

SUBJECT INDEX

Journal of Coastal Research

Annual Index Vol. 9 (Nos. 1-4), 1993

A

Abyssal plain, 1075
 Accretion, 654, 934
 Accretion waves, 182
 Acid rain, 97
 Adaptive strategy, 678
 Aeolian sand transport, 648
 Aeolian sands, 1045
 Aerosol optical depth, 437
 Agrochemicals, 23
 Algal
 blooms, 904
 mats, 249
 Allochemicals, 41
 Alluvial, 28, 53, 539 *ff*, 747 *ff*, 757, 959
 Alongshore
 drift, 663
 variability, 1013
 velocity variance, 4
 Alternating Conditional Expectation (ACE), 383
 Alternating Direction Implicit (ADI), 381
 American beachgrass, 97
 Amino acid racemization, 577
 Aminostratigraphy, 578
 Ammonium, 900
 Analysis of variance, 155
 Anchor ice, 70
 Anchoring headlands, 578
 Angle of repose, 650
 Annual, 403
 Annual sediment yield, 209
 Annular flume, 1094
 Anthropogenic
 alterations, 27
 factor, 59
 Aragonite clasts, 618
 Arcuate beaches, 654
 Artificial dune ridge system, 178, 185
 Artificial
 islands, 766
 traces, 811
 Assemblage zones, 689
 Attached beach, 243
 Autogenic succession, 319

B

Back-barrier estuary, 988
 Back-reef facies, 22

Backbarrier
 lagoon, 57
 marsh peat, 268
 Backpassing, vi, 1106 *ff*
 Backscatter nephelometers, 391
 Backshore dunes, 655
 Backswamps, 959 *ff*
 Bar
 crests, 429
 migration, 979
 morphology, 185, 786
 Barge basin, 457
 Barrage and delta irrigation system, 564
 Barrier
 beach, 721
 coasts, 105
 enclosed estuaries, 414
 island, 163, 178, 249, 267, 403, 414,
 462 *ff*, 596, 731, 801, 824, 988
 arc, 114
 shoreline, 464
 Basaltic reef, 453
 Basement subsidence, 960
 Basin
 apron, 1075
 slope, 1075
 Bathymetry, 934
 Bay
 heads, 816
 shores, 801
 Bay-head beach, 414
 Bayou, 211
 Beach, 1083
 Beach
 and ice profiles, 71
 berm, 916
 change, 785
 deflation, 185
 design, 1
 drift, 811
 dune, 356
 dynamics, 147, 702
 erosion, 88, 481, 847
 face, 786
 gravels, 266
 loss, 149
 model, 785
 monitoring, 702
 morphodynamics, 785, 1065
 pads, 668, 812
 profile modification, 65
 profiles, 189 *ff*, 256, 654, 702
 protection, 65
 replenishment, 255
 response, 973
 time, 206
 ridge, 18 *ff*, 108 *ff*, 126 *ff*, 132, 483,
 721, 812
 archaeology, 126 *ff*
 method, 141
 sediments, 610
 slope, 202, 616, 668, 812
 starvation, 111
 width, 812
 Beach-face
 erosion, 112
 retreat, 112 *ff*
 Beach-nearshore zone, 596
 Beaches, 481, 785, 812
 Beachgrass planting, 102
 Beachrock, 15, 427
 Beaumont formation, 570
 Bed
 agitation, 262
 friction, 519
 shear, 1051
 Bedforms, 1044
 Bedload, 642
 Berm, 703, 848
 Berm
 crest, 114
 or beach ridge, 194
 sediments, 1049
 Berm-profile, 1106
 Bethnic
 communities, 378
 macrofauna, 379
 Bienneal, 403
 Bifurcating, 669
 Bifurcation sequence, 279
 Biloxi formation, 570
 Bioclasts, 579
 Biomass, 317, 339, 806
 Biomass dynamics,
 Biotope, 378
 Bioturbation, 44, 986
 Birdfoot delta channels, 436
 Bluff
 erosion, 84
 morphology, 812
 retreat, 168, 757
 Bored tunnels, 769
 Boston blue clay, 364 *ff*
 Bottom
 friction, 379, 907, 969, 1146

