

F

- FAD. *See* first appearance datum
- Fagaloa trend, 330759
- Faial, 33, 820505
- Faial Island, basalt, alkali, 820453, 820454, 820455
- fairchildite, clay minerals, hydrothermal mounds, 700225
- Fairway Ridge, 901339
- Lansdowne Bank, Neogene sequence, 901339
- Faisi, 160663
- Falcon E, 040592
- Falcon Formations, 040597
- Falconara, Sicily, 42A0777
- Falkland Escarpment, 360966, 710021, 710285
- Falkland Fracture Zone, 360008, 360027, 360100, 360101, 360259, 360494, 360538, 360962, 361004, 710302, 710470, 710830, 720017, 730791, 750479
- Atlantic Ocean S
- Argentine Basin, 391117
- Santos Plateau, 391106
- Atlantic Ocean SW, basin, evolution, 360994, 361002, 361003, 361004, 361005, 361008
- lithology, 360101
- Mid-Atlantic Ridge, 361002
- Agulhas Fracture Zone, 361002
- Falkland Islands, 360027, 38S0509, 660419, 710024, 710281, 710285, 710299, 710481, 711013, 720054, 720738
- Atlantic Ocean SW, basin, evolution, 360993, 360996, 360998
- current, 360537
- geochemistry, 360893
- mineralogy, 360893
- Falkland Outer Basin, 361051
- Antarctica, 361051
- minor element, geochemistry, 360929
- Falkland Plateau, 350887, 350889, 360971, 361051, 38S0493, 38S0498, 390161, 390434, 390657, 390673, 390906, 391049, 391057, 391060, 391068, 400006, 400069, 400384, 400741, 400970, 401002, 401026, 401041, 430697, 430802, 440768, 620395, 620479, 621031, 710005, 710008, 710009, 710021, 710024, 710031, 710033, 710038, 710042, 710046, 710047, 710050, 710111, 710120, 710145, 710215, 710253, 710281, 710284, 710285, 710287, 710288, 710292, 710295, 710302, 710314, 710315, 710317, 710320, 710329, 710331, 710337, 710339, 710340, 710345, 710356, 710357, 710361, 710363, 710365, 710366, 710377, 710379, 710380, 710385, 710387, 710388, 710391, 710402, 710406, 710409, 710410, 710419, 710425, 710428, 710430, 710432, 710433, 710438, 710445, 710449, 710452, 710454, 710457, 710459, 710461, 710474, 710481, 710483, 710484, 710487, 710495, 710498, 710500, 710503, 710551, 710554, 710565, 710567, 710583, 710635, 710644, 710645, 710667, 710674, 710687, 710705, 710739, 710750, 710754, 710755, 710757, 710758, 710789, 710791, 710796, 710798, 710799, 710800, 710801, 710802, 710803, 710821, 710822, 710830, 710832, 710833, 710835, 710836, 710837, 710859, 710879, 710886, 710888, 710907, 710911, 710933, 710951, 710978, 710981, 711003, 711016, 711026, 711027, 711033, 711053, 711073, 711077, 711141, 711150, 711171, 711174, 720005, 720029, 720757, 720981, 720982, 720990, 730496, 730498, 740510, 740520, 740679, 750530, 750845, 801003, 820567, 820624, 901213, 901511, 950395, 950400, 950401
- acoustic stratigraphy, 711133
- Africa W, 360043, 360101, 361003
- alteration, 711003
- Angola Basin, evolution, geologic, 750530
- anoxia, global, evidence against, 801003
- Antarctica, 361051
- geochemistry, 711011
- aromatic fraction, 711008
- Atlantic Ocean, Cretaceous, 750820
- Atlantic Ocean S
- Cretaceous, 720981, 720982
- hiatuses, 391099, 391101, 391104
- Mesozoic, 751035, 751040, 751041
- Atlantic Ocean SW
- basin, evolution, 360993, 360994, 360996, 360998, 360999, 361000, 361001, 361002, 361004, 361005, 361006, 361007, 361008, 361009
- paleoenvironment, 710320, 710321, 710328
- sediments, 711001
- authigenic minerals, Miocene, 710361
- basement
- geochemistry, 360893
- K/Ar age, 360923
- mineralogy, 360893
- petrology, 360893, 360894, 360895, 360896, 360897, 360900, 360902, 360904, 360905, 360906, 360907, 360908, 360909, 360910, 360911
- Rb-Sr age, 360923
- basin, 710048, 710281, 710287, 710289
- geochemistry, 711049
- beef-in-shale structure, 360865
- biostratigraphy, 710445
- Cape Basin, shale, black, 711029, 711030
- carbon, 711185
- even-numbered molecules, 711008
- carbon, mineral, 711001
- calcium carbonate, 711001
- carbon, organic, 711001, 711003
- cycles, 711051
- preservation, 711053, 711054
- stable isotopes, 711056
- carbonate, 711185
- accumulation, 710295
- buildup, 710295
- carbon, organic, 711051, 711061
- stable isotopes, 711056
- carbonate cycle
- Cretaceous, 711054
- shale, black, 711051
- clay minerals, 710377
- coarse fraction variation
- erosion, 901213
- sedimentation rate, 901213
- cone-in-cone structure, 360865, 710345
- continental shelf, onshore geology, 400970, 400971
- Cretaceous calcispherulids, 710977
- erosion, 710281
- euxinic sedimentation, 360877
- evolution, 710331
- evolution, thermal, 711015
- fault block, 710281
- geochemical history, sedimentation, 710404, 710437
- geochemical relationships, 711011
- geochemistry, eastern extremity, 710410
- geologic framework
- crust, 710284
- geomorphic-physical setting, 710281, 710284
- history, 710288
- petroleum generating potential, 710292
- plate tectonics, 710284
- seismic stratigraphy, 710287
- geophysical measurements, 710253
- glauconite, authigenic, 710361
- gypsum, authigenic, 710361
- heat flow, 710299, 710302
- thermal conductivity, 710300
- humic acid, 711048
- chemistry, 711045
- kerogen, 711048, 711049
- organic matter, 711045
- shale, black, 711049
- humic compounds, 711006
- carbon, organic, 711006
- mudstone, black, 711006
- poor yield, 711006
- hydrocarbon, 711033
- carbon, organic, 711033
- hydrocarbon, C₁-C₇, 711033
- hydrocarbon, light, 711033
- kerogen, 711033
- low molecular weight, 711033, 711034
- methane, 711033
- organic matter, 711033
- shale, black, 711033
- hydrocarbon, aromatic
- chemistry, 711045
- kerogen, 711049
- shale, black, 711046
- hydrocarbon, C₂-C₈, basin, 711033, 711043
- isotopic paleotemperature estimates, 710415
- Jurassic, nannofossils, calcareous, 440768
- K/Ar age, basement, 360923
- kerogen, 711001, 711006, 711008, 711048, 711049
- alteration, 711008
- chemistry, 711045
- H/C ratio, 711006
- humic acid, 711048
- immature stage, beginning evolution, 711006
- O/C ratio, 711006
- pyrite, 711006
- shale, black, 711006
- vitritine, 711006
- lithology, 711133
- sandstone, 400069
- shale, 400069
- magnetostratigraphy, 711093
- Mesozoic, Miocene, 710455
- Mesozoic sedimentation, 360877
- Mesozoic sediments, organic geochemistry, 500637
- Messinian environments, salinity crisis, 42A1009
- minor element, 360929
- geochemistry, 360929
- Miocene to Quaternary sediment, 711183
- nannofloral analysis
- carbonate cycle, 711058
- nannoplankton floral diversity stock, 711061
- nonmarine matter, dilution, 711003
- NSO compounds, 711008
- oil
- generation, 711003
- zone assignment, 711003
- ooze, biogenic, Miocene, 700361
- organic chemistry, 500637
- Mesozoic, 711013
- organic matter, 711011
- organic geochemistry, 500637
- organic matter, 360941, 711015
- basin, 711016
- composition, 360941
- evolution, 711015, 711016
- geochemistry, 711045
- maturity, 711003
- Mesozoic, 360941

- organic matter (Cont.)
 thermal evolution, 711015
 thermal history, 360941
 vertical distribution, 711009, 711011
 Pacific Ocean SE, 710697
 Pacific Ocean SW, 710697
 paleoceanography, 901511
 paleoenvironment, 710320
 paleoenvironmental comparison, shale,
 black, 711029
 Paleogene sediments, 730487
 paleomagnetism, 711051, 711073, 711075,
 711076
 intensity variation, 711077
 magnetic polarity, 711076
 susceptibility, 711077
 paleontology, 710445
 paragenetic assemblages
 Assemblage IIA(+), 710425
 Assemblages IIIA(+), 710428
 physical properties, effects on sediment
 composition, 711111
 phytane, 711008
 pristane, 711008
 pyrite, authigenic, 710361
 saturated fraction, 711008
 sea floor spreading, 710287
 sedimentary fill, basin, 710281
 sedimentation, 360877
 geochemical aspects, 710430
 sedimentation history, Mesozoic, 710391
 sediments, 711015
 organic geochemistry, 711001
 organic matter, 711015
 temperature increases, 711003
 seismic profiles, 360971
 geological history, 360987
 seismic reflection, 360971
 seismology, 710295
 shale, black
 Aptian-Albian, 711051, 711053
 carbon, organic, 711051
 carbonate, 711051
 thermal history, 711026, 711027, 711028
 subsidence, crust, continental, 710287
 thermohaline flow, Quaternary, 720990
 Ti/Zr ratio
 distribution, 710398
 tectonic activity, 710402
 trace elements, 710391
 geochemistry, 710391
 Walvis Ridge
 climatic, oceanographic evolution, 740679
 sediments, 751057, 751079
 Falkland Plateau E, 360971, 711011, 711015
 sedimentation, Mesozoic, 330880, 360877,
 360878, 360880, 360881, 360884, 360886,
 360887, 360888, 360889, 360890
 seismic profiles, 360971, 360973, 360977,
 360983, 360985, 360986, 360990
 Falkland Trough, 360100, 360973, 360987,
 361004, 710021, 710281, 710284, 710285,
 710292
 Falmouth, bank, 780088
 FAMOUS area, 020422, 490007, 511132, 540026,
 540045, 540048, 540244, 540245, 540323,
 540346, 540408, 540410, 540411, 540415,
 540640, 540641, 540688, 540718, 540725,
 540826, 580043, 580811, 600226, 600662,
 600778, 600894, 610676, 640645, 640656,
 650530, 650626, 650630, 650750, 670567,
 670568, 670569, 690504, 690760, 690776,
 690781, 700211, 700220, 700277, 700304,
 700314, 700439, 700440, 700474, 730528,
 730598, 820006, 820007, 820010, 820078,
 820121, 820127, 820156, 820395, 820396,
 820401, 820404, 820416, 820417, 820421,
 820424, 820456, 820463, 820464, 820465,
 820471, 820472, 820483, 820487, 820493,
 820494, 820498, 820499, 820505, 820506,
 820509, 820523, 820555, 860694, 890507
 alteration, products, 810736
 Atlantic Ocean, 540415
 basalt, 370003, 370239, 370341, 370363,
 370365, 370539, 370543, 370591, 370595,
 450496, 490161, 490315, 490328, 490339,
 490629, 490837, 490841, 490845, 510967,
 510974
 basement, 460016
 biostratigraphy, 490857
 calcareous nannofossils, 490519, 490528
 chemistry, 460124, 460233, 511009
 comparison, 460233
 crust, 490353
 crystallization, fractional, 460124
 "dynamic mixing" model, 820454
 geochemistry, 490629, 490657, 490675,
 490681, 490696
 glass, 460123, 460183, 510982, 511009,
 511107
 La/Ce ratio, 820427
 lead isotope, 490721, 490722, 490724
 magnetic inclination, 490816
 magnetism, 460423
 mantle, 490847
 melting, partial, 490629
 Mid-Atlantic Ridge, 450654
 midocean ridge, 820416, 820417, 820418
 paleomagnetism, 370475, 370477, 490769,
 490772, 490778
 petrology, 460124, 460233
 phenocrysts, 460220, 460233
 planktonic foraminiferal biostratigraphy,
 490463
 seismic refraction experiments, 460381
 stable inclinations, 490779
 stratigraphy, chemical, 460039, 460040,
 460418
 trace elements, 460247
 volcanic flows, 511373
 basalt, altered
 geochemistry, 540688, 580811
 petrology, 540688
 basalt, submarine, magnetic viscosity,
 370503, 370504, 370505
 basement, 370702
 chemical and magnetic stratigraphy, 450671
 geochemistry, 370702
 magnetic properties, 370449, 370450,
 370452, 370454
 paleomagnetism, 370425, 370426, 370427,
 370429, 370431, 370432, 370433, 370434,
 370436, 370437, 370439, 370443, 370444,
 370445
 petrology, 370702, 370703
 Bermuda Rise, oblique seismic experiment,
 510675, 510676
 bulk-rock compositions, minor element,
 540640
 California, Gulf of, basalt, 650530
 chemical stratigraphy, 450672
 axial rift, 450658
 chrome spinel, classification, 690807
 clay, green
 Galapagos Spreading center, 700211
 mineralogy, 700214
 comparisons, other volcanic provinces
 aseismic ridges, 540826
 spreading ridge, 540826
 crust, magnetic structure, 450658
 electrical properties, 370417
 emplacement, magnetic properties, 370465,
 370466, 370469, 370511, 370512, 510014
 ferrobasalt, MAR, 540846, 540848
 ferrobasalt, oceanic, rift, 540835
 flow line, 820017, 820073, 820487, 820490,
 820491, 820494, 820505
 LREE, 820487
 formations, 700333
 fracture zones, 250667, 370004, 370342,
 490339, 490837
 biostratigraphy, 490857
 calcareous nannofossils, 490528
 coccolith assemblages, 490557
 crust, 490357
 deformation, 490428
 petrological and geochemical variation,
 490619
 south side, 490391
 Galapagos Spreading center
 basalt, 540725
 sediment classification, 540323
 geochemistry
 comparison, 370702, 370703
 major oxides, 540347
 Rockall Plateau, 810736
 geophysics, viscous remanent magnetization,
 370525, 370528, 370529
 glass, basalt, 511107
 hygromagmatophile (HYG) elements,
 geochemistry, 650630
 igneous rocks, magnetic properties, 450400
 Layer 2, crust, oceanic, 370988, 370995
 lead isotope, basalt, 490722, 490724
 low partition coefficient elements,
 hygromagmatophile (HYG) elements, 600662
 magnetic properties, 370465, 370471, 370473
 magnetic anisotropy, 370471
 NRM demagnetization, 370465, 370466
 NRM directions, 370465
 NRM intensities, 370465
 thermal demagnetization, 370472
 viscous remanence, 370466, 370469
 viscous remanent magnetization, 370471
 magnetic stratigraphy, 450672
 axial rift, 450658
 chemical stratigraphy, 450657
 magnetization, 370481
 paleomagnetic field intensity, 370482
 manganese oxide, precipitation chemical,
 700309
 mantle, heterogeneity, 490841
 melting, tholeiite, olivine, 450516
 Mid-Atlantic Ridge, 690530
 basalt, 370395, 490772, 490774, 490776,
 490779
 magnetic observations, 490807
 paleocolatitude, 490816
 mineralogy, 370895, 370896, 370897, 370898,
 370899, 370900, 370901, 370902, 370903
 amphiboles, 370896, 370899
 analcime, 370897, 370898, 370899, 370900,
 370901, 370902, 370903
 anatase, 370897
 aragonite, 370899
 augite, 370896, 370897, 370898, 370899,
 370900, 370901, 370902, 370903
 barite, 370896
 calcite, 370896, 370897, 370898, 370899,
 370900, 370901, 370903
 chlorite, 370896, 370897, 370898, 370899,
 370901, 370902, 370903
 cristobalite, 370900
 goethite, 370896
 hydrothermal deposits, 540346
 K-feldspar, 370896, 370897, 370898,
 370899, 370900, 370901, 370902, 370903
 kaolinite, 370896, 370897, 370898,

