EXPORTS 1 ALFA data processing

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Cruise name: EXPORTS 1
Cruise id: RR1813
Ship: R/V Roger Revelle
Location: Station Papa, North East Pacific
Dates at sea: 2018/08/11 to 2018/09/12 01:00
    Epoch 1:2018/08/14 4:30 to 2018/08/23 9:00
    Epoch 2:2018/08/23 9:00 to 2018/08/31 9:00
    Epoch 3:2018/08/31 9:00 to 2018/09/08 9:00
    At Station P: 2018/08/14 0:00 to 2018/08/23 9:00
Operators: Nils Haëntjens and Emmanuel Boss
Group Leaders: Emmanuel Boss and Lee Karp-Boss
ALFA Serial Number: 011

The WETLabs Aquatic Laser Fluorescence Analyzer, (ALFA) spectrofluorometer was mounted on the flow through system of the ship, after a vortex debubbler and switching system. The switching system automatically ran filtered seawater (0.2 um) the first 10 minutes of every hour, unfiltered/total seawater was running through the instruments the rest of the time. The instrument was cleaned daily at night time with bleach and laboratory grade soap. A peristatic pump was used to pump the water through the instruments of the underway.

The data presented here was collected and preprocessed by the manufacturers software, manually quality checked (un-realistic values mainly being due to bubbles running through the system), and minute binned. Data collected when the water was filtered was removed from the dataset and not used in the processing but can be distributed per request to the data owner.

TSG, PAR, and the chlorophyll fluorometer (Wetlabs WS3S) data from the R/V Roger Revelle are added to the SeaBASS file to help for data analysis.

Parameters collected by the ALFA are:

- Chl_stimf_ex405: chlorophyll a fluorescence excited at 405 nm
- Chl_stimf_ex514: chlorophyll a fluorescence excited at 514 nm
- Fv_Fm_ex405: Fv/Fm value with 405 nm excitation
- Fv_Fm_ex514: Fv/Fm value with 514 nm excitation