- morphologies, 425
 profiles, 79
 sediments, 885
 shear stress, 213
 Boulder barricades, 636
 Brackish
 lagoon, 901
 marsh, 990
 water bay muds, 43
 Braided river system, 49
 river channel, 58
 Brash, 630
 Breaker type, 1070
 Breakwater, 661, 915, 1110
 Breeding synchrony, 221
 Bridge piers, 766
 Bruun rule, 149, 175 *ff*, 255, 283, 595
 Buried soil, 675
 Bypassing, vi
- C**
- Calcareous
 algae, 41, 956
 nodules, 58, 543
 Calcturbidites, 619
 Calich horizons, 50
 Caliche, 42 *ff*
 Caliche structures, 543
 Carbon-14 analysis, 721
 Carbonate
 desert coastal sands, 28
 islands, 577
 ridge, 30 *ff*
 Carbonates, 956
 Catchment, 501
 Causeway, 766
 Cavernous weathering, 582
 Cenozoic sediments, 960
 Cesium dating, 698
 Channel
 dynamics, 973
 flow measurements, 213
 migration, 568, 983
 Channel-lag deposits, 374
 Chaotic dynamics, 279
 Chenier, 134, 324, 435, 969
 Chernobyl event, 699 *ff*
 Churning, 669
 Clay minerals, 543, 885
 Cliff
 attack, 747
 erosion, 747
 recession rates, 88
 retreat, 87 *ff*, 88
 Cliffs, 88, 812 *ff*
 Climate change, 965
 Climatic oscillation, 27, 654
 Climax fynbos vegetation, 653
 Climbing-falling dune, 647
 Clonal, 403
 Closed-basin muds, 43
 Closure depth, 256
 Coagulation, 390
- Coarse debris, 628
 Coastal Engineering Research Center (CERC), 448
 Coastal
 bar, 107
 bluffs, 65
 building codes, 1054
 zone, 1054
 carbonate sands, 28
 change, 104
 circulation, 440
 construction, 1054
 downwelling, 262
 drift, 825
 dune ridges, 57
 dunes, 108, 654 *ff*
 embayments, 414
 engineering, 449
 environments, 434
 erosion, 65, 83, 663, 673, 702, 746, 811, 1125
 flats, 654
 forts, 1130
 geomorphology, 403, 823
 ice, 65
 lagoons, 895
 lowlands, 958
 management, 862
 marshes, 209
 modification, 65
 morphologies, 425
 Morphology, 481
 paleoseismology, 673
 plain alluvium, 13
 plains, 959
 processes, 481, 964
 ridges, 959
 sand dunes, 97
 sediment, 539, 577
 storms, 1054
 structures, 448
 subsidence, 209, 673
 subsidence, 673
 surge, 519
 terraces, 133
 waves, 944
 wetlands, 958
 Coastal-lake ice, 81
 Coastal-trapped waves, 509
 Cobble
 beaches, 1015
 rampart, 762
 Cobbles, 205, 375
 Cohesive sediment, 1094
 Cold front weather systems, 434
 Compaction, 961
 Complexity penalty method, 153
 Composition, 510
 Cone points, 817
 Contaminant transport, 1037
 Continental shelf, 1147
 Control management, 1083
 Coral
 bleaching, 23
 growth, 17
- mortality, 12
 rock outcrops, 13
 rubble, 14
 Coralline algae, 945
 Coriolis force, 379, 525
 Crescentic bars, 191, 423
 Crevasse deposits, 959
 Crevasse-splay deposits, 42
 Critical shear stress, 1094
 Cross
 shore
 direction, 4
 transportation, iii
 velocity variance, 4
 validation, 153
 Cross-bedding, 42
 Cross-shore profile, 1147
 Cross-shore sediment transport, 255
 Crustacean biomass, 383 *ff*
 Crustal subsidence, 494
 Cryogenic shatter, 128
 Cumulative ice mass, 70
 Current
 scour, 80
 velocities, 908
 Current-ripple laminated, 42
 Currents, 847
 Curved spits, 243
 Cusp erosion, 481
 Cuspate foreland, 721, 1143
 Cyclons, 959
- D**
- Dam construction, 251
 Dams, 402, 497
 Debris
 fans, 1030
 slumps, 1132
 Deep
 ocean forced waves, 518
 water wave, 919
 Deforestation, 481
 Degree of divergence, 202
 Delta, 324, 665, 958
 Delta
 deposits, 539
 lobe abandonment, 464
 Deltaic
 coasts, 105
 environments, 134
 formation, 539
 littoral environment, 29
 lobes, 135
 plain, 959
 siliciclastic sands, 28 *ff*
 Deltas, 540
 Dendograms, 952
 Dendrochronology, 924
 Density gradients, 511
 Deposition, 1095
 Desert littoral environment, 29
 Design wind speed, 1054
 Detrital flakes, 13