- mineralogy (Cont.)
 370899, 370901, 370902, 370903
 mica, 370896, 370897, 370898, 370899,
 370900, 370901, 370902, 370903
 montmorillonite, 370896, 370897, 370898,
 370899, 370900, 370901, 370902, 370903
 palygorskite, 370896, 370897, 370898,
 370899, 370901, 370902, 370903
 phillipsite, 370896, 370897, 370898,
 370899, 370900, 370902, 370903
 plagioclase, 370896, 370897, 370898,
 370899, 370900, 370901, 370902, 370903
 pyrite, 370897, 370899, 370900, 370901,
 370902, 370903
 quartz, 370896, 370897, 370898, 370899,
 370900, 370901, 370902, 370903
 Mounds Hydrothermal Field
 chemistry, 540408
 origin, 540411, 540415
 Mt. de Venus, 510974
 Mt. Pluto, 510974
 paleomagnetic field intensity, 370457
 Curie temperature, 370457
 determination, 370459, 370461
 hysteresis, 370457
 magnetization, unstable, 370458
 mineral, magnetic, 370458, 370459, 370461
 natural remanent magnetization, 370457
 negative inclinations, 370481
 paleointensity, 370457
 reversed inclinations, 370481
 stable magnetization, 370457
 viscous remanent magnetization, 370457
 paleomagnetism, age, 370533
 rare earth elements, 700319
 Reykjanes Ridge
 basalt, 490772, 490774, 490776, 490779
 magnetic observations, 490807
 rift, 540048, 540835, 540846, 540848
 sediment, 700333
 hydrothermal mounds, 700277
 seismic velocity, 370373, 370389
 crust, oceanic, 370383, 370390
 Layer, 3, 370384
 Poisson's ratio, 370382
 ultramafic rocks, 370384
 velocity, 370374, 370381
 velocity and elastic constants, 370389
 velocity-density, 370382, 370389
 Siqueiros Fracture Zone, basalt, 540718
 uranium, disequilibrium, 700304
 X-ray mineralogy, 370895
 fan, submarine, 100298, 100311, 131033, 180241,
 180889, 220276, 300075, 310353, 310354,
 310355, 310489, 310490, 360887, 410967,
 411131, 411133, 47B0053, 47B0405,
 47B0416, 47B0417, 47A0794, 47B0389,
 47B0403, 47B0404, 310489, 500174
 acoustic facies, sedimentology, 960471
 Africa, continental margin NW, 410967
 Africa NW, continental margin, 411133
 Amazon River, 760785
 Angola Basin, 400537
 Cretaceous to Recent, 750771
 geologic evolution, 750518, 750519,
 750520, 750522
 Arabian Sea, sediment history, 230513
 California, offshore, 630960
 Cape Basin, 400537
 Cape Bojador, continental margin, 47A0794
 Cape Hatteras, 931385, 931419
 clay minerals
 chemical analysis, 960695
 Cretaceous, 931079
 conglomerate, 300432
 consolidation, permeability, 960807, 960809
 continental margin, porosity, 180889, 180891
 continental margin, preservation,
 paleoenvironment, 630946
 continental shelf, onshore geology, 400972
 Cretaceous to Recent, 750780, 750781, 750783
 geometry, 750783
 gradation, 750782
 lithology, 750777, 750782
 sediment classification, 750783
 sedimentation rate, 750779, 750782
 seismic stratigraphy, 750771
 slumping, 750781
 source, 750778, 750779, 750782, 750783
 turbidites, 750777, 750780
 deposition, 300438
 models, 960738
 Portugal, 47B0389
 Toyama Trough, 310489
 Eleuthera Ridge, 760938
 Falkland Plateau E, sedimentation, 360887
 fan, transition, 960465
 geochemistry, Cretaceous, 930961
 Honshu Deep Basin, 310489
 Honshu NW, 310489
 Indus Fan, sedimentation, 230491
 inorganic chemistry
 major element, 960738
 minor element, 960738
 sediment composition, 960738
 Japan, 310489
 Japan, Sea of, 310489
 Lansdowne Bank, seismic facies, 901339
 lithology, 180241, 300075, 310353, 310354,
 310355
 Mesozoic deposits, 47B0053
 progradation, 180103
 Toyama Trough, 310361, 310362, 310406
 magnetostratigraphy, Cretaceous sediments,
 400460
 margin, organic matter, 960752, 960753
 Mediterranean Sea, lithostratigraphy, 131033
 Mississippi Fan, 310494
 depositional history, 960426
 modern characteristics, 960425
 morphologic characteristics, 960427
 organic matter, 960755
 sediment, 960432
 sediment chemical characteristics, 960425
 sediment physical characteristics, 960425
 seismic stratigraphy, 960437
 Moroccan Basin, margin, 500814, 500815
 Neogene sedimentation, sediment evolution
 and sources, 47A0613
 Noto Peninsula, 310489
 organic geochemistry
 carbon, organic, 960691
 specific organic geochemical changes,
 960692
 organic matter, depositional environment,
 960763
 Pacific continental margin, geomorphology,
 350285
 Pacific Ocean SW, island arcs, 300693
 paleoenvironment, 47B0403, 47B0416, 47B0417
 Hauterivian to Cenomanian, 47B0404,
 47B0405
 Miocene change, 630960
 petroleum generating potential, Magdalena
 Fan, 630958
 petrology, Cretaceous, 930961
 physical properties, Toyama Seachannel,
 310553
 porosity, 180889
 progradation, 131033, 180103
 Red Sea, geology, 230813
 Sea of Japan, 310490
 sediment source
 growth, 960485
 inactivity, 960485
 sedimentary structure, study material,
 960532
 source variation, alternating sources,
 960537
 Southeast Pacific Basin, evolution,
 geologic, 350727
 stratification, deposition, 960517
 Toyama Bay, 310489
 Toyama Trough, 310489, 310490, 310495
 bedding, graded, 310490
 clay, 310490
 foreset bedding, 310494
 lamination, parallel, 310490
 planktonic fossils, 310494
 Pleistocene to Recent, 310495
 sand, 310490
 silt, 310490
 turbidites, 310490, 310494
 volcanoclastics, 310490
 transport, 230489
 turbidites, 300430, 750792, 750793
 basin plain, 750792
 conglomerate, 300430
 deposition rate, 300430
 green, 750790, 750791
 inner fan, 750792
 outer fan, 750792
 turbidity current, 300430
 Yamato Basin, 310489
 Yamato Rise, 310489
 Yaqui River, 640263
 Fanghorn Bank, 480166, 481061, 481086, 481145
 Rockall Plateau W, stratigraphy, 481061
 Rockall Rise SW, structure, 481065, 481086
 stratigraphy
 basement, 481065
 post-Eocene stratigraphy, 481086
 Rockall, 481065
 structural evolution, morphology, 481061
 Fanning Island, 330037, 330126, 330571,
 330649, 330733, 330790, 330922, 740557
 east, 330040
 Line Islands, tectonics, 330733, 330734,
 330737
 Fanshuliao Formation
 Paleogene-Neogene, 310849
 Philippine Sea, Paleogene-Neogene, 310849
 Farafra, Mediterranean Sea E, history, 42B1220
 Farallon Basin, 640587, 640597
 Farallon Islands, 150554, 330744, 350263
 continental plate, 641284
 islands, 150554
 Line Islands, tectonics, 330744
 Patton Escarpment, Pacific Ridge, 630929
 Farallon Plate, 330739, 330915, 330917,
 610817, 610824, 610861, 621074, 630228,
 630954, 641108, 641115, 641280, 650005,
 650739, 660728, 670672, 670750, 840892,
 920229, 920599
 Baja California S
 breakup, rotation, 630954
 fragment, 630954
 California, offshore, 630960
 Line Islands, tectonics, 330739
 Mexico, magmatic episodes, 660728
 Pacific Plate, 610841
 Southern California Borderland, volcanic
 rocks, 630951
 subduction, island-arc hypothesis, 630917
 tectonic setting
 Pacific Plate, 920599
 segmentation, 920599
 Farallon Ridge

- East Pacific Rise, 920595
hydrothermal sediment, 920595
Mendoza Rise, East Pacific Rise, 920595
Farallon-Pacific Ridge, 630173, 630174, 630510, 630857
California S, trench, 630857
Farasan Islands, 230678, 230813
Red Sea, geology, 230813
Faraulep Atoll, 060013
Farewell Transform Fault, 121157
Atlantic Ocean N, paleogeography, 121171
Labrador Sea S
basement, 121157
magnetic anomaly, 121166
Faroe Bank, 810919
Faroe Bank Channel. *See* Faroe Gap
Faroe Gap, 120373, 120930, 481099, 490859, 810035, 810613
Atlantic Ocean, margin, 481099
Faroe Island Plateau. *See* Rockall Rise
Faroe Islands, 260571, 370591, 38S0215, 38S0251, 380685, 380751, 391105, 480166, 481061, 641137, 810033, 810035, 810627, 810640, 810670, 810754, 810778, 810779, 810784, 810787, 810793, 810802, 810803, 810804, 810886, 810900, 810916, 810919
Atlantic Ocean, margin, 481102
Atlantic Ocean S
hiatuses, 391105
Paleogene, 720985
basalt, 810886, 810900
block, 810886
continental shelf, 800726
Goban Spur, copper, native, 800852
Iceland, 810035, 810278, 810688, 810692
hot spot, 481145
islands, 481061
lava, isotope geochemistry, 810776, 810779
lithology, Reflector, 4, 120449
middle and upper series, 810793
mineral, primary, pyroxene, 810787
mineralogy, Paleocene-Eocene, 810784
ridges, 480165, 480166, 480348, 480477, 480815, 490826, 490959, 500817
Iceland, 380025
Rockall Plateau, basalt, 810802
Rockall Plateau W, stratigraphy, 481061
Rockall Rise SW, structure, 481084
Shetland Islands, 810914
basin, 810520
escarpment, 381217, 381231
shelf, 47B0057
sill, 720985
trough, 380959, 810917
stratigraphy, sea floor spreading, 481084
structural evolution, tectonic history, 481061
tholeiite, depleted, geochemistry, 810784
trace elements, Thulean Volcanic Province, 810793
tuff, 810919
volcanism, 810913
volcanism, basaltic, 810919
age, 810919
magmatism, 810919
magnetic polarity interval, 810919
Faroe Ridge, 800833
Faroe-Iceland Ridge, 120003, 120326, 120909, 120911, 120918, 38S0445, 480165, 480166, 480169, 480208, 480215, 480348, 480477, 480483, 480613, 480616, 480815, 480816, 481099, 481101, 481102, 481107, 490005, 490036, 490459, 490826, 490859, 500817, 590123, 590552, 720027, 720033, 720074, 800808, 800813, 801031, 810032, 810033, 810037, 810484, 810517, 810525, 810614, 810692, 850749, 850962, 950562
Atlantic Ocean, margin, 481099, 481101, 481102, 481107
Atlantic Ocean NE, stable isotope, 480477, 480482, 480483
basalt, chemistry, 380742
bathymetry, 38S0445
bottom current
erosion, 490862
sedimentation, 490862
formation, 381218, 490719
Greenland Sea, 38S0246
ash, 38S0239
Eocene, 38S0246
geologic setting, 38S0193, 38S0195
glass, 38S0239
mud, terrigenous, 38S0246
Oligocene, 38S0246
ooze, nannofossil, 38S0246
Pleistocene, 38S0246
Pliocene, 38S0246
sand, glauconitic, 38S0246
Greenland-Iceland Rise, 740658
magnetic intensity, 38S0445
Mid-Atlantic Ridge, 370591
mineralogical facies comparison, lithogenous material, 810708
mineralogy, 38S0135
Miocene, Antarctica, 720986
Moroccan Basin, margin, 500817
nannoplankton, 490541
Norwegian Sea, 38S0246
ash, 38S0239
Eocene, 38S0246
geologic setting, 38S0193, 38S0195
glass, 38S0239
mud, terrigenous, 38S0246
Oligocene, 38S0246
ooze, nannofossil, 38S0246
Pleistocene, 38S0246
Pliocene, 38S0246
sand, glauconitic, 38S0246
paleoceanography, Reflector Lavender, 850962
planktonic foraminiferal biostratigraphy, 490465
Reykjanes Ridge, 380025
Rockall Rise SW, structure, 481084, 481087
stratigraphy
post-Eocene stratigraphy, 481087
sea floor spreading, 481084
subsidence, 480012, 941114
subsidence history, 490447, 490459
tectonics, 381213, 381218, 381220
basement, 381221
bathymetry, 381218
Greenland, 381220
hiatus, 381221
magnetic intensity, 381218
Norwegian Sea, 381213, 381218
spreading axis, 381219
Farquhar Islands, 250667
sea floor spreading, history, 250667
fassaite, Costa Rica Rift, basalt, 690522
Fastnet, 801189, 801202
Fastnet Basin, 800678, 801124, 801190, 801202, 801204, 801206
Goban Spur
continental margin, 801124
evolution, 801201, 801204, 801208, 801213
regional geology, regional structure, 801190
Fatjet Island, 270851
fatty acid, 070889, 070892, 070895, 070899, 070907, 720837
algal contributions, 720837
alkanoic acid, distribution, 720837
amino acid, lipid, 42B0697
Angola Basin, Cretaceous, 751011, 751014, 751016
Atlantic Ocean N, lipid, 38S0659
Atlantic Ocean S, Quaternary sediments, 720833
bacterial contributions, 720837
bacterial reworking, organic matter, 720837
bimodal distributions, 720837
Black Sea, interstitial water, 42B0650
bound acids distribution, 720837
C₁₅ dominance, 720837
C₂₆/CD > 5 ratio, 720837
carbon
bacterial origin, 720837
geochemistry, 610623
carbon, organic, 740731, 740734, 740735
alkanoic acid, 740734
Angola Basin, 740734
Atlantic Ocean SW, 740735
bimodal acid distributions, 740735
California Borderland, 740734
Middle America Trench, 740734
Cariaco Trench, organic geochemistry, 38S0632
deposition, low surface productivity, 720837
even/odd ratios, 720837
Hess Rise, Albian sediment, 620939, 620941
humic substances, sources, 440588
hydrocarbon, higher weight, 090859, 090861, 090866, 090879, 090887, 090888, 090889, 090900
hydrocarbon, extractable, organic petrology, 630819, 630824, 630828, 630833
Japan Trench, free acid distributions, 720837
kerogen, organic geochemistry, 640883, 640887, 640890, 640893, 640894, 640895, 640899
laminated/nonlaminated sediments, organic geochemistry, 640921, 640922
lipid
fatty acid, bound, 571381, 571382
fatty acid, free, 571381, 571382
geochemistry, 610627
organic geochemistry, 640883, 640887, 640890, 640893, 640894, 640895, 640899
shale, black, 410856
source, 440588
lipid, terrigenous, carbonate-rich samples, 390497
long-chain components, 720837
mud, terrigenous, organic geochemistry, 42B0749, 42B0752
mudstone, Eocene, 480936, 480938
organic geochemistry
Cabo San Lucas, 640879
Guaymas Basin, 640942, 640944
gulf mouth, 640878
lipid, 630839, 630851
molecular markers, 630844
organic matter, 720837
organic matter reworking, 720837
Pacific Ocean C, 070889, 080873, 090859
Pacific Ocean SE, 920412
pore water chemistry, anaerobic bacteria, pore-water characteristics, 960694
preliminary organic analyses, 100626
salts, 160585
pyrolysis-GCMS results, discussion, colloidal organic matter, 950663
shale
geochemistry, 430644
organic geochemistry, 42B0749, 42B0752
shale, black, Cretaceous, 480936, 480938
short-chain components, 720837
sugar, lipid, 42B0697

