

Google Earth Exercise for Biblical Geography

For this exercise you will need internet access to download the program and other data. If you have already installed Google Earth and are familiar with its operation, scan through numbers 2-6. There are important biblical resources indicated in #7.

1. INSTALLATION

Go to the [Google Earth site](#) to download the program. Then go ahead to run the installation.

2. CONTROLS

Play around with the program for a while! Note what happens when you use the various **controls** in the upper right side of the program.

- a. Click the N at the top of the controls to quickly reorient to the north.
- b. If you have a scroll wheel on your mouse, note that rolling it allows you to zoom in/out.
- c. Hold the Ctrl key and roll the wheel to rotate.
- d. Hold the Shift key and roll to tilt.
- e. Double-clicking on a spot on the map zooms in to it.
- f. Where available and at the proper zoom, note that Google Earth provides a Street Level or Ground Level View. In the photo below, we are at the top of the Arbel on the west side. (Click [HERE](#) to get the KML file to locate yourself here in Google Earth.) You won't see it until you hover your mouse over it, but on the right side you will be able to take the little golden guy and drag him on to the map. If there is Street View available, you will see it indicated with a blue path. (You can see it on the lower right of the pic.) Once in Street View, you can click around to move ahead / back. Now at the top right of the screen, you will see a box allowing you to switch between Street View, Ground-level view, and to exit out.

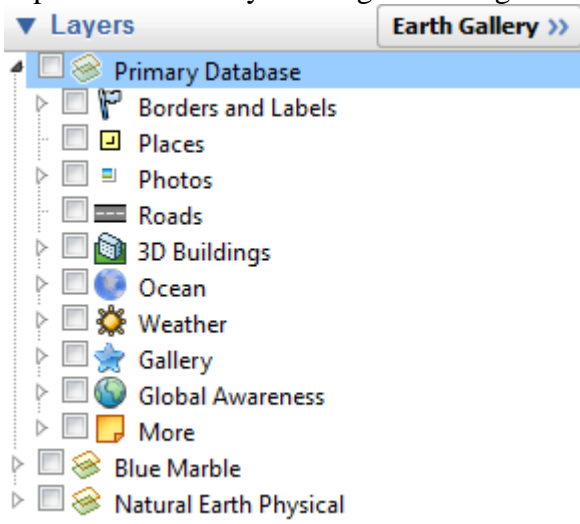


3. SEARCH

Use the **Search** window at the top left and fly to Jerusalem, Israel. Zoom in/out to take a look around. Especially play with the tilting and rotating to get a sense of the terrain.

4. LAYERS

On the left side, check out the **Layers** options. (Note that the Layers pane can be expanded/hidden by clicking that triangle next to Layers.)



Note what happens as click on/off the various check boxes. Note that most of them can be expanded by clicking on the little triangle on the left to finetune what you want to display.

- a. The view can get quite busy depending on what you turn on/off, so try things one at a time. Note that some markers only become visible as you zoom in on a location.
- b. Expand the Photos category.
 - Enabling Panoramio will let you see the millions of pictures people have taken of a location and uploaded. Click on a pic icon to see the picture.
 - Click on the 360 Cities to get 360 degree views. There are quite a few in Jerusalem.
 - For more pictures, cf. Gallery 4.d.i. below
- c. Check on the 3D Buildings option. You'll see that there are fine models of the Temple Mount Structures, the Church of the Holy Sepulchre, and the Tower of David. Remember that you can zoom in/out, circle around, and tilt your view to see more of the building's features. Note that for some buildings (e.g., the Dome of the Rock), you can actually go inside by continuing to zoom in on the building.



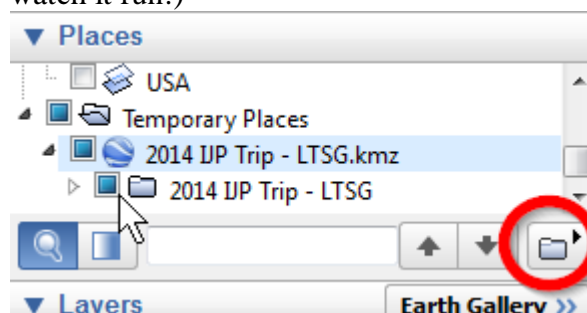
- d. Expand the **Gallery** layer. There is tons of information linked through here. Some things to check out:
 - Pictures: 360Cities is different than the previous 360 Cities. There are many of them around Jerusalem. Gigapan Photos (mostly Europe and USA, but there are views from all around the world) and Gigapixel Photos (USA only) are ultrahigh resolution photos.
 - National Geographic Magazine provides links to features it has done related to a specific location.
- e. Check out the **Global Awareness** layer. Not much here related to the biblical lands, but there are some interesting links.
- f. Expand the **More** layer. In particular, if you turn on the Wikipedia box, you will see hundreds of links to articles connected with a specific location.
- g. Still want more? Click on **Earth Gallery** at the top of the Layers bar. The popout will provide links to many more maps, features, data overlays, etc.


