

Google Earth - A Prospecting Tool

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Overview

- ⇒ Introduction
- ⇒ What is Google Earth and how do you get it?
- ⇒ What are its features?
- ⇒ How do you install a geologic map overlay?
- ⇒ What are its features?
- ⇒ How do you install a mining overlay?
- ⇒ What are its features?
- ⇒ How do you install a topographic map overlay?
- ⇒ What are its features?
- ⇒ Questions



What is Google Earth

Google Earth is a virtual globe, map and geographical information program that was originally called EarthViewer 3D created by Keyhole, Inc, a Central Intelligence Agency (CIA) funded company acquired by Google in 2004. It maps the Earth by the superimposition of images obtained from satellite imagery, aerial photography and geographic information system (GIS) onto a 3D globe. For more information, go to:
https://en.wikipedia.org/wiki/Google_Earth



How do you get Google Earth

The product is available for use on personal computers running Windows 2000 and above, Mac OS X 10.3.9 and above, Linux kernel: 2.6 or later, and FreeBSD. Google Earth is also available as a browser plugin. It was also made available for mobile viewers on the iPhone OS, as a free download from the App Store, and is available to Android users as a free app in the Google Play store. On a personal computer, go to: <https://www.google.com/earth/resources>



Features of Google Earth

- ➔ Search panel - Use this to find places and directions and manage search results.
- ➔ 3D Viewer - View the globe and its terrain in this window.
- ➔ Toolbar buttons
- ➔ Navigation controls - Use these to zoom, look and move around.
- ➔ Sign in with your Google account - When you sign in, you can share to Google+ or email what you're viewing in Google Earth.
- ➔ A helpful resource: <http://rocksfromabove.blogspot.com/p/google-earth-files.html>



Features of Google Earth (continued)

- ➔ Street View - Zoom in to the map then drag the pegman to view street-level imagery.
- ➔ Places panel - Use this to locate, save, organize and revisit place-marks.
- ➔ Search in Places - Find your places quickly by searching for them.
- ➔ Layers panel - Use this to display points of interest.
- ➔ Tour Guide - explore interesting places around the world.

For more information, go to:

https://support.google.com/earth/answer/148176?hl=en&ref_topic=4380577



Installing a Geologic Map Overlay

- ➔ The US Geological Service (USGS) publishes maps in KML and KMZ formats for use in Google Earth
- ➔ To choose a US state of interest, go to:
<http://mrdata.usgs.gov/geology/state/>
- ➔ Choose the state of Nevada, for example, and download:
nvgeol.kml (22.0M bytes) or
nvgeol.kmz (6.6M bytes)
- ➔ Double click on the chosen file in the downloaded directory to open it in Google Earth
- ➔ Move the Geologic units of Nevada overlay from “Temporary Places” to “My Places” in Google Earth



Geologic Map Overlay Features

- ➔ Color coded rock formations
- ➔ Detailed descriptions of rock types, age, and names of rock formations
- ➔ Map and unit references



Installing a Mining Overlay

- ➔ The mining sites are obtained from the USGS Mineral Resources Data System (MRDS)
- ➔ To choose a US state of interest, go to:
<http://mrdata.usgs.gov/mrds/select.php>
- ➔ Choose the state of Nevada, for example, and download the Google Earth file format (“Get Data” button)
- ➔ Double click on the file “mrds-fUS32-1” in the downloaded directory to open it in Google Earth
- ➔ Move the overlay from “Temporary Places” to “My Places” in Google Earth



Mining Overlay Features

- ➔ Key shows symbols for active mines, closed mines, and a designation of “Occurrence , Prospect, or Unknown” minerals
- ➔ Clicking on a symbol pops up a general information window
- ➔ Links in the window provide more detailed information about the minerals mined including the Site Identification, Geographic location, Site characteristics, and Commodities (gold, for example)



Installing a Topographic Map Overlay

- ➔ Go to: <http://www.gelib.com/usgs-topographic-maps-2.htm>
- ➔ Scroll down the page to the button that says: “Download With Google Earth”
- ➔ Double click on the file “usgs-topographic-maps.kml” in the downloaded directory to open it in Google Earth
- ➔ Move the overlay from “Temporary Places” to “My Places” in Google Earth

