

J

- J-Anomaly Ridge, 430005, 430008, 430011, 430012, 430032, 430034, 430095, 430107, 430424, 430513, 430739, 430832, 47B0095, 47B0766, 510028, 760007
 basalt, geochemistry, 430736
 geochemistry, 430736
 Iberian margin W, evolution, 47B0766
 magnetism, 430803
 New England Seamounts, 430890
 testing origins, 430879
 paleomagnetism, Tertiary-Cretaceous, 430785, 450387, 450388, 450392, 450393, 450394
 petrology, 430726, 430736
 sedimentary evolution, 430792, 430801, 430802, 430803, 430805, 430806, 430807, 430808, 430809, 430810, 430813
 subsidence, 430808
 tectonic history
 age, 430802, 430803, 430806, 430807
 basalt, 430792, 430803, 430805
 Cretaceous-Tertiary boundary, 430813
 depositional environment, 430801
 emergence and subsidence, 430807, 430808
 low-temperature oxidation, 430805
 mantle, 430805
 origin, 430806
 petrochemistry, 430803
 reef, rudist, 430808, 430809, 430810
 stable magnetic inclinations, 430805
 J-Anomaly Seamount, basalt, 430731
 Jabal Al Wask complex, basalt, petrology, 580868
 Jabal Tair, Red Sea, geology, 230816
 Jackson Group, 151032
 Gulf Coast, 730632, 730633
 Jacksonville
 Blake Spur, north rim, 440071
 Cenozoic, cocolith, silicoflagellate, diatom, 440807
 Jacksonville Fracture Zone, magnetic anomaly, 950606
 Jacqueline Guyot, 200655, 200667, 200691, 200693
 volcanic rocks, petrography, submergence, 200691
 jadeite
 basalt, geochemistry, 590754
 lithology, 040081
 Jaffa, *see also* Yafo
 Jaffa Formation, Israel, history, 42B1208
 Jaffa marl, Israel, history, 42B1199
 Jamaica, 020397, 040593, 150034, 150331, 150973, 150994, 151002, 151019, 780096
 Beata Ridge, 150963
 diagenesis, 020422
 lithology, 150337
 Jamaica Formation, 040594
 James Ross Island, 360871
 Jamieson Land, 810917
 Jan Mayen Fracture Zone, 38S0207, 38S0214, 38S0251, 380451, 380727, 380748, 380761, 381237, 490825, 810914
 basalt, chemistry, 380748
 extension, basalt, 380748
 tectonics, 381237
 basement, 381237
 magnetic anomaly, 381237
 magnetic lineation, 381237
 spreading axis, 381237
 Jan Mayen Island, 38S0216, 380751
 lithology, 380539
 platform, 380748
 Jan Mayen Plateau, lithology, 380528, 810914
 Jan Mayen Ridge, 38S0053, 38S0239, 38S0246, 38S0248, 381224, 381225, 381228, 481101, 481102, 490826, 810918
 arc, 38S0246
 Atlantic Ocean, margin, 481101
 axis, 38S0139, 38S0282
 basalt, chemistry, 38S0132, 380748
 basement, age, 381230
 bathymetry, 381224
 formation, 381218
 Greenland, 380569
 separation, 38S0246
 Greenland Sea
 ash, 38S0240
 geologic setting, 38S0210, 38S0214
 glass, 38S0240
 Iceland Plateau
 magnetic anomaly, 38S0465
 opaque layer, 38S0465, 381231
 spreading, 38S0466
 interstitial water, 38S0132
 lithology, 380539
 magnetic anomaly, 381224
 magnetic lineation, 381231
 red beds
 sedimentary structure, 38S0264
 turbidites, 38S0270
 sediments, 38S0095, 38S0098
 tectonics, 381224
 Norwegian Sea, 381213, 381218
 unconformity, 381230
 Janapal Harbor, Saipan, 600010
 Japan, 600623, 600694, 600698, 600731, 600763, 600766, 600909, 610765, 610841, 620730, 660155, 660419, 660428, 660544, 660546, 660661, 670537, 670649, 670759, 810450, 840811, 840912, 840921, 860284, 860576, 860724, 860781, 870046, 870419, 870426, 870436, 870437, 870484, 870563, 870613, 870626, 870652, 870703, 870704, 870710, 870713, 870714, 870739, 870742, 870810, 870877, 880005, 880131, 880150, 880155, 890034
 Aleutian Islands, 880129
 alteration, diagenetic, organic matter, 571306
 arc island, 200395, 600615
 ash, tephra, 870707
 Atlantic Ocean S, history, 740728
 basalt, 590743
 basalt, altered
 major element, 580874, 580883, 580884, 580885, 580887, 580888, 580889, 580892
 trace elements, 580874, 580883, 580884, 580885, 580887, 580888, 580889, 580892
 basement
 geochemistry, 590743, 590744, 590746, 590750, 590751
 uplifting, 870746, 870748
 basin genesis, 310870, 310875
 continental margin, 310874
 bathymetry, Hawaii, 320393
 Bonin Islands, 200039
 calc-alkalic series, 590744
 California, continental margin, 630759
 Central America, western continental slope, 840921
 chlorite, 580669, 580673, 580676
 clastic wedge source, 580995, 580996
 clay
 source, 860576
 stratigraphy, 870639, 870640
 clay minerals, 580992
 coast, 560482
 coastal terraces, 870304
 continental margin, 560487, 560543, 560581, 560585, 640868, 660541, 660545, 870068, 870809, 870810, 901089
 Honshu N, 560502
 continental plate, 560566
 continental slope, 870751, 870754
 convergence, continental margin, 560486
 convergent margin, deformation, tectonic, 560569, 560570, 560574, 560576, 560577, 560578, 560579, 560580, 560581
 dacite, conglomerate, 571285, 571286, 571287, 571288
 deep sea terrace, 560023, 560047, 560234
 deformation, tectonic, convergent margin, 560569
 detrital sediment source, 560962
 Eocene, 550330
 fan, submarine, deposits, 310489
 Fiji, 200547
