

Subject Index

- ANCOVA 154, 156
- Accumulation 41, 90, 109, 149, 183, 193, 209, 214, 221, 231, 242, 243, 296, 320, 353, 362, 363, 386, 388, 398, 441
- area 218, 276, 282, 296
- bottom 221, 231, 238, 249, 275–279, 281, 314, 320, 321, 402
- rate 218, 276, 279, 402
- sediment 318
- Advection 29, 43, 59, 62, 68, 184, 200, 204, 380, 438
- Air-water exchange 445
- Allochthonous 177, 218
- Ammonium 4, 136, 141, 143, 146, 177, 209, 244, 246, 247, 250, 289, 316, 335, 336, 348, 378, 381–384, 386, 395, 396
- Ammonification 244, 246, 249, 250, 401
- Anoxic 1, 25, 65, 177, 231, 234, 239, 243, 244, 246, 247, 277, 289, 316, 329, 348, 378, 382
- sediment 11, 232, 237
- water 244
- Aerosol 95, 151, 162, 264, 265, 270–272, 284, 426, 427, 431, 434, 443, 246
- Anoxia 9, 31, 232, 239, 240, 243, 246, 250, 289, 325
- Aphanizomenon 200, 201–203, 214
- Arkona 21, 23, 28, 37, 53, 62–65, 73, 141, 217, 342
- Atmospheric deposition 1, 4, 14, 15, 75, 113, 118, 128, 133, 172, 177, 348, 360, 383, 406, 417, 433, 434, 436, 440
- Autochthonous 219, 424, 443
- Autotroph 7, 188, 193, 199, 204, 376–379, 381, 382, 394, 399–401, 410
- Bacteria 7, 11, 178–180, 183–185, 187, 188, 190–193, 196, 198, 201, 234, 244, 318
- Baroclinic
- current 37, 61, 64
- flow 48, 51, 52, 54, 64
- Barotropic
- current 24, 37, 52, 64
- flow 26, 50, 65, 70, 71, 74
- Belt Sea 19, 21, 23–26, 31, 41, 42, 45, 46, 49, 50, 53, 62–64, 379, 384, 439
- Benthos 16, 188, 212, 213, 215, 223, 226, 324, 414
- Bioaccumulation 149
- Biogeochemistry 1, 2, 5–7, 10, 12–14, 19, 40, 177–179, 196, 230, 289, 290, 314, 319, 353–355, 368, 373, 374, 377, 380–382, 398, 403–406, 409, 410
- Bioturbation 9, 277, 279, 289, 290, 314
- Bloom 1, 6, 7, 59, 178, 185–187, 190, 200, 203, 212, 214, 231, 239, 240, 329, 382, 392, 394, 399, 401
- spring 8, 59, 183, 186, 188, 189, 196, 197, 212, 213, 338, 341, 348, 394, 399, 401
- Bornholm
- Basin 66
- Channel 26, 37, 62, 64
- Deep 399
- Strait 62
- Bothnian
- Bay 6, 7, 11, 31, 33, 35, 38, 44, 46, 47, 49, 52–55, 98, 109, 110, 133, 142, 146, 180, 184, 188, 193, 195, 199, 203, 204, 213, 229, 231, 261, 310, 312, 313, 318, 319, 321, 322, 329, 335, 336, 338, 340, 344, 355, 357, 362, 419, 429, 434
- Sea 14, 31, 33, 37, 49, 52–55, 104, 109, 110, 185, 186, 188, 193, 195, 196, 199, 203, 204, 229, 231, 261, 313, 318, 319, 320, 321, 322, 329, 333, 336, 338, 340, 345, 355, 357, 369, 419, 429, 436

