

# INDEX TO VOLUME 188

This index covers both the *Initial Reports* and *Scientific Results* portions of Volume 188 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 1165, for example, is given as "Site 1165, A3:1–191."

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

- ablation, vs. sea-surface temperature, B14:32
- accessory component
  - distribution, B4:35–37
  - foraminifers, A4:110
  - sediments, A3:73–76, 191; A5:97; B4:10–12, 16–17, 19–20
- advection, paleoclimatology, B14:12
- age
  - palynomorphs, B3:27
  - vs. oxygen isotopes, B1:42
  - vs. sedimentation rates, B1:42
- age vs. depth
  - Site 1165, A1:59; A3:108, 112; B1:33
  - Site 1166, A4:67
- aggradation, stratigraphy, B1:8–9
- alkalinity
  - carbon dioxide reduction zone, A3:45
  - pore water, A3:43–47; A4:30; A5:23
  - rock-water reaction zone, A3:46
  - sulfate reduction zone, A3:44–45
  - vs. depth, A3:125; A4:77; A5:65; B14:10
  - vs. sulfate, A3:128
- alluvial fans, Eocene, B1:6–7
- alluvial plains
  - glaciation, B1:6
  - lithologic units, A4:14
  - seismic units, B8:5–6
- aluminum hydroxide, X-ray diffraction data, A4:16
- Amery Depression, bathymetry, A1:5
- Amery Group, palynomorphs, B2:6
- Amery Ice Shelf, glaciology, A1:6–7
- Amery Ice Shelf System. *See* Lambert Glacier–Amery Ice Shelf System
- ammonium
  - carbon dioxide reduction zone, A3:45
  - pore water, A3:43–47; A4:29; A5:23
  - rock-water reaction zone, A3:46
  - vs. depth, A3:125; A4:75; A5:65
- amphibole
  - lithologic units, A3:16
  - smear slides, A4:14–15
- amphibolite facies, geology, A1:7–8
- angiosperms, palynomorphs, B2:4–5; B3:11
- Antarctic Circumpolar Current, drift deposits, A1:4; B1:5
- Antarctic Convergence, palynomorphs, B2:10–11
- Antarctic Divergence
  - nannofossils, A5:17
  - ocean circulation, A1:6; B1:5
- Antarctic Ice Sheet, summary, A1:1–65
- Antarctic Peninsula, palynomorphs, B3:16–17
- Antarctica
  - palynomorphs, B3:12–13
  - summary, A1:1–65
- Antarctica E, synthesis, B1:1–42

anticlinal epidermal phytoliths, sediments, B5:4  
Aptian, geology, A1:8–9  
Araucariaceae, palynomorphs, B3:9, 11  
Austral Conifer Woodland, palynomorphs, B3:12  
authigenic carbonates. *See* carbonates, authigenic

## B

bacteria, pore water, A3:45–46  
barnacle plate, accessory component, B4:16  
basement  
  geology, A1:7–8  
  structure contour maps, A1:35  
basins, seismic units, B8:5  
bathyal environment, deposition, B4:9–10  
bathymetry, embayments, A1:5, 31; A3:10–11; B14:17  
Beaver Lake, geology, A1:7–8  
bed thickness, impedance logs, B10:27  
biogeography, palynomorphs, B3:13  
biostratigraphic datums  
  diatoms, A3:177–178; A4:102; B6:19, 25  
  radiolarians, A3:178; A4:102  
  sedimentation rates, A4:26  
biostratigraphy  
  diatoms, B6:1–25  
  nannofossils, B11:1–14  
  palynomorphs, B2:1–20  
  phytoliths, B5:1–12  
  principal results, A1:14  
  Site 1165, A3:21–38  
  Site 1166, A4:13–26  
  vs. depth, A1:42; A4:66; A5:58  
  zonation, B3:25  
  *See also* Southern Ocean diatom zonation  
bioturbation  
  composite section, B12:15  
  lithologic units, A3:16, 20–21; A4:13–14  
  photograph, A3:101–102; B12:11  
bituminite, lonestone, A5:11  
bivalves, accessory component, B4:19  
block phytoliths, unknown origin, B5:6  
bone fragments  
  accessory component, A3:74–75; B4:10  
  *See also* cetacean bones  
braided deltaic environment, deposition, A4:17  
brightness  
  diffuse spectral reflectance, B13:9–11  
  percentages, B7:48  
  sediments, B7:5–7, 47  
  vs. age, B13:21, 26  
  vs. depth, B7:17–18, 20, 22; B13:21, 26  
  *See also* lightness  
Brunhes Chron, magnetostratigraphy, A3:42–43; A5:22  
Brunhes/Matuyama boundary  
  chronostratigraphy, B14:10–11  
  foraminifers, B13:11  
bulliform phytoliths, sediments, B5:3  
burrows, photograph, A3:101–102; B12:11

## C

Calabrian, magnetostratigraphy, B13:24  
calcareous beds, photograph, A3:94  
calcified beds, log signature, A3:65  
calcite  
  Factor 1, B7:27  
  sediments, B14:6–7  
  vs. depth, B14:13  
  *See also* micrite  
calcium  
  pore water, A4:30; A5:24  
  predicted depletion vs. observed, A3:129  
  rock-water reaction zone, A3:46  
  sulfate reduction zone, A3:44–45  
  vs. depth, A3:124–125; A4:76; A5:65; B14:10  
  vs. magnesium, A3:130  
Campanian, palynomorphs, B2:3–4  
Campanian–middle to late Eocene interval, unconformities, B3:8, 10  
Cape Darnley, bathymetry, A1:5  
carbon, inorganic  
  sediments, A3:49; A4:31; A5:25; B14:5–6; B16:3–4  
  vs. depth, A3:136; A4:79; A5:67  
carbon, organic  
  color cycles, A3:53–54  
  organic matter, A4:31–32  
  pyrolysis, A4:105  
  sediments, A3:183; A5:25, 91; B16:3–4, 10  
  vs. depth, A1:60; A3:136; A4:79; A5:67  
carbon, total  
  sediments, A3:49, 182; A4:31, 104; A5:25, 90; B16:3–5  
  vs. depth, B16:7  
carbon, total organic, vs. depth, B16:7  
carbon/nitrogen ratio  
  sediments, A4:31, 104; A5:25, 90; B16:4–5, 10  
  vs. carbon isotopes, B16:8  
  vs. depth, B16:7  
carbon dioxide reduction zone, pore water, A3:45–46  
carbon isotopes  
  authigenic carbonates, B14:5–6, 15  
  foraminifers, B13:11; B16:3–4, 11  
  kerogen, B16:3–5, 10  
  vs. carbon/nitrogen ratio, B16:8  
  vs. depth, B1:41; B13:33; B14:11; B16:7, 9  
carbonate compensation depth  
  faunal associations, A5:15; B4:20–21  
  lithologic units, A3:11–12, 21  
  Pliocene–Pleistocene interval, B13:14  
  sediments, B4:13; B11:6–7  
carbonate content  
  lithologic units, A4:9–13; A5:8–11  
  sediments, A5:25, 90; B7:47  
  spectral data, B7:4–5  
  vs. age, B13:21  
  vs. depth, B7:17–18; B13:21  
carbonates  
  diagenesis, B1:19–20  
  well-logging signature, A3:65

- carbonates, authigenic
  - carbon isotopes, B15:5–6
  - oxygen isotopes, B15:6
  - sediments, B15:1–15
- Carboniferous, palynomorphs, B2:6
- Casuarinaceae, palynomorphs, B3:15–16
- Cenozoic
  - geology, A1:9
  - paleoclimatology, A1:2–5
  - palynomorphs, B3:1–43
  - phytoliths, B5:1–12
  - sedimentation, A1:9–11
- cetacean bones, geology, A1:9
- charnockite, geology, A1:7–8
- Charybdis Glacier, glaciology, A1:6–7
- Chenopodiaceae, palynomorphs, B3:15
- chert
  - accessory component, A3:74–75; B4:11
  - smear slides, A3:16–17
- Chierolepidaceae, palynomorphs, B2:10
- chloride
  - pore water, A3:43–44; A4:30; A5:23
  - rock-water reaction zone, A3:46
  - vs. depth, A1:52; A3:124–125; A4:78; A5:65
- chlorite
  - diffuse reflectance spectrophotometry, B7:9
  - lithologic units, A3:13–14
  - sediments, B13:11–12
  - vs. depth, B13:34
  - X-ray diffraction data, A4:16
  - See also* ripidolite
- Chron C1n
  - biostratigraphy, B6:6
  - magnetostratigraphy, A3:42–43; A5:22
- Chron C1r.1n, magnetostratigraphy, A3:42–43; A5:22; B13:8
- Chron C1r.1r, magnetostratigraphy, A5:22
- Chron C1r.2r, magnetostratigraphy, A5:22
- Chron C2An.1n, magnetostratigraphy, A4:28
- Chron C2An.1r, magnetostratigraphy, A4:28
- Chron C2An.3n
  - biostratigraphy, B6:4
  - magnetostratigraphy, A3:42–43
- Chron C2n
  - biostratigraphy, B6:4
  - magnetostratigraphy, B13:8
- Chron C2r.1n, magnetostratigraphy, A4:28
- Chron C2r.1r
  - biostratigraphy, B6:6
  - magnetostratigraphy, A4:28
- Chron C2r.2r
  - biostratigraphy, B6:6
  - magnetostratigraphy, A4:28
- Chron C3An.1n, magnetostratigraphy, A3:42
- Chron C3An.1r, magnetostratigraphy, A3:42
- Chron C3An.2n, magnetostratigraphy, A3:42–43
- Chron C3Ar, magnetostratigraphy, A3:42–43
- Chron C3n.4n, magnetostratigraphy, A3:42–43
- Chron C3r, magnetostratigraphy, A3:42–43
- Chron C5ABr, biostratigraphy, B4:10
- Chron C5Br, magnetostratigraphy, A3:42
- Chron C5Cn, magnetostratigraphy, A3:43
- Chron C5Dr, biostratigraphy, B4:10, 12
- Chron C6An, magnetostratigraphy, A3:43
- Chron C6Ar, magnetostratigraphy, A3:43
- Chron C6n, magnetostratigraphy, A3:43
- Chron C6r, magnetostratigraphy, A3:43
- Chron C13n, magnetostratigraphy, A4:29
- chronostratigraphy
  - palynomorphs, B3:12–13
  - seismic facies, B14:10–11
- Circumpolar Deep Water, foraminifers, A5:16
- CIROS–1, palynomorphs, B3:14–16
- clasts
  - lithologic units, A4:9–13
  - photograph, A5:44
  - X-ray diffraction data, A5:12–13
- clasts, bituminite, lonestone, A5:11
- clasts, dark organic, lithologic units, A4:10
- clasts, mud
  - lithologic units, A5:9–11
  - photograph, A5:49
- clasts, rip-up, photograph, A3:100
- clasts, rock, lithologic units, A5:9–11
- clay
  - lithologic units, A3:15–16; A5:8–11
  - photograph, A4:53–55, 57; A5:43, 50–52
  - vs. depth, A5:54
  - X-ray diffraction data, A3:17–18, 105–106
- clay, carbonaceous, lithologic units, A4:13–14
- clay, diatom
  - lithologic units, A3:11–14; A4:9–11
  - photograph, A3:89; A4:53–54
  - photomicrograph, A3:93
- clay, diatom-bearing
  - lithologic units, A3:13–14
  - photograph, A3:92
  - photomicrograph, A3:93
- clay, sandy
  - lithologic units, A5:8
  - photograph, A5:43
  - clay, silty, lithologic units, A4:9–11
- clay beds
  - magnetic susceptibility logs, A5:33–34
  - resistivity logs, A5:33–34
- clay laminae, lithologic units, A3:15–16
- clay mineralogy, trough-mouth fans, B1:12
- clay minerals
  - composition, B13:11–12
  - cyclicality, B13:12
  - deposition, A5:13
  - diffuse reflectance spectrophotometry, B7:10; B13:10–11
  - factor score vs. depth, B7:34
  - pore water, A3:47
  - vs. depth, B13:34
  - X-ray diffraction data, A4:15–16; A5:12–13
- claystone
  - lithologic units, A3:15–16, 19–21; A4:11–12; B1:4
  - photograph, A3:96–102, 104

- claystone, calcite-cemented, photomicrograph, A3:103
- coal
- diagenesis, B1:19–20
  - geology, A1:8–9
  - smear slides, A4:15
- coal fragments, black, accessory component, B4:16, 19
- coarse fraction
- grain size, B9:10
  - sediments, B9:1–16
  - weight percentage vs. age, B9:9
  - weight percentages vs. depth, B9:7
- Cockburn Island, palynomorphs, B3:16
- coercivity
- isothermal remanent magnetization, A3:115
  - magnetostratigraphy, A5:21–22
- color bands
- calibration, B12:18–19
  - composite section, B12:14–15, 21
  - iron, A3:53–54
  - lithologic units, A4:13–14; A5:8
  - photograph, A3:91–92, 138; A4:59; A5:48; B12:11–12
  - sediments, A3:50–54; B7:47
  - sensitivity test vs. depth, B12:16–17
  - spectral analysis, A3:52–53
  - vs. depth, A3:137; B1:38
  - See also* brightness; lightness; reflectance; spectral analysis; spectrophotometry
- composite section
- color bands, B12:21
  - lithostratigraphy, B12:14–15
- compressional wave velocity
- sediments, A3:59, 184; A4:34–35; A5:28, 92
  - slowness log, A4:94
  - vs. depth, A3:142–143, 151, 165–166, 169; A4:84, 93; A5:68, 75
- compressional wave velocity, atmospheric, vs. in situ
- compressional wave velocity, B10:18
- compressional wave velocity, discrete, sediments, A4:106
- compressional wave velocity, in situ, vs. atmospheric
- compressional wave velocity, B10:18
- conglomerate, geology, A1:8–9
- conifers, palynomorphs, B2:10–11; B3:11–12
- contamination, palynomorphs, B3:9–10
- continental rise
- authigenic carbonates, B15:1–15
  - kaolinite, B1:9
  - ocean circulation, A1:6
  - principal results, A1:19–23
  - synthetic seismograms, B10:1–28
- continental shelf
- authigenic carbonates, B15:1–15
  - morphology, B1:9–11
  - principal results, A1:11–16; B1:5
  - sediments, A1:2–3
  - synthetic seismograms, B10:1–28
- continental slope
- bathymetry, A1:5
  - principal results, A1:16–19
  - See also* upper slope
- contour currents
- ocean circulation, A1:6
  - seismic facies, B14:9
- contourite, lithologic units, A3:16, 19–21
- Cooperation Sea
- diatom biostratigraphy, B6:1–25
  - summary, A1:1–65
- core photos, correlation with diffuse spectral reflectance, B12:1–27
- core-log comparison, gamma rays, A3:64–65
- correlation, seismic stratigraphy, B8:1–21; B14:3–5
- correlation coefficient, sediments, B9:15
- Convulvulaceae, palynomorphs, B3:15
- Cretaceous, Lower
- authigenic carbonates, B15:7
  - palynomorphs, B2:4–6
  - sediments, B1:4
  - structure contour maps, A1:36
- Cretaceous, Upper
- lithologic units, A4:13–14
  - palynomorph abundance, B3:32–33
  - palynomorphs, B1:6; B3:7, 10–11, 15–17
  - phytoliths, B5:1–12
  - seismic units, B8:9–10
- cross bedding, photograph, A3:98; A5:50
- cross laminations, lithologic units, A3:15–16, 19–21
- cryptogams, palynomorphs, B3:7, 10–11
- cubic phytoliths, unknown origin, B5:6
- Curie temperature
- magnetite, A3:41
  - remanent magnetization, A4:27–28
- Cupressaceae, palynomorphs, B3:9, 11
- current sorting, lithologic units, A3:14
- currents. *See* contour currents
- Cyatheaceae, palynomorphs, B3:11
- cyclic processes
- clay minerals, B13:12
  - composite section, B1:37; B12:14–15
  - principal results, A1:22–23
  - sedimentation, B1:13–18
  - trough-mouth fans, B1:12
  - vs. depth, A1:61–62
  - See also* color bands; glacial/interglacial cycles; Milankovitch cycles; rhythmic bedding; rhythmic sedimentation
- D**
- Danian, palynomorphs, B2:5
- debris flows
- chronostratigraphy, B14:10–11
  - cyclic processes, B1:16
  - deposition, A5:13
  - Pleistocene, A1:2–3
  - seismic facies, B14:8–10
  - See also* mud-flow deposits
- deep water, ocean circulation, A1:5–6
- deformation
- photograph, A3:99; A4:59
  - seismic units, B8:7
  - See also* soft sediment deformation
- deltaic environment
- deposition, A4:17