5. ADDITIONAL FEATURES

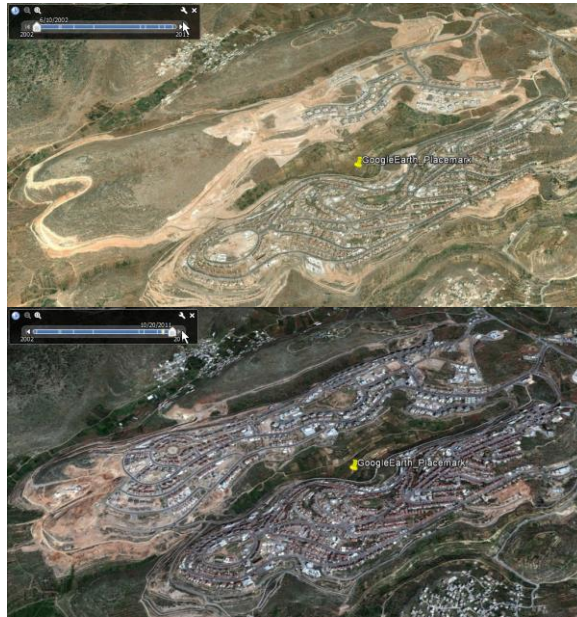
Next, play around with some of the features in the **top icon bar**:



- a. The first group of 5 buttons can be used to add your own markings to the view, add overlays of other maps, and record tours.
- b. Have a location/view you want to save? To add it to your Places folder, you need to create a Placemark.
 - Click on the first icon (thumbtack) and then move the thumbtack to exactly where you want it.
 - In the New Placemark box, you can give it whatever name you want.
 - Click on the little icon to the right of the name box and select whatever icon you want to use.
 - In the Description box, you can add whatever information you want along with links and images.
 - When you click OK, you will see that you've created the placemark in your Places.
 - To share your placemark, right-click on the placemark you've created. You will then have the option of "Save Place As" (which creates a KMZ file which you can save and then share), post it to the Google Earth community, or Email it.
- c. You can create polygons and paths (2nd and 3rd icons) by clicking on the appropriate icons. Once you click on the icon, you can start 'drawing' on the map and use the dialogue box to provide details, etc.
- d. To add a Map Overlay (4th icon), you will need a graphic image of a map to stretch over Google Earth. Cf. "6. Map Overlays" below to see how they work.
- e. By clicking on the "Record a Tour" icon (the little camera), you can conduct a virtual tour and then save and share it with others.
 - As an example of the kind of 'tour' you can create, [HERE](#) is a file with all the stops labeled and linked for the January 2014 trip. It will be easier to view if you turn off all the Layers options, and it will help if you have a fast internet connection. (Opening the file will add a folder to your Temporary Places in Google Earth. Click on the "Play Tour" button I've marked with the red circle then watch it run!)



- If you prefer, [HERE](#) is a narrated tour of the trip that plays out the daily itinerary. 13 minutes long; 21MB download.
- f. Check out the **Historical Imagery** option.  This will open a time scale at the top right of the window. Move the slider back and forth to see what a location looked like at various times where imagery is available. (Unfortunately, we have no satellite views from ancient times...)
- As an example of how such imagery might be useful, [open this file](#) which will bring you to a view of [Beitar Illit](#), an Israeli settlement in the West Bank. (I.e., this is one of the Jewish settlements which is illegal under international law since it is in the West Bank, though Israel asserts its rights to build here.) Turn off all the options in the Layers to see the site better. Now drag the slider back to 2002 then click on the right side of the scale to move forward in time.

