671, 460429
Azores, 450658
Costa Rica Rift, alkali, 690492
cruise objectives, Kane Fracture Zone, 450005
dacite, conglomerate, 571285, 571286
dipping reflector, 810884, 810901, 810903
Faroe Islands, 810035, 810278, 810688, 810692
hot spot, 481145
ferrobasalt, 820403
formation, 490719
geochemical anomaly, 490721
evolution, 490721
geochemical variation, 490598, 490604, 490606
geochemistry
ferrobasalt, 540765
Hatton Drift, 810734
geological, geophysical setting, Mid-Atlantic Ridge, 450023
glaciation, 490036
Goban Spur, upper slope, 800764
hot spot, 481145, 490583, 490812, 490830
hydrothermal, 610663
Iceland Basin, eruption, 121188
Indian Ocean W, regional aspects, 250757
interstitial water, geochemistry, Guaymas Basin, 640686
Labrador Sea S
bathymetry, 121155
deep current-controlled sediment body, 121163
lava, isotope geochemistry, 810776
lavas, 490059, 490842
lead isotope, basalt, 490721
lithology
paleoenvironment, 490036
sandstone, 120373
magma
ash, 490437
petrogenesis, 490634
tectonic affinities, 810801
magnetic stratigraphy, 450658, 450671, 460429
Azores, 450658
Mid-Atlantic Ridge, magnetic observations, 490807, 490812
mineralogy, ferrobasalt, 540765
northeastern, 120959
Pacific Ocean E, ferrobasalt, 540845
petrological and geochemical variation, 490597
plateaus, 220464, 380595, 380758
plume, 490843
crust, oceanic, 490807
rare earth elements, light, enrichment, 830252
Reykjanes Ridge
magnetic observations, 490807, 490812
paleogeography, 490826
rhyolite, conglomerate, 571285, 571286
ridges, Faroe Islands, 380025
Rio Grande Rise, subsidence, 720963, 720964, 720968
Rockall Plateau, basalt, 810803
Rockall Rise SW, structure, 481084
seamounts, ridges, volcanic origin, 330784
south, 810896
Stardalur, 430805
stratigraphy, sea floor spreading, 481084
Suiko Seamount, trace elements, 550567
Tertiary, Eocene, 801179
Tjornes, 120962
volcanic rocks, petrography, 200691
volcanic sediments, 480780
volcanism, 490439, 490440, 941114
volcano, 120909
zeolite, 810649
Iceland Basin, 120003, 120326, 120361, 120373, 120397, 120909, 120928, 38S0246, 481145, 490859, 810033, 810035, 810036, 810683, 810689, 810898
Atlantic Ocean, margin, 481102
Atlantic Ocean N
paleogeography, 121171, 121173, 121177
sedimentation, 120928, 120930
Atlantic Ocean NE, 810689, 810692
basement, age, 121186
basin, asymmetrical, 121186
bottom water, circulation, 941220
Cenozoic sediments, 38S0073, 38S0074, 38S0075, 38S0080, 38S0087, 38S0089, 38S0092
ash, 38S0081, 38S0091
authigenic components, 38S0074, 38S0081
basalt, 38S0089
biogenic components, 38S0089
carbonate, biogenic, 38S0073, 38S0080
Cenozoic, 38S0092
chlorite, 38S0075
clay, 38S0075
clay, authigenic, 38S0073
clay minerals, 38S0074
clay, montmorillonite, 38S0092
diagenesis, 38S0089
diatom skeletons, 38S0080
diatoms, 38S0092
erosion, 38S0089
foraminifers, 38S0080
glass, acidic, 38S0081
hydromica, 38S0075, 38S0081, 38S0087
iron sulfide, 38S0081
kaolinite, 38S0075, 38S0087
marcasite, 38S0075
mineral, heavy, 38S0075
Miocene, 38S0075
Miocene-Pliocene, 38S0080
montmorillonite, 38S0075, 38S0081, 38S0087
Oligocene, 38S0075
Oligocene-Miocene, 38S0089
plagioclase, 38S0075
Pleistocene, 38S0087, 38S0092
Pliocene, 38S0091
pyrite, 38S0075
quartz, 38S0075
silica, biogenic, 38S0073
terrigenous components, 38S0075, 38S0087
terrigenous material, 38S0089, 38S0092
volcanic components, 38S0073
volcanism, 38S0089
volcanogenic components, 38S0087
volcanogenic material, 38S0092
volcanogenic origin, 38S0073
volcanogenic sources, 38S0092
weathering, submarine, 38S0089
zeolite, 38S0075, 38S0081, 38S0089
circulation blocking, 121188
contour current, 121186
drift, sediment, 941222
Gardar Ridge, 121186
Hatton Ridge, W scarp, 121186
Iceland, eruption, 121188
interstitial water, carbonate, 121194
Labrador Sea S, deep current-controlled sediment body, 121161
lithology, 120370
Magnetic Anomaly, 22, 121186
Maury Seachannel, 121186
mineralogy, 101130
origin of Cenozoic sediments, 38S0073
Reykjanes Ridge, 121186
Rockall, 121186
Rockall Rise SW, structure, 481084
sandstone, 121188
sandstone, volcanic, 121188
sedimentary processes, 120928
stratigraphy, sea floor spreading, 481084
Tertiary section, 121186

- turbidity current, deposits, 121188
 Iceland E, 380685, 380751, 380752, 820403
 alteration, remnant arc debris, 590739
 basalt, 490604
 Iceland Plateau, 220464, 380595, 380758, 810666, 810870
 ash, 810666
 Greenland Sea
 ash, 38S0240
 geologic setting, 38S0210, 38S0214
 glass, 38S0240
 Jan Mayen Ridge, 38S0246
 Jan Mayen Ridge, 38S0465
 Magnetic Anomaly 5D, 38S0466
 magnetic anomaly, 38S0465
 opaque layer, 38S0465, 381231
 spreading, 38S0466
 mineralogy, 38S0135
 Norwegian Sea
 ash, 38S0240
 geologic setting, 38S0210, 38S0214
 glass, 38S0240
 Greenland Sea, 38S0266
 Jan Mayen Ridge, 38S0246
 red beds, sedimentary structure, secondary, 38S0266
 Rio Grande Rise, basement, volcanic, 720956
 tectonics, 381213
 Iceland Ridge, sedimentary evolution, 430818
 Iceland S, 720964, 800764
 Iceland-Faeroe Ridge. *See* Faeroe-Iceland Ridge
 Iceland-Faeroe Plateau
 Norwegian Sea, Greenland Sea, 38S0264, 38S0285
 red beds
 sediment history, 38S0285
 sedimentary structure, 38S0264
 Iceland-Greenland Ridge. *See* Greenland-Iceland Ridge
 Iceland-Jan Mayen Ridge. *See* Jan Mayen Ridge
 Iceland-Scotland Overflow Water, 810683
 Atlantic Ocean NE, stable isotope, 480475
 lithology, 810862
 Idaho, 120959
 iddingsite
 alteration, products, 450615, 511274
 basalt
 geochemistry, 350333
 mineral chemistry, 550611, 550617, 550627, 550629, 550630, 550632
 mineral, secondary, 340399
 mineralogy, 110875, 291104
 petrochemistry, 630711
 petrology, 350333, 590672
 basement, mineralogy, 110875
 chemistry, chemistry, petrography, 550687
 claystone, basalt, 550707
 Costa Rica Rift, basalt, 690516
 Costa Rica Rift Zone, basalt, 830238, 830239, 830307, 830309
 Emperor Seamounts, petrology, 550511, 550516, 550522, 550572, 550573, 550574, 550578, 550581, 550582
 ferromanganese sediment, 190630
 Geisha Guyots, 200682
 geochemistry, mineral, secondary, 450615
 Jingu Seamount, volcanics, 550687
 lithology, basalt, 300242
 Mid-Pacific Mountains, 200674
 mineral composition, basement, 110875
 mineralogy, 291104
 amphibolite, 220418
 basalt, 220423
 basalt, amphibole-bearing, 220418
 Necker Ridge, 200678
 Peter I Island, geology, 350347, 350349
 polymict breccia, clast, 600648
 Rockall Plateau, Paleogene sediments, 810653, 810658
 spherule, 291104
 volcanics, Pacific Ocean C, 291104
 Wake Guyots, 200679
 iderite, lithology, 360214
 Idjwi Island, 210909
 Iglesias, 130777
 igneous rocks, 580633, 580659, 780019, 840947, 840948
 accretion, Neogene, 840949
 age determination, 42A0531
 Al, 840948
 Al₂O₃, 840948
 alteration
 Mariana Islands, 600769
 secondary processes, 580659
 amphiboles, 840948
 amphibolite, 840947
 paragenesis, 840948
 Angola Basin, geologic evolution, 750516, 750517, 750518
 Antalya, Gulf of, ophiolite, 840948
 Arabian Sea, sediment history, 230517
 Atlantic Ocean
 geochemistry, 370653, 370735
 magnetic properties, 370471
 paleomagnetism, 140777
 petrology, 370653
 trace elements, 370573
 viscous remanent magnetization, 370525
 whole-rock chemistry, 370725
 Atlantic Ocean C, 391099
 Atlantic Ocean N, 020387
 paleomagnetism, 140777
 Atlantic Ocean S, 391099
 Atlantic Ocean SW, basin, evolution, 361004
 Ba, 840948
 Baja California
 isotopic ratio, 630733
 magnetic properties, 630739
 major element, 630733
 basalt, 840947
 age, 840948
 Cocos Plate, 840948
 island arc, 840949
⁴⁰K/⁴⁰Ar age, 840948
 paleomagnetism, 610717
 basalt, alkali, 840948
 age, 840948
 basalt, phyrlic, 580659
 basalt, quartz-normative, 840948
 basement, Mesozoic, 840949
 Bermuda Rise, basalt, 511473, 511474
 calcium, 840948
 California, Gulf of, paleomagnetism, 650705
 California S
 isotopic ratio, 630733
 magnetic properties, 630739
 major element, 630733
 Central America
 basement, 840949
 ophiolite, 840949
 chemical composition
 Melanesian Basin, 610673
 Philippine Sea, 590719, 600679
 chromium, 840948
 classification, 780021
 clast, 580632
 clinopyroxene, 580659, 840948
 Cocos Plate, basalt, 840948
 conglomerate, 580659
 Costa Rica, ophiolite, 840948
 Cr/Al ratio, 840948
 crystallization, 840948
 Daito Ridge, 580629, 580659
 dolerite, 580659, 840947, 840948
 Eocene-Cretaceous sediment, 840949
 feldspar, 580659
 FeO, 840948
 gabbro, 840947
 geochemistry
 Atlantic Ocean, 370653, 370729, 370735
 Hess Rise, 620955
 Mariana Islands, 600611
 Pacific Ocean N, 620945
 glass, altered, 580659
 Goban Spur, continental margin, 801130, 801131
 gravity, models, 801143
 Greenland Sea, geologic setting, 38S0214
 Guatemala
 Middle America Trench, 840619
 offshore sediment, 840621, 840623
 harzburgite, 840947, 840949
 Hess Rise, geochemistry, 620955
 hydromagmaphile element, 840948
 ilmenite, 840948
 Indian Ocean NE, petrology, 220413
 isotopic ratio
 Baja California, 630733
 California S, 630733
 K, 840948
 K₂O, 840948
 lead isotope
 Mid-Atlantic Ridge, 370613
 Pacific Ocean W, 310601
 Lesser Antilles, 780095
 limestone
 Cretaceous, 840948
 Maestrichtian, 840948
 lithology, 230387, 330046, 330170, 330171, 350035, 350076
 basalt, 330046, 330170
 claystone, 330046
 contact, sharp, 330046
 diagenesis, 330170
 mudstone, 330170
 sandstone, volcanic, 120366
 siltstone, 330170
 LREE, 840948
 magmatic layering, 840948
 magnesiohornblende, 840948
 magnetic models, basalt, 801142
 magnetic properties, 340473, 370471, 450397, 450399, 450402, 650727, 830347
 AF demagnetization, 450397
 ARM, 450397
 Atlantic Ocean, 370471
 Baja California, 630739
 California S, 630739
 chemical remanent magnetism, 450402
 chemical remanent magnetization, 450402
 coercivity/curie temperature, 450400
 Curie temperature, 450398, 450402
 demagnetization, 340473
 FAMOUS area, 450400
 intensity of magnetization, 450402
 low-temperature oxidation, 450403
 magnetic intensity, 450397
 magnetic layer, 450400
 magnetic mineralogy, 450397
 magnetic parameters, 450399, 450400
 magnetization intensity, 450397
 magnetization saturation, 450397
 median demagnetizing field, 450399
 natural remanent magnetization, 340473
 Pacific Ocean, 340473
 Philippine Sea, 580923
 rock composition, 450399
 saturation magnetization, 450397, 450402

- magnetic properties (Cont.)
 stability index, 340473
 titanomaghemite, 450401
 titanomagnetite, 450399, 450401
 viscous remanent magnetization, 340475
 weak field susceptibility, 450398, 450402
- major element
 Baja California, 630733
 California S, 630733
- Mariana Islands
 fore-arc, 600769
 paleomagnetism, 600855, 600856, 600859, 600860, 600861, 600863
- Mariana Trough, seismic velocity, 600805
- Melanesian Basin, 610633
 acoustic layers, 610673
 basement, 610674, 610681
 basement, volcanic, 610673
 chemical composition, 610673
 geologic setting, 610673
 paleomagnetism, 610717, 610718, 610723, 610727, 610728
 sill, 610673
 tholeiite, 610673
 turbidite, 610673
- metamorphism, low temperature, 840948
 Mg/Fe ratio, 840948
- Mid-Atlantic Ridge, 450387, 450397, 450407
 lead isotope, 370613
 Sr isotope, 370613
- Middle America Trench, 840619, 840804, 840806, 840954
 Guatemala, 840619
 landward slope, 840947
 mineral, mafic, 840949
 mineral, opaque, 840659, 840948
 mugearite-hawaiite, 580659
 Na₂O, 840948
 nepheline, 840948
 nickel, 840948
- Norwegian Sea, geologic setting, 38S0214
- Oman, ophiolite, 840948
- opaque mineralogy, 450407
- ophiolite, 840947, 840948, 840949
- orogenic lava field, 840948
- orthopyroxene, 840948
- Pacific Ocean, magnetic properties, 340473
- Pacific Ocean N
 geochemistry, 620945
 petrology, 620945
- Pacific Ocean NE, 151096, 151097
- Pacific Ocean SW, 300401
- Pacific Ocean W
 lead isotope, 310601
 Sr isotope, 310601
- paleomagnetism, 151020, 450383, 450394, 540851
 AF demagnetization, 140777, 151019
 Atlantic Ocean N, 140777
 basalt, 38S0003, 38S0005
 California, Gulf of, 650705
 Caribbean Sea C, 151017
 crust, oceanic, 450392
 dolerite, 450388
 East Pacific Rise, 540851
 magnetic anomaly, 450387
 magnetic chronology, 450393
 magnetic inclinations, 140777, 151019
 magnetic intensity, 140777, 450393
 magnetic polarity reversal, 450392
 magnetic properties, 38S0003, 38S0004
 magnetic source layer, 450393
 Mariana Islands, 600855
 natural remanent magnetization, 140777, 151019
 polarity, paleomagnetism, 450388, 450391
- remanent magnetization, 450387
 viscous remanent magnetization, 151019
- peridotite, 840947
 peridotite, serpentinized, 840948
 petrography, 580659
- petrology
 Atlantic Ocean, 370653
 Indian Ocean NE, 220413
 Pacific Ocean N, 620945
 Philippine Sea, 580659, 580923
 chemical composition, 590719, 600679
 magnetic properties, 580923, 580924, 580926, 580927, 580928, 580929
 Sr isotope, 590719, 600679
 Philippines, West Mariana Basin, 590754
 physical properties, 540851
 East Pacific Rise, 540851
 plagioclase, 580659, 840948
 plagioclase, sodic, 580659
 plutonic rock, 840949
 Polochic-Motagua ophiolite, 840949
 regional summary, 020415
 Reykjanes Ridge, 490059
 Rio Grande Rise N, regional setting, 250690, 250691
 Santa Clara, 840948
 Santa Elena
 ophiolite, 840948
 potassic alkaline rock, 840948
 sea floor spreading, 020426
 seismic velocities, elevated pressures, 600805
 serpentine, Miocene, 840948
 serpentinization
 olivine, 840948
 pyroxene, 840948
 SiO₂, 840948
 Southeast Pacific Basin, evolution, geologic, 350729, 350730, 350736
 spinel, 840948
 Sr isotope
 Mid-Atlantic Ridge, 370613
 Pacific Ocean W, 310601
 Philippine Sea, 590719, 600679
 strontium, 840948
 thermal conductivity, Philippine Sea, 600807
 tholeiite, 840948
 affinities, 840948
 Ti/N ratio, 840948
 TiO₂, 840948
 titanium, 840948
 titanomagnetite, 840948
 trace elements, geochemistry, 370573, 370577
 turbidites, source areas, 250454
 ultramafic rocks, 840948
 viscous remanent magnetization, Atlantic Ocean, 370525
 volcanism, active, island arc, 840948
 West Mariana Basin, 590753
 whole-rock chemistry, Atlantic Ocean, 370725
 zirconium, 840948
- ignimbrite
 breccia, Line Islands, 330753
 Central America, eruption, 840892
 East Pacific Rise, sediments, 650375, 650377
 Lord Howe Rise, rhyolite, 210525
 Middle America Trench, tephra, 660687
 Pacific Ocean EC, geologic history, 090921
 sediment chemistry, lower part, 350430
 tephra
 Cenozoic, 901170
 source, 901167
- Ika Fjord, Greenland, 870659
- ikaite
 basalt, mineral, secondary, 340423
 carbonate nodule, authigenic, 870662
- Antarctica, 870664
 mud, 870916
 Nankai Trough
 carbonate nodule, authigenic, 870659
 turbidites, 870916
- Ile de Groix, 801108
- Illinois, 110501
- Illinois River, mudstone, petrology, 180909
- illite + chlorite/smectite ratio, mineralogy, Goban Spur, 801027
- illite, 390397, 390398, 390399, 390402, 47B0685, 560944, 560949, 560980, 560981, 560984, 560987, 580669, 580671, 580672, 580684, 580686, 590598, 590600, 860552, 860572
- Africa SW, continental margin, 400470
- Albian sediment, geochemistry, 480855, 480866
- Alboran Basin W
 clay minerals, 130670
 mineralogy, 130670
 alteration, products, 810739
 alteration, low-temperature, basalt, 490710
- Angola Basin
 clay mineralogy, 750846, 750847
 geochemistry, 750846
- Antarctica, geochemistry, 350403, 350404, 350405
- Atlantic continental margin NW, evolution, 440951
- Atlantic Ocean, geochemistry, 47B0432, 47B0434, 47B0435, 47B0436
- Atlantic Ocean N
 clay, 481091, 481094, 481095, 481097
 Mediterranean Sea, 110811, 110816
 sediments, 760441, 760442
- Atlantic Ocean NC, Mesozoic sequences, 411000, 411004
- Atlantic Ocean NW
 microfacies, 440485, 440488, 440489, 440490, 440491
 sedimentary evolution, 430793, 430795, 430811, 430815
- Atlantic Ocean S
 Malvinas Outer Basin, 391110
 mineralogy, 400542, 400544, 400547, 400548
- Atlantic Ocean SE, paleoenvironmental evolution, 740664, 740665, 740666, 740670, 740672, 740673, 740677
- Atlantic Ocean SW, basin, evolution, 361005
- authigenic minerals, 600463
- Balearic Plain, mineralogy, 130678, 130679
- Balearic Rise, mineralogy, 130676, 130677
- Barbados Ridge, 780603
- Barremian-Albian sediment, phyllosilicate, 800911
- Biscay, Bay of, Albian sediments, 480855, 480866
- Black Sea
 evolution, 42B1141, 42B1148
 mineral, terrigenous, 42B0655
 sediments, 42B0375, 42B0385, 42B0386, 42B0389
- Blake Basin, 760729, 760772
 sediments, 760441, 760442
- Brazil Basin, geochemistry, 720422
- California, Gulf of, gulf mouth, 650363
- Cape Bojador, continental margin, 47A0779, 47A0780, 47A0781
- carbonate, dissolution, 750853
- Cenozoic sediments, lithology, mineralogy, geochemistry, 450323, 450327, 450330
 chemical and mineral composition, 350465, 350467, 350468, 350471
- chert
 formation, 320444