- terrigenous, bound fractions, 720837
 terrigenous components destruction, 720837
 Vigo Seamount, Cretaceous sediments, 47B0565
 fatty acid, bound, lipid, 571381, 571382
 fatty acid, branched
 amino acid, lipid, 42B0697
 Cariaco Trench, organic geochemistry, 38S0635
 sugar, lipid, 42B0697
 fatty acid, free
 lipid, 571381, 571382
 total concentrations, 571381
 organic geochemistry, lipid, 630838
 fatty acid, hydroxy, lipid, 571382
 fatty acid, long-chain
 Cariaco Trench, organic geochemistry, 38S0633
 hydrocarbon, extractable, organic petrology, 630828, 630833
 fatty acid, short-chain, muramic acid, microbial biomass, sediments, 42B0767
 fatty acid, unsaturated
 Cariaco Trench, organic geochemistry, 38S0635
 hydrocarbon, higher weight, 090900
 insoluble organic matter, 870894
 derivation, 870892
 freshwater algae, 870894
 kerogen, 870894
 seawater algae, 870894
 kerogen, organic geochemistry, 640887
 lipid
 fatty acid, bound, 571382
 fatty acid, free, 571382
 organic geochemistry, 640887
 organic geochemistry
 Cabo San Lucas, 640879, 640880
 gulf mouth, 640878
 fatty alcohol
 alkanol, 720837
 Atlantic Ocean S, Quaternary sediments, 720833
 bound, distribution, 720837
 C₂₂, 720837
 decomposer organisms activities, 720837
 even/odd ratios, 720837
 reworked organic matter, 720837
 fatty alcohols, Pacific Ocean SE, 920413
 faujasite
 alteration, products, 450615
 geochemistry, mineral, secondary, 450615
 fault, 460341, 511491
 accretionary wedge, 870749
 Africa E, coast, 250680
 Algeria, continental shelf, 42B1181
 Atlantic Ocean N, Paleozoic, 801108
 Atlantic Ocean NE, evolution, 411239
 Atlas Mountains, 801103, 801201
 sinistral shear, 500770
 Baja California SW, tectonics, 630958
 Barbados Ridge, 780603, 780606, 780607, 780611, 780613, 780619
 basalt
 mineralogy, 540698, 540700
 petrography, 540698, 540700
 petrology, 180938
 basement, morphology, 801164
 Bauer Basin, structure, 340157, 340159
 Biscay, Bay of N, continental margin, 481028
 Blake Basin, 760743
 California, offshore, 630960
 Cayman Trough, 151047
 Chatham Rise, seismic stratigraphy, 901327
 chemical stratigraphy
 median rift, 450672
 Mid-Atlantic Ridge, 460429
 outward-facing, 450672
 continental margin, structural evolution, 481044, 481045, 481047, 481053, 481058
 deformation, 481059
 strike-slip, 481059
 East Pacific Rise, basalt, 540695
 gas hydrate, trench slope, 670607
 general synthesis
 biostratigraphy, 280925
 lithology, 280925
 geological, geophysical setting, rifting, 42A0889
 geophysical data, trench slope, 840942
 Goban Spur
 continental margin, 801125, 801132, 801137, 801138, 801155, 801158, 801161
 evolution, 801201, 801213
 Guatemala, slope sediment, 840631
 healed fracture, 870816
 Hercynian, 47B0636
 Hess Rise, 621034, 621051, 621070
 hyaloclastite, 460346
 Iberian margin W, evolution, 47B0766, 47B0770
 interstitial water, sediment relationship, 870872
 Israel, history, 42B1202, 42B1204
 Jean Charcot Escarpment, 801189
 Labrador, 801111
 Line Islands, tectonics, 330740
 Lions, Gulf of, 42A1048
 lithology, step, 330309
 magnetic stratigraphy
 median rift, 450672
 Mid-Atlantic Ridge, 460429
 outward-facing, 450672
 Mediterranean Sea E, history, 42B1202, 42B1204
 Mesozoic evolution, Alpine sequence, 440949
 microtectonic data, 511491, 511493, 511494
 Mid-Pacific Mountains, 621081
 Moroccan Basin, margin, 500808, 500816
 Mounds, nontronite, 540384
 Nankai Trough, geologic setting, 870910
 New England Seamounts, 430857
 New Jersey Transect, 950805
 North America, 481015
 Oca, 151046
 Pacific Ocean SW, step, 210897
 petrology, 180938
 Philippine Basin, genesis, 310859
 Philippine Sea, 590511
 Red Sea, geology, 230815
 rifting, 481145
 Rio Grande Rise, Eocene sedimentation, 721007
 Rio Grande Rise N, regional setting, 250691, 250693
 Rockall Rise SW, structure, 481065
 sand, basaltic, origin, 460336
 Santos Plateau, origin, 390931, 390944
 sedimentary environments, Atlantic Ocean, 440974
 seismic stratigraphy, North Mernoo Slope, 901332
 seismostratigraphy, acoustic basement, 801120
 South Fiji Basin
 geology, 300625
 history, 300629
 southwest regional unconformities, step, 210897
 stratigraphy
 basement, 481065
 northern rifted margin, 481065
 Rockall, 481065
 structure, 310618
 thrust slab 2, displacement, 870934
 transform fault, basalt, high-alumina, 481147
 Venezuelan Basin, Beata Ridge, 040666
 volcanic deposit, Cretaceous, 901185
 fault, angular
 lithology
 marl, dolomitic, 130340
 ooze, dolomitic, 130340
 fault, antithetic, Pacific continental margin, geomorphology, 350287
 fault, bedding slip, Japan Trench, 870778
 fault block
 basement, drilling difficulties, 540594
 Biscay, Bay of N, continental margin, 481041
 chemical and magnetic units, correlation, rotation, 460428
 continental margin, structural evolution, 481042, 481050
 Falkland Plateau, 710281
 Goban Spur, continental margin, 801124
 hydrothermal deposits, origin, 540417
 Iberian margin W, evolution, 47B0766, 47B0768
 Mazagan Plateau, 790373
 Mid-Atlantic Ridge, 490817, 830518
 basement, 820028
 organic geochemistry, Proto-Gulf, 640877
 Rockall Rise SW, structure, 481065
 stratigraphy, northern rifted margin, 481065
 fault block, rotated
 regional geology, acoustic basement, 801192
 volcaniclastics, Eocene, 720957
 fault block, tilted
 Atlantic Ocean, margin, 481102
 basement, morphology, 801164
 continental margin, structural evolution, 481044, 481047, 481050
 Goban Spur
 continental margin, 801125, 801127, 801130, 801157, 801161
 half-grabens, 801169
 Iberian margin W, evolution, 47B0761
 Japan Trench, structural feature, 870825
 magnetic anomaly, basement, 820026
 Mid-Atlantic Ridge, paleocolatitude, 490817
 Philippine Basin, genesis, 310857
 Pyrenean orogeny, 801153
 half grabens, 801153
 regional geology, NW-SE-trending, 801115
 rifting, 481044, 481047, 481050
 seismostratigraphy, acoustic basement, 801120
 transparent seismic facies, 901339
 volcaniclastics, Eocene, 720957
 fault, boundary, continental margin, structural evolution, 481053
 fault, brecciated, Japan Trench, 571343
 fault, conjugate
 Japan Trench, structural feature, 870825
 Nankai Trough, faults, fractures, 870805
 fault, extensional, regional geology, regional structure, 801190
 fault, healed
 Japan Trench
 conjugate set, 870779
 deformation, 870779
 structural feature, 870825
 Nankai Trough, structural feature, 870806
 Shikoku Basin, faulting, 870802
 fault, imbricate, deformation, framework, 870937
 fault, listric
 Atlantic Ocean N, basement, 801103
 continental margin, structural evolution,

- continental margin (Cont.)
 481044, 481045, 481047, 481050, 481053
 Japan Trench, stratigraphy, 870924
 regional geology, acoustic basement, 801192
 Rockall Rise SW, structure, 481078
 stratigraphy, Paleocene interval, 481078
 fault, listric normal
 bedding orientation, 870813
 faults, fractures, 870819
 Goban Spur, 801169
 continental margin, 801124
 evolution, 801201, 801212, 801213
 Japan Trench, structural feature, 870824, 870825
 regional geology
 regional structure, 801190
 seismostratigraphy, 801193
 fault, normal
 Coral Sea E, geology, 300653, 300659
 faults, fractures, kinematic
 interpretation, 870817, 870818
 general synthesis
 biostratigraphy, 280925
 lithology, 280925
 geologic structure, 870810
 Goban Spur
 continental margin, 801125
 evolution, 801201
 Guadalupe Island, Guadalupe Arrugado, 630952
 Japan Trench, structural feature, 870825
 Pacific Ocean SW, 210897
 Eastern Marginal Basin Province, 210897
 Western Marginal Basin Province, 210898
 Red Sea, geology, 230813, 230815
 regional geology, acoustic basement, 801192
 regional seismic grid, borehole data
 extrapolation, Campanian sequence, 950775
 regional tectonics, deformation, 801155
 Rockall Rise SW, structure, 481082
 seismic section, tectonics, 870746
 seismic stratigraphy, North Mernoo Fault Zone, 901334
 Shikoku Basin, faulting, 870802
 South Tasman Basin, borderland, 291139, 291142, 291143, 291144
 southwest regional unconformities, 210897
 stratigraphy, transform boundary
 development, 481082
 vein, structure, 870821
 fault, oblique-slip, faults, fractures, 870816
 fault, offset
 faults, fractures, 870816
 Orca Basin, seismic characteristics, 960573
 fault plane, 511491
 pillow lava, 511491
 microtectonic data, 511491, 511493
 fault, reverse
 continental margin, structural evolution, 481059
 faults, fractures, kinematic
 interpretation, 870817
 Goban Spur
 continental margin, 801162
 evolution, 801210
 Japan Trench, structural feature, 870825
 Nankai Trough
 faults, fractures, 870805
 kinks, 870805
 Neogene formations, paleogeography, 42A0903, 42A0904
 wrench tectonics, 630910
 fault scarp
 geochemistry
 Guaymas Basin, 640711
 igneous rocks, 370746
 Kings Trough, 941253
 petrography, 540598
 fault, shear
 Goban Spur, evolution, 801201
 regional geology, regional structure, 801190
 regional tectonics, deformation, 801155
 fault, strike-slip
 Aruba Gap Plain, geology, 151046
 Atlantic Ocean, margins, 801111
 Atlantic Ocean SW, basin, evolution, 361009
 continental margin, structural evolution, 481059
 faults, fractures, 870816
 Goban Spur
 continental margin, 801162
 evolution, 801201, 801213
 gravity tectonics, passive margin, 500759
 Guadalupe Island, Guadalupe Arrugado, 630952
 Moroccan Basin, margin, 500808
 Pacific Ocean N, plate movement, 190900
 Pacific Ocean SW, island arcs, 300698
 Philippines, genesis, 310876
 Red Sea, geology, 230816, 230818
 fault system
 Atlantic Ocean, margins, 801111
 Atlantic Ocean N, Paleozoic, 801110
 Goban Spur
 continental margin, 801137
 evolution, 801201, 801212
 regional geology, regional structure, 801189, 801190, 801191
 fault, tensional, seismic stratigraphy, 901336
 fault, throw
 continental margin, structural evolution, 481047
 Rockall Rise SW, structure, 481065
 stratigraphy, southern rifted margin, 481065
 fault, thrust
 accretion, Middle America Trench, 660827
 deformation, framework, 870937, 870938, 870939
 low velocity layer
 generation, 870733
 velocity increase, 870734
 mud, 870916
 Nankai Trough
 accretionary prism, 870941
 accumulation rate, 870927
 seismic reflectors, 870802, 870805
 structural features, 870798, 870806
 turbidites, 870916
 Pacific Ocean EC, geologic history, 090924
 regional setting, 870798
 thrust slab, 2, 870933, 870934
 fault, transform
 Arabian Sea, plate tectonics, 230527
 California S, 641286
 continental shelf, onshore geology, 400970, 400971
 geological, geophysical setting,
 Mid-Atlantic Ridge, 450025
 grain size, formation, 920342
 Indian Ocean S, geologic history, 260922
 Indian Ocean W, Alula-Fartak Trench, 240664
 Ninetyeast Ridge, 220214
 Red Sea, geology, 230815
 regional summary
 Indian Ocean E, 220826
 Ninetyeast Ridge, 220816, 220825
 reconstruction, 220827
 Wharton Basin, 220816
 smectite, authigenic, 540316
 Tethys, Mediterranean Sea, 42A0945
 fault, transverse
 continental margin, structural evolution, 481052
 gas hydrate, 840951
 Israel, history, 42B1204
 Mediterranean Sea E, history, 42B1204
 Tel Aviv, 42B1204
 faulting, 481044, 810901
 accretionary prism, Tosa Terrace, 870953
 accretionary wedge
 accretion, 870749
 subduction, 870749
 Africa E, coast, 250681, 250682
 Al-Jadida
 continental margin, 790897, 790899, 790907, 790914, 790915, 790917
 continental slope, 790915
 Aleutian Terrace, 190571
 American Plate, 370341
³⁹Ar/⁴⁰Ar age, rock fracturing, 600744
 Aruba Gap Plain, geology, 151047
 ash, 870709
 air-fall, 780369
 Atka Basin, 190571
 Atlantic Ocean, margins, 481110, 801111
 Atlantic Ocean NE, evolution, 411239
 Atlantic Ocean S, Paleogene, 720983
 Bahama Islands, geology, 110888
 Baja California SW, tectonics, 630957, 630958
 Barbados Ridge, 780070, 780071, 780079, 780080, 780556
 basement
 chemical and magnetic stratigraphy, 450658
 stratigraphy, 450676
 bedding, chalk, 941135
 bedding orientation, 870813
 Blake Basin, Great Abaco Canyon, 440203
 Blake Spur S, Blake Spur, 440358
 California, Gulf of
 geologic and tectonic history, 641292
 Tamayo Fracture Zone, 650476
 chalk, 941135
 continental margin, 840912, 840913
 Africa NW, 790915
 continental shelf, onshore geology, 400965
 continental slope, Guatemala, 840900, 840906, 840908
 Coral Sea E, geology, 300649, 300650, 300657, 300659
 crust, 820527
 crust, oceanic, 690702
 deep-sea trench, sedimentary facies, 670609
 deformation
 dewatering, 870841
 framework, 870939
 deposition
 carbonate, 790885, 790888
 Portugal, 47B0384
 diapirism, Voring Plateau, 380781
 Eocene, Rio Grande Rise, 720511, 720515
 faults, fractures
 fault, listric normal, 870819
 kinematic interpretation, 870818
 sand-filled fracture, 870819
 Feni Ridge, 941134, 941135
 formation, accumulation, 700228
 gabbro
 mineralogy, 600591
 petrography, 600591
 phase chemistry, 370844
 Galicia Bank, tectonics, 47B0666
 Ganges Fan, history, 220410
 gas, molecular, isotopic analysis, 960781
 geological, geophysical setting, North
 Pond, 450032
 geophysical data, bench, 840942
 Goban Spur
 continental margin, 801125, 801128, 801138, 801161, 801162

- Goban Spur (Cont.)
 evolution, 801200
 gravity, 47B0384
 Great Abaco Fracture Zone, 760743
 Guatemala, continental slope, 840900,
 840906, 840908, 840912
 Iberian margin W, evolution, 47B0768
 igneous rocks, geochemistry, 370672, 370678
 Indian Ocean W
 regional aspects, 250755
 tropical, 240641
 intrusion, sill, 641175
 Isle of Wight, 941135
 chalk, 941135
 Israel, history, 42B1199, 42B1202, 42B1218
 Japan Trench, 870749, 870777, 870778,
 870780, 870810, 870813, 870818, 870824,
 870825
 listric, 870813, 870819, 870825
 structural feature, 870809, 870825
 Jurassic sedimentation, facies evolution,
 790445
 Jurassic-Cretaceous, carbonate, 790879
 Kings Trough, 941132, 941135, 941246,
 941252, 941253, 941257, 941260
 Lesser Antilles, 780006, 780049, 780050,
 780566, 780573
 forearc complex, 780535, 780537, 780542
 listric, 481045
 lithology, 100316, 280222, 350161
 sedimentary structure, 47A0030
 Little Bahama Bank, 760743
 Mazagan Escarpment, 790373, 790914
 Mazagan Plateau, 790888, 790897
 Mediterranean Sea E, history, 42B1199,
 42B1202, 42B1218
 Mendocino Fracture Zone, 621034
 Mendoza Rise, East Pacific Rise, 920595
 Mid-Atlantic Ridge, crust, 450658
 Middle America Trench, 840820, 840846,
 840900, 840906, 840912
 extensional, 840955
 Moroccan Basin, margin, 500808
 Morocco, continental margin, 790895,
 790897, 790917
 Nankai Trough, 870728, 870733, 870769,
 870780
 sediment, 870827
 seismic reflectors, 870802
 Natal Basin, sand, 250727
 Necker Ridge, 200678
 New Jersey, upper continental rise, 950682
 Nicoya Peninsula, 840845, 840846
 Norwegian Sea, Greenland Sea, 38S0270
 organic geochemistry, Baja California,
 640940
 Pacific continental margin, geomorphology,
 350281, 350287
 Pacific Ocean C, paleoceanography, 850948
 Pacific Ocean SW
 Cenozoic, 300679
 island arcs, 300691
 Western Marginal Basin Province, 210900
 paleomagnetic results, 870780
 Palmer Ridge, 941260
 peridotite, phase chemistry, 370844
 Pigmy Basin, diapirism, 960563
 pore fluid pressure, 840767
 red beds, turbidites, 38S0270
 Red Sea, geology, 230813, 230816
 reflector, 481045
 regional geology, regional structure, 801190
 regional problems, acoustic stratigraphy,
 061304
 regional seismic grid, borehole data
 extrapolation
 chalk, siliceous nannofossil, 950796
 pre-Campanian depositional history, 950774
 regional tectonics
 deformation, 801155
 orogeny, 801153
 uplifting, 720959
 Rio Grande Rise, 720511, 720515
 subsidence, 720963, 720971
 Rockall Rise SW, structure, 481065, 481078,
 481082, 481086
 sedimentary structure, microfaulting, 960521
 sedimentation, tectonics, 47B0666
 sediments, 941135
 Barbados Ridge, 780556
 seismic stratigraphy
 Blake Basin, 440530
 North Mernoo Fault Zone, 901335
 North Mernoo Slope, 901332
 Shikoku Basin, fissility, 870799, 870802
 Somali Basin, sand, 250727
 South Fiji Basin, geology, 300625, 300628,
 300629
 Southeast Pacific Basin, sediment
 distribution, 350218
 stratigraphy, 460428, 460429
 basement, 481065
 magnetic units, 460428
 Paleocene-pre-Oligocene interval, 481078
 postrift subsidence, 481086
 Rockall, 481065
 sea floor spreading, 481082
 tectonic history
 canyon, 840956
 Oligocene, 840956
 vein structure, 870824
 volcanoclastics, Eocene, 720957
 volcanism
 Eocene-Oligocene, 901183, 901184
 Madagascar, 250532
 faulting, active
 accretionary prism, 870953
 Baja California SW, tectonics, 630957
 faulting, antithetic
 seismic stratigraphy, 901336
 North Mernoo Fault Zone, 901336
 faulting, block
 Africa E, coast, 250681
 Atlantic Ocean N, Mediterranean Sea, 110813
 Bahama Islands, geology, 110877
 Bauer Basin, structure, 340159
 Bermuda Rise, basalt, 511360
 Biscay, Bay of N, continental margin, 481028
 Campeche Bank, biostratigraphy, 100685
 Iberian margin W, evolution, 47B0764,
 47B0766
 Jurassic sedimentation, facies evolution,
 790444
 Mexico, Gulf of, regional aspects, 010634
 mineralogy, 350309
 Pacific Ocean NE, regional aspects, 050636
 Red Sea, geology, 230813, 230817, 230818
 Rockall Rise SW, structure, 481065
 stratigraphy, Rockall, 481065
 faulting, en echelon, reconstruction, 220827
 faulting, normal
 Africa E, coast, 250680
 basalt, interlayered sediment, 490428
 Beata Ridge, Tertiary, 040668
 Iberian margin NW, tectonics and
 sedimentation, 47B0666
 Japan Trench, 870920
 Red Sea, geology, 230817
 seismic stratigraphy, North Mernoo Slope,
 901332
 Shikoku Basin, vein, 870802
 Tasman Basin S, borderland, 291142
 tectonic history, 840956
 Tethys, Mediterranean Sea, 42A0945
 vein, structure, 870824
 faulting, reverse
 currents, Miocene, 901234
 Iberian margin NW, tectonics and
 sedimentation, 47B0671
 Japan Trench, 870920
 New Zealand, tectonics, 901234
 wrench tectonics, 630910
 faulting, step, East Pacific Rise, 540024
 faulting, strike-slip, 360889, 47B0757
 geological, geophysical setting, rifting,
 42A0889
 Pacific Ocean SW, island arcs, 300703
 Red Sea, geology, 230817
 regional tectonics, deformation, 801155
 tectonic history, 840956
 faulting, syn-sedimentary
 seismostratigraphy, 801118, 801193
 structure, 801189
 faulting, tensional
 seismic stratigraphy
 North Mernoo Fault Zone, 901335
 rise crest seismic stratigraphy, 901332
 faulting, thrust, Middle America Trench,
 accretion, 660827
 faulting, transcurent
 California, Gulf of, sedimentation rate,
 650476
 Coral Sea E, geology, 300649
 Indian Ocean W, regional aspects, 250753
 Rockall Rise SW, structure, 481078, 481082
 stratigraphy
 Paleocene interval, 481078
 transform boundary development, 481082
 tectonic history, 840956
 faulting, transform
 California, Gulf of, geologic and tectonic
 history, 641285
 subduction, 630917
 transition, 630917
 fayalite
 basalt, Fe-Ti oxide, 550649
 Bauer Basin, basalt, 340227
 boninite, mineralogy, 600794
 mineral, primary
 iron-titanium oxide, 810787
 olivine, 810784
 Nazca Plate, basalt, 340227
 seawater, interaction, 830236
 Fe
 abyssal plain, inorganic geochemistry,
 801074
 Atlantic Ocean, crust, continental, 801055
 basalt, 820520
 Costa Rica Rift Zone, 830147
 enrichment, 820472
 Mid-Atlantic Ridge, 820427, 820446
 midocean ridge, 820401, 820450
 sill-pillow complex, 610675
 Brazil Basin, geochemistry, 720421
 carbonate, Tethys, 801055
 Cocos Plate, geochemistry, 660683
 continental margin, inorganic geochemistry,
 801073
 Costa Rica Rift Zone, basalt, 830222,
 830223, 830228, 830230, 830236, 830249,
 830252, 830257, 830258, 830261, 830307,
 830308
 geochemical component grouping, 801077
 geochemistry, 660683, 720429, 720438, 720829
 Cr, 720430
 Ti, 720430
 Goban Spur, geochemistry, 801033
 iron, 801069, 801070