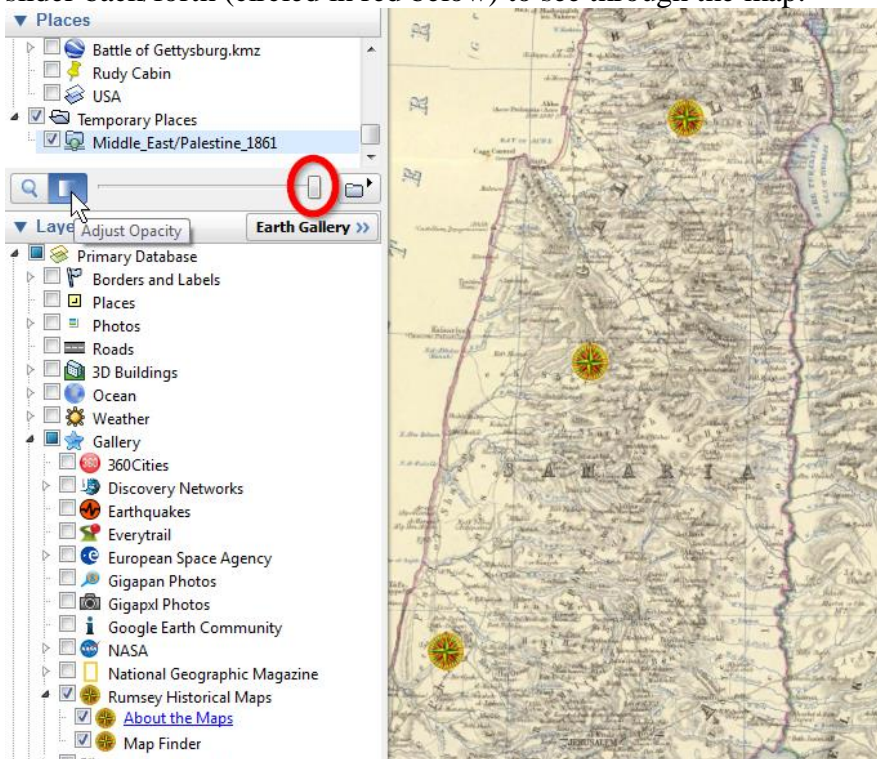


- g. Click on the little **sunrise icon** to see a real-time depiction of where the earth is light and dark.
- h. Google Earth not enough? Click on the little **Saturn-looking icon** to view the Sky, Mars, or the Moon!
- i. Click on the **Ruler icon** to measure distances. You can either do a single straight line or create a path.
- j. Want to share a location or spot you've found with someone? Note that the last 4 icons allow you to email a location, print a view or save it as an image, or view it in Google Earth. You can also use the Share button on the upper right. Also cf. 5b above for sharing a placemark.

6. MAP OVERLAYS

To get an idea of how map overlays work:

- Expand your Layers pane, expand the Gallery option, and then check the “Rumsey Historical Maps.”
- Now zoom out a bit so you see most of the land of Israel, and you should also see three markers related to the Rumsey maps. Click on the middle one showing Palestine 1861.
- Click on the map thumbnail, and it will add a “Middle East/Palestine 1861” map to your Temporary Places and display it on the map. Click on it.
- Look just above the Layers bar and just below where this map is listed. Enable the opacity slider if it isn’t already visible, and then move the slider back/forth (circled in red below) to see through the map.



You can create your own such map overlays by using a digital copy of a map and then, from the menu bar at top, using Add > Image Overlay. More info [HERE](#).

7. RESOURCES FOR BIBLICAL GEOGRAPHY

Now that you have a general idea of how Google Earth works, how can we maximize its use for doing biblical geography? Here are files and links you will want to use that can be saved in the **My Places** panel on the left.

(Note: Google Earth uses KMZ and KML to store location data. Clicking on the KMZ or KML links below. You can open them in Google Earth, and they will appear in your Temporary Places at the bottom of the My Places panel. If you decide you want to save that collection, right click on it and “Save to My Places.” When you exit Google Earth, it will ask if you want to save the files that are in the Temporary Places.)

- [Bible Places \(ISBE\)](#) KMZ with info from ISBE and Easton Bible Dictionaries
 - Note that the ISBE is from 1939 and Easton is from 1897. Use this dated information with discernment! (This file originated with the [Bible Places group in the Google Earth Community](#), but I have corrected some errors and grouped sites alphabetically for easier navigation in Google Earth.)
- [Complete list of Bible Place](#) KMZ (from OpenBible.info; cf. below) with listing of every biblical mention and live links to the online ESV Bible
 - Note that when you click on a Bible text, it will open a browser pane in Google Earth. You can open the window in your usual internet browser by clicking in the upper right corner [Open in ...]. To get back to the Earth view, click on “Back to Google Earth” at the upper left.
 - Also available: KMZs arranged by biblical [book](#) and by [chapter](#). Turn book or chapter layers on and off to see patterns across the Bible.
- [Biblical Rivers and Bodies of Water](#) KML (OpenBible.info)
- [Jerusalem Overlays](#) (OpenBible.info) Historical map overlays for Jerusalem
- [Bible Mountains](#) addins
- [Sacred Destinations](#) addins: Over 1000 sacred spots around the world
- [Jerusalem Temple Overlays](#): Quite a few overlays and markers for spots at and around the Jerusalem Temple
- [Sites of Jesus](#) addin
- Google Earth and journeys of Paul
 - [Viewing Biblical Sites in Google Earth](#) - Some helpful tips and a collection of links to KMZ files including Journeys of Paul (from Tim Schumacher)
 - [Paul's Missionary Journeys](#) kmz file (get file [HERE](#))
 - [Paul's first journey](#) (annotated) kmz file
 - [Paul's second journey with locations in Athens](#) kmz file
- [Gerasa](#) (by Stephen Langfur) is great example of using GoogleEarth to demonstrate city geometry

mgvh 2013.09