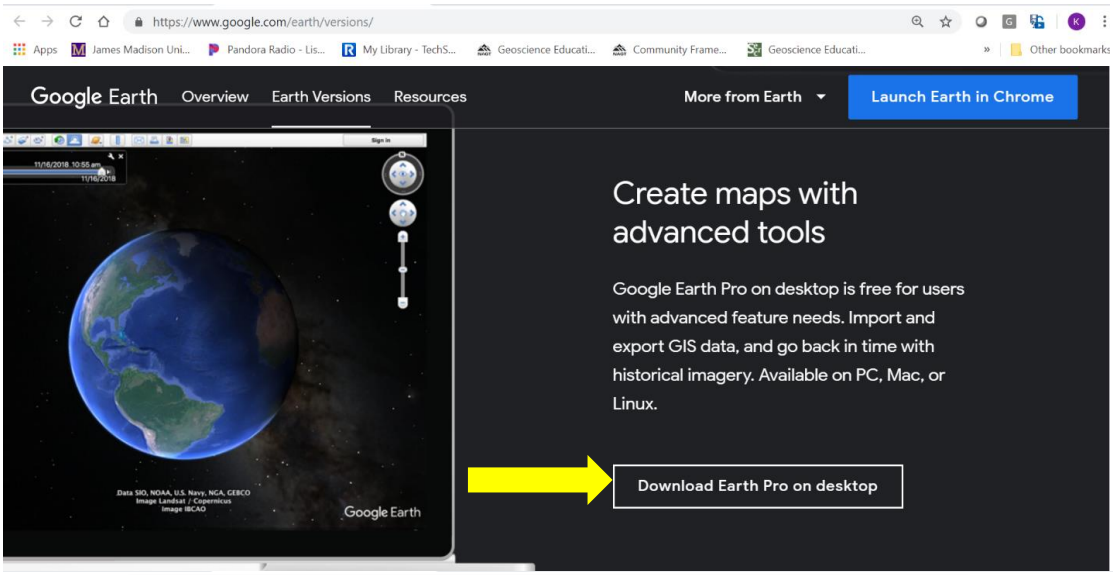
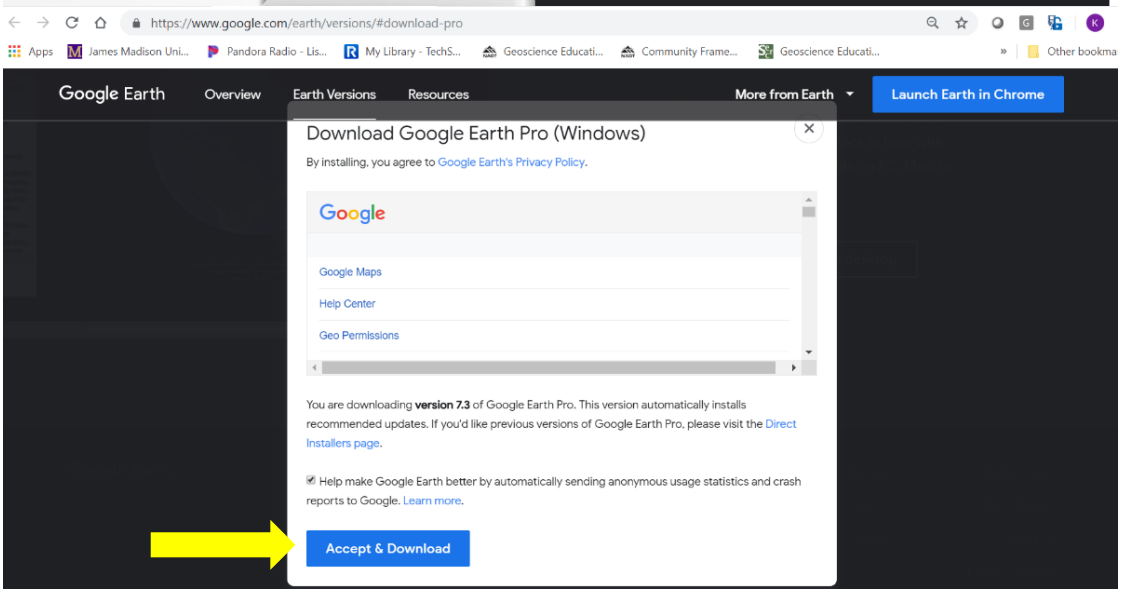
A Short Primer on Google Earth Pro

Updated July 1, 2019 by Kristen St. John.
Modified from a lab developed by Denise Bristol, Hillsborough Community College.

