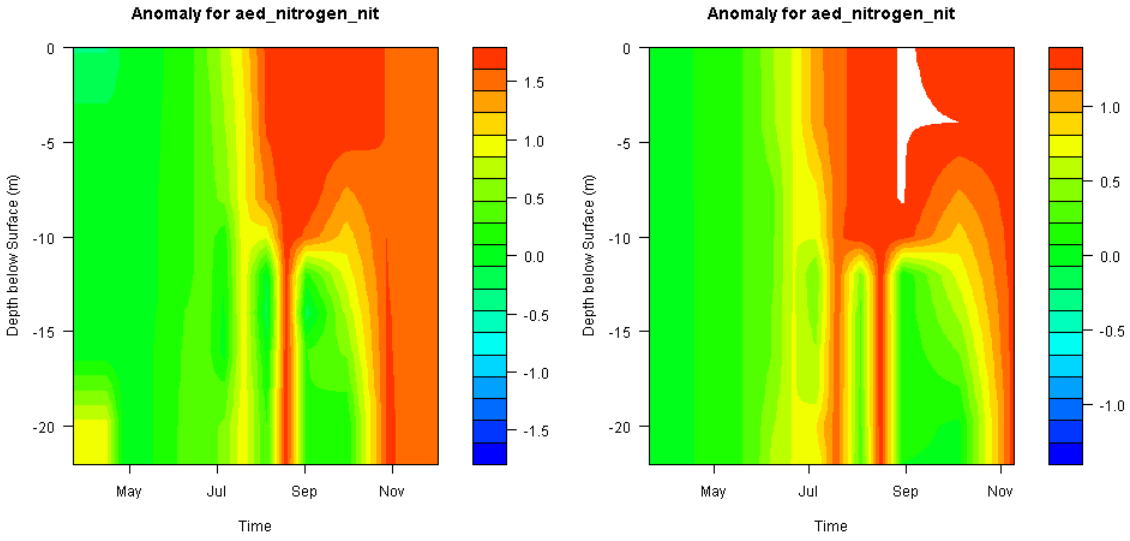
**Results of Normalized Mean Absolute Error calculations to compare simulated to field data for years 2009-2010. Values are for 2009, with 2010 results in parentheses.**

| State Variable | Literature Epilimnion NMAE* | Literature Hypolimnion NMAE* | Literature Overall NMAE ** | Model Epilimnion NMAE*** | Model Hypolimnion NMAE*** | Model Overall NMAE |
|---|---|---|---|---|---|---|
| Temp | 0.04 | 0.08 | NA | 0.068 (0.068) | 0.038 (0.065) | 0.058 (0.067) |
| DO | 0.10 | 0.29 | 0.08 | 0.262 (0.313) | 0.124 (0.105) | 0.197 (0.221) |
| NO3 | 0.42 | 0.64 | 0.38 | 0.901 (2.23) | 0.357 (1.12) | 0.699 (1.82) |
| NH4 | 0.65 | 0.99 | 0.67 | 0.355 (0.196) | 0.674 (0.641) | 0.474 (0.362) |
| PO4 | 0.97 | 0.74 | 0.81 | 0.659 (0.757) | 0.519 (1.32) | 0.607 (0.967) |
| *Microcystis* | 1.24 | NA | NA | 0.651 (0.597) | NA | 0.651 (0.597) |
| Nanoplankton | 0.50 | NA | 0.46 | NA | NA | NA |

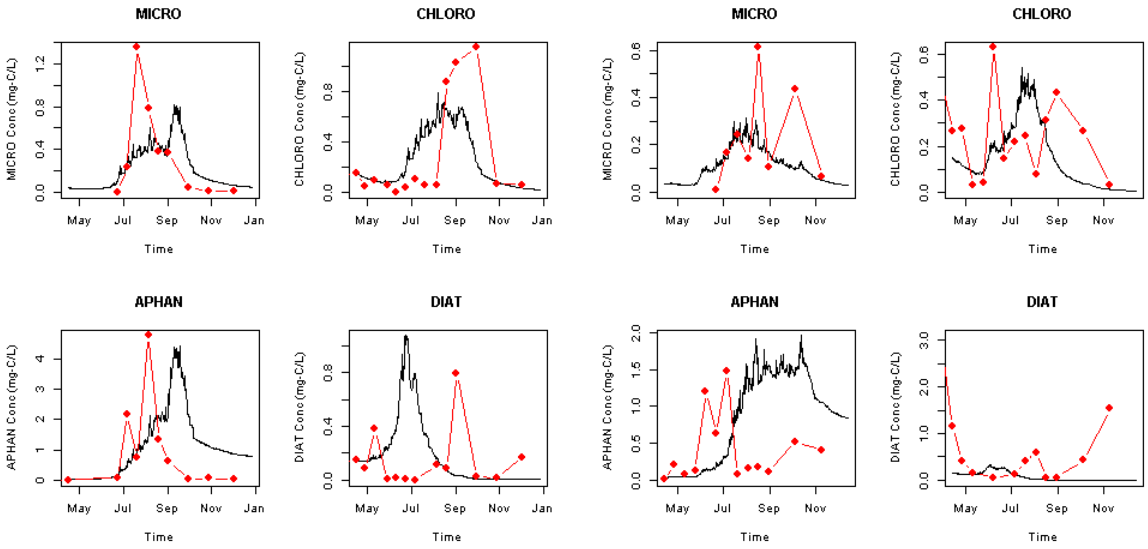
*Values are from Table 3 of (Gal et al., 2009); here, epilimnion is the top 10-meters of the water column, and hypolimnion is the bottom 10-m of the water column

**Values from Table 3 of (Bruce et al., 2006).

***Epilimnion is 0-12 depth from surface, and hypolimnion is 12 m depth to lake bottom.




**Anomalies for nitrate concentration for years 2009 (left panel) and 2010 (right panel) [mg-N/L].**




**Time series of phytoplankton concentrations (mean of 0-8m depth) for each of the four phytoplankton functional groups for years 2009 (left) and 2010 (right). Black line represents model, red line represents observations [mg-C/L].**