

CC1701RL Underway Data Processing Notes

The raw UW data were extracted from the various files in the UW Directory structure. Both TSG units failed at different times during the cruise. The TSG45 data are mostly garbage. Temp and Sal data are only available for the first part of the cruise.

The available variables from these files are:

COG – course over ground (deg)

SOG – ship speed over ground (knots)

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 Ruben Lasker TSG SBE 21 unit (deg C).

TSG_Cond – conductivity measured by the Ruben Lasker TSG SBE 21 unit (mSi/m²).

TSG_Sal – salinity calculated by the Ruben Lasker TSG SBE 21 unit (PSU)..

TSG_Dens – density calculated by the ship's systems from Temp and Cond.

SoundVel – sound velocity (m/sec).

ChlFluor – chlorophyll fluorescence (volt).

Derived variables are:

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

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

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