

# UNSUPERVISED CLASSIFICATION

Aim: To download Data and perform Unsupervised classification for Forest, Built Up Area, Agriculture, Open Area, Water

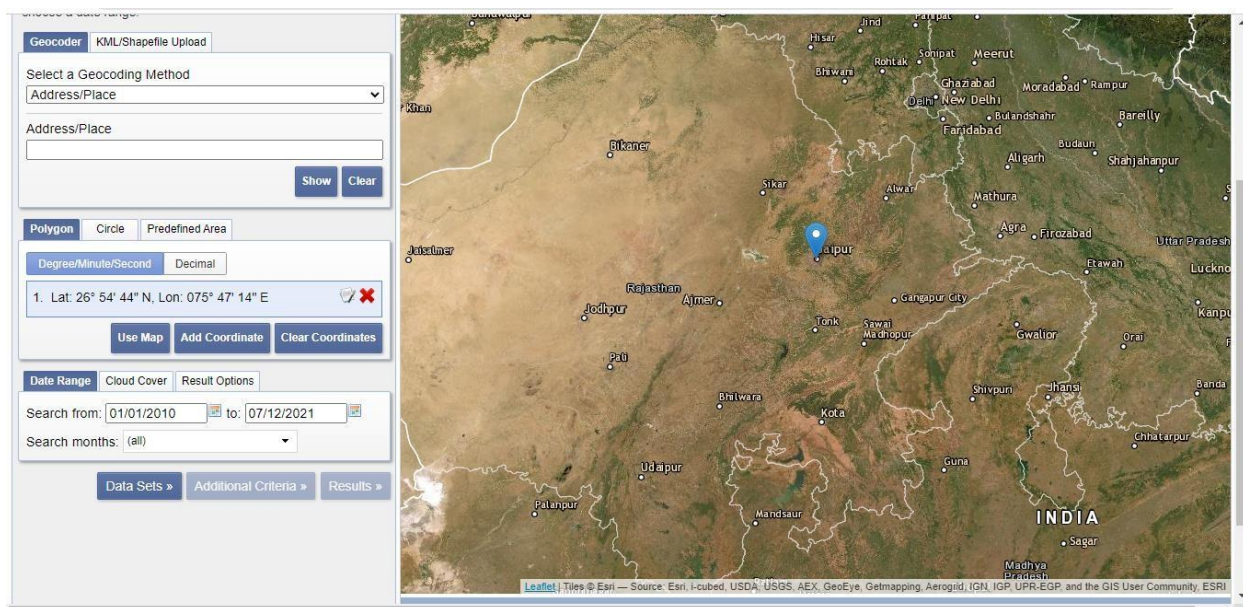
Legend scheme:

- i) "dark green " for forest
- ii)"pink" for build up area
- iii) "light green " for agriculture
- iv)"yellow" for open area
- v) "blue" for water

