

# CC2204SH Underway Data Processing Notes

The raw UW data were extracted from the Shimada MOA Continuous.xlsx file and the UW and Fluorometer raw files.

## The available variables from these files are:

COG – course over ground (deg)

SOG – ship speed over ground (knots)

USWFlow – flowrate of the UW system (units unknown)

LongWaveRad – **NO DATA FOR CC2204** Long Wave Radiation (W/M<sup>2</sup>, Pyranometer)

ShortWaveRad – **NO DATA FOR CC2204** Short Wave Radiation (W/M<sup>2</sup>, Pyranometer)

WindSpeed – wind speed (m/sec)

WindDir – wind direction (deg)

AirTemp – air temperature (deg C)

AtmPress – atmospheric pressure (mb)

RelHum – relative humidity (% saturation)

TSG\_Temp – temperature measured by the TSG SBE 21 unit (deg C).

TSG\_Cond – **NO DATA FOR CC2204** conductivity measured by the TSG SBE 21 unit (mS/cm).

TSG\_Sal – water salinity measured by the TSG SBE 21 unit (PSU).

**FOR CC2204** Sal readings during the first few days were off. Don't use.

TSG\_Density – seawater density calculated Temp & Sal (kg/m<sup>3</sup>)

SoundVel – **NO DATA FOR CC2204** sound velocity calculated by the TSG unit (m/sec)

TSG\_Temp\_2 – temperature measured by the TSG SBE 45 unit (deg C).

TSG\_Cond\_2 – **NO DATA FOR CC2204** conductivity measured by the TSG SBE 45 unit (mS/cm).

TSG\_Sal\_2 – water salinity measured by the TSG SBE 45 unit (PSU).

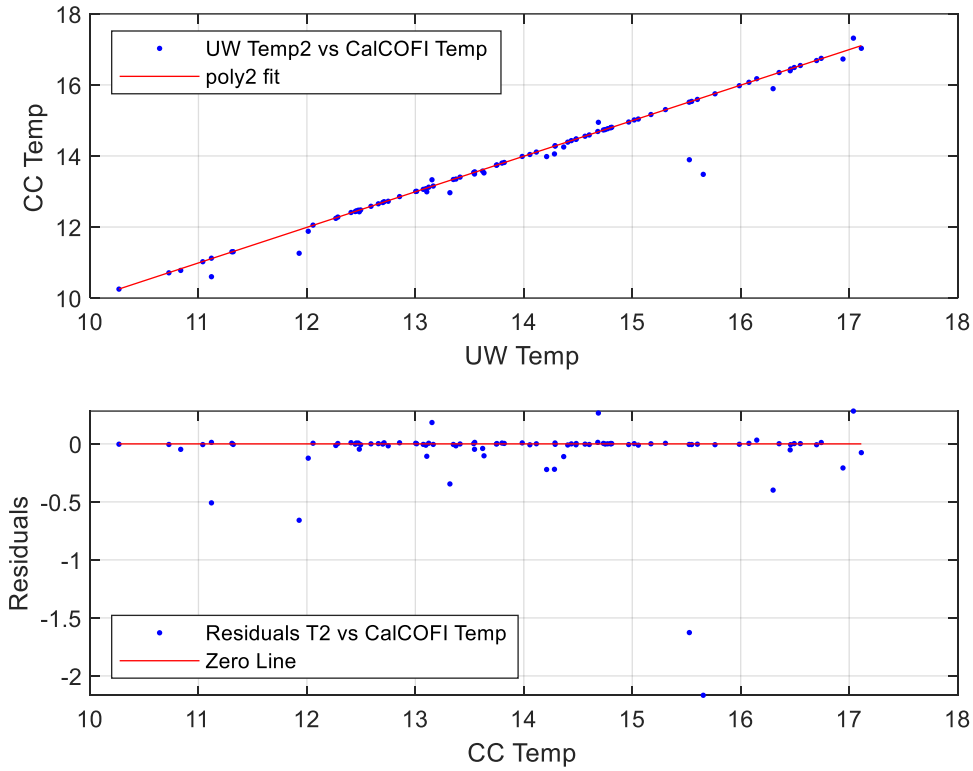
TSG\_Density\_2 – seawater density calculated from Temp & Sal (kg/m<sup>3</sup>)

SoundVel\_2 – **NO DATA FOR CC2204** sound velocity calculated by the TSG unit (m/sec)

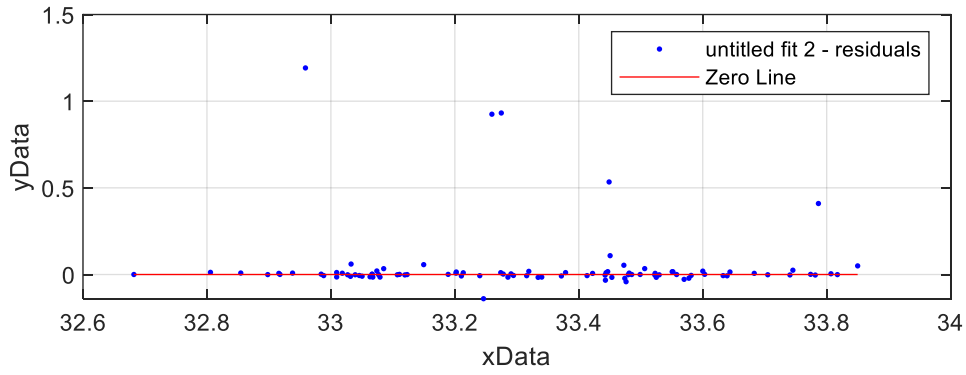
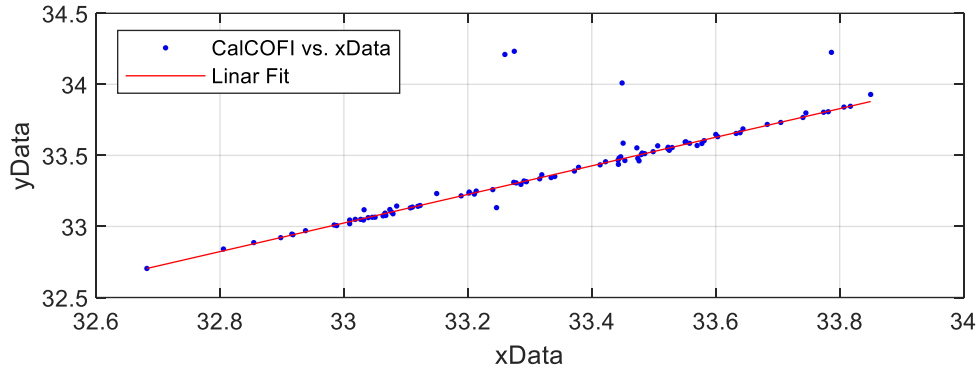
ChlFluor – chlorophyll fluorescence (volt).

**Derived variables are:**

Pred\_Temp – temperature derived from calibrations of TSG\_Temp\_2 vs. CalCOFI 0 to 8 m bottle temperatures (deg C)



Pred\_Sal – salinity derived from calibrations of TSG\_Sal\_2 vs. CalCOFI 0 to 8 m bottle salinity (PSU)



Pred\_Chlor – chlorophyll derived from calibrations of ChlFluor vs. CalCOFI 0 to 8 m bottle Chl a ( $\mu\text{g-Chl/L}$ ).

