

SUBJECT INDEX

Journal of Coastal Research

Annual Index Vol. 1, (Nos. 1-4) 1985

- "A-Terrace," 336, 341
Abrasion platform, 293
Abutilon pannosum, 281, 285
Abutments, scour, 390
Acacia
ehrenbergiana, 281
tortilis, 281, 282
Acanthastrea, reef corals of China, 68
Accretion
shoreline change, 2
rates, 32
Accretionary ridge and runnel
topography, 358
Acropora
China, 60, 62
French Polynesia, 170
rotumana, 170
Actinopterychus splendens, 277
Aerobic nitrification, 114
Aeluropus massauensis, 285
Aggradate, mudflats, 31
Aggradataion, St. George Island, 274
"Aggradation deficit," 32
Aggradational landforms, 334
Airy wave theory, 235
Alabama passes, fresh water, 276
All-Planet Synod, 1(2), vi
Alluvial diamonds, 329
Alveopora, China, 69
American beachgrass - see *Ammophila brevigulata*
Ammonia beccarii, 269, 271, 272, 274, 276
Ammonium
excretion, 111
flux, 113
Ammophila brevigulata (American beachgrass), 51, 53
Ammotium salsum, 269, 271, 274, 277
Amphipod *corophium volutator*, 115
Anadara
antiquata, Philippines, 241, 244
granosa, West Malaysia (gametogenic cycle), 241, 244
subcrenata, Korea, 241
unflata, 241
Anaerobic nitrate reduction, 114
Angle of repose, 365
Anomia simplex, 273
Anoxia, 11, 18
Apron reefs, 167
Artificial nourishment, beaches, 49, 54
Army Corps of Engineers Field Research Facility (FRF), 152
Arzal Dam, discharge, 13
Asclepiadaceae, desert shrub, 280
Astreopora
reef corals of China, 63
myriophthalma, 170
Atlantic
lagoon sediments, 144
Period, 141
seaboard, 30
Atoll, 59, 165
Auliscus pruinosus, 277
"Average profiles," 133
Avrainvillea, reef edges of atolls, 169
"B terrace," 341
Baccharis halimifolia, (groundsel tree), 32
Backbarrier transects, 190
Backswamp
description, 174
sequence, 178
Backwash, 133 375, 378
Balanophyllia, China, 68
Bar longshore, 232
Barchan dunes, 337
Barchanoid ridge dunes, 337
Barges, 48, 49, 54, 164
Barotropic M_2
tide dynamics, 128
Long Island Sound, 117
Barred beach, 231
Barrier
beaches, Port Felix, 172
deposits, 196
island, 1, 38, 39, 267
island dynamics, 1
island morphology, 2
spit segmentation, 276
types, Mid-Atlantic islands, 1
Basins, glacially over-deepened, 353
Beach
artificial nourishment, 49, 54
barrier, 231
berm, 130, 137, 139
chenier, 25, 27
clastic, 129
deposits, 175
dredging, 47
ecology, 151
erosion, 47
lag, 353
lakes, 361
linear, 353
mainland, 275-276
maintenance, 53
mining operation, 330
morphology, 136, 154
pocket, 359
processes, 151
profile, 129, 187
renourishment, 47
ridge and runnel, 358
ridges, 51, 267, 270, 275, 343, 344
rollover processes, 35
sands, 343
scarp, 364
scraping, 47, 54
shelf profile, 355
slope, 151
survey, 187
trimming, 53
volumetric changes, 360
Beachrock, 181
Bed stability, 365
Bellucina amiantus, 273
Benguella Current, 331
Benthic metabolism, 109
Benthic processes, 109
"Berg," hot, easterly (mountain) winds, 337
'Berm,' 130, 137, 139
Berm development, 129, 139
Bidirectional littoral drift systems, 359
Biloxi Formation, 271, 267
Biloxi Unit, 271
Biological cycles, coastal and estuarine systems, 109
Biomass, 257
Biotopes, 273
Bioturbation, 109
Birch-oak forests, Boreal Period, 143
Bivalve shells, 365, 368
Blackgrass - see *Juncus*
Blackrush - see *Juncus*
Blepharis edulis, 281
Blue crab - see *Callinectes sapidus*
Boreal Period, 143
Bottom anoxia, Bay of Vilaine, 12
Bottom tidal currents, 389, 392
"Boulder kopjes," 335
Brackish foraminifer biotopes, 276
Bursa bufonia, 170
Breaker
collapsing, 347
type, 233, 249
Breakwater, 140
Bronze Age, 141
