Data Viz Flipping for Volcanoes

On April 22, 2015, the Calbuco volcano in Chile erupted ash and gas more than 15 kilometers (9 miles) into the sky. The strong winds of the stratosphere carried the plume on a journey for miles around the globe.

Scientists use data from the Suomi NPP satellite to create maps of volcanic clouds. This information can be used to forecast where dangerous clouds of ash are spreading, helping pilots avoid areas where such debris could damage their airplanes.

Make a Volcano Animation

Make your own flipbook animation to track aerosols and sulfur dioxide from the 2015 eruption of Calbuco.

Materials:

- Flipbook images (pages 5-8)
- Color printer
- White card stock
- Scissors
- Binder clip

Calbuco Volcano erupting over Puerto Montt, Chile

1. Print flipbook pages double-sided on card-stock and cut along dotted lines.

2. Stack the frames in numerical order from 1 to 35.

3. Clip together the left side of the stack with a binder clip.

4. Flip through the stack quickly and watch the animation.

Think Like a Scientist

1. Which traveled farther: ash or sulfur dioxide?
2. Which traveled faster: ash or sulfur dioxide?
3. Which lingered for the longest time?

Answers on page 3

Try This!

Make your own volcano visualization. Draw or rubber stamp an eruption on each frame and flip the pages to see your volcano in action.

Calbuco Erupts! Make your own data visualization of volcanic ash and sulfur dioxide.

Binder Clip Here

EO Kids: Flipbook

Calbuco Volcano April 2015 Eruption

Sulfur Dioxide

Less — More

Volcanic Ash


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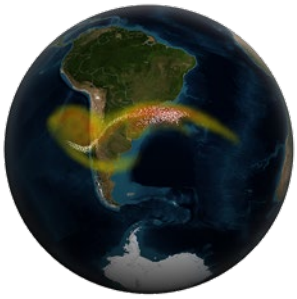
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Make your own volcano animation on the flip-side.

earthobservatory.nasa.gov/eokids

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Use dotted lines on page 5 as cutting guide.


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Use dotted lines on page 7 as cutting guide.