Index

Note: Page numbers in italic denote figures. Page numbers in bold denote tables.

abrasion surface, marine 59–60
southeast Australia 57–68
evolution 59–60

Acacia aneura 99, 100, 101
Adaminaby Fault 255
Adaminaby Group 272, 273, 274–275, 276–278
Al, cosmogenic nuclide dating 130, 226–227, 249, 250
Albany, Princess Royal Harbour, sheltered beaches 25, 27
Alice Springs, NT
rain events 94–95
rainless intervals 94, 96
storm events 92
andesite, weathering 168
Animal Creek glaciation 168–169
Anmatyerre Clay 129
Antarctic ice sheets 123, 125, 127
Anticline Cave 302
anticlines, fault propagation 255
ants 103, 104
Aphaenogaster barbigula 103
archaeology
artefacts 74–76, 78–79, 80
and geosciences 71–72, 78–81
Holocene 73–74
living floors 74–75, 78
Southern Forests Archaeological Project 75
see also geoarchaeology
arid zone see drylands
aridity
chronology 128–131, 132
evolution 123–128, 159
landforms 128–132
age variation 134–135
climatic threshold 133–134
onset 132–135
Arnhem escarpment, Tin Camp Creek, soil-mantled slope erosion rate measurement 229–230, 231, 232–233, 234, 236, 238–239
artefacts, archaeological 74–76, 78–79, 80
Arunta Block 153, 155
Ash Reef Fault 257, 259
Ashburton–Davenport Ranges 153
Ashford Cave 298
Atheron plateau 8
Australian–Antarctic Discordance 244, 249
Avon River, incision rates 249–250
Barkly Dunefield 142, 144, 156
influence of climate 147
Barron River 9, 10, 13, 14
basalt
Quaternary, Atheron plateau 8
Tertiary, Lachlan River catchment 270–272, 273, 274–283
Bass Canyon 45, 51
Be, cosmogenic nuclide dating 130, 226–227, 237, 249, 259, 260
beach profiles, low-energy beaches 24, 25, 26, 27–28, 30–40, 39
beaches
fetch-restricted 23, 24
low energy, sandy, SW Australia 23–40
surge-dominated 23, 25, 37–40
wave-dominated 37–40
Bega area, erosion rate measurement 227–229, 232
Belfry Cave, Timor Caves 298
Bellenden Ker granite 8
bettong 103
Bettongia lesueur 103
Beverdale Basalt 272, 273, 274, 276, 278
Billa Kalina Basin 125, 251, 252
biota
and climate change 89
drylands 89–98, 98–108
human impact on 88
impact on runoff 97–104
Birdsville, sand drift 145, 147
Blanchetown Clay 129
Bobadil glaciation 168–169
Boco glaciation 168–169
Boorowa basalt 271
Borenore Caves 292
bornhardts, Yilgarn Craton 309, 310
Br, speleothems, Tasmania 177, 181
Brachina Silts 212–215
breakaways, Yilgarn Craton 309, 314, 317
Bremer Fault 254
Broken Bay, continental shelf 59, 61, 62
Brown Mountain, soil-mantled slope erosion rates 227–229, 232, 234, 238, 239
Brunhes–Matuyama palaeomagnetic boundary 129, 167
Buchan Caves 294
Bulgoodac Glaciation 167, 168–169
Bulloo overflow 159
Bungonia Caves 293, 294, 295, 301
Bungonia Gorge 292, 295
Burra Fault 254, 256
Butzer, K.W., Environment and Archaeology (1971) 72
CaCO3, Murray Canyons Group sediments 46, 50
Cadell Fault 255, 258
Cadman Fault 255
Cairns
climate 8
sand beach ridge plains 9, 10, 11, 13, 14
deposition mechanisms 17–18, 20–21
modelling 18–19
tropical cyclone Justin (1997) 20
Cairns Bay, Holocene sand 10, 13
Calingiri Fault 255
Cambrai Fault 254
canyons 43, 44
Murray Canyons Group 43–52
carbon, Murray Canyons Group sediments 46, 48
carbon isotope variation, speleothems, Tasmania 177–180
Carpentaria Basin 151, 155
Cassia 98
Casuarina Point 13, 14
Cathedral Cave 295, 301, 303, 304

caves
age 299, 301
anticline 300, 302
blades 298, 303
breakdown 294, 295, 303–304
INDEX