 forearc, 560539, 560544, 560566, 600927, 870007, 870809, 870825, 870917
 accumulation history, 870925
 island arc, 870810
 mud, diatomaceous, 870925
 mudstone, diatomaceous, 870917, 870918, 870919, 870920
 reflectors, 870925
 sedimentary evolution, 560521
 geologic structure
 convergence, 870810
 magmatism, 870810
 geophysical data, Hawaii, 320393
 glass, volcanic, chemical composition, 870711
 grain size, 670538
 Guatemala, upper slope, 840928
 guyots, 890066
 hydrocarbon, potential, 660546
 hydrocarbon generation potential
 continental margin, 660541, 660545, 660546
 organic facies, 640868, 640869
 organic matter, 660541, 670598
 illite, 580669, 580673, 580676
 introduction, explanatory notes, 310005
 island arc, 560401, 580883, 600615, 870259, 870272, 870555, 870557, 870563, 870570, 870752, 870757, 870780, 870925
 erosion, tectonic, 870925
 subduction, 870810
 islands, 190003, 190005, 190019, 190027, 190174, 190755, 190806, 190822, 190909, 200003, 200033, 200055, 200221, 200325, 200341, 200359, 200389, 200395, 200523, 200547, 350531, 38S0304, 42B0633
 Bonin Islands, 200039
 Jurassic Quiet Zone, 610024
 kerogen, degradinite, 870898
 landmass, 560545
 lava series, 580873
 lithology, 190556
 forearc, 870811
 turbidites, 870617
 magma, calc-alkalic, 590789
 Cascade Range, 590789
 magnetic anomaly, Hawaii, 320393
 magnetic lineation, 320017, 320045
 sedimentary record, 320926
 major element, argillaceous sediments, 580719, 580721, 580724
 Mariana Islands, basement, 600615
 Nankai Trough
 clay minerals, 870636
 heat flow, 870739
 Neogene stages, 870762
 offshore, 660419
 Okinawa, 580404
 organic facies origin
 carbon, organic, 660544
 continental margin, 660544

- organic facies origin (Cont.)
 oxygenated water mass, 660545
organic geochemistry
 coal, 571298
 continental margin, 571291
 transport, 571299
organic matter
 continental margin, 670598
 lower productivity, 670598
 oxygen, 670598
terrigenous components, 670598
organic sediments, origin, 660544
Pacific Ocean
 bottom sediments, 571313
 continental shelf, 560489
Pacific Ocean EC, geologic history, 090919, 090921
Pacific Ocean N, ooze, diatomaceous, 190909
Pacific Ocean W, guyot, 200657
Pacific Plate, 200019, 200389, 200395, 200694, 200698, 200725
 chalk, 200019, 200021, 200022, 200023, 200024, 200026, 200027
 chert, 200019, 200021, 200022, 200023, 200024, 200026, 200027
Paleogene-Neogene, 310837
paleomagnetic results, island arc, 870780
petroleum generating potential, organic matter, 571327
Philippine Basin, genesis, 310859
Philippine Sea, Paleogene-Neogene, 310845
Philippines, genesis, 310870, 310874, 310875
physical properties, forearc, 870811
plate tectonics, 870762
rhyolite, conglomerate, 571285, 571286, 571287, 571288
sea floor, Hawaii, 320394
sediment source, 560939, 560950, 560991, 560993
sedimentary record, magnetic lineation, 320926, 320927
seismic reflection
 continental slope, 870746
 Hawaii, 320393
Shikoku Basin, island arc, 870762
spreading center, 860691
submarine canyon, 660450
tectonics, island arc, 870762, 870780
Tertiary and Quaternary sediments, 580661
tholeiite, 590750
topography, 200523
turbidite, mineral composition, 670537, 670538
unconformities, regional, island arc, 870762
uplifting, continental slope, 870746, 870748
vein, structure, 870824
volcanic activity, 561033
volcanic arc, 060832, 060834, 061281, 061285, 061289, 090919, 090921, 180535, 180674, 180687, 180693, 180694, 180698, 190003, 190005, 190019, 190027, 190174, 190806, 190822, 190909, 200003, 200055, 200221, 200325, 200341, 200359, 200389, 200395, 200523, 200547, 200736, 210843, 250648, 260161, 270747, 291100, 320005, 320017, 320772, 320928, 320945, 350531, 38S0304, 42B0633, 430857, 560037, 590793
Abashiri-Urahoro, 190824
Akita, 180700
Aomori Prefecture, 180700
Bonin Islands, 130771, 200033
Fuji, 130771
guyots, 200093
Hokkaido, 190824, 200361
Honshu, 090921
Iriki, 200336
Japan Trench, 560463
Kagoshima, 200336
Kanagawa Prefecture, 190755
Koroko, 340383
lakes, 42B0744
Makurazaki, 200336
northeastern, 190224
northern, 190731
Pacific Ocean, 190755
Yamagata Prefecture, 200336
Yokohama, 200505
volcanic rocks, petrography
 Geisha Guyots, 200684
 submergence, 200694
volcaniclastics, source, 580706
volcanism, clay, 870638
volcanism, explosive, 561027
 ash, 561034
see also Pacific NW
Japan Alps, 870627
Japan Basin
 Paleogene-Neogene, 310849, 310851
Philippine Sea, Paleogene-Neogene, 310849, 310851
Pleistocene, Pliocene foraminifers, 310699
radiolarians, 310711
sand, 310511
silicoflagellates, 310766
see also Japan, Sea of
Japan C, 090921, 200547, 540085, 540307, 560036, 560194, 560449, 560464, 560467, 560522, 560535, 560544, 560552, 560554, 580675, 580706, 580707, 580719, 580724, 580806, 580856, 580953, 580972, 580992, 580994, 580995, 580996, 590751, 590792, 600617
chert
 geochemistry, 620730
 petrology, 620730
detrital modal analysis
