

INDEX TO VOLUME 178

This index covers both the *Initial Reports* and *Scientific Results* portions of Volume 178 of the *Proceedings of the Ocean Drilling Program*. References to page numbers in the *Initial Reports* are preceded by "A" followed by the chapter number with a colon (A1:) and to those in the *Scientific Results* (this volume) by "B" followed by the chapter number with a colon (B1:).

The index was prepared by Earth Systems, under subcontract to the Ocean Drilling Program. The index contains two hierarchies of entries: (1) a main entry, defined as a keyword or concept followed by a reference to the page on which that word or concept appears, and (2) a subentry, defined as an elaboration on the main entry followed by a page reference.

The index covers volume text, figures, and tables but not core-description forms ("barrel sheets"), core photographs, smear slide data, or thin section descriptions. Also excluded from the index are bibliographic references, names of individuals, and routine front matter.

The Subject Index follows a standard format. Geographical, geologic, and other terms are referenced only if they are subjects of discussion. A site chapter in the *Initial Reports* is considered the principal reference for that site and is indicated on the first line of the site's listing in the index. Such a reference to Site 1095, for example, is given as "Site 1095, A4:1–173."

The Taxonomic Index is an index relating to significant findings and/or substantive discussions, not of species names *per se*. This index covers three varieties of information: (1) individual genera and species that have been erected or emended formally, (2) biostratigraphic zones, and (3) fossils depicted in illustrations. A taxonomic entry consisting of both genus and species is listed alphabetically by genus and also by species. Biostratigraphic zones are listed alphabetically by genus; zones with letter prefixes are listed under "zones."

SUBJECT INDEX

A

- acoustic properties
 - density/velocity models, A9:22–23
 - vs. two-way traveltime, A7:70–71
- acoustic stratigraphy
 - seismic units, A4:37–38
 - See also Antarctic Offshore Acoustic Stratigraphy
- age
 - argon isotopes, B22:6–10
 - barnacle fragments, B27:1–8
 - glaciation, A1:4
 - histograms, B22:22
 - lower Pliocene, A6:28
 - ocean floors, A2:35
 - sediments, B7:4–5
 - vs. strontium isotopes, B27:5
 - See also chronology; geochronology; radioactive dating
- age models, physical properties, B32:6
- age release
 - calcium/potassium ratio, B22:19–20
 - chlorine/potassium ratio, B22:18
- age vs. depth
 - Site 1095, A1:35; A4:63, 100; B(synthesis):36; B36:25
 - Site 1096, A1:38; A5:30, 92; B36:26
 - Site 1101, A1:40; A8:59; B36:27
- albite, potassium logs vs. photoelectric effect logs, A5:85
- Alexander Island
 - chlorite-illite province, B8:9
 - clay mineralogy, B8:14
 - geology, B8:5
- alkalinity
 - pore water, A4:21; A5:18; A6:14; A7:16; A8:13; A9:15
 - vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
- alkalis, vs. silica, B22:17
- aluminum/titanium ratio
 - climate optimum, B34:6
 - neoglacial, B34:7
- ammonium
 - pore water, A4:21; A5:18; A6:14; A7:16; A8:13; A9:15
 - vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
- amorphous material, vs. depth, B13:12
- amphibole, drift deposits, B8:7
- Andean Orogeny, geology, B8:4–5
- angiosperms, continental rise, B2:1–10
- anisotropy, magnetic minerals, B14:3
- anorthite, potassium logs vs. photoelectric effect logs, A5:85
- anoxia, sea ice, B25:9
- anoxic environment, Holocene, B7:10–14
- Antarctic Circumpolar Current
 - currents, A2:7; B10:8
 - neoglacial, B34:7–8

Antarctic Ice Sheet
 geology, A1:1–60
 glaciation, A2:1–44
 Antarctic Ocean, biostratigraphy, B13:1–22
 Antarctic Offshore Acoustic Stratigraphy, drilling, A1:2
 Antarctic Peninsula
 dinoflagellates, B2:1–10
 geochemistry, B4:1–12
 geology, A1:4–5; A2:7–9
 glacial history, B(synthesis):1–40
 ice-rafted debris, B11:1–23
 seismic velocity, B16:1–25
 upper Pliocene impact, B9:1–6
 Antarctic Peninsula Batholith, geology, B8:5
 Antarctic Peninsula Margin, stable isotopes, B20:1–10
 Antarctic Peninsula Pacific Margin, diatoms, B29:1–25
 Antarctic Peninsula W
 magnetobiochronology, B36:1–40
 magnetostratigraphy, B31:1–23; B37:1–61
 spectral reflectance data, B21:1–22
 Antarctic Surface Water, currents, B7:2
 Antarctic Zone, physiography, B8:4
Antarctissa, photograph, B13:16
 ANTOSTRAT, drilling, A1:2; A2:3
 Anvers Island
 clay mineralogy, B8:13
 seismic profiles, A2:41
 apatite
 authigenesis, A8:13
 sediments, A5:19
 argon isotopes
 milligram-sized fractions, B22:24
 multi-grain fractions, B22:25–26
 sediments, B(synthesis):9
 volcanic clasts, B22:1–26
See also age release; calcium/potassium ratio; chlorine/potassium ratio
 asteroids, impacts, A2:17–18
 authigenesis
 apatite, A8:13
 carbonates, A5:19–20
 autocyclic processes, deposition, B25:10–11

B

barium, sediments, A4:23–24; A5:21; A6:15; B4:1–12
 barium, biogenic
 vs. core depth, B23:27
See also biogenic barium accumulation rates
 barnacle fragments
 geochronology, B27:1–8
 photograph, B27:7
 scanning electron microscopy, B27:8
 basalt pebbles
 deposition, A8:8; B25–6
 photograph, A8:40
 basement, pre-Jurassic rocks, B8:5
 basement, oceanic, vertical seismic profiles, B17:23
 basins
 onlapping fill, A7:24–26; B34:3
 paleoenvironment, A7:9–10; B34:3

bathyal environment, lithologic units, A4:6
 bathymetry
 maps, A1:29; A2:33; A4:43; A5:38; A6:24; A7:28–29; A8:25; A9:28; B(synthesis):33
 Palmer Deep, B34:13
 seismic surveys, A1:46
 bedding
 lithologic units, A7:5–6
See also convolute bedding
 Bellingshausen abyssal plain, channels, B8:3–4, 15
 Bellingshausen Basin, biostratigraphy, B13:1–22
 Bellingshausen Sea, paleoproductivity, B23:12–16
 biofacies
 lower Pliocene, A6:28
 sedimentation, A9:9
 Sequence S3, A1:12
 summary, A1:43; A6:41
See also diatomaceous facies; ichnofacies
 Biofacies A, foraminifers, A6:10–11
 Biofacies B, foraminifers, A6:10–11
 Biofacies C, foraminifers, A6:10–11
 biogenic barium accumulation rates, vs. age, B23:28
 biogenic component
 coarse fraction, B15:10
 flux, B3:4–7
 lithologic units, A7:35, 39; A8:3–9
 vs. depth, A4:49; A5:76–77; A8:30, 54
 biogenic mixing, physical properties, B30:4–7
 biosiliceous content, biogenic opal, B23:8–9
 biostratigraphic datums, diatoms, B29:3–24
 biostratigraphic events, diatoms, B29:13–14, 16–17, 22
 biostratigraphy
 calcareous nannofossils, B26:1–21; B28:1–22
 Cenozoic, A1:14–15
 diatoms, B29:1–25; B35:1–57
 dinoflagellates, B2:1–10
 Miocene–Pleistocene, A4:62
 Neogene, B13:10
 palynomorphs, B26:1–21; B28:1–22
 Pliocene–Pleistocene, A5:58; A6:42
 sediments, B(synthesis):11–12
 Site 1095, A4:13–16; B35:1–57
 Site 1096, A5:12–15; B35:1–57
 Site 1097, A6:8–11; B35:1–57
 Site 1098, A7:10–11; B35:1–57
 Site 1099, A7:10–11; B35:1–57
 Site 1100, A9:11–12; B35:1–57
 Site 1101, A8:9–11; B35:1–57
 Site 1103, A9:11–12; B35:1–57
 summary, A1:41, 52
 biotite, vs. age, B15:11
 Bioturbated Facies, lithologic units, B25:7–12
 bioturbation
 color, B3:4–5
 deposition, A4:12–13
 lithologic units, A4:4–13; A5:5–12; A7:7; A8:3–9; B25:4–6, 8
 mud, A2:15; A4:4–13
 photograph; A5:50, 55; A6:38
 porosity, B30:4–7
 postglacial sediments, B18:5

- sediments, B7:10–14
 vs. depth, B32:20, 33
 wavenumber, B32:27
 X-ray radiography, B10:21
 Bismarck Strait
 deglaciation, B34:4
 neoglacial, B34:7
 blocks, seabed observations, A9:9–10
 blooms, *Coccolithus pelagicus*, B26:5–6
Bolboforma, biostratigraphy, A5:14–15
 bottom currents
 clay minerals, B8:10
 deposition, B25:9
 opal accumulation rates, B23:10–11
 Brabant Island, clay mineralogy, B8:13
 Bransfield Strait
 chlorite-illite province, B8:9
 glaciation, A2:6, 19
 breccia. *See* clast breccia
 Brunhes/Matuyama boundary
 magnetostratigraphy, A1:11; A4:18; A5:16; A8:11;
 B36:9; B37:13
 oxygen isotope Stage 19, A8:12
 Brunhes Chron, magnetostratigraphy, B36:7; B37:15
Bulimina aculeata, carbon and oxygen isotopes, B7:22
 bulk density logs
 comparison with velocity logs, B19:29
 vs. depth, A4:88; A5:82; A9:66
 bulk sediments, parameters, B15:1–19
 buried channels, deposition, A5:11–12
 Burrowed Facies, photograph, A4:59
 burrows
 lithologic units, A4:4–5, 10–11; A5:5; A7:4–7; A8:3, 5
 photograph, A4:52; A5:46, 55; A7:40; A8:37
- C**
 calcareous nannofossils, lithologic units, A5:5
 calcite
 chemical and nuclear parameters, A5:137
 diamict, A6:17–18
 potassium logs vs. photoelectric effect logs, A5:85
 X-ray diffraction data, A8:15, 65
 calcium
 pore water, A4:22; A5:19; A6:14; A8:14; A9:15
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
 calcium/potassium ratio
 spectra and age release, B22:5–6, 18
 vs. chlorine/potassium ratio, B22:21
 calcium carbonate
 sediments, A4:20–21; A5:128–130; A7:106–107; A8:12
 vs. depth, A4:78; A6:48
 caliper logs, vs. depth, A4:88; A9:66; B17:15; B32:19
 calving, pebbles, B11:4
 carbon, sediments, A7:106–107
 carbon, inorganic
 sediments, A4:20–21; A5:17, 128–130; A6:13–14;
 A7:13, 106–107; A8:12, 76–77
 vs. depth, A5:68; A7:50–51
 carbon, organic
 neoglacial, B34:6–8
 sediments, A4:20–21
 carbon, total, sediments, A4:158–160; A5:128–130
 carbon, total organic
 color, B3:6–7
 porosity, B30:5
 Rock-Eval pyrolysis, A5:17–18
 sediments, A5:17–18; A6:14; A7:13, 106–107; A8:13,
 76–77; B15:1–19
 vs. age, A4:7–8; B15:9
 vs. core depth, B23:27
 vs. depth, A5:69; A7:50–51; A8:46
 See also total organic carbon accumulation rates
 carbon-14, climate optimum, B34:5–6
 carbon dioxide
 productivity, B23:13
 sediments, B4:3
 carbon isotopes
 Bulimina aculeata, B7:22
 neoglacial, B34:7
 Neogloboquadrina pachyderma sinistral, B20:1–10
 sediments, B7:5–11
 vs. depth, B20:6
 vs. oxygen isotopes, B20:8
 carbonate compensation depth
 foraminifers, B7:9–14
 sedimentation, B28:5
 carbonate content
 pore water, A4:22–23; A5:19
 sediments, A8:76–77; B(synthesis):14; B15:1–19
 vs. age, A4:7; A4:8; B15:9
 vs. core depth, B23:27
 vs. depth, A8:33, 45
 X-ray diffraction data, A8:65
 carbonate content accumulation rates, vs. age, B23:28
 carbonates
 diagenesis, A7:16
 dissolution, A6:13–14; A8:14
 oxygen isotope Stage 19, A8:12
 Cariaco Basin
 neoglacial, B34:7
 Quaternary, A2:16–17
 Cenozoic
 calcareous nannofossils and palynomorphs, B28:1–22
 ice sheets, A2:1–44
 stratigraphy, A1:1–2
 cerium, sediments, A4:23; B4:1–12
Chaetoceros spp. spores
 abundance, A7:42
 backscattered electron photomicrograph, B18:13–14
 percentage in cores, B7:25–26
 photograph, A7:36, 40
 channels. *See* buried channels
 Chaotically Stratified Facies
 diamictite, A9:7
 See also diamict, chaotically bedded; diamict, strati-
 fied
 charcoal, vs. depth, B28:13
 chloride
 pore water, A4:21; A7:13, 16; A8:13
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
 chlorine, neutron capture cross section, A5:28

- chlorine/potassium ratio
 spectra and age release, B22:5–6, 8–9, 18
 vs. age, B22:21
 vs. calcium/potassium ratio, B22:21
- chlorite
 chemical and nuclear parameters, A5:137
 continental shelf, B8:9
 Core PS1565, B8:15
 drift deposits, B8:7–16
 potassium logs vs. photoelectric effect logs, A5:85
 sediments, A1:50; A8:49
 vs. age, B8:27
 vs. depth, B(synthesis):38; B8:23–24, 26
 X-ray diffraction data, A4:79–80; A5:20, 71; A6:15, 50; A8:15, 65, 79
See also illite-smectite-chlorite
- chlorite/illite ratio, X-ray diffraction data, A4:23; A5:71; A6:50; A8:48
- chlorite/mixed-layer clays ratio, X-ray diffraction data, A4:23; A5:71; A6:50; A8:48
- chlorite-illite province
 continental shelf, B8:9
 deposition, B8:10–12
- Chondrites*, lithologic units, A4:6; A5:6–7, 11–12
- chromaticity
 lithologic units, A5:45; A7:35, 39; B6:3
 sediments, B(synthesis):13
 vs. composite depth, A7:62, 64–65, 68–69
 vs. depth, A4:49–51, 98–99; A5:88–89; A8:33
See also color; lightness; reflectance
- chromium, sediments, A4:23; A5:21; A6:15; B4:1–12
- Chron C1r, magnetostratigraphy, B37:14
- Chron C1r.1n
 Neogene, B28:4
 sediments, B36:8; B37:8, 10
- Chron C1r.1r, magnetostratigraphy, B37:13
- Chron C1r.2r-1n, sediments, B36:11, 16
- Chron C2A, magnetostratigraphy, A1:11
- Chron C2An, magnetostratigraphy, A4:18; B37:10
- Chron C2An.1n, magnetostratigraphy, A1:11; A5:16; A8:11–12; B36:9–10; B37:13, 15–16
- Chron C2An.1r, magnetostratigraphy, B37:15
- Chron C2An.1r–C2An.2n reversal boundary, magnetostratigraphy, A8:12
- Chron C2An.2n, sediments, B36:10; B37:8, 10, 13, 15
- Chron C2An.2r, sediments, B37:8
- Chron C2An.3n, magnetostratigraphy, B37:15
- Chron C2Ar, magnetostratigraphy, B37:10
- Chron C2Ar.2r, sediments, B37:12
- Chron C2n, sediments, B36:8–9; B37:10, 13–14, 16
- Chron C2r, sediments, B37:14
- Chron C2r.1n
 impacts, A2:18
 sediments, B9:2; B36:8–9; B37:10–11, 13, 16
- Chron C3An.1n, magnetostratigraphy, B37:11
- Chron C3An.2n, magnetostratigraphy, B37:12
- Chron C3Bn, magnetostratigraphy, B37:12
- Chron C3Br, magnetostratigraphy, B37:12
- Chron C3n.1n, magnetostratigraphy, B37:11, 15
- Chron C3n.1r, magnetostratigraphy, B37:11
- Chron C3n.2n, magnetostratigraphy, A1:9; A5:16; B36:9
- Chron C3n.3n, magnetostratigraphy, B37:15
- Chron C3n.4n, magnetostratigraphy, B37:11
- Chron C3r, magnetostratigraphy, B37:11
- Chron C4An, magnetostratigraphy, A4:70
- Chron C4Ar.1n, magnetostratigraphy, A4:18; B36:8; B37:12
- Chron C4Ar.1r, sediments, B37:12
- Chron C4Ar.2n, magnetostratigraphy, A4:19; B36:7–8
- Chron C4n.2n, magnetostratigraphy, B37:12
- Chron C4r, magnetostratigraphy, B37:12
- Chron C4r.1n, magnetostratigraphy, B37:12
- Chron C4r.2r, magnetostratigraphy, A4:19, 70; B36:8
- Chron C5n.2n, magnetostratigraphy, B36:8; B37:12
- chronology
 Holocene, A7:12
See also age; geochronology
- chronostratigraphy, Neogene, B36:21
- Chronozone C3n.1r, magnetostratigraphy, B37:11
- Circumpolar Deep Water
 currents, A2:7
 paleoenvironment, A1:17; B7:2–4, 9–10
 productivity, B23:13–17
See also Upper Circumpolar Deep Water
- clast breccia, lithology, A9:7
- clasts
 diamictite, A9:6–7
 dip, A9:47
 ice-rafted debris, B25:9
 lithologic units, A8:7
 lithology, A6:4–5
 photograph, A8:39
See also intraclasts; silt clasts; volcanic clasts
- clasts, elongate
 dip, A6:35
 downhole lithology, A6:36
- clasts, floating, mudstone, A9:8
- clasts, ice-rafted, photograph, A6:40
- clasts, mud, lithology, A9:7
- clasts, mudstone, lithology, A9:7
- clasts, rip-up
 diamictite, A9:7
 photograph, A6:37; A7:41
- clasts, rounded, photograph, A6:37
- clasts, silt, photograph, A9:45
- clasts, volcanic
 argon isotopes, B22:1–26
 pebbles, B11:3
- clay
 backscattered electron photomicrograph, B18:11–12
 core photograph, B18:10
 diagenesis, A8:14
 lithologic units, A4:4–5, 10–11; A5:5; A7:35, 39; B25:4
 photograph, A4:53
 photomicrograph, A9:64
 vs. depth, A4:49; A5:56; A8:30; B(synthesis):38; B8:23–24, 26; B25:19–25
 X-ray diffraction data, A4:79
See also silt/clay ratio
- clay, bioturbated silty, lithologic units, A5:7–8, 11–12
- clay, diatom-bearing silty
 lithologic units, A4:4–5, 10–11; A5:5; A9:5–6; B25:4