- Diagenesis, 693, 885
 Diatom, 369
 Diatom zonation, 673
 Dieout, 97
 Differential settling, 885
 Digital planimeter, 89
 Dike bursts, 724
 Dikes, 959 *ff*
 Direct shear box, 91
 Directional wave spectra, 448
 Dispersal shear dispersion, 509
 Dispersion, 907
 Dissipative
 beaches, 2, 760, 786,
 coastline, 423
 state, 423
 surf zone, 1072
 Domain theory, 768
 Double storm bar beach, 272
 Double-spit, 414
 Downdrift, 80
 Downdrift
 beaches, *iv*, 1130
 erosion, 182
 Downwarping, 34
 Downwelling, 524
 Downwelling currents, 1147
 Drainage basin, 959
 Dredging, *vi*, 390, 403, 766, 983, 1004
 Drift
 cell, 667 *ff*
 log accumulation, 762
 Drowned
 channel sands, 39 *ff*
 paleovalley, 1020
 shoreline, 141
 valley systems, 413
 Drumlin, 88, 365
 Drumlins, 365
 Dune
 formation, 97
 protection, *vi*
 ridge system, 183
 ridges, 33
 sand, 731, 1143, 749
 scarp, 279, 1125
 stabilization, 646
 system, 648
 vegetation, 97, 647
 Dunes, 130, 1143
 Dye-plume experiments, 211
 Dynamic
 equilibrium, 1028
 profile, 272
- E**
- Earthquakes, 673, 747, 960
 Ebb
 deltas, 979
 flows, 940
 jet, 522
 shoals, 730
 tidal current, 981
 tide, 399, 825
 delta, 973
 Ebb-tidal delta, 730
 Echinoids, 23, 41
 Ecotone, 801
 Eddies, 522, 909
 Eddy viscosities, 528
 Eel-grass, 678
 Ekman layer, 262
 Elevated
 beach ridges, 1125
 shore-parallel ridges, 132
 Embankments, 766
 Embayed beaches, 424
 Embayments, 748
 Embryo dunes, 317
 Empirical stability relationships, 413
 End-Point Rate method, 149
 Endangered coastline, 128
 Energy
 flux, 665
 regime, 648
 Entrained sediment, 79
 Entrainment, 399
 Entrance channel, 1004
 Eolian
 activity, 577
 foresets, 582
 Eolianites, 582
 Episodic flooding, 209
 Equilibrium
 beach/shoreface profile, 255
 concept, 1146
 shore profile, 595
 Erosion, 654, 821, 934, 986
 Erosion waves, 182
 Erosion-deposition model, 1044
 Erosional
 headland, 114
 patterns, 112
 trough, 73
 Esker sediments, 133
 Estuarine lagoon, 249
 Estuaries, 403 *ff*, 434, 654, 812, 907, 986
 Estuarine
 circulation, 390, 885
 dynamics, 885
 coagulation, 390
 geomorphology, 986
 lagoon, 242
 marshes, 986
 rivers, 935
 stratigraphy, 363 *ff*
 Estuary, 390, 452, 1066
 Estuary throat cross-section, 416
 Estuary-mouth morphology, 242
 Eugeosynclinal trough, 610
 Eustatic sea levels, 132
 Eustasy, 958
 Eustatic
 rise, 726
 sea level, 229 *ff*
 changes, 133
 fluctuations, 168
 oscillations, 27
 rise, 209, 958
 rise method, 151
 Evaporation, 891, 907
 Evapotranspiration, 898, 965
 Exclusive economic zone, 863
 Explosion craters, 414
 Extreme wind, 1054
- F**
- Fast-ice segments, 69
 Fathometer profiles, 244
 Fault zone, 945
 Faulting, 34
 Faults, 747, 812
 Fennoscandian isostasy, 725
 Fetch, 68, 189, 485, 500, 610 *ff*
 Finite element method, 768
 Fish recruitment, 383
 Fishweirs, 363 *ff*
 Fjords, 414
 Flanking barrier
 island, 114
 shoreline, 470
 Flaser bedding, 44
 Flat low tide terrace, 195
 Floc size distribution, 1094
 Flocculation, 885
 Floes, 390 *ff*
 Flood
 and ebb flows, 1051
 Plain Muds, 42
 tidal current, 981
 tide, 399
 Flood-tidal delta, 266, 509
 Flood-tide delta sands, 266
 Flow
 asymmetry, 200
 field, 909
 Fluid mud, 390, 434
 Fluvial
 channel to Crevasse-splay sands, 45
 channels, 243
 discharge, 244
 erosion, 413
 salt marsh, 721
 sands and gravels, 266
 Fluvial-influenced lagoon muds, 44
 Food availability, 221
 Foraminifera, 41, 549, 673
 Forced long waves, 261
 Fore-reef slope, 13
 Fore-reef talus, 22
 Forebulge, 725
 Foredune
 plants, 317
 ridges, 317
 Foredunes, 483, 495
 Forest catchments, 12
 Fossil tidal pools, 1018
 Fracture zone, 47
 Fractures, 812
 Frazil ice, 79