Eocene, B1:6–7  
*See also* braided deltaic environment; fluvio-deltaic environment  
demagnetization, isothermal remanent magnetization, A3:114–115  
demagnetization, alternating-field, vectors, A3:117; A4:71–72; A5:62–63  
demagnetization, thermal  
  components, A4:70  
  sediments, A3:114  
density  
  ice-rafted debris, B9:3–4  
  sediments, A3:56–58; A4:32–34; A5:26–28  
density, bulk  
  sediments, A3:56–58; A4:34; A5:27; B9:13  
  vs. depth, A3:139–140, 142, 145, 147, 149, 164; A4:82; A5:68, 72, 74; B9:8  
  *See also* density, dry-bulk; density, index bulk; density, in situ bulk; density, wet-bulk  
density, discrete, vs. depth, A3:149  
density, dry  
  sediments, A4:34; A5:27  
  vs. depth, A3:147; A4:82, 87; A5:72  
density, dry-bulk, vs. wet-bulk density, B9:6  
density, gamma-ray attenuation, vs. depth, A3:149; A5:74  
density, grain  
  sediments, A3:56–58; A4:33; A5:26–27  
  vs. depth, A3:146; A4:81; A5:71  
density, index bulk, vs. logging density, B10:18  
density, logging, vs. index bulk density, B10:18  
density, moisture and density measurements, vs. depth, A5:74  
density, in situ bulk, vs. in situ velocity, B10:18  
density, wet-bulk, vs. dry-bulk density, B9:6  
density logs, vs. depth, A3:160, 190; A4:89; A5:82  
depletion, calcium, A3:129  
deposition  
  environment, A4:16–17; A5:13; B3:11  
  paleoenvironment, B8:1–21  
  shelf environment, B2:11–12  
  trough-mouth fan, A1:30  
Devonian, palynomorphs, B2:6  
diagenesis  
  photograph, B12:12  
  phytoliths, B5:7  
  pore water, A3:43–47  
  reflectors, B10:12  
  silica, A3:59  
diagenesis, carbon-related, sediments, B1:19–20  
diagenesis, silica-related, sediments, B1:18–19  
diamictite  
  deposition, A4:17  
  lithologic units, A4:12  
  sedimentation, A1:9–11  
diamicton  
  geology, A1:8  
  lithologic units, A4:9–11; A5:8–11; B1:4  
  photograph, A4:52  
  seismic units, B8:9–10  
  X-ray diffraction data, A4:15–16

diatom assemblages, summary, A4:25–26  
diatom frustules, smear slides, A3:16–17  
diatoms  
  biostratigraphic datums, A4:102  
  biostratigraphy, A3:30–36; A4:20–24; A5:17–18; B6:1–25  
  distribution, B6:20–22  
  lithologic units, A3:13–14; A4:9–11  
  photomicrograph, A3:93  
  reworked fossils, B6:23–24  
  smear slides, A4:14–15  
  *See also* Southern Ocean diatom zonation  
dikes, geology, A1:7–8  
dinocysts  
  Mesozoic, B3:10  
  palynomorphs, B2:4–5, 7–8; B3:3–5  
dinoflagellates, nannofossils, A5:17  
disconformities, biostratigraphy, A3:38; B6:6–7  
dissolution  
  foraminifers, A4:18–19; A5:15; B4:5–8, 18, 20–21  
  nannofossils, B11:3–5  
  pore water, A3:43–47  
dolomite, accessory component, B4:11  
downhole measurements  
  Site 1165, A3:62–68  
  Site 1166, A4:36–42  
  Site 1167, A5:31–34; B14:31  
drainage systems, glaciology, A1:6–7  
drift deposits  
  sedimentation, A1:4, 10–11  
  stratigraphy, B1:8–9  
Dundee Island, palynomorphs, B3:17

## E

East Antarctic Ice Sheet, glaciology, A1:6–7  
endemism, dinocysts, B3:3–5, 13, 16  
environment  
  deposition, A4:16–17; A5:13; B3:11  
  *See also* paleoenvironment  
  deltaic environment, B1:6–7  
Eocene  
  diatoms, A4:23–24  
  lithologic units, A4:11–13  
  nannofossils, B11:6–7  
  palynomorph abundance, B3:29–31  
  palynomorphs, B2:4, 6; B3:4, 16  
Eocene, middle, A1:4  
Eocene, middle–upper  
  palynomorphs, B3:6–8  
  *See also* Campanian–middle to late Eocene interval  
Eocene/Oligocene boundary  
  glaciation, A1:4  
  stratigraphy, B1:7  
erosion  
  ice sheets, B2:12  
  paleoclimatology, B14:12  
eskers, seismic units, B8:7  
ethane  
  sediments, A3:48–49; A5:24–25  
  vs. depth, A3:132  
  *See also* methane/ethane ratio

**F**

Factor 1

- diffuse reflectance spectrophotometry, B7:9, 13, 26–27; B13:10–11
- factor score vs. age, B13:28
- factor score vs. depth, B7:32, 37, 42; B13:28
- goethite, B7:26–27

Factor 2

- diffuse reflectance spectrophotometry, B7:9–10, 13; B13:10–11
- factor score vs. age, B13:29
- factor score vs. depth, B7:33, 38, 43; B13:29
- organic matter, B7:28

Factor 3

- clay minerals, B7:29
- diffuse reflectance spectrophotometry, B7:10, 13; B13:10–11
- factor score vs. age, B13:30
- factor score vs. depth, B7:34, 39, 44; B13:30

Factor 4

- diffuse reflectance spectrophotometry, B7:10, 13; B13:10–11
- factor score vs. age, B13:31
- factor score vs. depth, B7:35, 40, 45; B13:31
- maghemite, B7:30

Factor 5

- diffuse reflectance spectrophotometry, B7:10, 13; B13:10–11
- factor score vs. age, B13:32
- factor score vs. depth, B7:36, 41, 46; B13:32
- hematite, B7:31

factor analysis

- diffuse reflectance spectrophotometry, B7:7–12
- diffuse spectral spectrophotometry, B13:9–11
- downhole variations, B7:10–11
- interpretation, B7:9–12

fans

- growth, B14:27
- history, B14:11–13
- seismic facies, B14:8–10
- seismic sections, B14:21–26
- See also* alluvial fans; alluvial plains; foresets; topsets

fans, trough-mouth, ice sheets, B1:11–12

faunal assemblages

- foraminifers, A3:25; B4:8–10, 14–20
- nannofossils, B11:6–7
- sources, B4:9–10

feldspar

- Pliocene/Pleistocene interval, B13:8
- smear slides, A4:15

ferns, phytoliths, B5:4–6

festucoid contaminants, phytoliths, B5:6

first derivative values

- diffuse reflectance spectrophotometry, B7:7, 24–31
- hematite in calcite, B7:24

Fisher Glacier, glaciology, A1:6–7

fluvial environment

- deposition, A4:17
- lithologic units, A4:13
- seismic units, B8:7–10

fluvio-deltaic environment, palynomorphs, B3:7

fluvio-glacial environment, deposition, B2:11–12

folded spherical phytoliths, sediments, B5:4–5

foraminifer associations, environment, A5:14–15

foraminifer residues, change with depth, A3:75–76, 191

foraminifers

- biostratigraphy, A5:14–16; B4:4–8, 13–21
- comparison with onshore sections, B4:21–22
- dissolution, A4:18–19; A5:15; B4:5–8, 18, 20–21
- distribution, B4:36, 38; B13:35–38
- faunal assemblages, A3:25; B4:8–10, 14–20
- lithologic units, A3:11–12, 20; A4:9–11
- Neogene, A4:19–20; B4:1–41
- Pliocene–Pleistocene interval, B13:12–14
- sediments, A5:88
- stable isotopes, B13:11; B16:1–11

foraminifers, benthic

- biostratigraphy, A3:23–26; A4:19; A5:16; B4:7–8, 15
- photograph, A3:100
- Pliocene–Pleistocene interval, B13:12–13

foraminifers, planktonic

- biostratigraphy, A3:21–23; A4:18–19; A5:15–16; B4: 4–6, 14–15
- percentages, B4:39
- Pliocene–Pleistocene interval, B13:12–14
- See also* *Neogloboquadrina pachyderma*

foresets

- reflection, B14:4–5
- seismic facies, B14:8–10

Formation Microscanner imagery, vs. depth, A1:45; A4:91–92

Four Ladies Bank

- bathymetry, A1:5
- morphology, B1:9–11
- synthetic seismograms, B10:3
- topsets, B14:26

fractionation, sulfur isotopes, B16:7

Fram Bank, bathymetry, A1:5

**G**

Gamburtsev Subglacial Mountains

- glaciation, A1:4
- maps, B1:29

gamma rays

- core-log comparison, A3:64–65
- vs. depth, A3:142, 144; A4:80; A5:68–70
- See also* density, gamma-ray attenuation
- gamma-ray logs, vs. depth, A3:160–161, 163; A4:89–90; A5:82–83; ; B1:39; B14:31

garnet, Pliocene/Pleistocene interval, B13:8

gas hydrate stability zone, depth, A3:62

gas hydrates

- diagenesis, B1:20
- geothermal gradient, A5:31

Gauss Chron, Pliocene–Pleistocene interval, B13:7–8, 15

Gelasian, magnetostratigraphy, B13:24

geochemistry, principal results, A1:14–15, 18, 22

geochemistry, inorganic

- Site 1165, A3:43–47
- Site 1166, A4:29–30
- Site 1167, A5:23–24

- geochemistry, organic
    - Site 1165, A3:47–50
    - Site 1166, A4:31–32
    - Site 1167, A5:24–25
  - geology, maps, A1:33–34
  - geothermal gradient, sediments, A3:188; A5:31, 95
  - gibbsite, X-ray diffraction data, A4:16
  - Gippsland Basin, palynomorphs, B3:4–8
  - glacial environment
    - foraminifers, B16:5
    - Pliocene/Pleistocene interval, B13:8
    - seismic units, B8:6–10
    - See also* fluvio-glacial environment
  - glacial/interglacial cycles
    - deposition, A4:16–17
    - foraminifers, B13:11; B16:5
    - seismic units, B8:3–10
    - trough-mouth fan, A1:30; A3:20
  - glaciation
    - chronostratigraphy, B14:10–11
    - deposition, A5:13
    - ice advances, B14:1–32
    - lithologic units, A4:11; A5:9–11
    - onset, A1:4
    - paleoenvironment, B1:20–22
    - sediments, A1:2–3
    - transitions, B1:1–42
  - glaciers, glaciology, A1:6–7
  - glaciers, unroofing, sedimentation, B2:11
  - glaciology, drainage systems, A1:6–7
  - glaciomarine environment
    - deposition, A4:16–17; B4:9–10
    - geology, A1:8; B1:6
    - seismic units, B8:7–10
  - glaciotectonics, seismic units, B8:7
  - glauconite
    - accessory component, A3:74; B4:11, 20
    - distribution, B4:35
    - lithologic units, A3:13–14, 20, 22
    - stratigraphy, B1:10
  - gneiss, geology, A1:7–8
  - goethite
    - diffuse reflectance spectrophotometry, B7:9, 11; B13:10–11
    - Factor 1, B7:26–27
    - factor score vs. depth, B7:32, 37, 42
    - first derivative values, B7:24–25
    - magnetostratigraphy, B13:7–8
  - graded bedding, photograph, A4:56
  - grain size
    - coarse fraction, B9:10
    - Pliocene/Pleistocene interval, B13:8
    - sediments, B9:1–16
    - vs. age, B13:25
    - vs. depth, B13:25
    - weight percentages vs. depth, B9:7
    - See also* granulometry
  - grain size, magnetic, vs. depth, B13:23
  - granite, geology, A1:7–8
  - granules, lithologic units, A3:13–14, 18–19; A4:9–12; A5:9–11
  - granulites, geology, A1:7–8
  - granulometry
    - Pliocene/Pleistocene interval, B13:8
    - vs. depth, B13:25
    - See also* grain size
  - graphic logs, lithofacies, A3:85–88
  - grasses, phytoliths, B5:3–4
  - gravel, vs. depth, B13:25
  - gravel beds
    - lithologic units, A5:9–11
    - photograph, A5:47
  - gravity flows, deposition, B14:12–13
  - gray facies
    - composite section, B12:15
    - models, B12:13
    - normalization, B12:20
    - photograph, B12:11–12
  - green facies
    - composite section, B12:15
    - models, B12:13
    - normalization, B12:20
    - photograph, B12:11–12
  - gymnosperms, palynomorphs, B2:4, 6; B3:5–9, 11
- ## H
- heat flow, sediments, A3:188; A5:30–31, 95
  - heath, palynomorphs, B3:12
  - hematite
    - diffuse reflectance spectrophotometry, B7:10–11; B13:10–11
    - Factor 5, B7:31
    - factor score vs. depth, B7:36, 41, 46
    - first derivative values, B7:24–25
    - magnetostratigraphy, B13:8
  - hemipelagic sediment
    - lithologic units, A3:14, 20–21
    - X-ray diffraction data, A5:12–13
  - hiatuses
    - biostratigraphy, A3:39
    - paleoclimatology, B13:15
    - Pliocene–Pleistocene interval, B13:7–8, 14
  - High-Resolution Integrated Stratigraphy Committee. *See* HiRISC Section
  - HiRISC Section
    - Pliocene–Pleistocene interval, B13:1–38
    - spectral data, B7:1–49
  - Holocene
    - ice sheets, B1:11–12
    - lithologic units, A4:9–10; A5:8–11
  - hornblende, X-ray diffraction data, A4:15–16
  - hydrocarbons
    - principal results, A1:18, 22
    - sediments, A3:48–49, 180; A4:31; A5:24–25
    - vs. depth, A1:60
    - See also* ethane; methane; methane/ethane ratio; propane
  - hydrogen index
    - organic matter, A5:25
    - sediments, A5:91

I

- ice advances, glaciation, B14:1–32
- ice flow, maps, B1:29
- ice rafting
  - weathering, B13:15
  - See also* ice-rafted debris
- ice sheets
  - deposition, A4:17
  - dynamics, B13:14
  - erosion, B2:12
  - Pleistocene, B1:11–12
- ice velocity, glaciology, A1:6–7
- ice-rafted debris
  - lithologic units, A3:14, 18–19; A4:11
  - physical properties, B9:3–4
  - stratigraphy, B1:9–11
  - See also* ice rafting
- illite
  - diffuse reflectance spectrophotometry, B7:10
  - Factor 3, B7:29
  - factor score vs. depth, B7:39, 44
  - lithologic units, A3:13–14
  - sediments, B13:11–12
  - vs. depth, B13:34
  - weathering, B13:15
  - X-ray diffraction data, A3:17–18; A4:16; A5:12–13
- illite/smectite ratio, X-ray diffraction data, A5:13
- impedance logs
  - bed thickness, B10:27
  - seismic reflection, B10:5–8
  - velocity, B10:25, 28
  - vs. depth, B10:19–21, 24
  - See also* seismograms, synthetic; velocity logs
- Ingrid Christensen Coast
  - bathymetry, A1:5
  - glaciology, A1:6–7
- injection structures, photograph, A3:91
- interbedding, lithologic units, A3:11–12
- iron, color cycles, A3:53–54
- irregular spherical phytoliths, sediments, B5:5
- isopach maps
  - postsurface PP12 sediments, A1:38; B1:34
  - Prydz Channel Trough Mouth Fan, B14:18, 27–29
  - thickness, B14:5, 27–29

J

- James Ross Island, palynomorphs, B3:17
- Jaramillo Subchron, magnetostratigraphy, A3:42–43; A5:22; B13:8
- Jurassic, palynomorphs, B2:6
- Jurassic, Lower, palynomorphs, B2:6–7
- Jurassic, Upper, palynomorphs, B2:4–7

K

- kaolinite
  - continental rise, B1:9
  - lithologic units, A3:13–14
  - sediments, B13:11–12

- vs. depth, B13:34
- X-ray diffraction data, A3:17–18; A4:16; A5:12–13
- kerogen, sediments, B16:4

L

- La Meseta Formation, palynomorphs, B3:16
- Labiatae, palynomorphs, B3:15
- lacustrine environment, lithologic units, A4:13
- lag surfaces, lithologic units, A3:16
- lagoonal environment
  - Eocene, B1:6–7
  - lithologic units, A4:14
  - nodules, B15:4–7
  - seismic units, B8:6–7
- Lambert Deep, bathymetry, A1:5
- Lambert Glacier
  - chronostratigraphy, B14:10–11
  - drift deposits, A1:4
  - glaciology, A1:6–7
  - maps, B1:29
- Lambert Glacier–Amery Ice Shelf System
  - fans, B14:11–13
  - glaciology, A1:6–7; B1:4
- Lambert Graben
  - geology, A1:8; B1:4
  - ice sheets, B13:14
- laminations
  - composite section, B12:14–15
  - lithologic units, A3:11–12; A4:14
  - photograph, B12:12
  - See also* cross-laminations; planar laminations
- lamproite, geology, A1:7–8
- Last Glacial Maximum
  - biostratigraphy, A4:22
  - history, B14:11
- lightness
  - sediments, A3:50–54
  - spectral data, A3:141
  - vs. depth, A3:139–140, 145
  - See also* brightness
- lignite
  - accessory component, B4:16
  - Factor 2, B7:28
- lithium
  - carbon dioxide reduction zone, A3:46
  - pore water, A4:30; A5:24
  - rock–water reaction zone, A3:46
  - sulfate reduction zone, A3:45
  - vs. depth, A3:124, 126; A4:76; A5:66
- lithofacies
  - composite section, B12:15
  - graphic logs, A3:85–88; A5:40
  - lithologic units, A3:11–21, 175; A5:8–11; B14:6
  - Milankovitch cycles, A3:54
  - models, B12:13
  - photograph, A5:53; B12:11–12
  - principal results, A1:20–21
  - reflectance, B12:7
  - vs. depth, B1:39
  - See also* color bands; gray facies; green facies



lithologic units  
  principal results, A1:11–14, 16–17, 20–21; A4:9–14;  
    A5:8–11  
  reflectance, B12:7  
  seismic facies, B14:8–10  
  Site 742, B8:19  
  Site 1165, A3:11–16  
  Site 1166, B8:20  
  smear slides, A4:14–15  
  Unit I, A3:11–12; A4:9–11; A5:8; B14:6  
  Unit II, A3:13–14; A4:11–12; A5:8–11; B14:6  
  Unit III, A3:14–16; A4:12–13  
  Unit IV, A4:13–14  
  Unit V, A4:14  
lithostratigraphy  
  composite section, A3:82–84; A4:51; A5:41–42; B3:24;  
    B12:14–15  
  principal results, A1:11–14, 16–17, 20–21; A3:81;  
    A4:50  
  reflectors, B10:7–12; B14:6–10  
  Site 1165, A3:11–21; B1:33; B12:3–4  
  Site 1166, A4:9–17  
  Site 1167, A5:7–13, 40, 58; B14:6–10, 30  
  synthetic seismograms, B10:22–23  
  vs. depth, A1:41, 48, 55–57  
lonestone  
  bituminite, A5:11  
  blue gneiss, A5:11  
  granite, A5:11  
  list, A5:87  
  lithologic units, A3:11–12, 14, 176; A4:9–11; A5:9–11  
  lithology vs. depth, A5:45  
  photograph, A3:104  
  sandstone, A5:11  
  vs. depth, A1:49  
lonestone, diorite, lithology, A5:11  
lonestone, diorite gneiss, lithologic units, A3:16  
lonestone, dolerite, lithologic units, A3:16, 18–19  
lonestone, gabbro, lithologic units, A5:11  
lonestone, gneiss, lithologic units, A5:11  
lonestone, granite, lithologic units, A3:18–19; A5:11  
lonestone, granite/igneous  
  vs. depth, A1:49  
  vs. sandstone, A5:46  
lonestone, mudstone, lithologic units, A3:16  
lonestone, quartzite, lithologic units, A3:18–19

