CSV files description

These datasets contain the measurements (three-hour intervals) of various meteo-marine parameters (such as SST, SLP, Height, Period, and Wave Direction). These measurements were conducted using a field of nine DWSD (Directional Wave Spectra Drifter) buoys positioned on a regular grid a few kilometers apart. For more details on the campaign, please refer to deliverable D1.3.

The dataset consists of nine files, each corresponding to a different buoy, with varying lengths, as some of these buoys became unmoored before the conclusion of the campaign.

Files in CSV format are used to store data in a very simple, tabular structure that is both human-readable and easy to process. Each line in a CSV file represents a data record, with individual fields separated by commas. This format allows for straightforward data viewing and manipulation using common tools like Microsoft Excel.

The meaning of each column in the .csv files is as follows:

Platform-ID: Identification numeric code for each buoy

Timestamp(UTC): Timestamp of the acquired data (three-hour average). The data are saved in the file from the most recent to the least recent.

GPS- Latitude at the data acquisition point (*)

GPS-Longitude(deg): Longitude at the data acquisition point (*)

SST (degC): Sea Surface Temperature (at the bottom of the surface float)

SLP (mB): Surface Level Pressure (on the top of the float)

Battery (volts): Battery voltage (**)

Drogue (cnts): drogue counter (that tracks the mooring status of the buoy)

Hs (m): Significant Wave Height

Tp (sec): Wave period (peak)

Ta (sec): Wave period (average)

Dd (deg): Dominant direcion

(*) Although the buoys are moored, the length of the rope allows for movement of a few hundred meters

(**) Transmission buoy will function down to ~6.5 volts

Example .csv file format:

Platform-ID, Timestamp(UTC), GPS-Latitude(deg), GPS-Longitude(deg), SST(degC), SLP(mB), Battery(volts), Drogue (cnts), Hs (m), Tp (sec), Ta (sec), Dd (deg)
300534061498950, 2023-03-06 18:00:00, 43.5597462, 10.0079313, 13.93, 850.00, 6.8, 13, 1.51, 6, 4.95, 237.80
300534061498950, 2023-03-06 15:00:00, 43.5599086, 10.0077231, 13.95, 850.00, 6.8, 13, 1.53, 6, 4.75, 251.10
300534061498950, 2023-03-06 12:00:00, 43.5600964, 10.0072448, 13.96, 850.00, 6.8, 13, 1.50, 4, 4.60, 206.10
300534061498950, 2023-03-06 09:00:00, 43.5601066, 10.0069155, 13.90, 850.00, 6.8, 13, 1.53, 7, 4.65, 259.20
300534061498950, 2023-03-06 03:00:00, 43.5598296, 10.0081417, 13.84, 850.00, 6.8, 13, 1.85, 7, 5.45, 250.00
300534061498950, 2023-03-06 00:00:00, 43.5594714, 10.0085338, 13.84, 850.00, 6.8, 14, 2.11, 7, 5.80, 239.70
300534061498950, 2023-03-05 21:00:00, 43.5592956, 10.0087566, 13.86, 850.00, 6.8, 14, 2.21, 7, 5.80, 241.10

300534061498950, 2023-03-05 15:00:00, 43.5594089, 10.0086473, 13.96, 850.00, 6.8, 13, 1.96, 7, 5.50, 233.50
300534061498950, 2023-03-05 12:00:00, 43.5596946, 10.0083129, 13.99, 850.00, 6.8, 15, 1.35, 6, 4.70, 234.60