- iron (Cont.)
 carbonate, 801070
 enrichment, 801070
 sea floor spreading, 801070
 manganese, carbonate, 801063
 Middle America Trench, sedimentation history, 670525
 mineral, chemical composition, 660713
 mineralogy
 hornblende, 660723
 Pendragon Escarpment, 801021
 plagioclase, 800942
 Mossbauer spectroscopy study, glauconite, 950643
 trace elements, 660731
 carbonate, 801070
 Cretaceous/Tertiary boundary, 720403
 Goban Spur, 800943
see also iron
- Fe, authigenic
 Japan Trench, sediments, 271220
 preliminary organic analyses, 42B0726
- Fe, beidellite
 authigenic minerals, alteration, 600463
 Cretaceous/Tertiary boundary, paleoenvironmental history, 740690
- Fe, calcite, Honshu NE, diagenesis, 561125
- Fe, ferric, basalt, mineral, secondary, 340408, 340417, 340418
- Fe, ferrous, basalt, mineral, secondary, 340426
- Fe, hydrothermal, hydrothermal accumulation, change, 920612
- Fe hydroxide
 Assemblage IIIB(-), 710396
 Ba/Zr ratio, distribution, 710402
- basalt
 alteration, low-temperature, 511305, 511309
 mineral assemblage, 511223
 mineral, opaque, 511436
 dolerite, colloform structure, 630713
 East Pacific Rise, carbonate-free material, 920373
 geochemical history, sedimentation, 710405, 710436, 710437
 geochemistry
 Cenozoic sediments, 42B0573, 42B0604
 invasion, 810715
 mineralogy, special features, 060831
 heavy metals, Cenozoic sediments, 450351
 Hess Rise, post-Jurassic sedimentation, 620825
 Hess Rise N, post-Jurassic, 620806, 620807, 620810, 620813, 620815, 620817
 isotopic study, interstitial water, 590636, 590637
 Japan Trench, sediments, 271223
 major element, enrichment, 920369
 Mariana Islands, fore arc, 600652, 600653
 Mellish Seamount, post-Jurassic sedimentation, 620835
 mineral, heavy, Arabian Sea, 230497
 mineralogy, mineral, secondary, 600718
 Pacific Ocean NW, geochemical history, 620800
 Pacific Ocean SE
 precipitation, 920551
 rare earth elements, 920554
 Patton Escarpment, alteration, 630713
 Pb/Zr ratio, geochemical significance, 710403
 plant organic matter, 380817
 polymict breccia, clast, 600648
 rare earth elements, tuff, 590655
 Rockall Plateau, concretion, fossil
 polymetallic, 810706
 sediment accumulation, 710402
 strontium, 710402
 zirconium, geochemical significance, 710402
- Fe, montmorillonite
 Guatemala, trench, 670525
 hydrothermal alteration, sediments, 650419
 Mellish Seamount, post-Jurassic sedimentation, 620840, 620843
 sapropel, Cretaceous, 620898
- Fe oxide
 alteration
 products, 450615
 remnant arc debris, 590739
 alteration minerals, trace elements, 920495
 altered rocks, 590735
 B, trace elements, 920491
 basalt
 geochemistry, 350332
 K/Ar age, 390551
 mineral, secondary, 511245
 mineralogy, 411104
 petrology, 350332, 390551, 540751
 basalt, altered
 geochemistry, 580793, 580798
 petrochemistry, 580793, 580798
 base metals relationship, 540323
 basement, calcite, 920500
 carbonate, secondary, vein, 580906
 chemistry, chemistry, petrography, 550687
 diabase, olivine, 411104
 geochemical history
 Albian, 710406
 sedimentation, 710405
 geochemical partitioning, 650428
 geochemistry, 810715
 Cenozoic sediments, 42B0587
 Guaymas Basin, 640708
 mineral, secondary, 450615
 hydrothermal deposits, origin, 540416
 isotopic study, interstitial water, 590636, 590637
 Jingu Seamount, volcanics, 550687
 Li, trace elements, 920491
 lithology, 660683
 mineral, secondary, elemental composition, 920511
 olivine, diabase, 411104
 Pacific Ocean NW, geochemical history, 620801
 sediment chemistry, trace elements, 350451
⁸⁶Sr/⁸⁷Sr ratio, 920500
 sulfur, distribution, 42B0625
 Walvis Ridge, transect, 740654
 X-ray diffraction analysis result, 920492
- Fe oxide, hydrated
 basalt, mineralogy, 370825, 370827
 chemistry, 370825, 370827
- Fe oxide, hydrous, Pacific Ocean NW, geochemical history, 620789
- Fe oxyhydroxide, 860657
 B, trace elements, 920491
 Bauer Basin, sediment, 850793
 carbon, organic, geochemistry, 750827
 Li, trace elements, 920491
 major element, enrichment, 920369
 metalliferous sediment, Eocene-Oligocene, 850799
 mineralogy, 540343
 silica, biogenic, 850795
 oxygen isotope, Pacific Ocean SE, 920559
 Pacific Ocean NW, 860657
 Pacific Ocean SE
 mud, 920558
 precipitation, 920556
 rare earth elements
 phosphatic phase, 920403
 rare earth elements, heavy, 920404
 sediments, 860657, 860658
- Fe sulfide
 Costa Rica Rift Zone, basalt, 830258
 crust, oceanic, Costa Rica Rift Zone, 830195
 deposition, models, 750837
 geochemical history, sedimentation, 710405
 mineral composition, 38S0031, 38S0044
 mineral distribution, 38S0032
- Fe, total, 540738
 alteration, low-temperature, basalt, 490710, 490713
 basalt
 mineralogy, 370825
 petrology, 590677
 basalt, altered
 major element, 580875
 trace elements, 580875
 chemistry, 550685
 glass, palagonite, 370825
 Emperor Seamounts, petrology, 550573
 geochemistry, mineral, secondary, 450615
 Japan Trench, sediments, 271220
 Jingu Seamount, volcanics, 550685
 major element, argillaceous sediments, 580724
 preliminary organic analyses, 42B0726
 Fe-Al smectite, Cretaceous/Tertiary boundary, paleoenvironmental history, 740689
- Fe-basalt
 origin, 660708
 Pacific Ocean E, basalt floor, 660707
- Fe-beidellite
 East Pacific Rise, sediments, 650381
 geochemistry, 540372
- Fe-calcite
 diagenesis, slope sediments, 840574, 840576
 Honshu NE, diagenesis, 561125
- Fe-Mg
 basalt
 geochemistry, 590765, 590774
 glass, 370732
 midocean ridge, 820401
 mineral chemistry, 550631
 basement, petrology, 370698
 Bermuda Rise, crystallization, 511043
 East Pacific Rise, sediments, 650380, 650382
 geochemistry, 370698
 interelement correlations, 810713
 melting, tholeiite, olivine, 450516
 normative mineralogy, differentiation, 370732
- Fe-mica, hydrothermal deposits, Galapagos Spreading center, 700244
- Fe-Mn
 Brazil Basin, geochemistry, 720422
 iron, 801069
 trace elements, carbonate, 801071
- Fe-Mn hydroxide
 Galapagos Fracture Zone, East Pacific Rise, 540405
 hydrothermal deposits, origin, 540416
 mineral, secondary, elemental composition, 920510
 sediment geochemistry, nondepositional environment, 550461
- Fe-Mn nodules, Antarctica, oceans, 280795
- Fe-Mn oxide, 460305, 730673
 alteration, mineralogy, 460305
 alteration, low-temperature, mineral, secondary, 460305
 Atlantic continental margin, interstitial water chemistry, 160573
 basalt, mineralogy, 460305
 deposition

- deposition (Cont.)
 chalk, nannofossil, 250496
 ooze, nannofossil, 250496
 Galapagos Fracture Zone, hydrothermal activity, 540407
 Galapagos Spreading center
 basalt, 540737
 hydrothermal deposits, 540340
 Hess Rise N, sedimentary sequences, 620766, 620767
 Japan Trench, sediments, 571255
 Mid-Atlantic Ridge, basalt, 460305
 mineralogy, 550857
 Mounds Hydrothermal Field, chemistry, 540408
 Pacific Ocean E, sediments, 540322
 pelagic components, distribution, Indian Ocean WC, 250490
 petrology, 540744
 spreading center, ore minerals, 540789
 Fe-Mn oxyhydroxide
 geochemistry, Guaymas Basin, 640708
 Hess Rise N, sedimentary sequences, 620760
 mineralogy, 540343
 rare earth elements, colloidal particles, 920402
 Fe-Mn/Al-Ti ratio, Japan Trench, sediments, 271220
 Fe-montmorillonite, 560979
 authigenic origin, 560987
 basalt, oceanic, Melanesian Basin, 610653
 California, Gulf of, gulf mouth, 650400, 650406
 chemistry, 650416
 clay minerals, 560979
 authigenic origin, 560987
 distribution, 560984
 distribution, 560984
 East Pacific Rise, 540307, 540308
 glass, basalt, 540314
 hydrothermal alteration, sediments, 650420
 Japan Trench, clay minerals, 560979, 560984, 560987
 Lofoten Islands, 38S0070
 Oligocene-Miocene, 38S0071
 mineralogy, 650416, 850782
 Pacific Ocean NE, 850795
 nodule formation, 540314
 Norwegian Basin, 38S0070
 Oligocene-Miocene, 38S0071
 Pacific Ocean NE, 540307
 Pacific Ocean SE, mineralogy, 920393
 Red Sea, Atlantis II Deep, 540315
 Fe-montmorillonite, authigenic
 Atlantic Ocean, 540307
 Guatemala, trench, 670523, 670524
 Fe-Nb, minor element, geochemistry, 360937
 Fe-Ti oxide
 basalt
 Costa Rica Rift Zone, 830171, 830173, 830175, 860168
 mineral chemistry, 550608, 550615, 550622, 550623, 550631, 550632, 550635
 mineralogy, 540698, 550639, 550640, 550641, 550643, 550644, 550645, 550649, 550651, 550652
 petrography, 540698
 petrology, 540751
 basalt, aphyric, composition, 830132
 basement, chemistry, 600622
 Bauer Basin, basalt, 340227
 Bermuda Rise, crystallization, 511041, 511042, 511046
 clinopyroxene, crystallization, 540663
 dolerite, precipitation, 540663
 Emperor Seamounts, mineralogy, 550639
 Hess Rise N, sedimentary sequences, 620763
 igneous rocks, geochemistry, 370664
 Mariana Islands, fore arc, 600619, 600653
 Mariana Trench, 600619
 mineralogy
 mineral, secondary, 600712
 primary mineralogy, 600710, 600717
 primary textures, 600710, 600717
 Nazca Plate, basalt, 340227
 polymict breccia, clast, 600648
 rare earth elements, geochemistry, 600737, 600739, 600740
 Fe/Al ratio
 Angola Basin, geologic evolution, 750513
 Bermuda Rise, geochemistry, 511516, 511517, 511520
 hydrothermal sediment, composition, 920606
 inorganic geochemistry, Angola Basin, 750931
 inorganic geochemistry, 430680
 Angola Basin, 752934
 interstitial water, geochemistry, Guaymas Basin, 640687, 640689
 Japan Trench, sediments, 271220, 271221, 271229, 271230
 metalliferous sediment, Bauer Basin, 340786
 Pacific Ocean E
 modified sediments, 540329, 540332, 540335
 oxide accumulations, 540337
 Pacific Ocean NE, metal-rich basal sediments, 630669
 Pacific Ocean SE, 920558
 rare earth elements, trace elements, 590666
 sediment, 920363, 920364
 basal metalliferous sediment, 920363
 decrease, 920364
 iron, 920363, 920364
 sediment chemistry, 350433, 350437
 sediment geochemistry
 ooze, siliceous calcareous, 550459
 shallow-water bethogenic detrital sediments, 550460
 Fe/(Mg + Fe) ratio
 basalt, petrology, 580849
 Melanesian Basin, ash, 610635, 610639
 Fe/Mg ratio
 ash, glass, volcanic, 870684
 basalt
 geochemistry, 490626
 minor element, 490681
 petrology, 580854, 580862
 basalt, altered
 geochemistry, 540687, 580810, 580816, 580824, 580830, 580835
 major element, 580891
 petrology, 540687
 trace elements, 580891
 basalt, oceanic
 chemistry, 610640
 petrochemistry, 610641
 basement, petrology, 370698
 Falkland Plateau, basement, 360897, 360905
 gabbro, phase chemistry, 370843
 geochemistry, 340218, 340220, 370698, 540757
 igneous rocks, 370747
 glass, volcanic, magma, 600495
 Mariana Trough
 glass, 600488
 Mariana Trough W, 600487
 Mid-Atlantic Ridge, basalt, 460305
 mineral chemistry, pyroxene, 920440
 mineralization, secondary, mineralogy, 540810
 mineralogy, clinopyroxene, 540761
 Pacific Ocean SE, basalt, 340218, 340220
 peridotite, phase chemistry, 370843
 petrogenesis, modeling, 920441
 sediment chemistry, basalt, 350437
 tholeiite
 geochemistry, 590681, 590687
 petrology, 590681, 590687
 Fe/Mn ratio, 540324
 Antarctica, geochemistry, 350404, 350405, 350406
 Black Sea, sediments, 42B0382, 42B0389
 Caribbean Sea, sediments, 150936
 Galapagos Spreading center, basal sediments, origin, 540382
 geochemistry, principal component, 810709
 hydrothermal precipitate, manganese, 920375
 hydrothermal sediment, composition, 920606
 iron, 920375
 Japan Trench, sediments, 271229
 metalliferous sediment, Eocene-Oligocene, 850799
 Pacific Ocean E, sediments, 540321
 reversal, 540325
 Rockall Plateau, concretion, fossil polymetallic, 810703
 sediment, 920366
 basal sediment "hydrothermal" ratio, 920366
 diagenesis, 920366
 East Pacific Rise, 920366
 Fe-rich precipitate, derivation, 920366
 hydrothermal activity, 920366
 hydrothermal deposits, 920368
 hydrothermal plume, 920366
 hydrothermal precipitate, 920366
 manganese, 920366
 oxyhydroxide, iron-rich, 920368
 rise crest distance, 920366
 Fe/P ratio
 sediment, 920364, 920366
 calcite, 920364
 end members, mixing, 920364
 high-P end member, 920364
 high-P, high-Fe end member, 920364
 hydrothermal activity, 920366
 hydrothermal precipitate, 920364
 iron oxyhydroxide, 920364
 low-P, high-Fe end member, 920364
 metalliferous sediment, 920364
 Pacific Ocean, 920366
 phosphatic fish debris increase, 920366
 phosphorus, 920364
 Fe/S ratio
 sediment geochemistry
 ooze, siliceous calcareous, 550459
 shallow-water bethogenic detrital sediments, 550460
 Fe/Si ratio
 factor analysis, sediment
 clay, Fe-rich, 920368
 distal factor, 920368
 hydrothermal deposits, origin, 540418, 540419
 Fe/Ti ratio
 basalt
 Fe-Ti oxide, 550644
 oxidation, 920481
 Bermuda Rise, basalt, 511399
 claystone, basalt, 550707
 electron microprobe analyses, 920484
 Hess Rise N, sedimentary sequences, 620763
 inorganic chemistry, 440578
 titanium, 430680
 Japan Trench, sediments, 271221, 271229, 271230
 magnetic oxides, petrology, 511420
 sediment geochemistry, 550460
 thermomagnetic analysis, oxidation, 920486
 feldspar, 580669, 580671, 580672, 580684,