## M

Maastrichtian, palynomorphs, B2:3  
Mac. Robertson Land, bathymetry, A1:5  
Mac. Robertson Shelf  
  geology, A1:9  
  palynomorphs, B3:13–14  
maghemite  
  diffuse reflectance spectrophotometry, B7:10–11;  
    B13:10–11  
  Factor 4, B7:30  
  factor score vs. depth, B7:35, 40, 45  
magnesium  
  carbon dioxide reduction zone, A3:46

  pore water, A4:30; A5:24  
  sulfate reduction zone, A3:44–45  
  vs. calcium, A3:130  
  vs. depth, A3:126; A4:76; A5:65  
magnetic inclination  
  vs. depth, A1:50–51; A3:116, 118–122; A4:74; B13:22,  
    24  
  vs. frequency, A4:73  
magnetic intensity  
  vs. depth, A3:118–123; A4:74  
  vs. temperature, A3:114; A4:70  
magnetic logs, lithology, A4:41–42  
magnetic mineralogy, vs. depth, B13:23  
magnetic polarity  
  magnetostratigraphy, A3:41–43; A4:28–29; A5:21–22  
  vs. depth, A3:120  
magnetic properties, trough-mouth fans, B1:12  
magnetic susceptibility  
  sediments, B9:3, 12  
  vs. depth, A1:50–51; A3:142, 145; A4:68; A5:59, 68;  
    B1:38, 41; B9:8; B13:22  
magnetic susceptibility, low-field, vs. depth, A3:113  
magnetic susceptibility logs  
  clay beds, A5:33–34  
  processed logs, A4:97–98  
  vs. depth, A4:90, 97–98; A5:83  
magnetite  
  Curie temperature, A3:41  
  magnetostratigraphy, B13:7  
  remanent magnetization, A4:27–28  
magnetostratigraphy  
  magnetic polarity, A3:41–43; A4:28–29; A5:21–22  
  Pliocene–Pleistocene interval, B13:7–8, 24  
  principal results, A1:18  
  vs. depth, A1:50–51, 58; A3:118–123; A4:66; A5:64  
manganese  
  carbon dioxide reduction zone, A3:45–46  
  pore water, A4:30; A5:23–24  
  rock-water reaction zone, A3:46  
  sulfate reduction zone, A3:44  
  vs. depth, A3:126; A4:76; A5:65  
maps, pre-Mesozoic geology, A1:33–34  
marine environment  
  lithologic units, A4:12  
  nodules, B15:4–7  
  palynomorphs, B3:7  
marine environment, subglacial, seismic units, B8:5–8  
mass balance, vs. sea-surface temperature, B14:32  
Matuyama Chron. *See* Brunhes/Matuyama boundary  
McMurdo Sound, palynomorphs, B3:14–16  
Mellor Glacier, glaciology, A1:6–7  
Mesozoic, palynomorphs, B3:10–12  
Mesozoic/Paleogene transition, glaciology, B1:5–7  
Messinian, magnetostratigraphy, B13:24  
metamorphic rocks  
  geology, A1:7–8  
  photomicrograph, A3:103  
metapelite, geology, A1:7–8  
methane  
  generation, B15:1–15  
  pore water, A3:43–47

recalculated concentration in pore water, A3:135  
sediments, A3:48–49, 181; A5:24–25  
vs. depth, A3:127, 132; B15:10  
*See also* sulfate/methane interface

methane/ethane ratio  
sediments, A3:48–49  
vs. depth, A3:133  
vs. temperature, A3:134

methanic zone, pore water, A3:45–46

mica  
lithologic units, A4:14  
smear slides, A4:15  
vs. depth, A4:62

micrite, smear slides, A3:16–17

microfossils, shelf environment, A5:19

microtherms, palynomorphs, B3:9

Milankovitch cycles  
lithofacies, A3:54; B1:38  
sedimentation, B1:13–14  
sediments, A3:51–53  
vs. depth, A1:61–62

mineralogy, bulk, vs. depth, A1:50–51; A4:80; A5:69–70

Miocene  
authigenic carbonates, B15:7  
calcareous nannofossils, A3:26–30; B11:14  
diatoms, A3:30–36  
drainage, B13:15  
lithology, B9:1–16  
palynomorphs, B2:4–5; B3:6  
radiolarians, A3:36–38  
seismic units, B8:9–10  
*See also* Oligocene/Miocene boundary

Miocene, lower, lithologic units, A3:14–16

Miocene, lower–middle, stratigraphy, B1:8–9

Miocene, middle  
glaciation, A1:4  
lithologic units, A3:13–14  
stratigraphy, B1:9–11

Miocene, upper  
foraminifers, A4:18–19  
lithologic units, A3:13–14  
stratigraphy, B1:9–11  
unconformities, A1:4

Miocene/Pliocene boundary, magnetostratigraphy,  
A3:42–43

montmorillonite  
diffuse reflectance spectrophotometry, B7:10; B13:10–  
11  
Factor 3, B7:29  
factor score vs. depth, B7:39, 44

moraines, seismic units, B8:7

mounds, reflection, B14:4

mud  
lithologic units, A4:13  
Pliocene/Pleistocene interval, B13:8  
vs. depth, B13:25

mud, gravelly, Pliocene/Pleistocene interval, B13:8

mud, gravelly sandy, Pliocene/Pleistocene interval, B13:8

mud, sandy, Pliocene/Pleistocene interval, B13:8

mud-flow deposits, nannofossils, B11:6

mudstone  
lithologic units, B14:7  
sedimentation, A1:10–11

multisensor core logging, sediments, B9:1–16

## N

nannofossils  
dissolution, B11:3–5  
lithologic units, A3:13–14

nannofossils, calcareous, biostratigraphy, A3:26–30;  
A4:20; A5:16–17; B11:1–14

Nanok Deep, bathymetry, A1:5

Neogene  
foraminifers, A4:19–20; B4:1–41  
paleoclimatology, B1:13  
palynology, B2:1–20  
palynomorphs, B1:11  
seismic units, B8:7–10  
warm periods, B1:13

Neogene/lower Oligocene, unconformities, A4:15

Neogene, upper, shelf progradation, A1:4–5

*Neogloboquadrina pachyderma*, stable isotopes, B16:1–11

neritic environment, calcareous nannofossils, A3:29–30

nitrogen, total  
sediments, A3:49, 182; A4:31, 104; A5:25, 90; B16:10  
vs. depth, B16:7  
*See also* carbon/nitrogen ratio

nitrogen-15  
kerogen, B16:4–5, 10  
vs. depth, B16:7

nitrogen isotopes  
kerogen, B16:4–5, 10  
vs. depth, B16:7

nodules, diagenesis, B1:19–20

nodules, carbonate, geochemistry, B15:4–8

nodules, siderite, stable isotopes, B15:4–7

*Nothofagus*, palynomorphs, B3:9

## O

ocean circulation  
continental rise, A1:6; B1:5  
gyres, A1:5–6  
maps, A1:32  
scheme, B1:31

Olduvai Subchron  
foraminifers, B13:11  
magnetostratigraphy, B13:8

Oligocene  
diatoms, A4:23–24  
glaciation, A1:4  
nannofossils, B11:6–7  
palynomorphs, B2:4, 6; B3:6  
seismic units, B8:9–10  
stratigraphy, B1:8–9  
*See also* Eocene/Oligocene boundary

Oligocene/Miocene boundary, glaciation, A1:4

Oligocene, lower  
lithologic units, A4:11–12  
*See also* Neogene/lower Oligocene

ooze, diatom, lithologic units, A3:11–12  
opal, biogenic, smear slides, A3:16–17  
opal-A, phytoliths, B5:7  
opal-A/opal-CT transition, reflectors, B10:12  
opal-CT, phytoliths, B5:7  
organic matter  
    diffuse reflectance spectrophotometry, B7:9–10;  
        B13:10–11  
    Factor 2, B7:28  
    factor score vs. depth, B7:33, 38, 43  
    photograph, A4:60–61  
    pyrolysis, A3:50; A4:31–32; A5:25  
    seismic units, B8:7  
    stable isotopes, B16:1–11  
    sulfate reduction zone, A3:44–45  
Osmundaceae, palynomorphs, B3:11  
Otway Basin, palynomorphs, B3:6  
overburden stress, sediments, A3:58  
overburden stress, effective, vs. depth, A3:150  
oxidation, sediments, B15:1–15  
oxygen isotopes  
    authigenic carbonates, B15:6, 15  
    foraminifers, B13:11; B15:5, 11  
    vs. age, B1:42  
    vs. depth, B13:33; B15:9

**P**

Pagodroma Gorge, geology, A1:8  
paleoclimatology  
    Cenozoic, A1:2–5  
    deposition, A5:13  
    foraminifers, B13:11  
    middle Pleistocene, B14:12  
    nannofossils, B11:6–7  
    Neogene, B1:13  
    palynomorphs, B2:10–11; B3:9, 11–12  
    weathering, B13:15  
    X-ray diffraction data, A4:16  
    *See also* warm periods  
paleoenvironment  
    calcareous nannofossils, A3:29–30  
    faunal assemblages, B4:9–10  
    foraminifers, B4:15–16; B15:5  
    nannofossils, B11:6–7  
    Neogene, A4:19–20; B4:15–16  
    nodules, B15:4–7  
    palynomorphs, B3:28  
    phytoliths, B5:8  
    principal results, A1:16  
    residues, A3:75–76; B4:12–13  
    sedimentation, A1:24  
    sediments, B4:22  
    seismic stratigraphic correlation, B8:1–21  
    transitions, B1:20–22  
    *See also* environment  
Paleogene  
    palynomorphs, B2:4–5  
    seismic units, B8:7–10  
    *See also* Mesozoic/Paleogene transition

paleointensity, magnetostratigraphy, A3:43  
paleomagnetism  
    principal results, A1:14, 21  
    Site 1165, A3:39–43  
    Site 1166, A4:26–29  
    Site 1167, A5:19–22  
paleoproductivity  
    calcareous nannofossils, A3:29–30  
    nannofossils, B11:7  
paleoshelf, thickness, B14:5  
palynology  
    Mesozoic/Paleogene transition, B1:6  
    Neogene, B2:1–20  
palynomorphs  
    biostratigraphy, A4:25; B2:1–20  
    Cenozoic, B3:1–43  
    Neogene, B1:11  
    transport, B2:11–12  
    vegetation, B2:10–11; B3:8–9  
panicoid phytoliths, sediments, B5:3–4  
pebbles  
    lithologic units, A4:10–11; A5:9–11  
    trough–mouth fans, B1:12  
pelagic sediment  
    foraminifers, A5:14–15  
    lithologic units, A3:14, 20–21  
pellet spherical phytoliths, sediments, B5:5  
Permian, palynomorphs, B2:4–6  
pH, vs. depth, A3:125; A5:65  
Phanerozoic, geology, A1:7–8  
phosphate  
    carbon dioxide reduction zone, A3:45  
    pore water, A4:30; A5:23  
    sulfate reduction zone, A3:44–45  
    vs. depth, A3:125; A4:77; A5:65  
photoelectric effect logs, vs. depth, A3:161, 163, 190;  
    A4:90; A5:82  
physical properties  
    principal results, A1:15  
    Site 1165, A3:54–61; B9:1–16  
    Site 1166, A4:32–36  
    Site 1167, A5:25–30  
phytoliths  
    classification, B5:3–7  
    ferns, B5:4–6  
    grasses, B5:3–4  
    paleoenvironment, B5:8  
    sediments, B5:1–12  
    stratigraphic distribution, B5:11  
    trees and shrubs, B5:4–6  
    unknown origin, B5:6  
Piacenzian, magnetostratigraphy, B13:24  
plagioclase, X-ray diffraction data, A3:17–18; A4:15–16  
planar laminations  
    lithologic units, A3:15–16  
    photograph, A3:92, 95  
plant debris  
    geology, A1:8–9  
    phytoliths, B5:7–8  
    smear slides, A4:15

- plate phytoliths, contaminants, B5:6
- Pleistocene
- biostratigraphy, B6:6–7
  - calcareous nannofossils, A3:26–30
  - debris flows, A1:2–3
  - foraminifers, B4:4–8
  - ice sheets, B1:11–12
  - lithologic units, A3:11–12; A4:9–11; A5:8–11
  - See also* Pliocene–Pleistocene interval; Pliocene/Pleistocene boundary
- Pleistocene, middle, paleoclimatology, B14:12
- Pliocene
- biostratigraphy, B6:6–7
  - calcareous nannofossils, A3:26–30
  - diatom biostratigraphy, B6:1–25
  - diatoms, A3:30–36; A4:22–23
  - foraminifer comparison with onshore sections, B4:21–22
  - foraminifers, A5:15–16; B4:4–8
  - lithologic units, A3:11–12; A4:9–11
  - methane, B15:5–6
  - palynomorphs, B3:6, 9
  - radiolarians, A3:36–38
  - See also* Miocene/Pliocene boundary
- Pliocene–Pleistocene interval
- clay mineral cyclicality, B13:12
  - foraminifers, B13:12–14
  - HiRISC Section, B13:1–38
- Pliocene/Pleistocene boundary, magnetostratigraphy, B13:8
- Pliocene, lower
- lithology, B9:1–16
  - stratigraphy, B1:9–11
- plutons, geology, A1:7–8
- Podocarpaceae, palynomorphs, B3:9
- Polar Current, ocean circulation, A1:5–6
- pollen
- Mesozoic, B3:11
  - palynomorphs, B2:9–10; B3:5–8
- Polygonaceae, palynomorphs, B3:15
- Polypodiaceae, palynomorphs, B2:11
- pore water
- geochemistry, A3:43–47, 179; A4:103; A5:89; B15:4
  - principal results, A1:14, 18, 22
  - sulfur isotopes, B15:5
- porosity
- sediments, A3:56–58; A4:33–34; A5:27; B15:6–7
  - velocity, A3:65–67
  - vs. depth, A3:146; A4:81; A5:71; B15:13
  - See also* void ratio
- porosity logs, vs. depth, A3:160; A4:89; A5:82
- potassium
- pore water, A4:30; A5:24
  - rock–water reaction zone, A3:46
  - sulfate reduction zone, A3:44–45
  - vs. depth, A3:124, 126; A4:77; A5:66
  - vs. potassium feldspar, A3:131
- potassium feldspar
- lithologic units, A5:9–11
  - vs. potassium in pore water, A3:131
  - X-ray diffraction data, A3:17–18; A4:15–16
- potassium logs, vs. depth, A3:161; A4:90
- precipitation, pore water, A3:47
- preglacial environment, seismic units, B8:6–7
- preservation, nannofossils, B11:6–7
- pressure, in-situ, velocimetry, B10:26
- Prince Charles Mountains, geology, A1:7–8; B1:4
- Prince Charles Mountains S, glaciology, A1:6–7
- proglacials, deposition, A4:17
- progradation
- sedimentation, A1:10–11
  - stratigraphy, B1:9–11
  - upper Neogene, A1:4–5
- propane
- sediments, A3:48–49
  - vs. depth, A3:132
- provenance, sediments, B2:11; B3:13
- Prydz Bay
- bathymetry, B14:17
  - correlation of Sites 742 and 1166, B8:1–21
  - diatom biostratigraphy, B6:1–25
  - geology, A1:7–9, 33–34
  - ice advances, B14:1–32
  - methane, B15:1–15
  - Neogene foraminifers, B4:1–41
  - palynomorphs, B3:13–14
  - phytoliths, B5:1–12
  - summary, A1:1–65
  - synthesis, B1:1–42
- Prydz Channel, bathymetry, A1:5; B1:5
- Prydz Channel Fan
- bathymetry, A1:5; B1:5
  - ice advances, B14:1–32
- Prydz Channel Trough Mouth Fan
- isopach maps, B14:18
  - seismic lines, B14:20
  - spectral data, B7:1–49
- pseudo-single domains, magnetostratigraphy, A3:43
- pseudomorphs, lithologic units, A3:11–12, 22
- Publication Ice Shelf, glaciology, A1:6–7
- pyrite
- accessory component, A3:74–75; B4:11, 13
  - photomicrograph, A3:93
- pyrite, detrital, accessory component, B4:19
- pyrolysis, organic matter, A3:50
- ## Q
- quartz
- lithologic units, A5:9–11
  - Pliocene/Pleistocene interval, B13:8
  - smear slides, A4:14–15
  - X-ray diffraction data, A3:17–18; A4:15–16
- quartz grains
- lithologic units, A3:16, 18–19
  - photomicrograph, A3:103
- Quaternary
- calcareous nannofossils, A3:26–30; B11:14
  - diatom biostratigraphy, B6:1–25
  - diatoms, A3:30–36; A4:21–22
  - foraminifers, A5:15–16
  - magnetostratigraphy, A4:28–29

methane, B15:5–6  
 paleoclimatology, A5:13  
 sedimentation, Prdzyz Bay, A1:11  
 Quaternary, upper, clay mineral cyclicality, B13:12

