**S6 Table.** **Spearman’s correlation results for marine surface water at Kūʻau Bay.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Salinity** | **SiO44-** | **TDN** | **DIN** | **TDP** | **PO43-** |
| **Distance** | rs | 0.94 | -0.71 | -0.76 | -0.75 | -0.59 | -0.72 |
|  | p | 0.0000002 | 0.0186 | 0.0087 | 0.0108 | 0.0665 | 0.0157 |
|  |   |  |  |  |  |  |  |
| **Salinity** | rs |  | -0.70 | -0.72 | -0.70 | -0.56 | -0.66 |
|  | p |  | 0.0217 | 0.0157 | 0.0217 | 0.0812 | 0.0332 |
|  |   |  |  |  |  |  |  |
| **SiO44-** | rs |  |  | 0.99 | 0.96 | 0.87 | 0.89 |
|  | p |  |  | 0.0000002 | 0.0000002 | 0.0000002 | 0.0000002 |
|  |   |  |  |  |  |  |  |
| **TDN** | rs |  |  |  | 0.99 | 0.89 | 0.93 |
|  | p |  |  |  | 0.0000002 | 0.0000002 | 0.0000002 |
|  |   |  |  |  |  |  |  |
| **DIN** | rs |  |  |  |  | 0.93 | 0.95 |
|  | p |  |  |  |  | 0.0000002 | 0.0000002 |
|  |   |  |  |  |  |  |  |
| **TDP** | rs |  |  |  |  |  | 0.976 |
|  | p |  |  |  |  |  | 0.0000002 |

Samples were collected adjacent to deployment cages at Kūʻau Bay. The correlation coefficient (rs) and p-value (p) is shown for parameters distance from shore (distance) in meters, salinity, silicate (SiO44-), total dissolved nitrogen (TDN), dissolved inorganic N (DIN), total dissolved phosphorous (TDP), and dissolved phosphate (PO43-). n = 9