Cockburn Sound
Garden Island, sheltered beaches 24
low-energy beaches 24, 25, 26–40
beach profiles 27–28, 30–40
water-level ranging 28–30
waves 30, 31, 33, 34, 35, 36–37
winds 28, 31, 33

Colong Cave 300, 301
Como Beach
fetch-restricted beaches 24, 25, 26–40, 40
beach profiles 27–28, 30–40
sediment size 36
water-level ranging 28–30
waves 30, 31, 33, 34, 35, 36–37
winds 28, 29, 31, 33

compression, tectonic 245–246
continental margin
eastern Australia 58–59
marine abrasion 60

continental shelf
asymmetry 247–248
NE Queensland 11
SE Australia 57, 58, 59, 60–64
evolution 66–68
marine abrasion surface 63–64
outer sediment wedge 65, 66, 67

Coolmna Plain karst 292
coolibah see Eucalyptus coolabah
cosmogenic nuclide see dating

Cowley Beach
sand beach ridge plains 9, 11, 13–14, 15, 16
deposition mechanisms 17–18, 20–21
modelling 18–19
tropical cyclone Larry (2006) 17–18, 20
crabhols 101

Creek Cave, Wombeyan Caves 302
Crocker Dunefield 144
Cudda Springs, archaeological site 74, 77
cupolas, caves 295, 297, 298
cyanobacteria, soil crusts 102
cyclone pumping 12
cyclones, tropical
Justin (1997) 20
Larry (2006) 17–18, 20
NE Queensland
sand transport 7–8, 12–13, 16
beach ridge plain formation 16–21

Darling Riverine Plain 151, 155
mapping 143
Darwin glass 76
dating
cosmogenic nuclide
dunefields 130–134
erosion rates 226–227, 230–232, 235–236,
236–239
ice advance 169–171
neotectonism 259, 260
luminescence 14
dunefields 128, 130, 132, 134, 142
Flinders Silts 195, 196–207, 208–209
oxygen isotope 312–313
speleothems, Tasmania 177–180
Yilgarn Craton 313–318, 315–316
palaeomagnetic 128–129
Yilgarn Craton 312
radiocarbon 13, 16, 128
Flinders Silts 194–195
INDEX

Flinders Silts (Continued)
  radiocarbon dating 194–195
  Wilkawillina Silts 215–218
Flogged Horse Cave 298
flooding, and human settlement 79–80
floodplains, clay 159
Flying Fish Point, sand beach ridge plain 9, 11
Flying Fortress Cave 301
folding, role of intraplate stress 252–253
Fowlers Creek, streamflow 91, 105, 106
Fowlers Gap
  runoff 95, 97
  storm events 79–80, 90, 92
Fraser Island 60, 67, 68, 128
Garden Island, sheltered beaches 24, 26
Gascoyne Dunefield 144
influence of climate 145, 147
influence of topography 151–153, 155
Fraser Island 60, 67, 68, 128
Gibson Desert 141, 144
Giles, WA
  rain events 94–95
  rainless intervals 94, 96
Glaciation
  Bulgbac 167, 168–169
  Linda 166–167, 168
  Moore 169
  Tasmanian climate 172
  Early Pleistocene 165–167, 168
  and karst processes 172–174, 180
  Late Pleistocene 170–171
  Middle Pleistocene 167–170, 168
  glacio-karst, Tasmanian 172–174, 180
Glen Helen, rocky slope erosion rate measurement 229, 231–233, 235, 237, 238
Goanna, sheltered beach 24
Gondwana, Jurassic rifting 121
granite
  geomorphology, Yilgarn Craton 309, 311
  NE Queensland 8, 13
  Upper Lachlan River 274, 275, 276, 278, 282
granodiorite, erosion rates 238
Great Artesian Basin, lithology 156
Great Barrier Reef 11
  waves 12
Great Dividing Range 8
Great Sandy Desert
  dunefield 143, 144, 150, 156
  influence of climate 145, 147
  influence of topography 151–153, 155
Great Victoria Desert
  dunefield 142, 143, 144, 150, 156
  influence of climate 147
  influence of topography 151–153, 155
Green Hill volcano 8
  ground shaking, coseismic 259–260
  groundwater, recharge 91
  gum, red see Eucalyptus camaldulensis
  guyots 60
Hamilton Basin 125, 127
Hamilton Moraine 169–170
hearth chronology 80
Hogans-Fossil Cave 301
Holocene
  dryland vegetation 112
  human–environment interaction 73–74, 77, 78
  sand beach ridges, NE Queensland 13–14, 15
  sea-level change, NE Queensland 8
Hookina Silts 209–212
  horns, Upper Lachlan River 273, 274, 275, 277–278, 282
  Hortonian overland flow 97, 103
Hunter River, continental shelf 61
Hyden Fault 255
hydroclimate, drylands 89–97
hydroisostasy 8
Indo-Australian Plate 243, 244
  stress field 244–246
inselbergs, Yilgarn Craton 310
Interdecadal Pacific Oscillation 146, 147
inundation, marine, and sand beach ridge formation 16–21
Jaramillo event 159
  on caves and karst 292–293
  Jenolan Caves 291–292, 294, 295, 297, 300, 301, 302, 303, 304
  Jinmium, archaeological site 74, 76
  Justin, tropical cyclone (1997) 20
Kangaroo Island 44, 124, 131
Kamalntoo Fold Belt 290
Kantappa Fault 254
kaoilinite, weathering, Yilgarn Craton 309, 311–318
Karrak field 291
karst
  eastern Australian caves 289, 290, 292, 293–294, 299–301
  and glaciation, Tasmania 172–174, 180
  work of Joseph Newell Jennings 292–293
  see also palaeokarst
Kiewa Fault 255
Kings Canyon, rocky slope erosion rate measurement 231, 232, 235, 237–238
knick-point retreat 67, 258, 269–270
  Upper Lachlan River system 274–277, 281–283
Kosciusko Uplift event 257, 293
Kybean Caves 290
Lacepede Shelf 44
biogenic carbonate production 50
Lachlan River 270–271