**R**

radiolarians  
 biostratigraphic datums, A4:102  
 biostratigraphy, A3:36–38; A4:25; A5:18  
 smear slides, A4:14–15  
 radiolarians, orosphaerid, accessory component, B4:10–11  
 rainforest scrub, palynomorphs, B3:8  
 recycling, palynomorphs, B2:7–8; B3:9–10, 13  
 red beds, geology, A1:8–9  
 reduction. *See* carbon dioxide reduction zone; sulfate reduction zone  
 reflectance  
 composite section, B12:14–15  
 lithologic units, B12:7  
 percentages, B7:49  
 sediments, B7:47; B12:24–27  
 vs. depth, B7:19, 21, 23; B13:27  
*See also* brightness; color bands; lightness; spectrophotometry  
 reflectance, diffuse spectral  
 brightness, B13:9–11  
 correlation with core photos, B12:1–27  
 reflection, geometry, B14:4  
 reflection coefficient logs, vs. depth, A3:171  
 reflectivity  
 calibration, B12:18–19  
 sensitivity test vs. depth, B12:16–17  
 remanent magnetization, anhysteretic  
 magnetostratigraphy, A3:43  
 sediments, A5:20–21  
 vs. depth, A3:113; A4:27–28, 68; A5:59; B13:22  
 remanent magnetization, anhysteretic/isothermal remanent magnetization ratio  
 magnetostratigraphy, B13:7–8  
 sediments, A5:20–21  
 vs. depth, A1:50–51; A5:61; B13:22–23  
 remanent magnetization, characteristic, magnetostratigraphy, A4:28–29; A5:22  
 remanent magnetization, isothermal  
 acquisition curves, A4:27–28, 69; A5:60  
 demagnetization, A3:114–115  
 rock magnetics, A3:40–41  
 sediments, A5:20–21  
 vs. depth, A3:113; A4:68; A5:59; B13:22–23  
*See also* remanent magnetization, anhysteretic/isothermal remanent magnetization ratio  
 remanent magnetization, natural  
 rock magnetics, A3:40–41  
 sediments, A5:19–20  
 residues, foraminifers, change with depth, A3:75–76, 191  
 resistivity logs  
 lows, A5:33

vs. depth, A3:160, 163, 190; A4:89; A5:82–83; B1:39, 41; B14:31  
 vs. sonic velocity logs, A4:96  
 rhythmic bedding, photograph, A4:57  
 rhythmic sedimentation, composite section, B12:14–15  
 ripidolite  
 diffuse reflectance spectrophotometry, B7:9; B13:10–11  
 Factor 1, B7:26–27  
 factor score vs. depth, B7:32, 37, 42  
 ripple marks  
 lithologic units, A3:15–16, 19–21  
 photograph, A3:98  
 rock magnetism  
 remanent magnetization, A3:40–41; A4:27–28  
 sediments, A5:20–21  
 rock–water reaction zone, geochemistry, A3:46  
 Ross Ice Shelf, palynomorphs, B3:14–16

**S**

salinity  
 pore water, A3:43–47; A4:30; A5:23  
 rock–water reaction zone, A3:46  
 vs. depth, A3:125; A4:78; A5:65  
 sand  
 lithologic units, A4:11–12; A5:8–11; B1:4; B9:3  
 photograph, A4:55–60; A5:49  
 Pliocene/Pleistocene interval, B13:8  
 seismic units, B8:6–10  
 vs. depth, A5:54; B13:25  
 sand, clayey, lithologic units, A5:9  
 sand, silty  
 lithologic units, A5:9  
 photograph, A5:44  
 sand grains, lithologic units, A3:11–12, 14, 18–19  
 sandstone  
 geology, A1:8–9  
 lithologic units, A4:13  
 lonestone, A5:11  
 vs. depth, A1:49  
 vs. granite/igneous lonestone, A5:46  
 Santonian  
 palynomorphs, B2:3–4; B3:10–11  
*See also* Turonian–Santonian interval  
 sea ice, Neogene, B1:13  
 sea-level changes, Eocene, B1:6–7  
 sediment influx, foraminifers, A5:14–15  
 sedimentation  
 cyclic processes, B1:14–17  
 history, A1:9–11  
 models, A1:46, 63–64  
 paleoenvironment, A1:24; B1:20–22  
 sedimentation rates  
 authigenic carbonates, B15:7  
 biostratigraphy, A3:39  
 Miocene–Pliocene interval, B1:10  
 Pliocene–Pleistocene interval, B13:14  
 radiolarian datums, A4:26  
 Site 1165, A3:39  
 Site 1166, A4:26

- Site 1167, A5:19; B14:10–11
- vs. age, B1:42
- sediments
  - brightness, B7:5–7; B13:9–11
  - Cenozoic, A1:9
  - multisensor core logging, B9:1–16
  - pre-Cenozoic, A1:8–9
  - provenance, B2:11; B3:13
  - thickness, B14:27
- seismic facies, lithologic units, B14:8–10
- seismic lines
  - lithology, B8:17–18
  - Prydz Channel Trough Mouth Fan, B14:20
- seismic profiles
  - lithostratigraphy, B10:22–23
  - principal results, A1:19–20
  - reflection, B1:30
  - Site 742, B8:15
  - Site 1165, A1:53–54; A3:11, 78–80; B1:40; B10:15
  - Site 1166, A1:40; A4:49; B8:15; B10:16
  - Site 1167, A1:47; A5:39
  - synthetic seismograms, B10:1–28
- seismic reflection
  - correlation at Sites 742 and 1166, B8:16
  - surveys, B10:3–4
- seismic Reflector 1, seismic reflectors, A3:67
- seismic Reflector 2, seismic reflectors, A3:67
- seismic Reflector 3, seismic reflectors, A3:67
- seismic Reflector 4, seismic reflectors, A3:67
- seismic Reflector 5, seismic reflectors, A3:67
- seismic Reflector 6, seismic reflectors, A3:68
- seismic reflectors
  - lithology, A3:67–68; B10:8–11
  - origin, A3:67–68
  - sediments, A1:10–11
- seismic sections, fans, B14:21–26
- seismic sequences, sketch profile, A1:37
- seismic stratigraphy
  - correlation, B8:1–21; B14:3–5
  - principal results, A1:16
- Seismic Unit PS.1, correlation, B8:4–5
- Seismic Unit PS.2A, correlation, B8:4
- Seismic Unit PS.2B, correlation, B8:3–4
- seismic units
  - correlation, B8:3–5
  - profile, B8:14
- seismograms, synthetic
  - lithostratigraphy, B10:22–23
  - profiles, A3:168; A4:40–41
  - sediments, A3:65–67
  - seismic profiles, B10:1–28
  - traveltime, A4:95
  - vs. depth, B10:19–21, 24
  - wave traces, A3:170
- shear strength, vs. depth, A5:76
- Seymour Island, palynomorphs, B3:16–17
- shear strength, normalized, vs. depth, A4:86; A5:77
- shear strength, undrained
  - normalization with respect to effective overburden pressure, A3:153
  - sediments, A3:59–60, 185; A4:35–36, 107; A5:28–29, 93
  - vs. depth, A3:152; A4:85
- shelf edge, seismic sections, B14:23
- shelf environment
  - deposition, B2:11–12
  - foraminifers, A5:14–15
  - microfossils, A5:19
  - Neogene, A4:19–20
- shrubs. *See* trees and shrubs
- siderite, nodules, B15:4–7
- silica
  - carbon dioxide reduction zone, A3:46
  - Factor 1, B7:27
  - pore water, A4:30; A5:24
  - rock–water reaction zone, A3:46
  - sulfate reduction zone, A3:45
  - vs. depth, A3:125; A4:77; A5:66
- silica, biogenic
  - diagenesis, B1:18–19
  - Miocene–Pliocene interval, B9:1–16
  - vs. age, B9:9
  - vs. depth, B9:8
- siliceous microfossils, lithologic units, A3:13–14
- siliciclastics
  - drift deposits, A1:4
  - lithologic units, A3:11–16
- silt
  - lithologic units, A3:15–16; B1:4
  - photograph, A3:98
  - seismic units, B8:6–10
  - smear slides, A3:16–17
  - vs. depth, A5:54
- silt, clayey, lithologic units, A4:10–11
- silt, micaceous, photograph, A4:61
- silt, sandy, lithologic units, A4:9–14; A5:9
- silt grains, lithologic units, A3:13–14
- silt laminae
  - lithologic units, A3:15–16, 19–21; A5:8–11
  - photograph, A3:90, 95; A5:50
- silt partings, photograph, B12:12
- siltstone, geology, A1:8–9
- siltstone, carbonaceous, lithologic units, A4:13
- Sirius Group, palynomorphs, B3:6, 9
- Site 149, palynomorphs, B3:14
- Site 149/GC47, palynomorphs, B3:14
- Site 270, palynomorphs, B3:14
- Site 742
  - correlation with B8:1–21
  - palynomorphs, B3:14
  - synthetic seismogram correlation with A4:41
  - synthetic seismograms, B10:3, 11
- Site 1165, A3:1–191
  - background and objectives, A3:6–7
  - biostratigraphy, A3:21–38; B4:1–41; B6:1–25; B11:1–14
  - calcareous nannofossils, B11:1–14
  - color alternations, A3:50–54
  - coring summary, A3:173–174
  - cyclic processes, B1:14–16
  - diatom biostratigraphy, B6:1–25

- diffuse spectral reflectance, B12:1–27
- downhole measurements, A3:62–68
- in-situ temperature, A3:62
- inorganic geochemistry, A3:43–47
- lithostratigraphy, A3:11–21
- methane, B15:1–15
- Miocene–lower Pliocene lithology, B9:1–16
- Neogene foraminifers, B4:1–41
- operations, A3:7–10
- organic geochemistry, A3:47–50
- paleomagnetism, A3:39–43
- palynology, B2:1–20
- physical properties, A3:54–61
- phytoliths, B5:1–12
- Pliocene–Pleistocene interval, B13:1–38
- principal results, A1:19–23; A3:1–6
- sedimentation rates, A3:39
- seismic profiles, A1:53–54; A3:11
- site description, A3:1–191
- site geophysics, A3:10–11
- spectral data, B7:1–49
- synthetic seismograms, B10:3, 8–9
- Site 1166, A4:1–110
  - background and objectives, A4:6–7
  - biostratigraphy, A4:17–26; B4:1–41; B6:1–25
  - composite section, B1:32
  - coring summary, A4:100–101
  - correlation with Site 742, B8:1–21
  - cyclic processes, B1:16
  - diatom biostratigraphy, B6:1–25
  - downhole measurements, A4:36–42
  - inorganic geochemistry, A4:29–30
  - lithostratigraphy, A4:9–17
  - methane, B15:1–15
  - Neogene foraminifers, B4:1–41
  - operations, A4:7–9
  - organic geochemistry, A4:31–32
  - organic matter, B16:1–11
  - paleomagnetism, A4:26–29
  - palynology, B3:1–43
  - physical properties, A4:32–36
  - phytoliths, B5:1–12
  - principal results, A1:11–16; A4:1–6
  - sedimentation rates, A4:26
  - seismic profiles, A1:40
  - site description, A4:1–110
  - summary and conclusions, A4:42
  - synthetic seismogram correlation with Site 742, A4:41
  - synthetic seismograms, B10:3, 9–11
- Site 1167, A5:1–97
  - background and objectives, A5:5
  - biostratigraphy, A5:13–19; B4:1–41
  - composite section, B1:35–36
  - coring summary, A5:85–86
  - cyclic processes, B1:16–17
  - downhole measurements, A5:31–34
  - in-situ temperature, A5:30–31
  - inorganic geochemistry, A5:23–24
  - lithostratigraphy, A5:7–13; B14:6–10, 30
  - Neogene foraminifers, B4:1–41
  - operations, A5:6–7
  - organic geochemistry, A5:24–25
  - paleomagnetism, A5:19–22
  - palynology, B2:1–20
  - physical properties, A5:25–30
  - principal results, A1:16–19; A5:1–5
  - sedimentation rates, A5:19
  - seismic profiles, A1:47
  - site description, A5:1–97
  - spectral data, B7:1–49
- site geophysics, Site 1165, A3:10–11
- slump scars
  - reflection, B14:4
  - seismic facies, B14:9
- slumps, sedimentation, A1:10–11
- smear slides, lithologic units, A3:16–17; A4:14–15; A5:12
- smectite
  - sediments, B13:11–12
  - vs. depth, B13:34
  - weathering, B13:15
  - X-ray diffraction data, A5:12–13
  - See also* illite/smectite ratio
- smooth spherical phytoliths, sediments, B5:5
- sodium
  - carbon dioxide reduction zone, A3:46
  - pore water, A4:30; A5:24
  - vs. depth, A3:126; A4:78; A5:66
- soft sediment deformation, lithologic units, A3:11–12; A4:13
- source beds, palynomorphs, B2:10–11
- Southern Ocean diatom zonation, biostratigraphy, B6:4–7
- spectral analysis, color, A3:52–53
- spectrophotometry, brightness, B13:9–11
- spectrophotometry, diffuse reflectance, factor analysis, B7:7–12
- spherical phytoliths, sediments, B5:4–6
- spinulose spherical phytoliths, sediments, B5:5
- sponge spicules
  - accessory component, B4:10, 16
  - distribution, B6:23–24
  - photomicrograph, A3:93
  - smear slides, A3:16–17; A4:14–15
- spores
  - Mesozoic, B3:11
  - palynomorphs, B2:9–10; B3:5–8
- stable isotopes
  - carbonates, B15:4–7
  - diagenesis, B1:20
  - foraminifers, B13:11
  - organic matter, B16:1–11
  - See also* carbon isotopes; nitrogen isotopes; oxygen isotopes; sulfur isotopes
- stratigraphy
  - graphical summary, A3:109–111
  - Pliocene–Pleistocene interval, B13:1–38
  - See also* biostratigraphy; seismic stratigraphy
- striated plate phytoliths, sediments, B5:4
- stringers, photograph, A3:90
- strontium
  - pore water, A4:30; A5:24
  - sulfate reduction zone, A3:45

vs. depth, A3:124, 126; A4:76; A5:66  
 strontium isotopes, chronostratigraphy, B14:10–11  
 structure contour maps  
   basement, A1:35  
   top of Lower Cretaceous, A1:36  
 Styliaceae, palynomorphs, B3:16  
 subglacial deposits  
   seismic facies, B14:9  
   seismic units, B8:7  
 sulfate  
   pore water, A3:43–47; A4:29; A5:23  
   vs. alkalinity, A3:128  
   vs. depth, A1:52; A3:124–125, 127; A4:75; A5:65;  
     B15:10  
 sulfate reduction zone  
   authigenic carbonates, B15:7  
   pore water, A3:44–45  
 sulfate/methane interface, carbon isotopes, B15:5–6  
 sulfur, total, sediments, A3:49, 182; A4:31, 104; A5:25,  
   90  
 sulfur isotopes  
   pore water, B15:14  
   sulfate, B15:5  
   vs. depth, B15:10  
 Svenner Channel  
   bathymetry, A1:5  
   glaciology, A1:6–7  
 synthetic seismograms. *See* seismograms, synthetic

**T**

Taxodiaceae, palynomorphs, B3:11  
 teeth, accessory component, A3:74–75; B4:10  
 temperature  
   foraminifers, B13:11  
   Neogene, B1:13  
   sediments, A5:95  
   vs. depth, A3:158, 172; A4:99; A5:80, 84; B15:12  
   vs. time, A3:155–157; A5:79  
 temperature, sea-surface  
   nannofossils, B11:6–7  
   vs. ablation, B14:32  
   vs. mass balance, B14:32  
 temperature, in-situ  
   sediments, A3:62  
   Site 1165, A3:62  
   Site 1167, A5:30–31  
 temperature logs, lithology, A4:42  
 terrigenous component, vs. depth, A3:107  
 thermal conductivity  
   sediments, A3:61, 186–187; A4:36, 108; A5:29–30, 94  
   vs. depth, A3:154; A4:87; A5:78  
 thickness, ice, B14:5  
 thorium logs, vs. depth, A3:161; A4:90  
 Thvera Subchron, magnetostratigraphy, A3:42–43  
 tidal environment, cyclic processes, B1:16  
 tie points, depth to age conversion, B9:16  
 topsets  
   reflection, B14:5  
   seismic facies, B14:8–10  
   seismic sections, B14:25–26

Tortonian, magnetostratigraphy, B13:24  
 Transantarctic Flora, palynomorphs, B2:7–8 ; B3:4–8, 13  
 transgression  
   deposition, A4:16–17  
   seismic units, B8:7–10  
 transport  
   nannofossils, B11:6–7  
   palynomorphs, B2:11–12  
 traveltime, two-way  
   shotpoints, A4:95  
   vs. relative amplitude, A3:167  
 trees and shrubs, phytoliths, B5:4–6  
 trough-mouth fan  
   deposition, A1:30  
   principal results, A1:16–19  
 turbidite, seismic facies, B14:8–10  
 Turonian  
   authigenic carbonates, B15:7  
   lithologic units, A4:13–14  
   palynomorphs, A4:25; B1:6; B2:3; B3:10–11  
 Turonian–Santonian interval, palynomorphs, A4:25

**U**

unconformities  
   Campanian–middle to late Eocene interval, B1:6;  
     B3:8, 10  
   deposition, A4:16–17  
   lithologic units, A4:14  
   Neogene/lower Oligocene, A4:15  
   palynomorphs, B3:8  
   seismic units, B8:3–10  
   upper Miocene, A1:4  
   *See also* disconformities; hiatuses  
 upper slope, seismic sections, B14:23  
 uranium logs, vs. depth, A3:161; A4:90

**V**

Vega Island, palynomorphs, B3:17  
 vegetation  
   paleoenvironment, B1:20–22  
   palynomorphs, B2:10–11; B3:8–9, 11–12  
 veins, geology, A1:7–8  
 velocimetry  
   in-situ pressure, B10:26  
   sediments, A3:59  
 velocity  
   impedance logs, B10:25, 28  
   porosity, A3:65–67  
   seismic reflection, B10:5–8  
   *See also* compressional wave velocity  
 velocity, acoustic, sediments, A3:59  
 velocity, in situ, vs. in situ bulk density, B10:18  
 velocity logs  
   vs. depth, A3:160; A4:89, 93–94; B10:20, 24  
   vs. resistivity logs, A4:96  
   *See also* impedance logs  
 verrucose spherical phytoliths  
   contaminants, B5:7  
   sediments, B5:5–6



