

CC2101RL Underway Data Processing Notes

The raw UW data were extracted from the various RL instrument files.

Notes:

1. There are no Air temperature data.
2. There are no Rel Humidity data.
3. There are no Chl Fluor data

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 – Long Wave Radiation (W/M^2 , Pyranometer) – data after Jan 13th are suspect

ShortWaveRad - Short Wave Radiation (W/M^2 , Pyranometer) – data after Jan 13th are suspect

WindSpeed – wind speed (m/sec)

WindDir – wind direction (deg)

(AirTemp – not available) – air temperature (deg C)

AtmPress – atmospheric pressure (mb)

(RelHum – not available) – relative humidity (% saturation)

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

TSG_Temp2 – temperature measured by the TSG SBE 38 unit (deg C).

TSG_Cond – conductivity measured by the TSG SBE 21 unit (mS/cm).

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

TSG_Density – seawater density calculated Temp & Sal (kg/m^3)

SoundVel – 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 – 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^3)

(SoundVel_2 – not available) – sound velocity calculated by the TSG unit (m/sec)

(SSTemp – not available) – x

(SSSal – not available) – x

(SSCond – not available) – x

(SW_pH – not available) – x

(Oxygen – not available) – x

ChlFluor – chlorophyll fluorescence (volt).

Derived variables are:

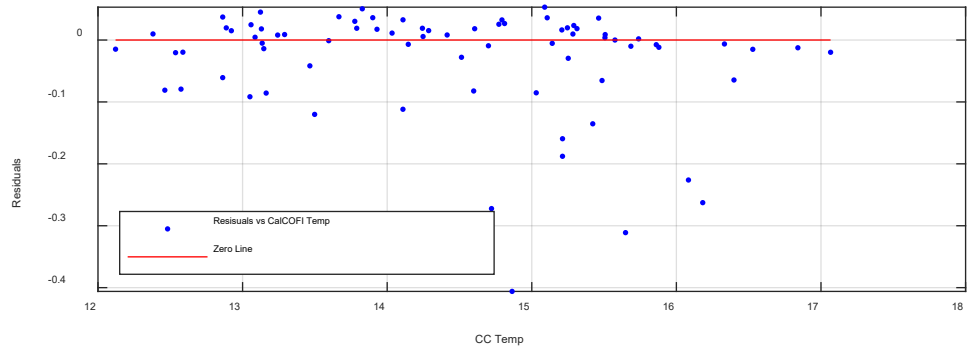
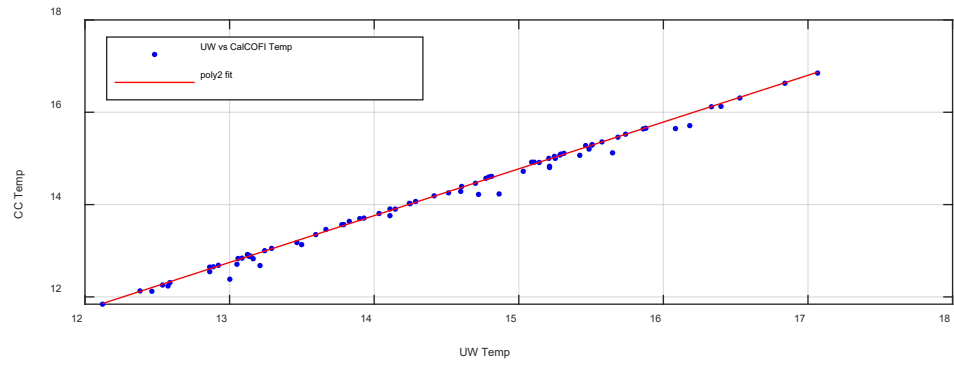
Pred_Temp – temperature derived from regressions of TSG SBE 45 TSG_Temp vs. CalCOFI 0 to 12 m bottle temperatures (deg C)

Pred_Sal – salinity derived from regressions of TSG_Sal vs. CalCOFI 0 to 12 m bottle salinity (PSU)

Pred_ChI – chlorophyll derived from regressions of ChIFluor vs. CalCOFI 0 to 12 m bottle Chl a (ug-Chl/L).
These data are not available

