

Locating and Downloading Satellite Imagery

Below are guidelines for navigating three satellite image web archives.

Global Land Cover Facilities (GLCF) – <http://landcover.org/>

To see the list of available satellite image data and derived raster products, click the *Data & Products* tab at the top of the page.

A *Data Guides* link on the left of the page leads to technical details about the file formats, as well as Landsat, GeoCover and SRTM technical guides.

To search for available Landsat Data for your area of interest click the Landsat link that can be found on the *Data & Products* page. The link leads to an overview of the data, as well as links to both a web interface and FTP interface for locating and downloading Landsat imagery.

Use the *Landsat in web interface* link to look for imagery based on a map search. Landsat images are referenced with a Path/Row number via the World Reference System 2 (WRS 2). Once you know the reference number for your area of interest, you can search for imagery based on the Path/Row.

On the *map search* page, you will see a world map, you can choose the type of imagery you are interested in finding on the left, and click the *Update Map* button to see the areas that are available in red.

Use the magnifying glass tool on the map to zoom in to your area of interest. Note that there are tabs above the map for searching based on *Path/Row*, *Lat/Long*, *Place Name*, *Draw* (trace a search area polygon), and *Map Layers* (select other map layers to be viewed).

Once you have identified your area of interest, use the *select* tool (arrow with plus sign) to select the tile. You will see the number of images available below the map. Click *Preview and Download* to see a preview image and additional information. You will need a compression utility to unzip the files once downloaded.

Once you have the Path/Row number of your area of interest, you can use the FTP server (<ftp://ftp.glc.f.umi.acs.umd.edu/glc.f/Landsat/>). There may be images available on the FTP server that are not displayed on the web interface.

Global Visualization Viewer (GLOVIS) – <http://glovis.usgs.gov/>

You will see a similar map interface on the GLOVIS web site. There is a *Select Sensor* drop down menu where you will find the available data sets. Click the *About Browse Images* button to read more details about the available imagery.

Choose a latitude/longitude location, or simply click on the map to view the available imagery. Once you are in the viewer, you can change the *Sensor*, *Resolution* and *Map Layers* using the menu bar above the map.

For Landsat images, you should see nine images in an interactive mosaic in the viewer. You can click on any image to bring it to the top. To scan the different dates for this image, click the *Previous Scene* and *Next Scene* buttons on the left. You can also choose to exclude images based on the amount of cloud cover with the *Max Cloud* option.

Right clicking on an image brings up additional options such as viewing metadata, a preview image. Choose *add scene to list* for ordering. Clicking Order will bring you to the appropriate USGS web site for purchasing the image. You can either have disks mailed to you, or download via FTP.

Earth Explorer – <http://earthexplorer.usgs.gov>

Choose Guest to enter the Data Set Selection menu, or register as a user for additional options such as saving search results.

In the Data Set Selection area you will find a list of the available data sources, as well as *Related Links* to additional information. Choose the data set that you would like to search. In the Spatial Coverage box you can define your area of interest on a map, using coordinates, or a place name. Click the *Continue* button to advance.

You can choose the (*Additional Search Criteria...*) link to limit the search by Path/Row, cloud cover, entity ID, day or night, or data classification for Landsat. You can also limit the search by choosing a date range in the *Acquisition Date* box. Choose a large number for records returned in order to view the complete range of available data. Click *Search* and wait for the results.

Once the results are returned, click the data set link to view the available images. Click the *Show* link to view preview images, metadata, and footprints. Not all datasets have preview images. Images can be ordered through the “Shopping Basket” feature.