p-values and summary statistics are reported for the best AIC model selected for each parameter. All site-level p-values are relative to the Bioluminescent Bay Site and all month p-values are relative to January.

|  | Temperature | Salinity | pH | POC | PON | d13C | d15N | C:N |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.011 | 0.006 |
| Month | <0.001 | <0.001 | <0.001 |  |  |  | <0.001 |  |
| Site × Month |  |  |  |  |  |  | 0.004 |  |
| Num.Obs. | 69 | 69 | 68 | 71 | 71 | 67 | 70 | 71 |
| R2 | 0.901 | 0.920 | 0.840 | 0.724 | 0.722 | 0.529 | 0.846 | 0.168 |
| R2 Adj. | 0.878 | 0.901 | 0.802 | 0.711 | 0.710 | 0.506 | 0.634 | 0.131 |
| AIC | 79.6 | 25.8 | -170.1 | 845.1 | 602.4 | 312.8 | 254.2 | 307.0 |
| BIC | 113.1 | 59.3 | -136.8 | 856.5 | 613.7 | 323.9 | 348.6 | 318.3 |
| Log.Lik. | -24.799 | 2.117 | 100.045 | -417.571 | -296.192 | -151.415 | -85.099 | -148.479 |
| RMSE | 0.35 | 0.23 | 0.06 | 86.69 | 15.69 | 2.32 | 0.82 | 1.96 |