

Using Google Earth in Taking the Pulse of Yellowstone’s “Breathing” Volcano: Problem-Based Learning in America’s First National Park

Google Earth (GE) is a free, fun, versatile, and useful way to explore the world. It places different kinds of information on a globe in layers so that you can think about how the information relates in space. In your problem of trying to find the best place to put a research station, you’ll be able to use GE to find geologically quiet places that are also convenient to drive to. For instance, you can compare where geysers are to where earthquakes have occurred and to where roads lie.

Think of the information as layers that you can stack on top of each other and see through them all at the same time. It’s like having a paper map at the bottom of a stack of clear transparencies. Each transparency has a different kind of information—locations of geysers or roads or water features. It’s like that, but GE does the stacking and displaying for you. And it allows you to measure distances easily, identify features, add your own information, and pretend you’re flying over the area in an airplane.

Here are the basics on how you use it:

1. Open GE and zoom in towards Wyoming. You can zoom in on the slider on the right or by scrolling the dial on your mouse.
2. Move around by clicking and dragging with your mouse.
3. Or, type the name “Yellowstone” in the Search box on the left menu.
4. Add layers of information by clicking on the link on the Powerpoint slide. (In general, if you’re browsing on the web, go to File → Open → Browse to the file.)
5. Select the information you want to see by checking the box to the left of the file’s name. You can turn layers on and off by checking them.
6. Some layers are opaque or transparent, depending on how you set the layer. Click on the layer to highlight it. If you see a slider, move it to adjust how well you can see through it.

That’s it! Now explore the menu and the button bar at the top. You can save your work as a file. And you can learn more from [tutorials](#).