- Bottom 8, 9, 19, 27, 37, 53, 62, 65, 68, 189, 196, 217, 221, 231, 232, 238–243, 249, 251, 252, 275–277, 279, 280, 289, 290–292, 294–296, 311, 314, 315, 318, 320, 321, 336, 379, 402, 419, 426,
 current 19, 20, 26, 27, 29, 37, 62–65, 67, 279, 355, 378, 379, 380
 layer 68
 sediment 40, 41, 215, 220, 238, 276, 280, 383, 417
 type 294–296, 311
 water 62, 230, 232, 240, 244, 246, 309, 338, 382, 422, 436, 437, 443
- Box 53, 355, 357, 363
- Budget 2, 9–12, 14, 35, 43, 67, 188, 202, 245, 342, 349, 353, 354, 356, 358, 363, 367, 404, 418, 433
 model 10, 33, 353, 373
 nutrient 10, 204, 215, 220, 221, 290, 353, 366, 373
 volume 50
 water 42, 49
- Burial 8, 9, 14, 15, 41, 204, 218, 221, 242–244, 248–252, 275–277, 281, 289, 291, 318, 321, 378, 379, 383, 403, 422, 426, 434, 436, 438, 440, 443
- Carbon 8, 9, 35, 152, 178, 180, 183, 187, 188, 192, 193, 215–221, 247, 264, 267, 268, 274, 276, 279, 280, 289–292, 294, 296, 309–313, 315, 316, 319, 321, 399, 426
 cycle 7, 178, 218, 220
 dissolved organic (DOC) 183, 191, 193, 195, 208–210, 267, 279, 280, 421, 441
 dioxide 220, 221
 flux 183, 184, 202, 219
 inorganic 178, 289, 309, 310, 316
 organic 9, 183, 187, 191, 217, 219–221, 267, 268, 276, 278–280, 282, 309, 311, 313, 315, 316, 421, 426, 443
 particulate organic (POC) 195, 196, 204, 214, 221, 267, 268, 421, 422, 426, 427, 432, 433, 434, 436, 438, 441, 443
 sink 221
- Catchment 15, 101, 102, 104, 114, 116, 118, 119, 126, 136, 152, 154, 229, 237, 356, 433, 442
- Chlorophyll 189, 199, 225, 343, 349, 413
- Circulation 19, 20, 28, 29, 37–39, 55, 60, 62, 65, 252, 331
 estuarine 8
 vertical 20, 62, 63, 67
- Climate 2, 3, 13, 14, 48, 69, 75, 78, 86, 90, 93, 96, 163, 165, 178, 204, 220, 221, 374
- Cloud 23, 42, 56, 60, 61, 78, 91, 93–96, 268
- Coastal 1, 7, 13, 46, 54–56, 98, 160, 168, 184, 186, 189, 196, 199, 215, 217, 218, 231, 232, 234, 239, 245, 249, 294, 321, 329, 353, 356, 360, 375, 384, 395, 396, 449
 aera 75, 83, 94, 96, 102, 118, 193, 212, 214, 217, 222, 231, 235, 241, 249, 275, 295, 358, 426, 449
 boundary 68
 region 7, 14
 sea 7, 200, 220
 water 53, 59, 107, 239
- Control 8, 19, 52, 64, 74, 124, 125, 127, 128, 133, 149, 178, 184, 197, 199, 206, 318, 374
 bottom-up 197
 top-down 197
- Coriolis 49, 53
- Currents
 inertial 56, 68
- Cyanobacteria 7, 11, 17, 118, 133, 179, 185, 200, 202, 205, 206, 208, 214, 224, 226, 360, 381, 398, 413
- DDT 150, 158, 175, 417, 446
- Data quality 116, 133, 136, 146
- Degradation 13, 151, 169, 178, 184, 192, 196, 201, 206, 207, 222, 230, 244, 251, 257, 275, 276, 277, 290, 314, 322, 348, 417, 427, 431, 434, 438, 444
- Denitrification 9, 11, 17, 230, 244, 245, 246, 247, 248, 249, 250, 251–253, 255, 256, 369, 371, 378, 379, 382, 398, 405, 411, 413
- Deposition
 flux 221, 271, 439
 rate 146, 168
- Detritus 196, 226, 289, 376, 377, 378, 379, 381, 382, 399, 401
- Diagenesis 218, 221, 222, 238, 255, 319, 323, 324, 325
- Diatom 8, 184, 187, 212, 213, 240, 323, 338

- Diapycnic mixing 24, 68
Diffusion 31, 56, 60, 62, 63, 67, 71, 72, 246,
273, 278, 279, 280, 284, 318, 378, 379,
380
Discharge 41, 101, 109, 113, 114, 117, 128,
129, 152, 170, 171, 172, 274, 282, 417,
432, 441
Dispersion 60, 61, 72
Dissolved organic matter (DOM) 7, 178,
179, 191–193, 200, 202, 205
Dry deposition 4, 133, 145, 146, 270–272,
281, 282, 284, 440, 443
Ecology 17, 19, 40, 209, 414
Ecotoxicology 325, 447
Ekman
 currents 38, 56
 layer 772, 73, 28
 transport 37
Emission 3, 113–118, 120, 122, 124, 125,
127, 128, 133, 142, 146, 150, 221, 266,
282, 431, 436, 444, 447
Entrainment 33, 58, 65, 378, 379
Equilibrium 141, 261, 268, 270, 272, 278,
280, 287, 426, 427
Erosion 40, 58, 60, 71, 122, 186, 218, 231,
232, 238, 240, 242, 249, 294, 296, 311,
314, 318, 332, 402
 bottoms 231, 242, 294, 296, 311, 314
Estuary 2, 52, 53, 70, 73, 200, 238, 255,
353, 418
Euphotic zone 56, 212, 214, 217, 262
Evaporation 33, 35, 38, 40, 41, 42, 43, 57,
58, 59, 72, 101, 175, 356, 358, 371
Excretion 208
Export 14, 121, 122, 163, 203, 212, 214,
216, 217, 218, 219, 224, 225, 226, 229,
237, 241, 353, 363, 367, 412

