
My NASA Data - Interactive Models

Space Weather Maps

Grade Band

- 6-8
- 9-12

Time

- 30 minutes

Directions

Remember to never look directly at the Sun without proper safety equipment.

1. Read the background information on space weather on slides 3-6.
2. Read the forecast for solar minimum on slide 7.
3. Complete the interactive space weather forecast map for solar minimum on slide 8.
4. Read the forecast for solar maximum on slide 9.
5. Complete the interactive space weather forecast map for solar maximum on slide 10.
6. Share your maps as direction by your instructor.

Teacher Note

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.



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NGSS Three Dimensional Learning

NGSS Disciplinary Core Ideas

- PS2B: Types of Interactions
- PS4A: Wave Properties
- PS4B: Electromagnetic Radiation
- ESS1A: The Universe and its Stars

Crosscutting Concepts

- Patterns
- Cause and Effect
- Structure and Function

Science and Engineering Practices

- Developing and Using Models

Learning Objectives

- Students will be able to identify key components of space weather (solar cycle, sunspots, geomagnetic storms, aurora).
- Students will be able to use space weather data to create a space weather map.

Essential Questions

- What is space weather?
- How do scientists predict space weather?
- How do space weather effects vary throughout the solar cycle?

Google Slide interactive Files

[Space Weather Maps Interactive Slides](#)