The **purpose** of this activity is to get you comfortable with the technology and tools in Google Earth so that you can later complete an online GEODE exercise Exploring Marine Sediments in Google Earth.

A. Downloading Google Earth Pro:
Download Google Earth Pro to your computer if you do not already have it.
Go to: https://www.google.com/earth/versions/ to agree to their terms of service and download the program. Save the program to your computer. Once the file is saved, open the file. You may get a screen where you need to select **Run**, or confirm installation. This will complete the installation process and open Google Earth.





Go to: https://support.google.com/earth/answer/21955?hl=en for help downloading the program. Note that for the current time we are using Google Earth Pro, not New Google Earth. This is because New Google Earth is limited in the platform and features. New Google Earth is web-based and can only be used in Google Chrome; it also does not yet support all of the features needed for many GEODE exercises.

B. Google Earth Tutorial Pages:

Familiarize yourself with basic **Navigation** and **Drawing and Measuring** in Google Earth Pro.

Navigation Includes tools for:	**Drawing and Measuring includes tools for:**
Changing your point of view	Drawing Paths and Polygons
Using the navigation controls	Measuring Distances and Area
	Viewing Elevation Profiles

Basic **navigation** instructions can be found at:
https://support.google.com/earth/answer/148186?hl=en&ref_topic=4363013.
Screenshots of basic navigation are shown below:

Explore the Earth on your computer

Check out mountains, hills, landmarks, and underwater scenery with the 3D viewer. You can zoom in and out, and tilt or rotate the view to look around.

Change your point of view

Use a mouse to change your perspective and explore different terrains.

- **To look in any direction**: Left-click and hold. Then, drag the cursor until you see the view you want.
- **To return to the default view**: Click the map and press r.

Zoom in & out

Tilt to view hills & mountains

Explore the ocean

Point the view North

Get started with Google Earth Pro

Search for places

Explore the Earth on your computer

Use keyboard shortcuts to navigate in Google Earth

Fly around the world

Use the navigation controls

The navigation controls are in the upper right corner of the map and fade when you aren't using them.

- **To show navigation controls**, mouse over the right corner of the map.
- **If you don't see the navigation controls**, in the top menu, click **View** > **Show Navigation** > **Automatically**.

Show or hide the compass: In the top menu, click **View** > **Show Navigation**.

Move around the globe

1. Open Google Earth.
2. Point to a directional arrow on the compass.
3. Left-click and hold. Then, release the button when you've reached the part of the world you want to see.

Set a default start location

You can change where you start each time you launch Google Earth.

1. Open Google Earth.
2. Go to the location you want to set as your start location.
3. Rotate, tilt, and zoom in until you have the view you want.
4. In the top menu, click **View** > **Make this my start location**.

Basic **drawing and measuring** instructions can be found at:
https://support.google.com/earth/answer/148134?hl%3Den
Screenshots of basic drawing and measuring instructions are shown:

Measure distance & elevation

Use lines and shapes to check distances and estimate sizes of different features on Earth.

What you can measure in Google Earth Pro:

- **Polygon:** The distance or area of a shape on the ground.
- **Circle:** The circumference of a circle on the ground.
- **3D path:** The distance between a building and places on the ground.
- **3D polygon:** The height, width, and area of 3D buildings.

Take and save a measurement

1. Open Google Earth Pro.
2. Go to a spot on the globe .
3. In the menu bar, click **Tools** > **Ruler**. A new "Ruler" window with options appears.
4. In the bottom left, select **Mouse Navigation**.
5. Click the tab for what you want to measure.
6. On the map, hover over a spot and click a starting point for your measurement.
7. Then, hover over another spot and click an end point.
8. The measurement will show up in the "Ruler" window. To save your measurement, click **Save**.
9. In the "Name" field, type a name for your measurement.
10. In the bottom right, click **OK**. Google Earth Pro will add your measurement under "Places" in the left-hand panel.