- chert (Cont.)
 geochemistry, 620715
 petrology, 620715
 porcellanite, 320444
 China, 590602
 China E, 590600
 clastic sediment, Cretaceous, 401031,
 401037, 401040
 clay, 220743, 960579
 bulk mineralogy, 860552
 Cenozoic, 780343, 780346
 mineralogy, 860552
 $^{16}\text{O}/^{18}\text{O}$ ratio, 350489
 stratigraphy, 870639
 trace elements, 170512, 170513
 clay, black, geochemistry, 430639
 clay mineralogy, 750862, 750865, 960738
 stratigraphic evolution, 750863
 claystone, sapropelic, 360884
 Cocos Plate, sediments, 670609
 Cretaceous/Tertiary boundary,
 paleoenvironmental history, 740687,
 740688, 740689, 740690, 740691
 currents
 Eocene-Oligocene, 901231
 Miocene, 901231, 901234
 Miocene-Pleistocene, 901234
 Daito Basin, 580686
 Daito Ridge, 580684
 deep-sea trench, sedimentary facies, 670610
 deposition, origin, 600450
 detrital minerals, 220731, 220732, 220733
 Neogene sediments, site, 218, 220733
 Paleogene and older, 220732
 diagenesis, 960584
 slope sediments, 840578, 840588
 diagenesis, burial, pelite, 230424, 230425,
 230427, 230428
 dioctahedral Fe-Al variety, 560980, 560981,
 560984
 distribution, 560981, 560984
 East Mariana Basin, micromorphology, 890418
 East Pacific Rise
 boron, 920379
 sediments, 650377, 650380, 650381
 sulfur, 920379
 Ecuador N, 540316
 Emperor Seamounts, mineralogy, 550464
 environment, sapropel, 42A0460
 eolian sedimentation, dust fallout, 680409
 erosion, continental, 580673
 Esmeraldas River, 540316
 euxinic sediment, Cenozoic organic
 sediments, 750852
 evaporites, Messinian, 42A0573
 Falkland Plateau E, sedimentation, 360884,
 360886
 Florida, Straits of, paleoenvironment,
 770383
 Galapagos Fracture Zone, East Pacific Rise,
 540404
 gas hydrate, trench slope, 670605, 670608
 geochemistry
 Cenozoic sediments, 42B0554, 42B0559,
 42B0602
 Hatton Ridge, 810739
 igneous rocks, 370735
 Goban Spur, geochemistry, 801039
 Greenland Sea, clay minerals, 38S0231,
 38S0232, 38S0235
 Hess Rise, 621046, 621047
 Hess Rise N
 post-Jurassic, 620806, 620807, 620817
 sedimentary sequences, 620759, 620763
 Iberian margin W, evolution, 47B0768
 Indian Ocean C, noncarbonate sediment,
 220492
 Indian Ocean NE, Cretaceous, 220731,
 220742, 220743
 Indian Ocean W
 geochemistry, 250406
 mineralogy, 130608, 140679, 150847, 150848,
 150849, 150850, 160529, 160530, 160531,
 181016, 181017, 400547, 400548, 411070,
 411077, 411084, 411085, 411086, 42A0365,
 42A0368, 42A0370, 42A0373, 42A0378,
 42A0380, 42B0451, 42B0460, 440520
 interstitial water, 030663
 physical properties, 350411
 solids, 430669
 interstitial water, geochemistry,
 diagenesis, 640691
 intraslope basin, 960718
 iron-rich sediment
 claystone, 330833
 sandstone, 330833
 Israel, history, 42B1212
 Japan, 580669, 580673, 580676
 Japan Trench, 560944, 560949
 clay minerals, 560980, 560981, 560984,
 560987
 interstitial water, 870868
 minerals, 870638
 litho stratigraphy, 680383
 clay minerals, 810687
 lithologies, major
 chalk, 901480
 ooze, 901481
 ooze, calcareous, 901480
 lithologies, minor, chalk, 901482
 lithology, 070729, 110228, 270282,
 270283, 350031, 360093, 360095, 360214,
 38S0021, 380163, 380173, 380176, 380178,
 42B0034, 42A0036, 42A0037, 42A0067,
 42B0124, 42B0137, 42A0181, 42A0182,
 42A0226, 42A0231, 42A0233, 42A0237,
 42A0238, 42A0242, 42B0298, 42A0308,
 430208, 430210, 430211, 430212, 47A0030,
 47B0035, 480079, 480132, 480135, 480175,
 480178, 480219, 480220, 480222, 500042,
 500127, 500131, 500140, 510360, 510361,
 721021
 breccia, 130227
 calcite, 721022
 Cenozoic units, 480044, 480047
 evaporites, 130196, 130425
 limestone, 120053
 marl, 130030, 130066
 marl, dolomitic, 130487, 130488
 marl, pyritic, 130487, 130488
 marl, red calcareous, 721022
 Mesozoic deposits, 47B0051, 47B0052,
 47B0054
 Mesozoic units, 480049
 ooze, foraminiferal nannofossil, 130195
 ooze, marl, 130227
 Oxfordian-Kimmeridgian, 110226
 Pleistocene, 110012
 Quaternary-Tertiary, 110225
 sandstone, 130066
 sedimentation, 350032
 silt, 120047
 Lord Howe Rise, pale green laminae, 901157
 Lord Howe Rise C, Neogene evolution,
 901450, 901451
 lueneburgite, Miocene sediments, 42A0662
 Luzon, 590600, 590602
 Madagascar Basin, volcanic sediment, 250520
 manganese nodule, 510771
 Magadan Plateau, 790390, 790395, 790397,
 790498, 790499, 790500
 Mediterranean Ridge, mineralogy, 130735
 Mediterranean Sea
 Messinian, 130676, 130677, 130679,
 130680, 130681, 130682, 130686
 mineralogy, 130666, 42A1157, 42A1158,
 42A1161, 42A1162, 42A1163, 42A1164,
 42A1165
 Mediterranean Sea E, history, 42B1212
 Mellish Seamount, post-Jurassic
 sedimentation, 620834, 620835, 620839,
 620841
 Messinian environments, salinity crisis,
 42A1026
 Mid-Pacific Mountains, 621084, 621092,
 621098
 Mid-Pacific Mountains W, Aptian sediments,
 620904, 620905
 Middle America Trench, transect, 670605,
 670608, 670609, 670610
 middle fan, 960712
 mineral assemblage, evolution, 600448
 mineralogy, 130717, 130719, 210538,
 38S0111, 38S0114, 38S0115, 38S0138,
 540344, 550857, 650395, 960584
 clay minerals, 600438
 Goban Spur, 801032
 Mariana Trench, 600443
 Mariana Trough, 600438, 600457
 Pacific Plate, 600446
 Pendragon Escarpment, 801021
 Rockall Rise, 801032, 801033
 sediment, 680397
 turbidites, 130714, 130717
 minerals, chemical composition, 600462
 Mira River, 540316
 Mississippi Fan, 960704, 960716
 sediment, 960430
 Moroccan Basin, continental margin, 500707,
 500708
 Mounds Hydrothermal Field, chemistry, 540410
 mud, 870913, 870916
 Nankai Trough
 clay minerals, 870635
 interstitial water, 870866
 turbidite, 870913
 turbidites, 870916
 Natal Basin, volcanic sediment, 250529
 Nazca Plate, South America, 340797
 Neogene formations, paleogeography,
 42A0909, 42A0913
 New Zealand
 Cenozoic changes, 901230, 901231
 tectonics, 901231, 901234
 Nile Fan, mineralogy, 130735
 Norwegian Sea
 clay minerals, 38S0231, 38S0232, 38S0235
 Greenland Sea, 38S0437, 38S0438
 ooze, calcareous, clay, 220742
 ooze, siliceous, nonbiogenic constituents,
 220743
 Pacific Ocean E, 540310
 Pacific Ocean NW, 860572, 860726, 860727,
 860748
 clay, 860572
 clay minerals, 860552, 860572
 geochemical history, 620786, 620788
 Pacific Ocean SE, 920556
 clay-sized minerals, 350480, 350484,
 350486
 Pacific Ocean SW
 modern sediment distribution, 901438
 paleoceanography, 901507
 Panama Basin, 540316
 sediments, 690387, 690389, 690393
 Panama, Gulf of, 540316
 particle, origin, 901226, 901227
 pelagic components, distribution,

- pelagic components (Cont.)
 terrigenous, hemihalmeic components, 250491
- petrology
 clay, 960501
 sand, 960496
 silt, 960501
- Philippine Basin W, 590598
- Philippine Sea
 Daito Basin, 600419
 Daito Ridge, 600419
 lithology, 061132, 061135, 061137, 061138, 061139
 Mariana Islands, 600435
 Mariana Trench, 600435
 Mariana Trough, 600431
 Philippine Sea W, 600429
 Shikoku Basin, 600415
 West Mariana Basin, 600429
 West Mariana Ridge, 600431
 Philippine Sea S, clay minerals, 590600, 590602
- physical properties, clay, 061132, 061138, 061139
- porcellanite
 chert, 320444
 formation, 320444
- quartz, $^{16}\text{O}/^{18}\text{O}$ ratio, 350489
- Red Sea
 evaporites, 230835
 sediment history, 230855, 230861
 rhyolite, mineralogy, 210538
 Rio Grande Fracture Zone, geochemistry, 720429
 Rio Grande Gap, 721020
 Rio Grande Rise, 721020
 limestone, flaser, 721007, 721012
 sediment, 720425
- Rockall Plateau
 sedimentation, 810681
 Tertiary deposits, 810669, 810670, 810673, 810674, 810676, 810677, 810680, 810681
- sandstone, foraminiferal, phillipsite, 42A0478
- sapropel
 petrography, 130714, 130717, 130719
 sedimentology, 42A0460
- sediment, 560944, 560949
 lithology, 38S0111, 38S0114, 38S0115
 sediment chemistry
 lower part, 350433
 upper part, 350429, 350432
- sediment composition, clay minerals, 960479
- sedimentary sequence, lithology, 200727
- sedimentation, 42B0607
- sedimentology, 100700
 Mexico, Gulf of, 100705
 terrigenous components, 340783
- sediments, 760441, 760442
 Atlantic Ocean NE, 941089, 941090, 941091, 941092, 941093, 941095, 941096, 941097
 Blake Basin, 760434, 760440, 760441, 760442, 760446
 Rockall Rise, 941110
 shear strength, porosity, 870839
- Shikoku Basin, 580669, 580671, 580672, 580673
- silica, mineralogy, 140730, 140731
- smectite, 670605
- sources, 590600, 590602
- Southeast Pacific Basin, evolution, geologic, 350730, 350736
- stratigraphy
 Mariana Trough, 600468
- Pacific Plate, 600468
- Pacific Plate W, 600469
- strontium, 42B0607
- tectonic
 clay, 430811
 clay, black, 430795
 Eocene siliceous sedimentation, 430815
 limestone, 430793
- tephra, source, 901153
- terrigenous origin, 560987
- Tethys N, margin, 440951
- titanium
 claystone, 330833
 sandstone, 330833
 trace elements, distribution, 42A0504, 42A0505
- Tyrrhenian Rise, mineralogy, 130608, 130682
- volcanic sediment
 clay minerals, 330794
 Paleocene and Eocene, 480775
- volcanics, mineralogy, 210538
- volcanism
 clay, 870636
 mineral evolution, 600451
- Walvis Ridge
 clay mineralogy, 750850
 climatic, oceanographic evolution, 740679
- West Mariana Basin, 590598, 590600
- X-ray diffraction analysis, 500707
 clay minerals, 510735, 510736
- X-ray mineralogy, 400547, 400548
- Biscay, Bay of, 480649
 clay minerals, 400541
- Rockall Rise, 480665, 480666, 480667, 480668
- Yellow Sea, 590602
- see also clay minerals; montmorillonite
- illite-chlorite-pyrite, geochemistry, Guaymas Basin, 640698
- illite-kaolinite, mud, pelitic aleuritic, 390453
- illite-mica
 Indian Ocean W
 mineralogy, 431019
 volcanic sediment, 250517
- Madagascar Basin, volcanic sediment, 250520
- mud, terrigenous, mud, 250455
- Natal Basin, volcanic sediment, 250528
- illite-montmorillonite, 150923, 150925
- Alboran Basin W
 clay minerals, 130670
 mineralogy, 130670
- ash, 150926
- Atlantic Ocean NC, Mesozoic sequences, 411004
- Black Sea, sediments, 42B0375
- Brazil Basin
 mineralogy, 721003
 sedimentation comparison, 721004
- California, Gulf of, gulf mouth, 650400
- chalk, 150926
- chemistry, 650418
- chlorite, 150923, 150924
- clay minerals, 560979
 distribution, 560981, 560984
 terrigenous origin, 560987
- diagenesis, burial, pelite, 230424
- hydrothermal alteration, sediments, 650419
- Indian Ocean W, mineralogy, 42B0457
- interbedding, 150926
- Japan Trench, clay minerals, 560979, 560981, 560984, 560987
- kaolinite, 150923, 150924, 150925
- lithology, 480132, 480133
- Mellish Seamount, post-Jurassic
 sedimentation, 620835, 620840
- mineralogy, 650418
- Miocene, 150926
- montmorillonite, 150923, 150924
- mud, siliceous, 150926
- oozes, 150926
- Pacific Ocean NW, geochemical history, 620788
- pelitic sediments, 150924
- Pliocene, 150925
- terrigenous origin, 560987
- terrigenous sedimentation, 150925
- trace elements, distribution, 42A0505
- illite-montmorillonite-chlorite, glauconite, 291093
- illite-montmorillonite-kaolinite, X-ray
 diffraction analysis, clay minerals, 510731
- illite-muscovite, clay minerals, Tertiary, 291081
- illite-smectite, 860552, 860564
- Antarctica, geochemistry, 350403
- Atlantic Ocean
 geochemistry, 47B0432, 47B0434, 47B0435
 mineralogy, 47B0432, 47B0434, 47B0435
- Barremian-Albian sediment, 800920
- chemical and mineral composition, 350467, 350468
- clay
 bulk mineralogy, 860552
 detrital vs. diagenetic imprint, 860564
- mineralogy, 860552
- $^{16}\text{O}/^{18}\text{O}$ ratio, 350489, 350493, 350495
- diagenesis, slope sediments, 840588
- Hess Rise N, post-Jurassic, 620810
- Indian Ocean W, mineralogy, 42A0363
- lithology
 Cenozoic units, 480047
 Mesozoic units, 480049
- mineralogy, 38S0135, 38S0137, 38S0138, 38S0139
- Pacific Ocean NW
 clay, 860552, 860564
 geochemical history, 620798, 620802
- quartz, $^{16}\text{O}/^{18}\text{O}$ ratio, 350489, 350493, 350495
- X-ray mineralogy, Biscay, Bay of, 480649
- illite-smectite, Fe-Mg, Pacific Ocean NW, geochemical history, 620800
- illite-vermiculite, Atlantic Ocean, geochemistry, 47B0432, 47B0434
- illite/chlorite ratio
 Arabian Sea, sediment history, 230511
- Arabian Sea N, sediment history, 230506
- Indian Ocean W, mineralogy, 42A0385
- illite/montmorillonite ratio
 Caribbean Sea, 150923
- Indian Ocean W, mineralogy, 42B0462
- illite/smectite ratio
 Japan Trench, 560946
 clay minerals, 560957, 560963
 oscillations, 560939, 560963
- Mid-Pacific Mountains W, Aptian sediments, 620905
- Philippine Sea, Shikoku Basin, 600419
- sediment, 560946
- illitization
 lithology, Paleocene red sediments, 120167
- Pacific Ocean NW, geochemical history, 620789
- ilmenite
 alteration, mineralogy, 460306
 alteration, oxidative, mineralogy, 260533
- amphiboles, chemical studies, 150966
- basalt
 basement, 340279
- Costa Rica Rift Zone, 830150

- basalt (Cont.)
 Fe-Ti oxide, 550639, 550641, 550644, 550651
 flow, 730689
 geochemistry, 350333
 magnetism, 430773
 Middle America Trench, 370578
 midocean ridge, 830150
 mineral chemistry, 550608, 550615, 550617, 550622, 550623, 550626, 550627, 550629, 550630, 550631, 550632, 550635
 mineral, opaque, 450557, 450560, 511431, 511432
 mineral, secondary, 340406
 basalt, altered
 geochemistry, 580820, 580823, 580826, 580831
 major element, 580889
 trace elements, 580889
 basement
 basalt, 340278, 340279
 geochemistry, 590746
 mineral composition, 180941
 mineralogy, 270553, 291118
 opaque mineralogy, 370858
 Bauer Basin, basalt, 340227
 California, Gulf of, basalt, 650663
 carbonate, diagenesis, 320522
 Cenozoic sediments, mineral composition, 42B0413
 chemical analysis, 690716
 clay minerals, 38S0016
 diabase, gabbro, 411103, 411104
 diagenesis, slope sediments, 840582
 East Pacific Rise, 540872
 Emperor Seamounts, petrology, 550511, 550516, 550522, 550582
 exsolution lamellae
 basalt, 690716, 690720
 titanomagnetite, 690709
 gabbro-diabase, petrology, 411103, 411104
 Galapagos Fracture Zone, 540872
 geochemistry, 060833
 mineralogy, special features, 060831
 glass, sulfide, 511070
 igneous rocks, 840948
 lithology, 260237, 320022, 38S0016
 magnetic oxides, petrology, 511411, 511421, 511427
 major element, geochemistry, 42B0536
 manganiferous, 670569
 Mariana Islands, fore arc, 600621
 Mariana Trench, 600621
 Melanesian Basin, ash, 610636, 610637
 Mendoza Rise, basalt, 920459
 Mid-Atlantic Ridge, basalt, 460309
 mineral and chemical composition, mineral composition, 38S0031
 mineral, chemical composition, sediments
 mineral composition, 38S0031
 mineral distribution, 38S0032
 mineral chemistry
 basalt, 340227
 other phases, 920440
 mineral composition, 340227, 340269
 tholeiite, 180941
 mineral, opaque, 450410
 petrology, 340356, 340358, 340359
 mineralogy, 270553, 340269, 411103, 460306, 660725
 basalt, 220423, 270553
 basement, 291118
 composition, 660725
 gabbro, 600587
 gabbro, amphibole, 600588
 hematite, 660725
 lithology, 810784
 MgO, 660725
 MnO, 660725
 minor element, geochemistry, 42B0536
 Nazca Plate, basalt, 340227
 opaque mineralogy, 360533, 450409, 450410, 450412
 Pacific Ocean NW, mineralogy, 320549
 Pacific Ocean SE, basalt, 340246, 340381
 palynological residue, crystals, crystalline debris, size, 640739
 Peter I Island, geology, 350351, 350353
 petrography, 260470, 260471, 660723, 670578
 gabbro, 600582
 petrography of opaque phases, 340358
 petrology, 30580, 330576, 330578, 340227, 350333, 411104, 540794
 petrology, 30580
 igneous rocks, 340358
 mineralogy, 540800, 540801
 sand, 960499
 phase chemistry, petrology, 340246
 pyrophanite-manganiferous, 670569
 pyroxene, 590699, 590703
 chemical studies, 150966
 Rockall Plateau, concretion, fossil polymetallic, 810706
 sand, trench slope, 660434
 sandstone, petrology, 660434
 Santos Plateau, 390519
 sill
 mineral composition, 180939
 mineralogy, 270553
 spreading center, ore minerals, 540789
 sulfur, oxides, 511070
 sulfur isotope, pyrite, 340381
 thermomagnetic curve, Curie temperature, 630749
 tholeiite
 geochemistry, 590682
 mineral composition, 180939, 180941
 mineralogy, 340269, 340270
 petrology, 590682
 tholeiite, depleted, geochemistry, 810784
 Ti/Fe ratio, 690715
 volcanics, mineral composition, 180939, 180941
 Voring Plateau, mineral composition, 38S0031
 ilmenite, manganiferous, 670562, 670563
 hydrothermal activity, 670569
 mineralogy, 670562
 ilmenite-hematite
 basalt
 mineral chemistry, 550608, 550635
 pyroxene, 590699
 ilmenite-magnetite, mineral chemistry, other phases, 920440
 ilmenorutile
 claystone, basalt, 550707
 Emperor Seamounts, mineralogy, 550471
 imbricate thrusting
 accretionary prism, vertical displacement, 870951
 geology, 660581
 subduction zone, 780618
 model, 780005
 imbrication, 110812, 130065, 130159, 130739, 170420, 220122, 310198, 310443, 410997, 47A0609, 47A0612
 Atlantic Ocean N, Mediterranean Sea, 110812, 110814
 Atlantic Ocean NC, Mesozoic sequences, 410997
 carbonate
 diagenesis, 170420
 fossil preservation, 170420
 lithology, 130159, 220122, 310198, 310443
 Mediterranean Ridge, mineralogy, 130739
 Neogene sedimentation, lithology, 47A0609
 Nile Fan, mineralogy, 130739
 Imhambane, 250736
 Imouzzer, 790923
 Moroccan Basin, margin, 500811
 Impamputo basalt, Africa SE, volcanism, 250532
 Imperial Valley, 641131, 641159
 Inan, 260950
 inclusion
 Angola Basin, 400536
 sedimentary structure, 400536
 anhydrite, 42A0587
 basalt
 petrography, 670577
 plagioclase, 660713, 660716
 breccia, volcanic, Neogene, 630640
 Cape Basin, 400536
 sedimentary structure, 400536
 chert, textures, 330859
 Costa Rica Rift Zone, stockwork-like zone, 830271
 East Pacific Rise, lithology, 920438
 geochemistry, ice, 660547, 660549
 lithology, chromite, 800939
 Melanesian Basin, ash, 610634
 Mendoza Rise
 basalt, 920462
 lithology, 920436
 mineral, chemical composition, 660712, 660713
 mineral chemistry, plagioclase, 920440
 Peter I Island, geology, 350352, 350353, 350354, 350355, 350356
 petrographic description, glass, 660711
 petrology, gravels, 960494
 Philippine Sea, sedimentary structure, 310484
 Sea of Japan, sedimentary structure, 310484
 tuff, Neogene, 630640
 incursion, marine
 Black Sea, sediment, 42B0492, 42B0493
 isotopic composition, Messinian sediments, 42A0648
 Philippine Sea, Paleogene-Neogene, 310849
 Rio Grande Rise N, regional setting, 250689
see also transgression
 indene, bitumen, 440646, 440649
 India, 220815, 230508, 230515, 230517, 270697, 270702, 400741, 621044, 710756, 750879, 760870, 760887, 810035, 810235
 Arabian Sea
 history, 231119, 231121, 231122
 sediment history, 230517
 Burma, ranges, 220407, 220408
 coast, 230505
 coast W, 230484
 continental margin sedimentation, turbidites, 280754
 continental shelf, 230181, 230471
 continental slope, 230527
 crustal plate, 220723
 deposition
 bottom water, 250503
 depositional paleoenvironment, 250497, 250498
 northward drift, 250503
 Ganges Fan, history, 220407
 Gondwana, dispersal, 260945, 260948, 260950, 260951
 Indian Ocean S, geologic history, 260925, 260929, 260932, 260938, 260940
 Indian Ocean W
 regional aspects, 250743, 250754
 tropical, 240637