Fecal pellet 215, 222
Feedback 35, 43, 382, 403
Fickian diffusion 355
Fishery 4, 291
Flagellate 180, 207
Forcing function 2, 5, 34, 330, 357, 363,
383, 406, 408
Freshwater 3, 19, 21, 23, 26, 29, 31–33,
34–38, 40–42, 44, 48, 50–54, 56–61,
64, 66, 69–70, 72, 75, 103–104, 110,
116, 193, 206, 253, 256, 350, 355–356,
358, 361, 412, 414, 421

Fugacity 13, 275, 419, 422, 429, 444,
446
Fulvic acid 191, 343

Gulf of Bothnia 9, 31, 44, 49, 54, 69, 70,
71, 199, 207, 208, 209, 222, 224, 225,
229, 230, 231, 236, 237, 239, 240, 241,
245, 247, 250, 253, 255, 256, 310, 318,
323, 324, 325, 340, 344, 353, 355, 363,
364, 372, 379, 413, 415, 439, 446
Gulf of Finland 6, 10, 17, 39, 47, 109, 177,
185, 199, 200, 206, 207, 208, 224, 261,
294, 296, 311, 312, 313, 318, 320, 322,
323, 327, 344, 345, 351, 399, 401, 411,
419, 429, 434, 437, 439
Gulf of Riga 32, 33, 49, 53, 74, 130, 199,
215, 225, 241, 256, 261, 292, 311, 318,
320, 323, 326, 419, 429, 434, 437

Halocline 8, 26, 28, 31, 33, 34, 35, 37, 63,
65, 66, 68, 71, 231, 238, 239, 240, 241,
242, 243, 246, 247, 248, 249, 250, 251,
252, 296, 330, 332, 333, 335, 348, 350,
355, 357, 421
Heat budget 35, 43
Heterotroph 7, 8, 204, 215, 376, 377, 378,
381, 382, 394, 398, 399
Heterotrophic 8, 183, 184, 185, 188, 193,
199, 205, 207
Himmerfjärden 17, 55, 223
Humic substance 192, 204, 209
Hydraulic control 51, 64
Hydrology 3, 14, 75
Hydrolytic ectoenzyme 179
Hydrophobicity 264, 277, 440
Hypoxia 289, 369

Ice cover 35, 41, 43, 98, 111, 185, 418
Import 43, 218, 229, 364
Inflow 15, 20–26, 28, 29, 31, 34, 40, 42,
49, 53, 62–66, 67, 70, 71, 72, 74, 75,
102, 103, 104, 107, 111, 130, 177, 183,
185, 191, 196, 204, 208, 225, 231, 237,
239, 282, 286, 296, 331, 332, 335, 347,
350, 360, 361, 375, 379, 386, 390, 417,
421, 424, 426, 429, 433, 436, 437, 442,
443
Influx 185

- Input 1, 3–5, 7, 8, 10, 11, 13–15, 95, 113, 114, 117, 118, 121, 128, 129, 130, 133, 141, 147, 154, 156, 166, 193, 197, 200, 201, 202, 204, 208, 217, 229, 236, 248, 251, 252, 270, 274, 280, 282, 283, 289, 327, 341, 342, 350, 355, 356, 358, 360, 361, 363, 366, 369, 373–375, 384, 386, 388, 400, 405, 406, 408, 421, 422, 428, 429, 430, 432, 433, 434, 436, 440, 442, 443, 444
 Insecticide 150, 158, 175
 Interannual 3, 13, 41, 46, 69, 72, 84, 93, 116, 117, 121, 126, 140, 222, 356, 358, 361, 362, 398, 410
 Interbasin 369, 434, 436
 Irbe Strait 49, 53, 71

 Kattegat 6, 19, 21, 23, 24, 25, 26, 31, 41, 42, 44, 45, 46, 48, 49, 50, 51, 53, 55, 63, 70, 71, 72, 73, 103, 109, 111, 193, 197, 204, 209, 215, 229, 231, 234, 239, 243, 251, 254, 355, 357, 361, 363, 366, 369, 378, 379, 384, 401, 412, 419, 429, 436, 439
 Kiel Bight 199, 209, 215, 218, 222, 223, 226, 322, 399, 401, 414
 Knudsen 25, 33, 63, 71, 356, 371

