Student Directions

Steps

1. Examine the images to complete a graphic organizer and answer questions. Check with your
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.

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

Sarychev Eruption June 12, 2009 and Raikoke Eruption June 22, 2019  
Image Credits: NASA  
https://mynasadata.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:


Access and Explore Data

- Monthly Aerosol Optical Depth