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Lab 1: Pre-lab Worksheet

1   What is the name of the organization providing the data?

   Scripps Institution of Oceanography

2   What is the temporal range (first date, last date) of the data?

   From January 1958 to December 2021

3   Which variables are measured (temperature, precipitation, etc...)?

   Monthly Atmospheric CO2 at Mauna Loa

4   What are the units of the data?

   Data are measured in units ppm (parts per million)

5   How are missing data identified?

   Missing data are inputted as -99.99 for every column in the row

6   How is the data is organized in the file - what do the rows and columns represent?

   The rows represent the timeline labeled as year and month, and columns as CO2 [ppm], CO2 filled [ppm], seasonally adjusted [ppm], and seasonally adjusted fit [ppm].

7   How might this data provide information about climate?

   This data set provides the atmospheric CO2 data, and the atmospheric condition is a great part of climate science.

8   In MATLAB, in the function call `rand(2,10)`, what is the meaning of the input arguments?

   It generates two arrays of 10 random numbers between 0 and 1

9   In the same function call, what will the output argument(s) be?

   The output of the function call gives a 2x10 Matrix with random numbers between 0 and 1 for each cell.