Solar data: (not immediately useful)

- dts
- dts_Solar
- Time_Solar_TF
- Elev_Angle
- Solar_Dir_A
- T2_Angle

Quality control booleans and meters

- App_z_Check
- Velocity
- GPSQuality
- SecondsToFix
- SubmergedBool

Submerge: Bool to indicate whether the buoy has fallen below the ice

- 1 – yes
- 0 – no

DeviceName: Serialized buoy identifier

DeviceId: Numeric buoy identifier

DateDateTime:

- Primary observation ID
- Format: “mm/dd/yyyy hr:min”

TempPod[NUMBER]: Temp sensor depth

- [NUMBER] corresponds to depth[†].

T_[NUMBER] or sigT[NUMBER] or WT_[DEPTH]: Temperature

- [NUMBER] corresponds to depth†.

PressPod[NUMBER]: Depth sensor

- [NUMBER] corresponds to depth†.

SST: Sea Surface Temperature

Any variable beginning with '37IM…': Sea-Bird SBE 37-IM MicroCAT

- Conductivity (S/m)
- Salinity (PSU)
- Temperature (°C)

LI_192_[NUMBER]: LI-COR Underwater light sensor

- [NUMBER] corresponds to depth†.
- Senses visible light spectrum.

LI_192_[NUMBER]_StdDev:

- [NUMBER] corresponds to depth†.
- Quality control metric used for sensor failure indication (unused).

OCR_[NUMBER]_412nm/443nm/555nm/PAR: Satlantic OCR-500 Multispectral Radiometer

- [NUMBER] corresponds to depth†.
- Sense
- 412nm - "violet"
- 443nm - "violet-blue"
- 555nm - "green/green-yellow"
- PAR - visible light spectrum

MS9_[NUMBER]_[WAVELENGTH]: In-situ Marine Optics MS9 nine wavelength multispectral light sensor

- [NUMBER] corresponds to depth†.
- 410nm
- 440nm
- 490nm
- 510nm
- 550nm
- 636nm
- 660nm
- 685nm
- 710nm

MS9_[NUMBER]_tilt: Tilt on sensor

- [NUMBER] corresponds to depth†.

ECO_460CDOM/532nm/695Chl: Sea-Bird Scientific ECO Triplet-W

- Sensor to measure Chlorophyll concentration
- Made up of 3 individual sensors
- 695Chl - Chl a (excitation 470 nm, emission 695 nm)
- 460CDOM - dissolved organic material (DOM; excitation 370 nm, emission 460 nm)
- 532nm - backscattering at 532 nm.
    - Higher readings equate to more particulate.

kd_[n]to[m]_412m,/443nm/555nm/PAR: Calculation of Diffuse Attenuation

- Calculated according to Beer's Law:

$$K_d(\lambda) = \frac{ln[E_d(\lambda, z_1)] - ln[E_d(\lambda, z_2)]}{\Delta z}$$

  Where lambda is the wavelength being measured, z_i is the depth of the measurement, and E_d is the irradiance measured.
- In laymen's terms, measures how much light is being absorbed by material between sensors.
- Was found to be useful in prediction by Dr. Hill's study.

† See metadata tables here: Metadata