01\_read\_std.R

Brings in the .csv file that has the standard information (for calibration of the fluorometer prior to each extraction). The information in this file is then used to create a linear regression between the standard and 90% acetone solutions to produce the best fit line. The slope of this line is then used as the normalization coefficient for all the relative fluorescence units for each sample for a particular date.

This also brings in the \_chla\_raw.csv files for specified date in `rundate` and uses the slope of the standard information regression to produce a chlorophyll value in μg/L for each relative fluorescence unit.

**Outputs:**

* **\_chla.csv** file with all the calculated chlorophyll information
* **plot\_std\_...\_chla.png** that has the calculated slope based on the standards used.
* **plot\_std\_eq\_...\_ chla.png** has the r2, p, and equation for standard lines

**NEXT:**

* Need to create a script that reads in each of the \_chla.csv files and binds them together into a master dataframe. This data is calculated so therefore is in the output folder, not in data.
* Need to create a script that reads in each of the \_exo.csv files and binds them together into a master dataframe. This data is raw from the sonde and is in the data folder.
* Script that combines the \_chla and \_exo dataframes. The exo data has more than the data necessary, so it will need to match to the datetime in the \_chla dataframe.
* Data dictionary with the run numbers and dates and also if they were an ISCO or tank run.?