Google Earth Pro Basics

Pro Essentials

Google Earth Pro is a yearly subscription to the user interface which not only allows one to view the 3D globe and Google Earth database, but also enables professional users to share and analyze industry data, as well as creating visually powerful presentations. With Google Earth Pro, it’s easy to research locations and present your discoveries. You can import site plans, property lists or client sites and share the view with your clients or colleagues. You can even export high-quality images to documents or the web.

Advanced Features of Google Earth Pro

Fastest performance
Premium printing resolution: 4800 dpi
Premium image output resolution: 4800 dpi
GPS data import
Spreadsheet import: 2500 points
Web site, email and chat support
Measuring toolset
Movie Maker module
GIS data import with style wizard
Live traffic count data (additional annual feature)

Goals of the American Watershed Project

Problem-based, interdisciplinary project design
Basic techniques of environmental data collection on local watershed
Use of GPS technology to record geographical data points
Use of spreadsheet technology to store and analyze the data
Use of online GIS database technology to share information between schools
Promote social networking between environmental teachers and area experts
Collaboration between participating groups to complete a large task
Logging into Google Earth Pro

1. Double click on the icon with your cursor to launch the software. There should be an icon on your desktop. If you do not have an icon, please inform the instructor.

2. Choose the primary database from the list of servers. The time it takes for the database to load will depend on the speed of your internet connection.

Moving Around In Google Earth Pro

1. The software offers a navigation tool in the upper right-hand corner of the screen. This tool will help you to zoom in or out, change your direction, or tilt your perspective.

2. Spend some time zooming in and out.

3. Use your mouse to move around the Earth. Try to center your location on the southeastern United States.

4. Change the viewing direction and your perspective.
Finding Places in Google Earth Pro

1. In the upper left hand corner, type in your address, and then click on the magnifying glass. The program will zoom in on the location of the address you entered. Pretty much any place with a physical street address can be found this way. Street address in other countries can be problematic.

2. Google Earth stores data either by street address or by its latitude and longitude coordinates. This information can be found at the bottom of your screen.

3. The elevation of a place can also be found in this area.

4. A number of places of interest can also be found, such as the Grand Canyon or the Statue of Liberty. To find these, type their name in the address bar in the upper left-hand corner and click on the magnifying glass.

5. After you visit a place, it is stored in the temporary folder. This folder is listed in the panel on the left-hand side of the program’s screen. To return to a place, double click on it.
Using Layers in Google Earth Pro

1. Google Earth Pro’s data base comes with a number of data layers that can be turned on and off. These layers are found in the left-hand panel at the bottom.

2. Sometimes this layer is collapsed to give you more viewing pace for the other panels. You can open or close a panel by clicking on the arrow in the title bar for that panel.

3. Once the panel is open, use your cursor and slide the panel up so you can see the available layers. To do this, move your cursor over the darker line just above the arrow to expand the panel. Notice your cursor changes to a bar with arrows. Click and drag up to increase the size of the panel, or drag down to decrease the size.

4. There are layers for roads, buildings, traffic and weather to name just a few. To activate a layer, check the box on the left-hand side of the layer. This will activate it.

5. Some of these layers are actually comprised of many individual layers. To see each layer in a category (or folder), left click on the plus sign to expand that layer. Click on the minus sign to collapse that layer.
Checking the Weather for Our Trip

1. Check the weather for our field trip today. To do this, check the box for the weather layer. Give it time to load.

2. Make sure you are over the southeast region of the United States. You can change your location by using your mouse. If you are on the other side of the world, you can get there faster by typing in the name of the city and then clicking on the magnifying glass.

3. Expand the weather layer by clicking on the plus sign. How many individual layers are included in this category?

4. Uncheck the layers: clouds, radar, and information. This will leave you with the forecast layer. To find out more information about a particular region, click on one of the placemarks near the Chattoochee where we will be collecting our water samples. These are the types of placemarks we will be creating after we collect our data this afternoon.
Environmental Layers in Google Earth Pro

1. Google Earth Pro has a number of layers that can be used to teach students about environmental issues. Most of these layers can be found under the Global Awareness category in the layer panel. Some of these layers deal with endangered species, mountain top removal for mining, and the UN’s Atlas of our Changing world.

2. The National Geographic Association also has a layer under the Geographic Web category.

3. To activate one or more of these layers; expand the Global Awareness folder by clicking on the plus sign, and then checking the box.

4. To view a place mark, click on it.

5. Many of these placemarks have images, text, and links to websites where students can learn more about the issue.
Google Earth Community Outreach

1. Google Earth maintains a website of layers constructed by teachers and professionals in the field. These layers can be downloaded and then loaded into Google Earth or Google Earth Pro. To access these layers, open a web browser and type in the following address: http://earth.google.com/outreach/index.html

2. To access a number of educational layers related to environmental issues, click on “Showcases” on the left-hand side of the page.

3. Click on Environment and Science category. Some of the layers include Forest Cover Change, Global Database of Dams, and Climate Change in our World.

4. These layers can be downloaded and used in either Google Earth or Google Earth Pro. To download a layer click on the file “Open in Google Earth”. These files are created and stored with the file extension “.kmz”. We will be creating this file when we create a layer.

5. Let’s practice by opening the layer on America’s Wild Legacy. This layer is toward the bottom of the Environment and Science page. Click on the file “Open in Google Earth”.

6. A dialog box will appear. Make sure that it is opening the file in Google Earth. If you already have Google Earth Pro open, it will open the file in that program, rather than Google Earth. Click OK.

7. The file will appear under the “Places” panel on the left-hand side of the program.
Adding a Network Link

Many industries save their data in formats that are readable by Google Earth Pro (e.g. KMZ and KML). You can add a network link to view this data. When the data is updated to their server, you can view it too.

To Do This:
1. Click on “Add” and then choose “Network Link”.
2. Type in the name of the link. This can be any name you choose, really. For this example we will use “USGS Streamgage Watch.”
3. Type in the link address. For this example we will use: http://water.usgs.gov/waterwatch/kmls/real.kmz
4. Set refresh to “Never”. If you do this, you can update the information by right-clicking on the folder and then choosing “Refresh”.

http://water.usgs.gov/waterwatch/kmls/real.kmz