- 580686, 600705, 670561, 670562, 810637, 830335, 860552
 190633, 340615, 41S0947, 560941, 560944, 560946, 560949, 560950, 560954, 560981
 Africa, continental margin NW, 410970
 Al vs Ti, 600706
 Al₂, 600706
 albitized, 670563
 alteration, basalt, 370563
 alteration, low-temperature, mineralogy, 511187
 andesine, 600705
 Angola Basin
 biostratigraphy, 750450
 clay mineralogy, 750847
 anorthoclase, 600705
 Antarctica
 geochemistry, 350403
 glaciation, 291040, 291041, 291042
 ash, 020417
 Central America, 670482
 geochemistry, 660691
 ash flow, Walvis Ridge, 390526, 390528
 Atlantic continental margin, mineralogy, 050442, 100755, 100784, 110755, 110783, 110784
 Atlantic Ocean
 Cenozoic sediments, 140807, 140809
 Cretaceous sediment, 140807, 140809
 geochemistry, 47B0432, 47B0434, 47B0435
 mineralogy, 47B0432, 47B0434, 47B0435
 Atlantic Ocean C, Walvis Seamount, 391127
 Atlantic Ocean N
 clay, 481094
 Mediterranean Sea, 110811
 mineralogy, 020330
 Atlantic Ocean NC, Mesozoic sequences, 411002, 411006, 411007
 Atlantic Ocean NW
 lithology, 110916, 110924
 microfacies, 440489
 sedimentary evolution, 430811, 430815
 Atlantic Ocean S
 history, 740726
 mineralogy, 030509, 030510, 040325
 Walvis Seamount, 391127
 Atlantic Ocean SE
 Cretaceous, 740775
 paleoenvironmental evolution, 740665, 740666, 740670, 740672, 740673
 Atlantic Ocean W, mineralogy, 040325
 augite, 600705
 augite, tholeiitic, 600705
 Azores, mantle, 370593
 Balearic Plain
 halite, 130709
 mineralogy, 130679
 barite, authigenic, origin, 410923
 Barremian-Albian sediment, 800911
 basalt, 240784, 330649
 active margin, 670561
 alteration, 511187, 920512
³⁹Ar/⁴⁰Ar age, 340439
 Barbados Ridge, 780394, 780396
 basement, 240767
 Costa Rica Rift Zone, 830145, 830155
 crystallization, 920466
 geochemistry, 260569
 Hess Rise, 620967
 K/Ar age, 160651, 340439
 mineral chemistry, 550608, 550615, 550618, 550622, 550632, 550633
 mineralogy, 291104, 340264
 minor element, 490664
 petrography, 260470, 260471
 petrology, 260485, 340199, 390518, 390522, 450464, 580853, 580860
 phase chemistry, 340199
 Santos Plateau, 390518
 basalt, altered
 crystal morphology change, 600702
 geochemistry, 580814
 basement, basalt, 190622, 260485, 390518
 Bermuda Rise
 crystallization, 511041, 511046
 Magnetic Anomaly MO, 511130
 mineral, secondary, 511258
 oxygen, 511180
 Black Sea
 mineral, terrigenous, 42B0655
 sediments, 42B0375, 42B0376, 42B0378, 42B0383, 42B0386, 42B0389
 Blake Basin, 760769, 760770, 760772
 Brazil Basin, Recent-Eocene sedimentation, 721001
 bronzite, 600706
 calcic/alkaline ratio, 561008
 California, continental margin, 630758
 California, Gulf of
 basalt, 650643
 gulf mouth, 650363, 650399, 650406, 650409, 650410
 sediment distribution, 650471
 Cape Verde Basin, volcanic origin, 020414
 carbonate, diagenesis, 320522
 carbonate, diagenetic, isotopic survey, 630597
 Caribbean Sea
 sediments, 150939
 volcanic activity, 150969
 Caroline Abyssal Plain, chalk, 200067
 Cenozoic sediments
 lithology, mineralogy, geochemistry, 450326
 mineral composition, 42B0413
 chemical and mineral composition, mineralogy, 070965, 350465
 chemistry, 650418
 chemistry, petrography, 550687
 chert
 chalk, 300435
 geochemistry, 620715, 620730
 limestone, 300435
 petrology, 620715, 620730
 clay, 300432, 300434, 47A0579, 960579
 bulk mineralogy, 860552
 mineralogy, 860552
¹⁶O/¹⁸O ratio, 350489
 stratigraphy, 870639
 trace elements, 170513
 clay, authigenic
 Mariana Islands, 600471
 plagioclase, 600470
 clay, black, geochemistry, 430639
 clay mineralogy, 750865, 960738
 stratigraphic evolution, 750863
 clay minerals, 560981, 860572
 Cretaceous and Cenozoic, 480705, 480707, 480711, 480716
 distribution, 560983, 560984
 hydrothermal mounds, 700225, 700228
 Japan Trench, 870635
 mineralogy, 140728
 Nankai Trough, 870634
 Pacific Ocean NW, 200336, 200339, 200340
 terrigenous origin, 560987
 clay, red, Miocene, 730519
 clay, siliceous, 271005
 kaolinite, 271006
 claystone, basalt, 550707
 claystone, siliceous, 271005
 kaolinite, 271006
 clinoptilolite, Atlantic Ocean NW, 430464, 430470
 clinopyroxene, 600705
 Cocos Plate
 basalt, 660704
 sediments, 670608
 composition, volcanic flow rock, 620967
 conglomerate, clast, gravel, 300431
 continental margin sediments, petrology, 280736
 Costa Rica, continental margin, 840923
 Costa Rica Rift, chalk, 690397, 690399
 Costa Rica Rift Zone, 830221
 Cretaceous/Tertiary boundary, paleoenvironmental history, 740687, 740688
 crust, oceanic, aging, 511567
 crystallization
 Brazil Basin, 390518
 crystals, 210524
 Santos Plateau, 390518
 crystals, 210524, 210535
 Daito Basin, 580686
 Daito Ridge, 580684
 deep-sea trench, sedimentary facies, 670609
 deposition
 current, 280728
 origin, 600448, 600449
 detrital minerals, 220731
 Neogene sediments, site, 218, 220733
 Paleocene sediments, 220733
 detrital sediment, origin, 670512
 diabase, trace elements, 240784
 diagenesis, sediments, 750857
 distribution, 560983, 560984
 dolomite, isotope geochemistry, 42A0542
 dolosparite, petrography, 800901
 East Pacific Rise, sediments, 650380
 Eastern Gulf Province, sand, 960534
 Emperor Seamounts
 mineralogy, 550464, 550473
 petrology, 550511, 550516, 550522
 environment, sapropel, 42A0457
 evaporites, Miocene, 131238
 Falkland Plateau, basement, 360893, 360895
 Falkland Plateau E, sedimentation, 360880
 feldspar, alkali, 600705
 feldspathic sediment, mineral composition, 200360
 formation, 760401
 fossils, minerals, rare and unusual, 340615
 gabbro, phase chemistry, 370841
 gas hydrate, trench slope, 670605
 Geisha Guyots, 200682, 200683
 geochemical history, sedimentation, 710405
 geochemistry, 650535, 650536
 Cenozoic sediments, 42B0559, 42B0573, 42B0587, 42B0597, 42B0602
 clinopyroxene, 650535
 igneous rocks, 370740
 plagioclase, 650535
 glaciation, detritus, 360857
 glass, sulfide, 511070
 glass, volcanic, petrology, 870711
 glauconite, mineralogy, 250429
 Goban Spur, evolution, 801209
 granodiorite, Mazagan Escarpment, 790543, 790547
 Greenland Sea, basalt, 38S0241
 Guatemala
 offshore sediment, 840620
 trench, 670515, 670518, 670520, 670522
 Guaymas Basin, metamorphism, 641129
 Hellenic Trough, mineralogy, 130669, 130686
 Hess Rise
 basalt, 620967

- Hess Rise (Cont.)
composition, 620967
volcanic flow, 620967
- Hess Rise N
post-Jurassic, 620817
sedimentary sequences, 620759, 620763
- Horizon Tablemount, 200668
hydrothermal activity, petrology, 641129
hydrothermal alteration, sediments, 650420
igneous rocks, 580659
- Indian Ocean C, noncarbonate sediment, 220492
- Indian Ocean E, lithology, 271010
- Indian Ocean NE
Cretaceous, 220731, 220743, 220745
volcanic sediment, 220745
- Indian Ocean NW
grain size, 250417, 250418, 250422, 250423
volcanic components, 241060
- Indian Ocean W
clay minerals, 241056
geochemistry, 250407, 250415
mineralogy, 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,
regional aspects, 250754
terrigenous components, 240662, 240676,
241052
terrigenous sediment, 241054
- Indus Fan, sedimentation, 230480
- interstitial water, 090845
sediment relationship, 870871
- Jan Mayen Ridge, siltstone, phosphatic, 38S0095
- Japan Trench, 560944, 560946, 560949,
560950, 560954
chalk, 200011
clay minerals, 560981, 560983, 560984,
560987
interstitial water, 870868
Miocene-Quaternary sediments, 870647
quartz, 560944
sediments, 271220
silt, 561008
- Jingu Seamount, volcanics, 550687
- ⁴⁰K/⁴⁰Ar age, Goban Spur, 800944
- K-feldspar, diagenetic, origin, 330798
- K/Ar age, 330649
- labradorite, calcic, 600705
- limestone, carbonaceous, Cretaceous, 800888
- lithologies, major
chalk, 901480
ooze, 901481
ooze, calcareous, 901480
- lithologies, minor, chalk, 901482
- lithology, 040023, 040043, 040081,
040098, 040129, 040222, 040246,
050017, 050058, 050277, 050411,
050413, 060044, 060059, 060173, 060197,
060225, 060248, 060249, 060296, 060298,
060495, 060540, 060558, 060559, 070823,
100008, 100092, 100097, 100298, 120321,
150172, 150176, 150279, 160154, 160155,
160156, 160234, 180033, 180099, 180236,
190096, 190292, 190417, 210060, 210061,
210106, 210335, 210336, 210337, 210372,
220016, 220017, 220122, 220196, 220326,
220327, 230170, 230215, 240018, 240021,
240251, 240252, 240329, 240472, 250031,
250071, 250092, 250146, 250184, 250193,
250194, 250266, 260026, 260028, 260299,
270016, 270018, 270019, 270093, 270132,
270197, 270198, 270282, 270283, 280083,
280084, 280216, 280219, 280221, 290022,
290040, 290195, 290369, 300030, 300032,
310029, 310030, 310050, 310051, 310133,
310136, 310173, 310280, 310320, 310354,
310404, 310405, 310411, 310443, 320020,
320080, 320162, 320196, 320318, 330030,
330044, 330045, 330110, 330171, 330307,
330308, 330309, 340086, 340114, 350030,
350031, 350067, 350068, 350131, 350160,
350161, 360020, 360031, 360032, 360145,
360148, 360212, 360215, 360261, 380036,
380163, 380164, 380165, 380168, 380170,
380172, 380528, 380530, 390032, 390105,
390147, 390149, 390150, 390239, 390240,
390241, 390333, 390336, 390376, 390377,
400047, 400049, 400368, 410170, 410171,
410172, 410237, 410239, 410427, 410428,
42B0034, 42B0035, 42A0036, 42B0037,
42B0124, 42B0125, 42B0130, 42B0143,
42B0144, 42A0156, 42A0226, 42A0227,
42A0231, 42A0235, 42A0236, 42A0237,
42B0294, 42B0296, 42B0298, 430038,
430040, 430041, 430043,
430044, 430159, 430160, 430161, 430163,
430165, 430201, 430204, 430205, 430208,
430210, 430211, 430212, 430330, 430333,
430335, 440030, 440031, 440032, 440342,
47A0027, 47A0030, 480176, 480177,
480178, 480179, 490025, 490026, 490027,
490102, 490104, 490163, 490233, 490237,
490343, 500129, 510042, 510360, 510361,
721021, 800940
- ash, 140054
basalt, 140054, 140140
chert nodule, 300239, 300241
clay, 110353, 120261, 140054, 140139,
140183, 300134, 300137, 300140, 960478
clay, green, 300140
clay, nannofossil, 120766
clay, zeolitic, 140185, 140220, 170264
diatomite, 180034
evaporites, 130425
limestone, 120053
limestone, radiolarian, 300239, 300241
- Line Islands, 080623
- marl, dolomitic, 130487
- marl, pyritic, 130487
- Mesozoic deposits, 47B0051, 47B0054
- mud, 960478
- muststone, 120259
- needle-like, 210021
- Oligocene to Miocene pelagic sediments, 120168
- ooze, chalk, 120048
- ooze, diatomaceous, 140164
- ooze, nannofossil, 130338, 140054,
180034, 490319
- ooze, nannofossil foraminiferal, 300233
- oozes, 120683
- plagioclase, 040098, 100121, 240395,
250145, 330030, 330169
- Pleistocene, 110317
- Pliocene sediment, 120168
- Quaternary-Neogene, 110056
- sand, 190221
- sand, arkosic, 140185
- sand, subarkosic, 140224
- sand, turbidite, 130064 sandstone, 130064
sandstone, quartzose, 140164 sandstone,
volcanic, 120366
- sapropel, 130338
- sedimentation, 350032
- shale, 130486
- silt, 120047, 130486, 140183, 190221,
300134, 300137
- silt, dolomitic, 140140
- silt-size, 060059
- turbidites, 120683
- Lord Howe Rise
pale green laminae, 901145
rhyolite, 210524, 210535
- lueneburgite, Miocene sediments, 42A0662
- Madagascar Basin, volcanic sediment, 250520
- Madagascar Plateau, volcanic sediment, 250524
- Magdalena Bay, sulfide chemistry, 630679
- magma, 901164
- major element, geochemistry, 42B0528,
42B0535
- Manihiki Plateau, claystone, 330883
- Marcus Island, archipelagic apron, 200053
- Mariana Islands, fore arc, 600653
- Mariana Trough, Mariana Trough W, 600487
- Mazagan Plateau, 790397
- Mediterranean Ridge, mineralogy, 130668
- Mediterranean Sea
Hellenic Trough, 130669
- Levantine Basin, 130668
- Messinian, 130673, 130680, 130681,
130682, 130686
- Meiji Guyot, K/Ar age, 550678, 550679,
550680
- Melanesian Basin
ash, 610636
basalt, 610832
- Mendoza Rise, lithology, 920438
- metagranite, Mazagan Escarpment, 790551
- Mexico, Gulf of, regional aspects, 010628
- microlite, 511187
- Mid-Pacific Mountains, 200669, 621092
- Mid-Pacific Mountains W, Aptian sediments, 620903, 620904
- Middle America Trench
ash, 660691
magma, calc-alkaline, 660699
transect, 670529, 670533, 670605, 670608,
670609
- mineral and chemical composition
bulk mineral distribution, 38S0040
mineral composition, 38S0031
- mineral chemistry
basalt, porphyritic, 450464
plagioclase, 920440
- mineral, clastic, 670515, 670518, 670519
- mineral composition, 340264, 38S0041
- bulk mineral distribution, 38S0040,
38S0041
- mineral distribution, 38S0032
- mineral, primary, 810787
- anorthite, 810787
- feldspar, interstitial, 810787
- plagioclase, 810787
- plagioclase, sodic, 810787
- mineral, secondary, 511187
- labradorite, 511187
- microlite, 511187
- phenocryst, 511187
- potassium, 511187
- mineralogic facies comparison, lithogenous
material, 810708
- mineralogy, 291104, 330541, 350309,
38S0111, 38S0118, 440510, 550857,
650391, 650395, 650418, 660725, 670562,
850781, 960578
- composition, 660725
- feldspar, alkali, 660725
- Goban Spur, 801020
- labradorite, 660725
- Mariana Trough, 600438, 600457
- mineral, 660691
- mineral, detrital, 950569
- oligoclase, 660725
- orthoclase, 660725