- photograph, A5:46
 clay, laminated silty, lithologic units, A4:7; A5:7, 11–12
 clay, sandy silty, lithologic units, A4:7
 clay, silty
 lithologic units, A4:4–13; A5:6–7, 11–12; A7:5–6; A8:3–9; B25:4–6
 lithology, A6:4–5
 magnetic polarity, B31:8–9
 photograph, A4:52; A5:52, 55; A6:39–40; A8:31
 vs. depth, A4:51
 clay/silt ratio, models, B24:4–8
 clay laminae, postglacial sediments, B18:5
 clay mineralogy
 drift sediments, B8:1–29
 long-term variations, B8:13–14
 sediments, B(synthesis):13
 short-term variations, B8:12–13
 clay minerals
 chemical and nuclear parameters, A5:137
 glacial/interglacial cycles, B8:10–12
 provenance, B8:8–10
 X-ray diffraction data, A4:23, 163; A5:134; A6:50
 See also chlorite; chlorite-illite province; chlorite/illite ratio; chlorite/mixed-layer clays ratio; illite; illite-smectite-chlorite; kaolinite; montmorillonite; smectite; smectite province
 climate
 Holocene, B7:1–45
 sedimentation, B(synthesis):3–5
 tectonics, A1:4
 climate cycles, deposition, A5:11–12
 climate forcing, deposition, B25:10–11
 climate optimum. *See* Holocene Climate Optimum
 climate reversals
 diatomaceous sandy mud, B34:4
 mass accumulation rates, B34:4–5
 climate signals, foraminifers, A8:8
 clinopyroxene, backscattered electron photomicrograph, B22:16
 coal chips, vs. depth, B28:13
 coarse fraction
 biogenic component, B15:10
 data, B13:17–19
 particle counts ages and sedimentation rates, B15:19
 terrigenous component, B15:11
 vs. age, A4:7–8; B15:9, 11
 See also fine fraction; grain size
 coastal environment, radiolarians, B33:1–14
 Cobb Mountain Event, magnetostratigraphy, A4:18; A8:12; B36:8, 11; B37:10, 16
Coccolithus pelagicus, blooms, B26:5–6
 coercivity
 magnetic minerals, B14:3, 8
 overprinting, A4:16–17
 collisions, tectonics, A2:7–9, 19
 collisions, ridge crest–trench, ocean floors, A2:35
 color
 bioturbation, B3:4–5
 diatoms, B3:6–7
 organic carbon, B3:6–7
 sediments, B3:1–20
 spectral analysis, B25:19–20
 vs. depth, B3:12; B25:19–25
 See also chromaticity; reflectance
 color bands, lithologic units, A5:5
 composite depth scales, Antarctic Peninsula, B5:5–10
 composite depths
 depth offsets, A4:96
 Site 1095, A4:31–32; B6:1–15
 Site 1096, A5:29–30; B6:1–15
 Site 1098, A7:20–21
 Site 1099, A7:20–21
 compression, composite depths, B6:3–5
 compressional wave velocity
 sediments, A4:25; A5:22; A7:18; A9:16; A8:17
 vs. depth, A4:81, 86, 98; A5:72, 95; A7:54, 59; A8:50–52, 55–56; A9:58, 63
 compressional wave velocity, discrete
 sediments, A5:24; A6:17; A7:19
 split cores, A4:26–27; A8:18; A9:17–18
 consolidation
 anomalies, B17:9
 porosity, B30:4–7
 continental margin
 glacial history, B(synthesis):1–40
 tectonics, A1:4; A2:7–9, 39
 continental rise
 calcareous nannofossils and palynomorphs, B28:1–22
 clay minerals, B8:10
 diatoms, B29:1–25
 dinoflagellates, B2:1–10
 drift deposits, A1:5–11; A2:20–21; B(synthesis):9–14
 glacial signal, B10:1–22
 grain size, B12:1–34
 ice sheets, B(synthesis):16–17
 insolation, B(synthesis):16–17
 magnetostratigraphy, B37:1–61
 marine-glacial environment, A2:9–13
 Neogene glaciation, B25:1–25
 opal, B23:1–33
 pebbles, B11:1–23
 salinity and temperature vs. water depth, A2:34
 sedimentation, B(synthesis):16–17
 seismic stratigraphy, B17:1–36
 spectral reflectance data, B21:1–22
 continental shelf
 calcareous nannofossils and palynomorphs, B28:1–22
 clay minerals, B8:8–9
 core recovery, B(synthesis):15–16
 deposition, A1:3, 11–15; A2:5; A9:9
 glaciation, A9:9
 marine-glacial environment, A2:9–13, 20–22
 paleoenvironment, B(synthesis):5–9
 Seismic Sequence Group S1, A9:25
 velocity, B16:1–25
 See also inner shelf; mid-shelf high; middle shelf; outer shelf; saline shelf water; shelf topsets; shelf transects; shelf water
 continental slope
 deposition, A4:11; A9:9
 paleoenvironment, B(synthesis):5–9; B8:3–4
 sediments, A2:12–13; B8:3–4

See also slope foresets
 contour currents
 ice-rafted debris, B10:6
 sedimentation, A1:6
 contour plots
 fine fraction vs. age, B24:17
 fine fraction vs. depth, B24:16
 contourite
 lithologic units, A5:5–6
 photograph, A8:32
 Contourite Facies, structure, A5:51
 convolute bedding, lithology, A9:7
 core offsets, vs. depth, B6:4–5, 10, 12–13
 core recovery, continental shelf, B(synthesis):15–16
 core-log correlation, magnetic polarity, B31:6–8
Corethron criophilum
 backscattered electron photomicrograph, B18:15–16
 photograph, A7:36
 coring, summary, A1:54–58
 correlation
 biostratigraphy, A1:41; B(synthesis):35, 37
 composite depth scales, B5:1–35
 composite depths, A4:31–32; B6:3–5
 physical properties, B6:3–5
 postglacial sediments, B18:17
 seismic models, A7:22–23
 seismic units, A4:36–38
 synthetic seismograms, A5:32
 time-depth, B16:24
 correlation analysis logs, vs. depth, B31:18–19
 couplets, deglaciation, B34:4
 cross laminations
 lithologic units, A4:5–8, 11–13; B25:5–6
 photograph, A8:36
 Cryptochron C1r.2r-1n, sediments, B36:8, 10
 Cryptochron C2r.2r-1n, magnetic polarity, B36:8
 Cryptochron C4r.2r-1, magnetic polarity, A4:19–20, 71–74; B37:12
 Cryptochron C4r.2r-1n, sediments, A4:70–71, 73–75
 current winnowing, lithologic units, A4:5; B25:4
 currents, oceanography, A2:6–7
 cyclic processes
 clay/silt ratio, B24:4–8
 deposition, A4:11–13; A5:8–9, 11–12; B25:10–12
 lithologic units, A1:6–7; B32:1–43
 sedimentation, B(synthesis):16–17
 See also glacial cycles; glacial half-cycles; glacial/inter-glacial cycles
 cyclic processes, first-order, vs. depth, A4:49; B25:16
 cyclic processes, short-term, sediments, B25:7–8

D

data reduction, velocity logs, B19:25
 datums. *See* diatom datums; radiolarian datums
 debris, impacts, A2:18
 debris flows
 deposition, A9:8–9
 impacts, A2:18
 See also gravity flows; turbidity currents

debrites
 deposition, A5:8–9, 11–12; A9:9
 lithofacies, A6:6–7
 Deception Island, smectite, B8:8–9
 deep-sea environment, lithologic units, B25:4–6
 deepwater signal, climate optimum, B34:5–6
 deformation, style, A7:37
 deformation till, deposition, A6:8; A9:9
 deglaciation, diamicton, B34:4
 degradation, organic matter, A4:21; A5:18–19; A7:15–16; A8:13; A9:15
 demagnetization
 discrete samples, A4:17–18, 146–150; A5:119–122; A7:103
 split cores, A4:16–17, 125–145; A5:106–118; A7:11–12, 83–102; A8:67–71
 vectors, A5:60–61
 demagnetization, alternating-field
 discrete samples, A5:15–16; A8:72; A9:13–14
 overprinting, A4:65–66
 remanence vectors, A4:71–74
 split cores, A5:15
 U-channel samples, B37:21–25
 vectors, A6:45–47; A7:47; A9:52–53, 55
 demagnetization, low-temperature, discrete samples, A9:13–14
 demagnetization, single-step, split cores, B37:26
 demagnetization, thermal
 Cryptochron 4r.2r-1, A4:19–20
 saturation isothermal remanence, B14:6
 density
 core and downhole logs, B17:29–35
 summary, B17:5–7
 vs. depth, A4:103; A5:94, 97; A9:72; B17:15, 17, 20
 vs. two-way traveltime, A7:70–71
 density, bulk
 composite depth scales, B5:7–8, 33
 porosity, B30:4–7
 sediments, A4:24–25; A5:22; A6:16; A7:18; A9:16
 split cores, A9:17
 vs. depth, A4:84; A5:72–74; A6:52, 54; A7:54–58; A8:50–53; A9:58–59, 61–62; B3:12; B5:20–23
 vs. gamma-ray attenuation density, B30:14
 vs. porosity, B30:14
 See also bulk density logs
 density, gamma-ray attenuation
 porosity, B30:4–7
 vs. bulk density, B30:14
 vs. depth, B30:11–12
 vs. magnetic susceptibility, B30:15
 density, grain
 split cores, A8:17–18
 vs. depth, A4:85; A5:75; A6:52; A7:57–58; A8:53; A9:61–62
 density, GRAPE
 sediments, A4:24–25; A5:22; A6:16; A7:18; A8:16; A9:16
 vs. composite depth, A7:62–65, 68
 vs. depth, A4:81–84, 97–98; A5:72–74, 88, 91; A6:51; A7:54–56; A8:50–53; A9:58–59

- density/velocity models, seismic models, A4:33–34;
A7:22; A9:22–23
- density logs. *See* bulk density logs; lithodensity logs;
variable-density stack sections
- deposition
bottom currents, B25:9
cycles, A4:11–13; A5:11–12
environment, A6:7–8; A7:9–10; B24:6–8; B25:11
glacial cycles, A1:32; A2:4–5
opal, B23:1–33
paleoenvironment, A4:10–13; B(synthesis):5–9
sediment traps, A7:8–10
turbidite facies, A4:61
turbidity currents, A9:8–9
See also glacial sedimentation
- deposition energy, reflectance, B21:1–22
- depth. *See* traveltime/depth function
- depth offsets, composite depths, A4:96, 166–167; A5:90,
138–139; A7:66–67, 109
- depth scales, magnetobiochronology, B36:5
- depth sections, vs. time sections, B19:30
- depth-shifted resistivity logs, vs. depth, B19:27
- depth shifts, absolute, velocity logs, B19:33
- diagenesis
biogenic opal, B23:9
carbonates, A7:16
climate optimum, B34:5–6
geochemistry, A8:14
pore water, A8:13
sediments, A4:22–23
sulfate reduction, A5:19–20
See also authigenesis; hydrothermal alteration
- diamict
gamma rays vs. magnetic susceptibility, A9:16
Koenigsberger ratio, B31:8
lithologic units, A4:5–8, 11–13; A7:8; B25:4–6
micromorphology, A6:17–18; A9:18–19
photomicrograph, A9:64
porosity, B30:5–7
sediments, B(synthesis):14–15
Sequence S2, A1:12
smear slides, A9:16–17
See also Massive Diamict Facies; Stratified Diamict Facies
- diamict, chaotically bedded
photograph, A9:46
See also Chaotically Stratified Facies
- diamict, graded
lithofacies, A6:5
photograph, A6:37–38
- diamict, laminated, photomicrograph, A6:55
- diamict, massive
lithology, A6:4–5; A9:5–6
photograph, A6:31–34; A9:45
See also Massive Diamict Facies
- diamict, stratified
lithofacies, A6:5
photograph, A6:39; A9:46
See also Chaotically Stratified Facies; Stratified Diamict Facies
- Diamict Facies
lithologic units, A8:7
photograph, A8:39
- diamictite
argon isotopes, B22:1–26
backscattered electron photomicrograph, B22:16
clasts, A9:47
lithofacies, A1:14–15
lithology, A9:6–7
- diamicton
deglaciation, B34:4
X-ray radiography, B10:21
- diamicton, glacial, upper Pleistocene, B34:3–4
- diatom-ooze laminae, postglacial sediments, B18:4–5
- diatom datums
biostratigraphy, A4:123–124; A8:66
depths, A5:142
sedimentation rates, A4:172
- diatom Gen. et sp. indet., Site 1095, B35:14, 29, 32
- diatom Gen. et sp. indet. B, Site 1095, B35:14, 30
- Diatomaceous Facies, vs. depth, A4:50
- diatoms
abundance, A7:42; B7:25–26; B25:6–7
backscattered electron photomicrograph, B18:15–16
biostratigraphy, A4:13–15; A5:12–13; A6:8–9, 43;
A7:10; A8:9, 41; A9:11, 51; B35:1–57
climate optimum, B34:5–6
color, B3:6–7
cyclic processes, B25:7
data, B7:35
first and last occurrences, A5:104–105
lithologic units, A5:5; A7:4–10
magnetobiochronology, B36:3–4
Neogene, B29:1–25
paleoclimatology, B7:3–4, 6; B25:9
paleoenvironment, A7:9, 82
percentage, B12:16, 23, 29
photomicrographs, B35:25–57
preservation, A7:5, 7; B30:4
productivity, A7:10
Quaternary, A2:14
sedimentation, A1:15–17
sediments, B15:4–5
taxonomy, B35:1–57
vs. age, B2:7; B12:7, 12; B15:10; B25:17
vs. depth, A4:62; A5:58; A6:42; B13:12; B25:19–25
zonation, B29:5–9
- digital coherency mapping, velocity profiles, B19:23
- dikes, downward-penetrating, mudstone, A9:8
- dinoflagellates
continental rise, B2:1–10
vs. age, B2:7–8
- dip
clasts, A9:47
elongate clasts, A6:35
- discontinuities, cyclic processes, B32:14–15
- dissolution
biogenic opal, B23:8–9
calcareous nannofossils, B26:6–7
carbonates, A5:19–20; A6:13–14; A8:14
foraminifers, B7:8–14

manganese oxide, A9:15
 opal, A9:15
 silica, A7:16
 water column, B23:9
 distal environment, lithologic units, A4:11–13
 dolomite
 potassium logs vs. photoelectric effect logs, A5:85
 sediments, A4:22
 downhole measurements
 Site 1095, A4:27–30, 87
 Site 1096, A5:26–29
 Site 1103, A9:19–22
 Drift D1, sediments, A2:13–15
 Drift D2, sediments, A2:13–15
 Drift D3, sediments, A2:13–15
 Drift D4, sediments, A2:13–15
 Drift D5, sediments, A2:13–15
 Drift D6, sediments, A2:13–15; A4:43; A5:38
 Drift D7
 clay mineralogy, B8:14
 cyclic processes, B25:7
 illite, B8:16
 sediments, A2:13–15; A4:43; A5:38
 seismic profiles, A2:42; B24:12
 Drift D8, sediments, A2:13–15
 drift deposits
 biogenic opal, B23:8–17
 biostratigraphy, B13:1–22
 clay mineralogy, B8:1–29
 continental rise, A1:5–11, 24–27; A2:13–15; B(synthesis):9–14, 16–17, 24
 glacial signal, B10:1–22
 magnetostratigraphy, B37:1–61
 pebbles, B11:1–23
 physiography, B8:3–4
 rock magnetism, B14:1–12
 sedimentation, B(synthesis):16–17
 See also hemipelagic drifts
 dropstone
 pebbles, B11:4–5
 photograph, A8:40
 X-ray radiography, B10:21

E

eccentricity, physical properties, B32:8–15
 eccentricity forcing, deposition, B25:10–11
 El Nino Southern Oscillation, neoglacal, B34:7–8
 Eltanin impact, sediments, B(synthesis):14; B9:3–4
 Eltanin piston cores, impacts, A2:17–18
 environment
 calcareous nanofossils, B28:1–22
 deposition, A1:3; A6:7–8; B24:6–8; B25:11
 reflectance, B21:6–7
 See also anoxic environment; bathyal environment;
 coastal environment; deep-sea environment;
 distal environment; glaciomarine environ-
 ment; hemipelagic environment; low-energy
 environment; marine-glacial environment; pa-
 leoenvironment; subglacial environment
 Eocene, paleoclimatology, A1:5

erosion. *See* glacial erosion
 ethane
 sediments, A4:20; A5:16–17; A6:13; A8:12; A9:15
 See also methane/ethane ratio
Eucampia, ratio of symmetric to asymmetric forms, B7:36

F

fabric
 diamict, A9:18–19
 See also grain fabric; microfabric
 fabric, laminated, postglacial sediments, B18:4
 Facies C
 lithologic units, A5:7, 9, 11–12; A8:6
 photograph, A5:50; A8:34, 37
 structure, A5:51
 Facies Dmm, photograph, A9:45
 Facies Dms
 deposition, A9:8–9
 diamictite, A9:7
 photograph, A9:46
 Facies F1, photograph, A9:50
 Facies Fm, photograph, A9:49
 Facies Fmd, diamictite, A9:7
 Facies L
 lithologic units, A5:5
 photograph, A5:47
 Facies L1
 lithologic units, A4:5–8, 11–13; B25:4–6
 photograph, A4:54–56, 58; A8:32, 36, 38
 structure, A4:57
 Facies L2
 lithologic units, A4:5–8, 11–13; A5:8, 11–12; A8:6;
 B25:4–6
 photograph, A4:54, 58–59; A8:32, 35
 structure, A4:57; A5:48
 Facies L3
 lithologic units, A4:5–8, 11–13; A5:7, 9, 11–12; B25:4–
 6
 photograph, A4:56, 60; A5:54
 structure, A4:57; A5:48, 51
 Facies M
 lithologic units, A4:5–8, 11–13; A5:7–9, 11–12; B25:4–
 6
 photograph, A4:55–56; A5:52, 55
 structure, A5:51
 Facies Mb, lithologic units, A5:5; A8:5
 Facies Md
 lithologic units, A5:5
 photograph, A5:46
 Facies Mf
 lithologic units, A8:5
 photograph, A8:33
 Facies Sd, photograph, A9:48
 fan lobes, deposition, A4:11
 faults
 photograph, A4:54
 See also microfaults; normal faults
 fecal pellets, micrograph, B18:13–14
 feldspar
 chemical and nuclear parameters, A5:137

diagenesis, A8:14
 diamict, A6:4–5, 14–15
 impacts, B9:4
 lithologic units, A4:9, 23
 vs. age, B15:11
 X-ray diffraction data, A8:15
 field anomaly logs, vs. depth, B31:15
 field cooled curves, granulometry, B14:7
 filters. *See* low-pass filters
 fine fraction
 grain size, B24:1–27
 sediments, B25:7
 vs. age, B24:18
 See also coarse fraction; grain size; granulometry
 fissility, photograph, A6:34
 fluoride
 pore water, A4:21; A5:19; A6:14; A8:13; A9:15
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
 foraminifers
 biostratigraphy, A4:16; A5:14–15; A6:10–11; A7:11;
 A8:11, 41; A9:10, 12
 climate signals, A8:8
 core data, B7:45
 dissolution, B7:8–9
 lithologic units, A5:5
 magnetobiochronology, B36:4
 neoglacal, B34:6–8
 paleoclimatology, B7:3–5, 7–10
 photograph, A4:52
 productivity, B23:13
 size and number, B7:43
 stable isotopes, B20:1–10
 vs. depth, A7:43; B7:30–31
 foraminifers, agglutinated
 dissolution, B7:9–10
 sediments, B15:4–5
 vs. age, B15:10
 foraminifers, benthic
 data, B7:32–34
 data in intervals, B7:44
 Interval A, B7:37
 Interval B, B7:38
 Interval C, B7:39
 Interval D, B7:40
 oxygen isotopes, B(synthesis):40
 percentage in cores, B7:27–28
 reference list and taxonomy, B7:19–21
 vs. age, B15:10
 foraminifers, calcareous, dissolution, B7:42
 foraminifers, planktonic
 biostratigraphy, A9:51
 vs. age, B15:10
 vs. depth, A4:62; A5:58; A6:42
 Formation Microscanner imaging logs
 lithology, A9:21
 vs. depth, A9:69
 Formation Microscanner imaging sonic tool string, Ant-
 arctic Peninsula, B19:19
Fragilariopsis
 backscattered electron photomicrograph, B18:15–16
 percentage in cores, B7:25–26

frequency vs. attenuation, low-pass filters, B19:26

G

gamma-ray logs
 vs. depth, A4:89; A5:82–83, 88; A9:66–67; B32:19
 vs. lithology, A4:91
 wavenumber, B32:30
 gamma rays
 sediments, A4:25–26; A5:22; A6:16; A7:18; A8:17;
 A9:16
 vs. composite depth, A7:64–65
 vs. depth, A4:81–83; A5:72–74; A6:51; A7:54–55;
 A8:50–52; A9:58–59; B32:20, 33
 vs. magnetic susceptibility, A6:53; A9:60
 wavenumber, B32:34
 gas hydrates, reflectors, A2:19–20
 gases. *See* headspace gases; hydrocarbons
 geochemistry, sediments, B4:1–12
 geochemistry, inorganic
 Site 1095, A4:21–24
 Site 1096, A5:18–21
 Site 1097, A6:14–15
 Site 1098, A7:13–15
 Site 1099, A7:15–16
 Site 1100, A9:15
 Site 1101, A8:13–15
 geochemistry, organic
 climate optimum, B34:5–6
 Site 1095, A4:20–21
 Site 1096, A5:16–18
 Site 1097, A6:13–14
 Site 1098, A7:12–13
 Site 1099, A7:12–13
 Site 1101, A8:12–13
 Site 1103, A9:15
 geochronology
 barnacle fragments, B27:1–8
 sediments, B(synthesis):9; B7:4–5
 See also age; chronology; radioactive dating
 geological high-resolution magnetic tool, magnetic po-
 larity, B31:1–23
 geology, sediments, B(synthesis):3–5
 geomagnetic reversals
 depths, A4:156; A5:125; A8:74
 See also magnetic reversals
 Gerlache Strait
 deglaciation, B34:4
 neoglacal, B34:7
 Glacial–Interglacial Facies, climate signals, A8:8
 glacial/interglacial cycles
 clay minerals, B8:10–12
 ice-raftered debris, B10:6–8
 lithologic units, A1:6–7; A5:11–12
 pebbles, B11:6
 stable isotopes, B20:3–4
 glacial cycles, deposition, A1:32; A2:30
 glacial erosion
 argon isotopes, B22:9
 sediments, A2:11–13
 glacial half-cycles, deposition, A1:33; A2:31

