

ES 106 Extra Credit Option – Collecting Weather Data

Keeping a weather log for 15 days

- **General Directions:**

Download the Excel spreadsheet provided on the course website for keeping a record of local weather conditions for 15 days. Conditions will be recorded twice a day – once in the morning and once in the afternoon. Type in the information on the spreadsheet and print it out when finished.

Keep your own independent weather log. Do not copy data from other students' weather logs!

When completed, be sure to answer the questions on the back of this sheet.

The following websites are useful for looking up weather conditions for this area:

National Weather Service: <http://www.wrh.noaa.gov/pqr/>

Locate the area that you live in on the map and click the area for current weather conditions.

Weather Underground: <http://www.wunderground.com/>

Enter the city that you live in for current weather conditions.

- **Directions for Recording Observations:**

Temperature: either use °C or °F but stay consistent.

Wind Speed and Direction: show wind speed in miles/hour (MPH).

Air Pressure (Barometer): record pressure in either millibars (mb) or inches of mercury (in), but stay consistent.

Relative Humidity: shown as a percentage.

Precipitation: indicate what types of precipitation are falling in the area (rain, hail, sleet, drizzle, etc.).

Cloud Types: look outside and identify the cloud types. Cloud charts and photos are included in the Earth Science Text Book. You can also use the cloud picture slides in **Lecture 10b** as a guide.

Amount of Cloud Cover: indicate the amount of cloud cover if any (clear, partly cloudy, mostly cloudy, overcast).

Notes and other Observations: include any other interesting observations such as wind gust velocities during storms, rainfall amounts, frost, optical effects (rainbows, halos around the Sun), etc.

Weather Observation Questions

Use the data that you recorded on the spreadsheet for answering the following questions.

How does the air pressure during rainy days compare with that on days with mostly clear, sunny skies?

What types of clouds produced most of the observed precipitation?

In general, what was the relative humidity like in the mornings when compared to the afternoons?

What was the general wind direction when a storm system or front was approaching?

What were the most common types of clouds that you observed in the local area?