- Indian Ocean W (Cont.)
 volcanic sediment, 250541
 lithology, stratigraphy, 230181
 Madagascar Plateau, 260950
 Middle America Trench, continental slope, 670594
 Neogene formations, paleogeography, 42A0920
 Ninetyeast Ridge, 230053
 Pacific Ocean EC, geologic history, 090924
 Pacific Ocean SW, island arcs, 300698
 Pakistan, continental margin, 230484
 Paratethys, paleogeography, 42A0988
 peninsula, 400744
 regional summary, 220815
 Australia, 220818
 reconstruction, 220826, 220827
 ridges, 090919, 220119, 220214, 220766, 220826, 250025, 250065, 250187, 250539, 250663, 250664, 250667, 250746, 291156
 sand, continental margin, 230484
 sea floor spreading, history, 250663, 250664
 shield, 220807
 Somali Basin, volcanism, 250539
 South Fiji Basin, history, 300631
 Tethys, Mediterranean Sea, 42A0943
 volcanism, 250533
see also Arabian Sea; Indian Ocean NE
- India N
 clay minerals, sources, 241058
 Gondwana, dispersal, 260949
- India S, 220809, 750510
- India W, 090924, 220003, 220005, 220119, 220214, 220369, 220403, 220407, 220411, 220503, 220507, 220815, 220826, 230426, 230522, 230529, 230531, 241058, 250481, 250497, 250515, 250540, 250691, 260007, 260009, 260242, 260283, 260295, 260816, 260924, 260938, 260940, 260945, 260947, 260948, 260949, 260950, 260951, 270290, 270984, 270985, 271051, 280831, 360531, 360887, 360909, 400225, 42A0943, 750035
- Albian series, 47B0293
 Arabian Sea, history, 231122
 Bombay, continental slope, 230181
 continental margin, 750003
 continental shelf, 230490, 230518
 deposition, bottom water, 250501
 desert, 230504
 east coast, 230044, 230506, 260929
 eastern, 260951
 eastern margin, 270015
 Gondwana, dispersal, 260949
 Indian Ocean S, geologic history, 260938
 Indian Ocean W, tropical, 240646
 Madras, 270706
 Mangalore, 230498
 Ninetyeast Ridge, 230053
 rivers, 230505
 slopes off western coast, 230503
 west coast, 260949
- Indian Basin, 260007, 260153, 260418, 260910, 260940
 geophysical measurements, 220366
 Indian Ocean S, geologic history, 260920
- Indian Basin S, 291156, 300679
 central, 220003, 220005, 220193, 220198, 220365, 220366, 220426, 220459, 220763, 220815, 220818, 220827
 crust, oceanic, 280920
- Indian Ocean, 270535, 280837, 280919, 280945, 290771, 330375, 360888, 370353, 540455, 540514, 540517, 540686, 540689, 540741, 540746, 540826, 540881, 540883, 550350, 580617, 580803, 580971, 600614, 610074, 610592, 620065, 620332, 620344, 620471, 620472, 620477, 620888, 620889, 620891, 621090, 641115, 670459, 690245, 700325, 700457, 710475, 710739, 710750, 710751, 710754, 710755, 710759, 710802, 710977, 711141, 711157, 720029, 720807, 720962, 730488, 730489, 730498, 730737, 730743, 730746, 730782, 730784, 740748, 740749, 750547, 750651, 750903, 760499, 760537, 760538, 760539, 760547, 760549, 760552, 760941, 780818, 780835, 800794, 810456, 820515, 820583, 820595, 820624, 850414, 850655, 850672, 850766, 860349, 890005, 890066, 890094, 901057, 901413, 901509, 930998, 950360, 950565
- Africa E, coast, 250679, 250683, 250684
 Amirante Passage, 760680
 anoxia, global, evidence against, 801002
 Arabian Sea, history, 231123
 assemblage composition, 780516
 Atlantic Ocean C, basin, 511507
 Atlantic Ocean NE, stable isotope, 480483
 Atlantic Ocean S
 hiatuses, 391099, 391103, 391106
 Paleogene, 720983
 Atlantic Ocean SW, basin, evolution, 360994, 360999, 361000, 361001, 361002, 361006, 361008
 Atlantic Ocean W, 250237, 250287, 250497
 basalt, 220377
 electrical resistivity, 260505
 geochemistry, 250543, 260567
 K/Ar age, 220377, 250553
 magnetic properties, 260529
 mineralogy, 250543
 opaque mineralogy, 260533
 paleomagnetism, 250555, 260517
 petrology, 250543, 260465
 potassium-argon age, 220378, 220379
 seismic velocity, 260509
- basalt, Fe-rich, 250395
 basement
 petrology, 220429
 volcanic provinces, 220429, 220430
 basin, 260909, 260949
 biostratigraphy, chemostratigraphy
 correlation, 850766
 bulk-rock compositions, 540741
 calcareous nannoplankton, 440742
 Cape Basin, shale, black, 711030
 carbon, 250841
 stable isotope, 260613
 carbon isotope, 260613
¹³C, 901401
 shift, 901402
 carbonate, 250841
 Cenozoic pelagic deposits, 250481, 250841
 central water, 241140
 chalk, calcite, 260593
 garnet, 260593
 Challenger Plateau, Quaternary, 901422
 clay, Mesozoic, 270481
 climate, 280935
 continent movements, volcanogenic
 sediments, 250513
 Cretaceous pelagic deposits, 250481
 deposition
 bottom water, 250499, 250500, 250501, 250502
 chalk, nannofossil, 250493
 depositional paleoenvironment, 250497
 ooze, nannofossil, 250493
 detrital to biogenic sediment trends
 Pacific Ocean, 291075, 291076
 South Tasman Rise, 291071, 291075
 early formation, 260945
 elastic moduli, 250357
 elements, 270481
- equatorial water, 241139
 ferrobasalt, 820404
 foraminiferal assemblages, 780511
 foraminiferal assemblages in sediments, 780511
 fracture zones, 230529
 garnet, metasomatic, 260593
 geochemistry, 250405, 260541
 interstitial water, 250405
 nodule, 810715
 geochemistry, sediments, 260541
 geologic history, 260909
 geophysical data, 250863
 geophysical investigations, 260959
 geophysical measurements, 240591, 240606
 Aden, Gulf of, 240591, 240592
 Argo Fracture Zone, 240606
 Carlsberg Ridge, 240607
 Chagos-Laccadive Ridge, 240607
 magnetic anomaly, 240591, 240606
 Mascarene Plateau, 240606
 Mid-Indian Ridge, 240606
 Somali Basin NW, 240592
 Vema Trench, 240607
 Wight Bank, 240607
 geothermal phenomena, 260451
 glauconite, mineralogy, 250425, 250543
 Gondwana
 breakup, 260945
 dispersal, 260945, 260949
 grain size, 250417
 heat flow, 250349, 250417
 Himalayas, Pacific Ocean, 710957
 interstitial water, chemistry, 250361, 250405
 islands, 260505, 260567
 Israel, history, 42B1214
 Japan Trench, sediments, 271219
 Jurassic, calcisphaerulids, 440911
 K/Ar age, basalt, 250553
 lead isotope, 700325
 limestone, Cretaceous, 620877, 620878, 620889
 lithology, 250725, 290276
 Pacific Ocean, 290285
 Madagascar, Mascarene Basin, 250663
 magnetic anisotropy determination, 480916
 magnetic data, 250543, 250763, 280945
 Mediterranean Sea, connection, 42A1040
 Mediterranean Sea E, history, 42B1214
 Messinian environments
 Lago Mare, 42A1026, 42A1031
 pre-evaporitic setting, 42A1004
 metalliferous sediment, 340785
 micarb, garnet, metasomatic, 260593
 mineral, heavy, 270253, 270523, 270524, 270525
 epidote, 270524
 garnet, 270526
 hornblende, 270524, 270525
 increase, 270524
 pyroxene, 270525
 tourmaline, 270525
 zircon, 270525
 mineralogy, 220693, 220694, 220695, 220696, 220697, 250431, 270535
 analcime, 220696
 apatite, 220695
 augite, 220696
 barite, 220696
 beidellite, 220695
 calcite, 220694, 220695, 220696, 220697
 chlorite, 220697
 clinoptilolite, 220694, 220695, 220696
 dolomite, 220696
 hematite, 220694

mineralogy (Cont.)

K-feldspar, 220694, 220695, 220696
 kaolinite, 220694, 220695, 220696, 220697
 mica, 220694, 220695, 220696, 220697
 montmorillonite, 220694, 220695, 220696, 220697
 palygorskite, 220694, 220695, 220696
 phillipsite, 220694, 220695, 220696
 plagioclase, 220694, 220695, 220696, 220697
 pyrite, 220695, 220696
 quartz, 220694, 220695, 220696, 220697
 siderite, 220695
 Moroccan Basin, margin, 500817
 mud, terrigenous, 250441
 Neogene formations, paleogeography, 42A0917, 42A0919, 42A0920
 noncarbonate sediment, equatorial, 220489
 northern, 230425
 ocean basin, evolution, 291147
 oceanography, surface currents, 270387
 ooze, calcareous, Cenozoic, 270481
 ooze, nannoplankton, pyrite, 260603
 Pacific Ocean, 250237, 250287, 250497, 400697, 400730, 42A0985, 720677, 810595
 Pacific Ocean EC, geologic history, 090919
 Pacific Ocean NW, geochemical history, 620800
 Pacific Ocean SW
 Cenozoic, 300667, 300681
 paleoceanography, 901500
 Pacific Ocean W, 320837
 paleoceanography, 250481
 Miocene events, 850767
 Reflector Lavender, 850961
 paleoenvironment, 250481
 Paratethys, paleogeography, 42A0985, 42A0987, 42A0988, 42A0989
 phosphate, 270455
 planktonic diatom stratigraphy, 751245
 plate, 260567
 pyroclastics, basalt, 260553
 radiometric age, 260513
 Red Sea, geology, 230814, 230817
 regional aspects, 250743
 regional summary, 220815
 tectonic history, 220816
 Wharton Basin, 220818
 regional tectonics, swell push forces, 720962
 ridge crests, 370682
 ridges, 220046, 340194, 340199, 370631, 370893
 Rio Grande Rise, sedimentation, 721017
 Rio Grande Rise N, regional setting, 250694
 sapropel, Cretaceous, 620891
 sea floor spreading, 250663
 history, 250663
 sedimentary blanket, 780707
 sedimentary rocks, elastic moduli, 250357, 250481
 seismic reflection, 250763
 seismic reflection data, 250763, 280945
 seismic refraction, 780783
 Southeast Pacific Basin, sediment distribution, 350197
 stable isotope analysis, carbon isotope, 800794
 stratigraphy, 260825
 stratigraphy, foraminiferal, 450322
 Timor Trough, 450322
 tephra, 580617
 terrigenous minerals, 250431
 thermal conductivity, 250349
 tropical, 240889, 241129, 270929, 350618, 370968, 670458, 901401

turbidites, 250441
 velocity, volcanic rocks, 250357
 volcanic, sediment, 250513
 volcanic provinces, 220429
 volcanic rocks
 elastic moduli, 250357
 velocity, 250357
 volcanism, volcanogenic sediment, 250513
 western, 230005, 360531
 X-ray mineralogy, 250843, 260573
 Zr/Nb ratio, 490848
see also Arabian Sea; Indian Ocean E; Indian Ocean NE; Indian Ocean W
 Indian Ocean C, 240679, 240684, 240685, 240690, 240722, 241065, 250025, 250065, 250087, 250139, 250177, 250187, 250237, 250259, 250287, 250417, 250763, 250831, 250863, 260075, 260135, 260153, 260233, 260281, 260295, 260327, 260359, 260417, 260967
 authigenic components, 240682, 240685, 240690
 chert, 240685
 FeO, 240690
 glauconite, 240682, 240685
 pyrite, 240682, 240690
 zeolite, 240682, 240690
 Barremian, 240679
 basalt, basement, 240690
 basement, basalt, 240679
 basin, 220365
 biogenic components, 240682, 240686, 240690, 240692
 algal crusts, 240682, 240686
 calcium carbonate, 240679, 240690
 carbon, organic, 240679, 240690
 chalk, 240679, 240685
 chert, 240679, 240685
 chlorite, 240690
 clay, 240679, 240690
 clinoptilolite, 240690
 dolomite, 240690
 equatorial sediment, 240722, 240723, 240724
 geographic location, 240684, 240690
 Gondwana, dispersal, 260950
 gypsum, 240690
 halite, 240690
 isotope stratigraphy, 850751
 K-feldspar, 240690
 kaolinite, 240690
 lithology, 240679, 240690
 mica, 240690
 minerals, 240682
 montmorillonite, 240690
 noncarbonate sediment, mineralogy, 220489, 220490, 220492, 220493, 220495, 220496, 220497
 Oligocene to Pleistocene sediment, 240680
 ooze, calcareous nannofossil, 240690
 chalk, 240690
 ooze, nannofossil, 240679, 240685
 Paleocene to Recent sediments, 240685
 pelagic components, distribution, 250492
 phillipsite, 240690
 plagioclase, 240690
 quartz, 240690
 recrystallization, chalk, nannofossil, 240679
 reworked materials, 240679
 sand, 240685
 sea floor spreading, history, 250664
 sedimentary structure, 240679, 240685, 240690
 burrow mottling, 240679
 burrows, 240685, 240690
 silt, 240685, 240690

terrigenous components
 ash, 240690
 benthic foraminifers, 240682
 dolomite, 240682, 240685
 eolian contribution, 240682
 glass, volcanic, 240682, 240685, 240690
 granitlike rocks, 240682
 limestone, 240682
 mica, 240682
 mineral, heavy, 240690
 Miocene-Pliocene, 240682
 quartz, 240682, 240685, 240690
 recrystallized calcareous rock fragments, 240685
 Seychelles Bank, 240682
 volcanic activity, 240690
 Indian Ocean E, 050525, 260967, 270015, 270089, 270129, 270193, 270279, 270339, 270387, 270507, 270535, 270561, 271049, 280821, 280945, 38S0817
 abyssal plain sediment
 Mesozoic, 271007, 271008
 Mesozoic-Cenozoic, 271017, 271020
 Australia W, 270387
 basalt, 270551
 Antarctica, 280835
 paleomagnetism, 270403
 basalt, altered
 geochemistry, 580800
 petrochemistry, 580800
 bathymetry, 260967, 270339
 Australia, 260967
 Broken Ridge, 260967
 Diamantina Fracture Zone, 260967
 Naturaliste Plateau, 260967
 Perth Plain, 260967
 Southeast Indian Ridge, 260967
 bathymetry, magnetics, seismic profiles, 270339, 270341, 270345, 270380, 270381
 Fremantle, 270339
 biostratigraphy, 270993
 carbon, 270499
 carbonate, 270499, 300687, 340601, 38S0433
 compressional-wave velocity, 270445
 diagenesis
 interstitial fluids, 270463
 ooze, calcareous, 270463
 geochemistry, interstitial fluids, 270463
 geochemistry, interstitial fluids, 270463
 Gondwana, dispersal, 260945, 260950
 grain size, 270503, 270507, 270508, 270509, 270517, 270518, 270519, 270521
 interstitial fluids, geochemistry, 270463
 lithology, 271001, 271002, 271020
 abyssal plain sediment, 271004, 271014, 271015
 abyssal sediment units, 271020
 bedding, 271002
 CaCO₃, 271015, 271017
 carbonate, 271020
 Cenozoic abyssal plain sediments, 271008
 Cenozoic sediments, 271001, 271015
 clay, 271002, 271010
 clay, nannofossil, 271002
 clay, zeolitic, 271002
 claystone, 271002
 Cretaceous/Tertiary boundary, 271002
 diagenesis, 271013
 mass transport, 271002
 Mesozoic sediments, 271001, 271014, 271015
 noncalcareous, 271002
 ooze, nannofossil, 271002
 Timor Trough, 271002, 271004, 271020
 unconformity, angular, 271020
 magnetic anomaly, 270339
 major element

- major element (Cont.)
 composition, 270481
 geochemistry, 270481
 sediments, 270481
 Mesozoic sediments, lithology, 271001
 methane, 270453
 mineral, heavy, 270523
 mineralogy, 270535
 ooze, calcareous
 diagenesis, 270463
 geochemistry, 270463
 paleogeography, 271049
 paleomagnetism, 270405, 270415
 paleontology, 270993
 phosphate, 270455
 physical properties, 270433
 regional summary, 220815
 reconstruction, 220826
 tectonic history, 220825, 220826
 sediment distribution, 270387
 shear strength, 270425
 shear wave velocity, 270445
 sorting, 270503
 stratigraphy, 270571
 structure, 270571
 surface currents, 270387
 surface water
 salinity, 270387
 temperature, 270387
 suspended sediment, 270383
 tectonic synthesis, 271049
 trace elements, 270481
 transport, direct sediment, 270387
 transport, eolian, 270397
 volcanic rock, 280821
 X-ray mineralogy, 270535
see also Ashmore Reef; Australia W; Bowers Basin; Broken Ridge; Canning Basin; Carnarvon Basin; Cuvier Plain; Eauripik Basin; Exmouth Plateau; Gascoyne Plain; Java Trench; Naturaliste Plateau; Perth Basin; Scott Plateau; Timor Sea; Timor Trough; Wallaby-Perth Scarp; Wharton Basin
 Indian Ocean N, 200342, 890569
 interstitial water chemistry, 220861
 ammonia, 220864
 bromide, 220861
 calcium, 220861
 cation, 220861
 chloride, 220861
 lithium, 220864
 magnesium, 220861
 manganese, 220864
 potassium, 220861
 silicon, 220861
 sulfate, 220864
 limestone, Cretaceous, 620888
 Indian Ocean NC
 deposition, 250503
 depositional paleoenvironment, 250497
 Indian Ocean NE, 220351, 220381, 220387, 220489, 220764, 220815
 accumulation, 220767
 accumulation rate, 220763
 ash, 220718, 220723
 basalt, 220718, 220720, 220723
 geochemistry, 220459
 K/Ar age, 220377
 petrology, 220459
 potassium-argon age, 220377
 bathymetry, 220718
 biostratigraphic time scale, 220381
 biostratigraphy, 220721, 220723
 Broken Ridge, 220766
 calcareous sediments, 220763
 calcium carbonate, 220718
 carbon, organic, 220671
 carbonate compensation depth, 220720, 220763
 chalk, 220723
 chalk, micritic, 220763
 chalk, nannofossil, 220723
 chert, 220720, 220723, 220767, 220771
 chlorophyll derivatives, 220677
 sediments, 220677
 clay, 220723, 220763, 220764, 220767
 clay, ferruginous, 220718
 clay, nannofossil, 220718
 clay, volcanic, 220723
 clay, zeolitic, 220718, 220720, 220767
 copper, 220723
 Cretaceous, sedimentology, 220717, 220718, 220720, 220721, 220723, 220725, 220726, 220729, 220731, 220733, 220734, 220735, 220737, 220738, 220739, 220742, 220743, 220745, 220763, 220764, 220767, 220769, 220771
 Cretaceous to Recent, 220717
 Cretaceous to Recent history, 220717
 crust, 220720
 current, 220771
 diabase, andesitic, 220718
 diffusimetry, 220663
 dolarenite, 220723
 foraminifers, 220764
 fossil preservation, 220718
 Ganges Fan, 220771, 220772
 history, 220403
 geographic setting, 220718
 geologic history, 220717
 hiatuses, 220769, 220771
 hydrocarbon, 220673
 gasoline range, 220671
 Indo-Australian Plate, 220766
 inferred hiatuses, 220676
 interstitial water, chemistry, 220657, 220861
 iron-manganese oxide, 220720
 isotopic ages, 220718
 kerogen, 220673
 limestone, 220723
 limestone, recrystallized, 220720
 lithology, reflectors, 220697
 magnetic anomaly, 220676
 magnetic time scale, 220381
 metamorphosed calcareous sediments, 220763
 mineralization, 220469
 Nicobar Fan, 220771, 220772
 Ninetyeast Ridge, 220766
 noncarbonate sediment, origin, 220489
 ooze, calcareous, 220764, 220767
 ooze, clay nannofossil, 220723
 ooze, foraminiferal, 220720
 ooze, nannofossil, 220718, 220720, 220723
 ooze, radiolarian diatomaceous, 220720
 ooze, siliceous, 220767
 organic geochemistry, 220681
 paleomagnetism, 220369
 paleontology, 220805
 petrology, igneous rocks, 220413
 Pliocene to Cretaceous, 220718
 reflector, lithology, 220697
 reflectors correlated with lithology, 220397
 sand, 220718
 sand-silt-clay distribution, 220771
 sediment age, 220720
 sediment, recrystallized calcareous, 220718
 sedimentary pattern, 220723, 220724, 220725
 sedimentology, Cretaceous to Recent, 220717
 siliceous microfossils, 220729
 silt, 220718, 220720, 220723
 silt, glauconitic carbonate, 220720
 siltstone, 220723
 sinking history, 220763
 spreading center, 220766
 stratigraphic-seismic correlations, 220403
 stratigraphy, 220720, 220723
 synthesis, regional, 220815
 tectonic setting, 220764
 terrigenous material, 220771, 220772
 terrigenous sediment, 220743
 terrigenous sedimentation, 220771
 tholeiite, 220763
 transition metals in rocks, 220449
 turbidity current, 220723
 volcanic sediment, 220745
 volcaniclastics, 220720
 Wharton Basin, 220718
 X-ray mineralogy, 220693
see also Bengal Basin
 Indian Ocean NW, 240696, 241058
 crust, oceanic, age, 230131
 Gondwana, dispersal, 260950
 grain size, 250417, 250418, 250422, 250423, 250446
 volcanic components, 241058, 241060, 241061
 ash, 241058, 241060, 241061
 bentonite, 241060
 clay, palygorskite, 241060
 glass, volcanic, 241060
 glassy rocks, 241061
 gypsum, 241061
 palagonite, 241058
 pumice, 241058
 SiO₂ content, 241061
 zeolite, 241060
 Indian Ocean S, 240969, 280772, 291167, 340190, 350605, 350617, 641160, 710741, 730741, 901500
 Albian sediment, 260930
 Albian volcanic sediments, 260928
 aseismic ridges, 260910
 ash, 260919
 ash, vitric, 260919
 basalt, 260915, 260919, 260920, 260930
 black vesicular olivine, 260919
 magnetic properties, 260529
 seismic velocity, 260509
 carbonate, 260919
 chalk, nannofossil, 260914, 260919, 260930
 circulation, circumpolar, 260929
 Circum-antarctic Current, development, 291155
 clay, 260930, 291049
 clay, foraminiferal, 260919
 clay, nannofossil, 260930
 crust, oceanic, 260910
 deep-sea unconformity, 260911
 deformation, 280977
 deposition, 260920
 depositional paleoenvironment, 250499
 dissolution, 260911, 260930
 Eocene sediment, 260919
 gabbro, 280772
 garnet, authigenic, 260915
 geologic history, 260909, 260938, 260939, 260941
 abyssal hills, 260930
 active mid-ocean ridge system, 260910
 African Plate, 260910
 Antarctica, 260910
 Australia, 260910, 260929
 Australia SW, 260925
 Bengal, Bay of, 260910
 cold-water regime, 260930
 continental fragments, 260910
 continental structures, 260925
 continental vs oceanic affinities, 260928

geologic history (Cont.)