 Lake 7, 14, 28, 44, 59, 61, 72, 86, 93, 101, 107, 111, 121, 122, 125, 127, 149, 170, 174, 188, 200, 202, 203, 229–234, 237, 238, 240, 246, 250–256, 285, 286, 324, 350, 417, 419, 422, 434, 441, 446, 446
 Landsort 47, 91, 310, 347
 Land use 3, 128, 129, 130
 Lipophilic 151
 Load 1–4, 10, 11, 14, 15, 17, 18, 107, 112–119, 121, 128, 130, 147, 149, 162, 172, 217, 226, 236, 249, 289, 329, 330, 338, 342, 345, 348, 353, 358, 360, 363, 364, 367–372, 384, 406–409, 412
 Loss on ignition (LOI) 218, 291, 309, 311, 314, 316, 439

 Macrofauna 9, 225, 289, 290, 292, 309, 321, 322, 323, 327
 Management 2, 10, 13, 129, 178, 197, 203, 353, 369, 373, 374, 418

 Mass balance 13, 17, 224, 229, 243, 255, 257, 264, 267, 276, 281, 282, 283, 286, 325, 356, 405, 413, 415, 417, 418, 421, 422, 428, 429, 432, 433, 439, 441, 445–447
 transfer 272, 273, 432, 443
 Michaelis-Menten 81
 Microbial
 food web 178, 180, 183, 185, 198, 201, 203, 205, 222
 loop 178, 179, 180, 183, 184, 203, 204, 209
 Microzooplankton 183, 217
 Mineralization 235, 244, 246, 255, 275, 276, 277, 281, 316, 319, 378, 381–382, 396, 401, 422, 443
 Mixing
 vertical 10, 20, 60, 63, 68, 71, 346
 Model
 advection-diffusion 62, 63, 67
 box 25, 63, 355
 empirical 7, 10, 120, 342, 353, 373
 filling box 20, 28, 37, 62, 63
 mechanistic 12, 373
 Monitoring 7, 114, 116, 117, 121, 124, 129, 177, 189, 198, 206, 207, 285, 292, 330, 342, 343, 347, 348, 357, 358, 360, 363, 373, 445
 Mortality 5, 179, 191, 208, 377, 381, 382, 394, 401

 Nanoflagellates 179
 Nitrate 4, 6, 11, 107, 111, 117, 120, 123, 124, 126, 127, 128, 129, 136, 140, 142, 143, 145, 146, 147, 199, 244, 246, 247, 248, 250, 252, 336, 338, 344, 345, 378, 381, 382, 383, 384, 386, 389, 395, 398, 409, 412
 Nitrification 244, 246, 248, 249, 378, 382, 383, 396, 411, 413
 Nitrite 244, 396
 Nitrogen 3, 4, 7–10, 13–15, 17–18, 74, 113, 114, 117, 118, 120–124, 126–131, 133, 139, 142, 143, 145–148, 186, 199, 200, 202–206, 209, 217, 223, 226, 229–231, 244–255, 289, 290, 292, 296, 309, 310, 311, 312, 315, 316, 319, 321, 324, 325, 326, 327, 329, 335, 338, 341, 345, 349, 350, 360, 363, 366, 368–373, 376, 377, 378, 379, 381–384, 395–396, 398–415