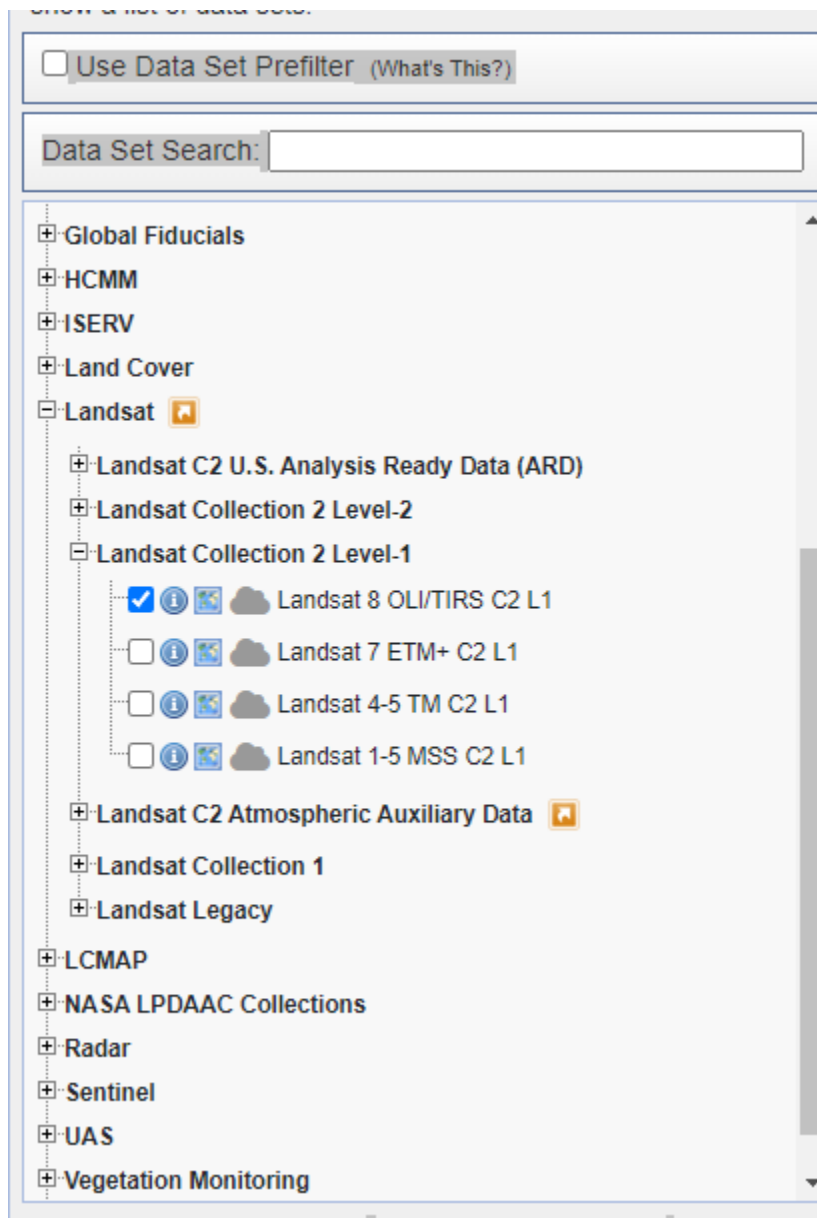
Procedure:

DOWNLOADING data

- i) search for the area in the earth explorer and select the date range and cloud coverage
- ii) go for Data Sets



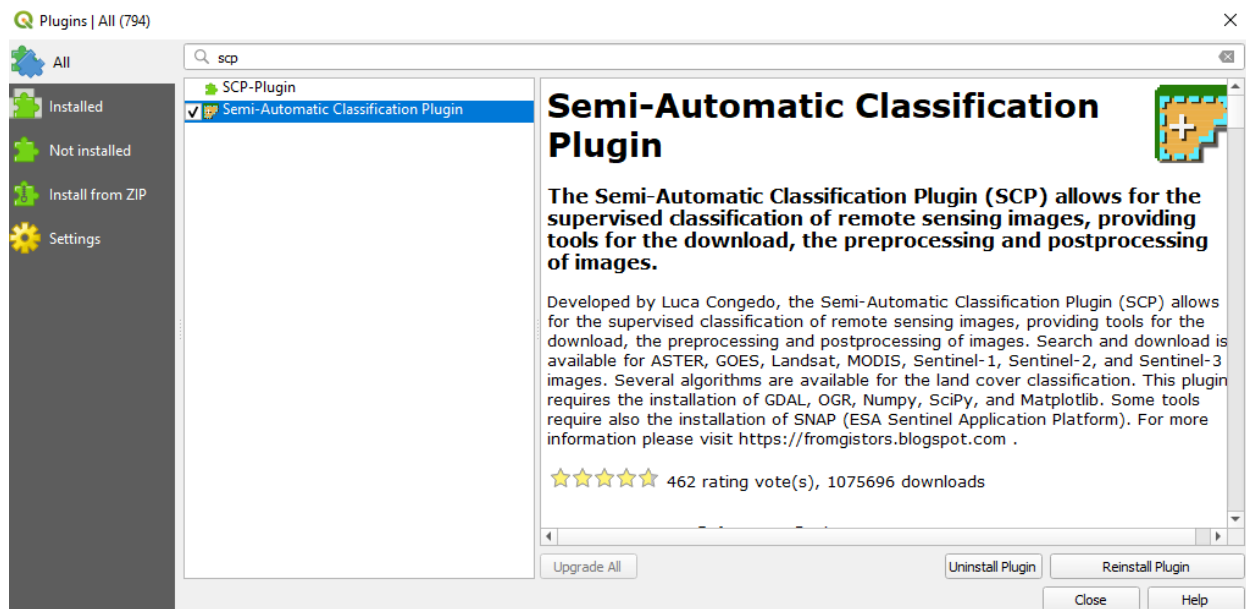
- iii) Select landsat --> landsat collection 8 leven 1 --> Landsat 8



iv) select suitable dataset and download it.