Vestfold Hills, glaciology, A1:6–7  
 void ratio  
   sediments, A3:56–58; A5:27  
   vs. depth, A3:148; A4:83; A5:73  
   *See also* porosity  
 volcanic glass, accessory component, A3:74; B4:12–13

**W**

warm periods, Neogene, B1:13  
 water content  
   sediments, A3:56–58; A4:32–34; A5:26–28  
   vs. depth, A3:148; A4:83; A5:73  
 water. *See* rock–water reaction zone  
 wavelets, seismic reflection, B10:4–5, 17  
 weathering, paleoclimatology, B13:15  
 well-logging  
   principal results, A1:15–16, 19, 22–23, 189; A5:32–34; B14:31  
   sediments, B9:1–16  
   summary, A4:88, 109; A5:32–34, 96  
   vs. depth, A1:43–44; A5:81; B14:6–10  
   *See also* core–log comparison; multisensor core logging  
 well-logging signature, calcified beds, A3:65  
 well-logging Unit 1, sediments, A3:63–64; A4:37–38; A5:32  
 well-logging Unit 2, sediments, A3:64; A4:38; A5:32–33  
 well-logging Unit 3, sediments, A3:64; A4:39

well-logging Unit 4, sediments, A4:39  
 well-logging Unit 5, sediments, A4:39–40  
 well-logging Unit 6, sediments, A4:40  
 well-logging units, sediments, A3:63–64; A4:37–40; A5:32–33  
 Wild Canyon, bathymetry, A1:5  
 Wild Drift  
   diffuse spectral reflectance, B12:1–27  
   principal results, A1:19–23  
   spectral data, B7:1–49  
 Wilkins Canyon, bathymetry, A1:5  
 wood fragments, accessory component, B4:16–17

**X**

X-ray diffraction data  
   clay-size fractions, A4:63–65; A5:55–57  
   lithologic units, A3:17–18; A4:15–16; A5:12–13

**Z**

Zanclean, magnetostratigraphy, B13:24  
 zonation  
   biostratigraphy, B3:25  
   *See also* Southern Ocean diatom zonation  
 Zoophycos  
   lithologic units, A3:16  
   photograph, A3:101–102

**TAXONOMIC INDEX****A**

*abies*, *Sphenolithus*, Site 1165, B11:4, 6  
*abisectus*, *Cyclicargolithus*, Site 1165, A3:28; B11:5  
*Acrosphaera australis*, Site 1165, A3:37  
*Acrosphaera australis* Zone, Site 1165, A3:37  
*Acrosphaera murrayana*, Site 1165, A3:37  
*Acrosphaera? labrata*, Site 1165, A3:37  
*Acrosphaera? labrata* Zone, Site 1165, A3:37  
*Actinocyclus ingens*  
   Site 1165, A3:30–31, 34–35; B6:4  
   Site 1166, A4:21  
*Actinocyclus ingens* var. *nodus*, Site 1165, A3:34  
*Actinocyclus ingens* var. *nodus* Zone, Site 1165, A3:34  
*Actinocyclus ingens* Zone, Site 1165, B6:4  
*Actinocyclus ingens–Denticulopsis maccollumii* Zone, Site 1165, A3:34  
*Actinomma golownini*, Site 1165, A3:37  
 cf. *Adnatosphaeridium reticulense*, Site 1166, B3:36  
*aequalis*, *Ceratospirites*, Site 1165, B2:4, 17  
*Agathis*, Site 1166, B3:9, 11  
*Ailanthipites* sp. cf. *Ailanthipites paenestriatus*, Site 1166, B3:43  
*Alabaminoides exiguus*, Site 1165, B13:13  
*Alisporites* sp., Site 1165, B2:10  
*Alisporites* Zone, Site 1167, B2:6  
*Alterbidinium (Deflandrea) asymmetricum*, Site 1166, B3:15  
*americanus*, *Nothofagidites*, Site 1166, B3:6  
*Ammodochium ampulla*, Site 1166, A4:24

*Amphymenium challengeriae*, Site 1165, A3:36  
*amplus*, *Latrobosporites*, Site 1166, B3:11  
*ampulla*, *Ammodochium*, Site 1166, A4:24  
*angulatus* var., *Proteacidites*, Site 1166, B3:39  
*Angulogerina earlandi*, Site 1166, A4:19  
*angulosa*, *Trifarina*  
   Site 1166, B4:15  
   Site 1167, B4:21, 23–24, 40–41  
*Anomalinoidea* sp., Site 1167, B4:24–25, 40–41  
*antarctica*, *Deflandrea*, Site 1166, B3:4, 13, 15–16, 34  
*antarctica*, *Triceraspyris*  
   Site 1166, A4:25  
   Site 1167, A5:18  
*antarctica* var. *recta*, *Eucampia*, Site 1166, A4:23  
*antarcticum*, *Arachnodinium*  
   Site 1166, B3:4, 13, 15–16  
   Site 1167, B2:6, 8, 24, 40–41  
*antarcticus*, *Dactyliosolen*, Site 1165, A3:36  
*antarcticus*, *Dictyococcites*, Site 1165, A3:27  
*antarcticus*, *Microcachryidites*  
   Site 742A, B3:14  
   Site 1167, B2:6–8, 18  
*antarcticus* var., *Microcachryidites*, Site 1166, B3:11, 43  
*Antarctissa cylindrica*  
   Site 1166, A4:25  
   Site 1167, A5:18  
*Antarctissa denticulata*, Site 1167, A5:18  
*Antarctissa strelkovi*, Site 1166, A4:25  
 anticlinal epidermal phytolith, Site 1165, B5:4, 12

apertura, *Spinidinium* sp. cf. *Vozzhenikovia*, Site 1166, B3:37  
 apertura, *Vozzhenikovia*  
 Site 742, B3:14  
 Site 1166, B3:15  
 apoxyxinus, *Tricolporites*, Site 1166, B3:11, 39  
 apoxyxinus, *Tricolporites* sp. cf. *Tricolporites*, Site 1165, B2:18  
*Appendicisporites*, Site 1166, B3:10  
*Arachnodinium antarcticum*  
 Site 1166, B3:4, 13, 15–16  
 Site 1167, B2:6, 8, 24, 40–41  
*Araucaria*, Site 1166, B3:9  
*Araucariacites australis*, Site 1166, B3:11, 43  
*Archaeosphaeridium australiensis*, Site 1166, A4:24  
*Archaeosphaeridium tasmaniae*, Site 1166, A4:24  
*architecturalis*, *Distephanosira (Melosira)*, Site 1166, A4:24  
*Arecipites* sp., Site 1165, B2:20  
*asanoi*, *Reticulofenestra*, Site 1165, B11:4  
*askinae*, *Octodinium*, Site 1166, B3:39  
*asperus*, *Nothofagidites*  
 Site 1165, B2:5  
 Site 1166, B3:6  
*asteroides*, cf. *Asteropollis*, Site 1165, B2:18  
*Asteromphalus kennettii*, Site 1165, A3:33–34  
*Asteromphalus kennettii* Zone, Site 1165, A3:33–34  
 cf. *Asteropollis asteroides*, Site 1165, B2:18  
*Astrononion echolsi*, Site 1166, B4:40–41  
*Astrononion* spp., Site 1166, A4:19; B4:15  
*Astrononion stelligerum*, Site 1167, B4:40–41  
*asymmetrica*, *Deflandrea*, Site 1166, B3:4, 34  
*asymmetrica*, *Deflandrea* sp. cf. *Deflandrea*, Site 1166, B3:4, 34  
*asymmetricum*, *Alterbidinium (Deflandrea)*, Site 1166, B3:15  
*asymmetricus*, *Foraminisporis*, Site 1167, B2:6, 17  
*australiensis*, *Archaeosphaeridium*, Site 1166, A4:24  
*australiensis*, *Cicatricosisporites*  
 Site 742A, B3:14  
 Site 1165, B2:4, 17  
 Site 1167, B2:6–7  
*australiensis*, *Dacrycarpites*  
 Site 1165, B2:3  
 Site 1166, B3:11  
*australis*, *Acrosphaera*, Site 1165, A3:37  
*australis*, *Araucariacites*, Site 1166, B3:11, 43  
*australis*, *Stereisporites*, Site 1165, B2:18  
*australis*, *Stereisporites* sp. cf. *Stereisporites*, Site 1166, B3:43  
*Australopollis obscurus*, Site 1166, B3:10–11, 43  
 cf. *Australopollis obscurus*, Site 1166, B3:43

**B**

*Baculatisporites*, Site 1166, B3:11  
*balmei*, *Lygistepollenites* sp. cf. *Lygistepollenites*, Site 1166, B3:39  
*Balmeisporites holodictyus*, Site 1167, B2:6  
*Balmeopsis limbata*, Site 1165, B2:17  
*barronii*, *Fragilariopsis*, Site 1165, A3:32; B6:4–5

*barronii*, *Fragilariopsis* sp. cf. *Fragilariopsis*, Site 1165, A3:30–31; B6:4  
*barronii* s.s., *Fragilariopsis*, Site 1165, A3:31; B6:4  
*bassensis*, *Uvigerina*, Site 1166, A4:19  
*Bathysiphon* sp. 1, Site 1165, A3:24–25; B4:5, 7–9, 22  
*Bathysiphon* sp. 2, Site 1165, A3:24; B4:7  
*Batiacasphaera* sp. A, Site 1165, B2:8, 20  
*Batiacasphaera* sp. B, Site 1165, B2:8, 20  
*Batiacasphaera* sp. C, Site 1165, B2:20  
*Batiacasphaera* spp., Site 1165, B2:4–5, 7–8  
*Battenipollis sectilis*  
 Site 1165, B2:8, 18  
 Site 1166, B3:6, 8, 10  
*Battenipollis senectus*, Site 1165, B2:3  
*beardmorensis*, *Nothofagus*, Site 1166, B3:9  
*Beaupreadites elegansiformis*, Site 1166, B3:39  
*biora*, *Globocassidulina*  
 Site 1166, A4:19  
 Site 1167, A5:16  
*bisecta*, *Reticulofenestra*, Site 1165, B11:5–6  
*bisectus*, *Dictyococcites*, Site 1165, A3:29  
 block phytolith, Site 1165, B5:6, 12  
*Botryococcus* sp., Site 1165, B2:5  
*brachyspinulosus*, *Nothofagidites*  
 Site 1166, B3:6  
 Site 1167, B2:18  
*bradyi*, *Eggerella*, Site 1165, A3:26; B4:10  
*bradyi*, *Karriella*, Site 1165, A3:26  
*Brassopora* spp., Site 1166, B3:5–6  
*Brigantedinium pynei*, Site 1165, B2:5, 8, 19  
 cf. *Brigantedinium simplex*, Site 1165, B2:19  
*bullatus*, *Camarozonosporites*  
 Site 742A, B3:14  
 Site 1166, B3:7, 11  
*bullatus* var., *Camarozonosporites*, Site 1166, B3:42  
 bulliform phytolith, Site 1165, B5:3, 12  
*bulloides*, *Globigerina*, Site 1165, A3:22; B4:5–6

**C**

*Calcidiscus leptoporus*  
 Site 1165, A3:27; B11:4  
 Site 1167, A5:16–17  
*Callitriche*, Site 1166, B3:11  
*Camarozonosporites bullatus*  
 Site 742A, B3:14  
 Site 1166, B3:7, 11  
*Camarozonosporites bullatus* var., Site 1166, B3:42  
*canariensis*, *Haplophragmoides*, Site 1165, B4:23, 40–41  
*Cancris nuttalli*, Site 1165, B4:25  
*characteristicus*, *Hemiaulus*, Site 1166, A4:24, 29  
*caribbeanica*, *Gephyrocapsa*  
 Site 1165, A3:27; B11:4–5  
 Site 1167, A5:17  
*carteri*, *Helicosphaera*, Site 1165, B11:5  
*Cassidulina* spp., Site 1166, A4:19; B4:15  
*Catapsydrax dissimilis*, Site 1165, A3:23; B4:6  
*Catapsydrax* sp., Site 1165, A3:23  
*Catapsydrax unicavus*, Site 1165, A3:23; B4:6  
*centrocarpum*, *Operculodinium*, Site 1166, B3:9  
*Ceratocyrtis stigi*, Site 1165, A3:37

- Ceratospirites aequalis*, Site 1165, B2:4, 17  
*Ceratospirites* sp. cf. *Ceratospirites aequalis*, Site 1166, B3:41  
*challengerae*, *Amphymenium*, Site 1165, A3:36  
*charoides*, *Repmanina*, Site 1165, B4:8  
*chenopodiaceoides*, *Chenopodipollis*, Site 1166, B3:15  
*Chenopodipollis chenopodiaceoides*, Site 1166, B3:15  
Chi Zone  
Site 1166, A4:25  
Site 1167, A5:18  
*Chiasmolithus* sp., Site 1165, B11:5  
*Cibicides lobatulus*, Site 1167, B4:24, 40–41  
*Cibicides mundulus*, Site 1165, B4:8  
*Cibicides* spp., Site 1165, B13:7  
*Cibicides subhaidingeri*, Site 1165, B4:8, 10  
*Cibicidoides mundulus*, Site 1165, A3:24  
*Cibicidoides subhaidingeri*, Site 1165, A3:24, 26  
*Cicatricosisporites*, Site 1166, B3:10  
*Cicatricosisporites australiensis*  
Site 742A, B3:14  
Site 1165, B2:4, 17  
Site 1167, B2:6–7  
*cinctus*, *Nothofagidites*, Site 1166, B3:6  
*clevei*, *Phorticum*  
Site 1166, A4:25  
Site 1167, A5:18  
*Coccolithus miopelagicus*, Site 1165, A3:28; B11:5  
*Coccolithus pelagicus*  
Site 1165, A3:28, 30; B11:4–5, 7  
Site 1166, A4:20  
Site 1167, A5:17  
*Cocconeis* spp., Site 1165, A3:31  
*confessus*, *Tricolporites*, Site 1166, B3:11  
*convallis*, *Minylitha*, Site 1165, A3:27; B11:4, 6  
*Cooksonites variabilis*, Site 1167, B2:8, 17  
*Coptospora*, Prydz Bay, B1:11  
*Coptospora* sp. A, Site 1166, B3:7, 42  
*Coptospora* sp. B, Site 1165, B2:5, 7–9, 11, 20  
cf. *Coptospora* sp. B, Site 1165, B2:20  
*cornuta*, *Trinacria*, Site 1166, A4:24  
*Corollina* spp., Site 1165, B2:3, 5–6, 8, 10  
*Corollina torosa*, Site 1167, B2:6–7, 17  
*Corrudinium* sp. cf. *Corrudinium incompositum*, Site 1166, B3:4, 38  
*corrugata*, *Wuroia*, Site 1166, B3:10, 41  
*Corsinipollis epilobioides*, Site 1166, B3:15  
*costata*, *Rhizosolenia*, Site 1165, A3:32; B6:5  
*Craspedodiscus moellerii*, Site 1166, A4:24  
*crassa*, *Globocassidulina*, Site 1166, A4:19  
*crassa biora*, *Globocassidulina*  
Site 1166, B4:15  
Site 1167, B4:24, 40–41  
*crassa crassa*, *Globocassidulina*, Site 1166, B4:15, 24, 40–41  
*crassa rossensis*, *Globocassidulina*  
Site 1166, B4:15  
Site 1167, B4:24, 40–41  
*crenulata*, *Ebriopsis*, Site 1166, A4:24  
*Crucidenticula kanayae*, Site 1165, A3:35, 42  
*Crucidenticula kanayae* Zone, Site 1165, A3:35  
cubic phytolith, Site 1166, B5:6, 12  
*Cupaneiidites* sp. cf. *Cupaneiidites orthoteichus*, Site 1166, B3:8  
*Cupresaccites* sp., Site 1166, B3:11, 43  
*curta*, *Fragilariopsis*, Site 1166, A4:21, 23  
*Cyathidites*, Site 1166, B3:11  
*Cycladophora golli regipileus*, Site 1165, A3:38  
*Cycladophora golli regipileus* Zone, Site 1165, A3:38  
*Cycladophora humerus*, Site 1165, A3:37  
*Cycladophora pliocenica*  
Site 1166, A4:25  
Site 1167, A5:18  
*Cycladophora spongothorax*, Site 1165, A3:37  
*Cycladophora spongothorax* Zone, Site 1165, A3:37  
*Cyclammmina incisa*, Site 1165, A3:23–25; B4:5, 7–9, 22, 40–41  
*Cyclammmina/Bathysiphon* sp. 1 assemblage, Site 1165, A3:25; B4:8–9  
*Cyclicargolithus abisectus*, Site 1165, A3:28; B11:5  
*Cyclicargolithus floridanus*, Site 1165, A3:28; B11:4–6  
*Cyclopsiella* sp., Site 1166, B3:37  
*cygniformis*, *Deflandrea*, Site 1166, B3:4  
*cylindrica*, *Antarctissa*  
Site 1166, A4:25  
Site 1167, A5:18  
*Cymatiosphaera? invaginata*, Site 1165, B2:4–5, 8–9, 20  
cf. *Cymatiosphaera? invaginata*, Site 1165, B2:20
- ## D
- Dacrycarpites australiensis*  
Site 1165, B2:3  
Site 1166, B3:11  
*Dacrycarpus*, Site 1166, B3:9  
*Dacrydium*, Site 1166, B3:9  
*Dactyliosolen antarcticus*, Site 1165, A3:36  
*danica*, *Pterotheca*, Site 1166, A4:24  
*daviesii*, *Reticulofenestra*  
Site 1165, A3:29; B11:5  
Site 1166, A4:20  
*Deflandrea antarctica*, Site 1166, B3:4, 13, 15–16, 34  
*Deflandrea antarctica* complex, Site 1166, B3:34  
*Deflandrea antarctica-flounderensis-phosphoritica* plexus,  
Site 1166, B3:4  
*Deflandrea asymmetrica*, Site 1166, B3:4, 34  
*Deflandrea cygniformis*, Site 1166, B3:4  
*Deflandrea flounderensis*, Site 1166, B3:4  
*Deflandrea obeisfieldensis*, Site 1166, B3:13  
*Deflandrea phosphoritica*, Site 1166, B3:4  
*Deflandrea "prydzensis"*  
Site 1165, B2:4, 8  
Site 1166, B3:4–5, 7, 13, 16, 34  
*Deflandrea* sp. cf. *Deflandrea asymmetrica*, Site 1166, B3:4, 34  
*Deflandrea* sp. cf. *Deflandrea flounderensis*, Site 1166, B3:4  
*Deflandrea* spp., Site 742, B3:14  
*deflandrei*, *Discoaster*, Site 1165, B11:5  
*deflandrei*, *Discoaster* sp. aff. *Discoaster*, Site 1165, A3:28  
*Densoisporites* sp., Site 1165, B2:5  
*Densoisporites* sp. cf. *Densoisporites simplex*, Site 1165, B2:20  
*denticulata*, *Antarctissa*, Site 1167, A5:18

