
My NASA Data - Mini Lesson/Activity

Introduction to Volcanic Ash

Grade Band

- 6-8
- 9-12

Time

- 15 minutes

Overview

Watch NASA videos about aerosols and volcanic ash.

Student Directions

Steps

[Video: NASA's Earth Minute: My Name is Aerosol](#)

1. Watch the videos and answer the questions. Check with your instructor on how to submit answers.

2. Watch the [NASA's Earth Minute: All About Aerosols video](#) (above).

1. Identify different sources of aerosols.

2. What are the effects of aerosols?

3. How does NASA study aerosols?

3. Watch the [NASA video: Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds](#) (below) which describes hazards of volcanic emissions.

1. How does volcanic ash demonstrate an interaction between the geosphere and the atmosphere?

2. Why are volcanic emissions a problem?

3. What is NASA tracking to try to help predict emissions?

[Video: Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds](#)

Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds |
<https://www.youtube.com/watch?v=TP4vzFojewU&t=3s> | Source: 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.

Sources:

1. *NASA's Earth Minute: My Name is Aerosol*. (2017, January 13). YouTube. Retrieved April 28, 2022, from <https://www.youtube.com/watch?v=4eh6IKahbok>
2. *Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds*. (2016, May 10). YouTube. Retrieved April 28, 2022, from <https://www.youtube.com/watch?v=TP4vzFojewU>

NGSS Three Dimensional Learning

NGSS Disciplinary Core Ideas

- ESS2A: Earth Materials and Systems

Crosscutting Concepts

- Cause and Effect

Science and Engineering Practices

- Obtaining, Evaluating and Communicating Information