Brown algae, 169 see also *Choospora minima*; *Ectocarpus breviar-ticulatus*; *Hydroclathrus clathrus*
Brownian motion, 264
Bruun Rule, 172, 359
Buliminella, 270
Buliminella elegantissima, 271, 274
Burrowing
animals, 109
shrimps, 113
C/N ratio, 115
"C Terrace," 341

- Calcium-carbonate-fixing pelagic phytoplankton, 1(2), vi
- Callinectes sapidus* (blue crab), 390
- Caloric levels, 255
- Calotropis procera*, 279-283
- "Candle rocks," Yehliu, Taiwan, 70
- Cape Fold Belt, landform pattern, 336
- Capparis decidua*, 285
- Carbonate high island, Makatea, 165
- Cardium*, 175
- Caulastrea*, China, 63
- Caulerpa*
- cupressoides*, 169
 - prolifera*, 258
 - racemosa*, 169
 - surati*, 169
 - urvillania*, 169
- Central Primorye, 143
- Centre National pour l'Exploration des Océans (C'NEXO), 19
- Chemical cycles, coastal and estuarine systems, 109
- Chenier, 25, 27
- Chesapeake Bay, circulation of, 397
- Chione cancellata* (cross-barred chione), bivalve shells, 358
- Chnoospora*, 170
- minima*, (brown algae), 169
- Clastic beach, 129
- Clay - see lagoonal clay
- Cliff
- coastal, 166
 - erosional remnants, 382
- Climatic fluctuations, 34
- Coast parallel offshore breakwaters, Mediterranean shore of Israel, 140
- Coastal
- archeological sites, 141
 - cliffs, 166
 - desert, 279, 329, 331
 - development, 383
 - developers, conflict, 385
 - diamonds, 341
 - dunes, 45
 - dynamics, 344
 - erosion, 21
 - geomorphology, 187
 - lagoons, marsh development environments, 31
 - midden, 141
 - morphology, 21
 - plain, 173, 343, 345
 - resource management, 383, 384
 - sedimentary environments, 173
 - strip, 336
 - submergence, 34
 - threats, 383
- Coastal Education and Research Foundation, Fort Lauderdale, 1(1), v
- Coasts, receding, 27
- Coconut palm - see *Cocos nucifera*
- Cocos nucifera*, (coconut palm), 192
- Coeloria*, China, 67
- Coelosoris*, China, 63
- Coenopsammia*, China, 69
- Collapsing breaker, 247
- Colobocentrotus pedifer*, 170
- Commission on Coastal Environments, IGU, 198
- Common oyster see *Crassostrea virginica*
- Composite island formation*, 275
- Concolculus hystrix*, 281
- Conservation, 383
- Contaminant flux, coastal zone, 199
- Continental shelf, 30
- Conus lividus*, 170
- Conus sponsalis*, 170
- Coquina see *Donax mirabilis*
- Coral
- knolls, 60
 - reef, 57, 165
- Coralline algae, 165
- Corange lines, tides, 123
- Corbula contracta*, 273
- Coriolis
- effect, 1(2), v
 - force, 126
- Coscinastrea*, China, 64, 69
- Cosmodiscus beaufortianus*, 277
- Cotidal lines, 123 see also corange lines
- Crassostrea*
- echinata* (mangrove oyster), 244
 - lugubrius* (mangrove oyster), 244
 - virginica* (common oyster), 368
- Cribroelphidium pocyantum*, 271, 272
- Cross-barred chione - see *Chione cancellata*
- Cross-sections, marine and non-marine deposits, 174
- Cryptodepressions, 353
- Current
- Benguela, 331
 - flood, 21
 - longshore, 343, 345
 - Taiwan, 57 ff
- Current meters, general, 123, 392
- Currituck, beach nourishment, 48
- Cyperus laevigatus*, 285
- Cyphastrea*, China, 67
- Cypraca*
- casputserpentis*, 170
 - moneta*, 170
- Daira perlata*, 170
- Darling Plateau, 78
- Degree of roundness, 343
- Delafield's hematoxylin, 241
- Delta
- intralagoonal, 343
 - marsh development environments, 31
- Dendrophyllia*
- China, 69
 - manni*, 60
- Density
- gradient, 118
 - stratification in water column, 19
- Depletion, 11
- Desert, coastal, 279, 329, 331
- Design shore-breaker, 247, 252
- Desoxygenation periods, 19
- Development pressures, 385