*denticuloides*, *Nitzschia*, Site 1165, A3:34  
*denticuloides*, *Nitzschia* cf., Site 1165, A3:34  
*Denticulopsis dimorpha*  
 Site 1165, A3:34  
 Site 1167, A5:17  
*Denticulopsis dimorpha* Zone, Site 1165, A3:34  
*Denticulopsis maccollumii*, Site 1165, A3:34–35  
*Denticulopsis maccollumii* Zone, Site 1165, A3:34–35  
*Denticulopsis meridionalis*, Site 1165, A3:34  
*Denticulopsis praedimorpha*, Site 1165, A3:30, 34  
*Denticulopsis praedimorpha* Zone, Site 1165, A3:34  
*Denticulopsis praedimorpha*–*Nitzschia denticuloides* Zone,  
 Site 1165, A3:34  
*Denticulopsis simonsenii*, Site 1165, A3:34  
*Denticulopsis simonsenii* Zone, Site 1165, A3:33–34  
*Denticulopsis simonsenii*–*Nitzschia grossepunctata* Zone,  
 Site 1165, A3:34; B4:10  
*Dictyocha* spp., Site 1165, A3:33; B1:13  
*Dictyococcites antarcticus*, Site 1165, A3:27  
*Dictyococcites bisectus*, Site 1165, A3:29  
*dictyoides*, *Pseudammodochium*, Site 1166, A4:24  
*Dictyophyllidites* sp. ?, Site 1166, B3:41  
*Dictyophyllidites* spp., Prydz Bay, B2:8  
*Didecitriletes ericianus*, Site 1165, B2:4, 10  
*digitatus*, *Perforicolpites*, Site 1166, B3:15  
*Dilwynites granulatus*, Site 1166, B3:42  
*Dilwynites* sp.  
 Site 1165, B2:3  
 Site 1166, B3:11  
*Dilwynites* sp. A  
 Site 1165, B2:5, 18  
 Site 1166, B3:7, 11, 42–43  
*Dilwynites* sp. B, Site 1166, B3:7, 42–43  
*Dilwynites* sp. cf. *Dilwynites tuberculatus*, Site 1166, B3:42  
*dimorpha*, *Denticulopsis*  
 Site 1165, A3:34  
 Site 1167, A5:17  
*Discoaster deflandrei*, Site 1165, B11:5  
*Discoaster* sp. aff. *Discoaster deflandrei*, Site 1165, A3:28  
*Discoaster* sp. cf. *Discoaster variabilis*, Site 1165, B11:4, 6  
*dissimilis*, *Catapsydrax*, Site 1165, A3:23; B4:6  
*dissimilis*, *Hemiaulus*, Site 1166, A4:24  
*Distephanosira (Melosira) architecturalis*, Site 1166, A4:24

**E**

*earlandi*, *Angulogerina*, Site 1166, A4:19  
*Ebrinula paradoxa*, Site 1166, A4:24  
*Ebriopsis crenulata*, Site 1166, A4:24  
*echolsi*, *Astrononion*, Site 1166, B4:40–41  
*edwardsii* var., *Gambierina*, Site 1166, B3:6, 8, 39  
*Eggerella bradyi*, Site 1165, A3:26; B4:10  
*Ehrenbergina glabra*, Site 1167, B4:21  
*Ehrenbergina* spp., Site 1166, A4:19; B4:15  
*elegansiformis*, *Beaupreadites*, Site 1166, B3:39  
*elliptipora*, *Thalassiosira*  
 Site 1165, A3:30  
 Site 1166, A4:23; B6:5  
*Emiliania huxleyi*, Site 1165, A3:27; B11:4–5  
*Enneadocysta partridgei*  
 Site 742, B3:14

Site 1165, B2:4–5, 8  
 Site 1166, B3:4–5, 15–16, 35  
*Entopyla* spp., Site 1165, A3:31  
*epilobioides*, *Corsinipollis*, Site 1166, B3:15  
*Epistominella exigua*, Site 1165, A3:24; B4:8  
*Epistominella vitrea*, Site 1165, A3:23–24, 26; B4:8, 10  
*Eponides* sp. 1, Site 1165, A3:23  
*Eponides* sp. 2, Site 1165, A3:23  
*Eponides tenera*, Site 1165, B4:6  
*equalis*, *Ceratosporites* sp. cf. *Ceratosporites*, Site 1166,  
 B3:41  
*ericianus*, *Didecitriletes*, Site 1165, B2:4, 10  
*ericsonii*, *Gephyrocapsa*, Site 1167, A5:16  
*Eucalyptus*  
 Site 1165, B2:3  
 Site 1166, B3:9  
*Eucampia antarctica* var. *recta*, Site 1166, A4:23  
*Eucyrtidium punctatum*, Site 1165, A3:37  
*Eurossia irregularis*, Site 1166, A4:24  
*Exesipollenites* spp., Site 1165, B2:6, 10  
*Exesipollenites tumulus*  
 Site 1165, B2:3, 5, 8, 17  
 Site 1166, B3:40  
 Site 1167, B2:6–7, 17  
*exigua*, *Epistominella*, Site 1165, A3:24; B4:8  
*exiguus*, *Alabaminoides*, Site 1165, B13:13  
*extensa*, *Vozzhenikovia* sp. cf. *Gippslandica*  
 Site 1165, B2:4  
 Site 1166, B3:4, 35

**F**

*facetum*, *Glyphanodinium*, Site 1165, B2:5  
*facetum*, cf. *Glyphanodinium*, Site 1165, B2:19  
*falconensis*, *Globigerina*, Site 1166, A4:18; B4:14  
*fallax*, *Parebriopsis*, Site 1166, A4:24  
*festucoid* phytolith, Site 1166, B5:6, 12  
*filosa*, *Turbiosphaera*, Site 1166, B3:15  
*filosa*, *Turbiosphaera* sp. cf. *Turbiosphaera*, Site 1166,  
 B3:35  
*Fischeripollis* sp., Site 1166, B3:38  
*Fischeripollis* sp. A, Site 1166, B3:6, 8, 37–38  
*Fissurina* spp., Site 1165, A3:24; B4:8; B13:13  
*flemingii*, *Nothofagidites*  
 Site 1165, B2:18  
 Site 1166, B3:5–6  
*floridanus*, *Cyclicargolithus*, Site 1165, A3:28; B11:4–6  
*florinii*, *Lygistepollenites*, Site 1166, B3:11  
*flounderensis*, *Deflandrea*, Site 1166, B3:4  
*flounderensis*, *Deflandrea* sp. cf. *Deflandrea*, Site 1166, B3:4  
*folded* spherical phytolith, Site 1166, B5:4–5, 12  
*Foraminisporis asymmetricus*, Site 1167, B2:6, 17  
*Forcipites longus* var., Site 1166, B3:6, 10, 39  
*Forcipites sabulosus*, Site 1165, B2:3, 18  
*Forcipites sabulosus* var., Site 1166, B3:6, 10, 39  
*Forcipites* sp. cf. *Forcipites longus*, Site 1165, B2:3–4, 18  
*Forcipites* spp., Site 1165, B2:8, 18  
*Forcipites stipulatus*, Site 1166, B3:11  
*Foveoglecheniidites* sp., Site 1165, B2:18  
*Fragilariopsis barronii*, Site 1165, A3:32; B6:4–5  
*Fragilariopsis barronii* s.s., Site 1165, A3:31; B6:4

*Fragilariopsis barronii* Zone, Site 1165, A3:32; B6:5  
*Fragilariopsis curta*, Site 1166, A4:21, 23  
*Fragilariopsis interfrigidaria*, Site 1165, A3:32; B6:4  
*Fragilariopsis interfrigidaria* Zone, Site 1165, A3:32; B6:4  
*Fragilariopsis kerguelensis*  
 Site 1165, A3:30–31  
 Site 1166, A4:22  
*Fragilariopsis kerguelensis* Zone, Site 1165, A3:32; B13:13  
*Fragilariopsis praeinterfrigidaria*, Site 1165, A3:33  
*Fragilariopsis ritscherii*, Site 1165, A3:30–31  
*Fragilariopsis* sp. cf. *Fragilariopsis barronii*, Site 1165,  
 A3:30–31; B6:4  
*Fragilariopsis weaveri*, Site 1165, A3:32; B6:4  
*Fuscopora* spp., Site 1166, B3:5–6

## G

*Gambierina edwardsii* var., Site 1166, B3:6, 8, 39  
*Gambierina rudata*  
 Site 1165, B2:3–4, 18  
 Site 1166, B3:6  
*Gambierina* spp., Site 1166, B3:8, 10  
*Gartnerago obliquum*, Site 1167, A5:16  
*gelida*, *Reticulofenestra*, Site 1165, A3:27; B11:4  
*Gephyrocapsa caribbeanica*  
 Site 1165, A3:27; B11:4–5  
 Site 1167, A5:17  
*Gephyrocapsa ericonii*, Site 1167, A5:16  
*Gephyrocapsa oceanica*, Site 1165, B11:4  
*Gephyrocapsa* sp.  
 Site 1165, A3:27  
 Site 1167, A5:16–17  
*gillii*, *Peninsulapollis* sp. cf. *Peninsulapollis*, Site 1166,  
 B3:10  
*glabra*, *Ehrenbergina*, Site 1167, B4:21  
*glacialis*, *Spongotrochus*?  
 Site 1166, A4:25  
 Site 1167, A5:18  
*Gleicheniidites* sp. A, Site 1166, B3:7, 42  
*Globigerina bulloides*, Site 1165, A3:22; B4:5–6  
*Globigerina falconensis*, Site 1166, A4:18; B4:14  
*Globigerina praebulloides*, Site 1165, A3:22; B4:6  
*Globigerina* sp., Site 1167, A5:15; B4:23, 40–41  
*Globigerinita parkerae*, Site 1166, A4:19; B4:15  
*Globocassidulina biora*  
 Site 1166, A4:19  
 Site 1167, A5:16  
*Globocassidulina crassa*, Site 1166, A4:19  
*Globocassidulina crassa biora*  
 Site 1166, B4:15  
 Site 1167, B4:24, 40–41  
*Globocassidulina crassa crassa*, Site 1166, B4:15, 24, 40–41  
*Globocassidulina crassa rossensis*  
 Site 1166, B4:15  
 Site 1167, B4:24, 40–41  
*Globocassidulina* spp.  
 Site 1166, A4:19; B4:15  
 Site 1167, A5:16; B4:17, 20  
*Globocassidulina subglobosa*, Site 1166, A4:19; B4:15, 24

*Globorotalia puncticulata*  
 Site 1165, A3:22; B4:5–6, 22, 40–41; B13:13  
 Site 1167, A5:15; B4:18  
*Globorotalia scitula*, Site 1165, A3:22; B4:5  
*Globorotalia (Tenuitella)* sp.  
 Site 1166, A4:18–19  
 Site 1167, A5:16  
*Globorotalita woodi*, Site 1165, A3:23  
*Globorotaloides variabilis*, Site 1165, A3:22; B4:6  
*Globoroturborotalita woodi*, Site 1165, A3:22; B4:6  
*Glyphanodinium facetum*, Site 1165, B2:5  
 cf. *Glyphanodinium facetum*, Site 1165, B2:19  
*golli regipileus*, *Cycladophora*, Site 1165, A3:38  
*golownini*, *Actinomma*, Site 1165, A3:37  
*goniatus*, *Nothofagidites*  
 Site 1165, B2:4  
 Site 1166, B3:5–6, 38  
*Grammatophora* spp., Site 1165, A3:31  
*grande*, *Lynocanoma*, Site 1165, A3:37  
*granulatus*, *Dilwynites*, Site 1166, B3:42  
*grunowii*, *Stephanopyxis*, Site 1166, A4:24  
*gunnii*, *Nothofagus*, Site 1166, B3:16  
*Gyroidina subplanulatus*, Site 1165, B4:6  
*Gyroidinoides neosoldanii*, Site 1165, B4:25, 40–41

**H**

*halophora*, *Laticarinina*, Site 1165, B4:10  
*hampdenensis*, *Svalbardella* aff. *Svalbardella*, Site 1165,  
 B2:4  
*hannae*, *Vulcanella*, Site 1166, A4:24  
*Hanzawaia mantaensis*, Site 1165, A3:24; B4:8  
*Haplophragmoides canariensis*, Site 1165, B4:23, 40–41  
*Haplophragmoides* sp., Site 1166, A4:19; B4:14–15  
*haqii*, *Reticulofenestra*, Site 1165, A3:28; B11:4–5  
*hastata*, *Kannoa*, Site 1166, A4:24  
*Helicosphaera carteri*, Site 1165, B11:5  
*Helicosphaera* sp., Site 1165, A3:28; B11:5  
*Helicosphaera* sp. cf. *Helicosphaera paleocarteri*, Site 1165,  
 A3:28; B11:5  
*Helotholus vema*, Site 1165, A3:36  
*Hemiaulus characteristicus*, Site 1166, A4:24, 29  
*Hemiaulus dissimilis*, Site 1166, A4:24  
*Hemiaulus incisus*, Site 1166, A4:24  
 cf. *Hemicystodinium zoharyi*, Site 1166, B3:36  
*Hemidiscus ovalis* Zone, Site 1165, A3:33  
*Hemidiscus triangularis*, Site 1165, A3:33, 35  
*hesslandii*, *Reticulofenestra*  
 Site 1165, A3:28; B11:5  
 Site 1166, A4:20  
*heterocanthum*, *Heterosphaeridium*, Site 1166, B3:10, 41  
*Heterosphaeridium heterocanthum*, Site 1166, B3:10, 41  
*heterus*, *Nothofagidites*, Site 1166, B3:6  
*hexaporus*, *Periporopollenites*, Site 1166, B3:6, 8–9, 38  
*hispidocostata*, *Uvigerina*, Site 1167, B4:21, 23, 40–41  
*holodictyus*, *Balmeisporites*, Site 1167, B2:6  
*Homotryblum tasmaniense*, Site 1166, B3:4  
*humerus*, *Cycladophora*, Site 1165, A3:37  
*huxleyi*, *Emiliania*, Site 1165, A3:27; B11:4–5

*Hyperammina*, Site 1165, B4:5, 22  
*Hystrichosphaeridium tubiferum*, Site 1166, B3:15, 36

## I

*Ilexpollenites* sp., Site 1166, B3:39  
*Impagidinium* sp. cf. *Impagidinium victorianum*  
 Site 1165, B2:4  
 Site 1166, B3:37  
*incisa*, *Cyclammina*, Site 1165, A3:23–25; B4:5, 7–9, 22,  
 40–41  
*incisus*, *Hemiaulus*, Site 1166, A4:24  
*incompositum*, *Corrudinium* sp. cf. *Corrudinium*, Site 1166,  
 B3:4, 38  
*incrassata*, *Nothofagidites*, Site 1166, B3:6  
*ingens*, *Actinocyclus*  
 Site 1165, A3:30–31, 34–35; B6:4  
 Site 1166, A4:21  
*ingens* var. *nodus*, *Actinocyclus*, Site 1165, A3:34  
*Inoceramus*, Site 1166, B1:6  
*insigna*, *Thalassiosira*  
 Site 1165, A3:32  
 Site 1166, A4:23; B6:5  
*insigna/inura*, *Thalassiosira*, Site 1166, A4:23  
*Integricorpus* sp., Site 1166, B3:38  
*interfrigidaria*, *Fragilariopsis*, Site 1165, A3:32; B6:4  
*inura*, *Thalassiosira*, Site 1165, A3:32–33; B6:5  
*invaginata*, *Cymatiosphaera?*, Site 1165, B2:4–5, 8–9, 20  
 irregular spherical phytolith, Site 1166, B5:5, 12  
*irregularis*, *Eurossia*, Site 1166, A4:24  
*Isabelidinium variable*, Site 1166, B3:10, 41  
*Ischyosporites punctatus*, Site 1167, B2:17

## J

*jacksonii*, *Thalassiosira*, Site 1165, A3:32  
*jafarii*, *Umbilicosphaera*, Site 1165, A3:28; B11:5

## K

*kanayae*, *Crucidentacula*, Site 1165, A3:35, 42  
*Kannoa hastata*, Site 1166, A4:24  
*Karriella bradyi*, Site 1165, A3:26  
*kennettii*, *Asteromphalus*, Site 1165, A3:33–34  
*kerquelenensis*, *Fragilariopsis*  
 Site 1165, A3:30–31  
 Site 1166, A4:22  
*Kisseleviella* sp. G, Site 1166, A4:24  
*kittonianus*, *Stictodiscus*, Site 1166, A4:24  
*kolbei*, *Thalassiosira*  
 Prydz Bay, A1:14  
 Site 1165, A3:30–32; B6:4  
 Site 1166, A4:22, 28; B6:5  
*kopiensis*, *Proteacidites* sp. cf. *Proteacidites*, Site 1166,  
 B3:39  
*Kraeuselisporites majus*  
 Site 742A, B3:14  
 Site 1166, B3:41