INDEX
INDEX

incision 271, 272–283
influence of lithology, numerical simulation 279–283
long profile DS analysis 274–279
left-bank tributaries 276–277, 278
right-bank tributaries 274–276, 277–279
Lachlan–Thompson Fold Belt, caves 289, 290, 300, 304
Lake Amadeus 124, 129, 133, 134
Lake Baraba, archaeological site 74, 78
Lake Buchanan, climate 124, 128, 133
Lake Bungunia 129, 134–135, 157, 158, 253
Lake Edgar Fault 255, 256
Lake Eyre 124, 129, 133
dunefields 142, 144
intermediate-wavelength deformation 253
Lake Eyre Basin 90, 125, 126, 127
intermediate-wavelength deformation 251
Lake Frome 124, 133
Lake Gairdner 124, 133
Lake George archaeological site 74, 76, 78
climate 124, 128
Lake Gregory 133, 134
Lake Kanyapella 258
Lake Lewis 124, 129, 133
Lake Lefroy 124, 129, 134–135
Lake Lewis 124, 129, 133
Lake Licoln, tropical cyclone (2006) 18
Lake Lort River Fault 255
luminescence see dating
Lynch’s Crater, archaeological site 74, 76, 78
Macalister Range 8
MacDonnell Ranges 153
rocky slope erosion rate measurement 229, 231–232, 237, 239
Mackintosh rockshelter 74, 75
macropods 88
Main Cave, Timor Caves 293, 300
Malbon–Thompson coastal range 8
mallee 98
Mallee Dunefield 143, 144, 150, 151, 158
formation 157
influence of climate 145, 147, 159
mantle processes 246
Marakoopa Cave, Mole Creek 303, 304
Marryat Creek Fault 257
marsupials 88, 103
Matilda Bay, Perth, fetch-restricted beach 24, 25, 26
Meckering Fault 255, 256, 257
Medieval Climatic Anomaly 80
megafauna
drylands 88, 103
extinction 77
Melaleuca glomerate 107
meltwater, Tasmania 173–174
Menzies Line 310, 311
metasediments, Middle Palaeozoic, NE Queensland 8
Mg, speleothems, Tasmania 177
Middle Eocene Climatic Optimum 122
Millendella Fault 254, 256, 258
Miocene, climate 122–123, 126–127
Miocene Climatic Optimum 122, 123, 127
Mission Beach
sand beach ridge plains 9, 11
tropical cyclone Larry (2006) 18
Mole Creek Caves 296, 300, 303, 304
Mole Creek karst 292
Moore Glaciation 169
Moparabah Cave 298
moraines, Tasmania 166–168, 169–170, 171, 174
Morgan Fault 254, 259
mosaics, vegetation 99–101, 112
Mt Etna 124, 128
Mt Lofty Ranges, deformation 258–259
Mt Margaret Fault 254
Mt Narryer Fault 255
Mt Sonder, rocky slope erosion rate measurement 229, 231–232, 233, 235, 237–239
mulga 99, 100, 101
Mulgrave Corridor 8
Mulgrave River 9, 10, 13
Mulvaney, D.J. and Golson, J., Aboriginal Man and Environment in Australia (1971) 72
Mundie Mundi Fault 254
Murninnie Fault 256
Murray Basin 125, 127
subsidence 252
Murray Canyons Group 43–52, 44
sediments 44, 45–52
biogenic 50–51
bioturbation rates 47, 48–49
present-day 48–50
sediment accumulation rates 46–48
sediment focusing 47–48, 51–52, 51
sediment slides 51–52
INDEX 325
INDEX

