**Table 1 The nine environmental variables selected for this study**

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| --- | --- | --- | --- |
| **Environment variable** | **Unit** | **Source** | **Data for the future** |
| Current velocity | m·S-1 | http://www.bio-oracle.org | Downloaded from Bio-oracle |
| Salinity | PSS | http://www.bio-oracle.org | Downloaded from Bio-oracle |
| Temperature Mean | ℃ | http://www.bio-oracle.org | Downloaded from Bio-oracle |
| Temperature Range | ℃ | http://www.bio-oracle.org | Downloaded from Bio-oracle |
| Depth | m | http://www.bio-oracle.org | Remain unchanged |
| Land Distance | km | http://gmed.auckland.ac.nz | Remain unchanged |
| Dissolved oxygen | mol·m-3 | http://gmed.auckland.ac.nz | Remain unchanged |
| Light bottom | / | http://www.bio-oracle.org | Remain unchanged |
| Phytoplankton | μmol·m-3 | http://www.bio-oracle.org | Remain unchanged |