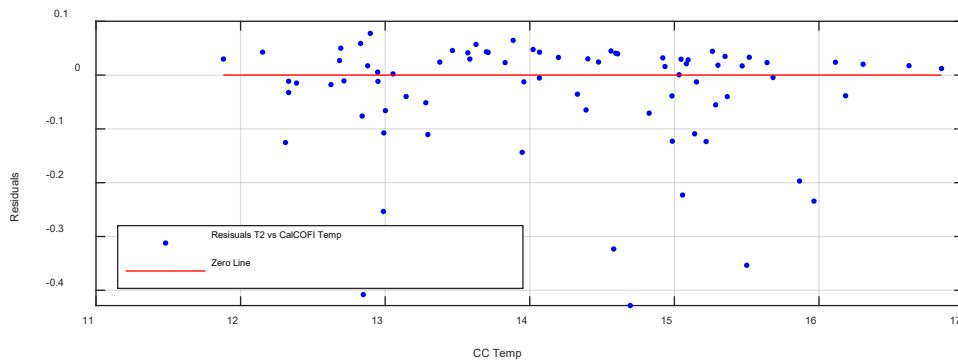
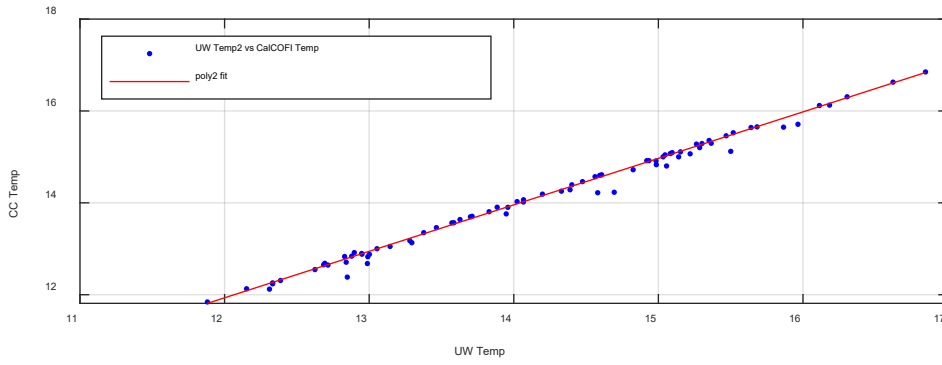
Temperature Calibration:

Pred_Temp – temperature derived from calibrations of TSG 21_Temp vs. CalCOFI 0 to 12 m bottle



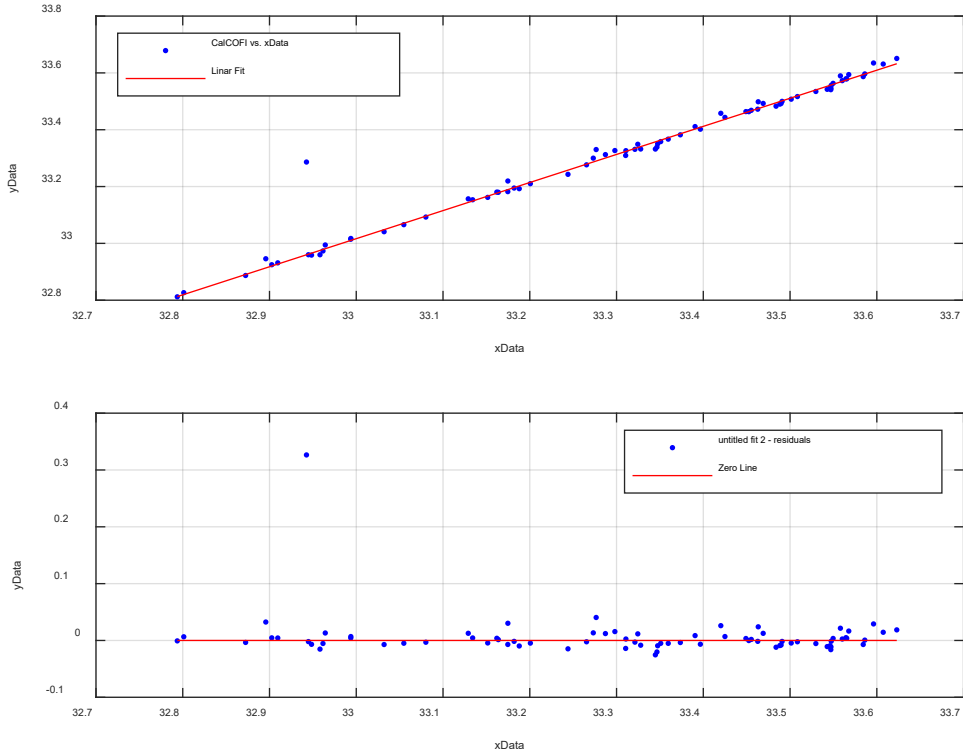
Pred_Temp – temperature derived from calibrations of TSG 21_Temp2 vs. CalCOFI 0 to 12 m bottle

Salinity



Calibration:

Pred_Sal – salinity derived from calibrations of TSG_Sal vs. CalCOFI 0 to 12 m bottle salinity (PSU)



Chlorophyll Calibration:

Pred_Ch1 – chlorophyll derived from calibrations of ChlFluor vs. CalCOFI 0 to 12 m bottle Chl a (ug-Chl/L).

No Data