 sand, 870623
 turbidites, 870624
mountain building, 870762
Nankai Trough, heat flow, 870739
sedimentary facies, sedimentation model, 870624, 870626
Japan Current, 310005, 310018, 320444, 320928, 320933, 590600, 641008, 680308, 860005, 860209, 860215, 860367, 860370, 860441, 860576, 900926, 900928
chlorite, source, 590600
clay, source, 860576
clay minerals, 580992
deep sea sediment, geochemistry, 870652
dominant Pyrenean factor, 580989
introduction, explanatory notes,
 transitional water mass, W, 310007
kaolinite, 580669
lithology, 310204, 310205, 310288, 320022
Nankai Trough, Japan Trench, 870651
Neogene diatoms, 310779
Pleistocene, Pliocene foraminifers, 310695
sediment source, 560993
sedimentary record, 320927, 320930
 Hess Rise, 320930
 Japan, 320927
silicoflagellates, 310764
see also Philippine Sea
Japan E, 600475, 860370, 870587, 870639
clay, stratigraphy, 870640
continental margin, 870640
Japan N, 870638
clay, stratigraphy, 870638
margin, Cenozoic history, 870638
offshore, 560473
Japan NE, 560465, 560467, 560469, 560507, 810450
amphiboles, 580663
ash, 870681
continental slope, 870746
 basement, 870746
 crust, oceanic, 870749
 seismic reflection, 870746
 subduction, 870749
major reflectors, continental slope, 870746
offshore, 760411, 760425, 760426
 claystone, 760429
Philippines, genesis, 310875
silicoflagellates, 310768
volcanic arc, 870649
Japan Plain, 310007
lithology, 310419
Neogene diatoms, 310785
Japan S, 580673, 870555
Fiji, magnetic anomaly, 200523
Nankai Trough, clay minerals, 870635
volcanism, explosive, Neogene, 310587
Japan SE, organic matter, carbonization, 310621
Japan, Sea of, 550379, 560194, 580721, 580995, 590601, 870258, 870436, 870437, 870563, 870570, 870643, 870695, 870700, 870716
alteration, diagenetic, organic matter, 571306
arc-continent separation, 310005
ash, geochemistry, 870700
Atlantic Ocean NW, physical properties, 310535
basalt, altered
 major element, 580883
 trace elements, 580883
bathymetry, Paleogene-Neogene, 310837
calcareous nannofossils, biostratigraphy, 310655
carbon, 310633
 geochemistry, 310633, 580883
chlorophyll derivatives, 310629
clastic wedges, 580995, 580996
consolidation, sediment, 310569, 310571
crust, oceanic, 310005
fan, submarine, deposits, 310489, 310490
geochemistry, volcanism, 870700
geothermal studies, heat flow, 310575
Hokkaido E, Wadati-Benioff zone, 560482
interstitial water, 310639
interstitial water studies, 310639
island arcs, transitional-continental, 310005
kaolinite, 580673
major element, argillaceous sediments, 580721
margin, 310849
marginal basins, 310005
Miocene-Pleistocene sediments, 560981
Neogene diatoms, 310779, 310781, 310785
Oki Archipelago, 580875
Paleogene-Neogene, 060293, 180534, 180959, 190805, 310837, 42B0744
carbon, 310633
chlorophyll derivatives, 310629
interstitial water, 310639
paleotemperatures, 590601
petrology, 310528
Philippine Sea, Paleogene-Neogene, 310852
Philippines, genesis, 310875
physical properties, 310535, 310538, 310553
 sediments, 310535
Pleistocene, Pliocene foraminifers, 310693, 310696, 310699
radiolarians, 310703, 310711
rafting, 310007

- sand, 310511
 sedimentary structure, 310471, 310484
 ash, 310487
 bedding, 310474
 bottom current, 310488
 chalk, 310488
 clay, 310487
 conglomerate, 310487
 cross-bedding, 310488
 deformation, 310488
 erosion, 310484
 inclusion, 310484
 lamination, 310474, 310487
 load cast, 310484
 ooze, 310488
 primary structure, 310474
 slumping, 310486, 310487
 tuff, 310487
 silicoflagellates, 310763, 310768
 stratigraphy, Paleogene-Neogene, 310837
 sulfur, geochemistry, 310633
 volcanism, explosive, Neogene, 310587
 Yamato Basin, 310007
see also Toyama Trough; Yamato Basin;
 Yamato Rise
 Japan SW, 580662, 580721, 580767, 780615,
 870045, 870621, 870623, 870624, 870795,
 870853, 870941
 ash, geochemistry, 870700
 basin genesis, 310859
 continental margin, 310007
 detrital modal analysis
 sand, 870621, 870622
 turbidites, 870623
 frontal thrust sheet, trench fill boundary,
 870931
 geochemistry, volcanism, 870699, 870700
 magnetite, 580665
 major element, argillaceous sediments,
 580721, 580724
 mineral, 580665
 mineral, heavy, sandstone, 580661, 580665,
 580666
 mineral, mafic, 580666
 Nankai Trough, subduction rate, 870789
 Philippine Basin, genesis, 310859
 Philippine Sea NE, mineral, heavy, 580661,
 580665
 Philippines, genesis, 310874
 physiography, basement, 870613
 planktonic foraminiferal biostratigraphy,
 Pacific Ocean, 310679
 radiolarians, 310703, 310709
 sandstone, 580661, 580662
 magnetite, 580665
 mineral, heavy, 580665
 silicoflagellates, 310763
 subduction rate, geologic constraint, 870795
 Tertiary and Quaternary sediments, 580661
 volcanic arc, 870699
 volcanism, explosive, Neogene, 310577
 Japan Trench, 040125, 060010, 060644, 200547,
 320873, 560003, 560004, 560024, 560054,
