

Activity: Ice Core Data

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1 Plotting the Data

1. Navigate your desktop PC or laptop to the course Moodle page, and scroll to the bottom.
 2. Download the two Excel spreadsheets (.xlsx format) entitled DronningMaudLand and SouthPole. These are data corresponding to the Paleoclimatology Data Map we explored.
 3. Manipulate the data to get the gas age in years before present (AD) from the South Pole data set next to the mean CO₂ level in parts per million by volume.
 4. Plot the data in an x-y scatter plot. Do you observe an increase in greenhouse gas concentration?
 5. Repeat the exercise from the data from Dronning Maud Land (DML), and add the data to the plot.
 6. Do the data agree for the years since the middle ages? Why or why not?
 7. What do we observe in more recent years? Draw the graph below and highlight the area corresponding to CO₂ increases.
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8. If there is time, repeat the entire exercise but add *error bars* from the final column in each data set.