|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| The values of all the explanatory variables at each sampling site.  |  |  |  |  |
| Abbreviation: GF + Arch. = The Gulf of Finland and the Archipelago Sea |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |   |  | **Physicochemical variables** |  |   |
| **Sub-basin name** | **Sampling site number** | **Sampling site name** | **Water temp. (°C)** | **pH** | **Salinity**  | **Total P (µg/l)** | **Total N (µg/l)** | **Oxygen (mg/l)** | **Silicon****(mg/l)** |
| GF + Arch. | 1 | Virolahti | 22 | 7.9 | 2.7 | 41.6 | 491.5 | 8.78 | 0.26 |
| GF + Arch. | 2 | Hamina | 21.7 | 8.1 | 3.4 | 69.0 | 461.4 | 8.95 | 0.05 |
| GF + Arch. | 3 | Pyhtää | 22.1 | 8.1 | 1.5 | 23.9 | 364.1 | 9.42 | 0.38 |
| GF + Arch. | 4 | Loviisi | 21 | 8.3 | 4.1 | 49.1 | 453.6 | 11.73 | 0.20 |
| GF + Arch. | 5 | Porvoo | 21.1 | 8.5 | 4.3 | 59.7 | 379.0 | 10.60 | 0.39 |
| GF + Arch. | 6 | Vuosaari | 18.4 | 8.3 | 5.2 | 19.9 | 383.1 | 11.79 | 0.36 |
| GF + Arch. | 7 | Porkkala | 20.8 | 8.3 | 5.5 | 131.0 | 365.5 | 10.61 | 0.18 |
| GF + Arch. | 8 | Snappertuna | 22.3 | 7.9 | 5.1 | 64.5 | 353.1 | 11.37 | 0.57 |
| GF + Arch. | 9 | Hanko | 21.7 | 8.2 | 5.5 | 69.1 | 449.8 | 11.25 | 0.83 |
| GF + Arch. | 10 | Förby | 21 | 8.2 | 5.0 | 46.3 | 408.0 | 12.63 | 0.33 |
| GF + Arch. | 11 | Karuna | 22.3 | 8.2 | 4.4 | 58.8 | 360.3 | 9.26 | 0.53 |
| GF + Arch. | 12 | Rymättylä | 21 | 7.9 | 5.2 | 64.9 | 419.2 | 10.04 | 0.81 |
| GF + Arch. | 13 | Kustavi | 17.8 | 8.1 | 6.1 | 94.2 | 325.4 | 10.49 | 0.60 |
| Bothnian Sea | 14 | Uusikaupunki | 21 | 8.0 | 3.5 | 52.1 | 467.3 | 9.52 | 0.44 |
| Bothnian Sea  | 15 | Rauma | 19.7 | 7.9 | 5.2 | 62.7 | 308.7 | 9.68 | 0.49 |
| Bothnian Sea  | 16 | Luvia | 21.1 | 7.9 | 5.4 | 75.6 | 255.8 | 11.62 | 1.30 |
| Bothnian Sea  | 17 | Reposaari | 18.7 | 7.7 | 1.7 | 29.5 | 696.5 | 10.27 | 0.99 |
| Bothnian Sea  | 18 | Merikarvia | 19 | 6.4 | 5.5 | 57.5 | 758.4 | 6.41 | 0.77 |
| Bothnian Sea  | 19 | Kristiinankaup. | 18.7 | 8.0 | 4.7 | 55.1 | 265.4 | 9.50 | 0.69 |
| Bothnian Sea | 20 | Närpiö | 18.3 | 8.1 | 5.7 | 60.8 | 349.0 | 9.74 | 0.86 |
| Bothnian Sea  | 21 | Korsnäs | 18.3 | 8.0 | 5.7 | 80.0 | 547.2 | 9.67 | 0.39 |
| Bothnian Sea  | 22 | Långskäret | 19.4 | 8.0 | 3.5 | 35.6 | 1429.2 | 10.17 | 0.72 |
| Bothnian Sea | 23 | Iskmo | 18.5 | 8.0 | 4.4 | 34.3 | 334.5 | 11.50 | 0.86 |
| Bothnian Bay | 24 | Oravainen | 19.9 | 7.6 | 3.2 | 54.1 | 730.4 | 9.78 | 1.46 |
| Bothnian Bay | 25 | Uusikaarlepyy | 20.1 | 7.6 | 1.6 | 38.0 | 544.9 | 9.88 | 1.47 |
| Bothnian Bay | 26 | Luoto | 22 | 7.1 | 1.2 | 20.7 | 805.9 | 10.32 | 1.42 |
| Bothnian Bay | 27 | Kokkola | 20.3 | 7.6 | 2.1 | 31.0 | 440.1 | 10.86 | 1.25 |
| Bothnian Bay | 28 | Kalajoki | 18.8 | 7.7 | 3.0 | 50.6 | 381.8 | 10.46 | 1.23 |
| Bothnian Bay | 29 | Yppäri/Pyhäjoki | 17.6 | 7.4 | 2.6 | 27.9 | 396.8 | 10.09 | 3.20 |
| Bothnian Bay | 30 | Raahe | 18.4 | 7.9 | 2.6 | 18.5 | 362.7 | 10.68 | 0.72 |
| Bothnian Bay | 31 | Siikajoki | 17.7 | 7.5 | 2.2 | 21.3 | 401.4 | 10.71 | 1.75 |
| Bothnian Bay | 32 | Oulunsalo | 16.3 | 7.4 | 1.7 | 28.0 | 379.4 | 10.31 | 2.13 |
| Bothnian Bay | 33 | Haukipudas | 19.1 | 7.5 | 1.8 | 33.7 | 427.0 | 11.30 | 2.62 |