Add more details when you save a measurement

In the "New Path" or "Edit Path" window, change fields like altitude, color, or style.

Open saved measurements

1. Open Google Earth Pro.
2. On the left, under "Places," you will see a list of saved measurements. Check the measurement you want to open.
3. Double click the name of the measurement. Earth will show your measurement on the map.
4. To see measurement details, hover over the shape and right-click.Then, click **Properties** (Windows) or **Get Info** (Mac). The "Edit Path" window will open.

View a path's elevation profile

Explore the slope, elevation, and distance along a path.

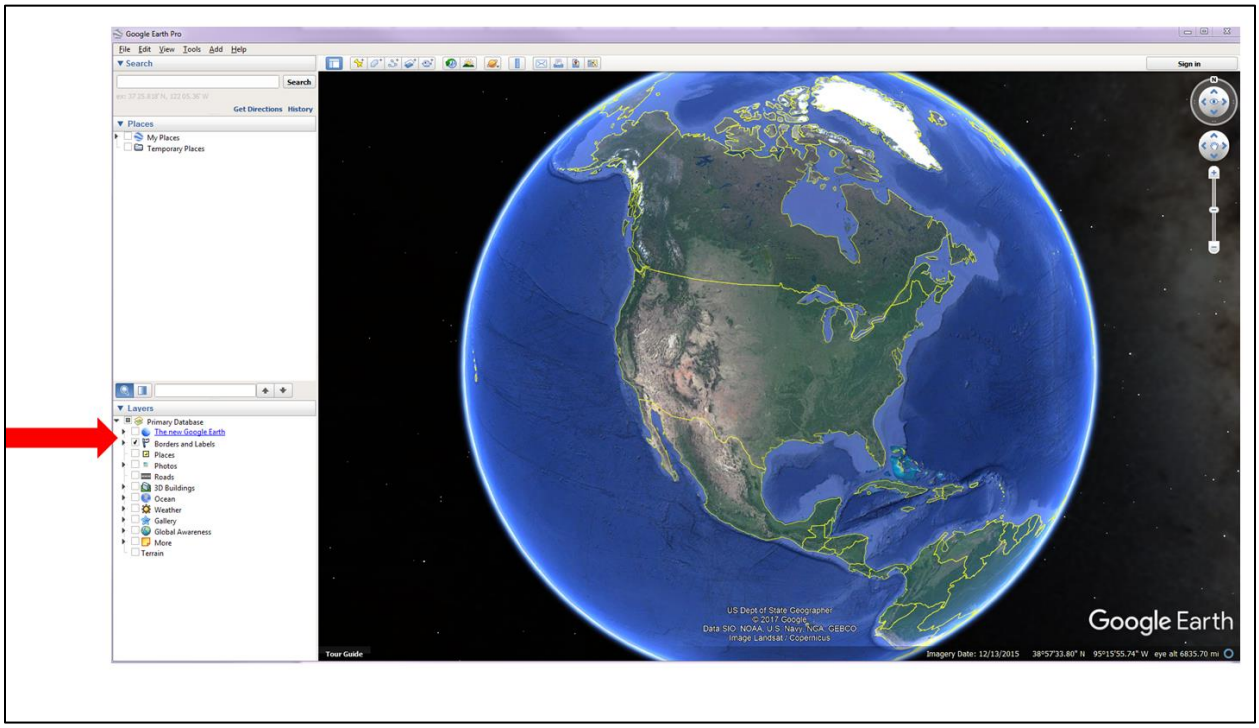
1. Open Google Earth Pro.
2. Draw a path or open an existing path.
3. Click **Edit** > **Show Elevation Profile**.
4. An elevation profile will appear in the the lower half of the 3D Viewer. If your elevation measurement reads "0," make sure the terrain layer is turned on.
   - The Y-axis of the chart displays the elevation, and the X-axis of the chart displays the distance.
   - To see the elevation and distance at different points along a path, mouse over the path.
   - To see data for a portion of the path, left-click and hold. Then, move the cursor along the path you want to see.
   - To change measurement systems on a Windows computer, select **Tools** > **Options**. Then, under "Units of measurement," choose feet or meters.
   - To change measurement systems on a Mac, select **Google Earth** > **Preferences**. Then, under "Units of measurement," choose feet or meters.

