Fluorometer Calibration Notes

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2007-20 JOIS

Data had not been calibrated in initial distribution version.

2013-05-18

Chlorophyll Data Set calibrated using routines

***cal\_fluorometer\_2007v2.m***

***add\_lag.m***

***out\_finish\_data\_200720\_justChl.m***

Fit using all bottle data, first using w/in chlorophyll range 0.025 to 10mg/m3 but then reran to match the final decision to use 0.025 to 0.6mg/m3. For the fit, a STD of 2.5 was used to remove outliers. The low value criteria excludes those below the CTD Flr sensitivity and the high cut off value excludes calibration points in the chlorophyll peak that can be mismatched w/ CTD due to such sharp gradients.

Also, no alignment had been applied so data were calibrated as is with no alignment (lag) but then re calibrated after applying a 4 second lag and plucking out new CTD values from upcast.

Typically, the CTD fluro is close to a 1:1 relationship with the combined chlorophyll plus phaeophytin values, however that is not the case for this data set.

Chlorophyll and Phaeophytin however are approximately 1:1 as is typically seen on JOIS.

Range 0.025 to 0.6 with 4 second lag

116 out of 141 observations used, STD 0.026

Slope = 0.7909, Bias = -0.0045