

Checking Weather Forecasts

Students record a four or five-day weather forecast, then check the actual weather each day and compare the actual weather with what was forecast. This is important to ISS EarthKAM because, as part of requesting images during a mission, students consider the weather at the time and place an image may be taken.

Materials/Resources

1. Make copies of the Student Handout 1: Weather Table — Forecast and Actual.
2. Arrange one week of daily Internet access for your students. Teams can take turns, so a single computer is enough. Weather Web sites are accessible from the (password protected) SMOC Weather page <http://www.earthkam.ucsd.edu/smoc>

Time: 2+ (50 minute) periods, plus 10-15 minutes each day for a week; This activity should be started on a Monday, unless your students have reliable Internet access outside of school

Level: Intermediate

Recommended Procedure

The Activity

1. Have each student or team identify a location to study.
 - Have students check that at least one weather Web site provides forecast and daily weather for their location.
2. Have each team use a weather Web site to record a four or five-day forecast for their location.
3. Have them record the actual weather at that location for the next four or five days and compare the forecasted weather with the actual weather.
4. Lead a discussion on all the data, using the questions below the table as a guide.

Extending the Activity

5. Have different students or teams record a local weather forecast from different sources: newspapers, radio stations, and television stations. Compare the accuracy of the different sources by determining which forecasted results are closest to the actual results.
6. Research the kinds of data and reasoning meteorologists use to

ISS EarthKAM

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STANDARDS

Science

Science as Inquiry

- Use appropriate tools and techniques to gather, analyze, and interpret data.
- Understandings about Scientific Inquiry

Earth and Space Science

- Clouds, formed by the condensation of water vapor, affect weather and climate.
- Global patterns of atmospheric movement influence local weather.

Geography

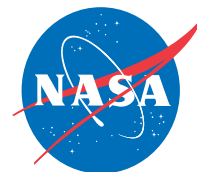
The World in Spatial Terms

- Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

Technology

Technology Research Tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.



Weather Table: Forecast and Actual

Location:

Date	High Temperature	Low Temperature	Clouds and Precipitation
Forecast			
Actual			
Forecast			
Actual			
Forecast			
Actual			
Forecast			
Actual			
Forecast			
Actual			

- How accurate were the forecasts?
- Were the temperature or cloud/precipitation forecasts more accurate?
- Did the forecast's accuracy drop off with time?
- What do you think about the accuracy of weather forecasts in general? Why?

Student