glacial history, continental margin, B(synthesis):1–40
 glacial meltwater, lithologic units, A5:9, 11–12
 glacial sedimentation, drift deposits, B(synthesis):9–14
 glacial Sequence S1, sediments, A2:11–13, 21, 40; B(synthesis):5–9, 21
 glacial Sequence S2
 diamicts, A1:12, 18–19; A2:40
 sediments, A2:11–13, 21; B(synthesis):5–9, 21
 glacial Sequence S2/S1 boundary, sediments, A2:11; B(synthesis):5–9
 glacial Sequence S3
 biofacies, A1:12, 19
 sediments, A2:11–13, 21, 40; B(synthesis):5–9, 21
 glacial Sequence S3/S1 unconformity, sediments, B(synthesis):5–9
 glacial Sequence S3/S2 boundary, sediments, A2:11, 21; B(synthesis):5–9
 glacial Sequence S4, sediments, A2:40
 glacial signal, drift deposits, B10:1–22
 Glacial Stage 6, cyclic processes, B25:7
 Glacial Stages 2–4, cyclic processes, B25:7
 glacials, sea ice, B25:9
 glaciation
 age, A1:4
 clay mineralogy, B8:14–15
 continental shelf, A9:9
 deposition, A4:10–11; A6:7–8
 history, A2:1–44; B(synthesis):18–24
 Neogene, B25:1–25
 neoglaciation, B34:7
 pebbles, B11:3–6
 sedimentation, A2:4–5, 39
 See also tidewater glaciers
 glaciation, continental, ice-rafted debris, B25:9–12
 glaciomarine environment
 biostratigraphy, B13:1–22
 deposition, A6:7–8; A9:9
 seismic units, A9:25
 glauconite, potassium logs vs. photoelectric effect logs, A5:85
 Graded Diamict Facies, lithofacies, A6:6
 Graham Land N, geology, B8:5
 grain diameter
 histograms, B12:15
 sediments, B12:21–22, 27–28, 33–34
 vs. age, B12:10, 14
 grain fabric, diamict, A9:18–19
 grain mode
 histograms, B12:15
 sediments, B12:21–22, 27–28, 33–34
 vs. age, B12:10, 14
 grain size
 bivariate discrimination, B24:23
 classes, B24:27
 clay mineralogy, B8:12–14
 climate optimum, B34:5–6
 continental rise, B12:1–34
 fine fraction, B12:17–20, 24–26, 30–32; B24:1–27
 histograms, B12:15
 mean vs. skewness, B24:23
 mean vs. standard deviation skewness, B24:23

method of moments for all fine fraction, B24:19–20
 method of moments for sortable silt fraction, B24:21–22
 populations, B24:6–8, 24; B25:8
 sediments, B15:1–19
 standard deviation vs. skewness, B24:23
 statistical filters, B24:18–22
 vs. age, B12:9, 13; B25:18
 vs. depth, B25:19–25
See also coarse fraction; fine fraction; mode; roundness; sorting; sphericity; standard deviation; zero field cooled curves
 granite pebbles, deposition, B25:6
 granules
 lithologic units, A4:9–10, 122; A5:5, 10; B25:4–6
 photograph, A5:46; A8:34
 vs. depth, A4:49
 gravel, abundance vs. calibrated age, B34:14
 gravel clasts, ice-rafted debris, B25:9–10
 gravity core PD92-30, dissolution, B7:8–9
 gravity core PS1565
 biogenic opal, B23:9
 clay mineralogy, B8:12, 25
 gravity flows
 deposition, A9:8–9; B25:4–6
 lithofacies, A6:6–7
 lithologic units, A4:8
 See also debris flows; turbidity currents
 gravity surveys, maps, A2:36
 greigite
 anisotropy, B14:4
 oxidation, B14:3
 grounded glacial ice, climate reversals, B34:5

H

headspace gases, hydrocarbons, A4:157
 heat flow, geothermal
 sediments, A5:25–26; A7:20
 split cores, A8:18–19
 heat flow, reflectors, A2:19–20
 hemipelagic drifts
 deposition, A1:3; A2:4–5
 magnetic minerals, B14:1–12
 hemipelagic environment, lithologic units, A5:5–6; A8:3–4, 6
 Hemipelagic Facies
 deposition, A5:11–12
 sediments, A1:8–9
 hemipelagics
 calcareous nannofossils, B26:6–7
 lithologic units, B25:4–6
 hiatuses
 grain size, B24:4
 magnetostratigraphy, A4:18; B37:8, 10
 seismic models, A4:34–35
 See also unconformities
 Holocene
 biostratigraphy, A4:13–16
 chronology, A7:12
 climate optimum, B34:4

lithologic units, A4:4–5, 10–11; A5:4–6, 11–12; A7:4–10; A8:3–4
 mass accumulation rates, B3:1–20
 paleoclimatology, B7:1–45
 Holocene Climate Optimum, sedimentation, B34:4–6
 hydrates. *See* gas hydrates
 hydrocarbons
 headspace gases, A4:157; A5:126–127; A8:75; A9:81
 See also headspaces gases; isobutane; isopentane
 hydrocarbons, C3+, vs. depth, A5:67
 hydrocarbons, volatile, sediments, A4:20; A5:16–17; A6:13; A7:12; A8:12; A9:15
 hydrothermal alteration, clay mineralogy, B8:8–9
 hysteresis, saturation remanence, B14:8, 10–11

I

ice, sediment transport, A1:2–3
 ice-rafted debris
 climate optimum, B34:6
 continental glaciation, B25:9–10
 glacial signal, B10:1–22
 lithologic units, A1:6–8; A4:6, 9–10, 122; A5:10–11; A8:6–8; B25:6
 magnetostratigraphy, B37:7–17
 pebbles, B11:1–23
 photograph, A4:60; A5:52; A6:40; A8:34
 structure, A4:57
 ice catchment, paleoclimatology, A1:5
 ice rafting, sedimentation, B15:4–5
 ice sheets
 continental rise, B(synthesis):16–17, 32
 deposition, B25:10–11
 history, A2:1–44
 maps, A1:31; A2:29
 Seismic Sequence Group S1, A9:25
 ice streaming, tectonics, A1:4
 ice streams
 deposition, B8:10–12
 drift deposits, B8:3–4
 ice volume, orbital obliquity, B8:12
 iceberg plowing, deposition, A9:6
 icebergs
 location, A6:27
 pebbles, B11:3–6
 ichnofacies, lithologic units, A4:6
 igneous pebbles, deposition, A8:8
 illite
 continental shelf, B8:9
 drift deposits, B8:7–16
 potassium logs vs. photoelectric effect logs, A5:85
 sediments, A1:50; A8:49
 vs. age, B8:27
 vs. depth, B(synthesis):38; B8:23–24, 26
 X-ray diffraction data, A4:79–80; A5:20, 71; A6:15, 50; A8:15, 79
 See also chlorite/illite ratio; chlorite-illite province; mixed-layer clays/illite ratio
 illite–smectite–chlorite, ternary diagram, B8:28
 impacts, upper Pliocene, B9:1–6

impedance
 reflectors, A2:19–20
 vs. depth, A5:97
 vs. two-way traveltime, A7:70–71
 index properties
 split cores, A4:26; A5:22–23; A6:16–17; A7:19; A8:17–18; A9:17
 vs. depth, A5:94
 induced anomaly logs
 vs. depth, B31:15–16
 vs. remanent anomaly logs, B31:17
 inner shelf, topography, A2:10
 insolation
 continental rise, B(synthesis):16–17
 frequency vs. age, B32:31–32
 neoglacial, B34:7
 sediments, B(synthesis):13
 insolation, truncated, wavenumber, B32:28, 36
 insolation signal
 physical properties, B32:5, 9–15
 vs. age, B32:21
 wavenumber, B32:25–26, 28, 36
 integrated resistivity logs, vs. depth, B19:27
 Inter-Tropical Convergence Zone, neoglacial, B34:7
 interglacials, sea ice, B25:9
 Interval A
 benthic foraminifers, B7:37
 climate, B7:11–12
 Interval B
 benthic foraminifers, B7:38
 climate, B7:11–12
 Interval C
 benthic foraminifers, B7:39
 climate, B7:12–13
 Interval D
 benthic foraminifers, B7:40
 climate, B7:13
 intraclasts, diamict, A9:18–19
 iridium, impacts, B9:3–4, 6
 iron
 pore water, A5:19; A6:14; A7:15
 vs. depth, A7:52–53
 iron-titanium oxide, backscattered electron photomicrograph, B22:16
 iron oxide, sediments, B4:3
 isobutane, sediments, A5:17
 isopentane, sediments, A5:17

J

Jaramillo Subchron, magnetostratigraphy, A4:18; A5:16; A8:11; B36:7–8; B37:8, 10, 13–14

K

kaolinite
 drift deposits, B8:7
 potassium logs vs. photoelectric effect logs, A5:85
 Koenigsberger ratio
 magnetic polarity, B31:8, 21, 23
 vs. depth, B31:20

L

lag deposits, continental shelf, A9:10

Lallemand Fjord, photograph, A2:32

laminae

core photograph, B18:10

lateral continuity, B3:4–5

micrograph, B18:11–16

vs. depth, B3:12

See also clay laminae; diatom-ooze laminae; silt laminae

laminae, diatom-bearing terrigenous, postglacial sediments, B18:5

Laminated Facies

lithologic units, A5:5, 10–12; A8:3–7; B25:4–6, 8

photograph, A8:32, 35

reflectance, B21:3–22

laminations

deglaciation, B34:4

deposition, A7:8–10

ice-rafted debris, B10:5–8

lithologic units, A4:4–13; A5:6–7, 11–12; A7:4–6;

A8:3–9; B7:11–14; B25:4–6

neoglacial, B34:6–8

photograph, A5:47, 50, 54; A6:37

postglacial sediments, B18:4–6

sedimentation, A1:15–17

sediments, B3:1–20

vs. depth, A4:51; B32:33

X-ray radiography, B10:20

See also clay laminae; cross laminations; laminae; silt laminae

laser diffraction analysis, grain size, B24:3, 14

Last Glacial Maximum, currents, A2:7

lightness, vs. depth, B3:11–13; B32:20

lithic fragments

lithologic units, A4:9

vs. depth, B13:12

lithodensity logs, vs. depth, A5:84

lithofacies

deposition, A9:6

ice-rafted debris, B10:5–8, 19

lithologic units, A4:4–13; A5:4–12; A8:3–9

lower Pliocene, A6:28

photograph, A4:54–56, 58–60; A5:46–47, 49–50, 52–55; A6:31–34, 37–40; A9:45–46, 49–50

reflectance, B21:1–22

sedimentary record, A1:14–15

sediments, A9:6–9

seismic Unit S3, B22:15

structure, A4:57; A5:48

summary, A1:43; A6:41

See also biofacies; Bioturbated Facies; Burrowed Facies; Chaotically Stratified Facies; Contourite Facies; Diatomaceous Facies; Facies C; Facies Dmm; Facies Dms; Facies F1; Facies Fm; Facies Fmd; Facies L; Facies L1; Facies L2; Facies L3; Facies M; Facies Mb; Facies Md; Facies Mf; Facies Sd; Glacial–Interglacial Facies; Graded Diamict Facies; Hemipelagic Facies; ichnofacies; Laminated Fa-

cies; Massive Diamict Facies; Stratified Diamict Facies; Terrigenous Facies; Turbidite Facies

lithologic units

Site 1095, A4:4–13

Site 1096, A5:4–12

Site 1098, A7:3–6

Site 1099, A7:6–10

Site 1100, A8:3–9

summary, A4:121; A5:103

Unit I, A4:4–5, 10–11; A5:4–6, 11–12; A7:4–10; A8:3–4; B25:4

Unit II, A4:5–8, 11–13; A5:6–9, 11–12; A8:4–6; B25:4–6

Unit III, A4:8–9, 11; A5:9–12; A8:6–7

See also logging units; petrophysical units; seismic units

lithology

composite depth scales, B5:6, 31

logs, A6:29–30

vs. color, A5:45

vs. gamma-ray logs, A4:91

vs. magnetic susceptibility, A5:45

vs. magnetic susceptibility logs, A4:91

well-logging, A5:27–28

See also log–lithology correlation

lithostratigraphy

seismic profiles, A5:100

Site 1095, A4:4–13, 47–48; B25:16

Site 1096, A5:4–12, 43–45

Site 1097, A6:3–8

Site 1098, A7:3–6, 8–10, 34

Site 1099, A7:6–10, 38

Site 1100, A9:5–6, 33

Site 1101, A8:2–9, 29

Site 1102, A9:9–10

Site 1103, A9:6–9, 34–44

summary, A1:36, 45, 49; A7:80

log–lithology correlation, logging units, A4:29

logging units

lithology, A4:28–29; A9:20–21

Unit 1, A4:28; A9:20

Unit 2, A4:29; A9:20

Unit 3, A9:20

Unit 4, A9:20

Unit 5, A9:21

Unit 6, A9:21

See also lithologic units; petrophysical units; seismic units

loss on ignition, sediments, B4:1–12

low-energy environment, lithologic units, A4:5; A8:6; B25:4

low-pass filters, frequency vs. attenuation, B19:26

M

magmatic activity, geology, B8:5

magnesium

pore water, A4:22; A5:19–20; A6:14; A7:16; A8:14; A9:15

vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47

magnesium/potassium ratio, pore water, A7:16

- magnesium chlorite, potassium logs vs. photoelectric effect logs, A5:85
- magnetic declination, overprinting, A4:64
- magnetic domains
 climate optimum, B34:6
 magnetic minerals, B14:2–4
 See also pseudo-single domains; stable single domain behavior; synthetic pseudo-single domains
- magnetic excursions, magnetostratigraphy, B37:11
- magnetic field
 magnetic polarity, A4:29
 profiles, A5:41
- magnetic inclination
 composite depth scales, B5:8–9
 demagnetization, A4:17–18
 histogram, A5:59; A8:42
 magnetostratigraphy, A4:18–20
 overprinting, A4:64
 split cores, A8:11
 vs. depth, A4:67–68, 70, 75; A5:62–63, 65; A6:44; A7:44, 46; A8:43; A9:54, 56–57; B37:27
 See also paleomagnetic inclination logs
- magnetic inclination, split core, vs. depth, B37:34
- magnetic inclination, U-channel and split core, vs. depth, B37:32–33
- magnetic inclination, U-channel and split core and discrete, vs. depth, B37:38
- magnetic intensity
 composite depth scales, B5:8, 34
 demagnetization, A4:17–18
 vs. depth, A4:67, 69, 75; A5:62, 64–65; A6:44; A7:45–46, 48; A8:43; A9:54, 57; B5:24–25; B37:27
 See also paleointensity
- magnetic logs. *See* paleomagnetic inclination logs; total magnetic field logs
- magnetic minerals, hemipelagic drifts, B14:1–12
- magnetic polarity
 correlation analysis, B31:5–6
 magnetic field, A4:29
 magnetostratigraphy, A4:18–20, 92; A5:28, 86; B31:1–23
 sedimentation rates, A5:143
 transition depths, A5:142
 vs. depth, B37:28–31, 37, 40
- magnetic polarity, normal, Cryptochron 4r.2r-1, A4:73–74
- magnetic polarity, reversed, Cryptochron 4r.2r-1, A4:71–72
- magnetic reversals
 magnetostratigraphy, B37:7–15
 sedimentation rates, B37:12, 15
 See also geomagnetic reversals
- magnetic susceptibility
 composite depth scales, B5:6–7, 32
 cycle length, B25:19–25
 neoglacial, B34:7
 paleoclimatology, B7:3–4
 porosity, B30:4–7
 sediments, A4:24; A5:21–22; A6:15–16; A7:17–18; A8:16; A9:16; B(synthesis):12–13; B6:3–5; B7:10–14
 vs. calibrated age, B34:14
 vs. carbon-14 age of marine sediments, A2:44
 vs. composite depth, A7:63–65, 69
 vs. depth, A4:50, 75, 81–83, 88, 90–92, 97–99; A5:65, 72–74, 82–83, 88–89, 91; A6:51; A7:45–49, 54–56; A8:33, 50–52; A9:58–59, 66–67; B5:16–19; B6:8–9, 11; B7:24; B14:9; B25:19–25; B30:11–12, 33; B31:20; B32:20; B37:27, 30–31
 vs. gamma-ray attenuation density, B30:15
 vs. gamma rays, A6:53; A9:60
 vs. lithology, A5:45
 wavenumber, B32:25–26
- magnetic susceptibility logs
 comparison with velocity logs, B19:29
 magnetic polarity, B31:7
 vs. depth, A4:88, 90–92, 97–99; A5:82, 84, 88–89, 91; A9:66–67; B31:13, 15–16; B32:19
 vs. lithology, A4:91
- magnetite
 climate optimum, B34:6
 granulometry, B14:7
 Verwey transition, B14:2–4
- magnetization, vs. depth, B31:20
- magnetobiochronology, B36:1–40
- magnetostratigraphy
 biostratigraphy, B37:9
 Cenozoic, A1:9, 53
 diamicts, A6:12–13
 drift deposits, B37:1–61
 magnetic inclination, A4:18–20
 magnetic polarity, A4:18–20, 92; A5:86; B31:1–23
 magnetobiochronology, B36:4–5
 overprinting, A9:14
 sedimentation rates, B37:16
 sediments, A5:16; A9:14–15; B(synthesis):11–12; B37:42–48
 vs. depth, A4:67–70; A5:62–65, 86; A6:44; A7:48; B37:28–31, 37, 40
 well-logging, B31:1–23; B37:9–12, 15, 35
- major elements, sediments, B4:1–12
- manganese
 pore water, A4:21; A5:18; A6:14; A8:13; A9:15; B8:9
 vs. depth, A4:77; A5:70; A6:49; A7:52; A8:47; B14:9
- manganese oxide
 dissolution, A5:18; A9:15
 pore water, A8:13
- Marguerite Bay, chlorite-illite province, B8:9
- Marguerite Trough
 chlorite-illite province, B8:9
 paleo-pathways, B8:3–4
- marine-glacial environment, sedimentation, A2:9–15
- mass accumulation rates
 biogenic opal, B23:7–8
 climate optimum, B34:6
 climate reversals, B34:4–5
 foraminifers, B7:10–14
 ice-rafted debris, B10:4–5, 12–16, 18
 neoglacial, B34:6–8
 sediments, B3:1–20
 vs. age, B10:18
 vs. calibrated age, B34:14