Cretaceous, 260910
 Cretaceous sedimentation, 260928
 Cretaceous-Eocene, 260928
 Cretaceous-Paleocene unconformity, 260911
 Eocene, 260910
 Ganges Fan, 260910
 Gondwana, 260910
 Indo-Australian Plate, 260910
 Indus Fan, 260910
 major ocean basin, 260910
 Miocene-Recent, 260915
 Miocene-Santonian gap, 260929
 Ob Trench, 260925
 Oligocene-Eocene, 260920
 Pacific Ocean W, 260911
 Pacific-Antarctic Ridge, 260910, 260929
 plate movement, 260910
 sea floor spreading, 260910
 shallow-water volcanic origin, 260910
 Southeast Indian Ridge, 260910
 spreading, 260929
 Tertiary, Cretaceous, 260930
 geophysical measurements, 260417, 260418, 260419
 Durban, 260417
 geothermal measurements, 080837, 080840, 080841, 080847, 210443, 220387, 220391, 260462
 bottom water, 210455
 circulation, oceanic, 080847
 gradient reversals, 080841
 heat flow, 080841, 210452, 210455, 260456, 260458, 260460, 260461
 interstitial water, 210452
 Melanesia, 210443
 Ninetyeast Ridge, 220391
 surface layer, 210452
 temperature, 080841, 210443, 210445, 210446, 210450, 210451, 220388, 220389, 260452, 260453, 260454, 260455
 thermal conductivity, 080845, 210451, 220389, 260451, 260452
 glacial sedimentation, Cenozoic, 280769
 gneiss, 280772
 granite, 280772
 heat flow measurements, 260919, 260920
 inner shelf environment, 260919
 latitudinal thermal gradients, Pacific Ocean S, 901359
 magnetic data, 280945
 mineral, heavy, 270523, 270525, 270526
 amphiboles, 270526
 apatite, 270523
 Cenozoic, 270526
 Cenozoic unstable components, 270526
 clinopyroxene, 270523
 disaggregation, 270523
 dispersal pattern changes, 270526
 downslope transport, 270523
 epidote, 270523, 270524
 garnet, 270523, 270524, 270526
 hornblende, 270523, 270524, 270525
 iron, authigenic, 270523
 manganese oxide, 270523
 Mesozoic, 270525
 Mesozoic unstable components, 270526
 mineral, nonopaque, 270525
 monazite, 270523
 opaques, 270523
 orthopyroxene, 270523
 pyroxene, 270525, 270526
 redeposition, 270523
 sphene, 270523
 terrigenous minerals, 270523
 Timor Trough, 270526

tourmaline, 270523, 270524, 270525, 270526
 zircon, 270523, 270524, 270525, 270526
 mixed isotope and radio chemical model, uranium, 700308
 Mount Sandow, Precambrian sediment, 280772
 mudstone, volcanic, 260920
 NNE-trending fracture zone, 260910
 ocean basin, evolution, 291049
 ooze, biogenic, 260920
 ooze, nannofossil, 260914, 260915, 260919, 260930
 orthoquartzite, 280772
 paleomagnetic measurements, 260517
 pebble characteristics, 280769
 sandstone, volcanic, 260920
 schist, 280772
 sedimentation, 260937, 260938, 260939, 260940, 260941
 sedimentation rate, 260915, 260930
 sediments, synthesis, 291147
 seismic reflection, 280645
 silt, terrigenous, 291049
 synthesis, general, 280919
 X-ray mineralogy, 280981
 zeolite, 260930
 Indian Ocean SC, sea floor spreading, history, 250664, 250675
 Indian Ocean SE, 050525, 260613, 260614, 260617, 280589, 280769, 280831, 280909, 280919, 280933, 290276, 290730, 291161, 710469
 Antarctica, glaciation, 291039
 carbon, 260614, 260617
 carbon isotope, stable, 260617
 carbon, organic, 260613, 260615
 carbonate, 260613
 Cenozoic, 280937
 grain size, 270503
 offshore environments, 280935
 paleoceanography, 280933
 paleoclimate, diachronous biogenic facies, 280910
 radiometric age, 260513
 basalt, 260513, 260515
 potassium-argon age, 260515
 sedimentology, 260617
 sediments, geochemistry, 260541, 260542, 260547, 260548, 260549, 260550, 260551
 unconformity, 280931
 Indian Ocean SW, 291160, 711155, 820404
 Africa E, coast, 250680
 Atlantic Ocean S, magnetic anomaly, 391113
 geophysical investigations, 260529, 260961, 260962
 magnetism, 260960
 Gondwana, dispersal, 260950
 iron-rich sediment, 250395, 250396, 250401
 Madagascar Basin, 250863
 Rio Grande Rise N, regional setting, 250699
 sea floor spreading, history, 250663, 250664
 sediment, synthesis, 291147
 structural history, 291157
 Indian Ocean W, 090919, 110772, 120441, 130231, 130692, 130902, 131006, 131207, 131224, 150478, 160601, 160714, 160876, 230036, 230075, 230118, 230168, 230178, 230503, 230505, 230521, 230550, 230814, 230859, 230953, 231002, 231095, 240003, 240249, 240283, 240327, 240391, 240469, 240637, 240641, 240646, 240651, 240653, 240656, 240658, 240664, 240672, 240674, 240675, 240678, 240697, 240715, 240722, 240859, 240995, 241047, 241049, 241051, 241058, 241061, 241065, 241069, 241070, 241111, 241125, 241136, 241137, 241140, 241141, 250515, 250743, 250831, 250832,

250834, 250835, 250836, 250840, 260005, 260007, 260009, 260011, 260021, 260153, 260359, 260417, 260541, 260669, 260675, 260743, 260745, 260771, 260909, 260945, 260959, 260967, 260994, 260999, 270481, 270925, 271049, 290271, 290285, 290555, 290563, 291049, 291059, 291062, 291075, 291156, 291164, 291166, 300013, 300681, 340285, 340631, 340785, 350197, 350270, 350560, 360042, 360293, 360519, 360761, 360934, 360988, 361002, 361006, 361008, 38S0019, 38S0887, 390628, 390657, 390672, 391071, 391113, 400225, 400741, 400744, 401026, 401045, 410918, 42B0627, 42A0648, 42A0761, 42A1040, 42B1214, 430124, 430601, 430614, 430697, 440742, 440745, 47B0079, 47B0674, 480371, 480483, 490848, 730744
 acoustic basement, 240672, 250756, 250758
 active oceanic ridge system, 250743
 age/depth depth constancy, 240710
 former water depths, 240715
 alteration, seawater, 250754, 250756, 250757
 Alula-Fartak Trench, 240651, 240664
 fault, transform, 240664
 Sheba Ridge, 240664
 amphiboles, 240658
 Antarctic Bottom Water, 250754
 Antarctica, 250743
 Arabian Sea, sediment history, 230518
 aragonite, 240658
 arenaceous benthic foraminifers, 240700
 diagenetic destruction, 240700
 Argo Fracture Zone, 240651
 aseismic ridges, 250743
 ash, 240658
 Atlantic Ocean, 250237, 250287, 250497, 360008
 Atlantic Ocean SW, basin, evolution, 361009
 authigenic components, 240658, 240674, 240675, 240678
 benthic foraminifers, 240662
 crust, 240679 glauconite, 240662, 240674, 240679
 gypsum, 240664, 240674
 manganese nodules, 240679
 planktonic foraminifers, 240662
 pyrite, 240662, 240674
 quartz, 240676, 240679
 quartz, idiomorphic, 240664
 zeolite, 240676, 240679
 authigenic minerals, 240656, 250758
 barite, 241061, 241062
 distribution, 241062
 basal metalliferous sediments, 241070
 basalt, 240658
 basement, 240656, 240678
 geochemistry, 250543, 250545, 250546, 250548, 250549
 K/Ar age, 250553
 trace elements, 240781, 240871
 basement, 240656, 240664
 basalt, 240653
 basins, unknown, 250743
 benthic foraminifers, 240656
 biogenic components, 240658, 240664, 240672, 240674, 240675, 240679, 240696, 241051
 algal crusts, 240664, 241051
 aragonite, 240696
 biogenic productivity, 250754
 biogenic sediments, 250755
 biogenous components, 250486
 biostratigraphy, Cenozoic, 241111
 breccia, volcanic, 250757
 burrows, 270675

- calcareous fossil preservation, 240704, 240707
 calcite, 240658, 241065
 calcium carbonate, 240653, 240658, 240672, 240678
 carbon, 241155
 carbon, organic, 240672, 240675, 240678
 carbonate, 241155
 CCD, 250746, 250753, 250754, 250755, 250756
 central, 250481
 central abyssal plain, 250754
 Chagos-Laccadive Plateau, clay minerals, 241056
 Chain Ridge, 240651
 chalk, 241049
 chalk, nannofossil, 240678
 channel deposits, 250755
 chert, 241049, 241065
 chlorite, 240658
 circulation, equatorial, 250754
 clastic terrigenous components, 240658
 clay, 240658, 240672, 240675, 240678, 241049
 clay, black, 241065
 clay minerals, 241056, 241065
 chlorite, 241058
 clay, 241056
 feldspar, 241056
 kaolinite, 241058
 Mascarene Plateau, 241056
 mica-illite, 241058
 montmorillonite, 241058
 palygorskite, 241058
 quartz, 241056
 Somali Basin, 241056
 volcanic material, 241056
 clay minerals, secondary, 250758
 clay, nannofossil, 240675
 coarse fraction sediment, 240651
 coral, 240656
 Cretaceous continental slope, 250755
 Cretaceous-Pleistocene sediment, 240653, 240678
 crust, oceanic, 250743
 current scouring, 250754
 current system, 250755
 deposition, 241065, 241066, 241068
 ash, 241066
 benthic fossils, 241067
 bottom water, 250503
 calcium carbonate, 241066
 chalk, nannofossil, 250496
 clay, nannofossil, 241066
 compositional bedding changes, 241066
 foraminifers, 241066
 glauconite, 241067
 lamination, 241068
 noncarbonate material, 241066
 ooze, foraminiferal, 241067
 ooze, nannofossil, 241066, 241067, 250496
 ooze, radiolarian, 241067
 open ocean, 241049
 pelagic facies, 241067
 sorting, 241067
 detrital sediment dispersal, 250754
 diabase, 240672
 trace elements, 240871
 diagenetic structures, 241068
 chert, 241068
 compaction, 241068
 consolidation, 241068
 limestone, siliceous, 241068
 manganese nodules, 241068
 pyrite nodule, 241068
 diatoms, 240656
 dolomite, 240658
 eastern, 390904
 equatorial, 260007, 260911
 Equatorial Current, 250754, 250755
 erosion, 250755
 erosion increase, 250754
 evaporites, 240672
 faulting, 250755
 ferromanganese oxide deposits, 241062
 abundance, 241062
 nodules, 241062
 fish remains, sedimentation rate, 240704
 formation, 250743
 fossils, 250756
 geochemistry, sediments, 250405, 250406, 250407, 250408, 250409, 250412, 250414, 250415
 geographic location, 240653, 240656
 geologic history, 250743
 glauconite, 241049
 Gondwana, dispersal, 260945
 grain size, 241153
 granitic/metamorphic terranes, 250755
 gypsum, 240672, 241062
 halite, 241062
 H₂S odor, 240672
 hemipelagic sediments, 241068
 benthic components, 241069
 calcareous nannofossils, 241068
 clastic terrigenous components, 241068
 pelagic-living organisms, 241068
 shallow-water derivation, 241069
 sodium, 241068
 hiatus, 250753, 250755, 250756, 250757
 hiatus formation, 250754
 history, 250683
 hydrothermal activity, 250756
 interstitial water, 250371, 250372
 alkalinity, 250361, 250363, 250364, 250371, 250373
 ammonia, 250363
 bicarbonate, 250361
 calcite, 250372
 calcium, 250363, 250364, 250371, 250373
 calcium carbonate, 250362, 250371
 carbon dioxide, 250362
 chemistry, 240799
 chloride, 250363
 interstitial waters, 250365, 250366, 250367, 250368, 250369, 250370, 250371
 kaolinite, 250372
 magnesium, 250363, 250364, 250371, 250373
 manganese, 250363, 250373
 mica, 250372
 mixed marine, terrigenous sediments, 250371
 montmorillonite, 250372
 NH₄, 250371
 palygorskite, 250372
 pH, 250363, 250364, 250372
 potassium, 250363, 250371, 250373
 salinity, 250363
 sedimentation, 250361, 250371
 silica, 250362, 250363, 250364, 250372
 SO₄, 250371
 strontium, 250363, 250371, 250373
 sulfate, 250361, 250363, 250364, 250373
 temperature effects, 250364, 250365
 tunicate, 250371
 turbidite, 250371
 intrusives, 250756
 iron oxide, 241051, 241062, 241064
 islands, 220429, 260505
 K-feldspar, 240658
 K/Ar age, 250757
 kaolinite, 240658
 lateral movement, 250756
 levee deposits, 250755
 limestone, 250757
 lithology, 240653, 240672, 240675
 hiatuses, 250739, 250740
 mineral, heavy, 250737, 250738
 Miocene to Pleistocene, 240672
 missing intervals, 250725
 ooze, nannofossil, 240672
 Quaternary/Pliocene boundary, 250725
 sandstone, quartzose, 240672
 sedimentation rate, 250738, 250739
 magnetic anomaly, 250743
 Mascarene Plateau, 240651
 metal content, 250756
 metalliferous sediments, 241065
 mica, 240658
 Mid-Indian Ridge, 240651
 mid-latitude biostratigraphic succession, 250746
 midocean ridge, 250753
 midocean ridge system, 250756
 mineral, heavy, 270523, 270524, 270525
 mineralogy
 Alaska, Gulf of, 181018
 allevardite, 42A0373
 amorphous content, 280981, 310883
 amorphous material, 411075, 411078, 411084, 42A0362
 amorphous materials, 411070
 amorphous scattering, 291173
 amphiboles, 130608, 130611, 140679, 150847, 150848, 160529, 181016, 181017, 440516, 440517, 440519
 analcime, 130608
 analcite, 170518
 anatase, 140677, 140678, 140679
 anhydrite, 130605, 130608, 130609, 150847, 150848, 150849, 150850, 160529, 160530, 181016, 181017, 240811, 42A0362, 42A0370
 ankerite, 42B0462
 apatite, 060755, 150847, 150848, 150849, 150850, 160529, 160530, 181016, 181017
 aragonite, 130610, 150847, 150848, 150849, 150850, 160529, 160530, 181016, 181017, 240812, 240813, 240814, 250844, 42A0372, 42B0451, 42B0462, 440517, 440518, 440519
 arenite, gypsum, 130609
 Astoria Canyon, 181018
 Astoria Fan, 181018
 attapulgit, 411072, 411075, 411078, 411079, 411081, 411084, 411085, 42A0370, 42A0373
 augite, 130608, 150848, 150849, 150850, 240814, 250844
 barite, 060753, 060754, 060755, 060757, 150847, 150850, 160529, 160530, 160531, 181017
 basanite, 130608
 calcite, 060753, 060754, 060755, 060756, 060757, 060758, 060759, 130606, 130607, 130608, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 400547, 400548, 411066, 411071, 411074, 411075, 411076, 411077, 411084, 411085, 411086, 42A0365, 42A0370, 42A0373, 42A0378, 42A0379, 42B0451, 42B0457, 431019, 440515, 440516, 440517, 440518, 440519
 calcite, biogenic, 411081
 carbonate, 060759, 431019
 carbonate/silicate ratio, 42A0370
 celestite, 130608, 150847, 150848, 150849, 150850, 160529, 160530, 181016,

mineralogy (Cont.)

