

Description of Data

Main Folders

Cruise Site & Date:

Y(ork)R(iver)YY(year)MM(month)DD(day)

Nested Folders/Files

1. CTD:

- a. *YRYMMDD_CTD.xlsx*: Burst average CTD data, , column descriptions as follows:
 - i. StationID: station id, B-bottom, M-middle, T-top
 - ii. Start Time/ End Time: Start/End time of burst in Hour, Minute, second. Time in EST/EDT.
 - iii. Depth, m
 - iv. Temp: temperature degree C
 - v. Cond: Conductivity, $\mu\text{S}/\text{cm}$
 - vi. Salinity: Salinity, PSU
 - vii. Turbidity: turbidity, NTU
 - viii. n: number of samples averaged in each burst

2. LISST-100X

- a. *YRYMMDD_LISST.xlsx*: Burst average data processed with Sequoia random shape matrix, column descriptions as follows:
 - i. StationID: station id, B-bottom, M-middle, T-top
 - ii. N: number of samples averaged in each burst
 - iii. Depth: depth from pressure sensor, m
 - iv. temp: Water temperature, degree C
 - v. VCtot: total volume concentration, $\mu\text{L}/\text{L}$.
 - vi. d16V, d50V, d84V: 16th, 50th, and 84th percentile of particle size by volume distribution, μm .
 - vii. Bin 1-Bin 32: Volume concentration in size bins, $\mu\text{L}/\text{L}$. The midpoint size for each is given in row 2.
 - viii. ACtot: total area concentration, cm^2/L .
 - ix. d50A: 50th percentile of particle size by area distribution, μm .
 - x. Bin 1- Bin 32: Area concentration in size bins 1-32, cm^2/L . The midpoint size for each is given in row 2.
 - xi. tau: optical transmission
 - xii. c: beam attenuation at 670 nm, 1/m.
 - xiii. b: estimated forward scattering between roughly 0.08°-15° at 670 nm, 1/m.

3. Nortek ADV

- a. *YRYMMDD_Nortek.xlsx*: Burst average data, column descriptions as follows:
 - i. Station ID: B-bottom, M-middle, T-top
 - ii. U: mean current velocity, cm/s
 - iii. std_U: standard deviation of mean current velocity, cm/s
 - iv. backscatter_x, _y, _z: acoustic backscatter from beam x,y and z
 - v. n: number of samples in each burst

4. Sontek ADV

- a. *YRYMMDD_Sontek.xlsx*: Burst average data, column descriptions as follows:
 - i. Station ID: B-bottom, M-middle, T-top
 - ii. U: mean current velocity, cm/s
 - iii. std_U: standard deviation of mean current velocity, cm/s
 - iv. backscatter_x, _y, _z: acoustic backscatter from beam x,y and z
 - v. n: number of samples in each burst

5. TSS

- a. *YRYMMDD_TSS.xlsx*: Total (TSS), fixed (FSS) and volatile/ organic (VSS) suspended from water samples determined via filtration and loss on ignition (LOI). 0.7 micron GF/F and 60 micron mesh filters were used; ">/< " 60 denotes mass greater than or less than 60 microns.

6. PICS

- a. *YRYMMDD_PICSLog.xlsx*: List of raw PICS sequence files identifying sample ID and Cruise.
- b. *YRYMMDD.zip*: Compressed file containing raw PICS sequence files, *YYYYMMDDHHMMSS.seq*, (year,month,day,hour,second) collected with StreamPix (image acquisition software used by the PICS).

7. Log Sheets.pdf:

Scanned log sheets from each cruise. Provides lat/lon, sample time, and instruments used for each station.

8. Log Book.pdf (available for some cruises):

Additional information from scanned log book entry from CHSD lab log book.