- Freezup, 630
 Frequency storm events, 501
 Fresh water gastropods, 549
 Fresh-water springs, 378
 Freshwater, 895
 Freshwater marsh, 317
 Friction, 907
 Fringing reef, 11
 Frontal beaches, iv
 Frost
 cracks, 131
 rings, 926
 Frozen beach, 79
 Frustules, 681
- G**
- Gastropods, 41
 Geest border, 722
 Geoaerchaeology, 126
 Geochemical cycling, 862
 Geomorphology, 434, 1013
 Gharbi winds, 611
 Glacial, 413
 Glacial
 cliffs, 88
 drift, 364
 rebound, 1115 *ff*, 1125, 1126
 Glacially-deposited clays, 205
 Glaciomarine muds, 364
 Global Biospherics Research Program, 339
 Global Positioning System (GPS), 702
 Global warming, 958
 Grab samples, 1026
 Grain size
 spectra maps, 491
 analysis, 1044
 Grain-size analysis, 616
 Grainstones, 51
 Granulometric statistics, 131
 Gravel
 beach ridges, 1125
 ridges, 133
 storm ridges, 132
 Gravelly aquifers, 961
 Gravity driven currents, iii
 Greenhouse
 effect, 104 *ff*
 Greenhouse warming, 494
 Groin field, 831
 Groins, 185, 669
 Ground water table, 185
 Groundwater
 outcrop (effluent line), 792
 salinization, 107
 seepage, 56, 748, 907
 surface, 108
 withdrawal, 961
 Groundwater table, 961
 Groynes, 915
 Gypsum, 35
 Gypsum
 crusts, 543
 evaporites, 563
 Gyre, 1036
- H**
- Halite, 35
 Halite and gypsum crusts, 56
 Hammocks, 139
 Harbor resonance, 448
 Harleman harmonic analysis, 908
 Harmonic
 analysis, 907, 1110
 oscillation, 1111
 Headland enclosed estuaries, 413
 Headland-bay beaches, 668
 Heavy mineral studies, 847
 Helmholtz (pumping) mode, 457
 Herbaceous
 backshore, 498
 plants, 404
 Heronry, 222
 Herring spawning, 767
 High magnitude storms, 126
 High-relief carbonate ridges, 555
 Hindcasting, 663
 Holocene
 delta plain, 464
 transgression, 481
 Horizontal eddy viscosity, 529
 Horst and grabben structure, 945
 House pits, 130
 Human impact, 481
 Human-induced subsidence, 959
 Hummock dunes, 317
 Hurricanes, 115, 463, 1054
 Hydraulically shaped piers, 766
 Hydrodynamic motion, 381
 Hydrodynamics, 907
 Hydroelectric and irrigation projects, 107
 Hydrogen sulfide, 43
 Hyperbolic shape triangle, 1044
- I**
- Ice
 auger holes, 71
 balls, 70
 blocks, 69, 630
 cakes, 630
 cap, 960, 1115
 cores, 71
 cover, 628 *ff*
 crystals, 78
 drift, 77
 offshore and longshore, 71
 velocity, 77
 floes, 628 *ff*
 keels, 80
 lagoons, 69
 pilings, 1123
 pressure, 725
 processes, 628
 push-ups of moraines, 1118
 rafting, 628
 ridges, 69
 sheets, 924
 shelf, 1121
 Ice-ages, 1115
 Ice-keel gouging, 80
 Ice-push ridges, 630
 Ice-rafted debris, 643
 Icefields, 1030
 Icefoot, 69
 Icefoot pustules, 630
 Ichnofacies, 247
 Image transformation methodology, 6
 Incident
 angle of longshore transport, 130
 wave
 energy, 2
 steepness, 202
 waves, 261, 762
 Indigenous fynbos plants, 653
 Infilling marsh deposits, 242
 Infragravity waves, 457
 Inlet
 channel stability, 973
 deterioration, 470
 migration, 668, 812
 throat, 466, 1049
 Inlets, 403, 730 *ff*
 Inner surf zone, 202
 Inner-shelf shoals, 114
 Interbedded
 paleosols, 50
 sands, 571
 Interdune swales, 483
 Intermittent dunes, 31
 International navigation, 766
 Interridge swales, 130
 Intertidal
 abrasion platform, 1013
 beach, 194
 flats, 242
 flood-tidal deltas, 466
 foraminifera faunas, 675
 marshes, 986
 mud or sand flats, 959
 reef-flat, 22
 sediment, 673
 zonation, 673
 Invader species, 648
 Inverse barometer, 509
 Iron-stained quartz, 539
 Irregular waves, 1110
 Irrigation
 dams, 959
 networks, 111
 Isostasy, 924
 Isostatic
 compensation, 133
 depression, 27
 downwarping, 177