- Nitrogen fixation 7, 14, 118, 145, 200, 202, 381, 398, 406, 407, 408, 409
- Nitrogen retention 229
- Nodularia 200, 201, 202, 206, 214, 226, 415
- Non-parametric 331, 342
- Normalization 117, 119, 121
- Nutrient 2–14, 17, 35, 56, 72, 74, 75, 107, 112–118, 120–123, 126–130, 133, 149, 178, 183–186, 188, 190, 191, 193, 197–200, 202–212, 214, 217, 219, 223, 224, 229, 230, 232, 233, 248, 250, 253, 255, 256, 289, 290, 291, 294, 323, 325–327, 329–331, 335, 340, 341, 344, 345, 347–351, 353, 354, 357, 358, 366, 368–375, 379, 381, 383–386, 388–400, 404, 406, 408–415, 441, 446
- limiting 7, 10, 197
- Parameterization 60, 73, 374, 381, 398, 400, 401, 410
- Patchiness 59, 70, 189, 375
- PCBs 4, 8, 9, 13, 14, 15, 149, 150, 151, 152, 153, 154, 155, 156, 158, 160, 163, 165, 166, 167, 169, 170, 171, 172, 174, 175, 257, 261, 263, 264, 265, 267, 268, 270, 271, 272, 273, 274, 275, 276, 277, 278, 280, 281, 282, 283, 284, 285, 286, 287, 417, 418, 419, 421, 430, 431, 432, 433, 434, 436, 437, 438, 439, 441, 444, 445, 446, 447
- Phosphate 6, 124, 177, 185, 199, 200, 203, 208, 209, 232, 233, 234, 235, 238, 239, 240, 241, 243, 255, 256, 326, 338, 344, 377, 378, 381, 383, 384, 386, 389, 408
- Phosphorus 3, 4, 6, 7, 8, 9, 10, 11, 13, 14, 18, 74, 114, 117, 118, 119, 120, 121, 122, 124, 125, 127, 128, 130, 131, 197, 199, 200, 201, 203, 204, 205, 206, 208, 209, 217, 223, 226, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 245, 251, 252, 253, 254, 255, 256, 290, 296, 309, 311, 316, 320, 321, 322, 323, 324, 325, 326, 329, 335, 338, 341, 344, 345, 350, 360, 366, 368, 369, 370, 371, 372, 373, 376, 377, 378, 379, 381, 382, 383, 384, 399, 400, 401, 402, 403, 404, 405, 408, 409, 410, 411, 412, 414, 415
- Phosphorus retention 232
- Phytoplankton 1, 6, 35, 59, 71, 179, 180, 183, 184, 185, 187, 189, 190, 197, 200, 204, 205, 206, 207, 208, 209, 212, 213, 216, 222, 223, 224, 225, 226, 240, 349, 376, 377, 381, 392, 399, 412, 413, 414
- Pollutant 1, 2, 4, 8, 15, 61, 129, 130, 147, 149, 150, 151, 152, 154, 156, 157, 158, 161, 162, 165, 166, 171, 174, 175, 196, 257, 263, 272, 274, 285, 286, 412, 417, 445, 446, 447
- persistent organic(POP) 8, 13, 151, 155, 157, 417, 418, 419, 422, 427, 428, 430, 439, 440, 441, 442
- Precipitation 38, 40, 43, 57, 59, 69, 72, 75, 78, 86, 89, 90, 107, 109, 110, 133, 134, 139, 140, 142, 143, 145, 146, 147, 148, 153, 154, 155, 156, 163, 165, 169, 170, 174, 199, 235, 270, 271, 274, 290, 316, 324, 356, 358, 371, 383, 421, 427, 439, 442
- Pressure 23, 48, 51, 75, 90, 129, 151, 152, 161, 163, 183, 197, 265, 266, 272, 285, 431, 444, 445, 447
- Production 6, 7, 8, 11, 12, 14, 17, 18, 41, 56, 178, 180, 183, 184, 185, 186, 187, 188, 189, 190, 193, 197, 199, 204–208, 209, 348, 349, 355, 370, 371, 381, 392, 394, 395, 396, 403, 406, 407, 408, 409, 446
- primary 7, 8, 11, 12, 14, 17, 18, 178, 180, 184, 185, 186, 187, 189, 199, 205, 206, 207, 213, 216, 217, 218, 219, 226, 229, 231, 316, 329, 330, 335, 336, 338, 340, 341, 342, 348, 349, 355, 370, 371, 381, 392, 394, 395, 396, 403, 406, 407, 408, 409, 446
- secondary 204, 394, 395
- Pycnocline 36, 43, 59, 60, 67, 73, 186, 378, 414
- Radiation
- global 94, 95, 96
- solar 35, 42, 44, 56, 94, 95, 96
- Recycling 8, 14, 15, 215, 244, 256, 276, 277, 284, 325, 331, 338, 348, 366, 367, 369, 375, 382, 398, 408, 409, 410, 424, 444
- Redfield 6, 14, 17, 200, 226, 253, 335, 338, 341, 350, 367, 381
- Regeneration 183, 201, 204, 206, 240, 325, 326, 409, 413

- Regulation 10, 15, 101, 110, 222, 224, 274, 348
 Representativity 330, 344, 348
 Residence time 11, 13, 14, 34, 45, 149, 283, 353, 363, 366, 367, 369, 409, 410, 438
 Respiration 183, 207, 209, 234, 378, 411
 Response time 26, 280, 437
 Resuspension 8, 14, 40, 185, 215, 218, 221, 222, 224, 231, 238, 241, 242, 249, 250, 252, 275, 277, 281, 314, 401, 402, 412, 422, 426, 427, 434, 438, 443
 Retention 4, 8, 17, 117, 120, 121, 126, 128, 215, 222, 224, 229, 232, 239, 241, 242, 244, 248, 250, 251, 252, 254, 263, 348, 350
 River Neva 6, 358
 Rossby radius 53, 54
 Runoff 3, 38, 40, 41, 42, 43, 57, 59, 66, 69, 101, 102, 103, 104, 107, 109, 110, 111, 112, 114, 116, 119, 120, 121, 126, 129, 130, 205, 284, 349, 371, 383, 384