Murray River 43, 44, 50
coseismic diversion 258–259
Musgrave Block, dunefields 153, 155
My Cave, Mole Creek 296

Nahal Arava, rain events and flooding 96
Nahal Eshtemoa, streamflow 105
Namib Silts 186, 209, 218
Narabeen Beach, continental shelf 59, 63, 64
Negev Desert, climate change and landscape 110
neotectonism 159
New England Fold Belt, caves 289, 290
New South Wales
archaeological record 74, 80
continental shelf 59, 60–64
dryland rainfall 92, 93
marine abrasion surface 57–68
New Zealand, glacial record 179–180
Newcastle, continental shelf 59, 61
Newell Beach, sand beach ridge plains 10
Ngaltinga Clay 131
Norah Head, continental shelf 61, 62
Nothofagus cunninghamii 175, 176
Nullarbor Plain 156
limestone 126, 127
palaeo-shoreline features 248, 249
Nunamira rockshelter 74, 75
Nundoo, Fowlers Gap
artefacts 80
palaeofloods 79–80
Nunnock River, soil-mantled slope erosion rates 227–229, 232, 238
Ochre Cove Formation 131
Oligocene, climate 122, 125, 126
Onadatta, SA
rain events 94–95
rainless intervals 94, 96
Otway Ranges, faulting 255, 257, 258
oxygen isotope analysis
speleothems, Tasmania 177–180; see also dating
Padthway uplift 250, 252, 253
Palaeocene, climate 121, 122, 124–125, 126
palaeoenvironment, and archaeology 72
palaeokarst 293–294, 300, 301
see also karst
palaeomagnetism see dating
palaeosols 130
Palaeozoic, Middle, metasediments, NE Queensland 8, 13
Para Fault 254
paragenesis, caves 301, 303
Paralana Fault 254
parna see dust, aeolian
partitions, caves 295
Pb, Murray Canyons Group sediments 44, 46–47, 48, 49
Phyllocladus aspleniifolius 175, 176
Pilbara Block, dunefields 155
planation, marine 60, 65–67
plants see vegetation
platforms, rock, polycyclic 58, 65
playa lakes
chronology 128–129
hydrological threshold 133–134
Pleistocene
climate 127–128, 132, 172
Early, glaciation, Tasmania 165–167, 168
Equilibrium Line Altitudes, Tasmania 172
Late, glaciation, Tasmania 170–171
Middle, glaciation, Tasmania 167–170, 168
sand beach ridges, NE Queensland 13–14
Pliocene, climate 122, 123, 127
Point Walter, Perth, fetch-restricted beach
pollen in archaeological record 78
Late Quaternary, Tasmania 174–176, 180
Pool of Cerberus Cave 297
Port Douglas, sand beach ridge plains 9, 10
Port Hacking, continental shelf 59, 61
Port Stephens, continental shelf 59, 61, 63
Princess Royal Harbour, Albany 25, 27
fetch-restricted beaches
beach profiles 27–28, 30–40
water-level ranging 28–30
waves 30, 31, 33, 34, 35, 36–37
winds 28, 31, 33
Punchbowl Cave, Wee Jasper 293, 303
quartzite, erosion rates 237
Quaternary
archaeology 72–81
basalt, Atherton plateau 8
human-environment interaction 72–81
sedimentary record, palaeoclimate 111
sediments, NE Queensland 8, 10, 13
Tasmania
environmental change, speleothems 176–181
glaciation 165–181
climate 172
pollen record 174–176, 180
Queensland, NE
bathymetry 11
climate 8
continental shelf 11
sediments 11–12
wave energy 12–13, 16, 17
environment 8–13
geology 8
sand beach ridges 7–21
winds 12–13, 16
Ra, Murray Canyons Group sediments 46
Rabbit Skull Cave 302
radiocarbon see dating
rainfall
drylands 87, 88, 89, 90–91
event structure 92
spatial variability 92–95
dunefields 145, 146
rebound, isostatic, denudational 268, 270–271, 281
regolith, Yilgarn Craton 311–313
oxygen isotope dating 313–318
Revenge Formation 129
ridges see sand beach ridges
River Cave, Jenolan Caves 291, 301
River Lethe, Jenolan Caves 302
rivers, bedrock, post-orogenic 268–283
rock slopes, erosion 226, 230–232, 237–239
rockshelter, Tasmania 75–76
Rosedale Fault 257
Roysalt Formation 129
runoff
drylands 95–96, 103–104, 110, 112
role of biota 97–104
dunefields 149
INDEX