- rebound, 127, 365, 924, 960, 1115
 model, 133
 response, 530
- J**
- Jetties, 413, 915, 973
 Jetty, 669
 Jetty stability, 448
 Joints, 747 *ff*, 812
 Jones Act, v, 1107
 Juan de Fuca, 748
- K**
- Karst, 582
 Katabatic winds, 1030
 Khamsin, 37
 Khondalites, 885
 Kinematic surveys, 704
 Kinematics, 831
 Koms or tells, 36
- L**
- Lagoon, 178, 823
 Lagoon
 bathymetry, 379
 ecosystem, 388
 inlets, 654
 margin muds, 44
 sands, 45
 Lagoonal shoreline, 139
 Lake
 drawdown, 504
 ecosystem, 654
 ice, 65
 level
 regime, 504
 regulation, 594
 Lakebed
 morphology, 65
 scour, 79
 Lakes, 494
 Land
 exploitaion, 483
 loss, 112, 327 *ff*
 reclamatiom, 481, 961
 subsidence, 230, 654, 958
 Landform indicators, 663, 811
 Landloss, 462
 Landsat images, 811
 Landsat Thematic Mapper, 340
 Landsat-5 Satellite Thematic Map-
 per, 28
 Landsliding, 747
 Larval recruitment, 17
 Laterites, 812
 Laurentian shield, 634
 Laurentidian ice cap, 924
 Leeward biofacies, 944
- Lenticular bedding, 44
 Leptynites, 885
 Levees, 665, 959
 Life history, 403
 Linear
 regression, 151
 wave theory, 193, 832
 Littoral zone, 132
 Littoral
 cell, 173 *ff*, 748 *ff*
 drift, 1125
 cell, 663
 current, 244 *ff*
 shores, vi
 dunes, 249
 fringe community, 16
 paleoenvironments, 673
 sands, 751
 sediment transport, 655
 transport, 68, 420, 616
 zone, 108, 128, 251
 Loess, 35
 Log-debris berm, 505
 Log-hyperbolic distribution, 1044
 Loggerhead turtle, 1004
 Long-period
 harbor resonance, 459
 waves, 1069
 Longshore
 and offshore transport, 79
 current, 823
 velocities, 1067
 drift, 108, 731
 material transport, 915, 1115
 sand transport, 655
 sediment supply, 470
 transport, 255, 463
 tidal currents, 731
 transport, 324, 823, 977, 1136, 1142
 system, 130
 variations in wave energy, 173
 Low littoral drift shores, 413
 Low-tide
 terrace morphology, 206
 zone, 206
 Lutite, 248
- M**
- Macro-tidal, 785
 Macrotidal, 390
 Macrotidal
 beaches, 189, 206
 environments, 934
 Magnetic and quartz sand, 16
 Mangrove swamps, 801
 Mangroves, 958
 Marginal flood channels, 467
 Marine
 domain, 388
 environment, 577
 foreland, 720, 1115, 1125
 mammals, 133
 microfossils, 549
 sediments, 748
 transgressive sands, 46
 Marine/fluvial erosion, 413
 Maritime coastal forest, 988
 Marl, 769
 Marl stone, 769
 Marsh, 506
 Marsh
 deterioration, 209
 development, 107
 habitat, 210
 inundation, 434
 peats, 266
 Mass movement, 87
 Mean angle of wave approach, 195
 Mediterranean lagoons, 378
 Mega-cusps, 425 *ff*
 Megaripple, 934, 1051
 Melt water sediment, 81
 Meltwater deposits, 769
 Mercury fallout, 56
 Mesotidal regimes, 462
 Meteorological influences, 112
 Methane, 339
 Methane flux, 340
 Methanogenesis, 339
 Micro- or meso-tidal conditions, 126
 Micro-tidal, 785
 Microfossil, 679
 Micropropagation systems, 356
 Microstratigraphy, 133
 Microtidal
 coastal basin, 210
 fluctuations, 211
 regimes, 462
 Middons, 134 *ff*
 Migrating
 ridge and runnell systems, 249
 spit or headland, 582
 Mineral
 assemblages
 extraction, 209
 Molecular scattering optical depth,
 437
 Mollusc density, 383
 Monasterian age, 35
 Monochromatic waves, 1146
 Monsoon, 847
 Moraine cliffs, 1118
 Moraine deposits, 88
 Moraines, 721, 1115
 Morphodynamic model, 1065
 Morphodynamic zones, 431
 Morphostratigraphy, 577
 Mud
 and sand faunas, 945
 flats, 105, 351, 468, 990
 stream, 435
 volcanoes, 109
 Mudcracks, 543
 Mudflat, 679
 Multiple regression analysis, 93

- Multispectral Atmospheric Mapping
 Sensor (MAMS), 434
Mussels, 767
- N**
- National Wetlands Inventory (NWI),
 862
Nature Conservatory, 405
Navigation Channel, v
Neap tide, 401
Near shore bars, 812
Near-bed currents, 529
Near-bottom mean flows, 262
Near-shore
 slope, 3
 zone, 126
Nearbed flow velocities, 191
Nearshore, 595
Nearshore
 bars, 668
 ice regime, 65
 lands, 958
 marine to beach sands, 45
 sediment transport models, iii
 slopes, 68
 wave refraction, iii
 zone, 11, 184, 654, 732, 1143
Nearshore-ice transport, 68
Nectobenthic, 387
Nematode, 97
Neolithicum, 728
Neotectonism, 27
Neptunian dikes, 1013
Nests, 224
Net
 accretion, 1029
 erosion, 1029
 littoral drift,
 sand transport, iv
 shore drift, 663, 811
 shoreline retreat, 942
Niskin bottle, 896
Niskin bottles, 391
Nitrogen, 895
Nitrogen-fixing bacteria, 98
NOAA, 862
Nodal explants, 358
Non-uniform sediment, 1094
Notches, 812
Nourishment sand, iv
Numeric hydrodynamic model, 509
Numerical
 model, 1094
 simulation, 915
Nutrient assimilation, 862
- O**
- Ocean
 currents, 511
 straight, 509
 waves, 448
- Oceanographic law of continuity, 262
Oertel's model, 731
Offshore
 bar, 3, 73 *ff*
 connected ridges, 185
 currents, 262
 sediment transport, 262
 shoal, 114
 slope, 107
 wind, 1143
 wave forcing function, 3
Oil pollution, 1065
One line model, 915
Onshore-offshore direction, 3
Ophiolites, 610
Ordovician
 limestone, 634
 shales, 629
Organic scum layers, iii
Oscillations, 1075
Ostracods, 41, 549
Outer beach, 243
Outwash
 plains, 721
 sand, 365
Over-marsh surface flows, 217
Overflow, 631
Overland
 runoff, 907
 sheet flows, 211
Overpumping, 959
Overtopping, 1
Overwash, iii, 108, 178, 699, 1147
Overwash
 deposition, 112
 events, 402
 lobes, 16
 storm surge, 404
Ozone optical depth, 437
- P**
- Paleo-channels, 668
Paleo-beach ridges, 668
Paleosol development, 57, 131
Paleosols, 652
Pancake ice, 634
Paralic domain, 388
Parallel breakwaters, 922
Parallel longshore bars, 423
Parallel ridges, 578
Partical size variability, 90
Patch reefs, 13
Peat, 549, 652, 970, 1125
Peat domes, 959
Pelecypods, 41
Perched barriers, 263
Percipitation, 907
Percolation, 378
Perennials, 403 *ff*
Permeability, 87
Phase shift, 518
Phosphorus, 895
- Photogrammetric analysis, 89
Phragmites, 724
Physical model testing, 449
Phytoplankton
 dynamics, 383
 production, 895
Pile bulkheads, 72
Pioneer
 grass, 653
 species, 653
Planar beaches, 786
Plate tectonics, 960
Playa muds, 42
Playas, 35, 563
Pleistocene
 glaciation, 495
 terrace, 945
Plumes, 767
Pocket beaches, 424, 622, 812, 847,
 1013
Pollen and vegetation analysis, 371
Pollution, 59, 1083
Polychaete biomass, 383 *ff*
Population
 concept, 1044
 growth, 1054
Pore
 pressure, 961
 water methane, 340 *ff*
 pressure, 87
Porosity, 87
Postglacial transgression, 723
Precambrian clasts, 634
Predominant waves, 610
Pressure
 gradients, 515
 response factor, 5
 ridges, 630
 transducer, 191
Presumpscot formation, 365
Prevailing waves, 610
Prismatic estuaries, 908
Process-response studies, 147
Profile nourishment, 1106
Promontories, 812 *ff*
Provenance, 610
- Q**
- Q-mode analysis, 944
- R**
- R-mode analysis, 944
Radiocarbon
 dates, 129
 dating, 543, 1125
Radiocarbon-dated sediment bor-
 ings, 26
Radiometric dating, 578
Rail tunnel, 766
Rain
 forests, 944