 Salinity 2, 10, 19–21, 24–26, 29, 31–33, 36, 37–38, 42–44, 48, 49, 51, 52, 54, 56, 57, 59, 61–63, 66–67, 70, 72, 73, 75, 184, 185, 189, 193, 230, 238, 248, 329–331, 342, 345, 347, 349, 351, 356, 360, 362, 371, 375, 383, 386, 418, 421
 Scale 1, 3, 4, 9, 10, 13, 15, 17, 19, 20, 37, 49, 50, 60–63, 66, 67, 72, 74, 91, 95, 102, 121, 126, 151, 173, 187, 196, 203, 206, 226, 230, 239, 241, 252, 255, 286, 289, 290, 329, 345, 351, 374, 375, 388, 405, 406, 412, 413, 446
 Scenario 12, 13, 183, 187, 199, 253, 374, 406, 407, 409, 441
 Sea level 19, 20, 23, 31, 41, 44–51, 55, 63, 64, 69, 73, 110, 358
 Seasonal variation 4, 8, 28, 33, 35, 41, 56, 59, 67, 69, 93, 96, 137, 139, 141, 143, 180, 206, 254, 265, 331, 345, 375, 383, 390
 Sea ice 43, 44, 98, 358
 Secchi 330, 342, 350, 372
 Sediment
 deep-sea 241, 242, 243, 252, 326
 trap 211, 212, 213, 215, 238, 241, 262, 268, 275, 276, 285, 445

 Sedimentation 2, 7, 8, 11, 13, 14, 41, 152, 183, 185, 187, 188, 203, 207, 208, 209, 211, 212, 215, 216, 217, 219, 220, 222, 223, 224, 225, 226, 233, 241, 242, 248, 249, 250, 251, 252, 253, 254, 256, 257, 272, 275, 276, 277, 281, 283, 319, 320, 324, 325, 373, 375, 378, 381, 394, 399, 400, 401, 412, 413, 414, 415, 422, 438, 440, 441
 Seiche 46, 47, 51, 71, 242
 Sensitivity 26, 233, 406
 Specific load 120, 370
 Sequestering 197, 218, 219, 221, 318, 441
 Settling velocity 270
 Silica 10, 15, 18, 156, 205, 323, 335, 338, 341, 342, 348, 349, 350, 367, 373
 Silicate 10, 14, 74, 186, 209, 331, 335, 338, 341, 344, 345, 348, 372, 415
 Sill 8, 20, 21, 23, 27, 40, 41, 49, 52, 54, 55, 65, 70, 355, 360, 361
 Sink 5, 9, 10, 11, 12, 14, 212, 220, 221, 223, 225, 227, 230, 240, 243, 251, 282, 353, 354, 363, 367, 368, 369, 370, 373, 374, 378, 379, 383, 403, 405, 434
 Stagnation 29, 31, 67, 247, 340, 348, 361, 386
 Stratification 8, 19, 25, 28, 32, 33, 35, 38, 48, 49, 51, 53, 56, 59, 60, 61, 62, 63, 64, 67, 184, 230, 231, 240, 335, 379, 419

 Tracer 38, 60, 61
 conservative 353, 356
 Temperature 2, 19, 31, 32, 35, 37, 38, 42, 43, 48, 56, 57, 59, 69, 71, 78, 91, 151, 152, 154, 156, 160, 161, 162, 163, 165, 169, 183, 185, 188, 197, 230, 231, 265, 266, 270, 273, 309, 342, 345, 351, 381, 382, 383, 386, 398, 401, 418, 431, 443, 445
 distribution 35
 freezing 43, 56
 Time series 42, 50, 84, 107, 113, 114, 116, 117, 127, 140, 330, 331, 332, 333, 344, 349, 350, 358, 379, 383
 Transformation 2, 17, 178, 193, 230, 237, 246, 253, 255, 371, 375, 412, 414, 419, 430

