Dataset Dictionary

This data set is created using Standard Meteorological Data gathered from Coastal-Marine Automated Network (C-MAN) stations and moored (weather) buoys monitored by the National Data Buoy Center (NDBC) during 2019. Only buoys and stations with acceptable level of available data for year 2019 are listed in the data set. The values under the columns for each buoy are the annual mean for 2019. A complete list of stations can be found here: `https://www.ndbc.noaa.gov`

- **Station_Name**: Name of the monitoring station
- **Owner**: Station's owner
- **Latitude**: Latitude of the station's location
- **Longitude**: Longitude of the station's location
- **Wind Dir.**: Wind direction (the direction the wind is coming from in degrees clockwise from true N)
- **Wind speed**: Wind speed (m/s)
- **Wave Height**: Significant wave height (meters), calculated as the average of the highest one-third of all of the wave heights
- **Dom Wave Period**: Dominant wave period (seconds) is the period with the maximum wave energy
- **Ave Wave Period**: Average wave period (seconds) of all waves
- **Wave Dir.**: The direction from which the waves at the dominant period (Dom Wave Period) are coming. The units are degrees from true North, increasing clockwise, with North as 0 (zero) degrees and East as 90 degrees.
- **Sea Level Pressure**: Sea level pressure (hPa)
- **Air Temp.**: Air temperature (Celsius)
- **Sea Surface Temp.**: Sea surface temperature (Celsius)
- **Dewpoint Temp.**: Dewpoint temperature taken at the same height as the air temperature measurement

- **Station Visib.**: Station visibility (nautical miles). Note that buoy stations are limited to reports from 0 to 1.6 nmi
- **Water Level**: The water level in feet above or below Mean Lower Low Water (MLLW) `https://tidesandcurrents.noaa.gov/datum_options.html#MLLW`
- **Energy Flux**: Approximate wave energy flux in kilowatts (kW) per meter of wavefront length `https://en.wikipedia.org/wiki/Wavefront`
- **Wave Height Cat**: Classification of waves based on their significant wave height.
  0.1-0.5 m: Low Height
  0.5-1.0 m: Average Height
  1.0-1.5 m: Tall
  1.5-3.5 m: Very Tall
- **Wave Period Cat**: Classification of waves based on their average wave period.
  1.5-3 s: Short
  3-5 s: Average
  5-7 s: Long
  7-8.5 s: Very Long