- Devil's Punchbowl, rocky cavern, 400
- Diabase dikes, ground water flow, 335
- Diagonal wave scour, 364
- Diamonds, coastal offshore, 341
- Diamondiferous gravels, 330
- Dictyospheria fauulosa*, 169
- Dike, 24
- Dinoflagellate, see also *Gonyaulax digitalis*
- Dinoflagellates, cyst formation, 263
- Dinoflagellate cysts, 263
- Diplastrea*, China, 66
- Dipterygium glaucum*, 275-281, 283, 285
- Direction Départementale de l'Équipement (DDE), Lorient, 11
- D.O. (dissolved oxygen), 12, 15
- Donax variabilis* (coquina), bivalve shell, 368
- Dong-Pa-Tou, 26
- Drainage, Orange River, 337
- Drift
- regime, 359
 - seaweeds, 258
- Drill-hole study, 185
- Drowned shoreline, 293
- Drowned valleys
- Dalmatian type, 193
 - Ria coast type, 193
- Drupa*
- cancellata*, 170
 - morum*, 170
 - ricinus*, 170
- Dumping offshore, nourishment, 49
- Dune
- barchan, 337
 - barchanoid
 - crest, coastal barriers, 43
 - frequency, 2
 - Great Sand Sea, 337
 - Kuiseb River, 333
 - star, 337
 - zone, 51
- Dynamic programming, 81
- Dzeman terrace, 293
- Early archeological culture, 142
- Early Bronze Age, 142
- Early Iron Age, 141, 142
- Ebb-flow dominant, 397
- "Ecdysal" cysts, 264, 265
- Echinometra mathaei*, 170
- Echinophyllia*, China, 68
- Echinopora*, China, 67
- Ectocarpus breviarticulatus* (brown algae), 169
- Ekman
- grab, 71, 72
 - numbers, 118, 119
- Elphidium*, 269, 276
- Elphidium galvestonense*, 271-272

- incertum mexicanum*, 271, 272
Emerita, 151 *ff*
anologa, 162
talpoida (mole crab), 151
 Energetics transport model, 231
 Energy
 flux, 235
 flux transport model, 231
Enteromorpha intestinalis, 258
 Environmental effects of offroad vehicles, 82
 Environmental oceanography, 83
 Eolian sediment budget, 44
 Eolian transport, 39
 Equilibrium profile, sandy coast, 344
 Erosion, 2, 51, 365
 Erosion control, 47
 Estuaries, marsh development environments, 31
 Estuaries and enclosed Seas, 84
 Estuarine beds, stability, 365
 Estuary, 11, 84, 396
Euphyllia, China, 60, 68
Eupodiscus radiatus, 277
 Everglades, Florida, 384
- F-Test, 134
 Facies modeling, coarse clastic (pebble) beach environment, 129
Favia, China, 59, 60, 65, 66
Favities, China, 60, 66
 Far east seas, fluctuations, 147
Farsetta longisiligua, 285
 Federal Insurance Administration
 Flood Insurance Program, 40
 Fence diagram, 173, 181
 Fill, beach nourishment, 51
 Fine sand beach, ridge and runnel morphology, 358
 Fire Island Coast Guard Station, 43
 Fire Island Lighthouse, 40, 43
 Fire Island National Seashore, Watch Hill Unit, 40
 Flandrian transgression, 293
 Floods, blocking transportation of sediments, 345
 Flood currents, 21
 "Flood sinus," 391, 397
 Florida beaches, pipeline dredging, 48
 Fluvial
 deposits, 178
 processes, 329
 sediments, Louisiana coastline, 134
 Flux models, 201
 "The Folly," 51
 Foraminiferal-algal grainstones, packstones, 167
 Foraminifer biotopes, 276
 Foreshore
 sections, 152
 slopes, sediment transport, 345
 transects, 190
Fragilidium, 263, 266
 Frequency curve, grain size of typhoon deposits, 26
- Fresh-water gastropod shells, 176
 Freshwater marshes, abandoned, 30
 Fresh-water molluscs, 175
 Fringing reefs, 165, 193
 Fringing reef platforms, Hainan Island, 195
 Froude number, 375, 376, 379, 380
Fungia, China, 60, 64
- Galaxea*, China, 65
 Gametogenic cycle, 241, 244
 Gastropods, 176
Gemma gemma, 273
 Geoarcheology, 141
Geograpsus crinipes, 170
Giffordia, 169
 Glacial Age, 30
 Glacial headland, 38
 Gonad, 241
 Gonad index, 242, 245
