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## My NASA Data - Mini Lesson/Activity

### Kuril Islands Volcanoes



### Student Directions

#### Steps

1. Examine the images to complete a graphic organizer and answer questions. Check with your instructor on how to submit answers.



[Sarychev Eruption June 12,2009](#)

[Image Credit: NASA](#)

[https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/Sarychev\\_0.jpg](https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/Sarychev_0.jpg)

2. Examine the image snapped from the International Space Station of the [Sarychev Volcano](#) in the Kuril Islands which are northeast of Japan. It is a photo of an early stage of eruption on June 12, 2009.



[My NASA Data](https://myNASAdata.larc.nasa.gov/sites/default/files/2019-08/Earth%20System%20Frayer%20Model%20V.5_Graphic%20Organizer.pdf)

[Earth System Graphic Organizer](https://myNASAdata.larc.nasa.gov/sites/default/files/2019-08/Earth%20System%20Frayer%20Model%20V.5_Graphic%20Organizer.pdf)

[https://myNASAdata.larc.nasa.gov/sites/default/files/2019-08/Earth%20System%20Frayer%20Model%20V.5\\_Graphic%20Organizer.pdf](https://myNASAdata.larc.nasa.gov/sites/default/files/2019-08/Earth%20System%20Frayer%20Model%20V.5_Graphic%20Organizer.pdf)

3. Describe the impact you think the eruption could have on the Earth spheres: Atmosphere (air), Biosphere (living things), Cryosphere (ice and snow), Geosphere (land and soil), and Hydrosphere (water). Use the [graphic organizer provided](#). NOTE: You will be filling it in for another image as well. Plan to use a different color or font to tell them apart.



[Raikoke](#)

[Eruption June 22, 2019](#)

[Image Credit: NASA](#)

[https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/Raikoke\\_1.jpg](https://mynasadata.larc.nasa.gov/sites/default/files/inline-images/Raikoke_1.jpg)

4. Now, examine the image (also taken from the International Space Station) of the [Raikoke Volcano](#), also in the Kuril Islands. This eruption occurred on June 22, 2019.
5. Describe the impact you think the eruption could have on the Earth spheres: Atmosphere (air), Biosphere (living things), Cryosphere (ice and snow), Geosphere (land and soil), and Hydrosphere (water). Use the same graphic organizer provided. Record your observations for

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the new volcano in a different font or a different color.

6. Compare the two images and use your graphic organizer to answer the following questions.



Sarychev Eruption June 12, 2009 - Image Credit: NASA



Raikoke Eruption June 22, 2019 - Image Credit: NASA

### [Sarychev Eruption June 12, 2009 and Raikoke Eruption June 22, 2019](#)

[Image Credits: NASA](#)

[https://mydasdata.larc.nasa.gov/sites/default/files/inline-images/Compare%20Sarychev%20and%20Raikoke\\_1.png](https://mydasdata.larc.nasa.gov/sites/default/files/inline-images/Compare%20Sarychev%20and%20Raikoke_1.png)

1. Compare the [two images](#). What are the similarities and differences in the images?
2. The volcanoes happened approximately 30 km apart. What does this tell you about the area?
3. Make a claim about the volcanoes in the area. Use the evidence from the images and give your reasoning.

### Sources:

1. *Sarychev Peak Eruption, Kuril Islands*. (2009, June 21). NASA Earth Observatory. Retrieved April 29, 2022, from <https://earthobservatory.nasa.gov/images/38985/sarychev-peak-eruption-k...>
2. Voiland, A., Klemetti, E., Carn, S., & Prata, A. (2019, June 24). *Raikoke Erupts*. NASA Earth Observatory. Retrieved April 29, 2022, from <https://earthobservatory.nasa.gov/images/145226/raikoke-erupts>

### My NASA Data Visualization Tool

- [Earth System Data Explorer](#)