#### CREATING UNSUPERVISED CLASSIFICATION

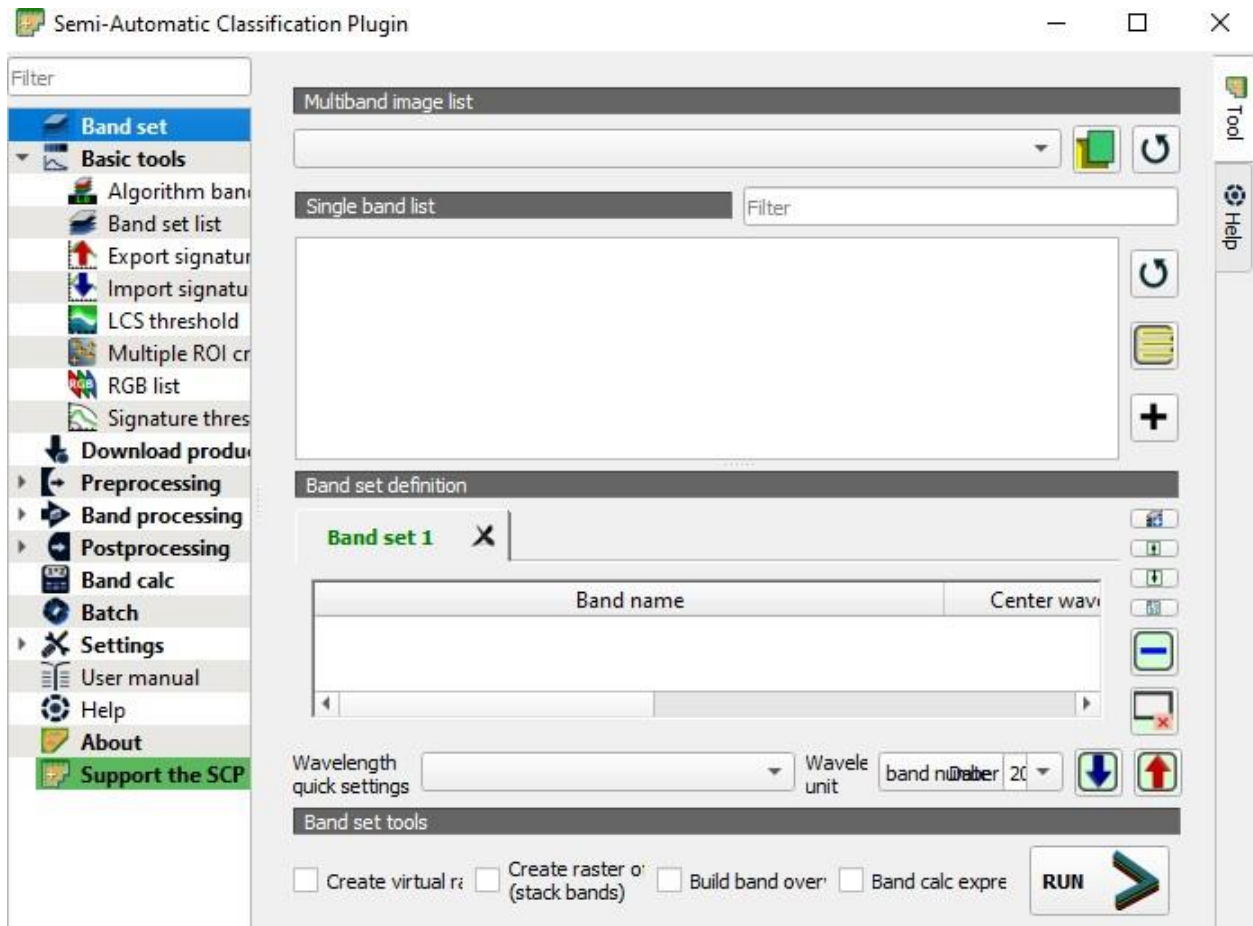
i) Install the SCP plugin



ii) unzip the downloaded file and browse the extracted files

iii) Preprocess the data and save the stack --> Cluster the above downloaded data in band processing for one unsupervised classification

iv) Now in post processing select reclassification and provide the new values of the band set and then click run.



v) Change the colour of the selected bands and label them with their name

vi) Print the layout and export it as image.