 560240, 560320, 560321, 560330, 560333,
 560355, 560356, 560403, 560404, 560449,
 560451, 560457, 560459, 560460, 560463,
 560468, 560469, 560473, 560474, 560476,
 560478, 560479, 560483, 560484, 560486,
 560489, 560490, 560505, 560512, 560513,
 560514, 560522, 560531, 560556, 560557,
 560565, 560566, 560570, 560572, 560584,
 560585, 560771, 560939, 560941, 560944,
 560949, 560950, 560954, 561089, 561090,
 561092, 561095, 561133, 561169, 561207,
 580719, 580724, 580737, 580759, 590641,
 590645, 600497, 610619, 640676, 640691,
 640763, 640764, 640794, 640796, 640798,
 640799, 640809, 640916, 650418, 660006,
 660059, 660451, 660453, 660477, 660489,
 660490, 660492, 660564, 660569, 660678,
 660692, 660787, 670610, 670645, 670663,
 670701, 670766, 670770, 670778, 720835,
 720837, 720871, 720875, 780597, 790794,
 840811, 840911, 860024, 870005, 870016,
 870035, 870123, 870257, 870270, 870281,
 870302, 870304, 870393, 870555, 870563,
 870564, 870573, 870577, 870580, 870587,
 870594, 870596, 870605, 870633, 870635,
 870638, 870643, 870646, 870649, 870650,
 870651, 870652, 870673, 870684, 870685,
 870703, 870704, 870709, 870713, 870745,
 870751, 870753, 870754, 870757, 870769,
 870771, 870777, 870809, 870843, 870846,
 870853, 870861, 870862, 870865, 870897,
 870902, 870909, 870910, 870917, 870950,
 931061, 950642, 960783
 accretion, 870703, 870749
 accretionary wedge, 870748
 accretionary zone, 870810
 accumulation rate, 870845, 870846, 870706,
 870707
 carbonate, authigenic, 870922, 870923
 change, 870776
 metal, 561259
 tectonism, 870777
 active-margin process, 870703
 AF demagnetization, 870769
 alteration, diagenetic, 561305
 organic matter, 561305, 571305
 amorphous constituents, 560941
 andesite, 561090
 anomalous zone, 870811
 $^{39}\text{Ar}/^{40}\text{Ar}$ age, boulders, 561281, 571281,
 571282
 argillaceous sediments, 561011
 mineral assemblages, 561014
 mineral compositions, 561011
 thermal properties, 561014
 ash, 561027, 561028, 561277, 860681,
 870647, 870681, 870921
 augite, 561029
 biotite, 561029
 bottom current, 561029
 deposition, 561029
 distribution, 561031, 660692
 geochemistry, 870695
 glass, 561029
 glass, volcanic, 561028
 hornblende, 561029
 hypersthene, 561029
 lithology, 870681
 magnetite, 561029
 Neogene, 561027
 plagioclase, 561029
 pumice, 561028
 redeposition, 561029
 sedimentary environment, 561028
 sedimentation, 561029
 tephra, 870684
 tuff, 561028
 volcanism, explosive, 561031, 870709
 augite, 561091
 axis, 870780
 basement, uplifting, 870746
 basin genesis, 310870
 bathymetry, 560449
 bedding, 870745 bedding attitude, 870757
 bedding plane, 870771, 870777, 870779,
 870810, 870812
 dipping, 870813, 870819, 870824, 870825
 stress axis, 870779
 tilting, 870780
 benthic foraminifers, 560835
 biostratigraphic summary, 560505, 560507,
 560510, 560511, 560512, 560513, 560514
 biotite hornfels, 561092
 bioturbation, 870811, 870825
 bitumen, chemistry, 561331
 Bonin Trench, 600085
 breccia
 chert, 561135
 collapse features, 561135
 marlstone, 561097
 mineralogy, 561135, 561136
 tuff, 561091
 bulk composition, 560957, 560960
 calcareous nannofossils, 560867
 biostratigraphy, 560875
 California, continental margin, 630759
 California, Gulf of, gulf mouth, 650404
 carbon
 geochemistry, 561319, 571319, 590641,
 590645
 isotopic composition, 561313
 carbon isotope ratio, carbonate, 870669
 carbon, organic, 870901
 carbonate carbon, 870901
 diagenesis, 670610
 hydrocarbon, 870901
 carbonate, 560941, 560944, 560949, 560954,
 560956
 altered volcanic debris, 870669
 authigenesis, 870669
 authigenic minerals, vertical
 distribution, 870669
 burial depth, 870669
 calcite, 870669
 carbon isotope ratio, 870669
 carbonate, authigenic, 870669
 chemistry, 870659, 870669
 concretion, 870669
 deep sea terrace, 870677
 diagenesis, 561117, 870669
 diagenetic environment “fossils”, 870669
 dolomite, 870669
 geothermal gradients, 870669
 interstitial water chemistry, 870669
 mudstone, diatomaceous, 870669
 ^{18}O , 870669
 origin, 870669
 oxygen isotope, 870669
 carbon nodule, 561089, 561094, 561098,
 870663
 Al_2O_3 content, 561094
 anaerobic decomposition, 561097
 breccia, 561090
 diagenesis, 561089, 561097
 diatom assemblages, 561097
 fossil planktonic diatoms, 561094
 manganese oxide, 561094
 petrography, 561090, 561094
 stratigraphic position, 561089
 chalk, Cretaceous, 200009, 200011, 200013
 chemical composition, metal, 571259,
 571262, 571263, 571264, 571265, 571266
 chemistry, 561331, 650418
 chert
 bedding and structures, 561134
 breccia, 561135
 formation, 561133
 method of formation, 561139, 561140
 mineralogy, 561135
 physical properties, 561137
 silica, 561137
 chlorite, 560944, 560946, 560949
 chlorite/kaolinite ratio, 560939, 560946,
 560962
 chlorophyll, diagenesis, 561391, 561397,

- chlorophyll (Cont.)