 Gonadal stages, *A. antiquata*, 243
Goniastrea, China, 66
Goniopora, China, 65
Gonyaulax, 264
Gonyaulax digitalis, 265
Gonyaulax tamarensis, 265
Gracilaria mamillaris, Tampa Bay, 258
 Grainstones, 166
 Graphical standardization procedure, 129
Grapsus tenuicrustatus, 170
 Gravel, 71
 Gravel
 beaches, 352
 beach zonation, 129
 The Great Escarpment, 334
 "Greenhouse Effect," 1(2), v
 Greenland ice core, 1(2), vi
 Groins, 54
 Groundsel tree *see Baccharis*
 Grunion *see Leuresthes tenuis*
 Gulf Coast Research Laboratory, 268
 Gulf coast, salt marsh development, 29
 Gulfport Formation, 267, 271
 "Gymnodinoid," 264
 Gyttja, 175
- Halimeda*
 incrassata, 258
 micronesica, 169
 opuntia, 169
 taenicola, 169
 Haline stratification, 15
Haliotis pulcherrima, 170
Halodeima atra, 170
Halodule wrightii (shoal grass), 255
Halomitra, China, 64
 Halophytes, 31
Hanzawaia strattoni, 270
 Hard-shelled clams, Barnegat Light, New Jersey, 186
Hassalia byssoides, 169
 Heavy salt water influx, 273
Herpolitha, China, 64
Heterocentrotus mamillatus, 170
- Histograms, types of sands, 347
 Histological analysis, 241
 Hjulstrom's diagram, threshold of grain movement, 393, 395
 Holocene
 Atlantic phase, 297
 sea-level changes, 148
 shorelines, 294
 time, 173
 transgressions, 274, 297
 Hopper barge dredgers, split-hull type, 48
 Hopper dredges, 49
 Hopper-type split hull barge, 164
 Hopper-type split hull dredge, 75
 Hurricane David, 54
 Hurricane impact management, 387
Hydnophora, China, 67
 Hydraulic jump, 375
 Hydraulic regime, 392
Hydroclathrus clathratus (brown algae), 169
 Hydro-isostasy, 296
Hyphaena thebaica, 281
Hypnea musciformis, Tampa Bay, 258
 Hypnozygotes, zygotic cysts, 265
 Hypoxia, general, 11, 16
 Mississippi River flooding, 16
- Ice sheets, 1(2), vi
 Impact pressure, 247
Imperata cylindrical, 24
 Indian River, lagoonal system, 263, 265
Indigofera spinosa, 281, 285
 Inlet frequency, 2
 Inner continental shelf, coarse sand, 344
 Institut des Pêches Maritimes (ISTPM), 11
 Intertidal zone erosion, 27
 Interlocking groins, 54
 International Council for the Exploration of the Seas, 199
 Intertropical Convergence Zone (ITCZ), 18
 Intracoastal formation, 271
 Intralagoonal delta, 343
 Iron Age, 146
 Isostasy — *see* Hydro-isostasy
 Istrian Peninsula, Yugoslavia, 17
Iva frutescans (marsh elder), 32
- Jackson Bluff Formation, 271
 "Jubilee," 16
Juncus
 gerardi (blackgrass), 31
 roemarianus (blackcrush), 31
- Karasevaya Inlet, Holocene coastal landform, 143
 Karasevaya II (landform), 146
 Karstic system, 166
 Kazantsero transgression, 293-294
 Kelvin wave, 123
 Kolmogorov-Smirnov D-test, 370
 Kynosoura Peninsula, 173

- Lag beaches, 353
- Lagoonal
 clay, 175
 mud, 178
 sediments, 267, 294
- Lake levels, precipitation and runoff, 353
- Late Dryas, 297
- Late Wurmian regression, 295
- Laurencia poitei*, 258
- Leptadenia pyrotechnica*, 279-282, 284-286
- Leptastrea*, China, 67
- Leptodius sanguineus*, 170
- Leptoria*, China, 67
- Leptoseris*, 64
- Leptoseris striatus*, 59
- Leuresthes tenuis* (grunion), 151
- Ligora ceranoides*, 169
- Lidovskaya cultures, 144
- Limnic beaches, 353
- Linaria haelava*, 281
- Linear dunes
 Great Sand Sea, 337
 Kuiseb River, 333
- Lithogenetic units, 178, 181
- Littoral
 drift, 267, 274, 341
 environments, 129
 scoop, 71-71
 sediments, 71
- Litoralia*, 1(1), v
- Littorina coccinea*, 170
- Lobophora*, 169
- Lobophyllia*, China, 67
- Longshore
 bar, 232
 current, 343, 345
 flux factor, 231
 transport, 231