- 181017
 chalcedony, 411072, 411075
 chert, 170514, 170517
 chlorite, 060754, 060755, 060756, 060758, 130606, 130607, 130608, 130609, 130610, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 411076, 411084, 411085, 411086, 42A0363, 42A0365, 42A0370, 42A0373, 42A0378, 42A0380, 42B0451, 42B0457, 431019, 440516, 440517, 440520
 chlorite/kaolinite ratio, 42B0462
 clay, 130605
 clay mineralogy, 400541, 42A0362
 clay minerals, 411070
 clinoptilolite, 060753, 060754, 060757, 060758, 130606, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240814, 250846, 250848, 400548, 411066, 411074, 411075, 411084, 411085, 42A0365, 42A0373, 42B0457, 440516, 440519, 440521
 corrensite, 42A0373, 42A0376
 cristobalite, 060756, 060759, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 250846, 250847, 250848
 Delgada Fan, 181018
 deposition, 060758
 deposition, pyroclastic, 060759
 disconformity, 060754
 dolomite, 060758, 060759, 130605, 130607, 130608, 130609, 130610, 130611, 140677, 140678, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 250845, 400547, 400548, 411066, 411075, 411080, 411084, 411085, 42A0363, 42A0365, 42A0370, 42A0373, 42A0379, 42B0451, 42B0460, 440515, 440517, 440518, 440519
 dolomite, stoichiometric, 400548, 411080, 411084, 411085, 411086, 42A0368, 42A0379, 42A0385
 erionite, 060759
 Escambia Trough, 181018
 feldspar, 060755, 060756, 130608, 130611, 140677, 140678, 400547, 411071, 411076, 411077, 411084, 411085, 42A0362, 42A0365, 42A0370, 42A0372, 42A0373, 42A0378, 42A0379, 42A0385, 42B0451, 42B0457, 440517, 440519, 440520
 gibbsite, 130608, 150850
 glass, volcanic, 150850
 glauconite, 181016
 glilandite, 42B0457
 goethite, 130608, 160530, 170518
 gypsum, 130605, 130608, 130610, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 170518, 181016, 181017, 240814, 411075, 411077, 411084, 42A0368, 42A0370, 42A0377, 42A0385
 halite, 240814, 250848, 411066, 42A0377, 42A0386
 harmotome, 400547, 400548
 hematite, 130606, 140677, 150850, 250845, 250847, 440516
 hornblende, 440520
 hydrotroilite, 150848
 illite, 130608, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 400547, 400548, 411077, 411084, 411085, 411086, 42A0365, 42A0373, 42A0378, 42A0380, 42B0451, 42B0460, 440520, 42A038
 illite-mica, 431019
 illite-montmorillonite, 42B0457
 illite-smectite, 42A0363
 illite/chlorite ratio, 42A0385
 illite/montmorillonite ratio, 42B0462
 iron oxide, 160530
 K-feldspar, 060753, 060754, 060755, 060756, 060757, 060759, 130607, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 411071, 411075, 411076, 411084, 42B0462, 440516, 440517, 440518, 440519
 kaolinite, 060753, 060754, 060755, 060756, 060757, 060758, 130606, 130607, 130608, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 400547, 400548, 411071, 411075, 411076, 411078, 411084, 411085, 42A0363, 42A0365, 42A0370, 42A0373, 42A0378, 42A0380, 42B0451, 42B0457, 431019, 440516, 440517, 440518, 440520
 limestone, 130605
 lueneburgite, 42A0370
 magnesium, 411078
 magnetite, 140677, 150849, 150850, 181017, 250848
 manganosiderite, 42B0462
 marl, 130605
 marl ooze, 130605
 mica, 060753, 060754, 060755, 060756, 060757, 060758, 130606, 130607, 130608, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 440516, 440517, 440518, 440520
 micrite, 42B0462
 mineral identification, 411065, 42A0361
 mineral qualification, 361017, 370895
 mineral quantification, 350747
 minerals, 260573, 280981, 310883, 370896
 montmorillonite, 060753, 060754, 060755, 060756, 060757, 060758, 060759, 130606, 130607, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 400547, 400548, 42B0451, 42B0457, 431019, 440516, 440517, 440518, 440520
 ooze, nannofossil, 130605
 opal-CT, 411066, 411072, 411075, 411081, 411084, 411085, 42A0365
 ophiolite, 130606, 42A0373, 42A0378
 Oregon, 181018
 origin, 060754, 060756, 060757, 060759
 palygorskite, 130605, 130608, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 170518, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 440517, 440518, 440520
 percent amorphous, 350747, 361017, 370895
 phillipsite, 060753, 060755, 060756, 060758, 130607, 130608, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240814, 250847, 250848, 400547, 400548, 42A0370, 42B0457
 phosphatic minerals, 150849
 plagioclase, 060753, 060754, 060755, 060756, 060757, 060758, 060759, 130607, 130608, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 400547, 400548, 42A0365, 42A0370, 42A0373, 42A0378, 42A0380, 42B0451, 42B0457, 431019, 440516, 440517, 440518, 440519
 plagioclase/quartz ratio, 060757
 protodolomite, 400548
 pyrite, 130607, 130609, 130610, 130611, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 250848, 400548, 411075, 411077, 411084, 440517, 440518, 440521, 42A037
 quartz, 060753, 060754, 060755, 060756, 060757, 060758, 060759, 130606, 130607, 130608, 130609, 130610, 130611, 140648, 140677, 140678, 140679, 150847, 150848, 150849, 150850, 160529, 160530, 160531, 181016, 181017, 240812, 240813, 240814, 250844, 250845, 250846, 250847, 250848, 400547, 411066, 411071, 411075, 411076, 411077, 411084, 411085, 42A0362, 42A0365, 42A0368, 42A0370, 42A0372, 42A0373, 42A0378, 42A0379, 42A0385, 42B0451, 42B0457, 440516, 440517, 440518, 440519, 440520
 quartz/feldspar/mica ratio, 060755
 quartz/kaolinite ratio, 060757
 quartz/plagioclase ratio, 060755, 060756
 rhodessite, 250847 sediment classification, 350747, 361017, 370895
 sepiolite, 140677, 140678, 411075, 411078, 411079, 411080, 411081, 411085, 440517, 440520 serpentinite, 42A0343, 42A0378, 42A0380 serpentinite, 42B0457
 shale, 130605
 siderite, 140679, 150848, 42B0460, 440516
 silica, 181016
 smectite, 411071, 411075, 411077, 411084, 411085, 42A0365, 42A0370, 42A0373, 42A0378, 42A0380
 smectite/illite ratio, 42A0370
 stratigraphy, 310883
 talc, 160529
 trace, definition, 170517
 tridymite, 250846, 250848
 unidentified minerals, 190667, 291173
 Vancouver Island, 181018
 vermiculite, 42B0457
 volcanoclastics, 170518
 volcanism, 060759
 zeolite, 060754, 060758
 minerals, 240675, 240678
 amphiboles, 240675
 aragonite, 240678
 calcite, 240675, 240678
 chlorite, 240675, 240678
 dolomite, 240675, 240678
 K-feldspar, 240675, 240678
 kaolinite, 240675, 240678
 mica, 240675, 240678
 montmorillonite, 240675, 240678
 palygorskite, 240675
 phillipsite, 240678
 plagioclase, 240675, 240678
 pyrite, 240675, 240678
 quartz, 240675, 240678
 Miocene to Pleistocene, 240658
 mollusk debris, 240656
 montmorillonite, 240658
 mud, terrigenous, 250456
 clay, 250456
 microfossils, 250456
 mud, 250456

- mud (Cont.)
 mud, green, 250456
 silt, 250456
 silty clay, 250456
 Neogene sequence, 250755
 nodules, 241065
 oldest sediment, 250753, 250756, 250757, 250758
 Oligocene-Pleistocene sediment, 240675
 ooze, 240675
 ooze, biogenic, 241049
 ooze, foraminiferal, 241070
 preservation, 241070
 ooze, nannofossil, 240653, 240658, 240678, 241049, 241051, 241065, 241069, 241070
 Barremian, 240672
 basalt, 241070
 calcareous marine planktonic plant remains, 241069
 preservation, 241070
 recent distribution, 241069
 redeposited discoasters, 241070
 ooze, radiolarian, 241070
 overbank deposits, 250755
 Pacific Ocean, 250237, 250287, 250497
 paleoceanography, 241111
 palygorskite, 240658, 241064
 authigenic origin, 241064
 detrital origin, 241064
 pelagic sediments, 241049
 peneplain formation, 250755
 plagioclase, 240658
 planktonic foraminifers, 240656
 plant debris, 240656
 Pleistocene, 240658
 Pliocene, 240658
 Pliocene to Pleistocene deposits, 240672
 pore-water salinities, 240672
 productivity maximum, 250754
 pyrite, 240658, 240675, 241051, 241065
 absence, 241065
 deposition, 241065
 quartz, 240656, 240658
 quartz/mica ratio, 240674
 recrystallization, chalk, nannofossil, 240658
 regional aspects
 Aden, Gulf of, 250743
 Africa, 250743, 250754, 250755, 250756, 250758
 Africa E, 250743, 250755, 250756
 Atlantic Ocean, 250756
 Australia, 250743
 Chinde, 250756
 continental fragments, 250743
 continental margin, outbuilding, 250755
 continental margins, 250756
 continental structure, 250743
 Iceland, 250757
 India, 250743, 250754
 Pacific Ocean, 250756
 seawater, 250753
 shallow depths, 250755
 shallow-water environment, 250757
 regional distribution, 240692
 ridge, strong erosive current, 250758
 ridges, aseismic, 250743
 ridges, seismic, 250743
 sea floor movement, 250756
 sea floor spreading, 250746, 250747, 250748, 250749, 250752
 history, 250663, 250664, 250675
 sediment, 241047
 sediment starvation, 250755
 sedimentary structure, 240658, 240672, 240675, 240678
 sedimentary structure, biogenic, 241065
 sedimentation rate, 240710, 240716, 241049, 241051, 250754, 250755, 250757
 basement, 240715, 240716
 shallow-water derivation, 240715
 subsidence rate, 240715
 transport, 240716
 seismic reflection, 250756
 slumping, Tertiary, 241051
 sorting, 241153
 sponge spicules, 240656
 stratified sequence, 240656
 structure, 250663
 submarine canyons, 250756
 submarine plateaus, 250743
 subsidence, 250754, 250757
 surface water, 250755
 tectonic stability, 250755
 tectonism, vertical, 250756
 terrigenous components
 Aden, Gulf of, 240662
 Alula-Fartak Trench, 241053
 amphiboles, 240672
 ash, 240676
 ash, glass, 240696
 basement, continental, 240696
 calcite, 240672, 241051
 chlorite, 240672
 clastic input, 240693
 clay, 240662
 deposition, 241052
 detrital sediment, 241052
 distribution, 240661, 241051
 dolomite, 240661, 240672, 240676, 240679
 eolian origin, 240693
 feldspar, 240662, 240676, 241052
 glass, volcanic, 240676, 240679
 graywacke, 241052
 K-feldspar, 240672
 kaolinite, 240672
 limestone, 240661
 limestone, fossiliferous, 240661
 lithology, 241052
 mica, 240661, 240672, 240676, 240679, 241052
 mineral assemblage, 240693
 mineral, heavy, 240679
 Miocene, 240679
 montmorillonite, 240672
 ooze, nannofossil, 240661, 240662, 241052
 palygorskite, 240672
 plagioclase, 240672
 quartz, 240661, 240672, 240676, 240679, 241051, 241052
 quartz/mica ratio, 240661, 240676, 240679, 240693
 rock fragments, 240661
 sand, 241051
 sand, quartzose, 241052
 sandstone, 240661
 sandstone, quartzose, 240661
 siliceous detrital input, 241052
 silt, 241051
 siltstone, 241052
 siltstone, quartzose, 241052
 slumping, 240662
 transport, 240693
 volcanic activity, 240696
 windblown terrigenous components, 241053
 terrigenous debris, 250756
 terrigenous detritus, 250754, 250755
 terrigenous sediment, 250754, 250755, 250757, 250758
 Africa, 241056
 apatite, 241056
 Arabia, 241056
 biotite, 241055
 chlorite, 241056
 dolomite, 241056
 dolomitic rock fragments, 241055
 epidote, 241056
 feldspar, 241054
 geographic location, 241053
 glauconite, 241054, 241056
 gypsum, 241054, 241055
 hornblende, green, 241055
 K-feldspar, 241055
 mica, 241054
 mineral assemblages, 241056
 plagioclase, 241055
 pyrite, 241056
 pyroxene, 241055
 quartz, 241054
 sand, 241054, 241056
 sandstone, quartzose, 241054
 sedimentation rate, 241054
 shallow-water, 241056
 Somalia, 241056
 titanite, 241056
 transport, 241056
 zircon, 241056
 tropical, 240637
 Argo Fracture Zone, 240646
 Chagos-Laccadive Ridge, 240646
 foraminifers, 240637
 Mascarene Plateau, 240637, 240641
 nannofossil identification, 240637
 Saya de Malha Bank, 240637, 240641
 Saya de Malha Bank W, 240641, 240646
 Seychelles, 240637
 Somali Basin E, 240637
 turbidites, 250754, 250755
 turbidity current, 250754, 250758
 unconformity, 250757, 250758
 uplifting, epeirogenic, 250754, 250757, 250758
 upper waters, productivity, 250755
 volcanic edifices, 250743
 volcanic sediment, 250515, 250541
 Africa E, 250541
 basalt, 250541
 clay minerals, 250517
 Gondwana, 250541
 Madagascar Plateau, 250541
 Mozambique Ridge, 250541
 Natal Basin, 250541
 sea floor evolution, 250541
 sea floor spreading, 250541
 sediment distribution, 250515
 tectonic events, 250541
 volcanic activity, 250515, 250529
 volcanic origin, 250515, 250517
 volcanism, 250541
 volcanism, island, 250541
 volcanic sediments, 250757, 250758
 volcanic terranes, 250755, 250757
 volcanism, 250754, 250755, 250758
 basalt, 250534
 Campanian, 250540
 Cretaceous, 250540
 Eocene, 250540
 Gondwana, 250540
 magnetic anomaly, 250540
 sea floor continent movements, 250540
 spreading center, 250540
 volcanism, submarine, 241051
 weathering, submarine, 250757
 X-ray mineralogy, 240811
 zeolite, 241049, 241061, 241065
 clinoptilolite, 241061
 phillipsite, 241061
 volcanism, submarine, 241061

- see also Afar Depression; Alula-Fartak Trench; Argo Fracture Zone; Carlsberg Ridge; Chagos-Laccadive Ridge; Chain Ridge; Comoro Island; Crozet Basin; Davie Ridge; Madagascar; Madagascar Basin; Madagascar Ridge; Mascarene Basin; Mascarene Plateau; Mozambique; Mozambique Ridge; Owen Fracture Zone; Red Sea; Seychelles Bank; Sheba Ridge; Somali Basin; Southeast Indian Ridge; Southwest Indian Ridge
- Indian Ocean WC, 240827, 250664
- deposition
- bottom water, 250499
 - chalk, nannofossil, 250494, 250495
 - depositional paleoenvironment, 250497
 - ooze, nannofossil, 250494, 250495
- lithology, 250484
- paleoenvironment, paleoceanography, 250481
- pelagic components, distribution, 250490
- Fe-Mn oxide, 250490
 - pyrite, 250490, 250491
 - zeolite, 250490
- Indian Plate. See Indo-Australian Plate
- Indian Ridge. See Mid-Indian Ridge
- Indira Fracture Zone, 230527
- Arabian Sea, plate tectonics, 230527
- Indispensable Reefs, Coral Sea E, geology, 300649, 300659
- Indo-Australian Plate, 210905, 220021, 220214, 220369, 220464, 220489, 220723, 220766, 220772, 230052, 230292, 230315, 230497, 230518, 260007, 260153, 270193, 270707, 271002, 291117, 580003, 900005, 901225, 901326, 901327, 901385, 901448, 901451, 901452, 901483, 901495, 910471
- Arabian Sea
- geology, 231119
 - history, 231119, 231121
 - paleomagnetism, 230521, 230522
 - plate tectonics, 230533
- Australia, 901081, 901154
- biogeographic change, 220807
- Cenozoic paleoceanography, oceanographic setting, 901495
- Chatham Rise, seismic stratigraphy, 901326
- Coral Sea E, geology, 300647, 300660, 300661
- crust, 260418
- currents, Miocene, 901233
- Gondwana, dispersal, 260947
- Indian Ocean E, lithology, 271002
- Indian Ocean NE, sediment history, 220766
- Indian Ocean S, geologic history, 260910, 260919, 260920, 260922, 260925
- lithology, minor, pale green laminae, 901484
- lithology, 220021
- lithosphere, 260417
- Lord Howe Rise
- isotope stratigraphy, 901385
 - pale green laminae, 901154, 901155, 901157
- Lord Howe Rise C, Neogene evolution, 901452
- migration, 280938
- movement, 220806
- New Zealand, tectonics, 901233
- northward drift, 230521, 230533
- oceanography, 280937
- Pacific Ocean, boundary, 901157
- Pacific Ocean SW
- Antarctic Plate, 210906
 - Cenozoic paleoenvironment, 901225
 - connection, 210905
 - island arcs, 300691, 300693, 300696, 300698, 300700, 300702, 300703, 300704
 - Neogene-Paleogene evolution, 901437
- Pacific Plate, 900660, 901087
- boundary, 901154, 901155, 901161
- paleomagnetism, Arabian Sea, 230521
- regional summary, 220815, 220818
- Indian Ocean E, 220825, 220826
- Ninetyeast Ridge, 220825
- seismic stratigraphy, Hikurangi Trench S, 901333
- South Fiji Basin, history, 300630, 300631, 300632
- southwest regional unconformities, 210905
- tephra, Cenozoic, 901170
- see also Arabian Sea; Indian Ocean E; Indian Ocean S; Pacific Ocean SW
- Indo-Chinese orogenic belt, Tethys, Mediterranean Sea, 42A0944, 42A0948
- Indo-Gangetic Plains, 230505, 230518
- Indo-Pacific island arcs, 42B0518, 710289, 780463, 820620, 820624, 820626
- Pacific Ocean EC, geologic history, 090919
- Indochina, Tethys, Mediterranean Sea, 42A0944, 42A0945
- Indol Kuban Basin, 42B1079
- Black Sea, geophysical framework, 42B1077
- Indonesia, 061281, 100388, 110731, 130027, 150773, 160714, 220413, 220429, 260773, 260815, 260947, 261002, 270843, 270849, 270851, 280341, 360849, 610450, 710957, 870709
- basin genesis, Philippines, 310876
- Indian Ocean C, noncarbonate sediment, 220492, 220497
- Indian Ocean E, surface currents, 270387
- island arc, 190801, 220431, 220492
- lithology, 220021
- Misol, 270851
- Pacific Ocean SW, Cenozoic, 300667, 300679
- Philippines, genesis, 310876
- reef, Miocene, 790866
- regional summary, Wharton Basin, 220822
- smectite, 590602
- subduction, 840767
- Tethys, Mediterranean Sea, 42A0945
- trench system, 220021, 220771
- Indonesian Mineral Province, Indian Ocean C, noncarbonate sediment, 220493
- Indrani Fracture Zone, 230527
- Indus Fan, 230168, 230315, 230488, 230498, 230971, 231001, 260007, 260910, 260940, 260950, 261055, 300444
- Arabian Sea
- history, 231122
 - sediment history, 230513, 230514
- Arabian Sea N, sediment history, 230506
- Gondwana, dispersal, 260950
- Indian Ocean S, geologic history, 260910, 260940
- sand, 230484, 230485, 230486
- carbonate, 230485
- clay, 230486
- erosion, 230486
- igneous assemblages, 230485
- land-derived detritus, 230485
- minerals, 230485
- sedimentation barriers, 230486
- transport, 230485
- sedimentation, 230471, 230472, 230473, 230474, 230480, 230481, 230485, 230490, 230491
- bedding, graded, 230473, 230474, 230475, 230476, 230477, 230478, 230485
- benthic foraminifers, 230484
- cross-lamination, 230474
- deposition, 230490, 230491
- fan, submarine, 230491
- foraminiferal assemblages, 230483
- lamination, 230474, 230475, 230482
- lithology, 230472
- Miocene, 230473, 230480
- Pleistocene, 230480
- Pleistocene and Pliocene section, 230485
- Pliocene, 230473
- sand, 230472
- sand-silt interbeds, 230482, 230483
- sedimentary structure, 230472
- sedimentation rate, 230490
- turbidity current, 230490
- turbidites, 230506
- see also Arabian Sea
- Indus River, 230168, 230227, 230428, 230471, 230485, 230490, 230503, 230504, 230509, 230516, 230518, 231001
- Arabian Sea, sediment history, 230508, 230511, 230518
- Arabian Sea N, sediment history, 230506
- clay minerals, sources, 241058
- contribution, 230518
- delta, 230484, 230505
- discharge, 230508
- drainage, 230506
- formation, 230508
- mouth, 230484
- Indus Submarine Canyon. See Swatch, the
- Indus Suture Zone, Tethys, Mediterranean Sea, 42A0945
- inertinite
- Africa NW, continental margin, 790493
 - Brazil Basin, 720821
 - particulate, 720822
 - reflectance, 720823
 - carbon, organic, 870878
 - clay, black, geochemistry, 430638
 - coal
 - petrology, 670601
 - Triassic, 790493
 - Guatemala, continental slope, 670601
 - hydrocarbon, extractable, organic
 - petrology, 580758, 580759, 630825, 640841, 640849, 640851
 - maceral, 870880, 870881
 - maturation, maceral, 870883
 - Mazagan Escarpment, 790782, 790783
 - organic geochemistry, 571296, 720824
 - Guaymas Basin, 640946
 - huminate-vitrinite, 571298
 - organic matter, 670601
 - Aptian-Jurassic, 711016, 711018
 - petrology, 500568, 500610
 - Tertiary-Albian, 711021
 - organic matter maturity, 800984
 - petroleum generating potential
 - organic matter, 640872
 - sediments, 42B0732
 - petrology, sand, 960499
 - Rio Grande Rise, 720823
 - shale, Aptian-Barremian, 711016, 711021
- inertodetrinite
- Brazil Basin, 720821
 - maceral, 870881
 - organic chemistry, 870888
 - transport, organic matter, 870882
- Inguri River, 42B0653
- Inharrime Formation, 250695
- Rio Grande Rise N, regional setting, 250695
- Innes Bay, 040595
- inosilicates, physical properties, ash, 061221
- interglacial stage, Black Sea, sediment, 42B0489
- interglacial stage, 130068, 42B0161
- abyssal plain, benthic microfauna, 800744, 800745
- biostratigraphy, paleoenvironment, 840950
- Black Sea, evolution, 42B1148