- See also* opal accumulation rate; sedimentation rates;
total organic carbon accumulation rates
- mass flows, lithologic units, A7:5–6
- Massive Diamict Facies, lithofacies, A6:5–6
- Massive Facies, lithologic units, A5:5, 10–12; A8:3–6;
B25:4–5
- Matuyama Chron
magnetostratigraphy, B37:13
See also Brunhes/Matuyama boundary
- maximum angular deviation, vs. depth, A4:67; A5:62;
A6:44; A7:48
- megatsunamis, impacts, A2:18
- meltwater
deposition, A8:7
See also glacial meltwater
- metamorphic rocks, composition, B15:4–5
- methane
headspace gases, A7:105
precipitation, A5:20
sediments, A4:20; A5:16–17; A6:13; A7:12; A8:12;
A9:15
vs. depth, A4:76; A5:66; A8:44
- methane/ethane ratio, sediments, A5:17
- microfabric
micrograph, B18:11–14
postglacial sediments, B18:1–17
See also fabric
- microfaults
photograph, A4:53
See also faults
- micromorphology, diamict, A6:17–18; A9:18–19
- micronodules, photograph, A8:31
- mid-basin reflector, synthetic seismograms, A7:76
- mid-Pleistocene Climate Transition, pebbles, B11:6
- mid-shelf high
sedimentation, A2:10–11
tectonics, A2:8, 10
- middle shelf, topography, A2:10
- Milankovitch cycles, physical properties, B32:8–15
- Miocene
biostratigraphy, A4:62
cyclic processes, B32:14–15
diatoms, B25:6–7
dinoflagellate cysts, B2:2–4
glaciation, B(synthesis):20–21
lithologic units, A4:5–13
sediments, B(synthesis):9
stratigraphy, B36:11–12
- Miocene, upper
biostratigraphy, B13:1–22
clay mineralogy, B8:1–29
cyclic processes, B25:8, 25
productivity, B23:13–14
- mixed-layer clays
sediments, A1:50; A8:49
X-ray diffraction data, A4:23, 79–80; A5:20, 71; A6:15,
50; A8:15, 79
See also chlorite/mixed-layer clays ratio
- mixed-layer clays/illite ratio, X-ray diffraction data,
A4:23; A5:71; A6:50; A8:48
- mode, vs. age, B25:18
- Model A
filters, A4:111
input and output frequency spectra, A4:110
synthetic seismograms, A4:108
synthetic traces and digital data, A4:112–113
- Model B
synthetic seismograms, A4:109
synthetic traces and digital data, A4:114–115
- montmorillonite, potassium logs vs. photoelectric effect
logs, A5:85
- Morelet wavelet, waveform analysis, B32:23
- mottling
lithologic units, A4:4–5, 10–11; A5:5
photograph, A4:52; A5:46, 55
- mounds, sediments, A2:13–15
- mud
bioturbation, A2:15
diamictite, A9:6–7
ice-rafted debris, B10:5–8
impacts, B9:2
lithofacies, A6:5–7
lithologic units, A1:6–7; A2:16–17; A5:6–9, 11–12;
B25:4–6
structure, A4:57
X-ray radiography, B10:21
See also ooze/mud couplets
- mud, bioturbated diatom sandy, neoglacal, B34:4
- mud, bioturbated marine, photograph, A6:38
- mud, diatomaceous, Holocene climate optimum, B34:4
- mud, diatomaceous sandy
climate reversals, B34:4
deglaciation, B34:3–4
- mud, diatomaceous turbidite, climate reversals, B34:4
- mud, foraminifer-bearing, X-ray radiography, B10:21
- mud, hemipelagic, photograph, A5:49
- mud, laminated, X-ray radiography, B10:20
- mud, laminated marine, photograph, A6:37
- mud, parallel silt-laminated, lithologic units, A5:7–8,
11–12; B25:4–6
- mud, silty
lithologic units, B25:4–6
lithology, A6:4–5
photograph, A7:41
- mudstone
lithologic units, A4:9, 11
lithology, A9:7–8
reworking, A9:7
- mudstone, laminated, photograph, A9:49–50
- mudstone, massive, photograph, A9:49
- muscovite, vs. age, B15:11
- ## N
- nannofossils, calcareous
biostratigraphy, A1:14–15; A5:14; A8:10, 14, 41;
B28:1–22
magnetobiochronology, B36:4
Pliocene–Pleistocene, B26:1–21
taxonomy, B28:6
vs. depth, A5:58
zonation, B28:15

Neogene

- biostratigraphy, B13:10
- chronostratigraphy, B36:21
- diatoms, B29:1–25; B35:1–57
- glaciation, B25:1–25
- opal, B23:1–33
- radiolarians, B33:1–14
- neoglacial
 - Antarctic Circumpolar Current, B34:7
 - bioturbated diatom sandy mud, B34:4
 - paleoenvironment, B34:6–8
- Neoglobobulimina pachyderma* sinistral
 - occurrence, B7:41
 - stable isotopes, B20:1–10
- Nereites*, lithologic units, A4:6, 9; A5:6–7
- neutron capture cross section, chlorine, A5:28
- neutron porosity logs, comparison with velocity logs, B19:29
- nickel, sediments, A4:23
- niobium, sediments, A4:23
- nitrogen, total, sediments, A7:106–107
- nodules. *See* micronodules
- normal faults
 - mudstone, A9:8
 - X-ray radiography, B10:20
- Northern Component Water
 - evolution of properties, B23:31
 - sea ice, B23:13–17

O

- obliquity. *See* orbital obliquity
- ocean circulation, currents, A2:6–7; B8:4
- ocean floors, age, A2:35
- oceanography
 - currents, A2:6–7; A9:32; B7:2
 - seabed mooring, A4:30–31, 94–96
- Olduvai Subchron, magnetostratigraphy, A4:18; A5:16; A8:11
- Oligocene
 - glaciation, B(synthesis):20–21
 - paleoclimatology, A1:5
- onlapping fill, Seismic Unit II, A7:24–26
- ooze
 - core photograph, B18:10
 - lithologic units, A4:4–5, 10–11
 - sedimentation, A1:15–17; A2:16–17
- ooze, diatom
 - deglaciation, B34:4
 - postglacial sediments, B18:4–6
- ooze, interbedded laminated diatom, neoglacial, B34:4
- ooze, laminated, porosity, B30:6
- ooze, laminated diatom
 - deglaciation, B34:3–4
 - photograph, A7:36
- ooze, laminated diatomaceous, Holocene climate optimum, B34:4
- ooze, laminated mud-bearing diatom, lithologic units, A7:4–6
- ooze, massive bioturbated muddy diatom, lithologic units, A7:4–10
- ooze, massive diatom, photograph, A7:40
- ooze/mud couplets, deglaciation, B34:4
- opal
 - continental rise, B23:1–33
 - dissolution, A1:11
 - statistical data, B23:33
 - vs. opal accumulation rates, B23:9–10
- opal, biogenic
 - deposition, B23:1–33
 - dissolution, A5:19; A9:15
 - late Miocene, B23:6
 - Pliocene, B23:7
 - sediments, A4:23; B(synthesis):13; B1:1–7
 - upper Pliocene, B23:7
 - vs. age, B23:25
 - vs. core depth, B23:27
 - vs. depth, B(synthesis):39; B23:24
 - See also* silica, biogenic opal
- opal-A, solubility, A8:14
- opal accumulation rate
 - lateral sediment supply, B23:10–11
 - vs. age, B23:26, 28
 - vs. opal content, B23:9–10
- opal preservation efficiency, vs. original deposition rate, B23:29
- opal sedimentation rate, vs. age, B23:30–31
- orbital obliquity, deposition, B8:12; B25:10–11
- order–disorder transitions, magnetic minerals, B14:2
- organic matter
 - climate optimum, B34:5–6
 - degradation, A4:21; A5:18–19; A7:15–16; A8:13; A9:15
 - sediments, A5:17–18
- outer shelf, topography, A2:10
- overburden strength
 - vs. depth, A5:77
 - See also* strength
- overburden stress, porosity, B30:5–7
- overprinting
 - coercivity, A4:16–17
 - magnetostratigraphy, A9:14
- oxides, sediments, B4:1–12
- oxygen isotope Stage 1, clay minerals, B8:10–12
- oxygen isotope Stage 2, clay minerals, B8:10–12
- oxygen isotope Stage 5
 - clay minerals, B8:10–12
 - deposition, A4:10
 - lithofacies, B25:19–20
- oxygen isotope Stage 6, clay minerals, B8:10–12
- oxygen isotope Stage 7
 - dinoflagellate cysts, B2:2
 - lithofacies, B25:19–20
- oxygen isotope Stage 9, lithofacies, B25:19–20
- oxygen isotope Stage 11, lithologic units, A4:4
- oxygen isotope Stage 19, Brunhes/Matuyama boundary, A8:12
- oxygen isotope Stage 82, impacts, A2:18
- oxygen isotope Stages 1–11, cyclic processes, B25:7
- oxygen isotopes
 - benthic foraminifers, B(synthesis):40
 - Bulimina aculeata*, B7:22

Neoglobobadrina pachyderma sinistral, B20:1–10
sediments, B7:5–11
vs. age, B20:7
vs. carbon isotopes, B20:8
vs. depth, B7:30–31; B20:6

P

Pacific Ocean

currents, A2:6–7

tectonics, A2:7–9

Pacific Ocean S, glacial history, B(synthesis):1–40

paleoceanography

Holocene, B7:10–14

paleoproductivity, B23:12–16

sedimentation, B34:1–14

sedimentation rates, B18:6

stable isotopes, B20:1–10

paleoclimatology

Cenozoic, A8:8

clay mineralogy, B8:2–3

diatoms, B25:9

evolution, B23:31

Holocene, B7:1–45

ice catchment, A1:5; B(synthesis):20–22

ice sheets, A2:1–44

neoglacal, B34:7

paleoproductivity, B23:12–16

sedimentation, B34:1–14

sedimentation rates, B18:6

See also mid-Pleistocene Climate Transition

paleocurrents, models, B24:6–8

paleoenvironment

basins, A7:9–10

biostratigraphy, A4:13–16

deposition, A4:10–13, B(synthesis):5–9

diatoms, A7:9, 82

Holocene, B7:10–14

lower Pliocene, A6:28, 41

neoglacal, B34:6–8

radiolarians, B33:1–14

sedimentation rates, A7:9

See also environment

paleointensity

magnetic polarity, B31:8–9

See also magnetic intensity

paleointensity, relative, vs. depth, A4:75; A7:49

paleomagnetic inclination logs, vs. depth, B31:18–19

paleomagnetism

Antarctic Peninsula, B37:3–6

discrete samples, A4:17–18; A5:15–16; A6:12; A7:12;
A9:13–14

principal component analysis, A4:151–155; A5:123–
124; A7:104; A8:73

principal component analysis of U-channel samples,
B37:55–60

Site 1095, A4:16–20

Site 1096, A5:15–16

Site 1097, A6:11–13

Site 1098, A7:11–12

Site 1099, A7:11–12

Site 1100, A9:12–15

Site 1101, A8:11–12

Site 1102, A9:12–15

Site 1103, A9:12–15

split cores, A4:16–17, 125–145; A5:15, 106–118;

A6:11; A7:11–12, 83–102; A8:11, 67–71; A9:12

U-channel samples, B37:49–54

paleopathways, clay mineralogy, B8:14

paleoproductivity

color, B3:6–7

mud, A2:16–17

paleoceanography, B23:12–16

See also productivity

paleoproductivity proxies, biogenic opal, B23:9

Palmer Deep, A7:1–110

bathymetry, B34:13

biogenic opal, B1:1–7

composite depth scales, B5:1–35

Holocene climate, B7:1–45

mass accumulation rates, B3:1–20

microfabric, B18:1–17

petrophysical units, B30:1–17

radiolarians, B33:1–14

SeaBeam swath map, B34:12

sedimentation, B34:1–14

sedimentary record, A1:15–17; A2:16–17, 22

site description, A7:1–110

spectral reflectance data, B21:1–22

Palmer Land

chlorite-illite province, B8:9

clay mineralogy, B8:14

palynomorphs

biostratigraphy, B26:1–21; B28:1–22

continental rise, B2:1–10

See also pollen; spores

pebbles

deposition, A8:7–8

distribution, A9:47

ice-rafted debris, B11:1–23

lithologic units, A4:9–10, 122; A5:10–12; A7:5–6, 8,
35, 39; B25:6

lithology by percentage by unit, B11:10

percentage of shape by unit, B11:11

photograph, B11:15

roundness, B11:13

sediments, A7:81

shape vs. lithology, B11:12

sphericity, B11:14

vs. depth, A4:49; A5:57; A8:30; B11:9

X-ray radiography, B10:20

See also basalt pebbles

petrophysical Unit B, porosity, B30:6

petrophysical Unit C, porosity, B30:6

petrophysical Unit F, porosity, B30:6

petrophysical units

Antarctic Peninsula, B30:1–17

vs. depth, B30:11–12

See also lithologic units; logging units; seismic units

Phoenix–Antarctic ridge, tectonics, A2:8

Phormacantha hystrix, cumulative percentage vs. depth,
B33:11

- phosphate
 pore water, A4:21; A5:18–19; A6:14; A7:16; A8:13; A9:15
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
- photoelectric effect logs
 vs. depth, A5:84; A9:67
 vs. potassium logs, A5:85; A9:68
- Phycosiphon*
 lithologic units, A4:6; A7:7
 photograph, A7:40
- physical properties
 age models, B32:6
 core measurements, B32:4–5
 downhole measurements, B32:3–4
 insolation signal, B32:5
 Site 1095, A4:24–27; B17:5–6
 Site 1096, A5:21–26; B17:6–7
 Site 1097, A6:15–18
 Site 1098, A7:17–20
 Site 1099, A7:17–20
 Site 1100, A9:15–19
 Site 1101, A8:15–19; B17:6
 Site 1102, A9:15–19
 Site 1103, A9:15–19
 split cores, A4:26–27
 time-frequency analysis, B32:7–15
 variation with depth, B30:3–4
 wavelet analysis, B32:1–43
- physiography, drift deposits, B8:3–4
- plagioclase
 drift deposits, B8:7
 X-ray diffraction data, A6:15; A8:65
- plagioclase laths, backscattered electron photomicrograph, B22:16
- Planolites*
 lithologic units, A4:6; A5:6–7; A7:4–7; A8:3, 5
 photograph, A5:55
- Plectacantha oiksikos*, cumulative percentage vs. depth, B33:11
- Pleistocene
 biostratigraphy, A4:13–16, 62; A5:58; A6:42
 calcareous nannofossils, B26:1–21
 calcareous nannofossils and palynomorphs, B28:1–22
 cyclic processes, B32:14–15
 dinoflagellate cysts, B2:2–4
 glaciation, B(synthesis):1–40
 lithologic units, A4:4–5, 10–11; A5:4–9, 11–12; A8:3–6
 productivity, B25:11
 stratigraphy, B36:12–13
 See also mid-Pleistocene Climate Transition
- Pleistocene, upper
 glacial diamicton, B34:3–4
 stable isotopes, B20:3–4
- Pliocene
 biostratigraphy, A4:13–16; A5:58
 clay mineralogy, B8:1–29
 cyclic processes, B32:14–15
 diatoms, B25:6–7
 dinoflagellate cysts, B2:2–4
 glaciation, B(synthesis):1–40
 lithologic units, A1:6–7; A4:4–13; A5:6–12; A8:4–9
 stratigraphy, B36:11–12
- Pliocene, lower
 biostratigraphy, A6:42; B13:1–22
 cyclic processes, B25:8, 23–24
 paleoenvironment, A6:28
 productivity, B23:14–15
- Pliocene, upper
 biostratigraphy, A4:62
 calcareous nannofossils, B26:1–21
 cyclic processes, B25:7–8, 21–22
 impacts, B9:1–6
 productivity, B23:15–16
- plutonic rocks, calc-alkaline, geology, B8:4–5
- Polar Front, climate signals, A8:8
- pollen
 Neogene, B28:1–22
 photomicrograph, B28:21–22
 taxonomy, B28:7–8
 vs. depth, B28:13
- polynyas, sea ice, B25:9
- pore water, geochemistry, A4:21, 161; A5:18–20, 132; A6:14; A7:13, 108; A8:13, 78; A9:15, 82
- porosity
 bioturbation, B30:4–7
 core and downhole logs, B17:29–35
 diatoms, B30:4–7
 logging units, A4:29–30
 prediction, B30:3
 sediments, A7:19; B(synthesis):14
 split cores, A6:16–17; A9:17
 summary, B17:5–7
 vs. bulk density, B30:14
 vs. depth, A4:85; A5:76–77; A6:52; A7:57–58; A8:53–54; A9:61–62; B17:15, 17, 20; B30:11–12
 wavenumber, B32:34, 37
- porosity logs
 vs. depth, A4:88; A5:82; A9:66; B32:19
 See also neutron porosity logs
- postglacial sediments
 correlation, B18:17
 microfabric, B18:1–17
- potassium
 pore water, A5:19; A6:14; A7:16; A8:14; A9:15
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
 See also chlorine/potassium ratio; magnesium/potassium ratio; thorium/potassium ratio; thorium/potassium ratio logs
- potassium feldspar
 drift deposits, B8:7
 potassium logs vs. photoelectric effect logs, A5:85
- potassium logs
 vs. depth, A4:89; A5:84
 vs. photoelectric effect logs, A5:85; A9:68
- potassium oxide+sodium oxide, vs. silica, B22:17
- precession, physical properties, B32:8–15
- precipitation, carbonates, A5:20
- preservation
 barnacle fragments, B27:3
 biogenic opal, B23:8–12
 diatoms, A7:5, 7; B29:5; B30:4
 See also opal preservation efficiency

principal component analysis

discrete paleomagnetic samples, A4:151–155

paleomagnetism, A5:123–124; A7:104; A8:73

principal displacement zone, diamict, A9:19

productivity

biogenic opal, B23:8–12

carbonates, A6:13–14

climate optimum, B34:5–6

climate reversals, B34:4–5

diatoms, A7:10

Pliocene–Peistocene, B26:1–21

sea ice, B25:11

sediments, B7:10–14

See also paleoproductivity

progradation

drift deposits, B8:3–4

sediment transport, A1:3; A2:11–13

propane, sediments, A5:17

proposed Site APSHE-01A, seismic units, B16:4

proposed Site APSHE-02A, seismic units, B16:4–5

proposed Site APSHE-03A, seismic units, B16:5

proposed Site APSHE-04A, seismic units, B16:5

proposed Site APSHE-10A, seismic units, B16:5–6

provenance

argon isotopes, B22:10

clay minerals, B8:8–10

Prydz Bay, velocity vs. depth, B19:18

pseudo-single domains, climate optimum, B34:6

Psilate-type spore 1, Site 1100, B28:7, 18–20

Psilate-type spore 2, Site 1103, B28:7, 18–20

pyrite

impacts, B9:4

photograph, A8:37

vs. age, B15:12

pyrolysis, Rock-Eval, sediments, A5:131

pyroxene. *See* clinopyroxene

Q

quartz

chemical and nuclear parameters, A5:137

diamict, A6:4–5, 14

drift deposits, B8:7

impacts, B9:4

lithologic units, A4:9, 23

potassium logs vs. photoelectric effect logs, A5:85

X-ray diffraction data, A8:14–15, 65

quartz, angular, vs. age, B15:11

quartz, rounded, vs. age, B15:11

Quaternary

clay mineralogy, B8:1–29

diatoms, A2:14; B25:6–7

lithologic units, A1:6–7; A2:16–17

opal, B23:1–33

productivity, B23:16

sedimentation, B34:1–14

See also Holocene; Pleistocene

Quaternary, upper

clay minerals, B8:10–12

cyclic processes, B25:7, 19–20

R

radioactive dating, sediments, B7:4–5

radiolarian datums

depths, A5:142

sedimentation rates, A4:33, 171; A5:92

radiolarians

abundance, A7:43; B13:4

abundance in scrape samples, B33:13–14

assemblages, B13:4–5

biostratigraphic events, B13:15

biostratigraphy, A1:12–13; A4:15–16; A5:13–14; A6:9;

A7:10–11; A8:10, 41; A9:12, 51; B13:1–22

cumulative percentage vs. depth, B33:11

cyclic processes, B25:7

diversity vs. depth, B33:12

lithologic units, A5:5

magnetobiochronology, B36:4

range chart, B13:13–14

sediments, B15:4–5; B33:1–14

vs. age, B15:10

vs. depth, A4:62–63; A5:58; A6:42; B13:12

zonation, B13:10

rainout, deposition, A8:7

reduction

suboxic diagenesis, A8:13

See also sulfate reduction

reflectance

composite depth scales, B5:8, 35

sediments, B21:8–22; B25:20

spectrum, B21:6

vs. composite depth, A7:62, 68–69

vs. depth, B5:26

wavenumber, B32:29

See also chromaticity; color; lightness

reflectance, spectral, continental rise, B21:1–22

reflection coefficient

vs. depth, A5:97

vs. two-way traveltime, A7:70–71

reflections, two-way traveltime, B16:14–16

reflectors

onlapping fill, A7:24–26

sediments, A2:12–13

Seismic Unit I, A7:24

seismic units, B16:1–7

source signals, A4:105

tomographic inversion, B17:14

traveltime, B16:12

See also mid-basin reflector

reflectors, bottom-simulating, seismic surveys, A2:18–20

remanent anomaly logs

vs. depth, B31:15–16, 18–19

vs. induced anomaly logs, B31:17

remanent magnetization

magnetic polarity, B31:7–8

vectors, A4:65–66, 71–74; A5:60–61; A6:45–47; A7:47;