C. Hide the Tour Guide:

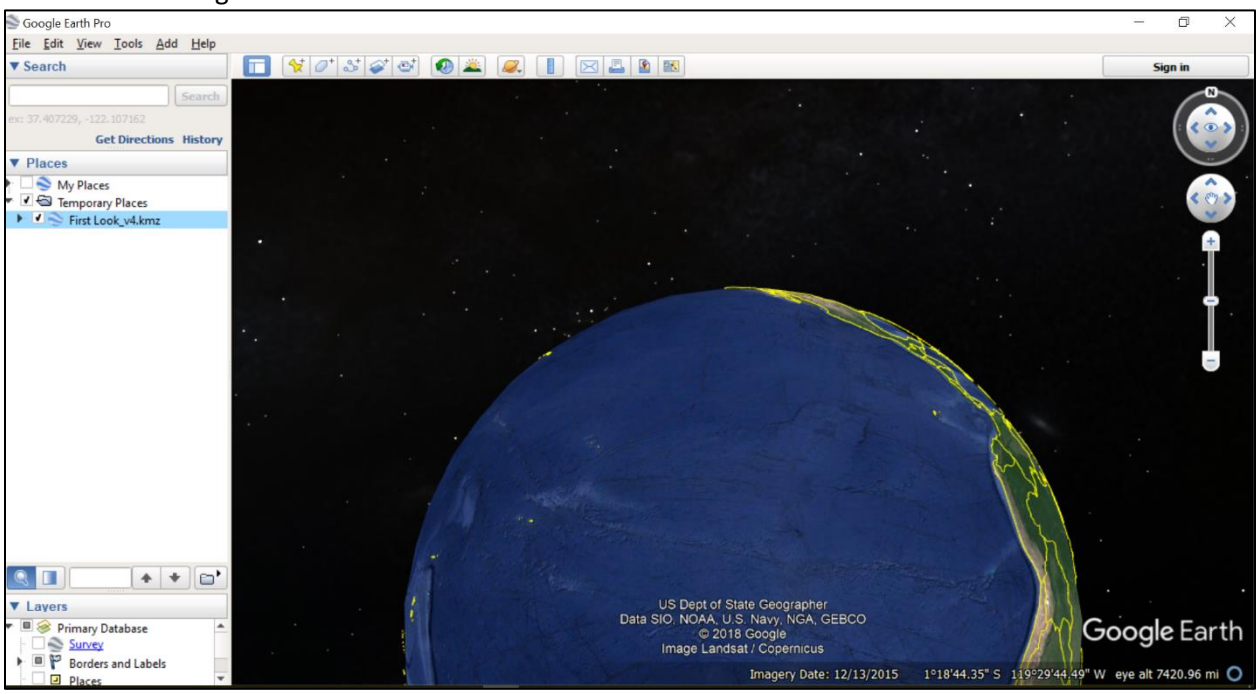
1. Open Google Earth Pro
2. If the Tour Guide pictures at the bottom of the screen show up you can hide them. Click on the black frame immediately above the pictures of tour locations to hide the Tour Guide. (Do not click on the pictures of the tour locations or it will take you to those locations.)

D. Google Earth Layers:

1. Open Google Earth Pro
2. Turn on your borders and labels layers by selecting “Borders and Labels” under the Layers menu on the left side of your screen.
3. Turn off all other layers by deselecting all other boxes.



E. Downloading files for Layers in Google Earth Pro

Once you have downloaded Google Earth Pro, you can download .kmz files and open them in Google Earth.

1. **For example** you can go to https://serc.carleton.edu/geode/activities/217455.html and download First Look v4 kmz. Save this on your computer (e.g., in your downloads folder or in a folder you make especially for your Google Earth project work).
2. Once downloaded, select to open it in Google Earth. It will show up in the left toolbar under "Places/Temporary Places".
3. You have the option of saving your temporary places to your permanent "My Places" when you close Google Earth.