**Workflow for data analysis**

* Read in data and create list
  + Separate scripts for separate datasets
* Use calculated offset (reference thermometer) to correct data
  + Use offset from test in the lab and substract the offset from temperature data
  + Offset for logger 33 is missing -> check that
* Tidy up data regarding spikes
  + Set a threshold for a rise in temperature (at the moment 10°C/10min) that are regarded as spikes and therefore set to NA
  + Separate scripts for separate datasets
* Plot the tidy data in pairs (water, settlement, vegetation)
* Split data into day and night datasets (creates separate lists)
  + Two hours per day for dawn are removed
  + Works for every dataset
* Plot the day and night datasets and save to file
  + Add the sunrise and sunset as vertical lines to the plots
  + Add description and type of location to plots

**To Do:**

* Create (working heatmap) -> check out other possibilities
* Run paired plot
* Get daily means for the data (and add to plot?)
* Do all the stuff for the other times frames
* Check time frame for Aug and Sep data (add 1 day at the end)
* Check which time needs first dataframe removed
* Check where NAs have gone
* Try and puzzle matching time frames together
* Treating spikes: how to remove longer spikes? -> how much data should be removed? 2 hours? 30mins?
  + Separate solution for water?
  + Idee: remove all single value spikes
  + For water: general threshold reg. temperature? Threshold of 2.5°C/10min
  + For Air: threshold of 5°C/10min

**Statistics:**

* Significance tests for difference between sealed areas and vegetation