B31:14

remanent magnetization, characteristic

demagnetization, A4:18

discrete samples, A5:16

remanent magnetization, natural
 coercivity, A4:16–17
 discrete samples, A4:146–150; A5:119–122; A7:103; A8:72; A9:13–14
 split cores, A5:15; A7:11–12; A8:11
 vs. depth, A7:49
 remanent magnetization, saturation, magnetic minerals, B14:3
 remanent magnetization, saturation isothermal, demagnetization, B14:6
 resistivity logs
 comparison with velocity logs, B19:29
 vs. depth, A4:88; A9:66, 69; B19:27; B32:19
See also integrated resistivity logs; self focusing resistivity logs
 resting spores
 backscattering electron photomicrograph, B18:13–14
 lithologic units, A7:4–10
 Reticulate-type spore 1, Site 1097, B28:7, 18–20
 Reticulate-type spore 2, Site 1103, B28:7, 18–20
 Reunion Event
 impacts, A2:18
 magnetostratigraphy, A8:12; B36:8, 11; B37:10, 16
 sediments, B9:2; B36:9; B37:13–14
 reworking
 microfauna, A9:6
 opal, B23:10–11
 ridge crest–trench collision
 Cenozoic, B(synthesis):4–5
 clay mineralogy, B8:16
 ridge crests, tectonics, A2:8, 19
 Riedel shears, diamict, A9:19
 rock fragments, igneous, vs. age, B15:12
 rock fragments, metamorphic, vs. age, B15:12
 rock fragments, sedimentary, vs. age, B15:12
 rock magnetism
 hemipelagics, B14:1–12
 sediments, B37:6
 vs. depth, B14:9
 Ross Sea, velocity vs. depth, B19:18
 Rouen Mountains, chlorite-illite province, B8:9
 roundness, pebbles, B11:5, 13
 rubidium, sediments, A4:23; A5:21; A6:15; B4:1–12

S

Saanich Inlet, Quaternary, A2:16–17
 saline shelf water, deglaciation, B34:4
 salinity, vs. water depth, A2:34
 sand
 abundance, B25:6–7
 diamictite, A9:6–7
 lithologic units, A4:122; A5:8; A7:35, 39; B25:4–6
 photograph, A7:41
 vs. age, B12:8, 11; B25:17
 vs. depth, A4:49, 51; A5:56; A8:30; B10:18; B25:19–25
 sand, laminated, lithologic units, A4:5–8, 11–13; B25:4–5
 sand, massive, photograph, A5:53
 sand grains
 lithologic units, A4:9–10; A5:5, 10; B25:4–6

photograph, A4:52; A5:46
 sandstone
 lithofacies, A1:14–15
 lithology, A9:6–7
 sandstone, chaotically bedded, photograph, A9:48
 sandstone, muddy, lithology, A9:7
 Santa Barbara Basin, Quaternary, A2:16–17
 sea ice
 Antarctic Zone, B23:17
 climate reversals, B34:5
 deposition, A4:10–11
 productivity, B25:11
 temperature, B25:9
 sea surface, temperature, B25:9
 sea-level changes
 clay mineralogy, B8:13–14
 deposition, A4:12–13; A8:15
 history, A1:1–2; A2:5
 seabed observations, lithostratigraphy, A9:9–10
 sediment-water interface, biogenic opal, B23:8–9
 sediment thickness, light/dark couplets, B3:17
 sediment transport
 barnacle fragments, B27:3
 ice-rafted debris, A1:2–3; B10:6–8
 paleoenvironment, A8:8
 pebbles, B11:3–6
See also subglacial transport
 sediment traps, deposition, A7:8–10
 sedimentation
 climate, B(synthesis):3–5
 continental rise, B(synthesis):16–17
 contour currents, A1:6
 glaciation, A2:4–5
 ice-rafted debris, B10:6–8
 marine-glacial environment, A2:9–15
 Neogene, B34:1–14
 porosity, B30:5–7
 sorting, A9:9
 tectonics, A2:8–9
See also glacial sedimentation
 sedimentation rates
 calcareous nannofossil datums, A5:30; A8:19, 82
 Cenozoic, A1:6–20; B(synthesis):24
 cyclic processes, B32:14–15
 diatom datums, A4:172; A8:20–21, 81
 geomagnetic polarity transition data, A4:32–33, 169–170; A5:30, 143; A8:19, 80
 magnetic reversals, B37:12, 15
 magnetostratigraphy, B37:16
 opal, B23:11–12
 paleoclimatology, B18:6
 paleoenvironment, A7:9
 paleomagnetism, A5:30
 physical properties, B32:6
 radiolarian datums, A4:16, 33, 171
 Site 1095, A4:32–33; B6:3–5
 Site 1096, A5:30; B6:3–5
 Site 1101, A8:19–20
 vs. age, A4:102; A5:93; A8:60; B23:30; B37:36, 39, 41
 vs. depth, A4:101; A5:93; A8:60; B32:22, 33; B37:36, 39, 41

- See also* mass accumulation rates; opal sedimentation rate
- sedimentation rates, linear
 bulk sediment properties, B15:13
 vs. age, B23:28
 vs. depth, A4:49; A8:30
- sediments
 biogenic opal, B1:1–7
 diagenesis, A4:22–23
 geochemistry, B4:1–12
 grain size, B12:1–34
 image data, B3:14, 16, 18–20
 impacts, B9:1–6
 mass accumulation rates, B3:1–20
 radiolarians, B33:1–14
 reflectance, B21:1–22
 seabed observations, A9:9–10
 X-ray diffraction data, A4:162; A5:133; A8:14–15
See also bulk sediments; postglacial sediments
- seismic models
 correlation, A7:22–23
 density/velocity models, A4:33–34; A9:22–23
 source signals, A4:34
 synthetic seismograms, A7:23
 traveltime depth model, A4:34–35
- seismic profiles
 continental margin, A1:24–27, 34, 59–60; A2:37–38, 43; B16:3–7, 11; B17:5
 correlation between onsite multichannel seismic and vertical seismic profiles, B17:22
 Drift D7, A2:42
 outer continental shelf, A2:41
 Palmer Deep, A7:30–33
 seismostratigraphy and lithostratigraphy, A5:100
 Site 1095, A1:34; A4:44–46, 116–118; B24:12
 Site 1096, A1:37; A5:39–40, 42, 100
 Site 1097, A1:42; A6:23, 25–26; B(synthesis):34
 Site 1098, A7:30–31, 74, 77
 Site 1099, A7:32–33, 75–76, 78
 Site 1100, A1:44; A9:29–31, 77
 Site 1101, A1:39; A8:26–28, 61, 63
 Site 1102, A1:44; A9:29–31, 76
 Site 1103, A1:44; A8:29–31, 75, 78; B19:16–17; B22:14
 superimposed synthetic trace, B17:24
 time sections and depth sections, B19:30
 vs. synthetic seismograms, A7:23
- seismic profiles, composite, data sets, B17:28
- seismic profiles, digital reflection, comparison with synthetic seismograms, A4:35–36
- seismic profiles, multichannel, acquisition parameters, B16:23
- seismic profiles, vertical
 seismostratigraphic units, A4:36–38
 tie to two-way traveltime between units, B17:23
- seismic sections, analog, seismostratigraphic units, A4:36–38
- seismic sections, digital, seismic stratigraphy, A9:23
- Seismic Sequence Group S1, seismic units, A9:24; B(synthesis):6–9, 23; B16:4–6, 13
- Seismic Sequence Group S2, seismic units, A9:24; B(synthesis):6–9, 23; B16:4–6, 12–13
- Seismic Sequence Group S2/S1 boundary, seismic units, B(synthesis):8; B22:14
- Seismic Sequence Group S3, seismic units, A9:24; B(synthesis):6–9, 23; B16:4–6; B22:14–15
- Seismic Sequence Group S3/S1 unconformity, seismic units, B(synthesis):7; B19:9
- Seismic Sequence Group S3/S2 boundary, seismic units, B(synthesis):7
- Seismic Sequence Group S4, seismic units, B16:4; B22:14
- Seismic Sequence Group S5/S4 boundary, seismic units, B16:13
- Seismic Sequence M1
 sediments, A2:14–15
 vertical seismic profiles, B17:23
- Seismic Sequence M2, sediments, A2:14–15
- Seismic Sequence M2/M1 boundary, vertical seismic profiles, B17:23
- Seismic Sequence M3, sediments, A2:14–15
- Seismic Sequence M3/M2 boundary, vertical seismic profiles, B17:23
- Seismic Sequence M4, sediments, A2:14–15
- Seismic Sequence M4/M3 boundary
 sediments, A2:14–15
 vertical seismic profiles, B17:23
- Seismic Sequence M5, sediments, A2:14–15
- Seismic Sequence M5/M4 boundary, vertical seismic profiles, B17:23
- Seismic Sequence M6, sediments, A2:14–15
- Seismic Sequence M6/M5 boundary
 sediments, A2:14–15
 vertical seismic profiles, B17:23
- seismic stratigraphy
 continental rise, B17:1–36
 reflections, A4:106
 seismic profiles, A5:100
 Site 1095, A4:33–38; B17:5–7
 Site 1096, A5:31–34; B17:5–7
 Site 1097, A6:18–20
 Site 1098, A7:22–26
 Site 1099, A7:22–26
 Site 1100, A9:22–25
 Site 1101, A8:20–22; B17:5–7
 Site 1102, A9:22–25
 Site 1103, A9:22–25
 source signals, A5:31
 synthetic seismograms, A5:32
 time–depth functions, A5:31–32
- seismic surveys, basins, A1:47
- Seismic Unit I, lithology, A4:36; A5:33–34; A6:19; A7:24–26; A8:21
- Seismic Unit II, lithology, A4:36–37; A5:33–34; A6:19; A7:24–26; A8:21
- Seismic Unit III, lithology, A4:37; A6:19–20; A8:21
- seismic units
 analog seismic section, A4:36–38
 correlation, A4:36–38; A6:19–20
 depth to base, A4:173
 lithology, A5:33–34; A7:24–26; A8:21–22
 reflectors, B16:1–7
 two-way traveltime, A5:144

- See also* lithologic units; logging units; petrophysical units
- self focusing resistivity logs, vs. depth, B19:27
- setae, micrograph, B18:15–16
- shape, pebbles, B11:5
- shear zones, diamict, A6:17–18; A9:18–19
- sheet drape geometry, Seismic Unit I, A7:24
- shelf topsets, deposition, A1:3; A2:4–5
- shelf transects, sediments, A1:13–15
- shelf water, neoglacal, B34:7
- shell fragments, photograph, A7:41
- silica
- biogenic opal, B23:8–9
 - pore water, A4:22–23; A5:19; A6:14; A7:16
 - vs. alkalis, B22:17
 - vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
- silica, biogenic
- dissolution, A7:16; A8:14
 - pore water, A9:15
 - reflectors, A2:19–20
 - sediments, B1:1–7
 - vs. age, B25:17
 - vs. depth, B1:5–6
 - See also* opal, biogenic
- silicates, pore water, A4:22–23
- siliciclastics
- accumulation, B3:4–7
 - climate reversals, B34:4–5
 - deglaciation, B34:4
- silicoflagellates, vs. depth, B13:12
- silt
- backscattered electron photomicrograph, B18:11–12
 - core photograph, B18:10
 - impacts, B9:2
 - lithologic units, A1:6–7; A5:6–9; A7:35, 39; B25:4–6
 - lithology, A6:4–5
 - photograph, A8:36
 - populations vs. age, B24:25–26
 - populations vs. depth, B24:25–26
 - vs. depth, A4:49; A5:56; A8:30; B25:19–25
 - See also* clay/silt ratio
- silt, clayey
- lithologic units, A8:3–9
 - photograph, A8:33
- silt, graded
- lithologic units, A8:3–4
 - photograph, A8:32
- silt, laminated, lithologic units, A4:5–8, 11–13
- silt/clay ratio, cyclic processes, B25:7
- silt clasts, photograph, A9:45
- silt laminae
- ice-rafted debris, B10:5–8
 - lithologic units, A4:4–13; A5:6–7, 11–12; A8:3–9; B25:4–5, 8
 - photograph, A4:53; A5:49–50; A6:34; A8:31–32
 - postglacial sediments, B18:5
- siltstone
- lithofacies, A1:14–15
 - lithologic units, A4:9, 11
- Site 270, velocity vs. depth, B19:18
- Site 271, velocity vs. depth, B19:18
- Site 272, velocity vs. depth, B19:18
- Site 739, velocity vs. depth, B19:18
- Site 1095, A4:1–173
- background and objectives, A4:1–2
 - biostratigraphy, A4:13–16; B13:1–22; B36:6–7, 22, 32–34
 - bulk sediment parameters, B15:1–19
 - calcareous nannofossils and palynomorphs, B28:1–22
 - clay mineralogy, B8:1–29
 - composite depths, A4:31–32; B6:1–15
 - coring summary, A4:119–120
 - diatoms, B29:3–4, 13–15
 - dinoflagellates, B2:1–10
 - downhole measurements, A4:27–30
 - geochemistry, B4:1–12
 - grain size, B12:1–34; B24:1–27
 - ice-rafted debris, B11:1–23
 - inorganic geochemistry, A4:21–24
 - lithologic units, A1:6–8; A4:121
 - lithostratigraphy, A4:4–13
 - magnetobiochronology, B36:1–40
 - magnetostratigraphy, B31:1–23; B36:7–8, 22, 28, 37–39; B37:1–61
 - Miocene, B36:11–12
 - Neogene glaciation, B25:1–25
 - objectives, A2:20–21
 - oceanography, A4:30–31
 - opal, B23:1–33
 - operations, A4:2–3
 - organic geochemistry, A4:20–21
 - paleomagnetism, A4:16–20
 - physical properties, A4:24–27; B17:5–6; B32:1–43
 - Pleistocene, B36:12–13
 - sedimentation rates, A4:32–33
 - seismic stratigraphy, A4:33–38
 - site description, A4:1–173
 - spectral reflectance data, B21:1–22
- Site 1096, A5:1–144
- background and scientific objectives, A5:1–2
 - biostratigraphy, A5:12–15; B36:9, 23, 32–36
 - bulk sediment parameters, B15:1–19
 - calcareous nannofossils, B26:1–21
 - clay mineralogy, B8:1–29
 - composite depths, A5:29–30; B6:1–15
 - coring summary, A5:101–102
 - diatoms, B29:4–5, 16–21
 - dinoflagellates, B2:1–10
 - downhole measurements, A5:26–29
 - geochemistry, B4:1–12
 - grain size, B12:1–34
 - ice-rafted debris, B11:1–23
 - inorganic geochemistry, A5:18–21
 - lithologic units, A1:8–9
 - lithostratigraphy, A5:4–12
 - magnetic minerals, B14:1–12
 - magnetobiochronology, B36:1–40
 - magnetostratigraphy, B31:1–23; B36:9–10, 23, 38–39; B37:1–61
 - objectives, A2:20–21
 - opal, B23:1–33
 - operations, A5:2–4

- organic geochemistry, A5:16–18
- paleomagnetism, A5:15–16
- physical properties, A5:21–26; B17:6–7; B32:1–43
- sedimentation rates, A5:30
- seismic stratigraphy, A5:31–34
- site description, A5:1–144
- spectral reflectance data, B21:1–22
- stable isotopes, B20:1–10
- upper Pliocene impact, B9:1–6
- Site 1097, A6:1–55
 - background and objectives, A6:1–2
 - biostratigraphy, A6:8–11
 - calcareous nannofossils and palynomorphs, B28:1–22
 - clay mineralogy, B8:8
 - geochemistry, B4:1–12
 - inorganic geochemistry, A6:14–15
 - lithostratigraphy, A6:3–8
 - objectives, A2:21
 - operations, A6:2–3
 - organic geochemistry, A6:13–14
 - paleomagnetism, A6:11–13
 - physical properties, A6:15–18
 - sedimentary record, A1:11–13
 - seismic stratigraphy, A6:18–20
 - site description, A6:1–55
 - volcanic clasts, B22:1–26
- Site 1098, A7:1–110
 - background and objectives, A7:1–2
 - biogenic opal, B1:1–7
 - biostratigraphy, A7:10–11
 - calcareous nannofossils, B26:4
 - composite depth scales, B5:1–35
 - composite depths, A7:20–21
 - coring summary, A7:79
 - inorganic geochemistry, A7:13–15
 - lithostratigraphy, A7:3–6, 8–10
 - mass accumulation rates, B3:1–20
 - microfabric, B18:1–17
 - objectives, A2:22
 - operations, A7:2–3
 - organic geochemistry, A7:12–13
 - paleoclimatology, B7:1–45
 - paleomagnetism, A7:11–12
 - petrophysical units, B30:1–17
 - physical properties, A7:17–20
 - radiolarians, B33:1–14
 - sedimentation, B34:1–14
 - sedimentary record, A1:15–17; A2:16–17
 - seismic stratigraphy, A7:22–26
 - site description, A7:1–110
 - spectral reflectance data, B21:1–22
- Site 1099, A7:1–110
 - background and objectives, A7:1–2
 - biostratigraphy, A7:10–11
 - composite depth scales, B5:1–35
 - composite depths, A7:20–21
 - coring summary, A7:79
 - inorganic geochemistry, A7:15–16
 - lithostratigraphy, A7:6–10
 - objectives, A2:22
 - operations, A7:2–3
- organic geochemistry, A7:12–13
- paleomagnetism, A7:11–12
- petrophysical units, B30:1–17
- physical properties, A7:17–20
- sedimentation, B34:1–14
- sedimentary record, A1:15–17; A2:16–17
- seismic stratigraphy, A7:22–26
- site description, A7:1–110
- spectral reflectance data, B21:1–22
- Site 1100, A9:1–83
 - background and scientific objectives, A9:1–3
 - biostratigraphy, A9:11–12
 - calcareous nannofossils and palynomorphs, B28:1–22
 - coring summary, A9:79–80
 - inorganic geochemistry, A9:15
 - lithostratigraphy, A9:5–6
 - objectives, A2:21
 - operations, A9:3–4
 - paleomagnetism, A9:12–15
 - physical properties, A9:15–19
 - sedimentary record, A1:13–14
 - seismic stratigraphy, A9:22–25
 - seismic units, B16:5
 - site description, A9:1–83
- Site 1101, A8:1–83
 - background and scientific objectives, A8:1–2
 - biostratigraphy, A8:9–11; B36:10, 24, 32–33
 - bulk sediment parameters, B15:1–19
 - calcareous nannofossils, B26:1–21
 - coring summary, A8:64
 - diatoms, B29:5, 22–24
 - geochemistry, B4:1–12
 - glacial signal, B10:1–22
 - grain size, B12:1–34
 - ice-rafted debris, B11:1–23
 - inorganic geochemistry, A8:13–15
 - lithologic units, A1:9–11
 - lithostratigraphy, A8:2–9
 - magnetobiochronology, B36:1–40
 - magnetostratigraphy, B36:10–11, 24, 38–39; B37:1–61
 - objectives, A2:20–21
 - opal, B23:1–33
 - operations, A8:2
 - organic geochemistry, A8:12–13
 - paleomagnetism, A8:11–12
 - physical properties, A8:15–19; B17:7
 - sedimentation rates, A8:19–20
 - seismic stratigraphy, A8:20–22
 - site description, A8:1–83
 - spectral reflectance data, B21:1–22
 - stable isotopes, B20:1–10
- Site 1102, A9:1–83
 - background and scientific objectives, A9:1–3
 - coring summary, A9:79–80
 - lithostratigraphy, A9:9–10
 - objectives, A2:21
 - operations, A9:4–5
 - paleomagnetism, A9:12–15
 - physical properties, A9:15–19
 - sedimentary record, A1:14
 - seismic stratigraphy, A9:22–25