 571391, 571392, 571395, 571397, 571402,
 571406
 chlorophyll derivatives, geochemistry,
 610619
 clast, Miocene, 561009
 clastic grains, 561008
 glass, volcanic, 561008
 plagioclase, 561008
 quartz, 561008
 clastic rocks, hydrothermal metamorphic
 rocks, 561009
 clay, 560981
 clay minerals, 870633, 560941, 560944,
 560946, 560949, 560950, 560954, 560962,
 560986, 560989, 560990, 870635
 amorphous phase, 560983, 560984
 ash, vitric, 560985
 authigenic origin, 560987, 560988
 carbonate, 560981, 560983, 560984
 Cenozoic environment, 870633
 chlorite, 560980, 560983, 560984, 870635
 chlorite-montmorillonite, 560979, 560983,
 560984
 chlorite/kaolinite ratio, 560957, 560962
 clay, 560987
 clinoptilolite, 560984
 Cretaceous-Holocene sediments, 560985
 crystallinity, 870635
 diagenesis, 560963, 560979, 560993
 Fe-montmorillonite, 560979, 560984
 Fe_2O_3 content, 560987
 feldspar, 560981, 560983, 560984, 870635
 FeO content, 560987
 homogeneity, 870635
 illite, 560980, 560981, 560984, 870635
 illite-montmorillonite, 560979, 560981,
 560984
 illite/smectite ratio, 560957, 560963
 kaolinite, 560980, 560983, 560984, 870635
 manganese oxide, 560987
 MgO content, 560987
 microelements, 560987
 Miocene sediment, 560985, 560990, 870635
 mixed-layers, 870635
 montmorillonite, 560979
 mudstone, diatomaceous, 560990
 Na_2O , 560987
 opal, 870635
 origins, 560987
 paleogeography, 560979
 palygorskite, 560984
 palygorskite-sepiolite minerals, 560981,
 560984
 passage bed, 560985, 560987, 560989
 Pliocene-Holocene sediments, 560985,
 560987
 Pliocene-Miocene sediment, 870635
 Pliocene-Pleistocene sediments, 560984,
 560990
 quartz, 560981, 560983, 560984, 870635
 sediment history, 560991, 560993
 silt, 870635
 SiO_2 content, 560986
 smectite, 870635
 structure, 870635
 terrigenous origin, 560987
 upper rock mass, 560984
 zeolite, 560981
 clinoptilolite, 560946, 560949, 561138
 compressibility, 870846
 conglomerate, rhyolite, 561285
 conglomerate, dacite, 561285
 age, 561083
 conglomerate, volcanic, 561077
 age, 561079
 magnetic properties, 561078
 petrography, 561075
 tectonic setting, 561078
 consolidation, 561201, 581201, 870843,
 870844, 870845, 870846
 disturbance, 870844
 overconsolidation, 870844
 permeability, 870846
 sediments, 561201, 870843
 silt, diatomaceous, 870844
 testing, 870844
 continental margin, 660491, 840944, 870007
 convergence rate, 870810
 convergent margin, 670728
 crust, structure, 560463, 560464, 560465,
 560467
 crust, continental, 560494
 crust, oceanic, 560496, 870749
 seismic reflection, 870751
 seismic refraction, 870752, 870773
 seismic velocity, 870754
 structure, 560463
 subduction, 870749
 dacite, 561090
 age, 561083, 561084
 origin, 561083, 561084
 sulfur/carbon isotope ratio, 561285
 decollement, 870749
 deep-sea ostracodes, 560907
 deformation, 870725
 deformation, differential, 870777
 density, 870811
 deviatoric stress, 870823
 dewatering, 870703
 diagenesis, 560939, 560979
 carbonate, 561117
 clay minerals, 560979
 silica, 561143
 diatom biostratigraphy, 560633, 870779
 Miocene to Quaternary, 560641
 diatom correlation, 560687
 downlapping, strata, 870746
 downslope deposits, 870825
 easterly uplift, 870779
 erosion, Miocene sedimentary rocks, 870917
 Eurasian Plate, motion, 870780
 extension, 870825, 870920
 fatty acid, free acid distributions, 720837
 fault, bedding slip, 870778
 fault dips, 870817, 870819
 fault, healed
 conjugate set, 870779
 deformation, 870779
 fault motion control, 870780
 fault patterns, 870817, 870818
 fault plane orientation, 870777
 fault plane slip direction, 870778
 fault planes attitude, 870757
 faulting, 870749, 870777, 870778, 870780,
 870810, 870813, 870818, 870824, 870825
 listric, 870813, 870819, 870825
 normal, 870920
 reverse, 870920
 faults
 compressional, 870817
 dip-slip, 870816, 870817
 extensional, 870817
 healed, 870816, 870825
 landward-dipping, 870745
 listric, 870819, 870825
 sand-filled, 870818
 striated, 870813, 870816
 fecal pellets, 560921
 feldspar, 560944, 560946, 560949, 560950,
 560954
 folding, 870813
- foraminifers, 560775
 forearc terrane, 870809
 fracture, 870813, 870816, 870817, 870818,
 870823, 870825
 fracturing, 870777
 gabbro, 561091
 gas
 $^3\text{He}/^4\text{He}$ ratio, 870861
 hydrocarbon, $\text{C}_2\text{-}\text{C}_5$, 960783
 geochemical history, 571251, 571253,
 571254, 571255, 571256
 geochemistry, 561049, 561057, 561060,
 561151, 561213, 561251, 561259, 840643,
 870643, 870652, 271213, 271214, 271216,
 271219, 271220, 271221, 271222, 271223,
 271224, 271225, 271226, 271227, 271228,
 271229, 271230, 271232, 571213, 571214,
 571216, 571219, 571224, 571225
 mineralogy, 561058
 tephra, 561058
 geologic history, 870707
 geologic setting, 560473
 convergent margin, 870917
 Honshu, 870917
 Pacific Plate, 870917
 Sanriku, 870917
 subhorizontal reflectors, 870917
 geologic structure, 870810
 geophysical data, shale, 840944
 geophysical logging, 561169, 561171,
 561173, 561180
 synthetic seismogram, 561180
 geothermal gradient, 780597
 burial temperature indicators, 870674
 clinoptilolite, 870674
 equilibrium temperatures, 870673
 glass, volcanic, 870674
 heat flow, 870674
 opal, biogenic, 870674
 opal-CT, 870674
 temperature, 870673
 temperature-dependent minerals, 870674
 geothermal observations, 560480, 561207
 glass, dispersed, 870921
 glass, volcanic, 560944, 560946, 560949,
 560950, 560954, 561029
 age, 561277
 Al_2O_3 content, 561030
 diagenesis, 561030
 FeO and MgO content, 561030
 fission track chronology, 561277
 geochemistry, 561049
 petrography, 561049, 561057, 561058,
 561060
 rhylolite, 561030
 SiO_2 content, 561030
 glauconite, 560957
 Goban Spur, benthic foraminifers, 800726
 graben, 870749
 granodiorite, 561091
 gravity, 560449
 $^3\text{He}/^4\text{He}$ ratio, 870861
 gas, 870862
 pore gases, 870861
 heavy metals, 561019
 heavy mineral analysis, 561019
 hiatuses, 870777
 Hochinohe Knoll, 870704
 Honshu N, 870398
 hornblende, 560944, 560949, 560953, 560956
 horst, graben, 870704
 hydrocarbon, extractable, 561291
 hydrocarbon, aliphatic, hydrocarbon,
 terrigenous, 720834
 hydrocarbon, $\text{C}_1\text{-}\text{C}_5$
 gas pockets, 561335

- hydrocarbon (Cont.)
