

Extension Questions – Satellite Lesson

1. Explain the difference between in-situ measurement and remote sensing.
2. Are the satellite images you viewed in the exercise an example of in-situ or remote measurement?
3. What are the advantages of using a satellite to collect data on phytoplankton activity?
4. What are the potential disadvantages of using only remote sensing techniques to collect this type of data?
5. How could in-situ measurement create a more complete picture of phytoplankton activity compared to use of remote sensing alone?

Answers to Extension Questions – Satellite Lesson

1. Explain the difference between in-situ measurement and remote sensing.

In-situ measurements are taken directly from the ocean whereas remote sensing occurs far away, for example through satellite observations from space.

2. Are the satellite images you viewed in the exercise an example of in-situ or remote measurement?

Remote measurement

3. What are the advantages of using a satellite to collect data on phytoplankton activity?

Satellites can capture data from a wide area relatively and easily.

4. What are the potential disadvantages of using only remote sensing techniques to collect this type of data?

Satellites cannot in many cases capture the level of resolution gained from in-situ measurement.

5. How could in-situ measurement create a more complete picture of phytoplankton activity compared to use of remote sensing alone?

Direct water sampling from the areas of interest could provide additional, specific information that remote sensing cannot provide. For example, in situ measurements could provide information about activity at different depths or information about the species composition in the sample area.