- Low marsh grasses, 30
- Lunar nodal cycle, 1(2), vi
- Lycium shawii*, 285
- M_s
 resonance, tides, 118
 tidal forcing, 120
 harmonic function, 121
 tidal circulation, 124
- Macroalgae, seaweed component, 259
- Macrobenthos, 113
- Macrofaunal
 abundance, 113
 respiration, 112
- Macrophytes, 255
- Maerua crassifolia*, 285
- Mainland beach ridge detachment, 275, 276
- Management strategy, 383
- Manatee grass - *see* *Syringodium filiforme*
- Mangroves, Marcus Island, Florida, 384
- Mangrove oyster - *see* *Crassostrea*
- Mangrove swamps
 Gulf of Sha-Men, 193
- Luichow Peninsula, 195
- Mann-Whitney U test, 135
- Marine
 angiosperm communities,
 Tampa Bay - Apalachicola Bay,
 Florida, 255
 biological subaerial weathering, 150
 deposits, 174
 erosional platform, 167
 strata, 27
 terrace, 150, 165
 transgression, 168
- Marsh
 development model, 30
 drowning, 32, 34
 expansion, 34
 grasses, 29
 retreat, 34
- Marsh elder - *see* *Iva frutescans*
- "Mass" angle of repose, loose
 sedimentary beds, 366
- Meander necks, 27
- Melkovodnaya I (archaeological site,
 USSR), 142, 146
- Mercedes I, ocean freighter, Palm
 Beach, Florida, 1(3), vi
- Mercetrix mercetrix*, 24
- Merulina*, China, 68
- Metabolic activity, 159
- Metal Age, 142
- Microbial (+meiofaunal) respiration,
 112
- Microdictyon cf. *okamuraii*, 169
- Microtidal sand beach environment,
 138
- Mid-Atlantic barrier island
 classification, 6
- Middle-late Holocene, 147
- Middle Wurmian transgression
 (Karginsky), 295
- Midforeshore, 160
- Mid-Wisconsinan transgression,
 "Silver Bluff," 271
- Millepora platyphylla*, 170
- Mining offshore, Namibian coastline,
 329
- Minonoska I - II (archaeological sites,
 USSR), 146
- Miocene Taliao Formation, "candle
 rocks," 70
- Mitra*
litterata, 170
pauperculata, 170
- Modiolus*
metcalfei (brown mussel), 244
philippinarum (brown mussel), 244
- Mole crab - *see* *Emerita talpoida*, 151
- Monsoon, 141
- Montastrea curta*, 170
- Montipora*
 China, 59, 62, 63
verrucosa, 60
- Morula granulata*, 170
- Mud
 boulders, 27
 flats, 27, 29, 31
 lagoonal, 178
 "nails," 22
- Mudstones, 166
- Mulinia lateralis*, 273
- Mya arenaria*, 242
- Mycedium*, China, 69
- Namib Platform, Late Cenozoic
 landscape, 334
- National Oceanographic Atmospheric
 Administration, 199
- Natural rain waves, 376
- "Natural slope," slope of repose, 366
- Near-bottom
 flows, 397
 velocity, 395
- Nearshore
 bottom surveys, 232
 depositional environment, 129
- Neomeris caribosae*, 169
- Nereis*, 110, 114
- Nereis virens*, 109-112, 115
- Nerita plicata*, 170
- "Nickpoints," 341
- Nitrate flux, 115
- Nitrification-denitrification processes,
 115 *see also* Aerobic nitrification
- Noetia ponderosa* (ponderous ark),
 bivalve shell, 368
- Non-aquatic plant, 32
- Nonion*, 270
- Nonion*
cibroelphidium, 277
depressulum matagordanum, 271,
 272, 274
- Nonionella*, 270
- Non-Marine deposits, 174
- Non-parametric test, 135
- Norfolk Dredging Company, 51
- Notch lines, cliffs, 165
- Nuculana concentrica*, 273
- Numerical-dynamic storm surge
 prediction model, National Weather
 Service, 2
- O/N ratio, 109, 115
- Ocean current, 329
- Ocean view, 397
- Office of Marine Pollution Assessment,
 199
- Offshore
 diamonds, 341
 dumping, 49
 mining, 329
- Olginskaya cultures, 146
- Olivella mutica*, 273
- "Omirimbi," 337
- One way analysis variance, 238
- Orbicella*, China, 66
- Organogenic aragonite, 1(2), v
- Oulophyllia*, China, 68
- Outwash terminal moraines, 353
- Overwash penetration distance, 2
