PS: File Formats

Download `hurricane_data_after2000.csv` from class GitHub into the same folder where you plan to write code.

1. Read the hurricane data into a Pandas dataframe.
2. Make ISO_TIME the index on your dataframe
3. Find the unique values of the BASIN, SUBBASIN, and NATURE columns.
4. Rename the WMO_WIND and WMO_PRES columns to WIND and PRES.
5. Get the 10 largest rows in the dataset by WIND.
6. Group the data on SID and get the 10 largest hurricanes by WIND.
7. Make a bar chart of the wind speed of the 20 strongest-wind hurricanes.
8. Plot the count of all datapoints by Basin
9. Plot the count of unique hurricanes by Basin.
10. Make a hexbin of the location of datapoints in Latitude and Longitude.
11. Plot the count of all datapoints per year as a timeseries using resample
12. Calculate the climatology of datapoint counts as a function of dayofyear