- carbonate
 - isotopes, 960671
 - isotopic events, 850731
 - Quaternary, 901435
- Challenger Plateau, Quaternary, 901423
- Chatham Rise, Quaternary, 901431, 901434
- Goban Spur, chronology, 800697
- intraslope basins, Pigmy Basin, 960592
- isotopes, oxygen isotope, 800807
- lithology, 180102, 180412, 42B0161
- Pleistocene, 130068
- magnetostratigraphy, rock-magnetic stratigraphy, 960683
- Mississippi Fan, Pleistocene flora, 960591
- ooze, 901481
- Pacific continental margin, geomorphology, 350281
- paleoenvironment, 800818
- North Atlantic Deep Water, 800819
- Pendragon Escarpment, autochthonous faunas, 800739
- pollen, spores, oak pollen, 960646
- Quaternary, surficial sediments, 801181
- sand, quartzose, source, 941103
- sediment source, inactivity, 960485
- stable isotope analysis
 - oxygen isotope, 800797
 - Pleistocene surface temperature changes, 800801
 - surface water, 800797
- upper slope, autochthonous benthic foraminifers, 800733
- intergrowths
 - basalt, phyrlic, 650636
 - plagioclase, 650639
 - boninite, nonglassy,
 - bronzite-clinoenstatite-olivine, 600698
 - Mariana Islands, fore arc, 600652
 - mineralogy, primary textures, 600717
- intraclastic, lithology, 430117
- intrabiosparudite, lithology, 430117
- intraclast
 - Atlantic Ocean NW, sedimentation, 440978
 - calciturbidites, carbonate, 500740
 - limestone, 320537
 - Jurassic, 790452
 - lithology, 220328, 42B0297, 440343
 - Mediterranean Sea, lithostratigraphy, 131032
 - Neogene formations, paleogeography, 42A0914, 42A0915
 - pyrite, 41S0968
 - sandstone, 320540
 - siliceous sediment, silicified sediments, 500728
- intrusion
 - alteration
 - basalt, 300483
 - gabbro, 300487
 - products, 810740
 - ash, granite, 870685
 - Atlantic Ocean, margins, 801111
 - Atlantic Ocean N, Precambrian features, 801107
 - Atlantic Ocean NE, evolution, 411216, 411220, 411221, 411237, 411243
 - Baja California, tholeiite, 630687
 - basalt, 050534
 - age, 580741, 580742, 580743
 - Costa Rica Rift Zone, 830151, 830155, 830160
 - crystallization, 920467, 920468
 - effects, 640883
 - petrology, 580848
 - sill-pillow complex, 610674, 610675
 - unconsolidated sediments, 640883
 - basalt, altered
 - carbonate, 580913
 - geochemistry, 580800
 - major element, 580883
 - petrochemistry, 580800
 - trace elements, 580883
 - basalt, oceanic, 610649
 - Melanesian Basin, 610650
 - basement
 - geochemistry, 590743
 - gneiss, 360896
 - Biscay Plain, basalt, 121189
 - California, Gulf of
 - basalt, 640883, 650534, 650664
 - sediment distribution, 650471
 - sill, 641169
 - Cape Bojador, sediments, 410817
 - carbon, geochemistry, 590642
 - Caribbean Sea, basin, 610705
 - clay, Miocene, 580669
 - contact metamorphism, kerogen, 410821, 410824
 - continental shelf, onshore geology, 400972
 - diabase, petrology, 630706
 - diagenesis, thermally controlled, 630947
 - diapir, 38S0268
 - dike, 810905
 - East Pacific Rise, basalt, 540807
 - Falkland Plateau, basement, 360896
 - gas, interstitial
 - geochemistry, 640783
 - stable isotopes, 640816
 - geochemistry
 - basalt, 810740
 - Cenozoic sediments, 42B0551
 - East Pacific Rise, 810740
 - Guaymas Basin, 640699, 640712, 640713
 - igneous rocks, 370743, 370747
 - sill, doleritic, 640695
 - Goban Spur
 - continental margin, 801126, 801132, 801158
 - evolution, 801201, 801213
 - Greenland Sea, geologic setting, 38S0207
 - hydrocarbon, C₁-C₈
 - Baja California, 630781
 - generation, 640776
 - hydrocarbon, 640776
 - lava, 640778
 - hydrocarbon, extractable, organic
 - petrology, 640837, 640851
 - hydrocarbon generation potential, organic
 - facies, 640867, 640869
 - hydrothermal activity
 - Guaymas Basin, 641165
 - petrology, 641131
 - hydrothermal system, Guaymas Basin, 641144, 641147
 - igneous rocks, geochemistry, 370663, 370664, 370678
 - Indian Ocean S, gabbro, 280772
 - Indian Ocean W
 - regional aspects, 250752
 - tropical, 240641
 - volcanism, 250540
 - interstitial water, geochemistry
 - Guaymas Basin, 640682, 640687, 640689
 - hydrothermal alteration, 640692
 - lithology, microsyenite, 360216
 - Magdalena Bay, sulfide, 630705
 - mechanical rebound, crust, oceanic, 830510
 - Melanesian Basin, ash, 610634
 - Mendoza Rise, basalt, 920460
 - metalliferous sediment, Eocene-Oligocene, 850799
 - Mexico, magmatic episodes, 660726, 660727, 660728
 - mineral, secondary, Guaymas Basin, 650644
 - Moroccan Basin, margin, 500808
 - Morocco, salt, 790520
 - muskox, 340383
 - Nankai Trough, heat flow, 870739
 - Norwegian Sea
 - geologic setting, 38S0207
 - Greenland Sea, 38S0268
 - ocean basin, basalt, 050533
 - organic geochemistry, 410815, 640724
 - bitumen, 640820
 - Guaymas Basin, 640942, 640943, 640945
 - kerogen, 630850, 630851
 - sill, 640727, 640939
 - tetrapyrrole, 640820
 - Pacific Ocean EC, geologic history, 090909, 090924
 - Pacific Ocean N, basalt, 190904
 - Pacific Ocean NE, regional aspects, 050629
 - paleomagnetism, igneous rocks, 450388
 - palynological residue
 - effects, 640729
 - Guaymas Basin, 640751
 - heat flow, 640754
 - organic matter, maturation index, 640746, 640747
 - pebble characteristics, mafic, 280773
 - Philippine Sea, basalt, 580741
 - pyrite, hydrothermal, Recent, 641140
 - red beds, sedimentary structure, secondary, 38S0268
 - regional geology
 - acoustic basement, 801192
 - regional structure, 801191
 - regional tectonics, deformation, 801155
 - salt, Morocco, 790520
 - sea floor spreading, 020426
 - sediments, 410821
 - organic extract, 410824
 - Shikoku Basin, basalt, 580896
 - sill
 - Guaymas Basin, 641169
 - kerogen, 410839
 - mechanism, 641169
 - water expulsion, 641169, 641170, 641171, 641172, 641173, 641174, 641175
 - South Fiji Basin
 - geology, 300625
 - volcanic components, 210485
 - stable isotope, carbonate, 650383
 - subalkalic, 38S0207
 - sulfur isotope, anhydrite, hydrothermal, 641140
 - tholeiite, basalt, 050533
 - trace elements, geochemistry, 370574
 - Vigo Seamount, sediments, 410817
 - volcanism, explosive, Neogene, 870718
 - intrusion, acidic
 - ³⁹Ar/⁴⁰Ar age, boulders, 571282
 - geochemistry, Cenozoic sediments, 42B0554
 - intrusion, granitic, Ross Sea, 280905, 280906
 - intrusion, igneous, 810918
 - tetrapyrrole, geochemistry, 640791
 - intrusion, magmatic
 - Costa Rica Rift, 690446
 - hydrocarbon, C₁-C₈
 - Guaymas Basin, 640764
 - high-temperature, 630783
 - intrusion, tholeiitic, basalt, altered, geochemistry, 580803
 - intrusion, volcanic
 - Atlantic Ocean NE, evolution, 411243
 - carbonate
 - carbon isotope, 170505
 - oxygen isotope, 170505
 - organic matter, migration, 630943
 - intrusives, 190615, 411107

- Africa E, coast, 250680
 Baja California, tholeiite, 630687
 basalt, 411107
 gas, 450651
 intrusion, 580741
 petrology, 580845, 580856
 pyroxene, 590693
 basalt, alkali olivine, 190617
 bitumen, 450651
 carbon, deep-sea sediments, 580750
 chemical composition, 411108
 Comoro Islands, volcanic pile, 411111
 geochronology, 411116, 411117
 Indian Ocean W, regional aspects, 250756
 lithology, basalt, 290231
 low abyssal hills, sill, 020414
 Mozambique Plateau, 411111
 Necker Ridge, 200678
 nitrogen, deep-sea sediments, 580750
 organic geochemistry, unconsolidated sediments, 640717
 Pacific Ocean NE, regional aspects, 050629
 Pacific Ocean SW, island arcs, 300704
 Peter I Island, geology, 350347
 Philippines, gensis, 310875
 Rockall Rise SW, structure, 481065
 sea floor spreading, history, 250677
 Southeast Pacific Basin, evolution, geologic, 350737
 stratigraphy, basement, 481065
 tholeiite, major element, 590707
 volcanism, Madagascar, 250532
 intrusives, alkaline, basalt, petrology, 580868
 Investigator Fracture Zone
 Indian Ocean S, geologic history, 260932
 lithology, 220046
 regional summary
 Ganges Fan, 220825
 Wharton Basin, 220818
 Investigator Ridge
 regional summary, 220816
 reconstruction, 220827
 iodine
 interstitial water, 350425
 major element, geochemistry, 42B0531, 42B0535, 42B0536
 minor element, geochemistry, 42B0531, 42B0535, 42B0536
 Red Sea, interstitial water, 230956
 iodine
 Black Sea, interstitial water, 42B0631
 interstitial water, 42B0631, 42B0632, 42B0635, 640933
 diffusion time, 42B0635
 distribution, 42B0631
 dolomite, 42B0634
 element distribution, 42B0635
 enrichment, 42B0631, 42B0632, 42B0635
 evaporite basin, 42B0634
 freshwater sequences, 42B0635
 genesis, natural waters, 42B0631
 halite, 42B0634
 high temperature, 42B0635
 ion diffusion rate, 42B0632
 ionic composition, 42B0632
 liberation, decomposition products, 42B0635
 magnesium, 42B0631
 mineralization, 42B0632, 42B0635
 NaCl, 42B0631, 42B0632, 42B0635
 NaCl leached deposits, waters, 42B0635
 oil field, 42B0635
 oil generating potential, 42B0635
 organic enrichment, 42B0635
 oxidation, 42B0631
 permeability, 42B0632
 petroleum generating potential, 42B0631
 positive sediment redox potentials, 42B0632
 salinity, 42B0631, 42B0632
 salt, 42B0634, 42B0635
 seawater evaporation, 42B0632, 42B0635
 sedimentation rate, 42B0635
 sediments, organic-rich, 42B0631
 sulfate, 42B0632
 sulfur isotope, 42B0632
 temperature, 42B0632
 transference, 42B0631, 42B0635
 water content, 42B0632
 iodine/bromine ratio
 major element, geochemistry, 42B0535
 minor element, geochemistry, 42B0535
 Ionian Abyssal Plain, 42A0875
 algae, blue-green, 42A0661
 limestone, 42A0621
 dolomitization, 42A0621
 Neogene formations, paleogeography, 42A0917
 stromatolite, 42A0661
 Messinian, 42A0661
 Ionian Basin, 130005, 130029, 130175, 130198, 130232, 130244, 130326, 130383, 130407, 130429, 130596, 130609, 130667, 130721, 130944, 130971, 131002, 131021, 131026, 131029, 131035, 131046, 131212, 131223, 131285, 131349, 131353, 131387, 131412, 170561, 400384, 401045, 42A0003, 42A0382, 42A1039
 carbonate, isotopes, 42A0650
 circulation, oceanic, 131402
 clay, 130667
 contourites, 130668
 diagenesis, 130721, 130723, 130724
 evaporites, 130667
 grading, 130668
 K-feldspar, 130667
 limestone
 compressional wave velocities, 130596
 Cretaceous, 131112
 lithified rocks, 130726
 lithified sediments, 130726
 lithology, 42A0182
 lithostratigraphy, 131026, 131029
 heat flow, 42A1140
 marl ooze, 130668
 Mediterranean Ridge, reefs, rudist, 131402
 Messinian, sulfate, 42A0657
 Messinian environments
 Lago Mare, 42A1025
 Mediterranean Sea, 42A1031
 salinity crisis, 42A1026
 mineralogy, 130667
 ooze, dolomitic, 130667, 130668
 ooze, nannofossil, 130667, 130668
 paleomagnetic measurements, 130599
 paleomagnetic stratigraphy, Tyrrhenian Basin, 131385
 paleomagnetism, 130599
 plagioclase, 130667
 Pliocene, 130667
 quartz, 130667
 Quaternary, 130667, 131263, 131266, 131267, 131268, 131269, 131278, 131279, 131280, 131283, 131284, 131285, 131286, 131287, 131288, 131290, 131291, 131293, 131294, 131295
 sand, 130668
 sand, terrigenous, 130668
 Serravallian marl, 130668
 source of sediment, 130668
 stable isotope, 42A0657
 sulfate
 Messinian, 42A0657
 stable isotope, 42A0657, 42A0658, 42A0660
 Tethys, 42A0945
 42A0947, 42A0948
 transport, 130668
 turbidites, 130668
 Tyrrhenian, 131288, 131290, 131291, 131293, 131294
 Ionian Islands, 130224, 42A0004, 42A0934
 correlation, land sections, 42A1140
 Tethys, Mediterranean Sea, 42A0948
 Ionian Sea, 130159, 130219, 130605, 130714, 131027, 131033, 131257, 42A0393, 42A0483
 evaporites, Messinian, 42A0505, 42A0583, 42A0584, 42A0585, 42A0586, 42A0587, 42A0588, 42A0589, 42A0591, 42A0592, 42A0593, 42A0594, 42A0595
 heat flow, 42A0857
 Messinian environments, 130690
 Lago Mare, 42A1031
 Iowa, 960650
 Iran, 130231, 130973, 131115, 260950, 42A0944, 42A0985, 430576, 760870, 760875
 coast, 230503
 continental plate, 42A0988
 Gondwana, dispersal, 260950
 Hormuz, Proterozoic, 790523
 Makran, coast, 230504
 Paratethys, paleogeography, 42A0985
 rivers, 140735
 salt rock, single dome intrusion, 790524
 Tethys, Mediterranean Sea, 42A0945
 Iraq, 131115, 42A0985
 Paratethys, paleogeography, 42A0985
 Irati Formation, Permian, 42A0653
 Ireland, 800012, 800700, 800703, 800764, 801110, 801173, 801187, 801189, 950805
 Atlantic Ocean N, paleogeography, 121174
 basalt, fracture zone, 540719
 continental margin, 800489, 800949, 800969, 801169, 801212, 950262, 950763
 continental shelf, 370335
 continental slope, 370335, 801208, 950453
 Goban Spur, evolution, 801200, 801202, 801208, 801209, 801210, 801213
 Hatton-Rockall Basin, 121188
 Hercynian-Caledonian massifs, 801202
 New Jersey Transect, 950805
 organic geochemistry, continental margin, 800949
 paleoclimatology, estimated temperatures, 800703
 passive margin, 890665
 depositional history, 950763
 prerift sequences, Devonian carboniferous sequence, 801173
 Ireland N, 120055, 121074, 121130, 121174, 481018, 810647, 810787, 810793
 Antrim, 380741
 continental shelf, 121177
 greensand, Hibernian, 810647
 Hebrides, 380741
 Ireland S, 800678, 801109, 801155, 801200
 Atlantic Ocean N, Paleozoic, 801109
 calcareous nannofossils, distribution, upper slope, 800768
 Ireland SW, 800415, 800473, 800643, 800653
 Atlantic Ocean N, paleogeography, 121177
 iridium, 720931
 Angola Basin, geologic evolution, 750526, 750527
 Atlantic Ocean S, Cretaceous, 720982
 boundary, 730657
 Cretaceous/Tertiary boundary, 720931, 720949, 720951, 860533
 anomaly, 860513, 860524, 860533

- Cretaceous/Tertiary boundary (Cont.)
 Hess Rise, 620847
 impact ejecta fallout, 730758
 Pacific Ocean NW, 860533
 deposition rate, 860537
 geochemistry, clay, 950569, 950570
 Goban Spur, evolution, 801208
 Hess Rise
 Cretaceous/Tertiary boundary, 620847
 distribution, 620847, 620849
 iron, ratio, 860534
 mafic rocks
 metals, 370577, 370578
 Mid-Atlantic Ridge, 370577
 Pacific Ocean NW, 860533
 Cretaceous/Tertiary boundary, 860533
 Rio Grande Rise, 720931
 Cretaceous/Tertiary boundary, 721014
 stratigraphy, 720931
 thermohaline flow, Quaternary, 720990
 ultramafic rocks, 370577, 370578
 Mid-Atlantic Ridge, 370577
 Iriki, Japan, volcanic arc, 200336
 Iriomote Island, sandstone, 580661, 580665
 Irish Sea, 120673, 800614, 800678
 Irminger Sea, 120003, 120918, 481100
 Atlantic Ocean, margin, 481100
 iron, 010584, 020347, 030584, 460316, 540324, 540325, 670559, 670561, 670563, 670567, 801069, 860605, 860657, 920375, 920598
 accumulation rate, metal, 340577, 340580
 Africa SW, continental margin, 400476
 Albian-Cretaceous sediments, 801069
 alteration, 300487
 bulk chemical changes, 650649
 products, 450616, 810736, 810739
 remnant arc debris, 590737
 alteration, low-temperature
 basalt, 490710
 geochemistry, 460316
 altered rocks, 590735
 leaching, 590736
 amphiboles, chemical studies, 150963
 analysis, 920354
 Angola Basin
 clay mineralogy, 750846, 750847
 geochemistry, 750846, 750847, 750850
 geologic evolution, 750513
 Antarctica
 geochemistry, 350403
 glaciation, 291040
 Miocene-Pleistocene, 280797, 280798
 Arabian Sea, history, 231123
 Atlantic continental margin
 interstitial water chemistry, 040427, 050516, 070883, 070884, 080853, 090841, 230953
 mineralogy, 080909
 Atlantic Ocean
 geochemistry, 47B0434
 mineralogy, 47B0434
 Atlantic Ocean N, Albian-Cenomanian
 enrichment, 801070
 Atlantic Ocean NW, regional aspects, 110967
 Atlantic Ocean S
 history, 740715, 740718, 740725, 740727
 mineralogy, 030510
 Sierra Leone Rise, 391121
 Atlantic Ocean SE
 Cretaceous, 740778, 740781
 paleoenvironmental evolution, 740664, 740665, 740667, 740672, 740676
 Atlantic Ocean SW, paleoenvironment, 710320
 authigenic minerals, 600463
 Miocene, 710364
 Azores, mantle, 730592
 Baja California Seamount Province, basalt, 630718
 barite, authigenic
 barite, 410915
 origin, 410922
 basalt, 240785
 Barbados Ridge, 780402
 basement, 240775
 Blake Basin, 760714
 California, Gulf of, 650579, 650585
 celadonite, 511269
 chemical composition, 320565, 320568
 chemical variation, 340303, 340305, 340306
 chemistry, 450453, 540676, 540681, 540682, 920473
 chromium, spinel, 450582
 Cretaceous, 511087
 effect, 540861
 Fe-Ti oxide, 550643, 550649
 fracture zone, 540719
 geochemistry, 260567, 260569, 260570, 350333, 490601, 490609, 490611, 490622, 590759, 590766, 590782, 590783, 590786, 590787, 590788, 590792
 glass, 540721, 600604
 major element, 510997, 511007, 511008, 511009
 Middle America Trench, 670581
 mineral assemblage, 511219, 511224
 mineral chemistry, 550608, 550621, 550632
 mineral, opaque, 450561, 511432, 511435
 mineral, secondary, 340405, 340406
 mineralogy, 540697
 minor element, 490666
 origin, 660708
 petrochemistry, 630727, 670580
 petrography, 540697
 petrology, 160627, 160636, 160639, 220463, 320565, 320568, 350333, 450465, 450466, 580854, 590670, 590673, 590678
 pyroclastics, 260563
 pyroxene, 590700
 rare earth, 380742
 smectite, 511267, 511269
 trace elements, 510997
 basalt, altered
 chemistry, 511319, 511324, 511325, 511326
 classification, 540684, 540686
 geochemistry, 580793, 580798, 580800, 580802, 580828
 major element, 580874
 petrochemistry, 580793, 580798, 580800, 580802
 trace elements, 580874
 basalt, oceanic, chemistry, 610640
 basalt, phytic
 clinopyroxene, 650636
 olivine, 650636
 basalt, sparsely phytic
 Mid-Atlantic Ridge, 540631
 tholeiite, aphyric olivine-poor, 540619
 basement
 chemistry, 600622
 geochemistry, 920480
 petrology, 370695, 370696, 370700
 Bauer Basin, basalt, 340227, 340239, 340242
 Bermuda Rise
 basalt, 511209, 511211
 crystallization, 511041, 511046
 geochemistry, 511515, 511517, 511519, 511520, 511521
 mineral, secondary, 511256, 511258, 511260, 511261
 plagioclase, 511056
 Biscay, Bay of N, continental margin, 480731
 Black Sea, sediments, 42B0382
 black stains, 010585
 Blake Basin, 760687, 760772
 Blake Ridge, 760940
 boninite
 crystallization, 600701
 mineralogy, 600691
 bulk-rock compositions, 540741
 burrow mottling, silt, 291053
 burrows, element distribution, 410933, 410934
 California, Gulf of
 basalt, 650643
 gulf mouth, 650401, 650415
 carbon, 100641, 111059
 carbon, organic, geochemistry, 750828
 carbonate, 100641, 111059, 440562
 authigenesis, 870677
 diagenesis, 320525, 320527
 manganese, 440557
 petrology, 540327
 trace elements, 480727, 480731
 carbonate, authigenic, chemical
 composition, 870672
 carbonate nodule, authigenic, 870663
 carbonate, secondary, vein, 580905, 580906
 Caribbean Sea, sediments, 150930, 150939
 chalk, calcite, paragenesis, 260595
 chemical analyses, 600604
 chemical behavior differences, 801070
 chemical composition, 070967
 major element, 600461
 metal, 571259, 571262, 571263, 571264, 571265, 571266
 chemistry, 650418
 chert
 geochemistry, 620728, 620730
 mineralogy, 320443
 Pacific Ocean E, 160611
 petrography, 320443
 petrology, 620728, 620730
 chloride, Pacific Ocean SE, 920550
 clay, 010540, 860605, 960580
 authigenic minerals, 291053
 clay, authigenic, Mariana Trough, 600471
 clay, black, geochemistry, 430639, 430640
 clay, glauconitic, 810649
 clay, green, geochemistry, 700216, 700218
 clay mineralogy, montmorillonite-illite, glauconitic, 650369
 clay minerals
 celadonite, 511269
 smectite, 511267, 511269
 Tertiary, 291077
 clay, red, Miocene, 730526
 clay, terrigenous
 authigenic minerals, 291148
 mineral, diagenetic, 291148
 claystone, basalt, 550709
 clinopyroxene, crystallization, 540663
 Cocos Plate, basalt, 660704, 660705
 coercive force, 630746
 Colon Ridge, interstitial water, 680467
 copper, native, geochemistry, 38S0761
 Costa Rica Rift
 alteration minerals, 690555
 basalt, 690477
 carbonate, 690465
 chalk, 690399
 Costa Rica Rift Zone, stockwork-like zone, 830265
 Cretaceous/Tertiary boundary, 860537
 paleoenvironmental history, 740687, 740688, 740689
 crust, continental, 801069
 crust, oceanic, 801070
 Costa Rica Rift Zone, 830187, 830190,