- mineralogy (Cont.)
 petrology, 480775
 plagioclase, 600438, 660725, 660731, 670563
 sediment, 680397, 680400
 sodic composition, 660725
 volcanics, 150969
 zoning, 660725
 minor element, geochemistry, 42B0528, 42B0535
 Mississippi Fan, sediment, 960430, 960432
 Mississippi Province, sand, 960534
 Mozambique Ridge, volcanic sediment, 250529
 mud, 870916
 mud, terrigenous
 mud, green, 250455
 mudstone, 250455
 Nankai Trough
 clay minerals, 870635
 interstitial water, 870866
 turbidites, 870916
 Natal Basin, volcanic sediment, 250526, 250528
 Neogene formations, paleogeography, 42A0910, 42A0914
 New Jersey Transect, stratigraphy, 950767, 950772
 Nile Fan, mineralogy, 130611, 130668
 Norwegian Sea
 basalt, 38S0241
 Greenland Sea, 38S0272
 nucleation rate, 830179
 oligoclase, calcic, 600705
 ooze, calcareous, 300434
 ooze, foraminiferal, 271009
 ooze, nannofossil, 271008
 ore, deposit, 540803
 origin, dolomite, ferroan, 42A0542
 Pacific Ocean C, mineralogy, 330541, 330543
 Pacific Ocean NE
 cruise synthesis, 151091
 regional aspects, 050624
 Pacific Ocean NW
 clay, 860552
 clay minerals, 860552, 860572
 Pacific Ocean SE, 920556
 basalt, 340246, 340251, 340252, 340253, 340382
 clay-sized minerals, 350481, 350484
 mineralogy, 920393
 mud, 920558
 Pacific Ocean W, volcanic rocks, 210488
 palynological residue, Guaymas Basin, 640743
 Panama Basin, sediments, 690385, 690386, 690389, 690390
 pebbles, petrography, 801040
 peridotite, phase chemistry, 370841
 periglacial terrigenous sediments, 010540
 Peter I Island, geology, 350351, 350352
 petrography
 breccia, 600583
 gabbro, amphibole, 600582
 petrology, 540794
 iron oxide, 540801
 sand, 960494, 960497, 960500
 sulfide, 540802
 phase chemistry, 340251, 340252, 340253
 intersite comparisons, 340253
 petrology, 340246
 plagioclase, 260485
 phenocryst, 210524
 andesite, 180936
 Brazil Basin, 390518
 Santos Plateau, 390519
 water influence, phenocryst compositions, 540662
 Philippine Sea
 Daito Basin, 600419
 Daito Ridge, 600419
 lithology, 061132, 061135, 061218
 Mariana Islands, 600432
 Mariana Trench, 600435
 Mariana Trough, 600431
 Philippine Sea W, 600429
 Shikoku Basin, 600415
 West Mariana Basin, 600429
 West Mariana Ridge, 600430
 phillipsite, Atlantic Ocean NW, 430464, 430470
 physical properties
 ash, 061218
 clay, 061132, 061135
 plagioclase, 050531, 600705
 ash, 050531
 plagioclase, calcic, 670563
 potash, metasomatism, 810637
 potassium, 511187, 810637
 preglacial sediments, 280760
 preliminary organic analyses, 42B0726
 quartz, 560944, 600705
 $^{16}\text{O}/^{18}\text{O}$ ratio, 350489
 Queensland Plateau, volcanic components, 210488
 rare earth elements, tuff, 590655
 red beds, 38S0272
 Red Sea
 evaporites, 230823, 230824, 230830, 230835
 sediment history, 230854, 230855
 residue, insoluble, fine-grained sediment, 670500
 Rio Grande Gap, 721020
 Rio Grande Rise, 390458, 721020
 Eocene sedimentation, 721007
 Recent-Eocene sedimentation, 721006
 sediment, 720425
 Rio Grande Rise E, carbonate, bulk, 720429
 Rockall Plateau
 concretion, fossil polymetallic, 810703, 810706
 sedimentation, 810681
 sediments, 810813
 Tertiary deposits, 810669, 810680
 volcanogenic sediments, 480775
 Ross Sea, basement, 280866
 San Jose Canyon, 840930
 sand, 060730
 Miocene, 47A0695
 Mississippi Fan, 960512
 Pacific Ocean NW, 310508, 310510, 310511, 310512
 petrology, 660523
 texture, 960578
 sand, glauconitic, 291152
 sand, turbidite, mineralogy, 050535
 sandstone
 petrology, 180915, 180919
 source, 840931
 volcanic grains, 320539, 320541
 sapropel
 Cretaceous, 620896
 sedimentology, 42A0457
 sediment, 560941, 560944, 560946, 560949, 560950, 560954
 lithology, 38S0111, 38S0118
 quartz, 560944
 sediment chemistry, upper part, 350427
 sediment composition, clay minerals, 960479
 sediment geochemistry, silt, 670605
 sediment mineralogy, silt, 670605
 sedimentary sequence, lithology, 200727
 sedimentation, 42B0607
 sedimentology
 Mexico, Gulf of, 100706
 terrigenous components, 340783
 sediments
 Atlantic Ocean NE, 941090, 941091, 941093, 941096, 941097
 Blake Basin, 760434, 760439
 Blake Ridge, 760414
 serpentinite, 370563
 Shikoku Basin, 580669, 580671, 580672
 silica, mineralogy, 140728
 silicate, 010543, 291065
 ferruginous coating, 291066
 silica, 291066
 unstable assemblages, 010543
 silt
 light fraction, 561008
 mineralogy, 960579
 Siqueiros Fracture Zone, basalt, porphyritic, 540615
 source, mineralogy, 660523
 Southeast Pacific Basin, evolution, geologic, 350736
 stable isotope, silicate, 350498
 strontium, 42B0607
 sulfide, chemistry, 630680
 sulfur, silicate, 511070
 sulfur isotope, pyrite, 340382
 tectonic
 clay, 430811
 Eocene siliceous sedimentation, 430815
 tephra
 chemistry, 901164
 petrography, 901163
 terrigenous minerals, mineralogy, 250432
 terrigenous origin, 560987
 tholeiite, 670561
 mineralogy, 340264
 phase chemistry, 260485
 Timor Trough, ooze, nannofossil, 271011
 titanium, 600706
 trachyte, Hess Rise, 620947, 620955, 621040
 tuff, Walvis Ridge, 390526, 390528
 tuff, altered, 020417
 turbidite, mineral composition, 670540
 turbidites
 Guatemala, 840925
 petrology, 300424
 sand, 250444
 Tyrrhenian Rise, mineralogy, 130681
 Valencia Trough, mineralogy, 130673
 volcanic components, 210488
 volcanic flow, Hess Rise, 620967
 volcanic rocks, ages, 550664
 volcanic sediment
 Paleocene and Eocene, 480775
 primary volcanic material, 901180
 volcanoclastics, volcanoclastic matter, 550504
 volcanoclasts, 810635
 volcanics
 age, 190622
 Pacific Ocean C, 170432, 291104
 petrology, 190622
 volcanism
 basalt, 050533
 Caribbean Sea, 150969
 mineral evolution, 600450
 Neogene, 47A0710
 volcanism, explosive, Central America, 670482
 Voring Plateau
 bulk mineral distribution (X-ray), 38S0040
 mineral composition, 38S0031
 Walvis Ridge, clay mineralogy, 750850
 X-ray mineralogy, Rockall Rise, 480666
 zoning, 600705

- feldspar, alkali
 basalt, alkali andesine, mineral composition, 180943
 basalt, altered, crystal morphology change, 540605, 600702
 Bermuda Rise, basalt, 511201
 Caribbean Sea
 sediments, 150933
 volcanic activity, 150969
 chemical and mineral composition, mineralogy, 070965
 clay minerals
 ash, 680388
 silt, 680388
 East Mariana Basin, geochemistry, 890420, 890422
 feldspar, 600705
 ferromanganese sediment
 iron-rich sediment, 190633
 volcanics, iron-rich, 190633
 Geisha Guyots, 200682
 hydrothermal deposits, origin, 540417
 igneous rocks, chemical composition, 590720
 Indian Ocean S, geologic history, 260927
 Indian Ocean W, basal metalliferous sediments, 241070
 lithology, 150022, 260026, 260027, 260028, 260237, 260238
 Lord Howe Rise, rhyolite, 210535
 major element, geochemistry, 42B0531
 Mariana Islands, fore arc, 600621
 Mariana Trench, 600621
 Mariana Trough, 600614
 Meiji Guyot, K/Ar age, 550679
 Middle America Trench, 840609
 transect, 670533
 mineral composition, basalt, alkali andesine, 180943
 mineralogy
 feldspar, 660725
 volcanics, 150969
 minor element, geochemistry, 42B0531
 Neogene formations, paleogeography, 42A0912
 Peter I Island, geology, 350352
 petrography, 660723
 pyroxene, 600705
 Sr isotope, 590720
 volcanics, mineral composition, 180943
 volcanism, Caribbean Sea, 150969
 feldspar, alkaline
 ash, geochemistry, 660691
 Middle America Trench, ash, 660691
 mineralogy, mineral, 660691
 feldspar, altered, Pacific Ocean NE, regional aspects, 050624
 feldspar, authigenic, diagenesis, Mediterranean Sea, 130725
 feldspar, calcic
 geochemistry, 650535
 igneous rocks, 370738
 Hess Rise N, sedimentary sequences, 620763
 Meiji Guyot, K/Ar age, 550681
 mineralogy, 38S0111
 sediment, lithology, 38S0111
 feldspar, interstitial
 Emperor Seamounts, petrology, 550572, 550573, 550576, 550581
 mineral, primary, feldspar, 810787
 Necker Ridge, 200678
 feldspar, plagioclase, Antarctica, glaciation, 291041, 291042
 feldspar, potassium
 Atlantic continental margin, mineralogy, 110784
 Atlantic Ocean S, mineralogy, 040325
 basement
 basalt, 190619, 190621
 gneiss, 360895
 mineral composition, 360906
 Bermuda Rise, basalt, 511202, 511206
 Black Sea, sediments, 42B0375
 California, Gulf of, gulf mouth, 650401, 650415
 Falkland Plateau, basement, 360895, 360906
 gneiss, mineral composition, 360895, 360906
 Guatemala, trench, 670515, 670518
 Indian Ocean W, geochemistry, 250406
 interstitial water, 111004
 major element, geochemistry, 42B0531
 Meiji Guyot, K/Ar age, 550681
 mineral composition, 38S0031
 gneiss, 360895, 360906
 minor element, geochemistry, 42B0531
 Shikoku Basin, basalt, 580895
 volcanics
 mineralogy, 190619, 190621
 petrology, 190619, 190621
 feldspar, quartz-alkali, basalt, sill-pillow complex, 610677
 feldspar, secondary
 sediment composition
 sand, 960479
 silt, 960479
 feldspar, secondary potassic
 lithology, 800940
 mineralogy, mineral, secondary, 800942
 feldspar, sodic
 ferromanganese sediment
 iron-rich sediment, 190634
 volcanics, iron-rich, 190634
 Mid-Pacific Mountains, 200671
 feldspar-quartz-magnetite, Mariana Islands, fore arc, 600652
 feldspar-silica-smectite, Guatemala, trench, 670524
 feldspar/quartz ratio, sand, turbidite, mineralogy, 050536
 felsite, Lord Howe Rise, rhyolite, 210524
 Feni Drift, 810683, 810862
 Feni Islands, ridges, 38S0216
 Feni Ridge, 120326, 120449, 120451, 120911, 120918, 38S0216, 490861, 941071, 941075, 941222
 Antarctic Bottom Water, 941220
 Atlantic Ocean, margin, 481100
 bathymetry, 941117
 bedding, 941076
 bottom current, 941107
 bottom water, circulation, 941061, 941065, 941067, 941069, 941165, 941220, 941240
 chalk, 941134
 chalk, nannofossil, sediments, 941093
 current effects, 941077
 current speeds, 941240
 currents, bottom water, 941061, 941065, 941069, 941077
 drift, formation, 941122
 drift, sediment, 941217
 Atlantic Ocean N, 490861
 erosion, sediments, 941107, 941125
 faulting, 941134, 941135
 ice rafting, 941107
 sediments, 941107
 magnetic fabric, 941083
 sediments, 941083
 magnetic grain alignment, 941084
 magnetic susceptibility, 941085, 941087
 magnetostratigraphy, 940642
 mineralogy, 941093
 Miocene sediments, 941093, 941134, 941227, 941229
 morphology, 941117, 941220
 Neogene sediments, 941083
 North Atlantic Deep Water, 941220
 cyclonic loop, 941065
 Norwegian Sea Deep Water
 effect on, 941062, 941071
 overflow, 941062, 941071, 941125
 Norwegian Sea Overflow Water, 941220, 941231, 941236, 941240
 pelagic sediments, 941233
 Pliocene sediment, 941093
 quartz, sediments, 941103
 Quaternary sediments, 941083, 941093
 Reflector R2, 941125, 941227, 941229
 sand, quartzose, 941103
 sediment, 941075
 sediment wave
 field, 941061, 941069, 941071, 941218, 941222, 941225, 941231, 941233, 941236, 941238
 migration, 941238
 patterns, 941077
 sedimentation, 941061, 941067, 941069, 941071, 941217
 sedimentation rate, 941120, 941123, 941125, 941229, 941233, 941236, 941240
 sediments, 941075, 941076, 941118, 941217, 941220, 941232, 941233
 accumulation, 941107
 accumulation rate, 941077
 burrows, 941134
 current effects, 941077
 deposition, 941061, 941067, 941120, 941122
 diagenesis, 941123
 erosion, 941107, 941125
 lithology, 941071, 941075, 941076, 941134, 941219, 941229, 941232
 provenance, 941103
 wave fields, 941087
 wave patterns, 941077
 seismic profiles, sediments, 941118
 seismic reflectors, 941119, 941219, 941227
 seismic stratigraphy, 941117, 941227
 seismic velocity, 941134, 941229
 slumping, 941240
 solution structures, chalk, 941134
 stratigraphy, 941075
 topology, 941220
 turbidity current, 941239
 Fennoscandia Ice Sheet, 131228
 Fergana Valley, 38S0301
 Fernando de Noronha, 390432, 390531, 390542, 620956
 trachyte, geochemistry, 620956
 Fernando Formation, 180549
 Fernao Veloso Bay, Rio Grande Rise N, regional setting, 250690
 ferric iron
 basalt
 chemistry, 920472
 petrology, 580850
 ferric oxide, hydrous
 inorganic geochemistry, sediments, rocks, Mid-Pacific Mountains W, 620688
 Pacific Ocean NW, geochemical history, 620787
 ferrimagnetic minerals, initial susceptibility, 690697
 ferrimagnetism
 basement, rock magnetic measurements, 370453
 sulfide, magnetism, 370451, 370453
 titanomagnetite, magnetism, 370451, 370453
 ferrite
 basalt, altered
 geochemistry, 580802
 petrochemistry, 580802
 ferroactinolite, Costa Rica Rift Zone,

- basalt, 830219
ferroaugite
basalt
 major element, 511008
 petrology, 330580
boninite, mineralogy, 600691
geochemistry, clinopyroxene, 650534
major element, mineralogy, 600665
Mariana Islands, fore arc, 600659
mineralogy
 clinopyroxene, 540761, 540762
 spinel, 800941
ferrobasalt
Atlantic Ocean N, 820403
augite, 820404
basalt
 distribution, 540837
 geochemistry, 490598, 540635, 540768, 590784, 650559, 920450
 glass, 600601
 midocean ridge, 820403, 820404
 mineralogy, 540768
 petrochemistry, 670580
 petrography, 920459, 920468
basalt, altered
 geochemistry, 540689, 580800, 580802, 580803, 580833, 580839
 major element, 580882
 petrochemistry, 580800, 580802, 580803
 petrology, 540689
 trace elements, 580882
basalt, sparsely phyrlic
 basalt, transitional, 540624
 ferrobasalt, tholeiitic, 540621
 Mid-Atlantic Ridge, 540630, 540631
 petrology, 540628
 tholeiite, aphyric olivine-poor, 540619
 tholeiite, olivine, 540624
basalt, tholeiitic, 670580
bulk-rock compositions, 540740
crust, oceanic, Costa Rica Rift Zone, 830185
crystallization, fractional, 820404
East Pacific Rise, 540115
 basalt, 920471
 basement, 540826
 composition, 540839
 Galapagos Fracture Zone, 540836, 540837
 lithology, 920438
 magmatism, axial, 540837
 petrology, 540821
Galapagos Spreading center, 820404
 basalt, 540737, 540738, 540755
genesis, 920449
 Galapagos Fracture Zone, 920449
 magma, 920449
 magma chamber, 920449
 magma, primitive, 920449
 olivine, 920449
 Pacific Ocean E, 920449
 plagioclase, calcic, 920449
 rift propagation, 920449
 SiO₂, 920449
 Siqueiros Fracture Zone, 920449
 solid rock scavenging, 920449
 Sr/Zr ratio, 920449
geochemistry
 East Pacific Rise, 540765
 Iceland, 540765
 Juan de Fuca Ridge, 540765
 MORB, 540757
 Nazca Plate, 540765
 Pacific Ocean E, 540768
Iceland, 820403
Indian Ocean, 820404
magma, mixing, 540842, 540843
magma chamber, axial, magmatism, 540848
major element, 810784
 characteristics, 920439
MAR, rifting, 540846, 540847, 540848
Mariana Islands, fore arc, 600620
Mariana Trench, 600620
Mendoza Rise
 basalt, 920537
 petrology, 920613
Mid-Pacific Mountains, 200669, 200674
mineral chemistry, pyroxene, 920440
mineralogy
 clinopyroxene, 540761
 East Pacific Rise, 540765
 Iceland, 540765
 Juan de Fuca Ridge, 540765
 Nazca Plate, 540765
 opaque oxides, 540744
 Pacific Ocean E, 540768
 plagioclase, 540744
 sulfide, 540744
minor element, East Pacific Rise, 650613
MORB, comparisons, 920468
olivine, 820404
Pacific Ocean E, 820404
 basalt, 920435
 evolution model, 540843, 540844, 540845, 540846
petrogenesis, modeling, 920440, 920442, 920444
petrology, 540747
 Galapagos Spreading center, 540744
 plagioclase, 820404
tholeiite
 East Pacific Rise, 600705
 Galapagos Fracture Zone, 600705
 titanomagnetite, 820404
 trace elements, 920440
 East Pacific Rise, 650613
 Galapagos Spreading center, 920440
see also basalt
ferrobasalt, oceanic, 540835
 basalt, quartz-normative, 540835
 clinopyroxene, 540835
 crystal fractionation, 540835
 East Pacific Rise, temporal variations, 540835
FAMOUS area, rift, 540835
fast spreading ridges, petrologic contrast, 540835
fractionation degree, 540835
Galapagos Fracture Zone, crystal fractionation, 540835
iron, 540835
 derivation, 540835
 magma chamber, axial, 540835
 magma chamber, residence time, 540835
 magma chamber, steady-state, 540836
 Mg/(Mg + Fe) ratio, 540835
 olivine, 540835
 ophiolite, 540836
 plagioclase, 540835
 Siqueiros Fracture Zone, crystal fractionation, 540835
 spreading ridge, petrologic variability, 540835
 tholeiite, olivine, liquid derivation, 540835
TiO₂, 540835
ferrobasalt, quartz-normative
 basalt, altered
 major element, 580892
 trace elements, 580892
ferrobasalt, tholeiitic
 basalt, sparsely phyrlic, 540619
 clinopyroxene, 540621
 crystallization, metastable, 540624
dendrite, 540624
East Pacific Rise, 540621
Fe enrichment, 540619
FeO, 540619
ferrobasalt, 540621
Galapagos Fracture Zone, 540621
glass, 540619, 540621
glass, quartz-normative, 540624
olivine, 540624
plagioclase, 540621
silicate, 540624
Siqueiros Fracture Zone, 540621
spherulites, 540621
TiO₂, 540619
titanium, 540619
titanomagnetite, 540621
ferrogabbro
 basalt, altered, geochemistry, 580800, 580803
 boninite, mineralogy, 600691
ferrohedenbergite, boninite, mineralogy, 600691
ferromagnesian minerals
 lithologies, major
 chalk, 901480
 ooze, calcareous, 901480
 Lord Howe Rise, rhyolite, 210530
 Peter I Island, geology, 350352
 Wake Guyots, 200679
ferromagnetic minerals
 basalt, 830334, 830335
 magnetism, 460357
 Brazil Basin S, 720591
 Emperor Seamounts, basalt, 550729, 550732
 origin, 720594
 Rio Grande Rise, 720591
ferromanganese, 190609
Aleutian Abyssal Plain, 190629
Aleutian Plain, 190629
Antarctica
 Miocene-Pleistocene, 280795, 280796, 280797, 280798
 nodule, 280795
 barite, authigenic, barite, 410918
 chemical and mineral composition, sediments, 350471
 concretion, 070990
 deposition
 chalk, nannofossil, 250496
 ooze, nannofossil, 250496
 East Pacific Rise, hydrothermal precipitate, 920383
 Emperor Seamounts, mineralogy, 550468, 550471
 geochemistry, chemical analyses, 340560
 glaciation, detritus, 360858
 Guatemala, trench, 670523, 670524
 lithology, 190629, 230171, 260299, 280372, 330167, 360095, 390333, 410028, 410030, 410329, 410428
 aggregate, 160237
 major element, 850784
 argillaceous sediments, 580721
 material, micronodule, 850783
 Meiji Guyot, 190629
 Pacific Ocean C, geochemistry, 850781
 Pacific Ocean NW, 190629
 Pacific Ocean SE, mineralogy, 920393
 Pacific Ocean W, noncalcareous sediment, 070990
rare earth elements
 Bauer Basin, 850798, 920404
 nodule, 850798
trace elements, 850790
comparable mineralogies, 850790
control, 850786