- shadow, 12
 wash, 748
 Raised beaches, 132, 924
 Rayleigh
 distributions, 845
 probability density function, 8
 Real-time navigation, 720
 Receiving basin, 959
 Recurved spit, 1125, 1143
 Red algae, 584
 Reefs, 416, 530
 Reflective
 beaches, 760, 786, 1071
 state, 423
 Reflectivity, 425
 Refraction patterns, 661
 Regression analysis, 524
 Regressive or near constant sea levels, 126
 Relative
 sea level, 229 *ff*
 rise, 462 *ff*
 sediment transport, 462
 Remote sensing, 341, 663, 811
 Replenishment sand, 263
 Replenished beaches, *iv*
 Replenishment, 184
 Reserve management, 651
 Reservoirs, 494
 Resonance modes, 459
 Response amplitude operator (RAO), 450
 Revetments, 72
 Reynolds number, 280, 909
 Rhizoliths, 586
 Rhythmic
 beach, 423
 topography, 715
 Rhythmites, 374
 Rice paddies, 340
 Ride/Pile-up ice floes, 631
 Ridge
 and runnel topography, 786
 and swale, 133
 Ridge/swale relationships, 127
 Rip
 channels, 191
 current
 cells, 185
 systems, 787
 currents, *iii*, 262, 748
 morphology, 786
 Rip-current embayments, 753
 Rising sea level, 185
 River
 bed quarrying, 481
 bedload, 484
 discharge, 965
 flow, 420
 plumes, 18
 regime, 964
 runoff, 1081
 River-mouth
 bar, 1022
 sand bar, 1015
 Riverine
 discharge periods, 155
 flow, 907
 system, 988
 Rocky
 coasts, 413
 headlands, 751
 Rocky-shore
 Biotic associations, 944
 deposits, 1013
 ecosystem, 944
 organisms, 944
 Rubble-mound jetties, 976
S
 Sabkha to alluvial fan silty sands, 46
 Sabkhas, 35, 53 *ff*, 563
 Saline
 groundwater, 44
 incursion, 59
 intrusion, 21
 soils, 339
 Salinity gradient, 679
 Salt
 incursion, 885
 lakes, 55
 marsh erosion, 698
 marshes, 249 *ff*, 340, 721, 801
 wedge, 893
 Salt-marsh microfossils, 673
 Saltwater intrusion, 209, 961
 Sand
 berm, 505
 bulges, 182 *ff*
 deposition, 97
 dunes, 243 *ff*, 1015
 flats, 31
 lenses, 366, 546
 movement, *iii*
 plains, 317
 ridges, 959
 shoals, 976
 spits, 751, 823
 stabilization, 102
 transport, 462, 610, 751, 916
 Sandbanks, 823
 Sandhumps, 731
 Sandwaves, 934
 Sandy
 beaches, 170
 bottom shelves, 13
 littoral drift shores, 418
 shores, 466, 816
 silts, 889
 Satellite imagery, 47
 Scour, 453, 973 *ff*
 Scour records, 453
 Scoured platforms, 133
 Sea
 cliff retreat, 1129
 cliffs, 747, 1022
 level, 494, 595, 673, 747, 924, 1075, 1147
 rise, 149, 173, 362, 654, 701, 986
 notches, 1132
 retreat, 924
 stacks, 756
 surface temperatures (SST), 434
 transgression, 924
 turtle, 1004
 Sea-arms, 732
 Sea-floor spreading, 748
 Sea-level
 change, 229, 577
 factor, 46
 rise, 104, 180, 721, 958, 1125
 Seabed topography, 934
 Seasonal variability, 885
 Seawalls, 72
 Seawater, 895
 Sediment
 accumulation, 811
 availability, 206
 balance, 654 *ff*
 budget, 93, 934, 1130
 compaction, *iii*
 composition, 88
 deficiency, 654
 dynamics, 823
 elevations, 986 *ff*
 flux, 988
 granulometry, 379
 load of shore ice, 628
 load, 965
 loss, 112
 movement, 847
 pathways, 1026
 plumes, 18, 435, 669
 pore pressure, *iii*
 rafting, 71
 size, 206, 812
 distribution, 87
 sorting, 1044
 stabilization, 862
 starvation, 821
 supply, *iii*, 242, 466
 textures, 425
 transport, 65, 185, 209, 262, 481, 663, 786, 847, 1148
 patterns, 1026, 1044
 processes, 27
 rate, 920
 traps, 242, 648, 811
 trend analysis, 1026 *ff*
 wedge, 267
 Sediment-laden ice, 628
 Sediment-transport processes, 654
 Sedimentary
 budget, 628
 characteristics, 611
 sequences, 1044
 Sedimentation, 767
 Sediments, 885
 Seiches, 457, 1075
 Seiching, 511
 Semi-arid, 885

