How to download Landsat images?

In order to download any images of the Landsat series you should follow these steps:

- Visit ***https://glovis.usgs.gov/*** website
- Click on the Launch Glovis button.
- Create an account on this website.
- Now, you have to input certain criteria in order to find the wanted image.
- First criterion: select the type of data (Landsat, Sentinel, SRTM, etc.)
- Select the **date range** or the date in which the images have been taken.
- Select **cloud cover** in percentage from/to.
- Click on the icon Jump to (at the right upper corner) in order to input the **path/row** or **latitude/longitude** for the wanted place.
- When you finish the inputs, click on the **download icon** to download the image if you have one image, while, if you have **more than one image** you should select the image by click on the **select button** and find the other images and select them as well, after selection click on selected scene bar at the top of the window and download each one of them.
- After pressing the download icon a new dialog box will popped up **select the last** option under name of (Level-1 GeoTIFF Data Product).

Understanding the Landsat images name

LXSS_LLLL_PPPRRR_YYYYMMDD_yyyymmdd_CC_TX_B

Where:

L = Landsat

X = Sensor ("C"=OLI/TIRS combined, "O"=OLI-only, "T"=TIRS-only, "E"=ETM+, "T"="TM, "M"=MSS)

OLI = Operational Land Imager

TIRS = Thermal Infrared Sensor

SS = Satellite ("07"=Landsat 7, "08"=Landsat 8)

LLLL = Processing correction level (L1TP/L1GT/L1GS)

PPP = WRS (worldwide reference system) path

RRR = WRS (worldwide reference system) row

YYYYMMDD = Acquisition year, month, day

yyyymmdd - Processing year, month, day

CC = Collection number (01, 02, …)

TX = Collection category ("RT"=Real-Time, "T1"=Tier 1, "T2"=Tier 2)

B = number of bands (B1, B2, B3, etc.)

Example: LC08_L1GT_029030_20151209_20160131_01_RT_B1

Means: Landsat 8; OLI/TIRS combined; processing correction level L1GT; path 029; row 030; acquired December 9, 2015; processed January 31, 2016; Collection 1; Real-Time; Band 1

How to combine LandSat image bands?

- Open ArcMap software
- Open arc toolbox
- Open this path Data management tools/Raster/Raster processing/composite bands
- In input raster open and select all bands that need to combine
- In output select a path and name of the output file
- Press OK

The band composition

- Add the new combined image
- R-click on the newly added image and select properties
- Go to symbology tab
- Change the color composition of each band (Red, Green, and Blue)