My NASA Data - Mini Lesson/Activity

Using Graphs: Identify and Interpret

Grade Band

- 6-8

Time

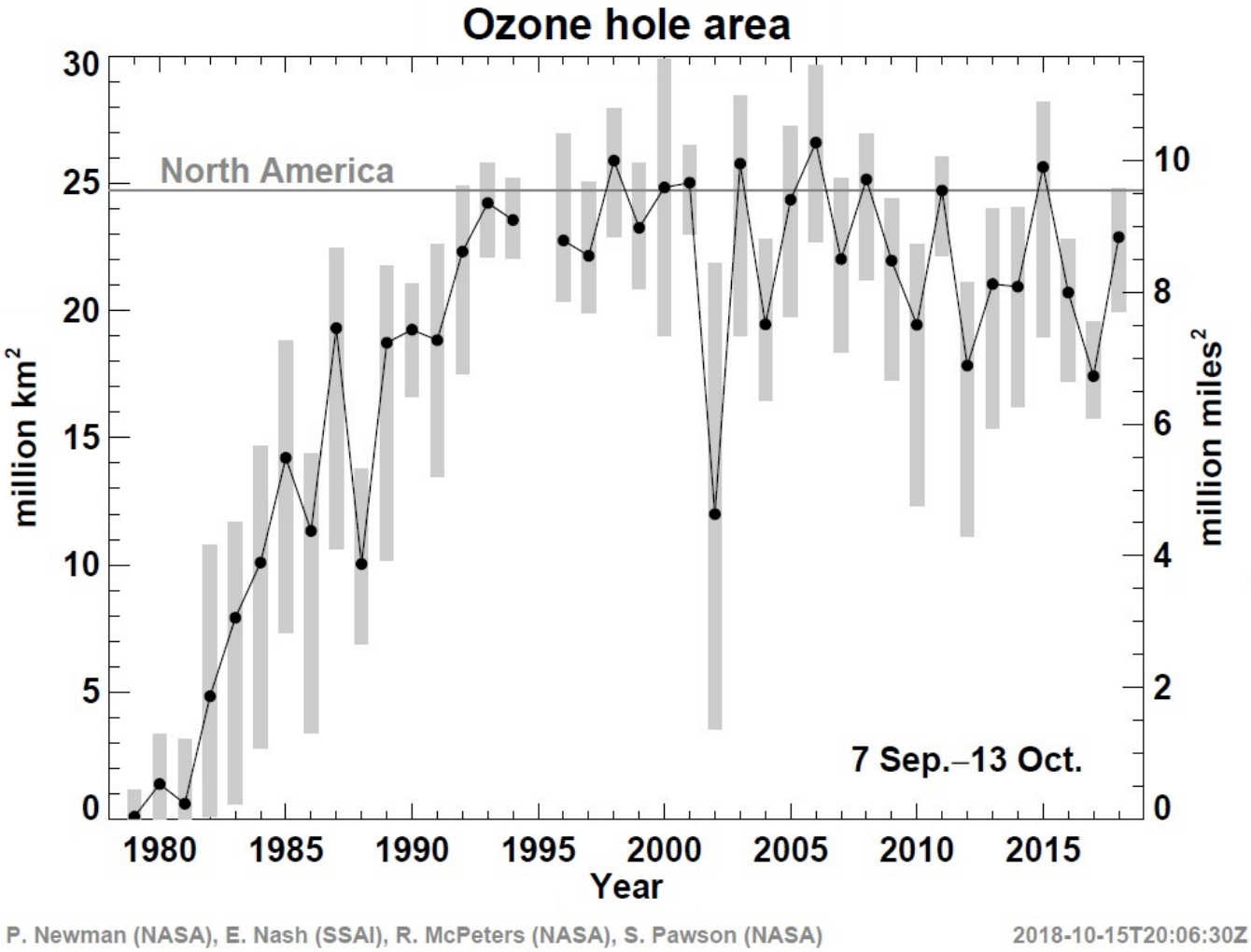
- 15 minutes

Overview

Students analyze the data and details of a complicated graph by identifying components and data patterns.

Student Directions

Review the sample graph below, then follow the instructions by marking each part of the graph described in the steps:



Size of the ozone hole over Antarctica through time. Source: P. Newman (NASA), E. Nash (SSAI), R. McPeters (NASA), S. Pawson (NASA) (https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/Ozone%20Graph_1.jpg)

Steps:

1. Check with your instructor on how to submit your answers.
2. Identify title, axis labels, and units; you may highlight them or use a color code.
3. Identify any unusual labels or odd markings, such as missing data; highlight or color code.
4. Note and mark high points.
5. Note and mark low points.
6. Note and mark any data patterns that are noticeable.
7. If possible, draw a best-fit trend line across the data.
8. Write a one-sentence caption that summarizes the data.

Source:

1. P. Newman (NASA), E. Nash (SSAI), R. McPeters (NASA), S. Pawson (NASA)

Teacher Note

Teachers, these mini lessons/student activities are perfect "warm up" tasks that can be used as a hook, bell ringer, exit slip, etc. They take less than a class period to complete. Learn more on the "My NASA Data What are Mini Lessons?" page.

Teachers who are interested in receiving the answer key, please complete the Teacher Key Request and Verification Form. We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

NGSS Three Dimensional Learning

NGSS Disciplinary Core Ideas

- ESS3C: Human Impacts on Earth Systems

Crosscutting Concepts

- Patterns
- Scale, Proportion, and Quantity
- Stability and Change

Science and Engineering Practices

- Developing and Using Models

Document Resources

- Using Graphs: Identify and Interpret Image