Russell Heads, sand beach ridge plain 9, 10–11
Russell-Mulgrave Shear Zone 8
sand
deserts 129–131
dune fields
activation threshold 134
age variation 134
chronology 129–131
formation and distribution 141–160
mapping 141, 142–143
origin and transport 157
transport
cyclones, NE Queensland 7–8, 16
marine abrasion surfaces 67–68
sand beach ridges
NE Queensland 7–21, 9
chronology 14–16
origin 16–18
sand drift 145–146, 147, 148
sandstone, erosion rates 237–238, 239
scotia 291, 292
sea-floor spreading, Tasman Sea 58–59, 65
sea-level
Holocene, NE Queensland 8
post-Eocene, New South Wales 65
sediments
aeolian, chronology 129–131, 132–133
Murray Canyons Group, focusing 47–48, 51–52, 51
palaeomagnetic dating 128–129
SE Australian continental shelf 63
detritus removal 67–68
outer sediment wedge 65, 66, 67
see also metasediments; sand
seismicity
geomorphological implications 258–260
profiles, Sydney coast sediments 61, 62, 63
zones 253, 255–258
Shark Bay, sheltered beach 24
Shoalhaven Fault 255
shoaling 23, 30
shoreline elevation, variation 248–249, 253
Signature Cave, Wee Jasper 298
silcrete 156
silt see Flinders Silts
Simpson Desert
dune fields 143, 144, 150, 151
dating 124, 131, 134, 141
formation 157
influence of climate 145, 147
Sinai Silts 186
snowline, Quaternary, Tasmania 172
Smag, soil-mantled slope erosion rates 227, 228, 232, 238
Soda Mountains, USA, climate change and landscape 112
soil properties, drylands
biological crusts 102, 111
ecohydrology 95–97
effects of vegetation 98–99
soil-mantled sites, erosion 226, 227–230, 232–236
sonar, sidescan, SE Australian continental shelf 61–63, 64
South Australia
dryland rainfall 92, 93
loess 185–220
see also Flinders Silt
southern Australian volcanic field 250, 252
Southern Forests Archaeological Project 75
speleogenesis 295, 299
speleogenesis, hypogene 295, 298, 299, 303
speleothems, Tasmania 173, 174
environmental change record 176–181
spinifex 98, 143, 145
Sprigg Canyon 43, 45, 46, 48, 49
sedimentation 48, 49, 50
Sr, speleothems, Tasmania 177, 178, 181
stalagnites, Tasmania 177–180
Stony Desert, Sturt's 142, 151, 157
storm surges
and sand beach ridge formation 8, 16–18
modelling 17, 18–19
storms, drylands 92
strandplain, Otway Range 255
strath terrace formation 109–110
stream damming, coseismic 258
stream gradients 249, 253, 258
stream incision 269–283
influence of lithology, numerical simulation 279–283
streamflow, drylands 91
channel processes 104–108
stress, intraplate 244–246
Strzelecki Desert
dune fields 143, 144, 151
dating 141, 142
formation 158, 159
influence of climate 145, 147
Stud Creek, archaeological site 74, 80
Sub-tropical High Pressure System 123
subsidence
East Australian continental margin 58–59
North Australian continental margin 249, 252
surge, low-energy beaches 29–30
Swan River Estuary, Como Beach, fetch-restricted beach 24, 25, 27
SWAN shallow water wave model 17
Sydney coast 58
continental shelf 59, 60–64
marine abrasion surface 59, 63–68
Sydney-Bowen Basin 290
Szemlő-Hegyi Cave 294
Tachyglossus aculeatus 103
Tanami Desert 144
Tamai Fold Belt 289
Tasman Sea
aeolian sediments 131, 135
sea-floor spreading 58–59, 65
Tasmania
Quaternary 165–181
climate change, pollen records 174–176, 180
environmental change, speleothems 176–181
glaciation
cclimate 172
Early Pleistocene 165–167, 168
Equilibrium Line Altitude 172
Late Pleistocene 170–171
Middle Pleistocene 167–170, 168
glaciokarst 172–174, 178
rockshelters 74, 75–76
Tasmanic Caves 289–305
Tawonga Fault 255
teatree 107
tectonism
and geomorphology 243–260
NE Queensland 8
termite 103, 104
Texas Caves 293
Th, Murray Canyons Group sediments 44, 46, 48–49, 50
Thermocline Cave 296