## L

*labrata*, *Acrosphaera?*, Site 1165, A3:37

*labrynthius*, *Nematosphaeropsis*, Site 1166, B3:9  
*lachlaniae*, *Nothofagidites*  
 Site 1165, B2:18  
 Site 1166, B3:5–7  
*lachlaniae*, *Nothofagidites* sp. cf. *Nothofagidites*, Site 1167,  
 B2:18  
*lacunosa*, *Pseudoemiliana*  
 Site 1165, A3:27; B11:5  
 Site 1167, A5:16–17  
*Laevigatosporites* sp., Site 1167, B2:17  
*Laevigatosporites* sp. A, Site 1166, B3:7, 11, 42  
*Lagarostrobos*, Site 1166, B3:9, 11  
*Lagen* spp., Site 1165, A3:24; B4:8  
 “*lapis*” ms., *Proteacidites*, Site 1166, B3:39  
*Laticarinina halophora*, Site 1165, B4:10  
*Laticarinina pauperata*, Site 1165, A3:26  
*Latrobosporites amplus*, Site 1166, B3:11  
*Lejeunocystia* sp., Site 1166, B3:15–16, 37  
*leptoporus*, *Calcidiscus*  
 Site 1165, A3:27; B11:4  
 Site 1167, A5:16–17  
*Liliacidites* sp. cf. *lilium*, Site 1166, B3:39  
*lilium*, *Liliacidites* sp. cf., Site 1166, B3:39  
*lillei*, *Tricolporites*, Site 1165, B2:3, 18  
*limbata*, *Balmeopsis*, Site 1165, B2:17  
*Lingulodinium macherophorum*, Site 1166, B3:9  
*Lithelium nautilodes*, Site 1166, A4:25  
*lobatulus*, *Cibicides*, Site 1167, B4:24, 40–41  
*longus*, *Forcipites* sp. cf. *Forcipites*, Site 1165, B2:3–4, 18  
*longus* var., *Forcipites*, Site 1166, B3:6, 10, 39  
*Lygistepollenites florinii*, Site 1166, B3:11  
*Lygistepollenites* sp. cf. *Lygistepollenites balmei*, Site 1166,  
 B3:39  
*Lynocanoma grande*, Site 1165, A3:37

## M

*maccollumii*, *Denticulopsis*, Site 1165, A3:34–35  
*macherophorum*, *Lingulodinium*, Site 1166, B3:9  
*macmurdoense*, *Spinidinium*, Site 1166, B3:15, 36  
*majus*, *Kraeuselisporites*  
 Site 742A, B3:14  
 Site 1166, B3:41  
*Malvacipollis* spp., Site 1166, B3:8  
*mantaensis*, *Hanzawaia*, Site 1165, A3:24; B4:8  
 “*Marchantiaceae*,” Site 1165, B2:9, 20  
*mawsonii*, *Phyllocladidites*  
 Site 742A, B3:14  
 Site 1165, B2:4–5, 18  
*mawsonii* var., *Phyllocladidites*, Site 1166, B3:7, 11–12, 16,  
 43  
*mays*, *Zea*, Site 1165, B5:3  
*Melonis pompiliodes*, Site 1165, B13:13  
*meridionalis*, *Denticulopsis*, Site 1165, A3:34  
*Merrimia*, Site 1166, B3:15  
*Microbaculispora tentula*  
 Site 1165, B2:4  
 Site 1166, B3:40  
*Microcachryidites antarcticus*  
 Site 742A, B3:14  
 Site 1167, B2:6–8, 18

*Microcachrydites antarcticus* var., Site 1166, B3:11, 43  
*Microcachrys*, Site 1166, B3:9, 11  
*microsaccatus*, *Podosporites*, Site 1166, B3:6  
*minuta*, *Reticulofenestra*, Site 1165, A3:27–28; B11:4–5  
*minutula*, *Reticulofenestra*, Site 1165, A3:27; B11:4  
*Minylitha convallis*, Site 1165, A3:27; B11:4, 6  
*miocenica*, *Thalassiosira*, Site 1165, A3:33  
*miopelagicus*, *Coccolithus*, Site 1165, A3:28; B11:5  
*moellerii*, *Craspedodiscus*, Site 1166, A4:24  
*monile*, *Pseudorutilaria*, Site 1166, A4:24  
*mundulus*, *Cibicides*, Site 1165, B4:8  
*mundulus*, *Cibicidoides*, Site 1165, A3:24  
*murrayana*, *Acrosphaera*, Site 1165, A3:37

## N

*nautilodes*, *Lithelium*, Site 1166, A4:25  
*Nematosphaeropsis labrynthius*, Site 1166, B3:9  
*Neogloboquadrina pachyderma*  
 Site 1165, A3:22; B4:5; B13:5–6, 11–13, 33  
 Site 1166, A4:18–19; B4:13–15  
 Site 1167, A5:14–16, 22; B4:17, 20, 22–23, 40–41  
*Neogloboquadrina pachyderma* (sinistral)  
 Site 1165, B13:5–6, 11–13, 33  
 Site 1166, B16:1–11  
 Site 1167, B14:6  
*Neogloboquadrina pachyderma* Zone  
 Site 1166, B4:13  
 Site 1167, A5:14–15; B4:17  
*neosoldanii*, *Gyroidinoides*, Site 1165, B4:25, 40–41  
*nephroides*, *Selenopemphix* sp. cf. *Selenopemphix*, Site 1165,  
 B2:19  
 new taxa, Site 1166, B3:6, 38  
*Nitzschia* cf. *denticuloides*, Site 1165, A3:34  
*Nitzschia denticuloides*, Site 1165, A3:34  
*Nitzschia denticuloides* Zone, Site 1165, A3:34  
*Nitzschia grossepunctata* Zone, Site 1165, A3:34  
*Nitzschia reinholdii* Zone, Site 1165, A3:33  
*Nothofagidites*, Prydz Bay, B1:11  
*Nothofagidites americanus*, Site 1166, B3:6  
*Nothofagidites asperus*  
 Site 1165, B2:5  
 Site 1166, B3:6  
*Nothofagidites asperus* complex, Site 1166, B3:6  
*Nothofagidites asperus* Zone, Site 1166, A4:25; B1:6–7  
*Nothofagidites brachyspinulosus*  
 Site 1166, B3:6  
 Site 1167, B2:18  
*Nothofagidites brachyspinulosus* complex, Site 1166, B3:6,  
 39  
*Nothofagidites cinctus*, Site 1166, B3:6  
*Nothofagidites flemingii*  
 Site 1165, B2:18  
 Site 1166, B3:5–6  
*Nothofagidites flemingii* complex  
 Site 1165, B2:5  
 Site 1166, B3:6, 15, 39  
*Nothofagidites goniatus*  
 Site 1165, B2:4  
 Site 1166, B3:5–6, 38

*Nothofagidites heterus*, Site 1166, B3:6  
*Nothofagidites incrassata*, Site 1166, B3:6  
*Nothofagidites lachlaniae*  
 Site 1165, B2:18  
 Site 1166, B3:5–7  
*Nothofagidites lachlaniae* complex  
 Site 1165, B2:4–5, 11  
 Site 1166, B3:6, 9, 15  
*Nothofagidites rocaensis*, Site 1166, B3:6  
*Nothofagidites saraensis*  
 Site 1166, B3:6  
 Site 1167, B2:18  
*Nothofagidites senectus*, Site 1165, B2:3  
*Nothofagidites* sp. cf. *Nothofagidites lachlaniae*, Site 1167,  
 B2:18  
*Nothofagidites* sp. cf. *Nothofagidites senectus*, Site 1167,  
 B2:18  
*Nothofagidites* spp.  
 Site 742, B3:14  
 Site 1165, B2:3–5, 8, 10–11; B5:7  
 Site 1166, B3:14, 16  
 Site 1167, B2:6–7  
*Nothofagidites tehuelchesii*, Site 1166, B3:6  
*Nothofagidites waipawensis*, Site 1166, B3:6  
*Nothofagus*  
 Site 1165, B1:7, 21; B2:10  
 Site 1166, B3:5–6, 8, 15–16  
*Nothofagus beardmorensis*, Site 1166, B3:9  
*Nothofagus gunnii*, Site 1166, B3:16  
*Nothofagus solandri* var. *cliffortioides*, Site 1165, B5:5  
*nuttalli*, *Cancris*, Site 1165, B4:25  
*Nuttallides umbonifera*, Site 1165, B13:7

## O

*oamaruensis*, *Stephanopyxis*, Site 1166, A4:24  
*obeisfieldensis*, *Deflandrea*, Site 1166, B3:13  
*obliquum*, *Gartnerago*, Site 1167, A5:16  
*obscura*, *Schematophora*, Site 1166, B3:4, 36  
*obscura*, *Schematophora* sp. cf. *Schematophora*, Site 1166,  
 B3:36  
*obscurus*, *Australopolis*, Site 1166, B3:10–11, 43  
*obscurus*, cf. *Australopolis*, Site 1166, B3:43  
*oceanica*, *Gephyrocapsa*, Site 1165, B11:4  
*Octodinium askinae*, Site 1166, B3:39  
*Octodinium* spp., Site 1166, B3:16  
*Odontochitina porifera*, Site 1165, B2:4, 8–9, 17  
*oestrupii*, *Thalassiosira*, Site 1165, A3:33; B6:5  
*oliverana*, *Thalassiosira*, Site 1165, A3:33  
*Operculodinium centrocarpum*, Site 1166, B3:9  
*Oridorsalis umbonatus*, Site 1165, A3:23, 26; B4:7, 9  
*Ornamentifera sentosa*, Site 1166, B3:11  
*Oroscena* spp., Site 1165, B4:10  
*orthoteichus*, *Cupaneidites* sp. cf. *Cupaneidites*, Site 1166,  
 B3:8  
*Osangulariella umbonifera*, Site 1165, B13:7, 13  
*Osmundacidites* sp. cf. *Osmundacidites wellmanii*, Site  
 1166, B3:41  
*ovata*, *Pseudoemiliana*, Site 1165, B11:4

**P**

*pachyderma*, *Neogloboquadrina*

- Site 1165, A3:22; B4:5; B13:5–6, 11–13, 33
- Site 1166, A4:18–19; B4:13–15
- Site 1167, A5:14–16, 22; B4:17, 20, 22–23, 40–41

*pachyderma* (sinistral), *Neogloboquadrina*

- Site 1165, B13:5–6, 11–13, 33
- Site 1166, B16:1–11
- Site 1167, B14:6

*paenestriatus*, *Ailanthipites* sp. cf. *Ailanthipites*, Site 1166, B3:43

*paleocarteri*, *Helicosphaera* sp. cf. *Helicosphaera*, Site 1165, A3:28; B11:5

*pandus*, *Tritonites*, Site 149/GC47, B3:14

panicoid phytolith, Site 1165, B5:3, 12

*paradoxa*, *Ebrinula*, Site 1166, A4:24

*Paralia sulcata*, Site 1165, A3:31

*Parebriopsis fallax*, Site 1166, A4:24

*parkeri*, *Globigerinita*, Site 1166, A4:19; B4:15

*partridgei*, *Enneadocysta*

- Site 742, B3:14
- Site 1165, B2:4–5, 8
- Site 1166, B3:4–5, 15–16, 35

*parvus*, *Podosporites*, Site 1166, B3:6

*Paucilobimorpha* (al *Tritonites*) *spinosus*, Site 1166, B3:4, 34

*pauperata*, *Laticarinina*, Site 1165, A3:26

*pelagica*, *Thalassiphora* sp. cf. *Thalassiphora*, Site 1166, B3:36

*pelagicus*, *Coccolithus*

- Site 1165, A3:28, 30; B11:4–5, 7
- Site 1166, A4:20
- Site 1167, A5:17

pellet spherical phytolith

- Site 1165, B5:5, 12
- Site 1166, B5:5, 12

*Peninsulapollis* sp. cf. *Peninsulapollis gillii*, Site 1166, B3:10

*Perfotricolpites digitatus*, Site 1166, B3:15

*Periporopollenites hexaporus*, Site 1166, B3:6, 8–9, 38

*Periporopollenites* sp. cf. *Periporopollenites polyoratus*, Site 1166, B3:43

*Periporopollenites* “*spinosus*” ms., Site 1166, B3:6, 38

*peroreticulatus*, *Retimonocolpites*, Site 1166, B3:43

*perplexa*, *Reticulofenestra*, Site 1165, A3:13, 27, 29; B11:4–7

*Phorticum clevei*

- Site 1166, A4:25
- Site 1167, A5:18

*phosphoritica*, *Deflandrea*, Site 1166, B3:4

*Phyllocladidites*, Prydz Bay, B1:11

*Phyllocladidites mawsonii*

- Site 742A, B3:14
- Site 1165, B2:4–5, 18

*Phyllocladidites mawsonii* var., Site 1166, B3:7, 11–12, 16, 43

*Phyllocladidites mawsonii* Zone, Site 1166, A4:25; B1:6; B3:7, 10–11

*Phyllocladidites reticulosaccatus* var., Site 1166, B3:7, 43

*Phyllocladidites* spp., Site 1166, B3:5

*Phyllocladus*, Site 1166, B3:9

*Planulina wuellerstorfi*, Site 1167, A5:16; B4:21

plate phytolith, Site 1165, B5:6, 12

*playfordii*, *Tigrisporites*, Site 1167, B2:6

*playfordii*, *Triplexisporites*, Site 1167, B2:6, 10, 17

*pliocenica*, *Cycladophora*

- Site 1166, A4:25
- Site 1167, A5:18

*Podocarpidites* spp.

- Site 742A, B3:14
- Site 1165, B2:10
- Site 1166, B3:5, 11, 16

*Podocarpus-Prumnopitys*, Site 1166, B3:9, 11, 14

*Podosporites microsaccatus*, Site 1166, B3:6

*Podosporites parvus*, Site 1166, B3:6

*Podosporites* spp., Site 1166, B3:5, 9, 12

*polymorphus*, *Proteacidites* aff. *Proteacidites*, Site 1166, B3:43

*polyoratus*, *Periporopollenites* sp. cf. *Periporopollenites*, Site 1166, B3:43

*Polypodiiisporites*, Site 1166, B3:10

*pompiliodes*, *Melonis*, Site 1165, B13:13

*porifera*, *Odontochitina*, Site 1165, B2:4, 8–9, 17

*praebulloides*, *Globigerina*, Site 1165, A3:22; B4:6

*praedimorpha*, *Denticulopsis*, Site 1165, A3:30, 34

*praefraga*, *Thalassiosira*, Site 1165, A3:35–36, 42–43

*praainterfrigidaria*, *Fragilariopsis*, Site 1165, A3:33

*producta*, *Reticulofenestra*, Site 1165, A3:27–28; B11:4–5

*productus*, *Reticulofenestra*, Site 1165, B11:4

*Proteacidites* aff. *Proteacidites polymorphus*, Site 1166, B3:43

*Proteacidites angulatus* var., Site 1166, B3:39

*Proteacidites* “*lapis*” ms., Site 1166, B3:39

*Proteacidites scaboratus*, Site 1165, B2:20

*Proteacidites* sp. cf. *Proteacidites kopiensis*, Site 1166, B3:39

*Proteacidites* sp. cf. *Proteacidites scaboratus*, Site 1165, B2:20

*Proteacidites* spp.

- Site 1165, B2:5
- Site 1166, B3:8, 17

*Protoellipsodinium* “*simplex*,” Site 1165, B2:4

*Protoellipsodinium* sp., Site 1165, B2:4, 7–8

*Protoellipsodinium* sp. 3, Site 1165, B2:8, 20

*Protohaploxypinus*

- Site 1165, B2:10
- Site 1166, B3:9

*Prunopyle titan*, Site 1165, A3:36

“*prydzensis*”, *Deflandrea*

- Site 1165, B2:4, 8
- Site 1166, B3:4–5, 7, 13, 16, 34

*Psammosphaera* sp. 1, Site 1165, A3:25; B4:9

*Pseudammodochium dictyoides*, Site 1166, A4:24

*Pseudoemiliana lacunosa*

- Site 1165, A3:27; B11:5
- Site 1167, A5:16–17

*Pseudoemiliana ovata*, Site 1165, B11:4

*Pseudorutilaria monile*, Site 1166, A4:24

*pseudoumbilica*, *Reticulofenestra*, Site 1165, A3:27

*pseudoumbilicus*, *Reticulofenestra*, Site 1165, B11:4

Psi Zone

- Site 1166, A4:25
- Site 1167, A5:18



*Pterocanium c. trilobum*

Site 1166, A4:25

Site 1167, A5:18

*Pterosperma* sp., Site 1165, B2:19*Pterotheca danica*, Site 1166, A4:24*Pullenia* cf. *subcarinata*, Site 1165, A3:24*Pullenia* spp., Site 1165, B13:13*punctatum*, *Eucyrtidium*, Site 1165, A3:37*punctatus*, *Ischyosporites*, Site 1167, B2:17*puncticulata*, *Globorotalia*

Site 1165, A3:22; B4:5–6, 22, 40–41; B13:13

Site 1167, A5:15; B4:18

*pynei*, *Brigantedinium*, Site 1165, B2:5, 8, 19*Pyxilla reticulata*

Site 1165, A3:30

Site 1166, A4:24

**R***regium*, *Stereisporites*, Site 1165, B2:18*Reophax*, Site 1165, B4:5, 22*Repmanina charoides*, Site 1165, B4:8*Repmanina* spp., Site 1165, A3:24*reticulata*, *Pyxilla*

Site 1165, A3:30

Site 1166, A4:24

*reticulense*, cf. *Adnatosphaeridium*, Site 1166, B3:36*Reticulofenestra asanoi*, Site 1165, B11:4*Reticulofenestra bisecta*, Site 1165, B11:5–6*Reticulofenestra daviesii*

Site 1165, A3:29; B11:5

Site 1166, A4:20

*Reticulofenestra gelida*, Site 1165, A3:27; B11:4*Reticulofenestra haqii*, Site 1165, A3:28; B11:4–5*Reticulofenestra hesslandii*

Site 1165, A3:28; B11:5

Site 1166, A4:20

*Reticulofenestra minuta*, Site 1165, A3:27–28; B11:4–5*Reticulofenestra minutula*, Site 1165, A3:27; B11:4*Reticulofenestra perplexa*, Site 1165, A3:13, 27, 29; B11:4–7*Reticulofenestra producta*, Site 1165, A3:27–28; B11:4–5*Reticulofenestra productus*, Site 1165, B11:4*Reticulofenestra pseudoumbilica*, Site 1165, A3:27*Reticulofenestra pseudoumbilicus*, Site 1165, B11:4*Reticulofenestra samodurovii*, Site 1165, A3:28; B11:5*Reticulofenestra* spp.