- seismic units, B16:4
- site description, A9:1–83
- Site 1103, A9:1–83
 - background and scientific objectives, A9:1–3
 - biostratigraphy, A9:11–12
 - calcareous nannofossils and palynomorphs, B28:1–22
 - composite velocity profile, B19:1–34
 - coring summary, A9:79–80
 - downhole measurements, A9:19–22
 - geochronology, B27:1–8
 - lithostratigraphy, A9:6–9
 - objectives, A2:21
 - operations, A9:5
 - organic geochemistry, A9:15
 - paleomagnetism, A9:12–15
 - physical properties, A9:15–19
 - sedimentary record, A1:14–15
 - seismic stratigraphy, A9:22–25
 - seismic units, B16:5–6
 - site description, A9:1–83
 - volcanic clasts, B22:1–26
- skewness
 - grain size, B24:23
 - sediments, B12:21–22, 27–28, 33–34
 - vs. age, B12:10, 14; B25:18
- slope foresets, deposition, A1:3; A2:4–5
- slowness, vs. depth, B19:23
- slumps, lithologic units, A7:5–6
- smear slides
 - diamict, A9:16–17
 - lithologic units, A4:9
- smectite
 - drift deposits, B8:7–16
 - glacial/interglacial cycles, B8:10–12
 - sediments, A4:22
 - vs. age, B8:27
 - vs. depth, B(synthesis):38; B8:23–24, 26
 - See also* illite–smectite–chlorite
- smectite province, continental shelf, B8:8–9
- sodium oxide. *See* potassium oxide+sodium oxide
- soft sediment deformation
 - deposition, A9:8–9
 - lithology, A9:7
- solubility, opal-A, A8:14
- sonic velocity tool
 - schematic diagram, B19:19
 - transmitter/receiver spacing, B19:31
- sorting
 - mudstone, A9:7_8
 - reflectance, B21:3
 - sedimentation, A9:9
 - sediments, B12:21–22, 27–28, 33–34
 - vs. age, B12:10, 14; B25:18
- source signals, seismic models, A7:22
- South Shetland Islands
 - glaciation, A2:9
 - smectite, B8:8–9
- South Shetland margin, currents, B8:4
- South Shetland Trench
 - geology, B8:5
 - tectonics, A2:8
- Southern Ocean
 - magnetobiochronology, B36:1–40
 - sediments, A1:2; B34:7–8
 - spectra plots, grain size, B24:15
 - spectral analyses, physical properties, B32:6
 - sphericity, pebbles, B11:5, 14
 - splice tie points, composite depth scales, B5:30
 - spliced cores
 - composite depth scales, B5:9–10
 - data, A4:168; A5:91, 140–141; A7:110; B6:1–15
 - split cores
 - paleomagnetism, A5:106–118; A7:83–94, 95–102
 - physical properties, A4:26–27
 - sponge spicules
 - lithologic units, A7:6–10
 - vs. depth, B13:12
 - spores
 - Neogene, B28:1–22
 - photomicrograph, B28:19–20
 - taxonomy, B28:6–7
 - vs. depth, B28:13
 - See also* resting spores
 - spreiten, photograph, A5:55
 - stable isotopes
 - foraminifers, B20:1–10
 - neoglacal, B34:7
 - sediments, B7:5–11
 - stable single domain behavior, magnetic minerals, B14:3
 - standard deviation, grain size, B24:23
 - statistical analysis, grain size, B24:18–27
 - Stratified Diamict Facies, lithofacies, A6:6
 - stratigraphic events, biocalcareous, calcareous nannofossils, B26:4–5, 21
 - stratigraphy
 - magnetic polarity, A4:29
 - See also* acoustic stratigraphy; biostratigraphy; chronostratigraphy; lithostratigraphy; log units; magnetostratigraphy; petrophysical units; seismic units; seismostratigraphy
 - strength
 - vs. depth, A5:77
 - See also* overburden strength
 - striations, photograph, A8:40
 - strontium
 - pore water, A4:22; A5:19; A6:14; A7:16; A8:14; A9:15
 - sediments, B4:1–12
 - vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47
 - strontium isotopes
 - barnacle fragments, B27:1–8
 - vs. age, B27:5
 - Subbasin I, Holocene, A7:12; B34:3
 - Subbasin II, sediment traps, A7:8–10; B34:3
 - Subbasin III
 - Holocene, A7:12; B34:3
 - sediment traps, A7:8–10; B34:3
 - subduction
 - Cenozoic, B(synthesis):4–5
 - geology, B8:4–5
 - tectonics, A1:4; A2:7–9
 - subglacial environment, deposition, A6:7–8, 18
 - subglacial flux, deposition, A9:9

subglacial transport
 blocks, A9:10
 pebbles, A8:40
 subsidence, continental margin, A1:4
 sulfate
 pore water, A4:21; A5:18; A6:14; A9:15
 vs. depth, A4:77; A5:70; A6:49; A7:52–53; A8:47;
 B14:9
 sulfate reduction
 diagenesis, A5:19–20
 organic matter, A7:13–14
 paleoenvironment, A1:17
 pore water, A9:15
 processes, A4:21
 suboxic diagenesis, A8:13
 sulfur
 pore water, A5:19
 sediments, A5:128–130; A7:13, 106–107
 synthetic pseudo-single domains, magnetic minerals,
 B14:3
 synthetic seismograms
 comparison with digital reflection seismic profiles,
 A4:35–36
 correlation, A5:32
 density-velocity data, A4:35
 field survey traces, A5:98–99
 mid-basin reflector, A7:76
 seismic models, A7:23
 seismic stratigraphy, A5:32
 vs. seismic profiles, A7:23
See also Model A; Model B
 synthetic seismograms, far-field
 vs. depth, A5:97
 vs. two-way traveltime, A7:71
 synthetic seismograms, Huntect Signal
 filtered synthetic trace, A7:72
 vs. two-way traveltime, A7:70–71
 synthetic seismograms, seafloor reflector
 vs. depth, A5:97
 vs. two-way traveltime, A7:71
 synthetic seismograms, unfiltered
 Model A, A4:108
 Model B, A4:109

T

tectonics
 continental margin, A1:4; A2:7–9
 maps, A1:30; A2:39
 sedimentation, A2:8–9
 temperature
 color, B3:7
 neoglacal, B34:7
 sea ice, B25:9
 stable isotopes, B20:3–4
 vs. depth, A4:93; A5:80, 87; A8:58
 vs. water depth, A2:34
 temperature, downhole
 sediments, A5:25–26; A7:20
 split cores, A8:18–19
 temperature logs
 sediments, A4:29–30; A5:29; A9:22
 vs. depth, A9:71
 tephra, photograph, A6:37
 terrigenous component
 coarse fraction, B15:11
 flux, B3:4–7
 lithologic units, A7:35, 39
 vs. depth, A4:49–50; A8:30
 Terrigenous Facies
 deposition, A4:10–13; B25:10
 lithologic units, A4:5
Thalassionema, percentage in cores, B7:25–26
Thalassiosira antarctica, backscattered electron photomi-
 crograph, B18:15–16
Thalassiothrix, percentage in cores, B7:25–26
 thermal conductivity
 sediments, A5:24–25; A7:19–20
 split cores, A8:18
 vs. depth, A5:79; A7:60–61; A8:57
 thorium/potassium ratio, mixed-layer clays, A5:28
 thorium/potassium ratio logs
 vs. depth, A4:89; A5:84; A9:67; B32:33
 wavenumber, B32:30
 thorium logs, vs. depth, A4:89; A9:67
 tidewater glaciers, deglaciation, B34:4
 till
 deposition, A9:6
 sediment transport, A1:2–3
See also deformation till
 till deltas, deposition, A9:9
 time sections, vs. depth sections, B19:30
 time-depth functions, seismic stratigraphy, A5:31–32
 time-depth models
 correlation, B16:24
 seismic models, A7:23
 time-frequency analysis, physical properties, B32:7–15
 titanium. *See* iron-titanium oxide
 tomographic inversion
 reflectors, B17:14
 seismic units, B16:4, 12
 traveltime, B17:18
 topography, sediments, B(synthesis):3–5
 total magnetic field logs
 lithology, A9:21–22
 vs. depth, A9:70; B31:13, 15–16
 total organic carbon accumulation rates, vs. age, B23:28
 trace elements
 climate optimum, B34:6
 sediments, A4:23–24, 164; A5:21, 135; A6:15; B4:1–12
 traveltime
 reflectors, B16:12, 14–16
 tomographic inversion, B17:18
 vs. depth, B17:21, 25, 27
 traveltime, one-way, vs. depth, A4:107; A5:96; A7:73
 traveltime, two-way
 depth sections vs. time sections, B19:30
 depth to base of seismic units, A8:83
 depth to seismic units, A5:144
 vs. acoustic properties, A7:70–71
 vs. depth, A8:62; A9:74
 vs. final depth, B19:34

traveltime/depth function, seismic models, A4:34–35;
A9:23

trough-mouth fans, sediment transport, A1:3

turbidite

climate reversals, B34:5

deformation, A7:37

lithologic units, A1:6–7; A4:8; A5:5–6; A7:5–10

photograph, A7:40–41; A8:36

porosity, B30:6

turbidite, distal

lithologic units, A4:5; A5:10–12

structure, A4:61

turbidite, muddy

lithologic units, A5:7–8, 11–12

photograph, A4:53; A5:49, 54

structure, A4:57

turbidite, thin-bedded, lithologic units, A5:7–8, 11–12

Turbidite Facies

deposition, A4:61

reflectance, B21:1–22

turbidity currents

clay minerals, B8:10

deposition, A4:12–13; A9:8–9

grain size, B12:2–3

lithologic units, A8:3–9

photograph, A8:32

sedimentation, A1:6

See also debris flows; gravity flows

U

U-channels, sediments, B36:10–14; B37:1–61

unconformities

sediments, A2:12–13

Seismic Sequence Group S2, A9:24

Seismic Sequence Group S3/S1 boundary, B19:9

seismic units, B(synthesis):6–9; B16:13

See also hiatuses

Unit I

lithology, A5:45

photograph, A5:46–47

Unit I/II boundary, lithology, A5:45

Unit II

lithologic units, A1:6–8

photograph, A4:54–56; A5:49–50, 52

Unit III

lithologic units, A1:8

photograph, A4:58–60; A5:54–55; A8:38–39

uplifts, tectonics, A2:19

Upper Circumpolar Deep Water, currents, B7:2

upwelling, productivity, B23:13

uranium logs

vs. depth, A4:89; A5:84; A9:67; B32:19

wavenumber, B32:35, 37

V

variable-density stack sections, velocity, B16:13

varves, climate optimum, B34:5–6

velocity

checkshot survey, A4:29

continental shelf, B16:1–25

core and downhole logs, B17:29–35

summary, B17:5–7

vs. depth, A4:104; A5:78, 95, 97; A6:54; A9:73;

B17:13, 15, 17, 20; B19:18

vs. final depth, B19:34

vs. two-way traveltime, A7:70–71

See also compressional wave velocity; density/velocity models

velocity, interval, vs. depth, B17:16, 18–19

velocity, sonic, vs. depth, B17:12

velocity, tomographic, vs. depth, B16:22

velocity fields, vs. depth, B16:17–21

velocity logs

comparison with neutron porosity and bulk density logs, B19:29

data pools of categories, B19:32

data reduction, B19:25

vs. depth, A9:66; B19:10–13, 24–25, 27

See also sonic velocity tool

velocity profiles

data categories, B19:21–22

digital coherency mapping, B19:23

velocity profiles, composite

transects, B19:1–34

vs. depth, B19:28

Verwey transition

magnetic minerals, B14:2–4

saturation isothermal remanence, B14:6

volcanic ash, graded vitric, photograph, A8:31

volcanic ash, lithologic units, A8:3–4

volcanic clasts, argon isotopes, B22:1–26

volcanic glass

backscattered electron photomicrograph, B22:16

electron microprobe data, B22:23

vs. age, B15:12

volcanic groundmass, backscattered electron photomicrograph, B22:16

volcanic rocks, clay mineralogy, B8:8–9

volcanism, argon isotopes, B22:6–10

W

water content

porosity, B30:5–7

vs. depth, A4:84; A5:76

waveform analysis

Morelet wavelet, B32:23

See also Morelet wavelet

wavelet analysis, physical properties, B32:1–43

wavelet transform, physical properties, B32:6–7

wavenumber

bioturbated intervals, B32:27

gamma-ray logs, B32:30

gamma rays, B32:34

insolation signal, B32:24–26, 36

magnetic susceptibility, B32:25–26

porosity, B32:34, 37

reflectance, B32:29

thorium/potassium ratio logs, B32:30

truncated insolation, B32:28, 36

uranium logs, B32:35, 37
 Weddell Sea Deep Water
 currents, A2:7; B8:4
 glacial/interglacial cycles, B8:10–12
 well-logging
 lithology, A5:27–28
 magnetostratigraphy, B31:1–23; B37:9–12, 15, 35, 61
 sediments, B(synthesis):12–13
 summary, A1:51; A4:165; A5:81, 136; A9:19–22, 65, 83; B17:5–7; B19:1–13
 West Antarctic Ice Sheet, ice-rafted debris, B25:9–10
 winnowing. *See* current winnowing

X

X-ray diffraction data
 clay minerals, A4:163; A5:134; A6:50
 sediments, A4:23, 162; A5:133

X-ray radiography, bioturbation, B10:21

Y

yield strength, sediments, A5:23–24
 yttrium, sediments, A4:23

Z

zero field cooled curves, granulometry, B14:7
 zinc, sediments, A4:23; B4:1–12
 zirconium, sediments, A4:23
 zonation
 biostratigraphy, A8:41
 calcareous nannofossils, B26:1–21
 diatoms, B29:5–9
Zoophycos
 lithologic units, A4:6; A8:5
 photograph, A5:55

TAXONOMIC INDEX**A**

Acanthes spp., Site 1095, B35:3, 30
Acrosphaera australis, Site 1095, A4:16
Acrosphaera australis Zone, Site 1095, A4:15–16; B13:1
Acrosphaera cylindrica, Site 1097, A6:9
Acrosphaera? labrata, Site 1095, A4:15; B36:7
Acrosphaera? labrata Zone, Site 1095, A4:15; B13:1
actinochilus, *Actinocyclus*, Site 1103, B35:3, 50
Actinocyclus actinochilus, Site 1103, B35:3, 50
Actinocyclus ingens
 Site 1095, A4:13; B29:5
 Site 1097, A6:8
 Site 1101, A8:9
 Site 1103, A1:14; A9:11; B35:3, 53
Actinocyclus ingens Partial Range Zone
 Site 1095, A4:13; B29:6
 Site 1101, A8:9
Actinocyclus ingens var. *ovalis*
 Site 1095, A4:14; B29:8; B35:3, 39
 Site 1103, B(synthesis):7–8
Actinocyclus ingens var. *ovalis* Partial Range Zone
 Site 1095, A4:14; B29:8
 Site 1103, B22:9; B27:3
Actinocyclus karstenii
 Site 1097, A6:9
 Site 1100, B35:3, 48
 Site 1101, B29:6
 Site 1103, B35:3, 50–51
Actinocyclus octonarius, Site 1095, B35:3, 44
Actinocyclus sp. cf. *Actinocyclus octonarius*
 Site 1095, B35:3, 45
 Site 1097, B35:3, 57
aculeata, *Bulimina*
 Site 1098, B7:3–5, 7–8, 10–11, 22, 30–31
 Site 1099, A7:11
alata, *Proboscina*, Site 1095, B35:9, 29
Ammoelphidiella antarctica, Site 1097, A6:11

Amphora spp., Site 1095, B35:3, 30
Amphymenium australis Zone, Site 1095, B13:5
Amphymenium challengerai Zone, Site 1095, A4:15; B13:1, 5
Amphymenium labrata Zone, Site 1095, B13:5
angulata, *Fragilariopsis*, Site 1098, B7:6, 25–26
angulata, *Nitzschia*, Site 1095, B35:8, 27
antarctica, *Ammoelphidiella*, Site 1097, A6:11
antarctica, *Eucampia*
 Site 1095, B35:6, 31
 Site 1098, A7:5, 10, 42; B7:6, 14, 36; B34:5–6
 Site 1099, A7:7, 10, 42; B34:5–6
 Site 1103, B35:6, 51
antarctica, *Schimperella*, Site 1095, B35:10, 47
antarctica, *Thalassiosira*
 Site 1098, A7:9–10, 42; B7:6; B18:15–16
 Site 1099, A7:9–10, 42
 Site 1100, B35:11, 48
antarctica, *Thalassiothrix*
 Site 1095, B35:14, 29
 Site 1103, B35:14, 48, 52
antarctica, *Tricerapys*
 Site 1095, A4:15
 Site 1101, A8:10
antarcticus, *Dactyliosolen*, Site 1095, B35:5, 42
antarcticus, *Martinottiella*, Site 1101, A8:11
Antarctissa cylindrica
 Site 1095, A4:15
 Site 1096, A5:13
 Site 1101, A8:10
Antarctissa deflandrei, Site 1095, B13:4
Antarctissa denticulata, Site 1095, B13:4
Antarctissa sp., Site 1095, B13:16
Antarctissa strelkovi, Site 1095, B13:4
Arachnoidiscus ehrenbergii, Site 1097, A6:11
arcua, *Fragilariopsis*, Site 1095, B35:6, 28
arenacea, *Milliammina*, Site 1098, B7:7–8, 27–29
asanoi, *Reticulofenestra*, Site 1101, B26:5, 19–20

Asteromphalus kennetii, Site 1095, A4:14; B29:4; B36:7
aurica, *Fragilariopsis*
 Site 1095, B35:6–7, 28
 Site 1097, A6:9
 Site 1103, B35:6–7, 49
australiensis, *Cicatricosporites*, Site 1097, B28:6, 17, 19–20
australis, *Acrosphaera*, Site 1095, A4:16
Azpeitia endoi, Site 1095, B35:4, 45
Azpeitia nodulifera
 Site 1095, B35:4, 45
 Site 1103, B35:4, 53
Azpeitia tabularis, Site 1095, B35:4, 45

B

baldaufii, *Thalassiosira*, Site 1095, B35:11, 41
barbadiensis, *Stephanopyxis*, Site 1095, B35:11, 33
barronii, *Fragilariopsis*
 Site 1095, A4:13–14; B29:6–7
 Site 1096, A5:13; B29:7
 Site 1097, A6:8–9
 Site 1101, A8:9
 Site 1103, A1:14; A9:11; B35:7, 49
barronii 1, *Fragilariopsis* aff., Site 1095, B35:7, 27
barronii 2, *Fragilariopsis* aff., Site 1095, B35:7, 28
Basilicostephanus? sp., Site 1103, B35:4, 52
biora, *Globocassidulina*, Site 1099, A7:11
Bolboforma spp., Site 1095, A5:14
Bolivina *pseudopunctata*, Site 1098, B7:3–4, 7–8, 13–14
Braarudosphaera spp., Site 1101, B26:3
Brigantedinium sp. indet., Site 1095, B2:3
Brigantedinium spp.
 Site 1095, B2:3–10
 Site 1096, B2:3–10
Bulimina aculeata
 Site 1098, B7:3–5, 7–8, 10–11, 22, 30–31
 Site 1099, A7:11
bulloides, *Globigerina*
 Site 1095, A4:16
 Site 1096, A5:15
 Site 1101, A1:10; B36:10

C

Calcidiscus leptoporus, Site 1098, B26:4
californica, *Cocconeis*, Site 1095, B35:4, 30
californica, *Cocconeis* sp. aff. *Cocconeis*
 Site 1095, B35:4, 30
 Site 1103, B35:4, 51
californica, *Rouxia*
 Site 1095, B35:10, 29
 Site 1103, A1:15; A9:11; B35:10, 52
calvertense, *Eucyrtidium*, Site 1101, A8:10
caribbeanica, *Gephyrocapsa*
 Site 1096, B26:5, 14–18
 Site 1101, B26:3, 5, 14, 19–20
Cassidulinoides parkerianus
 Site 1097, A6:10
 Site 1103, A1:15; A9:12; B28:5
Chaetoceros sp. A, Site 1095, B35:4, 29
Chaetoceros spp.