inner slope W, 571341, 571342
lower slope W, 571343, 571344
slope, 571339, 571341
upper slope, 571338, 571339
wall, 571335, 571336, 571337, 571338,
571342, 571343, 571344
hydrocarbon, C₁-C₇, 561349
volatile organic compounds, 571349,
571350, 571351, 571353, 571354
hydrocarbon, C₁-C₈
Baja California, 640764
Guaymas Basin, 640765
San Miguel Gap, 630778
sediments, 640763
hydrocarbon, extractable, 561291
organic petrology, 580758, 580759,
630832, 640850
hydrocarbon generation potential, 870902
hydrocarbon, nonaromatic, Pleistocene
sediments, 870883
hydrofracturing, 870823
ice rafting, 561089, 561095
ichthyolith, 560887
illite, 560944, 560949
illite/smectite ratio, 560946
oscillations, 560939, 560963
inclination, distributions, 870770
inner slope, 560467, 870280, 870669
chemical composition, 571259
sediments, 571259
inner trench slope, 560950
interstitial water, 561269, 870865
alteration, 870853
carbonate, 870853
chemical composition, 870853
chert, cristobalite, 870854
clay, 870854
clay minerals, 870853
consolidation, 870855
deformation, 870855
dewatering, 870854
diagenesis, 870853, 640691
magnesium, 870853
mineral composition, 870853
mineral-water interaction, 870854
Monterey shale, 870854
mud, diatomaceous, 870853
¹⁶O/¹⁸O ratio, 870853
¹⁸O, 870854, 870855
opal, biogenic, 870853
oxygen isotope, 870853
recrystallization, 870854
salinity, 870854, 870855
sediment chemistry, 870867, 870868
sediment interaction, 561269
sediment relationship, 870872
sedimentary structure, 870853
seismic reflection, 870855
shear zones, 870855
silica minerals, 870854
temperature effect, 870853
temperature increase, 870855
interstitial water chemistry, Baja
California, 640676
kaolinite, 560944, 560946, 560949
kerogen, 870901, 870902
Kuril Trench, Aleutian Trench, 860023
limestone, Albian, 620933, 620934
Line Islands, tectonics, 330743
lipid, 561367, 571385
comparison, 660569, 660571
depositional environment, 571387
diagenesis, 630770, 630771, 640916
distributions, 571387
origin, 571386, 571387
paleoenvironment, 640916, 660566, 660567
Quaternary, 660564
transformation, diagenetic, 571387
Walvis Bay, 571387
lithification, 870825
lithology, 870704, 870706, 870746, 870811,
870819
lower slope, 560319, 560355, 660529
structure, 560483
lower trench inner slope, 870704
maceral, sediment contrast, 870880
magnetic anomaly, 560449
magnetic direction change, 870769
magnetic overprint, 870771
magnetic polarity, 870776
magnetic intensity, 870779
magnetostratigraphy, 870757, 870776
age, 870776
major element, 271233, 271234, 271243,
271245, 271246, 271247, 271248
argillaceous sediments, 580719, 580724
chemistry, 561133
geochemistry, 561233
margin, 560487
metal, accumulation rate, 561259
Mexico S
continental margin, 660451
lipid, 660557
Middle America Trench
geotechnical properties, 660488
Quaternary, 660571
Quaternary sediments, 660557
middle trench inner slope, 870704
midslope, 560225
midslope terrace, 560225, 870780, 870810
midslope terrace sediment, 870917
mineral, heavy, 561005, 561019, 561020
mineralogy, 561011, 870777
sediments, 650418
minerals, Cenozoic, 870638
minor element, geochemistry, 870647, 870649
Miocene-Quaternary sediments, 870647
Mohorovicic discontinuity, depth, 870752,
870753, 870754
Mossbauer spectroscopy study, 950643
mud, siliceous, 870646
mudstone, 561092
mudstone, siliceous, 870646
nontronite, 560946
NRM, 870769, 870769
onshore volcanic activity, increase, 870921
ooze, diatomaceous, 870846
opal, biogenic, 561008
opal-A, 560944, 560946, 560949, 560953,
560956, 561139
opal-CT, 560949, 561135
organic chemistry, Miocene-Pliocene organic
material sources, 870902
organic geochemistry, 870897, 870897
active margin, 571291
midslope, 571291
outer slope, 571291
sediments, 571296
slope, 571291
transect, 571291
upper slope, 571291
organic matter, 561327, 571327
outer island rise, 560950
outer rise, 560399, 560401
outer trench slope, 870704
overburden stress, 870843, 870844, 870845,
870846
overconsolidation, 870843, 870846
oxygen isotope, interstitial water, 870853
Oyashio landmass, 870917
Pacific Ocean, bottom sediments, 571313,
571314
Pacific Ocean NE, 060644
Pacific Ocean NW, lithology, 200725
Pacific Ocean W, guyot, 200657
Pacific Plate, 870704
relative motion, 870780
paisley features, 870920
paleobathymetry, 560835
paleoceanography, 560809
paleocurrent direction, 870757
paleogeography, 560979
paleomagnetic results, 870757
floor deepening, 870780
remanent magnetization, 870780
tectonic disturbance, 870780
paleomagnetism, 561159, 561160
palygorskite, 560944, 560949
palynology, 560895
permeability, 870843, 870845, 870846
petrography, 561090, 561291
petroleum generating potential, 561327
organic matter, 571327, 571330
Philippine Sea S, sediment, 600497
Philippines, genesis, 310870
phylllosilicate, 870822, 870822
physical properties, 560615, 561187,
561190, 561193, 561195, 870777, 870957
bulk density, 561197
sonic velocity, 561198
tectonic modification, 561198
plagioclase, 561090
planktonic foraminiferal biostratigraphy,
560809