- trace elements (Cont.)
 diagenetic history, 850790
 group distribution, 850785
 volcanism, Madagascar Basin, 250539
- ferromanganese, authigenic
 Cenozoic sediments, lithology, mineralogy, geochemistry, 450327
 sediment geochemistry
 crust, 550462
 nondepositional environment, 550460
- ferromanganese nodules, 280748, 280750
 aggregate, iron oxide, 280751
 Antarctica, 280795
 oceans, 280795
 dark rough micronodules, 280750
 distribution, 280748
 hydrothermal mineralization, 020421
 ice rafting, 280738
 iron oxide, 280751
 light, smooth nodules, 280751
 lithology, 070029, 070327, 070727, 070729, 360091, 410329, 410426, 430159, 510042, 510043, 510362
 Quaternary-Neogene, 110056
 manganese, 280750
 manganese oxide-coated pebbles, 280750
 micronodule, 280750, 291085
 Miocene-Pliocene, 280750
 Miocene, 280750
 Miocene-Pleistocene, geochemistry, 280895
 nodule
 bottom current, 280751
 deposition rate, 280751
 Miocene-Pliocene, 280751
 nodules, Ross Sea, 280750
 Pliocene, 280750
 sediment history, 280785
 abundance, 280785
 silica, 280750
 titanium, 280750
- ferromanganese oxide
 authigenesis, 550463
 Emperor Seamounts, 550463
 carbonate
 petrology, 540326
 sediments, 320892
 chemical and mineral composition, 070967
 mineralogy, 070965
 Emperor Seamounts, mineralogy, 550463, 550470
 geochemical partitioning, manganese, 650427
 Hess Rise N, sedimentary sequences, 620759, 620765
 sediments, 760411
 Blake Ridge, 760414, 760418, 760422, 760426
- ferromanganese oxyhydroxide
 Bauer Basin, sediment, 850793
 claystone, basalt, 550709
 East Pacific Rise, sediments, 850791
 Emperor Seamounts, mineralogy, 550468
 metalliferous sediment, Eocene-Oligocene, 850798
 mineralogy, 850795
 rare earth elements, East Pacific Rise, 850798
 trace elements, partitioning, 850796
 ferropigeanite, mineral, primary, pyroxene, 810786
- ferrosilite
 basalt
 major element, 511008
 mineralogy, 540697
 petrography, 540697
 petrology, 580852
 clinopyroxene, crystallization, 540664
 dolerite, 540664
 mineral, primary, pyroxene, 810786
 mineralogy, spinel, 800941
 ferrous iron, analyses, 920433
 ferrous phosphate, Hess Rise N, post-Jurassic, 620807, 620810
- fichtelite
 hydrocarbon, aliphatic, cyclic components, 660558
 lipid, paleoenvironment, 660565
- Fifteen-Twenty Fracture Zone, transform fault, 780027
- Fiji, 200523, 200547, 210902, 300003, 300631, 580995, 590656, 590657
 arc, 590793
 Guam, 200547
 Japan, 200547
 Japan S, magnetic anomaly, 200523
 Pacific Ocean SW
 Eastern Marginal Basin Province, 210902
 island arcs, 300700, 300702, 300703
 unconformities, 210706
 South Fiji Basin
 geology, 300625
 history, 300630, 300631
 topography, 200523
 Fiji Plateau, 200523, 200527, 200550, 210003, 300003, 300704, 610549
 Coral Sea E, geology, 300661
 Pacific Ocean SW
 Cenozoic, 300667
 island arcs, 300691, 300703, 300704
 seismic profiles, 200550
 South Fiji Basin, history, 300630
 Fiji Sea, 210641, 210656
see also Pacific Ocean SW
- Fina-Sisu Formation
 basin genesis, 310875
 Philippines, genesis, 310875
- Firth of Clyde, 120411
- fish clay, Pacific Ocean, guyots, 620775
- Five Islands Dome, 010445
- Five Trough
 IPOD survey area AT-6: seismic refraction results, N-S-trending trough, 450049
 IPOD survey area AT-6: site survey
 fracture zones, 450044
 Mid-Atlantic Ridge, 450039
 ridge axis, 450044
 sediment pond, 450044
 western scarp, 450044
- flame structure, 130155, 250094, 330045, 47B0042, 47B0046
 lithology, 250094, 330045
 Cenozoic deposits, 47B0046
 sandstone, 130155
 Santos Plateau, origin, 390936
 turbidites, sedimentary structure, 300427
- Flamingo Fault Zone, 151042, 151047
- Aruba Gap Plain, geology, 151042
- Flamoudhi sandstone, Neogene formations, paleogeography, 42A0915, 42A0916, 42A0918, 42A0921
- Flandre Bank, greenstone, 780092
- flaser structure, 110811, 47B0038, 47B0046, 47B0047, 500127
 Atlantic Ocean N, Mediterranean Sea, 110811
 lithology, 500127
- Flemish Basin, 790510, 790523
- Flemish Cap, 47B0671, 790885, 801145, 801188, 801200, 931385, 120033, 120079, 121115, 121171, 121174, 121177, 121181, 430577, 47B0028, 47B0095
 Atlantic Ocean N, paleogeography, 121171, 121174, 121177
 Goban Spur, evolution, 801200
- gravity anomaly, modeling, 801143, 801145
 Iberian margin W, evolution, 47B0761, 47B0766
 Jurassic-Cretaceous, carbonate, 790885
 Labrador Sea S, bathymetry, 121155
 Magnetic Anomaly J, 47B0766
 magnetic models, margin, 801142
 margin, 801143
 Flemish Pass, 120036, 120070
 Flint Island, 330735
 Line Islands, tectonics, 330735
 flint, vitreous, regional problems, chert, 061304
 floatstone, limestone, Jurassic, 790471
 Florence Rise, 42A0005, 42A0395, 42A0659, 42B0717, 42A0903, 42A0975, 42A1019
 biostratigraphy, Mediterranean Sea, 42A1139
 evaporites, Messinian, 42A0595, 42A0596, 42A0597, 42A0598, 42A0599, 42A0600, 42A0602, 42A0603
 heat flow, 42A0857
 lithostratigraphy, Mediterranean Sea, 42A1139
 Messinian, sulfate, 42A0659
 Messinian environments
 Lago Mare, 42A1025
 salinity crisis, 42A1005
 Neogene formations, 42A0903
 paleogeography, 42A0903, 42A0908, 42A0920
 paleogeography, 42A0903
 sonic velocity, 42A0244
 stable isotope, 42A0659
 structures, 42A0903
 sulfate, stable isotope, 42A0659
 temperature, heat flow, 42A0857
 thermal conductivity, 42A0245
 Troodos Massif, 42A0920
 Flores, 820495
see also Indian Ocean E
- Florianopolis, Santos Plateau, origin, 390931
- Florida, 440521, 760391, 760538, 760646, 770006, 770257, 770381, 770383, 770388, 770397, 770502, 770503, 770715, 770718, 770723, 770726, 770727, 770728, 770729, 770732, 770733, 770734, 930801, 960288
- Bahama Islands
 geology, 110878, 110883, 110893, 110895
 platform, 770723
 biostratigraphy, 440941
 Blake Spur, north rim, 440104
 carbonate platform, 770733
 coast, 030025
 continental margin, 440520
 Cretaceous foraminifers, 440663
 Cretaceous sequence, 770573
 diagenesis, 020422
 lithology, continental slope, 100298
 lithostratigraphy, 440941
 Mississippi Fan
 accumulation rate, 960596
 sediment, 960432
 sediment source, continental shelf, 960485
 tetrapyrrole, geochemistry, 630809
- Florida Bank, 770005, 770703
- Florida Escarpment, 010084, 100055, 100089, 100117, 770026, 770056, 770084, 770086, 770092, 770093, 770377, 770404, 770477, 770549, 770593, 770614, 770715, 770717, 770721, 770727, 770729, 820549
 Cretaceous sediments, 770554
 Florida Platform, 960033, 960179
 Mexico, Gulf of, regional aspects, 100747
 Florida Escarpment W, 100004, 770382, 770391, 960541, 960545, 960738
 Florida Keys, 110009, 770429
 Florida Plain, 960519

- Mississippi Fan, sediment, 960432, 960519
 Florida Platform, 110878, 430869, 770727, 960596, 960613
 Bahama Islands, geology, 110878
 Florida S, 010406, 020422, 110009, 110545, 110883, 120433, 190871, 38S0794, 430810, 440104, 440663, 440941
 bank, 100025, 100187, 100195, 100259
 continental margin offshore, 140737
 continental slope, 100298
 platform, 100311, 100317
 Florida, Straits of, 010179, 100003, 100297, 100311, 100391, 100407, 100620, 100743, 110805, 760346, 760820, 760842, 770005, 770006, 770026, 770031, 770071, 770377, 770459, 770477, 770489, 770505, 770629, 770649, 770659, 770661, 770703, 770712, 950606, 950608, 950809
 Campeche Bank, biostratigraphy, 100679
 carbonate, redeposited clastics, 760820
 geochemistry, 770377
 lithology, 100311
 Mexico, Gulf of, regional aspects, 100737, 100738, 100743, 100747
 mineralogy, 770377
 mineralogy, paleoenvironmental implications, 770377
 organic geochemistry, Cretaceous, 770459
 paleoenvironment, 770377, 770381, 770384, 770390
 Albian, 770383, 770385
 Albian mineralogic stratigraphy, 770388
 Berriasian to Aptian, 770385
 carbonate, 770382, 770390
 Cenomanian, 770385
 Cenozoic, 770388
 clay, 770381
 clay minerals, 770388
 Cretaceous, 770388
 diagenesis, 770391
 Eocene, 770383
 lithology, 770388
 Oligocene, 770383
 Paleocene, 770383
 sedimentation conditions, 770379
 sources, 770392
 volcanic influences, 770392
 Florida W
 carbonate, gravity-flow deposit, 960546
 continental margin, 900541, 960546
 deposition, models, 960738
 Mississippi Fan
 carbonate, 960541
 lower fan region, 960613
 provenance
 continental margin, 960545
 slope sediment, 960545
 Quaternary nannofossil biostratigraphy, shelf detrital sedimentation, 960623
 Florida-Hatteras Slope, 931354, 950442
 Floridian Aquifer, Bahama Islands, geology, 110886
 flow structure, 110014, 110109, 110110, 110226, 110911, 110912, 130157, 160235, 400048, 400205, 400536
 Atlantic Ocean NW
 lithology, 110911, 110912
 regional aspects, 110967
 lithology, 110110, 160235, 400048, 400205, 410435
 Campanian, 110014
 Mesozoic units, 480049
 Neocomian, 110109
 Oxfordian-Kimmeridgian, 110079
 physical properties, 130157
 Tithonian-Neocomian, 110226
 fluid inclusion
 basalt, altered, carbonate, 580913, 580914
 chert
 geochemistry, 620725
 petrology, 620725
 fluoramphiboles, basalt, petrology, 580848
 fluoranthene
 hydrocarbon, extractable, organic
 petrology, 630828
 limestone, Albian, 620929
 lipid, hydrocarbon, aromatic, 571373
 fluorapatite
 basalt, oceanic, chemistry, 610640
 Brazil Basin, minor sediment components, 721003
 fluorine, 060847
 basalt, glass, 600604
 basalt, altered
 geochemistry, 580802
 petrochemistry, 580802
 basalt, oceanic, chemistry, 610640
 geochemistry, Cenozoic sediments, 42B0379, 42B0543, 42B0545, 42B0551, 42B0557, 42B0563, 42B0597, 42B0598, 42B0599
³He/⁴He ratio, 870863
 major element, minor element, 500681
 rare earth, 460243
 Red Sea, geochemistry, 230989
 sulfur isotope, minor element, 500681
 trace elements, 460243
 fluorite
 basalt
³⁹Ar/⁴⁰Ar age, 340439
 K/Ar age, 340439
 ore, deposit, 540802
 fluorspar, lueneburgite, Miocene sediments, 42A0663
 flute cast, 220039, 38S0225
 Greenland Sea, turbidites, 38S0225
 lithology, 220039
 Norwegian Sea, turbidites, 38S0225
 fluxoturbidites, 130392, 430168
 Atlantic Ocean N, Mediterranean Sea, 110810
 lithology, 430168
 transport, 130392
 Mediterranean Sea, lithostratigraphy, 131032
 Fly River, 210369
 delta, 210377
 lithology, geologic events, 210377
 flysch, 040043, 040295, 040660, 110806, 250095, 38S0267, 42A0261, 47A0035, 500751, 500752
 accretionary prism, nappe, 870951
 anoxia, global, evidence against, 801002
 arenite, 500752
 Atlantic Ocean, grain size, 040295
 Atlantic Ocean C, basin, 511507
 Atlantic Ocean N, Mediterranean Sea, 110806
 Atlantic Ocean NE, evolution, 411222, 411240
 Atlantic Ocean SW, basin, evolution, 361004, 361005
 Atlantic Ocean W, Brazil Basin, 040660
 biolite, 500752
 calcareous detritus, 500751
 carbonate shelf, 500752
 chemistry, Kamchatka, 650418
 chert, 500752
 Cretaceous, 250737
 carbonate compensation depth, 250737
 rifting, 250737
 sediment accumulation, 250737
 Cyprus, evaporites, 42B1186
 deposition
 chalk, nannofossil, 250496
 ooze, nannofossil, 250496
 Essaouira Basin, 500752, 500753
 felsitic volcanic rocks, 500752
 garnet, 500752
 Indian Ocean NW, grain size, 250447
 K-feldspar, 500752
 Kythrea, 42A0238, 42A0910
 limestone, micritic, 500751
 lithology, 040043, 130370, 250095, 250484, 42A0261
 deposition, 47A0035
 Kythrea, 42A0238
 magnetite, 500752
 micrite, 500752
 mineralogy, Kamchatka, 650418
 Moroccan Basin, margin, 500812, 500815
 mud, terrigenous
 diagenesis, 250458
 geosynclinal sequences, 250461
 mudstone, 500751
 muscovite, 500752
 Neogene formations, paleogeography, 42A0903, 42A0910, 42A0912
 Norwegian Sea, Greenland Sea, 38S0267
 Numidia, 130739, 130742, 42A0966
 Pacific Ocean NE, cruise synthesis, 151101
 pelagic components, distribution, Indian Ocean WC, 250490
 plagioclase, 500752
 progradation, 500751
 pyrite, 500752
 quartz, 500751
 quartz mica schist, 500752
 quartzose zone, 500751
 red beds, sedimentary structure, secondary, 38S0267
 relict oxide, 500751
 rutile, 500752
 sandstone, 500751
 siliceous detritus, 500751
 siltstone, 500751
 source area, 500752
 Anti-Atlas Mountains, 500753
 calcareous shelf and slope, 500752
 Morocco, 500753
 plutonic contribution, 500753
 red beds, 500753
 Rif, 500753
 Tarfaya Basin, 500753
 Tichka Massif, 500753
 Tethys, Mediterranean Sea, 42A0944, 42A0947
 tourmaline, 500752
 turbidites, 250443, 250444, 250445, 250447, 500751
 bedding, graded, 250443
 biotite, 250444
 calcarenite, 250443
 carbonate compensation depth, 250444
 CCD, 250444
 chlorite, 250444
 claystone, 250443
 diagenesis, 250458
 foraminifers, 250443, 250444
 geosynclinal sequences, 250461
 hornblende, 250444
 laminite, 250443
 microcline, 250444
 montmorillonite, 250444
 muscovite, 250444
 nannoflora, 250443
 orthoclase, 250444
 plagioclase, 250444
 pyrite, 250444
 quartz, 250444
 sandstone, calcareous, 250443
 sedimentary structure, 250443, 250448
 shell fragments, 250444
 silt, laminated, 250445