- Transport 2, 6, 8, 13, 14, 15, 19, 20, 23, 24,
 27, 31, 37, 38, 40, 41, 44, 45, 46, 48, 49,
 51, 52, 53, 54, 56, 62, 69, 73, 111, 125,
 129, 130, 133, 148, 150, 151, 171, 172,
 175, 179, 183, 196, 204, 212, 218, 221,
 231, 236, 238, 240, 242, 246, 247, 249,
 253, 254, 275, 278, 280, 284, 285, 314,
 345, 356, 358, 375, 376, 377, 379, 383,
 401, 402, 406, 417, 419, 421, 422, 427,
 430, 434, 438, 443
 bottom 231, 243
 physical 19
- Trend 1, 3, 4, 10, 14, 15, 84, 86, 90, 111,
 115, 117, 121–124, 126, 127, 129, 131,
 133, 134, 137, 139, 142, 149, 150, 169,
 174, 175, 186, 199, 202, 204, 207, 208,
 217, 225, 265, 266, 282, 284, 286, 311,
 320, 327, 329, 331, 332, 333, 335, 336,
 338, 340, 341, 342, 345, 348, 349–351,
 366, 372, 430, 444–446
- Turbulence 28, 58, 60, 61, 67, 68, 190
- Uncertainty 43, 58, 116, 118, 121, 142,
 145, 220, 272, 343, 362, 433, 440
- Upwelling 37, 239, 375
- Variability 6, 19, 31, 35, 45, 46, 47, 55, 56,
 68, 69, 71, 73, 89, 101, 104, 136, 142,
 147, 166, 177, 180, 190, 208, 212, 222,
 283, 286, 360, 371, 413, 414, 418, 440,
 446
- Volatilization 14, 15, 150, 161, 169, 265,
 272, 273, 282, 433, 434, 436, 438, 440,
 442, 446
- Water
 balance 40, 41, 70, 101, 361, 418, 421
 brackish 52, 54, 332, 355
 content 291, 309, 314
 deep 19, 20, 23, 25, 26, 27, 28, 29, 31, 32,
 33, 35, 37, 48, 49, 62, 63, 64, 65, 66, 67,
 68, 70, 72, 73, 74, 177, 211, 217, 231,
 239, 240, 243, 246, 247, 255, 321, 332,
 340, 342, 347, 348, 349, 360, 371, 375,
 414
 exchange 361, 374, 421, 434
 quality 113, 114, 115, 116, 121, 131,
 251, 331, 349, 350, 351
 waste 124, 125, 127, 203
- Wave 35, 38, 40, 42, 43, 53, 56, 60, 67, 68,
 71, 78, 189, 190, 219, 230, 342
 internal 67, 68
- Wet deposition 133, 142, 143, 145, 146,
 166, 175, 270, 271, 281, 439
- Wind 21, 26, 28, 29, 32, 35, 37, 39, 40, 42,
 43, 46, 48, 49, 53, 56, 58, 60, 61, 663,
 65, 67, 68, 71, 72, 73, 75, 90, 91, 141,
 183, 184, 185, 230, 231, 273, 332, 383

Ecological Studies

Volumes published since 1995

Volume 108

Ecology and Biogeography of Mediterranean Ecosystems in Chile, California and Australia (1995)

M.T.K. Arroyo, P.H. Zedler, and M.D. Fox (Eds.)

Volume 109

Mediterranean-Type Ecosystems. The Function of Biodiversity (1995)

G.W. Davis and D.M. Richardson (Eds.)

Volume 110

Tropical Montane Cloud Forests (1995)

L.S. Hamilton, J.O. Juvik, and F.N. Scatena (Eds.)

Volume 111

Peatland Forestry. Ecology and Principles (1995)

E. Paavilainen and J. Päivänen

Volume 112

Tropical Forests: Management and Ecology (1995)

A.E. Lugo and C. Lowe (Eds.)

Volume 113

Arctic and Alpine Biodiversity. Patterns, Causes and Ecosystem Consequences (1995)

F.S. Chapin III and C. Körner (Eds.)

Volume 114

Crassulacean Acid Metabolism. Biochemistry, Ecophysiology and Evolution (1996)

K. Winter and J.A.C. Smith (Eds.)

Volume 115

Islands. Biological Diversity and Ecosystem Function (1995)

P.M. Vitousek, L.L. Loope, and H. Adersen (Eds.)

Volume 116

High Latitude Rainforests and Associated Ecosystems of the West Coast of the Americas: Climate, Hydrology, Ecology and Conservation (1996)

R.G. Lawford, P. Alaback, and E. Fuentes (Eds.)

Volume 117

Global Change and Mediterranean-Type Ecosystems (1995)

J. Moreno and W.C. Oechel (Eds.)

Volume 118

Impact of Air Pollutants on Southern Pine Forests (1996)

S. Fox and R.A. Mickler (Eds.)

Volume 119

Freshwater Ecosystems of Alaska. Ecological Syntheses (1997)

A.M. Milner and M.W. Oswood (Eds.)