- Oxic surface layer, 113

- Oxygen
 consumption, benthic
 respiration studies, 113
 saturation (%), 112
 uptake, 110
- Oxyphyllia*, reef coral of China, 68
- Oxypora*, China, 68
- Pachyseris*, China, 64
- Packstones, 166
- Paired hydraulic jumps, swash zone, 379
- Paleogeography, 170
- Paleo sea levels, positions, 294
- Palmetto Dunes Development Corporation, 54
- Panagaea, 336
- Panicum*, 31
- Panicum turgidum*, 281, 282, 285
- Paraffin tissues, stained with
 Delafield's hematoxylin, 241
- Parahalomitra*, China, 64
- Patella flexuosa, 170
- Patelloida conoidalis*, 170
- Pavement beaches, Lakes Manapouri and Te Anau, 356
- Pavements, lake/ocean beaches, 361
- Pavement beaches, 356
- Pavona*, China, 60, 63, 64
- Peat, 176
- Peat bogs, 172
- Peat — Igarlsan cold episode, 293
- Pectinia*, China, 68
- Pediment, 333
- Pediplanation
 process, 329
 cycle, 333
- Pelagic realm, 1(2), v
- Pellicle cysts, temporary cysts, 265
- Perenon affine*, (Grapsidae), 170
- Phi, angle of repose, 373
- Phymastrea*, China, 67
- Phragmites australis* (reedgrass), 31
- Physophyllia*, China, 68
- Phytochemical, 279
- Phytoplankton, 18
- Pipeline dredges, 49
- Plagusia speciosa* (Grapsidae), 170
- Planulirus penicillatus*, 170
- Platform — see Abrasion platform;
 Marine erosional platform
- Platygyra*, China, 66
- Plesiastrea*, China, 67
- Pleistocene sea-level curves, Japan Sea, 296
- Plume, Hudson River, 15
- Plunging, shore breakers, 247
- Plunging wave, 247
- Pocillopora*
 China, 61
damicornis, 60
eydouxii, 170
verrucosa, 170
- Pocket beaches, sweep zones, 359
- Podabacia*, China, 65
- Pole-mounted Ekman grabs, 71, 72
- Polyastra*, China, 64
- Polychaete, 109
- Polykrikos*, 264
- Polyphyllia*, China, 64
- Polysiphonia denudata*, Tampa Bay, 258
- Porites*, 60, 65, 170
- Porolithon onkodes*, (*Lithophyllum spp.*), encrusting coralline algae, 169
- Pot holes, karstic system, 166
- Pottery shards, Yankovskaya culture, 146
- Pre-A terrace, 341
- Preboreal, 297
- Preemptive approach, 387
- Preemptive strategy
 high-threat situations, 385
 retain control, 385
 willing to change, 385
- Principal Components Analysis, 1, 2, 5
- Progradation, 274
- Project No. 200: Sea-Level
 Correlations and Applications
 (1984 Annual Report on Scientific Programs), 204
- Proluvial deposits, 143
- Promotive stage, 386
- Promotive strategy, 383, 386, 387
- Psammocora*, China, 61
- Puperita reticulata*, 170
- Pycnocline, 11
- Quaternary glaciation, 59
- Quaternary transgressions, 293
- Quartz grains
 conchoidal fractures, 26
 large impact pits, 26
- Quinqueloculina*, 272
- Radiocarbon, 30
- Radiocarbon dating, 30
- Radiometer, P_O₂ — electrode, 110
- Rain wave, 375, 377, 380
- Raised intertidal abrasion platform,
 Wild Cove, 246
- "Raised" marine terrace, 330
- Raised shoreline, 165, 293
- Rate of regression, 172
- Rate of sea-level rise, 172
- Receding coasts, 27
- Reef
 coral, 57, 59, 170
 flat flagstone, 168
 flat zones, 170
- Refractometer, measures salinity, 256
- Romaneica*, 272
- Residual magnetization (RM), 294
- Rhazya stricta*, 285
- Rhodophyceae*, 169
- Rhodymenials*, 169
- Rhomboidal "ripple-mark" formation,
 rain waves on the beach, 377
- Ripple mark, 375
- Rising sea level, tidal marsh
 development, 30
- Riss — Wurm transgression, 294
- River fresh water plume, 11
- Rosalina columbiensis*, 270, 271
- Rosby numbers, 118
- Rudnaya I (archeological site, USSR), 144
- Rubble-mound structures, 140, 248
- Rugosity, 376
- Salinity, Bay of Viliaine, 12
