Cloud and Contrail Cover
Field Guide

NEVER look directly at the Sun!

Task

Observe how much of the sky is covered by clouds, including contrails. Choosing between these categories is easy at the extremes, but harder where they meet. Estimate what fraction of the sky is covered by clouds. One good way to do this is to have everyone in the class make an estimate, and then average all the answers.

When multiple cloud layers are present, we would like this information for each cloud layer as well as a total cloud cover.

What You Need

- □ Cloud Data Sheet
- □ GLOBE Cloud Chart
- □ GLOBE Data Entry options

In the Field

1. Complete the top section of your Data Sheet.
2. Look at the sky in every direction (above 14 degrees).
3. Estimate how much of the sky is covered by clouds and contrails.
4. Record the cloud/contrail cover for the overall sky, as well as each level.

Cloud Cover Classifications
No Clouds The sky is cloudless; no clouds are visible.
Few Clouds are present but cover less than one-tenth (or 10%) of the sky.
Isolated Clouds cover between one-tenth (10%) and one-fourth (25%) of the sky.
Scattered Clouds cover between one-fourth (25%) and one-half (50%) of the sky.
Broken Clouds cover between one-half (50%) and nine-tenths (90%) of the sky.
Overcast Clouds cover more than nine-tenths (90%) of the sky.
Obscured Clouds and contrails cannot be observed because more than one-fourth (25%) of the sky cannot be seen clearly.

5. If the sky is Obscured, record what is blocking your view of the sky. Report as many of the following as you observe.
   - Fog • Smoke • Haze • Volcanic Ash • Dust
   - Sand • Spray • Heavy Rain • Heavy Snow • Blowing Snow