Volume 120

Landscape Function and Disturbance in Arctic Tundra (1996)

J.F. Reynolds and J.D. Tenhunen (Eds.)

Volume 121

Biodiversity and Savanna Ecosystem Processes. A Global Perspective (1996)

O.T. Solbrig, E. Medina, and J.F. Silva (Eds.)

Volume 122

Biodiversity and Ecosystem Processes in Tropical Forests (1996)

G.H. Orians, R. Dirzo, and J.H. Cushman (Eds.)

Volume 123

Marine Benthic Vegetation. Recent Changes and the Effects of Eutrophication (1996)

W. Schramm and P.H. Nienhuis (Eds.)

Volume 124

Global Change and Arctic Terrestrial Ecosystems (1997)

W.C. Oechel et al. (Eds.)

Volume 125

Ecology and Conservation of Great Plains Vertebrates (1997)

E.L. Knopf and F.B. Samson (Eds.)

Volume 126

The Central Amazon Floodplain: Ecology of a Pulsing System (1997)

W.J. Junk (Ed.)

Volume 127

Forest Decline and Ozone: A Comparison of Controlled Chamber and Field Experiments (1997)

H. Sandermann, A.R. Wellburn, and R.L. Heath (Eds.)

Volume 128

The Productivity and Sustainability of Southern Forest Ecosystems in a Changing Environment (1998)
R.A. Mickler and S. Fox (Eds.)

Volume 129

Pelagic Nutrient Cycles: Herbivores as Sources and Sinks (1997)
T. Andersen

Volume 130

Vertical Food Web Interactions: Evolutionary Patterns and Driving Forces (1997)
K. Dettner, G. Bauer, and W. Völkl (Eds.)

Volume 131

The Structuring Role of Submerged Macrophytes in Lakes (1998)
E. Jeppesen et al. (Eds.)

Volume 132

Vegetation of the Tropical Pacific Islands (1998)
D. Mueller-Dombois and F.R. Fosberg

Volume 133

Aquatic Humic Substances: Ecology and Biogeochemistry (1998)
D.O. Hessen and L.J. Tranvik (Eds.)

Volume 134

Oxidant Air Pollution Impacts in the Montane Forests of Southern California (1999)
P.R. Miller and J.R. McBride (Eds.)

Volume 135

Predation in Vertebrate Communities: The Białowieża Primeval Forest as a Case Study (1998)
B. Jędrzejewska and W. Jędrzejewski

Volume 136

Landscape Disturbance and Biodiversity in Mediterranean-Type Ecosystems (1998)
P.W. Rundel, G. Montenegro, and F.M. Jaksic (Eds.)

Volume 137

Ecology of Mediterranean Evergreen Oak Forests (1999)
F. Rodà et al. (Eds.)

Volume 138

Fire, Climate Change and Carbon Cycling in the North American Boreal Forest (2000)
E.S. Kasischke and B. Stocks (Eds.)

Volume 139

Responses of Northern U.S. Forests to Environmental Change (2000)
R. Mickler, R.A. Birdsey, and J. Hom (Eds.)

Volume 140

Rainforest Ecosystems of East Kalimantan: El Niño, Drought, Fire and Human Impacts (2000)
E. Guhardja et al. (Eds.)

Volume 141

Activity Patterns in Small Mammals: An Ecological Approach (2000)
S. Halle and N.C. Stenseth (Eds.)

Volume 142

Carbon and Nitrogen Cycling in European Forest Ecosystems (2000)
E.-D. Schulze (Ed.)

Volume 143

Global Climate Change and Human Impacts on Forest Ecosystems: Postglacial Development, Present Situation and Future Trends in Central Europe (2001)
J. Puhe and B. Ulrich

Volume 144

Coastal Marine Ecosystems of Latin America (2001)
U. Seeliger and B. Kjerfve (Eds.)

Volume 145

Ecology and Evolution of the Freshwater Mussels Unionoida (2001)
G. Bauer and K. Wächtler (Eds.)

Volume 146

Inselbergs: Biotic Diversity of Isolated Rock Outcrops in Tropical and Temperate Regions (2000)
S. Porembski and W. Barthlott (Eds.)

Volume 147

Ecosystem Approaches to Landscape Management in Central Europe (2001)
J.D. Tenhunen, R. Lenz, and R. Hantschel (Eds.)

Volume 148

A Systems Analysis of the Baltic Sea (2001)
F.V. Wulff, L.A. Rahm, and P. Larsson (Eds.)