- Sampler, bottom fauna, 71
- Sample intervals, 187
- Salsola*
baryosma, 279, 280, 285, 286
foetida, 286
kali, 286
richleri, 286
subaphylla, 286
- Salt marsh
 grasses, 30
 invasion of terrestrial vegetation, 34
- Shinas, 173
- vertical growth rates, 32
 see also Marsh
- Salt water influx, 273
- Sand
 beaches, 151, 343, 353
 degree of roundness, 348
 dunes, Great Sand Sea, 336
 fences, 39, 44
 Paraíba do Sul river, 349
 rose, 337
 spit, 347
 terraces, 345
 traps, 44
- Sartan assemblages, identical to
 Zyrjanskiye assemblages, 295
- Saturn/Jupiter Lap, 1(2), vi
- Scaling analysis, 119
- Scapophyllia*, China, 67, 68
- Scleractinian corals, 170
- Scouring, 24
- Scour
 surface, 27
 wave, 364
- "Scraping," 53
- Sea birds, Otter Rock, 400
- Sea dike, 22
- Sea-level
 change, 197
 curve, 296
 fall, 27, 172
 paleo positions, 294
 rise, 30, 1(2), v-vi, 172
- Seagrass beds, subtidal communities, 255
- Seagrass
 biomass, 257
 communities, 255
- Sea lions, Otter Rock, 400
- Sea notches, 352
- Seasonal biomass, 255
- Sea stacks, Washington coast, 382

- Sediment
 budget, 39, 40
 budget calculation, 43
 exchanges, 43
 flux, 232
 lagoonal, 267, 294
 sampling, 232
 texture, 389
 textural facies, 393
 tracer experiment, 356
 transport, 365, 389
 trap, 231
- Sediment-water interface, 109, 110
- Sedimentary
 environments, 173
 structures
 cross-bedding, 25
 horizontal bedding, 25
- Sedimentation, 21
- Seidlitzia rosmarinus*, 281
- Semi-diurnal sand beach profiles, 130
- Semidiurnal tide, 117
- Semivariance function, 187, 188
- Seriatopora*, China, 61
- Shells
 size, 370
 surfaces, 368
 transport, 365
 variation, 371
- Shock waves, rain waves, 380
- Shallow water erosion, 47
- Shapiro-Wilk W-test, 370
- Shell banks, 23
- Shelf profile, beaches, 355
- Shield's relationship, bed stability, 365
- Shinias, Great Marsh, 173
- Shoal aggradation, 275
- Shoal grass - see *Halodule wrightii*
- Shore-breaking wave, 247
- Shoreface sands, 269
- Shorefront houses, 39
- Shore-level change, Patagonia, 197
- Shorelines, 353
- Shoreline
 drowned, 193, 293
 dynamics, 231
 processes, 45
 recession, 51
 strike, 2
 submerged, 293
 see also Holocene shorelines
- Shore-normal
 beach changes, 361
 exchanges of sediment, 359
- Silver Bluff terrace, 271
- Single point trap sampling, 231
- Sinuuous coastlines, sediment
 accumulation, 345
- Slope of repose, "natural slope," 366
- Small lake beaches, sediment transport,
 361
- Smelt, 151
- Sodium hypochloride, clay
 treatment, 391
- Solar semidiurnal tide, 118
- Solitary solution, 238
- Solitary wave theory, 231
- Solution-rilled surface (erosional
 grooves), 166
- South China Mountainous Coast, 196
- South China Normal University, 69
- Spartina*
alterniflora, 31, 34
angelica, 24
patens, 31
- Spatial variation, 151
- Speleothem deposits, 166
- Spilling
 generated bores, 252
 shorebreakers, 247
 wave, 247
- Spit segmentation, non-deltaic shores,
 275
- Spyridia filamentosa*, Tampa Bay, 258
- Split hull barges, 49, 54
- Standing wave, 123
- Star dunes, Great Sand Sea, 337
- Stephanaria*, China, 64
- Storm
 configuration, 138
 wave, 329
- Strategies against threats (taken by
 developers), 385
- Stratification, water column density, 11
- Stylophora*, China, 61
- Suaeda*
maritima, 24
monoica, 285
vermiculate, 285
- Subboreal period, 141
- Submerged shoreline, 293
- Submergence, 32
- Subtidal
 region, 255
 seagrass beds, 255
- Suitable fill, 49
- Summer wave regime, 155
- Supratidal zone, 27