- turbidites (Cont.)
 Turonian-Senonian, 250443
 zircon, 500752
- fold, 110812, 180450, 180451, 180456,
 190799, 220739, 280222, 330308, 380168,
 42A0229, 42A0584, 47B0044, 47B0053,
 47A0781, 500071
 Atlantic Ocean N, Mediterranean Sea,
 110802, 110805
 Cape Bojador, continental margin, 47A0781
 chevron folds, 130152
 Indian Ocean NE, Cretaceous, 220739
 lithology, 180450, 180451, 280222, 42A0229,
 47A0027
 sedimentary structure, 47A0030
 Nankai Trough, geologic setting, 870910
 fold, enterolithic, 42A0600
 fold, isoclinal, 47B0040
 fold, recumbent, 47B0040
 Atlantic Ocean N, Mediterranean Sea, 110812
 folding, 130486, 131033, 131034, 210376,
 210381, 220328, 230302, 230919, 270208,
 38S0285, 400043
 Algeria, continental shelf, 42B1182
 ash, 870709
 Atlantic Ocean, margin, 481110
 Barbados Ridge, 780070, 780079, 780080
 bedding orientation, 870813
 deformation, framework, 870937
 Esperanza unit, Nicoya Complex, 840834,
 840837
 evaporites
 Messinian, 42A0584
 Red Sea, 230919
 geology, 660581
 Guatemala, slope sediment, 840631
 Japan Trench, 870813
 structural feature, 870809
 Lesser Antilles, 780006
 lithology, 180456, 210381, 220328, 330308,
 400043
 breccia, 230302
 geologic events, 210376
 Mesozoic, 500071
 Mesozoic deposits, 47B0053
 ooze, foraminiferal, 130486
 synsedimentary, 380168
 Timor Trough, 270208
 Matapalo, Nicoya Complex, 840834
 Mediterranean Sea, lithostratigraphy, 131033
 Middle America Trench, 840820
 Nankai Trough, 870805
 Nicoya Complex, 840834, 840835
 Norwegian Sea, Greenland Sea, 38S0285
 Pacific continental margin, geomorphology,
 350281
 Pacific Ocean NE, regional aspects, 050636
 Pacific Ocean SW
 island arcs, 300698
 Western Marginal Basin Province, 210900
 red beds, sediment history, 38S0285
 Santa Elena, 840837
 sedimentary structure, Ganges Fan, 220739
 site survey, abyssal sediment, 180983
 folding, ptygmatic, 130161, 210109
 lithology, 210109
 Folesti, Romania, 210843
 Folkestone
 beds, Kent, 800617
 Great Britain, 260635
 foraminifers, fossil, isotopic
 paleotemperature estimates, 710414
 Ford Ranges, 350379
 forearc, sedimentation, 560521, 560522,
 560530, 560531, 560542, 560543, 560545,
 560550, 560551, 560552, 560553, 560554,
 560560, 560564, 560566
 foreset bedding, 310194, 310494, 310499
 Angola Basin, sedimentary structure, 400536
 Cape Basin, sedimentary structure, 400536
 dobrites, sedimentary structure, 310499
 fan, submarine, Toyama Trough, 310494
 lithology, 040081, 350161
 sandstone, 130155
 Philippine Sea, sedimentary structure,
 310488
 Sea of Japan, sedimentary structure, 310488
 sedimentary structure, cross-lamination,
 960521
 foreset lamination, 310355
 lithology, 310355, 480176
 Forest Formation, 040599
 forsterite
 basalt
 fracture zone, 540719
 geochemistry, 590764
 midocean ridge, 820413
 petrology, 580849
 East Pacific Rise, petrology, 540821
 Peter I Island, geology, 350354
 phenocryst, 540654
 plagioclase, 540656
 Fort Hays limestone, 150814
 Fort Lauderdale, 760153, 760160, 760341,
 760346, 770006, 780661, 950604, 960016
 Port Everglades, 950158
 Fortymile Bank, Thirtymile Bank, platform,
 630912
 Fossa Magna, 560194, 870613
 basin genesis, 310875
 Philippines, genesis, 310875
 physiography, clastic sedimentary rocks,
 870613
 sedimentary facies, sedimentation model,
 870626
 Fossil Bluff Series, 150816
 fractionation, cotectic, basalt, liquid
 variation, 650556
 fractionation, open-system
 basalt
 geochemistry, 540768
 mineralogy, 540768
 petrogenesis, modeling, 920441
 fracture, 080821, 100261, 110812, 110905,
 150333, 180236, 190895, 200391, 210108,
 230171, 260161, 260284, 270094, 270134,
 291040, 291041, 291042, 330169, 340118,
 350042, 390107, 42A0584, 430164, 480080,
 480090, 480225, 490027, 500045, 840819
 analysis, grain-shape, quartz, 950583
 Antarctica, glaciation, 291040, 291042
 Atlantic Ocean N, Paleozoic, 801110, 801111
 Atlantic Ocean NE, evolution, 411221
 Bahama Islands, geology, 110884
 basalt
 alteration, 920512
 Mid-Atlantic Ridge, 820440, 820442
 midocean ridge, 820397
 petrochemistry, 630727
 Costa Rica Rift, distribution, 690255
 Costa Rica Rift Zone, basalt, 830239
 crust, oceanic, 830438
 geology, 920572
 deformation, 280978
 distribution, Costa Rica Rift, 690255
 elastic wave velocity, 920567
 horizontal density, 920568
 low-aspect ratio, 920569
 faults, fractures, 870813
 orientations, 870813
 Galicia, continental margin, 47B0649
 Galicia Bank, 47B0649
 gas hydrate, mudstone, 840950
 Guatemala, slope sediment, 840629
 Japan Trench, 870813, 870816, 870817,
 870818, 870823, 870825
 K/Ar age, celadonite, 920511
 limestone-chert sequence, Pacific Ocean,
 080821
 lithology, 100266, 230121, 230171, 250032,
 250072, 250196, 260028, 260080, 260301,
 260303, 260331, 280217, 280220, 280373,
 290321, 320022, 320048, 320165, 320197,
 320319, 330167, 330308, 350042, 410030,
 430043, 430165, 490343, 500043
 basalt, 270094, 270134, 340118
 chert, 320197
 conchoidal, 260161, 260284
 filling, 800940
 oblique, 480225
 slickensides, 180236, 480080, 480226
 Middle America Trench, structural features,
 660799
 mud, origin, 870916
 Nankai Trough, 870805
 faults, fractures, 870805
 structural features, 870798
 turbidites, 870916
 Pacific Ocean SE, paleoceanography, 920597
 Paranapanema River, 390931
 patterns, 47B0757
 pebbles, petrography, 801040
 petrology
 clay, 960501
 silt, 960501
 porosity, 690685, 690686, 830438, 830441
 crust, oceanic, 830419, 830423
 Red Sea, geology, 230814
 Santos Plateau, origin, 390931
 sedimentary rocks, Middle America Trench,
 840819
 sonic velocity, velocity, 920564
 synthetic seismogram, construction, 920574
 volcanism, clay, 870636
 fracture, conchoidal
 chert, 020418, 280751
 clay, terrigenous, Whangai Formation, 291062
 lithology, 490027
 mineral, heavy
 Cuvier Plain, 270524
 Timor Trough, 270524
 silt, terrigenous, Whangai Formation, 291062
 fracture, extensional, Japan Trench,
 structural feature, 870825
 fracture, sealed, Costa Rica Rift Zone,
 reopening, 830238, 830239
 fracture zone, 430862
 American Plate, 370341
 Atlantic Ocean C, 370329
 Atlantic Ocean S, 390931
 crust
 accumulation rate, 920308
 carbonate, biogenic, 920307, 920308
 hydrothermal phases, 920307, 920308
 Miocene, 920308
 nonfracture zone compared, 820527
 ooze, nannofossil, 920307, 920308
 sedimentation rate, 920307, 920308
 deformation, tectonic, 490428
 deposition, calcareous sediment, 220769
 deposition, eolian, Pacific Ocean SE, 920336
 diagenesis, crust, 920345
 elastic wave velocity, subhorizontal, 920569
 Goban Spur, continental margin, 801158
 Kings Trough, 941153
 Lesser Antilles, 780027, 780049, 780050
 lithology, 220200, 290134, 490359
 magnetic anomaly, basement, 820024

- Mid-Atlantic Ridge, 370329, 490413, 820421
basement, 820026, 820028
mineralogy, crust, 920345
Oligocene-Pleistocene sediments, crust,
920292, 920293
Pacific Ocean E, basalt floor, 660707
Pacific Ocean SE, 920520
regional geology, seismostratigraphy,
801191, 801192
regional tectonics
Frio Ridge, 720959
Rio Grande Rise, 720962
swell push forces, 720961
Santos Basin, 390931
Santos Plateau, 390929, 390931, 390944,
390949, 390950
Sao Paulo Ridge, 390929, 390949, 390950
Seabeam bathymetric surveys, geometry,
850831
sedimentology, lithostratigraphy, 340789
Siqueiros Fracture Zone, 540026, 540028,
540032
synthetic seismogram, construction, 920574
ultramafic rocks, nonfracture zone
compared, 820527
Fracture Zone X, 630922
Fracture Zone Y, 630922
fracturing
axial ridge, East Pacific Rise, 540056
Barbados Ridge, 780557
basement, morphology, 801164
Biscay, Bay of N, continental margin, 481028
Coral Sea E, geology, 300649
Costa Rica Rift
crust, 920563
crust, oceanic, 830443
crust, oceanic, 830443, 830484, 830487,
830488, 830491, 830494, 830510
Costa Rica Rift Zone, 830185
possible origins, 830510
diagenesis, 660512
dike, 830510
crust, oceanic, 830447, 830455, 830465,
830469, 830472
East Pacific Rise, Deep-Tow studies, 540056
elastic wave velocity, 920569
degree, 920566
pillows, 920569
shear velocity, 920569
vesicular porosity, 920569
evaporites, Messinian, 42A0584
faults, fractures
healed fracture, 870816
sand-filled fracture, 870819
gas, molecular, isotopic analysis, 960781
Goban Spur, continental margin, 801162
hydrocarbon, C_1 - C_5 , 571346
Japan Trench, 571342, 571343
midslope, 571342, 571343
hydrocarbon, C_1 - C_5 , volatile organic
compounds, 571351, 571354, 571355
Iberian margin W, evolution, 47B0766
Isle of Wight, chalk, 941135
Japan Trench, 870777
geology, 870704
limestone, Jurassic, 790453
lithology, 210108, 330169, 500045
physical properties, 480090
Mendoza Rise
basalt, 920537
East Pacific Rise, 920595
Necker Ridge, 200678
Pacific Ocean NW, clay, 200391
Pacific Ocean SW, island arcs, 300700
paleomagnetic results, healing processes,
870780
sand, diagenesis, 660512
sediments, Barbados Ridge, 780557
shear wave, velocity, 830487
sonic velocity, sonic properties, 920564
subduction, Middle America Trench, 840871
traveltime inversion, 920579
vein, structure, 870823
see also microfracturing
Frailes Formation, 151101
framboid
burrow mottling, silt, 291053
clay, pyrite, 291053
diagenesis, Mesozoic, 271014
Hess Rise, pyrite-marcasite, 620860
Indian Ocean E, lithology, 271013
iron, 010585
nannofloral analysis, Aptian cycle, 711060
pyrite, framboidal
formation, 750876, 750877, 750879
morphology, 750877, 750878
occurrence, 750875
pyrite, 750878, 750879
terminology, 750875
pyrite, microcrystalline, ooze,
nannofossil, 260603, 260604, 260605,
260606
France, 150504, 200226, 200645, 360909,
400764, 710498, 770369, 790653, 800657,
800759, 801106, 801110, 801162, 801191,
810515, 930755, 931271, 931390, 950360
Atlantic Ocean, margins, 801111
Blake Basin, 440203
Blake Spur S, 440345
borderland, 800427
continental margin, structural evolution,
481058
continental shelf, 120070
Goban Spur, continental margin, 801162
limestone, shallow water, 440430
Mariana Islands, slope, 600328
marine zone, 760552
Mid-Pacific Mountains, subalpine ranges,
620669
nannofossils, 760591
southern coast, 130466
southern margin, 131015
subalpine ranges, Cretaceous environment,
620669
Tournon, 131252
Valence, 131252
France N, 760573, 760606
Jurassic, nannofossils, calcareous, 440762
France S, 740469, 760578, 760606, 800614,
931316
Franciscan Basement, 630025
accretionary wedge, 630271
Franciscan Complex, 050536, 061217, 061285,
180040, 630024, 630114, 630585, 630910,
641280, 670751, 670753, 840651, 890338
chert
continental, 561140
geochemistry, 620731
shale, red, 561137
comparative stratigraphy, 630907
diagenesis, 020421
Franciscan Zone, North America, subduction,
670744
Franco-American Mid-Ocean undersea study
area. *See* FAMOUS area
francolite, Pacific Ocean W, guyot, 200658,
200660, 200661, 200662, 200664, 200666
Franklin Island, 280890
Franz Josef Land, 350818, 381101
Frattingsdorf, Austria, 210841, 210843
Fredericksburg Complex, 930946
free air gravity anomaly, *see also* gravity
anomaly
free-air gravity anomaly
Biscay, Bay of, seismic refraction, 481018
geological, geophysical setting, gravity,
390950
Goban Spur
continental margin, 801130
modeling, 801141
gravity, models, 801143
Madagascar Basin, gravity, 250863
Mexico, Gulf of, regional aspects, 100743
petroleum generating potential, Magdalena
Fan, 630958
regional summary, 220815
Rio Grande Rise, regional setting, 390957
Southwest Indian Ridge, gravity, 260959
free-air gravity map, Atlantic Ocean N,
Precambrian features, 801106
Freen Trough
formation, 941260
topography, 941246
freeschist, basalt, paragenesis, 830249
Freetown, Sierra Leone, 040017
reflection horizon, Horizon A, 040671
Frelanga limestone reef, South Fiji Basin,
geology, 300624
Fremantle, 260005, 270383, 270397, 280005,
280920, 280945
Australia W, 220037, 260669, 260675
general synthesis, 280920
Indian Ocean E, bathymetry, magnetics,
seismic profiles, 270339
Fribourg, Switzerland, 410501, 410503
friedelanone, ketone, cyclic components,
660561
Frio Ridge, 38S0735, 391101, 391108, 400008,
400230, 400365, 400549, 400637, 400681,
400742, 720006, 720959, 720960, 740713,
740723, 740726, 750031, 750032, 750111,
750291, 750292
abutment Plateau, 400183
Atlantic Ocean S
hiatuses, 391101
Santos Plateau, 391106, 391108
escarpment, 740725
regional tectonics
fracture zone, 720959
volcanism, 720960
fucoxanthin
chlorophyll, diagenesis, 571395
tetrapyrrole, geochemistry, 630814, 640804,
640810
Fuego, 670487
Fuerte, 640589
Fuerteventura, 411239, 430854, 790194,
790858, 790894
Atlantic Ocean NE, evolution, 411239
Canary Islands, 411239
diapir, 790179
volcanism, Neogene, 47A0714
Fuji, 580875, 870613
ash, 870684
Japan, volcanic arc, 130771
sedimentary facies, sedimentation model,
870624
Fuji River, 870046, 870612
detrital modal analysis, turbidites, 870624
drainage basin, 870624
physiography, 870612
sedimentary facies, sedimentation model,
870624
Suruga Bay, 870611
trough, 870624
turbidites, sedimentation, 870627
Fuji Valley
basin genesis, 310870

- Philippines, genesis, 310870
- fumaroles
 - Dominica, eruption, 780086
 - eruption
 - Dominica, 780086
 - Mount Pelee, 780086
 - Saint Christopher, 780086
 - Saint Lucie, 780086
 - Soufriere Volcano, 780086
- Funafuti, 200641, 220477, 890399
- ooids, 890399
- Funakawa Formation, 190224
- Pacific Ocean EC, geologic history, 090921
- Paleogene-Neogene, 310851
- Philippine Sea, Paleogene-Neogene, 310851
- Funakawa-Kitaura stage
 - Tohoku Arc, geology, 870715, 870716
 - volcanism, explosive, Neogene, 870718
- Funchal, 500033
- Fundy, Bay of, 120051, 801109
- fungi, Mediterranean Sea, 42A0817
- furan, hydrocarbon, C₁-C₇, volatile organic
 - compounds, 571349, 571353
- furan, aromatic
 - chemical characterization, molecular
 - analysis, 711048
 - hydrocarbon, aromatic, 711048
- furfural, carbohydrate, residues, 640881
- fusinite
 - coal, petrology, 670601
 - Guatemala, continental slope, 670601
 - organic matter
 - 40S0665,, 670601
 - palynology, 40S0663, 40S0665
 - petrology, 40S0663, 40S0665
 - petroleum generating potential
 - organic matter, 640872
 - sediments, 42B0732
 - Rockall Plateau, sediments, 810812, 810815
 - sapropel, Cretaceous, 620891
 - Futuna limestone, South Fiji Basin, geology,
 - 300624