Site 1165, A3:27; B11:4–5

Site 1166, A4:20

*reticulosaccatus* var., *Phyllocladidites*, Site 1166, B3:7, 43*Retimonocolpites peroreticulatus*, Site 1166, B3:43*Retitriletes*, Site 1166, B3:10*Retitriletes* spp.

Prydz Bay, B2:8

Site 742A, B3:14

*Rhabdonema* spp., Site 1165, A3:31*Rhizosolenia costata*, Site 1165, A3:32; B6:5*ritscherii*, *Fragilariopsis*, Site 1165, A3:30–31*rocaensis*, *Nothofagidites*, Site 1166, B3:6*rotundum*, *Spinidinium*, Site 1166, B3:36*rotundum*, *Spinidinium* sp. cf. *Spinidinium*, Site 1166, B3:4*rotundum*, *Vozzhenikovia*, Site 1166, B3:15*Rouxia* spp., Site 1166, A4:21–22*rudata*, *Gambierina*

Site 1165, B2:3–4, 18

Site 1166, B3:6

*Rytidosperma*, Site 1165, B5:3**S***sabulosus*, *Forcipites*, Site 1165, B2:3, 18*sabulosus* var., *Forcipites*, Site 1166, B3:6, 10, 39*samodurovii*, *Reticulofenestra*, Site 1165, A3:28; B11:5*saraensis*, *Nothofagidites*

Site 1166, B3:6

Site 1167, B2:18

*scaboratus*, *Proteacidites*, Site 1165, B2:20*scaboratus*, *Proteacidites* sp. cf. *Proteacidites*, Site 1165, B2:20*Schematophora obscura*, Site 1166, B3:4, 36*Schematophora* sp. cf. *Schematophora obscura*, Site 1166, B3:36*scitula*, *Globorotalia*, Site 1165, A3:22; B4:5*sectilis*, *Battenipollis*

Site 1165, B2:8, 18

Site 1166, B3:6, 8, 10

*Selenopemphix* sp., Site 1166, B3:4, 37*Selenopemphix* sp. cf. *Selenopemphix nephroides*, Site 1165, B2:19*Selenopemphix* spp., Site 1165, B2:5*senectus*, *Battenipollis*, Site 1165, B2:3*senectus*, *Nothofagidites*, Site 1165, B2:3*senectus*, *Nothofagidites* sp. cf. *Nothofagidites*, Site 1167, B2:18*sentosa*, *Ornamentifera*, Site 1166, B3:11*simonsenii*, *Denticulopsis*, Site 1165, A3:34*simplex*, cf. *Brigantedinium*, Site 1165, B2:19*simplex*, *Densoisporites* sp. cf. *Densoisporites*, Site 1165, B2:20"simplex," *Protoellipsodinium*, Site 1165, B2:4

## smooth spherical phytolith, Site 1165, B5:5, 12

*solandri* var. *cliffortiodes*, *Nothofagus*, Site 1165, B5:5*Sphenolithus*, Site 1166, B3:11*Sphenolithus abies*, Site 1165, B11:4, 6*Sphenolithus* spp., Site 1165, A3:28

## spherical phytolith

Site 1165, B5:4–8, 12

Site 1166, B5:4–8, 12

*Spinidinium macmurdoense*, Site 1166, B3:15, 36*Spinidinium rotundum*, Site 1166, B3:36*Spinidinium* sp. cf. *Spinidinium rotundum*, Site 1166, B3:4*Spinidinium* sp. cf. *Vozzhenikovia apertura*, Site 1166, B3:37*Spinidinium* spp., Site 1166, B3:7*spinosus*, *Paucilobimorpha* (al *Tritonites*), Site 1166, B3:4, 34*spinosus*, *Tritonites*, Site 1166, B3:4, 13, 34"spinous" ms., *Periporopollenites*, Site 1166, B3:6, 38

## spinulose spherical phytolith, Site 1165, B5:5, 12

*splendidus*, *Stephanopyxis*, Site 1166, A4:24*spongothorax*, *Cycladophora*, Site 1165, A3:37*Spongotrochus? glacialis*

Site 1166, A4:25

Site 1167, A5:18

*stelligerum*, *Astrononion*, Site 1167, B4:40–41

"stellus" ms., *Stereisporites*, Site 1166, B3:38  
*Stephanopyxis grunowii*, Site 1166, A4:24  
*Stephanopyxis oamaruensis*, Site 1166, A4:24  
*Stephanopyxis splendidus*, Site 1166, A4:24  
*Stephanopyxis superba*, Site 1166, A4:24  
*Stereisporites*, Site 1166, B3:11–12  
*Stereisporites australis*, Site 1165, B2:18  
*Stereisporites regium*, Site 1165, B2:18  
*Stereisporites* sp. cf. *Stereisporites australis*, Site 1166, B3:43  
*Stereisporites* "stellus" ms., Site 1166, B3:38  
*Stictodiscus kittonianus*, Site 1166, A4:24  
*stigi*, *Ceratocyrtis*, Site 1165, A3:37  
*Stilostomella* spp., Site 1165, B4:8  
*stipulatus*, *Forcipites*, Site 1166, B3:11  
*strelkovi*, *Antarctissa*, Site 1166, A4:25  
*striata*, *Thalassiosira*, Site 1166, A4:23  
striated plate phytoliths, Site 1165, B5:4, 12  
*Striatopodocarpidites*, Site 1166, B3:9  
*Striatopodocarpidites* sp., Site 1165, B2:10, 17  
*subcarinata*, *Pullenia* cf., Site 1165, A3:24  
*subglobosa*, *Globocassidulina*, Site 1166, A4:19; B4:15, 24  
*subgranulatus*, *Trichotomosulcites*, Site 1166, B3:6  
*subgranulosus* var., *Trichotomosulcites*, Site 1166, B3:6, 11, 43  
*subhaidingeri*, *Cibicides*, Site 1165, B4:8, 10  
*subhaidingeri*, *Cibicidoides*, Site 1165, A3:24, 26  
*subplanulatus*, *Gyroidina*, Site 1165, B4:6  
*sulcata*, *Paralia*, Site 1165, A3:31  
*superba*, *Stephanopyxis*, Site 1166, A4:24  
*Svalbardella* aff. *Svalbardella hampdenensis*, Site 1165, B2:4  
*Svalbardella* sp. A, Site 1165, B2:9, 20

## T

*tasmaniae*, *Archaeosphaeridium*, Site 1166, A4:24  
*tasmaniense*, *Homotryblum*, Site 1166, B3:4  
Tau Zone  
Site 1165, A3:36–37  
Site 1166, A4:25  
*tehuelchesii*, *Nothofagidites*, Site 1166, B3:6  
*tenera*, *Eponides*, Site 1165, B4:6  
*tentula*, *Microbaculispora*  
Site 1165, B2:4  
Site 1166, B3:40  
*Tetracolporites verrucosus*, Site 1166, B3:39  
*Tetradites* sp., Site 1166, B3:39  
*Thalassiosiphora* sp. cf. *Thalassiosiphora pelagica*, Site 1166, B3:36  
*Thalassiosira elliptipora*  
Site 1165, A3:30  
Site 1166, A4:23; B6:5  
*Thalassiosira insigna*  
Site 1165, A3:32  
Site 1166, A4:23; B6:5  
*Thalassiosira insigna*–*Thalassiosira vulnifica* Subzone "a,"  
Site 1165, B6:4  
*Thalassiosira insigna*–*Thalassiosira vulnifica* Subzone "b,"  
Site 1166, A4:22  
*Thalassiosira insigna*–*Thalassiosira vulnifica* Zone  
Site 1165, A3:32  
Site 1166, A4:22, 25

*Thalassiosira insigna/inura*, Site 1166, A4:23  
*Thalassiosira inura*, Site 1165, A3:32–33; B6:5  
*Thalassiosira inura* Zone, Site 1165, A3:32–33; B6:5  
*Thalassiosira jacksonii*, Site 1165, A3:32  
*Thalassiosira kolbei*  
Prydz Bay, A1:14  
Site 1165, A3:30–32; B6:4  
Site 1166, A4:22, 28; B6:5  
*Thalassiosira kolbei* Zone  
Site 1165, A3:32; B6:4  
Site 1166, A4:22; B6:5–6  
*Thalassiosira lentiginosa* Zone  
Site 1165, A3:31; B6:4; B13:12–13  
Site 1166, A4:21; B6:5  
Site 1167, A5:14, 17; B14:10  
*Thalassiosira miocenica*, Site 1165, A3:33  
*Thalassiosira oestrupii*, Site 1165, A3:33; B6:5  
*Thalassiosira oestrupii* Zone, Site 1165, A3:33; B6:5  
*Thalassiosira oestrupii*–*Nitzschia reinholdii* Zone, Site 1165, A3:35  
*Thalassiosira oliverana*, Site 1165, A3:33  
*Thalassiosira praefraga* "a" Subzone, Site 1165, A3:35–36  
*Thalassiosira praefraga* "b" Subzone, Site 1165, A3:35–36  
*Thalassiosira praefraga* "c" Subzone, Site 1165, A3:35  
*Thalassiosira praefraga* Zone, Site 1165, A3:35–36, 42–43; B4:10  
*Thalassiosira striata*, Site 1166, A4:23  
*Thalassiosira striata*–*Thalassiosira vulnifica* Zone  
Prydz Bay, A1:14  
Site 1166, A4:23  
*Thalassiosira torokina*  
Site 1165, A3:33  
Site 1166, A4:21  
*Thalassiosira torokina* Zone, Site 1165, A3:33  
*Thalassiosira vulnifica*  
Site 1165, A3:32; B6:4  
Site 1166, A4:22–23, 28; B6:5  
*Thalassiosira vulnifica* Zone  
Prydz Bay, A1:14  
Site 1165, A3:32; B6:4  
Site 1166, A4:22, 25  
*Thoracosphaera* sp., Site 1167, A5:16–17  
*Tigrisporites playfordii*, Site 1167, B2:6  
*titan*, *Prunopyle*, Site 1165, A3:36  
*torokina*, *Thalassiosira*  
Site 1165, A3:33  
Site 1166, A4:21  
*torosa*, *Corollina*, Site 1167, B2:6–7, 17  
*triangularis*, *Hemidiscus*, Site 1165, A3:33, 35  
*Tricerasypris antarctica*  
Site 1166, A4:25  
Site 1167, A5:18  
*Trichotomosulcites subgranulatus*, Site 1166, B3:6  
*Trichotomosulcites subgranulatus* complex, Site 1166, B3:7  
*Trichotomosulcites subgranulosus* complex  
Site 1165, B2:4  
Site 1166, B3:5–6, 12  
*Trichotomosulcites subgranulosus* var., Site 1166, B3:6, 11, 43  
*Tricolpites* sp. A, Site 1166, B3:15  
*Tricolporites apoxyxinus*, Site 1166, B3:11, 39

*Tricolporites apoxyexinus* Zone, Site 1166, B3:10–11  
*Tricolporites confessus*, Site 1166, B3:11  
*Tricolporites lillei*, Site 1165, B2:3, 18  
*Tricolporites* sp. cf. *Tricolporites apoxyexinus*, Site 1165, B2:18  
*Tricolporites/Phimopollenites* sp., Site 1165, B2:18  
*Trifarina angulosa*  
 Site 1166, B4:15  
 Site 1167, B4:21, 23–24, 40–41  
*Trifarina* spp., Site 1167, B4:17  
*trilobum*, *Pterocanium* c.  
 Site 1166, A4:25  
 Site 1167, A5:18  
*Trinacria cornuta*, Site 1166, A4:24  
*Trinovantedinium* sp., Site 1165, B2:5  
*Triplexisporites playfordii*, Site 1167, B2:6, 10, 17  
*Triprojectacites*, Site 1166, B3:6  
*Trisaccites* sp., Site 1167, B2:18  
*Tritonites pandus*, Site 149/GC47, B3:14  
*Tritonites spinosus*, Site 1166, B3:4, 13, 34  
*Trochammina* spp., Site 1165, A3:24; B4:8, 14  
*tuberculatus*, *Dilwynites* sp. cf. *Dilwynites*, Site 1166, B3:42  
*tubiferum*, *Hystrichosphaeridium*, Site 1166, B3:15, 36  
*tumulus*, *Exesipollenites*  
 Site 1165, B2:3, 5, 8, 17  
 Site 1166, B3:40  
 Site 1167, B2:6–7, 17  
*Turbiosphaera filosa*, Site 1166, B3:15  
*Turbiosphaera* sp. cf. *Turbiosphaera filosa*, Site 1166, B3:35

## U

*Umbilicosphaera jafarii*, Site 1165, A3:28; B11:5  
*umbonatus*, *Oridorsalis*, Site 1165, A3:23, 26; B4:7, 9  
*umbonifera*, *Nuttallides*, Site 1165, B13:7  
*umbonifera*, *Osangulariella*, Site 1165, B13:7, 13  
*unicavus*, *Catapsydrax*, Site 1165, A3:23; B4:6  
 Upsilon Zone  
 Site 1165, A3:36  
 Site 1166, A4:25  
*Uvigerina bassensis*, Site 1166, A4:19  
*Uvigerina hispidocostata*, Site 1167, B4:21, 23, 40–41  
*Uvigerina* spp., Site 1167, B4:17

## V

*variabilis*, *Cooksonites*, Site 1167, B2:8, 17  
*variabilis*, *Discoaster* sp. cf. *Discoaster*, Site 1165, B11:4, 6  
*variabilis*, *Globorotaloides*, Site 1165, A3:22; B4:6  
*variable*, *Isabelidinium*, Site 1166, B3:10, 41  
*vema*, *Helotholus*, Site 1165, A3:36  
 verrucose spherical phytolith, Site 1165, B5:5–7, 12  
*Verrucosiporites* sp. A, Site 1166, B3:11  
*verrucosus*, *Tetracolporites*, Site 1166, B3:39  
*victorianum*, *Impagidinium* sp. cf. *Impagidinium*  
 Site 1165, B2:4  
 Site 1166, B3:37

*Virgulina* spp., Site 1165, B4:8  
*vitrea*, *Epistominella*, Site 1165, A3:23–24, 26; B4:8, 10  
*Vozzhenikovia apertura*  
 Site 742, B3:14  
 Site 1166, B3:15  
*Vozzhenikovia rotundum*, Site 1166, B3:15  
*Vozzhenikovia* sp. cf. *Gippslandica extensa*  
 Site 1165, B2:4  
 Site 1166, B3:4, 35  
*Vulcanella hanna*, Site 1166, A4:24  
*vulnifica*, *Thalassiosira*  
 Site 1165, A3:32; B6:4  
 Site 1166, A4:22–23, 28; B6:5

## W

*waipawensis*, *Nothofagidites*, Site 1166, B3:6  
*weaveri*, *Fragilariopsis*, Site 1165, A3:32; B6:4  
*wellmanii*, *Osmundacidites* sp. cf. *Osmundacidites*, Site 1166, B3:41  
*Wollemia*, Site 1166, B3:9, 11  
*woodi*, *Globorotalita*, Site 1165, A3:23  
*woodi*, *Globoroturborotalita*, Site 1165, A3:22; B4:6  
*wuellerstorfi*, *Planulina*, Site 1167, A5:16; B4:21  
*Wuroia corrugata*, Site 1166, B3:10, 41

## Z

*Zea mays*, Site 1165, B5:3  
*zoharyi*, cf. *Hemicystodinium*, Site 1166, B3:36  
 zones (with letter prefixes)  
 AN3, Site 1165, A3:23; B4:6  
 AN5, Site 1165, A3:22; B4:6  
 AN7, A4:18; A5:14; B4:13, 17  
 CN1–CN2, Site 1165, A3:28, 38  
 CN1–CN3, Site 1165, B11:5  
 CN2–CN3, Site 1165, A3:28; B11:5  
 CN4, Site 1165, A3:28  
 CN5, Site 1165, B11:6  
 CN5–CN11, Site 1165, A3:27  
 CN5a, Site 1165, B11:4  
 CN5b–CN9, Site 1165, B11:4  
 CN7–CN9, Site 1165, B11:6  
 CN8, Site 1165, A3:27; B11:4  
 CN9, Site 1165, A3:27; B11:4  
 CN12, Site 1167, A5:14  
 CN12–CN14a, A3:27; A5:17  
 CN13b, A5:14, 17, 22; B11:4  
 CN13b–CN15, Site 1165, B11:6  
 CN14a, A5:22; B11:4  
 CN14b, Site 1165, B11:4  
 CN15, Site 1165, A3:27; B11:4  
 CP19b–CN3, Site 1165, A3:28  
 P8, Site 1166, B3:5  
 P9, Site 1166, B3:5  
 P10–11, Site 1166, B3:5