- crust (Cont.)
 830195, 930194
 hygromagmatophile (HYG) elements, 650623
 crystallization, fractional, melting,
 partial, 370540
 Cyprus, evaporites, 42B1186
 deposition
 bottom water, 250503
 models, 750840
 diabase, trace elements, 240785
 diagenesis, interstitial fluid, 270475
 differentiation, hydrothermal precipitate,
 920376
 dolerite, 540663, 630713
 oxidation, 630715
 East Mariana Basin, geochemistry, 890418,
 890422
 East Pacific Rise
 basalt, 540405, 540406, 540861
 carbonate-free material, 920373
 enrichment, 540853
 $\text{Fe}_2\text{O}_3/\text{MnO}_2$ ratio, 920376
 hydrothermal precipitate, 920383, 920384
 manganese, 920375
 Pb isotope, 920391
 sediments, 650381, 650382, 650426, 850793
 silicate, hydrothermal, 920375
 Sr isotope, 920391
 Emperor Seamounts
 mineralogy, 550467, 550468, 550469,
 550470, 550472, 550473
 petrology, 550577
 enrichment, 540899
 factor analysis, sediment, 920368
 Falkland Plateau, basement, 360896
 ferromanganese sediment, sediment
 chemistry, 190631, 190634
 fossils, minerals, rare and unusual, 340621
 framboid, 010585
 Galapagos Fracture Zone, basalt, 540861
 Galapagos Hydrothermal Mounds, sediments,
 850791
 Galapagos Spreading center, 540378
 basal sediments, origin, 540381, 540382
 normative composition, 540380
 sediment classification, 540322
 garnet, metasomatic, paragenesis, 260595
 geochemical partitioning, 650427, 650428,
 650429
 detrital source, 650428
 enrichment, 650428
 pyrite, 650427
 geochemical variation, 810799
 mobility, 810799
 geochemistry, 160636, 160639, 260563,
 370631, 370696, 370700, 390477, 390490,
 540757, 540776, 640696, 810708
 andesite, 220463
 basalt, 380719, 380720, 380727
 Bauer Basin, 340571
 biogenic material, 060837
 Campanian-Eocene sediments, 720831
 carbonate, 390478
 Cenozoic sediments, 42B0543, 42B0544,
 42B0545, 42B0551, 42B0554, 42B0559,
 42B0587, 42B0588, 42B0589, 42B0590,
 42B0591, 42B0592, 42B0594, 42B0599
 chemical analyses, 340560
 chemistry, 340220
 claystone, red variegated, 440505
 clinopyroxene, 650534
 comparison, other rock types, 220463
 concretion, 810713
 Coniacian-Santonian sediments, 720829
 Cretaceous and Cenozoic sediments,
 480708, 480716
 glass, 840610
 Guaymas Basin, 640708, 640712
 Hatton Ridge, 810739
 igneous rocks, 370743, 370748
 interelement correlations, 810713
 limestone, red, 440504
 major oxides, 540347
 mineral chemistry, 160627
 mineral, secondary, 450616
 mineralogy, 340218
 origins, basal sediments, 340564
 oxidation, 540757
 petrology chemistry, 370695
 precipitation, 810715
 principal component, 810710
 Rockall Plateau, 810736, 810739
 trace elements, 060840
 geochemistry, partition, 700297, 700299,
 700301, 700302
 diagenesis, 700302
 nontronite, 700298
 glass, 580622, 580623
 basalt, 650479, 650482
 chemical variation, 510982
 glass, volcanic, 600495
 Mariana Trough, 600494
 Mariana Trough W, 600489
 Tonga, 600494
 glauconite, 291093, 291094
 Goban Spur, evolution, 801208
 Guadalupe Island, alteration, 630715
 Guatemala
 slope sediment, 840628
 trench, 670520, 670525
 heavy metals, Cenozoic sediments, 450350,
 450352
 hematite, 010584
 Hess Rise
 iridium, 620849
 post-Jurassic sedimentation, 620820,
 620821, 620825, 620826, 620827, 620831
 pyrite-marcasite, 620855, 620859, 620860,
 620861
 rocks, 620863, 620864
 Hess Rise N
 post-Jurassic, 620806, 620807, 620810,
 620812, 620816, 620817
 sedimentary sequences, 620762, 620763
 hyaloclastite, 650479
 ash, 650479
 glass, 650482
 hydrocarbon, $\text{C}_1\text{-C}_5$, Japan Trench, 571336,
 571339
 hydrothermal alteration, sediments, 650419,
 650420
 hydrothermal deposits
 Galapagos Spreading center, 700242,
 700247, 700248, 700250, 700252
 origin, 540415, 540417, 540418, 540419
 hydrothermal material increase, 920375
 hydrothermal mounds, 700278, 700280, 700281
 Galapagos Spreading center, 700303
 hydrothermal sediment, composition, 920606
 igneous rocks
 chemical composition, 590721
 geochemistry, 370655
 Indian Ocean SE, sediments, 260542, 260547
 Indian Ocean SW, iron-rich sediment,
 250396, 250401, 250402
 Indian Ocean W
 basal metalliferous sediments, 241070
 geochemistry, 250405, 250415
 interstitial water, 250369
 regional aspects, 250758
 inorganic geochemistry, 430677, 440575,
 750951
 Angola Basin, 750924, 750930, 750933
 calcareous sediments, 430679
 claystone, red, 430687
 Hess Rise, 620689, 620692, 620693
 metalliferous trends, 430693
 Mid-Pacific Mountains W, 620688
 pyrite, 430679
 sediments, 430675, 430677
 siderite, 430679
 silica, 430677
 Walvis Ridge, 750925
 interstitial water, 060823, 111005, 350425
 basement, 100621
 interstitial water chemistry, 350419
 interstitial water, geochemistry, Guaymas
 Basin, 640689
 ions, basalt, 690719, 690724
 iridium, ratio, 860534
 iron oxide, 801070
 iron-rich sediment
 Meiji Guyot, 330836
 spreading, 330835
 isotopic study, interstitial water, 590636
 Japan Trench
 Miocene-Quaternary sediments, 870647
 sediments, 271220, 271221, 271222,
 271224, 271226, 271228, 271229, 271230,
 271234, 271243, 271245, 271246, 571213,
 571251, 571253, 571254, 571255, 571256
 kerogen, sediment cores, 42B0739
 lead isotope, 340343
 lithology, 120321, 220017, 250147, 340116,
 430331, 430333, 430334, 440032, 440033
 aggregate, 220016
 limestone, 120053
 nodule, 260028
 Lofoten Islands, 38S0070
 Magdalena Bay, dolerite, 630727
 magma, 901164
 magnetic oxides, petrology, 511411, 511420,
 511423
 magnetic-mineralogic studies,
 magnetic-mineralogical, zonation, 350322
 major element, 810784, 850783, 850789,
 920369
 argillaceous sediments, 580721, 580724
 chemistry, 330557
 distribution, 500678
 geochemistry, 42B0532, 42B0534, 630693
 hydrothermal activity, 920369
 manganese, 850785
 phosphorus, 850785
 manganese, 291083, 291084, 920375
 distribution, 801069
 increase, 920375
 mantle, upper, trace elements, 460247
 marcasite, geochemistry, 38S0767, 38S0769
 Mariana Islands, fore arc, 600620, 600659,
 600660
 Mariana Trench, 600620
 Mariana Trough, glass, 600487
 Mazagan Escarpment, 790520
 Mazagan Plateau, 790498
 Melish Seamount, post-Jurassic
 sedimentation, 620834, 620835, 620837,
 620839, 620841, 620843
 melting, tholeiite, olivine, 450515
 melting, partial, 460247
 metalliferous sediment, 340621
 Eocene-Oligocene, 850798
 microtektite, Eocene, 151032
 Mid-Atlantic Ridge
 basalt, 460316
 isotopes, 450545, 450548
 Mid-Pacific Mountains W, Aptian sediments,
 620905, 620909

- Middle America Trench, magma, calc-alkaline, 660699
 mineral, chemical composition, sediments, 38S0043
 sediment chemistry, 38S0041
 mineral chemistry
 basalt, porphyritic, 450465, 450466
 olivine, 630690
 plagioclase, 630691, 930691
 mineral, primary
 olivine, 810786
 pyroxene, 810786
 mineral, secondary
 basalt, 650646
 East Pacific Rise, 650648
 mineralization, 220471
 mineralogic facies comparison, clay, green, 810708
 mineralogy, 440511, 540346, 650418, 850794
 clinopyroxene, 540762
 Cretaceous and Cenozoic sediments, 480708, 480716
 dissolution, 850795
 gabbro, olivine, 600586
 geochemistry, 600719
 magmatic, 670561
 manganese, 850796
 olivine, 660731
 spinel, 800941
 minerals, chemical composition, 600461
 minor element
 East Pacific Rise, 650608, 650609, 650611
 geochemistry, 360930, 360937, 42B0532, 42B0534
 Mississippi Fan, 960703
 Mn, hydrothermal, accumulation, 920586
 Mn/Fe ratio, distance change, 920376
 Mossbauer spectroscopy study, 950645
 Mounds, nontronite, 540384, 540385
 Mounds Hydrothermal Field
 chemistry, 540408
 origin, 540411
 Natal Basin
 volcanic sediment, 250528
 volcanism, 250539
 Nazca Plate, basalt, 340227, 340239, 340242
 nearshore environment, 280933
 Neogene cores, organic geochemistry, 42A0466
 New Jersey Transect, oceanic sediments, 950641, 950642
 nitrate contamination, borehole, water chemistry, 920550
 nitrogen, inorganic, clay minerals, 800996
 nitrogen, organic, clay minerals, 800996
 Norwegian Basin, 38S0070
 Oligocene-present sediments, 801069
 ooids, nuclei, 890402, 890404
 oolite, Ita Mai Tai Guyot, 200364
 ooze, calcareous, pore water, 270475
 Pacific Ocean, guyots, 620773, 620774, 620776
 Pacific Ocean C, geochemistry, 850781
 Pacific Ocean E
 ferrobasalt, 540846
 modified sediments, 540329, 540331, 540332, 540335
 oxide accumulations, 540337
 sediments, 540319, 540321
 Pacific Ocean N, mineralization, contact, 190906
 Pacific Ocean NE, metal-rich basal sediments, 630667, 630669, 630671, 630674
 Pacific Ocean NW, 860657
 clay, 860605
 geochemical history, 620786, 620787, 620789, 620792, 620797, 620800, 620801, 620802
 Pacific Ocean SE, 920555
 basalt, 340218, 340220
 contamination, 920551
 dissolution, 920551, 920556
 hydrothermal component, 920385
 paleoceanography, 920597
 rare earth elements, 920387, 920388
 paragenetic assemblages, Assemblage IIB (-), 710428
 Patton Escarpment, alteration, 630713
 peridotite, spinel, 370883
 Peter I Island, geology, 350351, 350354
 petrography, enrichment, 540598
 petrology, 540794
 geochemical variation, 740757
 phenocryst, 540655
 Plantagenet Formation, 760763
 polymetallic crusts, diagenesis, 800827
 porcellanite
 mineralogy, 320443
 petrography, 320443
 pore water, oxidation, 700350, 700352
 pore water chemistry, 960692
 preliminary organic analyses, 111021, 42B0723, 42B0726
 diagenetic reduction, 42B0726
 pyrite, 010584, 010585
 geochemistry, 38S0767, 38S0769
 sulfur, 010585
 pyrite, framboidal
 framboid, 750876
 pyrite, 750878
 pyrite, microcrystalline, ooze, nannofossil, 260603, 260605, 260606
 pyroclastics, geochemistry, 260563
 pyroxene, chemical studies, 150963
 rare earth elements, 920404
 correlation, 920404
 trace elements, 590664, 590666, 590667
 tuff, 590659, 590660
 Red Sea, geochemistry, 230977, 230981, 230989
 Red Sea S, heavy metals, 231123
 regional summary, Wharton Basin, 220818
 regional, tectonic setting, enrichment, 600613
 Reykjanes Ridge, 480731
 Rockall Plateau, concretion, fossil
 polymetallic, 810702, 810703, 810704, 810706
 Rockall Rise, B100273, 121194
 Ross Sea, 280789
 diamict, 280789
 diamicts, 280789
 sea floor spreading
 effect, 920376
 Fe, 801070
 sediment chemistry, 350427, 350432, 350435, 350437, 700270, 700271, 700272
 enrichment, 350431, 350432
 lower part, 350430, 350433
 major element, 350447
 trace elements, 350451
 sediment geochemistry, 550461
 enrichment, 550462
 laterite, 550461
 nondepositional environment, 550460
 ooze, siliceous calcareous, 550459
 shallow-water bethogenic detrital sediments, 550460
 sediment-interstitial water interaction
 ankerite, secondary, 571270
 calcite, secondary, 571270
 sedimentation, geochemical aspects, 710430, 710432, 710433
 sedimentology, Nazca Plate, 340779
 sediments, 860657, 860658
 Blake Basin, 760443, 760446
 Blake Ridge, 760418, 760422, 760423, 760425
 shale, black
 chemical composition, 410875
 Cretaceous, 410866
 Shikoku Basin
 basalt, 580898
 glass, 580622, 580623
 tephra, 580618, 580622
 silicate, 920376
 ferruginous coating, 291065
 silica, 291066
 sill, mineral composition, 180940
 silt, terrigenous
 authigenic minerals, 291148
 mineral, diagenetic, 291148
 Siqueiros Fracture Zone, basalt, 540706
 Sohm Plain, oxide, metal, 020413
 Southeast Pacific Basin, evolution, geologic, 350729, 350730
 Sr isotope
 chemistry, 590721
 major element, 590721
 stable isotope, 350504
 sulfide, 010584, 370875
 chemistry, 630679
 globules, 370875
 pyrite, 370881
 sulfur, basalt, 370561
 sulfur isotope, major element, 500678
 tephra, 580622
 chemistry, 901164
 Miocene, 580618
 tholeiite
 magmatism, 540711
 mineral composition, 180940
 titanium
 Meiji Guyot, 330836
 spreading, 330835
 titanomagnetite
 decrease, 450579
 oxidation, 540875
 trace elements, 440562, 450545
 Ce, 850786
 chromium, 850786
 clinopyroxene, 450548
 Co, 850786
 copper, 850786
 Cretaceous, 511087
 distribution, 42A0504, 42A0505
 East Pacific Rise, 650609, 650611
 geochemistry, 630693
 insoluble residue relationship, 720402
 lanthanum, 850786
 manganese, 440557, 850786
 nickel, 850786
 olivine, 450548
 Paleocene-Coniacian sediment, 720402
 partitioning, 850796
 plagioclase, 450545
 vanadium, 850786
 yttrium, 850786
 zinc, 850786
 transport, water, differentiation, 920376
 uranium, distribution, 370548
 Vigo Seamount, carbonate, 47B0497, 47B0501
 volcanic sediment
 chemistry, 330796
 primary volcanic material, 901180, 901181
 volcanics, mineral composition, 180940
 volcanism, mineral evolution, 600450
 Walvis Ridge
 Angola Basin, 750977

- Walvis Ridge (Cont.)
basalt, 740757
- West Mariana Basin, metallogenesis, 590651
zoning, 370883, 450582
see also Fe
- iron, authigenic
Japan Trench, sediments, 271221
mineral, heavy, Indian Ocean S, 270523
preliminary organic analyses, 42B0723
- iron beidellite, Rockall Plateau, concretion,
fossil polymetallic, 810705
- iron carbonate
carbon, 090797
chemistry, 370367
- iron chlorite, geochemistry, igneous rocks,
370738
- iron, dissolved
Pacific Ocean SE, 920550
contamination, 920551
- iron, ferric
bulk chemical composition, 660711
chemistry, 370367, 650416
dispersed organic matter, 47B0695
heavy metals, Cenozoic sediments, 450350
mineralogy, 650416
- iron, ferrous
carbon, organic, geochemistry, 750827
chemistry, 370367, 550685
clay, green, Galapagos Spreading center,
700211
Costa Rica Rift Zone, basalt, 830236
Hess Rise, pyrite-marcasite, 620861
interstitial water, formation, 870869
Japan Trench, sediments, 271234
Jingu Seamount, volcanics, 550685
sediment, 700337
- iron, hydrothermal
Galapagos Spreading center, basal
sediments, origin, 540381
Pacific Ocean NE, metal-rich basal
sediments, 630675
- iron hydroxide, 370782
alteration
mineralogy, 370782, 460310
products, 511274
alteration, low-pressure, basalt, 370782
alteration, low-temperature, mineral,
secondary, 460310
- basalt
alteration, low-pressure, 370782
chemistry, 920472
electrical resistivity, 260507
mineral, opaque, 450561
mineral, secondary, 370782
petrology, 590670
- basalt, oceanic, Melanesian Basin, 610654,
610658, 610659
- Bermuda Rise, basalt, 511149, 511205, 511206
- Cenozoic sediments
lithology, mineralogy, geochemistry,
450326
mineral composition, 42B0420
claystone, basalt, 550709
- Costa Rica Rift Zone, basalt, 830219,
830221, 830230, 830249
- crust, oceanic, Costa Rica Rift Zone, 830184
- East Pacific Rise
basalt, 540405
boron, 920379
crest, 540812
sulfur, 920379
- Galapagos Fracture Zone, East Pacific Rise,
540401, 540403
geochemistry, 720430
heavy metals, Cenozoic sediments, 450349,
450350, 450354
- hydrothermal deposits, origin, 540415,
540416, 540417, 540418, 540419
- hydrothermal precipitate, aluminosilicate,
920376
- magnetic oxides, petrology, 511426
- major element, characteristics, 920438
- mineral, opaque, 460306
- mineral, secondary, 460310
alteration, low-pressure, 370782
East Pacific Rise, 650647
laumontite, 670551
mineralization, secondary, mineralogy,
540810
- mounds Hydrothermal Field, chemistry,
540410, 540411
- Pacific Ocean E, modified sediments, 540335
- petrography
breccia, 600583
gabbro, 600582
- petrology, formation mechanism, 540794
- rare earth elements
trace elements, 590662, 590663, 590666
tuff, 590659
- silica minerals, 370782
- sulfate mineral, 370782
- iron magnesium, Atlantic Ocean W, sediment
chemistry, 511519
- iron magnesium ratio, mineralogy, biotite,
660723
- iron manganese
Emperor Seamounts, mineralogy, 550466
geochemistry, 060833
Pacific Ocean W, guyot, 200660
- iron monosulfide
Hess Rise, pyrite-marcasite, 620859, 620861
pyrite, microcrystalline, ooze,
nannofossil, 260606
sediment properties, 901274
- iron nontronite, hydrothermal deposits,
origin, 540418
- iron, opaques
Caroline Abyssal Plain, chalk, 200067
feldspathic sediment, mineral composition,
200360
Indian Ocean NW, grain size, 250422
- iron oxide
Angola Basin, geochemistry., 751100
Atlantic continental margin, mineralogy,
050443, 080907, 080909, 090743
Atlantic Ocean N, mineralogy, 020330
basalt, 240781
chemistry, 920472, 920473
Fe-Ti oxide, 550639
mineralogy, 270552
petrology, 160620, 580848
- basalt, altered, chemistry, 511329
- basalt, oceanic, Melanesian Basin, 610647,
610648, 610649, 610650
- basement, mineralogy, 270552
- Bermuda Rise, basalt, 511201, 511202, 511211
- Black Sea, sediments, 42B0382
- carbonate
diagenesis, 320525
fossil preservation, 320899
- Cenozoic sediments, lithology, mineralogy,
geochemistry, 450332
- chemical and mineral composition,
mineralogy, 070965
- chert
geochemistry, 620720
petrology, 620720
- clay minerals, mineralogy, 140728
- claystone, basalt, 550707, 550709
- Costa Rica Rift Zone, basalt, 830221, 830230
- Cretaceous/Tertiary boundary,
paleoenvironmental history, 740687
- diabase, trace elements, 240781
- discussion, results, oxidizing conditions,
670552
- East Pacific Rise, crest, 540812
- Emperor Seamounts, mineralogy, 550472
- geochemistry, 160620
- Guatemala, trench, 670516, 670520
- Hess Rise, pyrite-marcasite, 620857
- Indian Ocean, basalt, 220378
- Indian Ocean W
basalt, 250549
mineralogy, 160530
- interstitial water, 090845
interstitial water chemistry, 240805,
240806
- interstitial water chemistry, 960708
- lithology, 540756, 540757
basalt, 510941
- magnetostratigraphy, Lord Howe Rise C,
901281
- Mariana Trough, 600614
- Mediterranean Sea, mineralogy, 130666
- Meiji Guyot, K/Ar age, 550678, 550679
- mineral, heavy, 41S0949
- mineral, opaque, petrology, 340358
- mineral, secondary, laumontite, 670551
- mineralization, secondary, mineralogy,
540810
- mineralogy, 220425
basalt, 220423, 220429, 270552
basalt, amygdaloidal, 220425, 220428
basalt, vesicular, 220425, 220428
diabase, 220416
- Mississippi Fan, Gulf of Mexico, 960703
- Mossbauer spectroscopy study, Ti-bearing,
950642
- Pacific Ocean, sediments, 920381
- petrology, 540789, 810796
mineralogy, 540801
pyrite coprecipitation, 540799
- pyrite, microcrystalline, ooze,
nannofossil, 260605, 260606
- Rio Grande Rise, Mesozoic, 721015
- Rockall Plateau, concretion, fossil
polymetallic, 810705
- sediment chemistry, 350438
- silica
diagenesis, 410881
mineralogy, 140728
- stable isotope
basalt, 350502
silicate, 350499
- Tyrrhenian Rise, mineralogy, 130667
- volcaniclastics, volcanoclastic matter,
550503
- volcanics, 190634
- Walvis Ridge, transect, 740658
- iron oxide, hydrated
alteration, mineralogy, 540775
alteration, low-temperature, olivine, 180941
- basement, mineral composition, 180941
- Bermuda Rise, geochemistry, 511521
- mineral composition, tholeiite, 180941
- mineralogy, mineral, secondary, 600712
- iron oxyhydroxide
alteration, products, 810735
- basalt
alteration, 511188
geochemistry, 920450
- East Pacific Rise, basalt, 540406
- factor analysis, sediment, excess, 920368
- geochemistry, Rockall Plateau, 810735
- Mendoza Rise
lithology, 920436
petrology, 920613
- mineral, secondary, 511188