plate tectonics, 870754, 870780
plutonic rock, 561091
pole/bedding plane distribution, 870779
pollen analysis, 560903
porcellanite, 561133, 561134, 561137
breccia, 561135
formation, 561133, 561139
mineralogy, 561135
physical properties, 561137
silica, 561137
pore fluid pressure, 840767
pore pressure, 870823, 870824, 870845,
870846
pore water, 870861
porosity, 870811, 870816
preconsolidation stress, 870843
pull-apart structure, 870920
pumice, 560950
pumpellyite, 561092
pyrite, 560944, 560946, 560949, 560954,
560956
pyroxene, 560944, 560949, 560953, 560956
quartz, 560944, 560946, 560949, 560950,
560954, 561135
feldspar, 560944
quartz/feldspar ratio, 560944, 560950,
560954
radiolarians, 560695, 560735
regional unconformity, 870810
remagnetization, 870769, 870771, 870777,
870779, 870780
remanent magnetization, 870769, 870770
result, previous, model, 870753, 870754
rhodochrosite, 560946, 560957
rhyolite, sulfur/carbon isotope ratio,
561285
rock types, 561089
S-wave, velocity, 560461
sand, 870647
sandstone, 561067, 561069, 561092
mineral, heavy, 561068
petrography, 561143
Sanriku, 870745

- sediment composition, 560939
 sediment-interstitial water interaction, 571269
 salinity, 571270
 silica, 571274
 sedimentary prism, 870754
 sedimentation rate, 660450, 870777, 870811, 870846
 sedimentology
 accretionary prism, 870910
 active margin, 870909, 870910
 bathymetry, 870909
 carbonate, 870910
 CCD, 870910
 convergent margin, 870909
 deep-sea sediment fans, 870910
 dissolution, 870910
 gravitational processes, 870910
 imbricate structure, 870910
 lithosphere, 870909
 structure, 870909
 subduction, 870909, 870910
 surface water, 870910
 “trench slope model” confirmation, 870910
 upwelling, 870910
 sediments
 chemical composition, 870865
 vein structure, 870821, 870823, 870824, 870825
 wet-bulk density, 870811
 seismic profiles, 200547
 seismic reflection, 870746, 560489, 870746, 870752, 870753, 870754, 870810
 crust, oceanic, 870751
 seismic refraction, 870752, 870753
 seismic stratigraphy, 870745
 continental slope, 870750
 seismic structure, 870751
 seismic refraction, 870751
 structural complexity, 870754
 shallow inclination, 870771, 870776
 shear zone, 870724, 870819, 870821, 870825
 vein structure, 870824
 Shikoku Basin, vein, 870802
 Shikoku Island, 660838, 870257
 siderite, 560957
 siliceous rocks
 bedding and structures, 561134, 561135
 breccia, 561135
 chert, 561136, 561137, 561139, 561140
 mineralogy, 561135
 physical properties, 561137
 porcellanite, 561136, 561137, 561139, 561140
 siltstone, 561067, 561069
 mineral, heavy, 561068
 slickensides, 561107
 origin, 561109
 striations, 870777
 slit, mineralogy, 561005, 561008
 slope, 560582, 560583, 600925, 670051
 slope sediment
 deformation, 870917
 physical properties, 870917
 slumping, downslope, 561089, 561095
 smectite, 560944, 560946
 smectite/illite ratio, 560949
 sonic velocity, 870811, 870811
 steep dipping beds, 870921
 stratigraphic correlations, 870770
 stratigraphic position, 561089, 561090
 stratigraphy
 seismic reflection, 870745
 turbidite, mud, 870923, 870924
 stress axis, 870779
 stress field, 870703
 structural feature
 bedding, tilted, 870824
 convergent margin, 870809
 crenulation, 870809
 deformation sequence, 870825
 deformational structure, 870809
 fault, conjugate, 870825
 fault, healed, 870825
 fault, listric normal, 870824
 faulting, 870809
 folding, 870809
 layer-parallel shear, 870824, 870825
 offscraping, 870809
 regional unconformity, 870810
 stratal disruption, 870809
 subduction, 870809
 subsidence, 870809
 synsedimentary processes, 870809
 tension gashes, 870825
 underplating, 870809
 uplifting, 870809
 vein filling, 870825
 structural model, 870753
 subduction, 870749, 870749
 crust, oceanic, 560463, 870751, 870752, 870754
 erosion, 560486, 870825
 subduction zone, 870810
 tectonic evolution, 870757
 subsidence, 870917
 deep sea terrace, 560482
 sulfur/carbon isotope ratio, 561285
 tectonic disturbance, 870769, 870771
 tectonics, 870746, 870752, 870780
 accretionary wedge, 870745
 landward-dipping faults, 870745
 seismic stratigraphy, 870745
 tectonism, 870777
 tephra, 870703
 petrography, 561043
 terrace, deep-sea, shallow-water depth, 560950
 tetrapyrrole
 geochemistry, 630788, 630790, 630791, 630805, 630810, 640789, 640792, 640796, 640798, 640809
 pigment, 580737
 thermal maturity, 870902
 thrust fault, 870749
 tilting, 870771, 870777, 870779
 bedding plane, 870771, 870777, 870779
 strata, 870813, 870825
 Tohoku Arc, geology, 870716
 toplapping, strata, 870746
 trace elements, geochemistry, 870647, 870649
 trace fossils, 560911
 trench lower slope, 560496
 trench slope, 870780, 870825
 seismic layering, 870754
 structural features, 870812
 tuff, vitric, 561091
 turbidites, magnetic fabric, 870611
 underconsolidation, 870843
 uplifting, 870746
 Pleistocene, 870917
 upper continental slope, 870704
 upper slope, 560193
 veinlet, dewatering, 870778
 void ratio, 870843, 870844
 volcanic rock, 560481
 volcanism, Miocene-Pliocene, 870921
