

Problem:

NOAA tracks various climate information via the Global Monitoring Division, which was formerly known as the CDML (Climate Monitoring and Diagnostics Laboratory). Among the information gathered there are measurements of the ozone layer. Ozone measurements are taken from various monitoring stations situated around the world.

Your task is to gather information about the amount of ozone measured from these stations throughout the year 2004. The stations for which you should gather information are:

- Perth, Australia
- Boulder, Colorado, USA
- Bismarck, North Dakota, USA
- Amundsen-Scott South Pole Station

Provide a line graph showing the average ozone measurements in Dobson Units for each month of the year 2004. A separate line should be provided for each monitoring station.

Short Answer Questions:

1. Based on the information on your line graph, it would be reasonable to guess that most areas experience the lowest levels of total ozone during which of the four seasons?
2. Does there appear to be a relationship between latitude and measured total ozone levels?
3. What is a Dobson Unit (DU)?
4. What are some possible causes of losing ozone? What are the effects of lower amounts of ozone?