tides
  range, low-energy beaches 26, 28–30
and sand beach ridge formation 17–18
Tilmouth Beds 129
Timor Caves 293, 298, 300
Tin Camp Creek, soil-mantled slope erosion rate
measurement 229–234, 256, 238, 239
Tinaroo granite 8
topography, dynamic 246, 249
Torrens Basin, intermediate-wavelength deformation
250–251, 252, 253
transpression 246
trees, in dryland stream processes 104–108
Triodia 98, 143, 145
Tully Heads, sand beach ridge plains 9, 11
Tyler Pass, soil-mantled slope erosion rate measurement 229,
230, 233, 235, 238, 239
Tyrrell Beds 129
Uluru Clay 129
uplift
  dynamic topographic, SW Australia 249–250, 252, 253
  isostatic, Lachlan River 270–271, 281
  southern Australian volcanic field 250, 252
uranium
Murray Canyons Group sediments 46, 48, 50
speleothems, Tasmania 177, 178
valleys, incised 65
Vancouver Peninsula, fetch-restricted beach 24, 25
Varanus gouldii 103
vegetation
  drylands 88, 91
  mosaics 99–101, 112
  role of plant litter 98–99
  and soil hydraulic properties 98–99, 112
  trees, and stream channel flow 104–108
  human management 78
Late Quaternary climate change, Tasmania 174–176
volcanism, basaltic 58–59, 252, 270–283
Waratata Fault 255, 257
water, hypogene 304
water-level ranging, low-energy beaches 28–29
waves
  attenuation 23, 36–37
  and formation of beach ridge plains 8, 16–18, 20–21
  modelling 18–19
low-energy beaches 30, 31, 33, 34, 35, 36–37
NE Queensland, continental shelf 12–13
weathering
  change of regime 131
  glacial 166–168
  karst, Tasmania 172–174
  Yilgarn Craton 309, 311–318
  oxygen isotope dating 313–318
Wee Jasper Caves 293, 296, 298, 303
  karst 292, 293
Wellington Caves 290, 292, 295
Western Australia
dryland rainfall 92, 93
low-energy sandy beaches 23–40
Western Desert, archaeological sites 74
Westland ice advance 180
Wheeo Basalt 272, 273
Wilkatana Fault 254, 256, 257–258
Wilkawillina Silts 215–218
Willandra Lakes, archaeological sites 73, 74
Willunga Fault 254
Wiluna, storm events 92
winds
dunefield formation 129, 134, 145–146, 158
  and formation of beach ridge plains 16–18, 20
  low-energy beaches 28, 29
NE Queensland 12–13, 20
Wimmati Beds 129
Wiso Dunefield 144, 145, 156
influence of climate 147
Wombeyan Caves 290, 300, 301, 302
Wonga Beach, sand beach ridge plains 9–10
Woomera, SA
  rain events 94–95
  rainless intervals 94, 96
Wyanbene Cave 294
Wyangala Batholith 273, 274–275, 276, 278
Yessabah Limestone, caves 304
Yilgarn Craton 310
dunefields 153, 155, 156
  granite geomorphology 309, 311
  weathering 309–318
  history 311–313
  oxygen isotope dating 313–318
  zircons 156
Yule Point, sand beach ridge plains 10
zircons, dunefields 156