| Bothnian Bay | 34 | Ii/Ojakylä | 19.3 | 7.2 | 1.2 | 91.1 | 427.8 | 10.65 | 4.07 |
| Bothnian Bay | 35 | Ii/Kuivaniemi | 18.3 | 6.6 | 1.7 | 13.7 | 346.0 | 9.24 | 8.91 |
| Bothnian Bay | 36 | Simo | 16.3 | 7.2 | 2.3 | 26.6 | 381.3 | 10.47 | 2.30 |
| Bothnian Bay | 37 | Kemi | 18.3 | 7.1 | 0.1 | 34.2 | 483.3 | 8.93 | 3.21 |
|  |  |  | **Climatic variables** | **Spatial variables** |   |
| **Sub-basin name** | **Sampling site number** | **Sampling site name** | **Air temp. (°C)** | **Precipit. (mm/month)** | **Longitude** | **Latitude** | **Exposition (index)** |
| GF + Arch. | 1 | Virolahti | 17.3 | 58.5 | 3541 | 6719 | 2767.7 |
| GF + Arch. | 2 | Hamina | 17.6 | 59.3 | 3511 | 6717 | 1837.4 |
| GF + Arch. | 3 | Pyhtää | 17.5 | 59.1 | 3481 | 6702 | 0.1 |
| GF + Arch. | 4 | Loviisi | 17.3 | 62.2 | 3459 | 6699 | 19.2 |
| GF + Arch. | 5 | Porvoo | 17.3 | 63.6 | 3439 | 6682 | 5439.4 |
| GF + Arch. | 6 | Vuosaari | 17.3 | 60.3 | 3399 | 6679 | 9945.5 |
| GF + Arch. | 7 | Porkkala | 17.1 | 59.5 | 3357 | 6661 | 24.6 |
| GF + Arch. | 8 | Snappertuna | 17.1 | 59.6 | 3315 | 6652 | 157.9 |
| GF + Arch. | 9 | Hanko | 17.2 | 54.3 | 3273 | 6644 | 1940.9 |
| GF + Arch. | 10 | Förby | 17.3 | 62.4 | 3270 | 6669 | 6552.6 |
| GF + Arch. | 11 | Karuna | 17.2 | 72.8 | 3256 | 6694 | 2953.4 |
| GF + Arch. | 12 | Rymättylä | 17.1 | 73.1 | 3221 | 6716 | 2227.6 |
| GF + Arch. | 13 | Kustavi | 16.7 | 53.5 | 3190 | 6728 | 0.0 |
| Bothnian Sea | 14 | Uusikaupunki | 16.6 | 59.9 | 3193 | 6760 | 3953.1 |
| Bothnian Sea | 15 | Rauma | 16.5 | 63.3 | 3202 | 6793 | 1617.3 |
| Bothnian Sea | 16 | Luvia | 16.4 | 59.5 | 3209 | 6816 | 5671.7 |
| Bothnian Sea | 17 | Reposaari | 16.2 | 58.9 | 3206 | 6846 | 5478 |
| Bothnian Sea | 18 | Merikarvia | 16.2 | 64.3 | 3204 | 6884 | 69020.7 |
| Bothnian Sea  | 19 | Kristiinankaup. | 16.1 | 61.3 | 3208 | 6919 | 5188.8 |
| Bothnian Sea  | 20 | Närpiö | 15.8 | 56.2 | 3198 | 6944 | 2308.5 |
| Bothnian Sea  | 21 | Korsnäs | 16 | 64.3 | 3201 | 6976 | 309986 |
| Bothnian Sea  | 22 | Långskäret | 16.2 | 58.8 | 3219 | 7003 | 1386.2 |
| Bothnian Sea  | 23 | Iskmo | 16.2 | 59.1 | 3223 | 7023 | 4486.0 |
| Bothnian Bay | 24 | Oravainen | 16.1 | 65.4 | 3268 | 7031 | 9945.0 |
| Bothnian Bay | 25 | Uusikaarlepyy | 15.9 | 65.9 | 3274 | 7054 | 7664.2 |
| Bothnian Bay | 26 | Luoto | 15.6 | 64.2 | 3289 | 7081 | 2277.6 |
| Bothnian Bay | 27 | Kokkola | 15.7 | 70.1 | 3324 | 7103 | 67027.4 |
| Bothnian Bay | 28 | Kalajoki | 15.4 | 64.9 | 3340 | 7129 | 54092.3 |
| Bothnian Bay | 29 | Yppäri/Pyhäjoki | 15.5 | 68.8 | 3357 | 7149 | 351800 |
| Bothnian Bay | 30 | Raahe | 15.7 | 63.9 | 3376 | 7177 | 135.9 |
| Bothnian Bay | 31 | Siikajoki | 15.7 | 57.2 | 3396 | 7201 | 145338 |
| Bothnian Bay | 32 | Oulunsalo | 16.3 | 71.4 | 3421 | 7211 | 9920.3 |
| Bothnian Bay | 33 | Haukipudas | 16.2 | 68.6 | 3421 | 7225 | 2486.8 |
| Bothnian Bay | 34 | Ii/Ojakylä | 16 | 65.7 | 3420 | 7245 | 28363.9 |
| Bothnian Bay | 35 | Ii/Kuivaniemi | 15.9 | 68.9 | 3413 | 7274 | 31391.7 |
| Bothnian Bay | 36 | Simo | 15.9 | 61.5 | 3395 | 7284 | 42378 |
| Bothnian Bay | 37 | Kemi | 15.7 | 60.3 | 3388 | 7295 | 10311.3 |