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 | <0.001 | <0.001 |
| Month | <0.001 | <0.001 | <0.001 |  |  |  | <0.001 | <0.001 |
| Site × Month |  |  |  |  |  |  | <0.001 | <0.001 |
| Num.Obs. | 216 | 216 | 213 | 225 | 225 | 213 | 222 | 225 |
| R2 | 0.913 | 0.922 | 0.844 | 0.727 | 0.725 | 0.497 | 0.845 | 0.722 |
| R2 Adj. | 0.908 | 0.917 | 0.834 | 0.723 | 0.721 | 0.489 | 0.811 | 0.662 |
| AIC | 177.1 | 8.0 | -606.0 | 2645.2 | 1875.0 | 977.0 | 614.7 | 767.9 |
| BIC | 227.8 | 58.6 | -555.6 | 2662.3 | 1892.1 | 993.8 | 757.6 | 911.4 |
| Log.Lik. | -73.574 | 11.005 | 318.006 | -1317.622 | -932.493 | -483.490 | -265.333 | -341.952 |
| RMSE | 0.34 | 0.23 | 0.05 | 84.53 | 15.26 | 2.34 | 0.80 | 1.11 |