Site 1095, B35:4, 47
 Site 1098, A1:16; A7:5, 9–10, 36, 42; B7:6, 25–26;
 B18:5, 13–16
 Site 1099, A7:7, 9–10, 42
 Site 1103, B35:4, 51–52
charybdeum trilobum, *Pterocanium*, Site 1101, A8:10
Chenopodipollis sp., Site 1097, B28:7, 17, 21–22
Cibicidoides mundulus
 Site 1096, A5:15
 Site 1101, A8:11
Cicatricosporites australiensis, Site 1097, B28:6, 17, 19–20
circularis, *Saturnalis*, Site 1101, A8:10
clementia, *Nitzschia*, Site 1095, B35:8, 28
Coccolithus pelagicus
 Site 1095, A5:14
 Site 1096, B26:5–8, 12, 15–18
 Site 1101, A8:10; B26:5–8, 13, 19–20
Cocconeis californica, Site 1095, B35:4, 30
Cocconeis costata, Site 1095, B35:4, 30
Cocconeis sp., Site 1095, B35:4, 30
Cocconeis sp. aff. *Cocconeis californica*
 Site 1095, B35:4, 30
 Site 1103, B35:4, 51
Cocconeis sp. aff. *Cocconeis costata*
 Site 1095, B35:4, 30
 Site 1103, B35:4, 53
Cocconeis sp. aff. *Cocconeis fasciolata*, Site 1095, B35:4, 30
Cocconeis spp., Site 1097, A6:9
Cocconeis? sp., Site 1095, B35:4, 30
communis, *Lejeunecysta* cf., Site 1095, B2:3
complicata, *Thalassiosira*
 Site 1095, A4:14; B29:6–7; B35:11–12, 36
 Site 1096, B29:6
 Site 1097, A6:8–9
 Site 1103, B35:11–12, 50
continua, *Neogloboquadrina*
 Site 1095, A4:16
 Site 1096, A5:15
Corethron criophilum
 Site 1098, A7:5, 9–10, 36; B7:6; B18:5, 15–16
 Site 1099, A7:7, 9–10
Corethron sp.
 Site 1095, B35:4–5, 31
 Site 1097, B35:4–5, 56
coronata, *Lampromitra*
 Site 1095, A4:15
 Site 1096, A5:13; B36:13; B37:13
 Site 1097, A6:9
Coscinodiscus elegans, Site 1095, B35:5, 46
Coscinodiscus marginatus
 Site 1097, B35:5, 55
 Site 1103, B35:5, 54
Coscinodiscus sp. A sensu Akiba, Site 1095, B35:5, 46
Coscinodiscus sp. cf. *Coscinodiscus radiatus*, Site 1095,
 B35:5, 46
Coscinodiscus spp., Site 1097, A6:8
costata, *Cocconeis*, Site 1095, B35:4, 30
costata, *Cocconeis* sp. aff. *Cocconeis*
 Site 1095, B35:4, 30
 Site 1103, B35:4, 53
costata, *Rhizosolenia*, Site 1095, B35:9, 31

costata var. A, *Rhizosolenia*, Site 1095, B35:9, 31
crassa, *Denticulopsis*, Site 1095, B29:8; B35:5, 25
criophilum, *Corethron*
 Site 1098, A7:5, 9–10, 36; B7:6; B18:5, 15–16
 Site 1099, A7:7, 9–10
Crucidentacula kanayae cf. var. *pacifica*, Site 1095, B35:5, 25
cuneiformis, *Hemidiscus*, Site 1095, B35:8, 45
curta, *Fragilariopsis*
 Site 1098, A7:9–10, 42; B7:6, 12, 25–26
 Site 1099, A7:9–10, 42
Cycladophora davisiana, Site 1096, A5:13
Cycladophora pliocenica
 Site 1095, B13:4
 Site 1101, A8:10; B36:13
Cycladophora spongothorax, Site 1095, A4:16
cylindrica, *Acrosphaera*, Site 1097, A6:9
cylindrica, *Antarctissa*
 Site 1095, A4:15
 Site 1096, A5:13
 Site 1101, A8:10
cylindrica, *Nitzschia*, Site 1095, B35:8, 26
cylindrus, *Fragilariopsis*, Site 1098, B7:6, 25–26

D

Dactyliosolen antarcticus, Site 1095, B35:5, 42
davisiana, *Cycladophora*, Site 1096, A5:13
deflandrei, *Antarctissa*, Site 1095, B13:4
delicata, *Denticulopsis*, Site 1097, A6:8; B35:5, 52
delicata, *Denticulopsis* sp. cf. *Denticulopsis*, Site 1095, B35:5–6, 26
Delphineis spp.
 Site 1095, B35:5, 30
 Site 1103, B35:5, 53
Dendrospyris rhodospyroides, Site 1095, B13:4
Dendrospyris rhodospyroides/haysi, Site 1095, B13:4
denticulata, *Antarctissa*, Site 1095, B13:4
Denticulopsis crassa, Site 1095, B29:8; B35:5, 25
Denticulopsis delicata, Site 1097, A6:8; B35:5, 52
Denticulopsis dimorpha, Site 1095, A4:14; B29:4; B36:7
Denticulopsis dimorpha var. *areolata*, Site 1095, A4:15; B29:4; B35:6, 25
Denticulopsis hustedtii, Site 1095, B35:6, 25
Denticulopsis maccollumii, Site 1095, B35:6, 27
Denticulopsis ovata, Site 1095, B35:6, 25
Denticulopsis praedimorpha, Site 1095, A4:14; B29:4; B36:7
Denticulopsis praehtyalina, Site 1095, B35:6, 25
Denticulopsis simonsenii, Site 1095, B35:6, 25
Denticulopsis simonsenii s.l.
 Site 1097, A6:8; B35:6, 52
 Site 1103, A9:11
Denticulopsis sp. cf. *Denticulopsis delicata*, Site 1095, B35:5–6, 26
Denticulopsis spp., Site 1103, A1:15; A9:11
Denticulopsis vulgaris, Site 1095, B35:6, 25
Desmospyris spongiosa
 Site 1095, A4:15
 Site 1096, A5:13
 Site 1101, A8:10

Deuterammia glabra, Site 1098, B7:7–8, 10, 27–29
Dictyococcites spp., Site 1103, B28:5
Dictyocorne spp., Site 1096, A5:13
dimorpha, *Denticulopsis*, Site 1095, A4:14; B29:4; B36:7
dimorpha var. *areolata*, *Denticulopsis*, Site 1095, A4:15; B29:4; B35:6, 25
diploneides, *Rouxia*, Site 1095, B35:10, 29
donahuensis, *Nitzschia*, Site 1095, A4:14

E

ehrenbergii, *Arachnoidiscus*, Site 1097, A6:11
elegans, *Coscinodiscus*, Site 1095, B35:5, 46
elliptipora, *Thalassiosira*, Site 1095, A4:13; B29:6
eltaninae, *Portatrochammina*, Site 1098, B7:3, 7–8, 10, 13–14, 27–29
Emiliana huxleyi
 Site 1095, A5:14; B28:4; B36:7
 Site 1096, B26:4, 15–18
 Site 1098, B26:4
 Site 1101, A8:10; B26:4, 19–20
endoi, *Azpeitia*, Site 1095, B35:4, 45
Epistominella exigua
 Site 1096, A5:15
 Site 1101, A8:11
Eucampia antarctica
 Site 1095, B35:6, 31
 Site 1098, A7:5, 10, 42; B7:6, 14, 36; B34:5–6
 Site 1099, A7:7, 10, 42; B34:5–6
 Site 1103, B35:6, 51
Eucyrtidium calvertense, Site 1101, A8:10
exigua, *Epistominella*
 Site 1096, A5:15
 Site 1101, A8:11

F

fasciculata, *Thalassiosira*
 Site 1095, B29:6–7
 Site 1097, A6:8–9
fasciolata, *Cocconeis* sp. aff. *Cocconeis*, Site 1095, B35:4, 30
flemingii, *Nothofagidites*, Site 1097, B28:7, 17, 21–22
Fontbotia wuellerstorfi, Site 1101, A8:11
Foveotriletes spp.
 Site 1097, B28:6, 17, 19–20
 Site 1103, B28:5–6
Fragilariopsis aff. *barronii* 1, Site 1095, B35:7, 27
Fragilariopsis aff. *barronii* 2, Site 1095, B35:7, 28
Fragilariopsis angulata, Site 1098, B7:6, 25–26
Fragilariopsis arcua, Site 1095, B35:6, 28
Fragilariopsis aurica
 Site 1095, B35:6–7, 28
 Site 1097, A6:9
 Site 1103, B35:6–7, 49
Fragilariopsis barronii
 Site 1095, A4:13–14; B29:6–7
 Site 1096, A5:13; B29:7
 Site 1097, A6:8–9
 Site 1101, A8:9
 Site 1103, A1:14; A9:11; B35:7, 49

Fragilariopsis barronii Partial Range Zone

Site 1095, A4:14; B29:7

Site 1096, A5:13; B29:7

Site 1097, A1:12

Fragilariopsis curta

Site 1098, A7:9–10, 42; B7:6, 12, 25–26

Site 1099, A7:9–10, 42

Fragilariopsis curta/*Fragilariopsis cylindrus* group, Site 1098, B7:6*Fragilariopsis cylindrus*, Site 1098, B7:6, 25–26*Fragilariopsis interfrigidaria*

Site 1095, A4:13–14; B29:6–7; B35:7, 27

Site 1096, A5:13; B29:6–7

Site 1097, A6:8

Site 1101, A8:9; B29:6–7

Fragilariopsis interfrigidaria Partial Range Zone

Site 1095, A4:14; B29:7; B37:9

Site 1096, A5:13; B29:7

Site 1101, A8:9; B29:7

Fragilariopsis kerguelensis

Site 1095, B35:7, 27

Site 1096, A5:12; B29:4; B36:9

Site 1097, A6:8

Site 1098, A7:9–10, 42; B7:6, 12, 25–26

Site 1099, A7:9–10, 42

Site 1100, A9:11

Site 1103, A9:11; B35:7, 48

Fragilariopsis lacrima, Site 1095, B35:7, 28*Fragilariopsis obliquecostata*, Site 1098, B7:6, 25–26*Fragilariopsis praecurta*

Site 1095, B35:7, 28

Site 1097, A6:9

Site 1103, B35:7, 52

Fragilariopsis praeinterfrigidaria

Site 1095, A4:14; B29:7; B35:7, 27

Site 1096, B29:7

Site 1097, A6:9

Fragilariopsis pseudonana, Site 1095, B35:8, 28*Fragilariopsis ritscheri*

Site 1098, A7:10; B7:6, 25–26

Site 1099, A7:10

Fragilariopsis ritscheri/*Fragilariopsis obliquecostata* group, Site 1098, B7:6*Fragilariopsis* sp. aff. *Fragilariopsis kerguelensis*, Site 1095, B35:7, 27*Fragilariopsis* sp. cf. *Fragilariopsis praeinterfrigidaria praeinterfrigidaria*, Site 1095, B35:7, 27*Fragilariopsis* spp.

Site 1097, A6:8

Site 1098, B18:15–16

Site 1103, A9:11

Fragilariopsis weaveri, Site 1095, B35:8, 27*frauenfeldii*, *Thalassionema*, Site 1095, B35:11, 29*Fursenkoina* spp., Site 1099, A7:11

G

Gephyrocapsa caribbeanica

Site 1096, B26:5, 14–18

Site 1101, B26:3, 5, 14, 19–20

Gephyrocapsa oceanica

Site 1096, B26:5, 14–18

Site 1101, B26:5, 14, 19–20

Gephyrocapsa spp.

Site 1095, A5:14; B28:4

Site 1096, A1:11; B26:3, 5–6, 14–18

Site 1097, B28:5

Site 1101, A8:10; B26:3, 5–6, 14, 19–20; B36:10

gersondei, *Thalassiosira*, Site 1095, B35:12, 46*glabra*, *Deuterammia*, Site 1098, B7:7–8, 10, 27–29*glacialis*, *Spongotrochus*, Site 1097, A6:9*Globigerina bulloides*

Site 1095, A4:16

Site 1096, A5:15

Site 1101, A1:10; B36:10

Globocassidulina biora, Site 1099, A7:11*Globocassidulina subglobosa*

Site 1096, A5:15

Site 1097, A6:10

Globorotalia scitula, Site 1095, A4:16*Globorotalia scitula* Zone, Site 1095, A4:16*Globoturbotalita woodi*

Site 1095, A4:16

Site 1096, A5:15

gracilis, *Thalassiosira*

Site 1098, A7:9

Site 1099, A7:9

Site 1103, B35:12, 48

gracilis, *Thalassiosira* sp. cf. *Thalassiosira*, Site 1095, B35:12, 36*Grammatophora* spp.

Site 1095, B35:8, 30

Site 1097, A6:9

grande, *Lychnocanium*

Site 1095, A4:15; B13:4

Site 1096, A5:14

grunowii, *Stephanopyxis*

Site 1095, B35:11, 33

Site 1103, A9:11

H

Haloragacidites? sp., Site 1103, B28:7, 17, 21–22*hebetata* f. *bidens*, *Rhizosolenia* sp. aff. *Rhizosolenia*, Site 1095, B35:10, 31*hebetata* f. *hiemalis*, *Rhizosolenia*

Site 1095, B35:10, 31

Site 1097, B35:10, 56

Helicosphaera selli, Site 1101, A8:10; B26:5, 19–20*Helotholus vema*

Site 1095, A4:15

Site 1096, A5:13

Site 1097, A6:9

Site 1101, A8:10

Hemidiscus cuneiformis, Site 1095, B35:8, 45*Hemidiscus karstenii*

Site 1095, A4:10; B25:7, 19; B29:5; B35:8, 45

Site 1096, A5:6, 12; B29:5; B36:9

Site 1101, A8:4, 9; B29:5

hustedtii, *Denticulopsis*, Site 1095, B35:6, 25

huxleyi, *Emiliania*

Site 1095, A5:14; B28:4; B36:7

Site 1096, B26:4, 15–18

Site 1098, B26:4

Site 1101, A8:10; B26:4, 19–20

Hyalodiscus spp., Site 1103, B35:8, 53*hystrix*, *Phormacantha*, Site 1098, B33:2–3, 9, 11**I***Ilexpollenites?* sp., Site 1097, B28:7, 17, 21–22*ingens*, *Actinocyclus*

Site 1095, A4:13; B29:5

Site 1097, A6:8

Site 1101, A8:9

Site 1103, A1:14; A9:11; B35:3, 53

ingens var. *ovalis*, *Actinocyclus*

Site 1095, A4:14; B29:8; B35:3, 39

Site 1103, B(synthesis):7–8

Inoceramus spp., Site 1103, A1:15*insigna*, *Thalassiosira*

Site 1095, A4:13; B29:6

Site 1096, A5:13; B29:6–7

Site 1097, A6:8

Site 1101, B29:6–7

Site 1103, A1:14

interfrigidaria, *Fragilariopsis*

Site 1095, A4:13–14; B29:6–7; B35:7, 27

Site 1096, A5:13; B29:6–7

Site 1097, A6:8

Site 1101, A8:9; B29:6–7

inura, *Thalassiosira*

Site 1095, A4:13–14; B29:6–7; B35:12, 36

Site 1096, A5:12–13; B29:6–7

Site 1097, A6:9; B(synthesis):7

Site 1103, A1:14; A9:11; B35:12, 50–51

inura, *Thalassiosira* sp. 1 aff. *Thalassiosira*, Site 1095, B35:12, 36*inura*, *Thalassiosira* sp. 2 aff. *Thalassiosira*, Site 1095, B35:12, 37*isopolica*, *Rouxia*, Site 1095, B35:10, 29**J***januaria*, *Nitzschia*

Site 1095, B35:9, 28

Site 1103, A1:15; A9:11

K*kanayae* cf. var. *pacifica*, *Crucidentricula*, Site 1095, B35:5, 25*Karreriella* spp.

Site 1096, A5:15

Site 1101, A8:11

karstenii, *Actinocyclus*

Site 1097, A6:9

Site 1100, B35:3, 48

Site 1101, B29:6

Site 1103, B35:3, 50–51

karstenii, *Hemidiscus*

Site 1095, A4:10; B25:7, 19; B29:5; B35:8, 45

Site 1096, A5:6, 12; B29:5; B36:9

Site 1101, A8:4, 9; B29:5

kennetii, *Asteromphalus*, Site 1095, A4:14; B29:4; B36:7*keruelensis*, *Fragilariopsis*

Site 1095, B35:7, 27

Site 1096, A5:12; B29:4; B36:9

Site 1097, A6:8

Site 1098, A7:9–10, 42; B7:6, 12, 25–26

Site 1099, A7:9–10, 42

Site 1100, A9:11

Site 1103, A9:11; B35:7, 48

keruelensis, *Fragilariopsis* sp. aff. *Fragilariopsis*, Site 1095, B35:7, 27**L***labrata*, *Acrosphaera?*, Site 1095, A4:15; B36:7*lachinae*, *Nothofagidites*, Site 1103, B28:5, 7*lachlanae*, *Nothofagidites*, Site 1103, B28:7, 17, 21–22*lacrima*, *Fragilariopsis*, Site 1095, B35:7, 28*lacunosa*, *Pseudoemiliania*

Site 1095, B28:4; B36:7

Site 1096, B26:5–6, 15–18

Site 1101, A8:10; B26:5–6, 19–20

Laevigatosporites ovatus, Site 1097, B28:7, 18–20*lambimarginata*, *Thalassiosira* sp. cf. *Thalassiosira*

Site 1095, B35:13, 40, 44

Site 1103, B35:13, 48

Lampromitra coronata

Site 1095, A4:15

Site 1096, A5:13; B36:13; B37:13

Site 1097, A6:9

Lejeunecysta cf. *communis*, Site 1095, B2:3*Lejeunecysta* spp.

Site 1095, B2:3–10

Site 1096, B2:3–10

lentiginosa, *Thalassiosira*

Site 1095, B29:7

Site 1098, A7:9–10

Site 1099, A7:9–10

lentiginosa var. *ovalis*, *Thalassiosira*, Site 1095, B35:13, 44*leptoporus*, *Calcidiscus*, Site 1098, B26:4*Lychnocanium grande*

Site 1095, A4:15; B13:4

Site 1096, A5:14

M*maccollumii*, *Denticulopsis*, Site 1095, B35:6, 27*mahoodii*, *Thalassiosira*, Site 1095, B29:8; B35:13, 39*marginatus*, *Coscinodiscus*

Site 1097, B35:5, 55

Site 1103, B35:5, 54

marina, *Nitzschia*, Site 1095, B35:9, 26*Martinottiella antarcticus*, Site 1101, A8:11*Martinottiella nodulosa*, Site 1096, A5:15*marujanica*, *Thalassiosira* sp. aff. *Thalassiosira*, Site 1095, B35:13, 42*mawsonii*, *Phyllocladidites*, Site 1103, B28:8, 18, 21–22

Melosira omma

Site 1095, B35:8, 32

Site 1097, B35:8, 55

Melosira? sp., Site 1095, B35:8, 32*Milliammina arenacea*, Site 1098, B7:7–8, 27–29*Milliammina* spp.

Site 1098, B7:3

Site 1099, A7:11

minima, *Rhizosolenia*, Site 1095, B35:10, 31*miocenica*, *Thalassiosira*, Site 1095, B29:8*mundulus*, *Cibicidoides*

Site 1096, A5:15

Site 1101, A8:11

murrhina, *Pyrgo*, Site 1101, A8:11**N***nativa*, *Thalassiosira*, Site 1095, B35:13, 43*Navicula* spp.

Site 1095, A4:15; B29:4

Site 1097, A6:9

Site 1103, B35:8, 51

naviculoides, *Rouxia*, Site 1095, B35:10, 29*Neogloboquadrina continuosa*

Site 1095, A4:16

Site 1096, A5:15

Neogloboquadrina pachyderma

Site 1096, A1:9

Site 1098, B7:41

Site 1101, A1:10

Site 1103, A1:15

Neogloboquadrina pachyderma dextral

Site 1095, A4:16

Site 1096, A5:15

Site 1101, A8:11

Neogloboquadrina pachyderma sinistral

Antarctic Peninsula, B(synthesis):14

Site 1095, A4:16

Site 1096, A5:14–15; B20:1–10; B36:9

Site 1097, A6:10

Site 1098, B7:7, 14

Site 1099, A7:11

Site 1100, A9:12

Site 1101, A8:11; B20:1–10; B36:10

Site 1102, A9:10

Site 1103, A9:12

nephroides, *Selenopemphix* cf., Site 1095, B2:3*Nitzschia angulata*, Site 1095, B35:8, 27*Nitzschia clementia*, Site 1095, B35:8, 28*Nitzschia cylindrica*, Site 1095, B35:8, 26*Nitzschia donahuensis*, Site 1095, A4:14*Nitzschia januaria*

Site 1095, B35:9, 28

Site 1103, A1:15; A9:11

Nitzschia marina, Site 1095, B35:9, 26*Nitzschia pliocena*, Site 1095, B35:9, 26*Nitzschia pusilla*, Site 1103, B35:9, 52*Nitzschia reinholdii*

Site 1097, A6:9

Site 1103, B35:9, 52

Nitzschia reinholdii Partial Range Zone, Site 1095, B29:8*Nitzschia* sp. A sensu Gersonde, Site 1095, B35:9, 27*Nitzschia* spp.

