

Seabird Data

Note: Sample Seabird data from Lake Erie Summer 2011 is attached to this page, click on the paperclip in the left corner to access it.

Software used to get data from sensor: <http://www.taltech.com/products/winwedge/>

Software used for data processing: <http://www.seabird.com/software/sbdataprocs-seasaverev.htm>

Raw data format from sensor should be [HEX](#) (confirm)

Sea Bird - Collected Data

Note: The data was classified into three sections based on late SU12 conversations with Paris:

Interesting Seabird data parts

- # name 0 = depFM: Depth [fresh water, m]
- # name 1 = t090C: Temperature [ITS-90, deg C]
- # name 2 = c0mS/cm: Conductivity [mS/cm]
- # name 3 = sbeox0Mg/L: Oxygen, SBE 43 [mg/l]
- # name 11 = flSP: Fluorescence, Seapoint
- # name 4 = par: PAR/Irradiance, Biospherical/Licor
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Other available seabird data types to being discussed in future

- # name 4 = par: PAR/Irradiance, Biospherical/Licor
- # name 5 = ph: pH
- # name 6 = altM: Altimeter [m]
- # name 7 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m]
- # name 8 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%]
- # name 9 = prDE: Pressure, Digiquartz [psi]
- # name 10 = ptempC: Pressure Temperature [deg C]
- # name 11 = flSP: Fluorescence, Seapoint
- # name 12 = specc: Specific Conductance [uS/cm]
- # name 13 = spar: SPAR/Surface Irradiance
- # name 14 = upoly0: Upoly 0, DO, mg/L Optode 4330FA
- # name 15 = upoly1: Upoly 1, Temp, C Optode 4330FA
- # name 16 = flag: 0.000e+00

Seabird parameters that have been identified as messy & error prone

- # name 7 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m]
- # name 8 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%]



Derived Data Products

Thermocline Identification

- The zone at which warmer and cooler waters meet in the water column.
- Data Inputs:
 - # name 0 = depFM: Depth [fresh water, m]
 - # name 1 = t090C: Temperature [ITS-90, deg C]
- Analytic(s):
- Result visualization: Line Graph representing the zone.

Deep Chlorophyll Layer and Maximum (DCM)

- A layer of elevated chlorophyll found below the epilimnion where evidence of phytoplankton accumulates mainly in the form of increased oxygen concentrations.
- Data Inputs:
 - # name 11 = flSP: Fluorescence, Seapoint
- Analytic(s):
- Result visualization:

Photic Zone

- The depth of water that is exposed to sufficient sunlight to enable photosynthesis.
- Data Inputs (provisional)
 - # name 4 = par: PAR/Irradiance, Biospherical/Licor

- # name 7 = bat: Beam Attenuation, Chelsea/Seatech/WET Labs CStar [1/m]
- # name 8 = xmiss: Beam Transmission, Chelsea/Seatech/WET Labs CStar [%]
- # name 13 = spar: SPAR/Surface Irradiance
- Analytic(s):
- Result visualization:

Hypoxia Layer

- # name 14 = upoly0: Upoly 0, DO, mg/L Optode 4330FA