- Settling
lag, 893
velocity, 397, 1094
- Shallow water draft hopper dredger, 1106
- Shear
dispersion, 529
strength, 87 *ff*
vane meter, 90
- Sheet ice, 630
- Shelf
break, 665
sediments, 847
seiche, 15
- Shell
beds, 134
lags, iii
layers, 698 *ff*
- Shingle, 88
- Shoaling, 654
- Shoaling waves, 206, 786
- Shoals, 731
- Shore
drift, 811
niches, 133
parallel submerged bars, 425
platforms, 629
vegetation, 924
- Shore-normal
morphology, 194
profile, 70
- Shore-parallel
profiles, 715
tidal currents, 787
- Shoreface, 654
profile, 263
retreat, iii
- Shoreface-ramp profile, 596
- Shorefaces, iii
- Shoreline, 577
- Shoreline
change, 481, 934
configurations, 915
development, 721
displacement, 721
erosion, 87, 175, 494, 595
evolution, 915 *ff*
movement, 172, 702
orientation, 425
rate-of-change, 147
recession, 12
response, 170, 255, 973
retreat, iii, 151, 497 *ff*
- Short-period waves, 1069
- Side-scanning sonar, 141
- Silicaceous diatoms, 14
- Siliciclastic sands, 38
- Silt, 401
- Siltation, 402
- Siltation
at a point (SAP), 1095
stress, 11
- Single-spit, 414
- Slope
angle, 87
break, 789
dike, 1110
failure processes, 87
gradients, 425
movement, 87
stability, 87
surface, 566
- Slush, 630
- Snow
cover, 644
fence, 102
pack, 501
traps, 932
- Social facilitation, 221
- Soil
erosion, 12, 481
pH, 131
- Solar cycle, 127
- Solar-cycle periodicities, 133
- Solid waste disposal sites, 55
- Spatial variability, 986
- Spilling waves and bores, 794
- Spit
growth, 812, 670
progradation, 243 *ff*
- Spit-lagoon, 414
- Spits, 268, 464, 812, 823
- Spoil
banks, 962
island, 356
- Sponge spicules, 549
- Spring
run-off, 504
tide, 401
- Standed marine scarp, 138
- Steep beach face slope, 195
- Stiff muds, 38, 540
- Still water level, 6
- Stokes second order wave theory, 199
- Storm
berms, 624
effect, 1054
events, 924
impact assessment, 702
overwash deposits, 181
rubble, 17
surge, 183, 262, 699
barrier, 737
deposits, 698
ebb, iii
tides, 686
wave height, 529
waves, 72, 435, 596
- Storm-induced wave set-up, 262
- Strand-plain beach, 265
- Stranded beach gravels, 129
- Strandline ecology, 410
- Stratal boundaries, 28
- Stratigraphic formation, 539
- Stream mouth diversions, 668
- Subduction, 748
- Subduction zone boundary, 673
- Submarine
canyons, 958, 1075
coastal bars, 46
delta, 481
zone, 595
- Submerged
mound, 450
reefs, 1123
rocky islets, 427
vegetation, 862
- Submergence, 673
- Subsidence, 27, 468, 986
- Substrate stability, 678
- Surf beat, 15, 518
- Surf
scaling parameter, 203
zone, iv, 81, 201, 257, 262, 505, 758, 786, 795
zone breaker heights, 1067
- Surf-scaling parameter, 425
- Surface
gravity waves, 511
scour pits, 13
- Surficial sediment grain size, iii
- Surge action, 435
- Suspended sediments, 390, 434
- Suspension bridge, 766
- Swash
autocorrelation plots, 7
bar, 195
height, 2
runup, 758
spectral plots, 7
zone, 616, 786
zone sediments, 487
- Swell, 786
- Swell waves, 732
- T**
- Talus, 753
- Tar
balls, 1065 *ff*
pollution, 1065
- Tectonic, 413
- Tectonic
activity, 242
subsidence, 960
uplift, 748
- Tectonism, 133
- Terminal
moraine, 721
spits, 112
- Terrigenous sediment loadings, 11
- Textural parameters, 481
- Texture, 610, 887
- Thematic mapper, 663 *ff*, 863
- Thermkarst lakes, 131
- Three-dimensional beach models, 702
- Thrust faults, 364
- Tidal
bays, 412
channels, 249, 374, 678, 730, 934, 968
creeks, 414, 968