Site 1095, B35:9, 27–28

Site 1097, A6:8

Site 1103, A9:11

nitzschiioides, *Thalassionema*, Site 1095, B35:11, 29*nitzschiioides* var. *parvum*, *Thalassionema*, Site 1095, B35:11, 29*nodulifera*, *Azpeitia*

Site 1095, B35:4, 45

Site 1103, B35:4, 53

nodulosa, *Martinottiella*, Site 1096, A5:15*Nothofagidites flemingii*, Site 1097, B28:7, 17, 21–22*Nothofagidites lachinae*, Site 1103, B28:5, 7*Nothofagidites lachlanae*, Site 1103, B28:7, 17, 21–22*Nothofagidites* spp., Site 1103, B28:5, 7*Nothofagus* spp., Site 1103, B28:5, 7*Nupharipollis?* sp., Site 1103, B28:7, 18, 21–22*Nuttallides umbonifer*

Site 1096, A5:15

Site 1101, A8:11

O*obliquecostata*, *Fragilariopsis*, Site 1098, B7:6, 25–26*oceanica*, *Gephyrocapsa*

Site 1096, B26:5, 14–18

Site 1101, B26:5, 14, 19–20

octonarius, *Actinocyclus*, Site 1095, B35:3, 44*octonarius*, *Actinocyclus* sp. cf. *Actinocyclus*

Site 1095, B35:3, 45

Site 1097, B35:3, 57

Odontella spp.

Site 1098, A7:10

Site 1099, A7:10

oestrupii, *Thalassiosira*

Site 1095, A4:14; B29:7; B35:13, 40

Site 1097, A6:8–9

Site 1103, A1:14; A9:11

oestrupii, *Thalassiosira* sp. aff. *Thalassiosira*, Site 1103, B35:13, 50*oikiskos*, *Plectacantha*, Site 1098, B33:2–3, 9, 11*oliverana*, *Thalassiosira*

Site 1095, A4:14; B29:8; B35:13, 48

Site 1097, A6:8; B35:13, 57

oliverana, *Thalassiosira* aff., Site 1095, B35:13, 38*oliverana* var. *sparsa*, *Thalassiosira*

Site 1095, A4:14

Site 1103, B35:13, 50

oliverana var. *sparsa*, *Thalassiosira* sp. aff. *Thalassiosira*, Site 1095, B35:13, 38*omma*, *Melosira*

Site 1095, B35:8, 32

Site 1097, B35:8, 55

Oridorsalis umbonatus

Site 1096, A5:15

Site 1101, A8:11

osculosa, *Spongopyle*, Site 1097, A6:9*ovata*, *Denticulopsis*, Site 1095, B35:6, 25*ovatus*, *Laevigatosporites*, Site 1097, B28:7, 18–20

P*pachyderma*, *Neogloboquadrina*

Site 1096, A1:9

Site 1098, B7:41

Site 1101, A1:10

Site 1103, A1:15

pachyderma dextral, *Neogloboquadrina*

Site 1095, A4:16

Site 1096, A5:15

Site 1101, A8:11

pachyderma sinistral, *Neogloboquadrina*

Antarctic Peninsula, B(synthesis):14

Site 1095, A4:16

Site 1096, A5:14–15; B20:1–10; B36:9

Site 1097, A6:10

Site 1098, B7:7, 14

Site 1099, A7:11

Site 1100, A9:12

Site 1101, A8:11; B20:1–10; B36:10

Site 1102, A9:10

Site 1103, A9:12

Paralia sulcata

Site 1095, A4:14–15; B(synthesis):12; B29:4; B35:9, 32

Site 1097, A6:8–9; B35:9, 56

Site 1103, B35:9, 53

parkerianus, *Cassidulinoides*

Site 1097, A6:10

Site 1103, A1:15; A9:12; B28:5

pelagicus, *Coccolithus*

Site 1095, A5:14

Site 1096, B26:5–8, 12, 15–18

Site 1101, A8:10; B26:5–8, 13, 19–20

peragalli, *Rouxia*, Site 1095, B35:10, 29*Phormacantha hystrix*, Site 1098, B33:2–3, 9, 11*Phyllocladidites mawsonii*, Site 1103, B28:8, 18, 21–22*Phyllocladidites* spp., Site 1103, B28:5, 8*Pinnularia* spp., Site 1095, A4:15; B29:4*Plectacantha oikiskos*, Site 1098, B33:2–3, 9, 11*pliocena*, *Nitzschia*, Site 1095, B35:9, 26*pliocenica*, *Cycladophora*

Site 1095, B13:4

Site 1101, A8:10; B36:13

Podocarpidites sp. 1, Site 1103, B28:8, 18, 21–22*Podocarpidites* sp. 2, Site 1103, B28:8, 18, 21–22*Podocarpidites* spp., Site 1103, B28:5, 8*Polypodiisporites radiatus*, Site 1097, B28:7, 18–20*Polypodiisporites* sp., Site 1097, B28:7, 18–20*Porodiscid* spp., Site 1097, A6:9*Porospira?* spp., Site 1095, B35:9, 42*Portatrochammina eltaninae*, Site 1098, B7:3, 7–8, 10, 13–14, 27–29*praebarboi*, *Proboscia*, Site 1095, B35:9, 29*praecurta*, *Fragilariopsis*

Site 1095, B35:7, 28

Site 1097, A6:9

Site 1103, B35:7, 52

praedimorpha, *Denticulopsis*, Site 1095, A4:14; B29:4; B36:7*praehyalina*, *Denticulopsis*, Site 1095, B35:6, 25*praeinterfrigidaria*, *Fragilariopsis*

Site 1095, A4:14; B29:7; B35:7, 27

Site 1096, B29:7

Site 1097, A6:9

praeinterfrigidaria praeinterfrigidaria, *Fragilariopsis* sp. cf.*Fragilariopsis*, Site 1095, B35:7, 27*praenidulus*, *Thalassiosira*, Site 1095, B35:13, 43*Proboscia alata*, Site 1095, B35:9, 29*Proboscia praebarboi*, Site 1095, B35:9, 29*Proboscia* spp., Site 1098, B7:6*Proteacidites* sp. 2, Site 1103, B28:8, 18, 21–22*Proteacidites* spp., Site 1103, B28:5, 8*Protoperidinium* spp.

Site 1095, B2:3–4

Site 1096, B2:3–4

Prunopyle titan

Site 1095, A4:15; B13:4

Site 1096, A5:13

Site 1097, A6:9

Site 1101, A8:10

Pseudoemiliana lacunosa

Site 1095, B28:4; B36:7

Site 1096, B26:5–6, 15–18

Site 1101, A8:10; B26:5–6, 19–20

pseudonana, *Fragilariopsis*, Site 1095, B35:8, 28*pseudopunctata*, *Bolivina*, Site 1098, B7:3–4, 7–8, 13–14*pseudoumbilica*, *Reticulofenestra*, Site 1095, B28:4*Psitrites* spp., Site 1103, B28:5*Pterocanium charybdeum trilobum*, Site 1101, A8:10*pusilla*, *Nitzschia*, Site 1103, B35:9, 52*Pyrgo murrhina*, Site 1101, A8:11**R***radiatus*, *Coscinodiscus* sp. cf. *Coscinodiscus*, Site 1095, B35:5, 46*radiatus*, *Polypodiisporites*, Site 1097, B28:7, 18–20*reinholdii*, *Nitzschia*

Site 1097, A6:9

Site 1103, B35:9, 52

Reticulofenestra asanoi, Site 1101, B26:5, 19–20*Reticulofenestra pseudoumbilica*, Site 1095, B28:4*Rhabdonema* spp., Site 1095, B35:9, 30*Rhizosolenia costata*, Site 1095, B35:9, 31*Rhizosolenia costata* var. A, Site 1095, B35:9, 31*Rhizosolenia hebetata* f. *hiemalis*

Site 1095, B35:10, 31

Site 1097, B35:10, 56

Rhizosolenia minima, Site 1095, B35:10, 31*Rhizosolenia setigera*

Site 1095, B35:10, 31

Site 1097, B35:10, 56

Rhizosolenia sp. aff. *Rhizosolenia hebetata* f. *bidens*, Site 1095, B35:10, 31*Rhizosolenia* sp. C, Site 1103, B35:10, 49*Rhizosolenia* sp. D, Site 1095, B35:10, 31*Rhizosolenia* spp.

Site 1098, A7:9–10; B7:6

Site 1099, A7:9–10

Rhizosolenia styliformis

Site 1095, B35:10, 31

Site 1103, B35:10, 52

rhodospyroides, *Dendrospyris*, Site 1095, B13:4
rhodospyroides/haysi, *Dendrospyris*, Site 1095, B13:4
ritscheri, *Fragilariopsis*
 Site 1098, A7:10; B7:6, 25–26
 Site 1099, A7:10
Rouxia californica
 Site 1095, B35:10, 29
 Site 1103, A1:15; A9:11; B35:10, 52
Rouxia diploneides, Site 1095, B35:10, 29
Rouxia isopolica, Site 1095, B35:10, 29
Rouxia naviculoides, Site 1095, B35:10, 29
Rouxia peragalli, Site 1095, B35:10, 29
Rugulatisporites sp. 1, Site 1103, B28:6, 18–20
Rugulatisporites sp. 2, Site 1097, B28:6, 18–20
Rugulatisporites sp. 3, Site 1103, B28:6, 18–20

S

Saturnalis circularis, Site 1101, A8:10
Schimperella antarctica, Site 1095, B35:10, 47
scitula, *Globorotalia*, Site 1095, A4:16
Selenopemphix cf. *nephroides*, Site 1095, B2:3
Selenopemphix spp.
 Site 1095, B2:3–10
 Site 1096, B2:3–10
selli, *Helicosphaera*, Site 1101, A8:10; B26:5, 19–20
setigera, *Rhizosolenia*
 Site 1095, B35:10, 31
 Site 1097, B35:10, 56
simonsenii, *Denticulopsis*, Site 1095, B35:6, 25
simonsenii s.l., *Denticulopsis*
 Site 1097, A6:8; B35:6, 52
 Site 1103, A9:11
Siphonosphaera vesuvius, Site 1095, A4:15; B13:4; B36:7
Siphonosphaera vesuvius Zone, Site 1095, A4:15; B13:1, 5
Sphenolithus spp.
 Site 1095, A5:14
 Site 1101, B26:3
spongiosa, *Desmospyris*
 Site 1095, A4:15
 Site 1096, A5:13
 Site 1101, A8:10
Spongopyle osculosa, Site 1097, A6:9
spongothorax, *Cycladophora*, Site 1095, A4:16
Spongotrochus glacialis, Site 1097, A6:9
Stellarima spp.
 Site 1095, B35:10, 34, 38
 Site 1097, B35:10, 55
 Site 1103, B35:10, 48
Stephanogonia spp., Site 1095, B35:10, 32
Stephanopyxis barbadiensis, Site 1095, B35:11, 33
Stephanopyxis grunowii
 Site 1095, B35:11, 33
 Site 1103, A9:11
Stephanopyxis spp.
 Site 1095, B35:11, 33
 Site 1097, A6:9
Stephanopyxis superba, Site 1095, B35:11, 33
Stephanopyxis turris, Site 1097, B35:11, 55
strelkovi, *Antarctissa*, Site 1095, B13:4
striata, *Thalassiosira*

Site 1095, A4:14; B29:7; B35:13, 39
 Site 1096, B29:7
 Site 1101, A8:9; B29:7
 Site 1103, B35:13, 51
Stylatractus universus
 Site 1095, A4:15; B25:3, 7, 19
 Site 1101, A8:10
styliiformis, *Rhizosolenia*
 Site 1095, B35:10, 31
 Site 1103, B35:10, 52
subglobosa, *Globocassidulina*
 Site 1096, A5:15
 Site 1097, A6:10
sulcata, *Paralia*
 Site 1095, A4:14–15; B(synthesis):12; B29:4; B35:9, 32
 Site 1097, A6:8–9; B35:9, 56
 Site 1103, B35:9, 53
superba, *Stephanopyxis*, Site 1095, B35:11, 33
Synedra spp., Site 1095, B35:11, 29

T

tabularis, *Azpeitia*, Site 1095, B35:4, 45
tetraoestrupii, *Thalassiosira*, Site 1095, B29:7; B35:13, 40
Textularia spp., Site 1098, B7:7, 29
Textularia wiesneri, Site 1098, B7:3, 8, 27–28
Thalassionema frauenfeldii, Site 1095, B35:11, 29
Thalassionema nitzschioides, Site 1095, B35:11, 29
Thalassionema nitzschioides var. *parvum*, Site 1095, B35:11, 29
Thalassionema spp.
 Site 1096, A5:12; B29:4; B36:9
 Site 1103, A9:11
Thalassiosira aff. *oliverana*, Site 1095, B35:13, 38
Thalassiosira aff. *trifulta* group, Site 1103, B35:13–14, 54
Thalassiosira antarctica
 Site 1098, A7:9–10, 42; B7:6; B18:15–16
 Site 1099, A7:9–10, 42
 Site 1100, B35:11, 48
Thalassiosira baldaufii, Site 1095, B35:11, 41
Thalassiosira complicata
 Site 1095, A4:14; B29:6–7; B35:11–12, 36
 Site 1096, B29:6
 Site 1097, A6:8–9
 Site 1103, B35:11–12, 50
Thalassiosira complicata Zone, Site 1095, B37:9
Thalassiosira elliptipora, Site 1095, A4:13; B29:6
Thalassiosira fasciculata
 Site 1095, B29:6–7
 Site 1097, A6:8–9
Thalassiosira gersondei, Site 1095, B35:12, 46
Thalassiosira gracilis
 Site 1098, A7:9
 Site 1099, A7:9
 Site 1103, B35:12, 48
Thalassiosira insigna
 Site 1095, A4:13; B29:6
 Site 1096, A5:13; B29:6–7
 Site 1097, A6:8
 Site 1101, B29:6–7
 Site 1103, A1:14

Thalassiosira insigna Zone, Site 1095, B37:9

Thalassiosira insigna–*Thalassiosira vulnifica* Concurrent

Range Zone

Site 1095, A4:13; B29:6–7

Site 1096, B29:6–7

Site 1101, A8:9; B29:6–7

Thalassiosira inura

Site 1095, A4:13–14; B29:6–7; B35:12, 36

Site 1096, A5:12–13; B29:6–7

Site 1097, A6:9; B(synthesis):7

Site 1103, A1:14; A9:11; B35:12, 50–51

Thalassiosira inura Partial Range Zone

Site 1095, B29:7; B37:9

Site 1096, A5:13; B29:7

Site 1097, A1:12; A6:9

Site 1103, A1:14

Thalassiosira kolbei Partial Range Zone

Site 1095, A4:13; B29:6

Site 1096, A5:12; B29:6

Site 1101, A8:9; B29:6

Site 1103, A9:11

Thalassiosira lentiginosa

Site 1095, B29:7

Site 1098, A7:9–10

Site 1099, A7:9–10

Thalassiosira lentiginosa Partial Range Zone

Antarctic Peninsula, A2:14; B29:5

Site 1098, A7:10

Site 1099, A7:10

Thalassiosira lentiginosa var. *ovalis*, Site 1095, B35:13, 44

Thalassiosira mahoodii, Site 1095, B29:8; B35:13, 39

Thalassiosira miocenica, Site 1095, B29:8

Thalassiosira nativa, Site 1095, B35:13, 43

Thalassiosira oestrupii

Site 1095, A4:14; B29:7; B35:13, 40

Site 1097, A6:8–9

Site 1103, A1:14; A9:11

Thalassiosira oestrupii Partial Range Zone

Site 1095, A4:14; B29:7

Site 1096, A5:13

Thalassiosira oliverana

Site 1095, A4:14; B29:8; B35:13, 48

Site 1097, A6:8; B35:13, 57

Thalassiosira oliverana var. *sparsa*

Site 1095, A4:14

Site 1103, B35:13, 50

Thalassiosira oliverana–*Thalassiosira inura* group, Site 1095, B35:13, 35

Thalassiosira praenidulus, Site 1095, B35:13, 43

Thalassiosira sp., Site 1095, B35:13, 32

Thalassiosira sp. aff. *Thalassiosira marujanica*, Site 1095, B35:13, 42

Thalassiosira sp. aff. *Thalassiosira oestrupii*, Site 1103, B35:13, 50

Thalassiosira sp. aff. *Thalassiosira oliverana* var. *sparsa*, Site 1095, B35:13, 38

Thalassiosira sp. cf. *Thalassiosira gracilis*, Site 1095, B35:12, 36

Thalassiosira sp. cf. *Thalassiosira lambimarginata*

Site 1095, B35:13, 40, 44

Site 1103, B35:13, 48

Thalassiosira sp. 1 aff. *Thalassiosira inura*, Site 1095, B35:12, 36

Thalassiosira sp. 2 aff. *Thalassiosira inura*, Site 1095, B35:12, 37

Thalassiosira spp.

Site 1095, B35:14, 38, 40–42

Site 1103, B35:14, 50, 54

Thalassiosira striata

Site 1095, A4:14; B29:7; B35:13, 39

Site 1096, B29:7

Site 1101, A8:9; B29:7

Site 1103, B35:13, 51

Thalassiosira tetraoestrupii, Site 1095, B29:7; B35:13, 40

Thalassiosira torokina

Site 1095, A4:14; B29:8; B35:13, 34, 39

Site 1096, A5:12

Site 1097, A6:8–9

Site 1101, A8:9

Site 1103, A1:14; A9:11; B35:13, 48

Thalassiosira torokina Partial Range Zone, Site 1095, B29:8; B37:9

Thalassiosira vulnifica

Site 1095, A4:13; B29:6–7; B35:14, 39

Site 1096, A5:12–13; B29:6–7

Site 1097, A6:8

Site 1101, A8:9; B29:6–7

Site 1103, B35:14, 51

Thalassiosira vulnifica Partial Range Zone

Site 1095, A4:13; B29:6

Site 1096, A5:12–13; B29:6

Site 1101, A8:9; B29:6

Thalassiothrix antarctica

Site 1095, B35:14, 29

Site 1103, B35:14, 48, 52

Thalassiothrix spp.

Site 1096, A5:12; B29:4; B36:9

Site 1098, A7:9–10; B7:6

Site 1099, A7:9–10

Site 1103, A9:11

Thoracosphaera spp., Site 1098, B26:4

titan, *Prunopyle*

Site 1095, A4:15; B13:4

Site 1096, A5:13

Site 1097, A6:9

Site 1101, A8:10

torokina, *Thalassiosira*

Site 1095, A4:14; B29:8; B35:13, 34, 39

Site 1096, A5:12

Site 1097, A6:8–9

Site 1101, A8:9

Site 1103, A1:14; A9:11; B35:13, 48

Tricerapys antarctica

Site 1095, A4:15

Site 1101, A8:10

Tricolpites spp., Site 1103, B28:5, 8

Tricolporopollenites sp., Site 1097, B28:8, 18, 21–22

Trinacria spp., Site 1097, B35:14, 56

turris, *Stephanopyxis*, Site 1097, B35:11, 55

U*umbonatus, Oridorsalis*

Site 1096, A5:15

Site 1101, A8:11

umbonifer, Nuttallides

Site 1096, A5:15

Site 1101, A8:11

universus, Stylatractus

Site 1095, A4:15; B25:3, 7, 19

Site 1101, A8:10

V*vema, Helotholus*

Site 1095, A4:15

Site 1096, A5:13

Site 1097, A6:9

Site 1101, A8:10

vesuvius, Siphonosphaera, Site 1095, A4:15; B13:4–5;
B36:7*vulgaris, Denticulopsis*, Site 1095, B35:6, 25*vulnifica, Thalassiosira*

Site 1095, A4:13; B29:6–7; B35:14, 39

Site 1096, A5:12–13; B29:6–7

Site 1097, A6:8

Site 1101, A8:9; B29:6–7

Site 1103, B35:14, 51

W*weaveri, Fragilariopsis*, Site 1095, B35:8, 27*wiesneri, Textularia*, Site 1098, B7:3, 8, 27–28*woodi, Globoturborotalita*

Site 1095, A4:16

Site 1096, A5:15

wuellerstorfi, Fontbotia, Site 1101, A8:11**Z**

zones (with letter prefixes)

Chi, A5:13; A8:10

CN11, Site 1095, B28:4

CN13, Site 1095, B28:4; B36:7

CN13b, B26:5; B28:4

CN13b/NN19, Site 1096, A5:14

CN14a/NN19, Site 1096, A5:14

CN14b/NN19, A5:14; A8:10

CN14b/NN20, Site 1101, B26:5

CN15, Site 1095, B28:4; B36:7

CN15/NN20, Site 1096, A5:14

CN15/NN21a, Site 1101, A8:10

Phi, A4:15; A5:13; A8:10

Psi, A5:13; A8:10; B36:9–10

Tau, A4:15; A5:13; A6:9; B13:1, 5–6; B36:7

Upsilon, A4:15; A5:13; A6:9; A8:10; A9:12; B13:1;
B36:10