- Surf similarity parameter, 247
- Surface salinities, 18
- Surging breakers, 247, 358
- Surging wave, 247
- Survey profile, measuring coastal
 topography, 187
- Swales, 51
- Swash
 process, 133, 375, 378
 zone, 130, 139, 151, 375, 378-381
- Sweep zone
 envelopes, 359
 pocket beaches, 359
- Synaraea*, China, 65
- Synegaiska cultures, 144
- Symphylia*, China, 68
- Syringodium filiforme* (manatee grass),
 255, 257-259
- T - Groins, 54
- Tamerix*
aphylla, 281
mannifera, 281, 285
- Taiwan Current, 57, 58, 80
- Tectarius grandinatus*, 179
- Temporal variation, 151
- Terpsinor musica*, 277
- Terrace - see "A-terrace," "B-terrace,"
 "C-terrace," Dzeman terrace
- Tetrapods, sea notches, 352
- Textularia mayori*, 271
- Thais*
aculeatus, 170
armigera, 170
- Thalassia testudinum* (turtle grass),
 255, 257-259
- Theca - cyst cycle, 263
- Thermal-luminescence age
 determination, 294
- Threshold velocity, 395
- Tidal
 channels, changes in, 28
 creeks, 27
 currents, Long Island Sound, 117
 flats, 21-23, 25, 30
 salt marshes, 29, 35
- Tidally forced circulation, 118
- Tide gauge, 1(2), v
- Tides
 barotropic, 117, 128
 Long Island Sound, 117
 M₂, 118 ff
 M_S, 118 ff
 semi-diurnal, 117
 see also Barotropic M₂
- Tizard Atoll, 59
- Tolo Channel, Dalmatian type, 193
- Tombolo, 140
- Torrifluvents, soils, 281
- Torriorthents, soils, 281
- Torripsamments, soils, 281
- Tracer experiments, 54
- Trachyphyllia*, China, 63
- Transgression, 183 see also Flandrian
 transgression; Marathon Plain;
 Mid-Wisconsinan transgression;
 Silver Bluff
- Transgressive barrier islands, 276
- Transgressive phases, Japanese
 Islands, 147
- Transgressive-regressive cycle,
 Sangamon Interglacial, 271
- Transitional wave regime, 156
- Trestle A, Chesapeake Bay Bridge
 Tunnel, Virginia, 389
- Tridacna maxima*, 170
- Tridaciphyllia*, China, 68
- Triceratium favus*, 277
- Tropical terrace coast, 196
- Tropospheric CO₂, 1(2), v
- Turbidity, 69
- Turbinaria*, 170
- Turbinaria ornata* (brown algae), 169
- Turbo setosus*, 170
- Turtle grass, 259 - see also *Thalassia*
testudinum
- Two-layer estuarine transport, 118

- Tyler Rotap, 392
- Typhoons
Number 8114, 21, 23, 27
Number 7, 21
- Typhoon deposits, 21, 24, 27
- Univariate procedure, 371
- Updrift erosion cliffing, 360
- Venus mercenaria*, 186
- Vertical distribution, reef corals, 59
- Vertical growth rates of salt marshes, 32
- Vestigial Neolithic, 141-143
- Vilaine estuary, 11
- "Vleie," shallow or dry lakes, 337
- Vreksisa, small marsh, 173
- Worm burrows, 109
- Wackestones, 166
- Wall layer, 375
- Water
 column, 11, 13
 exchange, 109
 levels, 353, 357
- temperatures, Nansha Islands, 59
- Wave-action sand transport, 398
- "Wave-base," 47
- Wave
 crest, 247
 energy, 152, 154
 flux, 231
 Kelvin, 123
 plunging, 247
 power, 231
 regime, 347
 scour, 364
 shadow, 162
 shore-breaking, 247
 standing, 123
 storm, 329
 summer regime, 155
 surging, 247
 transitional regime, 156
 uprush, 133
- Wave generation, limited by
 fetch, 356
 wind speed, 356
 duration, 356
- Weathering, marine biophysical, 150
- Wetland loss, 34
- Wetlands, 29, 34
- Wind
 direction, 329
 patterns, 40
 velocity data, 41
 waves, 353
- Winter dredging of blue crabs, 390
- Xerophyte, 279
- Xerophytic vegetation, Saudi Arabia, 279
- Xishasiderastrea*, China, 169
- Yankovskaya Culture, 145
- Yorktown Formation, erosional remnant, Virginia 390, 394, 398
- Zhongsha Atoll, China, 59
- Zygothallum*
coccineum, 285
simplex, 281, 285
- Zyryanskiye assemblages, "cold," 295