

Our group: _____

_____ (no more than 4 names)

Measurements of atmospheric carbon dioxide are in eight files in the directory 'csiro' off the mar08 directory according to eight stations:

cferg_mm.dat	mawson_mm.dat
cgrim_mm.dat	mlo_mm.dat
estpo_mm.dat	shetland_mm.dat
macq_mm.dat	spo_mm.dat

Check the file that your group is doing.

For more information, see <http://cdiac.ornl.gov/trends/co2/csiro>

These files all have the following format: a header, then the data, then a footer with more explanatory information. The body of the data has columns for year, then twelve monthly values, then annual averages for a total of 14 columns.

Read in these data and perform the following tasks:

1) Create a dataset with each observation corresponding to a month, with variables YEAR, MONTH (numeric), and CO2.

2) Plot the CO2 versus time.

3) Plot the monthly mean CO2 values by month in a bar chart.

bonus) Check the yearly totals -- are the records consistent?

You may notice this problem similar to the sleeping dog problem. You might find these files relevant: feb20.ex1 feb22.ex3 (especially) feb25.ex2

Submit your output and log. Don't forget your toes!