**Explaining phytoplankton response to heatwaves**

**Completed:**

* Precipitation week before
* Schmidt Stability
* Day of year
* Chlorophyll the week before the heatwave
* Cumulative nutrient load
* Daily loading rate
* G440 during heatwave
* Daphnia biomass
* Schmidt stability
* Standard deviation of chlorophyll the week before heatwave
* Coefficient of variation of chlorophyll the week before the heatwave
* Change in total zooplankton during heatwave
* Change in Daphnia during heatwave (% change and absolute)
* Change in Daphnia length during heatwave
* TP
* Heatwave intensity
* Heatwave duration
* Heatwave rate of onset
* Holopedium changes before and after heatwaves
* Phytoplankton community composition

**Working on:**

* Secchi/transparency responses to heatwave
* K of light profiles up to 2 m depth
* Multiple linear regression
* Depth of thermocline (microstratification and more stability)
* Summarize directional changes in each of the explanatory variables by heatwave event (zoop biomass, nutrients, DOC, g440, stratification intensity)
* % change in stability of water column

**Other ideas:**

* Update phytoplankton model to include heatwaves
* Some measure of ecosystem stability?

**Observations:**

* Heatwaves had stronger effects when food web was unstable
* Heatwaves had weaker effects when the temperature peak was not as clearly defined/didn’t stand out as much compared to preceding and following temps