 volcanism, explosive, 561027, 561028, 561029, 561031, 870703
 ash, 561034
 diagenesis, 561030
 history, 870917
 Neogene, 870703
 plate movement, 561033
 pulses of activity, 561033
 redeposition, 561029
 sedimentary environment, 561028
 sedimentation, 561029
 stages of high activity, 561027
 subduction, 561033, 561034
 synchronous pulses, 561027
 volcanism, subaerial, 870921
 Walvis Ridge
 alkane, 751091
 alkanoic acid, 751091
 zeolite, 561143
 see also Nankai Trough
 Japan Trench E, 600926
 Japan W, 600766
 Jarlemai siltstone, Australia W, continental margin, 270581
 jarosite, Hess Rise, pyrite-marcasite, 620856, 620859, 620861
 Jarvis Island, 330742
 Line Islands, tectonics, 330735, 330740
 jasper
 Caballo Formation, Texas, 561137
 chert
 geochemistry, 620713, 620721, 620725, 620731
 oxygen isotope, 620749
 petrology, 620713, 620721, 620725, 620731
 lithology, mud, 960479
 Pacific Ocean, guyots, 620773, 620774, 620775
 Java, 040599, 150484, 180700, 180701, 220723
 basalt, olivine, 250534
 Middle America Trench, margin, 840955
 volcanism, Mascarene Islands, 250534
 see also Indian Ocean E
 Java Trench, 220003, 220019, 220021, 220085, 220377, 220713, 220772, 220815, 220816, 220818, 220822, 220835, 270629, 390904, 660787, 660838, 670778, 840955
 deformation, framework, 870937
 frontal thrust sheet, structural development, 870933
 lithology, 220021
 regional summary, 220815, 220818
 Wharton Basin, 220822
 Jean Charcot Escarpment, 801156, 801158, 801161
 basement, morphology, 801164
 Goban Spur, continental margin, 801155, 801158
 regional geology, 801191
 regional structure, 801191
 Jean Charcot Fault, 801189
 Atlantic Ocean N, paleogeography, 121171
 Jeanne d'Arc Basin, 47B0026
 Jebel Amsitene
 Moroccan Basin, margin, 500809, 500811
 Ouanamane Formation, 790867
 Jebel at Tair, 230754, 230809
 Jebel d'Anklout, 790867
 Jenkins Seamount, 621023
 Jidda, 230814
 Red Sea, 230539, 230595, 230601
 geology, 230813, 230814, 230816
 Jimberiana dike, 370764, 370766
 Jimmu Seamount, 200684, 550847
 Jingu Seamount, 550019, 550669, 550687, 550760, 550780, 550830, 550807
 bathymetry, 550847
 chemistry, 550685, 550686
 K/Ar age, 550688
 geology and vertical tectonic history,

- geology and vertical tectonic history
 - (Cont.)
 - 550782
 - volcanics, age, 550685, 550686, 550687, 550688
 - Jizan, Red Sea, geology, 230813, 230814, 230816
 - Joban, 870426
 - basin, 870258
 - carbonate, formation, 561097
 - coal field, 870570
 - Joes River Formation, Barbados, diapir, mud, 780034
 - Jofane Formation, Rio Grande Rise N, regional setting, 250695
 - Johnston Island, 330025
 - Line Islands, tectonics, 330731
 - Johnston Island Ridge, 080045
 - Johnston Island Trough, 330008, 330025, 330387
 - lithology, 330034
 - Jones Mountains, 350005, 350008, 350028, 350064, 350127, 350291, 350299, 350730
 - Southeast Pacific Basin, evolution, geologic, 350735, 350739
 - Jordan, 230393
 - Israel, history, 42B1219
 - rift valley, 42B1195
 - Jordan Knoll, 100297, 770717, 770726
 - Josephine County, Oregon, basalt, petrology, 580865
 - Josephine Seamount, 130033, 430890
 - Jreibichat formation, Cape Bojador, seismic interpretation, 47A0497
 - Juan de Fuca Plate, 180005, 180098, 180170, 180214, 180233, 180549, 180588, 180915, 180984, 180990
 - Gorda Plate, 180980
 - mudstone, petrology, 180910
 - sand, mineral, heavy, 180880
 - Juan de Fuca Ridge, 140774, 160642, 160648, 180005, 180241, 180880, 180935, 180940, 180995, 190899, 340192, 340345, 340381, 340383, 430098, 430736, 540689, 540709, 540746, 540765, 540825, 580803, 590721, 590724, 650315, 650697, 650702, 690648, 820426, 820431, 910487
 - basalt, 590720, 830143
 - basalt, altered
 - geochemistry, 540689, 580800, 580803
 - petrochemistry, 580800
 - petrology, 540689
 - geochemistry, ferrobasalt, 540765
 - glass, basalt, 540709
 - Gorda Ridges, 090917, 090921
 - oceanic plate, 180214, 180910, 180980
 - igneous rocks, chemical composition, 590720, 590721, 590724
 - major element, geochemistry, 930693
 - mineralogy, ferrobasalt, 540765
 - Pacific Ocean EC, geologic history, 090917, 090921
 - Pacific Ocean N, plate movement, 190899
 - Pacific Ocean SE, Pb isotope, 920399
 - petrology, basalt, 540746
 - seamounts, 190620
 - sedimentation rate, 490315
 - Sr isotope
 - alteration, 590721
 - basalt, 590724
 - comparison suite, 590720
 - major element, 590721
 - trace elements, 590724
 - titanomagnetite, 450579
 - trace elements, geochemistry, 930693
 - Juan de Fuca Strait, 180980
 - Juan Fernandez, 340422
 - Juncal Formation, California, 950369
 - Jura Mountains, 110573, 760606
 - Jurassic Quiet Zone, 430866
 - Antarctica, geophysical measurements, 411135
 - Atlantic Ocean NE, evolution, 411215, 411219, 411221
 - Atlantic Ocean NW, sea floor spreading, 430866
 - continental margin, structural evolution, 481042
 - Iberian margin W, evolution, 47B0766
 - Japan, 610024
 - Moroccan Basin, 500005
 - evolution, 500803
 - Pacific Ocean, 760904
 - Jurassic/Cretaceous boundary, Bahama Basin, 770692
 - Jutland, 380921, 380943