

\*\*\* During the Cruise the underway fluorometer seemed to not have been cleaned prior to the cruise and there was aa growth and the values read very high and had poor agreement with the bottle.

Information provided by:

Shipboard Meteorological System MetAcq Operator's Manual  
Shipboard Technical Support Revision 1.26a 24 May 2003  
<http://www.hlsresearch.com/KauaiEx/MET/docs/MetAcq.htm>

Each data point has a 2 character ID to identify it.  
There is also a third character to help clarify the type of data.  
E.g. +25.3,AT0 (air temperature, calibrations not applied).

Underway\_Raw.txt Variables:

```
$WICOR Data Corrected
DDMMYY
HHMMSS
WS Wind Speed
WD Wind Direction
TW True Wind SpeedM/S
TI True Wind Direction Deg
WS Wind Speed
WD Wind Direction
TW True Wind SpeedM/S
TI True Wind Direction Deg
AT Air TemperatureDeg C
BP Barometric Pressure mb
RH Relative Humidity %RH
RT Air Temp (RH module) Deg C
DP Dew Point Deg C
PR Precipitation mm
LD LWR Dome Temperature Deg K
LB LWR Body Temperature Deg K
LT LWR Thermopile Volts
LW Long Wave Radiation W/M^2 (Pyranometer)
SW Short Wave Radiation W/M^2 (Pyranometer)
PA Surface PAR uE/Second/Meter^2
ST Sea Surface Temperature Deg C
TT SBE21 Temperature Deg C
TC SBE21 Conductivity mS/m
SA Salinity PSU
SD Sigma-t Kg/m^3
SV Sound Vel (Chen/Millero) M/S
FL Fluorometer ug/l
FI USW Flow Meter LPM
BT Bottom Depth Meters
LA Latitude Decimal format Deg
LO Longitude Decimal format Deg
GT GPS Time of DayGMT Secs 0-86400
CR Ships Course (GPS COG) Deg
SP Ships Speed (GPS SOG) Knts
ZD GPS DateTime GMT Secs Since 00:00:00 01/01/1970
GA
GS
GY Ships Heading (Gyrocompass) Deg
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SL Ships Speed (Speed Longitude) Knts  
 SX  
 SH Ashtech HeadingDeg  
 SM Ashtech Pitch Deg  
 SR Ashtech Roll Deg  
 ZO Winch Cable  
 ZS Winch Speed  
 ZT Winch Tension  
 IP  
 IV  
 IA9\*77,  
 Event\_Num CalCOFI Event# Appended

Each data point has a 2 character ID to identify it.  
 There is also a third character to help clarify the type of data.  
 E.g. +25.3,AT0 (air temperature, calibrations not applied).

- 0 - Calibration coefficients not applied
- 1 - Calibration coefficients applied in Sensor Module
- 2 - Calibration coefficients applied in Acquisition computer
- 3 - Calibration coefficients applied in Sensor Module and Acquisition computer
- 7 - Data Out of Range
- 8 - Data is Emulated (Not Real)
- 9 - Data invalid

Underway\_Final.txt Variables:

DATE.UTC DDMMYY  
 TIME.UTC HHMMSS  
 LA Latitude Decimal format Deg  
 LO Longitude Decimal format Deg  
 ST Sea Surface Temperature Deg C  
 SA Salinity PSU  
 FL Fluorometer ug/l  
 FI USW Flow Meter LPM  
 CAL\_T Calculated Temperature  
 CAL\_S Calculated Salinity  
 CAL\_C Calculated Chlorophyll A