- current strength, 678
 currents, iii, 730, 968
 cycle, 786, 847
 deltas, 248 *ff*
 embayment, 509
 energy dissipation, 907
 flat muds, 266
 flats, 374, 665, 721, 785, 959
 flow, 403, 420
 flux, 413
 inlets, 248, 462, 732, 885, 973, 1044
 marshes, 673 *ff*
 oscillations, 907
 power generation, 934
 prism, 245 *ff*, 373, 416, 462, 730
 regime, 244, 730
 sea levels, 515
 shoals, 730
 shoreline, 1054
 throat, 418
 variations, 1075
 wave propagation, 245, 908
 Tidal-wetland soils, 673
 Tide
 range, 785
 terrace, 848
 Tides, 448
 Tills, 769
 Time domain analysis, 831
 Tin, 36
 Tombolo, 414, 647, 949
 Total deposition, 1029
 Tracers, 663
 Transgression, 462
 Transgressive
 sand body, 968
 sands, 42
 shoreline, 468
 Transport environment, 1026
 Transverse
 bars, 191
 spits, 639
 Trawling, 1006
 Tree rings, 926
 Tropical storms, 463
 Tsunami runup, 449
 Tsunamis, 1, 457, 751
 Turbid water masses, 669
 Turbidity, 395, 890
 Turbidity
 current processes, 83
 currents, iii, 261
 zone, 643
 Turbulent
 shear stress, 213
 viscosity, 379
 Tyrrhenian age, 35
- U**
- Ultrasonic current meter, 191
 Unconformities, 1013
 Under-cutting, 505
 Unweighted Pair Group Method, 491
 Updrift
 beaches, iv
 dune erosion, 183
 Uplifted marine terraces, 747
 Upwelling, 524
- V**
- Varves, 698
 Vascular plants, 673
 Vegetation
 maps, 405
 mats, 924
 succession, 131
 Velocity
 profile, 529
 spectrum, 199
 Vertical
 eddy diffusivity, 529
 shear, 524
 Viruses, 102
 Viscosity, 909
 Visual interpretation, 663
 Volcanic, 413
 Volcanic
 breccia, 109
 embayments, 414
 Volcanoes, 748
 Volume changes, 654
 Vortex stretching, 909
- W**
- Washover
 deposits, 183
 fans, 402
 Water
 column, 399
 depth, 191, 908
 level
 regulation, 497
 setup, 434
 levels, 448
 quality, 1083
 reservoir, 111
 storage, 862
 turnover, 895
 Waterway's Experimental Station
 (WES), 325, 448
 Waterways, 907
 Watting, 375
 Wave
 action, 244, 420, 434, 730
 amplitude, 908
 time series, 5
 approach, 197, 448
 characteristics, 189
 climate, iii, 831
 crest, 197
 cut
 notch, 19
 platforms, 812
 dimensions, 1146
 energy, 79, 494, 1069
 analysis, 501
 dissipation, 261
 flux, 731
 field, 202
 fronts, 817
 generation system, 449
 height, 191 *ff*, 786, 840, 920
 induced
 erosion, 468
 longshore currents, iii
 Kinematics, 831
 motion, 847
 orbital interaction, iii
 overwash, 76 *ff*
 periods, 186, 191 *ff*, 840, 920
 propagation, 915
 refraction, 448, 847
 analyses, 184
 patterns, 185
 studies, 811
 rose diagrams, 181
 runup, 1, 758, 1110
 shoaling, 448
 simulation, 1110
 spilling, 1146
 steepness, 1070
 systems, 126
 trains, 79
 transformation/propagation, 448
 undercutting, 748
 wash, 69
 Wave-built barrier spits, 413
 Wave-cut platform, 265
 Wave-induced
 longshore drift, 731
 sediment transport, 979
 Wave-trimmed ridge, 15
 Wave-undercut beachrock slabs, 18
 Wavemakers, 448
 Waves, 448, 1110
 Weathering, in situ, 87
 Weibull distribution, 841 *ff*
 Weighted pair group method, 318
 Well-mixed estuaries, 907
 Wetland
 loss, 59
 rates, 209
 management, 862
 Wetlands, 340, 801, 862, 868
 Wetlands classification, 862
 Wind, 907
 Wind
 drag coefficient, 514
 regime, 127
 stress, 379, 515
 transport, 185
 vectors, 513
 Wind-driven circulation, 509
 Wind-induced

longshore currents, iii
surges, 105
upwelling, iii
Wind-sand regime, 648
Windward biofacies, 944
Winnowing, 183, 1051
Winter ice push, 130
Woody
plants, 404
population, 924
World ocean level, 104

X

X-ray
diffraction analysis, 562
radiography, 543

Z

Zero-crossing period, 197
Zonation, 801

Zone

of transport, 667, 821
of accumulation, 667, 821
of sediment supply, 667, 821
Zoom transfer scope, 89