- Pacific Ocean SE, rare earth elements, 920388
 sediment, Fe/P ratio, 920364
 iron sulfide, 010563
 alteration, remnant arc debris, 590737
 black stains, 010563
 calcareous sediment, Miocene, 330869
 Caribbean Sea, sediments, 150929
 Cenozoic sediments, mineral composition, 42B0413, 42B0421, 42B0422
 Costa Rica Rift, basalt, 690520
 Curie temperatures, mineral composition, 370452
 deposition
 chalk, nannofossil, 250495
 ooze, nannofossil, 250495
 diagenesis, 010563
 aspects, 901488
 East Pacific Rise, 540872
 Galapagos Fracture Zone, 540872
 Hess Rise, pyrite-marcasite, 620855, 620859, 620860, 620861
 hydrocarbon, 960787
 hydrocarbon, C_1 - C_5 , Japan Trench, 571336
 Iceland Basin, Cenozoic sediments, 38S0081
 lithology, 070327, 330044, 410426
 Pleistocene sediments, 110141
 Lord Howe Rise, pale green laminae, 901148, 901156
 magnetostratigraphy, Lord Howe Rise N, 901277
 mud, terrigenous, diagenesis, 250456
 New Jersey Transect, stratigraphy, 950767
 Panama Basin, sediments, 690391
 pyrite, 010563
 pyrite, microcrystalline, ooze, nannofossil, 260603
 sediment properties, 901274
 sedimentation, 42B0608
 noncarbonate fractions, 42B0609
 sulfur, distribution, 42B0625
 tephra, source, 901153
 iron sulfide, authigenic
 hydrothermal alteration, sediments, 650419
 lithology, ooze, 960476
 specific biogenic traces, 901192
 iron sulfide minerals
 diagenesis, aspects, 901486
 Hess Rise, pyrite-marcasite, 620855
 hydrocarbon, C_1 - C_5
 Japan Trench, 571342
 midslope, 571342
 Walvis Ridge, transect, 740658
 iron, terrigenous, Bermuda Rise, geochemistry, 511520
 iron-copper sulfide
 Pacific Ocean SE, basalt, 340382
 sulfur isotope, pyrite, 340382
 iron-manganese
 Atlantic continental margin, mineralogy, 080908
 Caribbean Sea, sediments, 150936
 Emperor Seamounts, mineralogy, 550474
 geochemistry, trace elements, 060840
 Indian Ocean W, regional aspects, 250756
 lithology, nodule, 150279
 ore, deposit, 540804, 540805
 Pacific Ocean E
 modified sediments, 540329
 oxide accumulations, 540337
 Pacific Ocean W, guyot, 200657, 200658, 200659, 200664
 rare earth elements, trace elements, 590662
 sediment geochemistry
 crust, 550457
 nondepositional environment, 550460
 shallow-water bethogenic detrital sediments, 550459
 iron-manganese hydroxide, hydrothermal sediment, composition, 920608
 iron-manganese oxide
 Atlantic continental margin, mineralogy, 080909
 Atlantic Ocean SE, Cretaceous, 740771
 chert
 geochemistry, 620723
 petrology, 620723
 deposition
 chalk, nannofossil, 250496
 ooze, nannofossil, 250496
 Emperor Seamounts, mineralogy, 550471, 550472, 550473, 550474
 Indian Ocean NE, sediment history, 220720
 Pacific Ocean W, guyot, 200658
 rare earth elements, tuff, 590655
 iron-manganese oxyhydroxide, Emperor Seamounts, mineralogy, 550464, 550465, 550469
 iron-montmorillonite
 alteration, products, 810736
 Galapagos Fracture Zone, East Pacific Rise, 540404
 geochemistry, Rockall Plateau, 810736
 iron-nontronite, hydrothermal deposits, origin, 540417, 540418, 540419
 iron-silica, Mounds, nontronite, 540382
 iron-smectite
 Emperor Seamounts, mineralogy, 550467
 Hess Rise N, sedimentary sequences, 620763, 620767
 minerals, chemical composition, 600461
 Mounds, nontronite, 540382
 mounds Hydrothermal Field, origin, 540412
 iron-titanium minerals, claystone, basalt, 550707
 iron-titanium oxide
 basalt
 glass, 180935
 petrology, 160632
 basalt, altered, chemistry, 511324
 basement, mineral composition, 180935
 chemistry, 340378
 claystone, basalt, 550707
 Emperor Seamounts
 mineralogy, 550473
 petrology, 550509, 550511
 geochemistry, mineral chemistry, 160632
 hydrothermal vein, mineralogy, 340378
 igneous rocks, chemistry, 630733
 lithologic, chemical stratigraphy, basalt, 510947
 lithology, oxidation, 800939
 mineral composition, 180935
 mineral, primary, 810787
 Pacific Ocean SE, basalt, 340381, 340383
 sulfur isotope, 340383
 pyrite, 340381
 volcanics, mineral composition, 180935
 iron/magnesium ratio
 basalt, geochemistry, 590765
 basement
 Indian Ocean, 220430
 petrology, 220430
 geochemistry, mineralogy, 340218
 Pacific Ocean SE, basalt, 340218
 Ironia Reef, Cyprus, evaporites, 42B1189
 ironstone, 190633
 calcite, 190630
 ferromanganese sediment, 190630, 190631
 mineralogy, 190630
 ironstone, calcareous
 ferromanganese sediment, lithologies, 190630
 Pacific Ocean N, mineralization, contact, 190906
 Iroquois Formation, 500808, 500809
 formations, 500808
 Georges Basin, limestone, 790717
 limestone, Georges Basin, 790717
 Moroccan Basin, margin, 500808, 500809
 Scotian Shelf, 790717
 Irving Tablemount, 490407, 490408
 calcareous nannofossils, 490519, 490529
 planktonic foraminiferal biostratigraphy, 490465
 Irvington mammal stage, glaciation, Pliocene-Pleistocene, 120959
 Isakov Seamount, 200656, 890066
 Pacific Ocean W, guyot, 200657
 submergence, 200691
 Ischia, 130361, 131034, 131035
 Iselin Bank, 280377, 280887, 280890, 280892, 280893, 280896, 280901, 280905, 280906, 290272, 290284, 291143
 Iselin Plateau, 280369, 280920, 291120
 Iselin Seamount, 280901, 280906
 bathymetry, 280892, 280901
 gravity anomaly, 280901, 280902, 280905
 magnetic anomaly, 280896, 280901, 280902, 280905
 topography, 280901, 280906
 Isengard Ridge, drift, sediment, 941220
 Ishigaki, Mijara Formation, 550431
 Ishikari Bay, 560473, 560474, 560557, 870564
 Ishikari-Hidaka Basin, 560474, 560479, 560483, 560522, 560554
 Ishikari-Tomakomai lowland, 870258
 Iskenderun, Neogene formations, paleogeography, 42A0904, 42A0921
 Iskenderun Salt Lake, Mediterranean Sea E, history, 42B1216
 Isla de los Estados, 710281
 Isla Moca, Chile, 670006
 Isla Santa, 640221
 Island Beach, 950461, 950775, 950779, 950782, 950788
 deposition, 950797
 New Jersey Transect, 950805
 regional seismic grid, borehole data
 extrapolation
 chalk, siliceous nannofossil, 950791
 deposition, 950784, 950802
 Islands, Bay of, ophiolite, 830125, 830126
 Islands Province, Line Islands, tectonics, 330733, 330734, 330735
 Islas Orcadas. See South Orkney Islands
 Isle of Rum, 380751, 550631, 550633
 Isle of Wight, 721012
 chalk
 compaction, differential, 941135
 faulting, 941135
 fracturing, 941135
 shear stress, 941135
 solution structures, 941135
 Rio Grande Rise, limestone, flaser, 721012
 Sandrock Formation, carstone Formation, 800617
 isobutane
 gas, interstitial, sediments, 410861
 hydrocarbon, C_1 - C_5 , Japan Trench, 571343
 organic geochemistry, 640724
 San Jose Canyon, 840930
 isobutane/n-butane ratio
 Black Sea, sediments, 42B0611
 hydrocarbon, C_1 - C_5
 Japan Trench, 571343
 midslope, 571343
 hydrocarbon, C_2 - C_8 , 711043
 hydrocarbon, low molecular weight, 711034

- methane, carbon isotope, 42B0667
Walvis Ridge, sediments, 751059
isohopane, 640888
isohopene
laminated/nonlaminated sediments, organic geochemistry, 640922
organic geochemistry, 640888
molecular markers, 630844
isoleucine
racemization
Atlantic Ocean, 370633
Caribbean Sea, 200947
isopentane
Balearic Plain, hydrocarbon, 130814
Black Sea, sediments, 42B0661
gas, 870884
hydrocarbon, 241165
hydrocarbon, C₁-C₅, 571344
Japan Trench, 571337, 571343
hydrocarbon, C₁-C₈, Guaymas Basin, 640775
kerogen, 241165
Nankai Trough, Japan Trench, 870866
organic geochemistry, 640724
tetrapyrrole, geochemistry, 640810
isopentane/n-pentane ratio, hydrocarbon, C₁-C₅, Japan Trench, 571343
isoprenoid
algal vs higher land plant source, indicator, 960787
alkane, 960787
distribution, 960787
amino acid, lipid, 42B0697
bitumen, A_{chl} fractions, group composition, 571332
carbon, geochemistry, 610623
carbon preference index, odd/even preference, 960787
chemical characterization, kerogen, 711048
deposition, reducing environment, 960788
depositional environment, indicator, 960788
heptadecane/nonacosane, 960787
hydrocarbon, land plant, 960787
hydrocarbon generation potential, organic facies, 640866
limestone, Albian, 620927
lipid
alcohol, acyclic components, 640914
diagenesis, 630770
enrichment, 960788
hydrocarbon, aliphatic, 571369
lower fan, organic matter, 960749
Neogene cores, organic geochemistry, 42A0469
Orca Basin, 960788
carbon preference index, 960787
hydrocarbon, n-C₁₇/n-C₂₉, 960787
organic contribution, 960788
organic geochemistry, 640830
alkane, 640820
organic matter, 500579
organic source variations influence, 960788
parametric ratios, 960787
Pigmy Basin
carbon preference index, 960787
hydrocarbon, n-C₁₇/n-C₂₉, 960787
sediment, 960788
preliminary organic analyses, 111016, 170577, 42B0727
pristane/phytane ratio, 960788, 960789
shale, Aptian-Barremian, 711018
shale, black, Cretaceous, 410866
sources, characterization, 960787
sugar, lipid, 42B0697
terrigenous source contribution indicators, 960788
total extractable material, 960787
isoprenoid acid
Atlantic Ocean N, lipid, 500653
preliminary organic analyses, 111022
isoprenoid, acyclic
limestone, Albian, 620924
lipid, acyclic components, 610614, 610615
isoterpenoids, acyclic, Pacific Ocean NW, lipid, 860672
isotetradecane, preliminary organic analyses, 160581
isotopic stage 1, biostratigraphic zonation, zones, subzones, definition, 800689
isotopic stage 2
glacial cycles, deep-sea environment, 800812
stable isotope analysis, Goban Spur, 800797
isotopic stage 2-5, biostratigraphy, Pigmy Basin, 960659
isotopic stage 5
Goban Spur, chronology, 800697
paleoenvironment
deep-water environment, 800819
North Atlantic Deep Water, 800819
water characteristics, 800819
isotopic stage 6, stable isotope analysis, Goban Spur, 800797
isotopic stage 8, stable isotope analysis, Goban Spur, 800797
isotopic stage 12
stable isotope analysis
Goban Spur, 800796
surface water, 800800
isotopic stage 13
isotopes, oxygen isotope, 800806
paleoenvironment
climate, 800818
deep-water environment, 800819
isotopic stage 16
oxygen isotope, carbon isotope, 800802
stratigraphy, 800818
isotopic stage 19, glacial cycles, deep-sea environment, 800811
isotopic stage 22
glacial cycles, deep-sea environment, 800811
isotopes, oxygen isotope, 800808
stable isotope analysis, Goban Spur, 800796
isotopic stage 24, glacial cycles, deep-sea environment, 800811
isotopic stage T, Goban Spur, chronology, 800697
Israel, 130977, 950365
coast, 130739, 750766
coastal plain, 42B1195, 42B1196
Mediterranean Sea, 42B1195
Tertiary, 42B1195
continental shelf, 42B1196
Mediterranean Sea, 42B1195
Tertiary, 42B1195
continental shelf, Tertiary, 42B1195
evaporites, 42B1219, 42B1220
history, 131115, 150773, 400917, 42B1195, 42B1196, 42B1197, 42B1210, 42B1214, 42B1220
Arabian platform, 42B1217
Bet Guvrin, 42B1199
Bet Guvrin Formation, 42B1201
common depth point traces, 42B1199
desiccation, 42B1214, 42B1216
Jaffa marl, 42B1199
Lakhish Formation, 42B1201
Levantine Basin, 42B1217, 42B1218
Lower Saqiye Group, 42B1197
Mavqim, 42B1197
Mavqim Formation, 42B1206
Messinian events, 42B1214
National Park Volcanics, 42B1204
Pliocene-Pleistocene stratigraphy, 42B1210, 42B1212
Saqiye Group, 42B1196, 42B1197, 42B1199
shallow basin model, 42B1220
stratigraphic reconstruction, 42B1199, 42B1201
tectonic setting, 42B1199
Tertiary strata, 42B1196
Tortonian-Messinian, stratigraphy, 42B1206, 42B1208
wedge, 42B1196
Yafo, 42B1210
Ziqim Formation, 42B1197
Ziqim sedimentary cycle, 42B1202, 42B1203, 42B1204
Ziqilag Formation, 42B1206
Ziqilag-Mavqim sedimentary cycle, 42B1206
interval velocity, 42B1199
Mediterranean Sea E, Tertiary, 42B1195
paleogeography, 42B1201, 42B1202, 42B1204, 42B1205, 42B1208, 42B1210, 42B1212, 42B1214
sandstone, 42B1196
seismic reflection, 42B1199
seismic velocity, 42B1199
water, salt budgets, 42B1218, 42B1219
Istanbul, Cenozoic silicoflagellate, coccolith stratigraphy, 440775
Isthmian Salt Embayment, 010456, 100071, 100615
Isthmus of Panama, 080040, 100475, 150412, 151104, 160020, 391061, 391065, 391072, 430011, 430446, 430817, 440493, 720033, 730784, 780346, 850474
Atlantic Ocean, margin, 481102
carbon isotope, shift, 901402
Caribbean Sea W, sediments, 680479
diagenesis, Miocene to present, 690376
final closing, 860600
lithology, 150282
microfacies, sediments, 440493
Pacific Ocean EC, geologic history, 090929
paleoceanography, Reflector Green, 850966
stratigraphy, carbonate, 680357, 680360
Isthmus of Tehuantepec, Mexico, Gulf of, regional aspects, 010625
Istranca Ridge, 42B1079
Black Sea, geophysical framework, 42B1079
ridges, 42B1079
Istria, 42B0518
Ita Mai Tai Guyot, 200008, 200087, 200093, 200097, 200101, 200111, 200221, 200527, 200547, 200645, 200654, 200700, 200725, 890039, 890088, 890097, 890291, 890385, 890399, 890547, 890590, 890606, 890662
East Mariana Basin, 890413
sedimentary history, 890655
limestone, oolitic, 200097, 200098, 200101
ooids, East Mariana Basin, 890399
oolite
age, 200363
chemical composition, 200364
diagenesis, 200366, 200367
location, 200363
micritization, 200365
mineralogy, 200364
origin, 200365
petrography, 200364
porosity, 200363
sorting, 200363
ultrastructure, 200365
ooze, Tertiary, 200087, 200088, 200093
Pacific Ocean NW, lithology, 200725
sedimentary sequence, lithology, 200725
seismic profiles, 200547
submergence, 200700
turbidites, origin, 890373
velocity, 200641

- volcanism, 890385
- Italy, 131227, 620991, 730629, 730744, 730758, 760606, 760642, 760685, 760874, 760878, 790885, 800647, 810878, 860796
- Austria, Tethys W, 760875
- Greece, continental plate, 760874
- Hess Rise, iridium, 620849
- Israel, history, 42B1197
- limestone, paleomagnetism, 760218
- Mediterranean Sea E, history, 42B1197
- Neogene formations, paleogeography, 42A0919
- see also* Sicily
- Italy N, 760887, 810581
- Messinian environments, salinity crisis, 42A1005
- Iturup, 180693, 180694
- Ivory Coast, 050525, 151098, 38S0845, 400915, 411045, 710888, 760822, 950573
- Ivrea Anomaly, gravity anomaly, 280905
- Iwaki Volcano, 870272
- Iwo Jima, 170442
 - basalt, petrology, 580843
 - basalt, altered
 - major element, 580873
 - trace elements, 580873
- Bonin Islands, 580674, 580992
- isotopes, 310602
- Izu, tephra, 580625, 580992
- Shichito, island arc, 580617
- Iwo Jima Ridge, 060011, 060293, 060294, 060301, 060349, 060587, 060590, 060681, 060692, 060756, 060757, 061218, 580022, 580029, 580137, 580220, 580221, 580240, 580669, 580676, 580677, 580708, 580724, 580755, 580785, 580787, 580805, 580807, 580953, 580955, 580996, 590322, 870737
- basalt, altered
 - geochemistry, 580806
 - major element, 580874, 580875
 - trace elements, 580874, 580875
- basin genesis, 310857
- Kyushu-Palau Ridge, 310875
- clastic wedge source, 580995
- clay, 580669, 580676
- geophysical, 060692
- hydrocarbon, extractable, organic
 - petrology, 580755
- major element, argillaceous sediments, 580724
- marine sediments, 580992
- mudstone, 580707
- Philippine Basin, genesis, 310857
- Philippines, genesis, 310875
- Shikoku Basin, basalt, 580900
- Izalco Volcano, 670487
- Izu, 600721, 870012, 870046, 870066, 870564, 870636, 870742, 870795
- basalt, altered
 - major element, 580875
 - trace elements, 580875
- Bonin Islands, 580895, 580900, 880129
 - active island arc, 561008
- convergence, Honshu, 870795
- geochemistry, volcanism, 870699, 870700
- Honshu, convergence, 870795
- Iwo Jima, 580625, 580992
 - tephra, 580625, 580992
- Mariana Islands, 580724
- Nankai Trough, clay minerals, 870635
- paleomagnetic results, Honshu, 870780
- ridge, 870302
- sedimentary facies, sedimentation model, 870626
- Shikoku Basin
 - basalt, 580895, 580900
 - Honshu, 870762
- subduction rate, geologic constraint, 870795
- tectonics, 870762
- Tohoku Arc, geology, 870716
- turbidites, sedimentation, 870627
- volcanics, fore arc, 600721
- volcanism, explosive, Neogene, 310577, 310587
- Izu Trench, 670691, 870716
- Bonin Trench, 200019, 200033, 200045, 200324, 200337, 200645, 580787, 620775
- Mariana Trench, 870714
- Yap Trench, 840791
- Pacific Ocean, guyots, 620773, 620774, 620775
- Izu-Mariana Arc, 840805
 - major element, argillaceous sediments, 580724
- Mariana Islands, fore arc, 600735