

UNSUPERVISED CLASSIFICATION

Aim: To download Data and perform Unsupervised classification for

- a) Forest
- b)Agriculture
- c)Water
- d)Built Up Area
- e)Open Area

Symbol used: For the above mentioned areas we used colour scheme

- a) GREEN
- b) LIGHT GREEN
- c) BLUE
- d)RED
- e)GRAY respectively

Procedure:

DATA DOWNLOAD

- 1) search for the area in the earth explorer

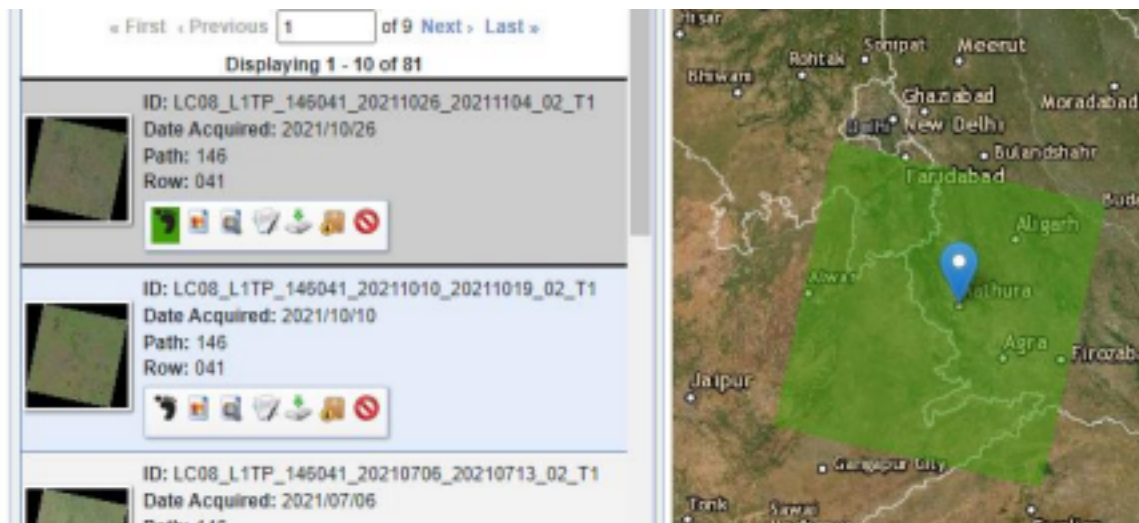
The screenshot shows a web interface with two tabs: 'Geocoder' and 'KML/Shapefile Upload'. The 'Geocoder' tab is active. It contains a dropdown menu labeled 'Select a Geocoding Method' with 'Address/Place' selected. Below this is a text input field labeled 'Address/Place' containing the word 'mathura'. To the right of the input field are two buttons: 'Show' and 'Clear'. Below the input field is a text box with the instruction: 'Click on an Address/Place to show the location on the map and add coordinates to the Area of Interest Control.' At the bottom, there is a table with the following data:

Num	Address/Place	Latitude	Longitude
1	Mathura, Uttar Pradesh, India	27.4924	77.6737

2) After finding area select the date range of the collected data and set cloud cover range and go for Data Sets

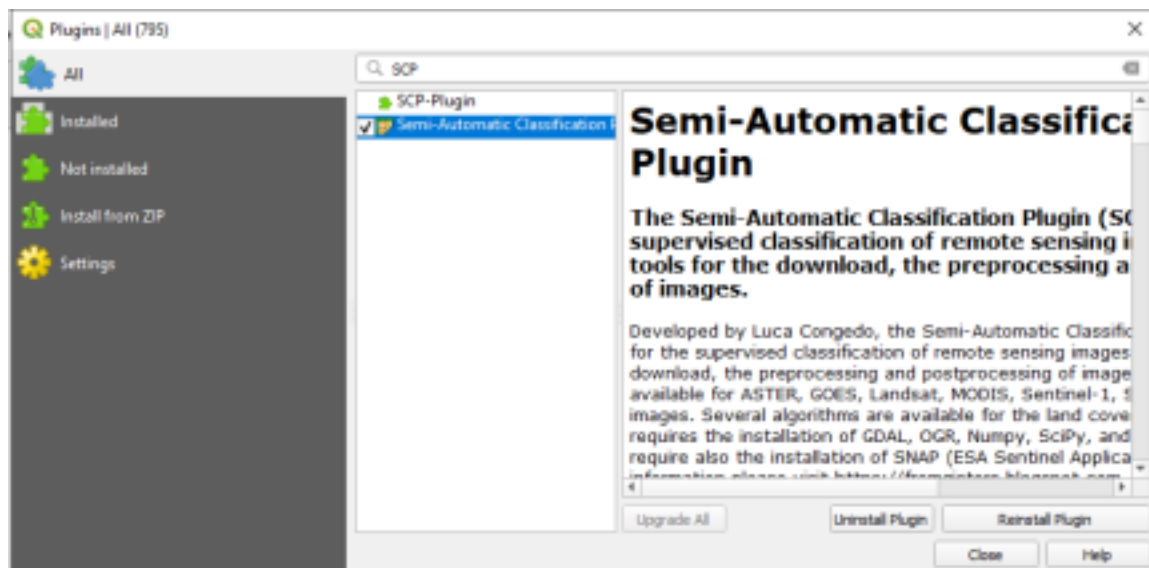
3) Select the below Data set and get results

4) Look for the suitable data set by seeing it's footprint and then download it.



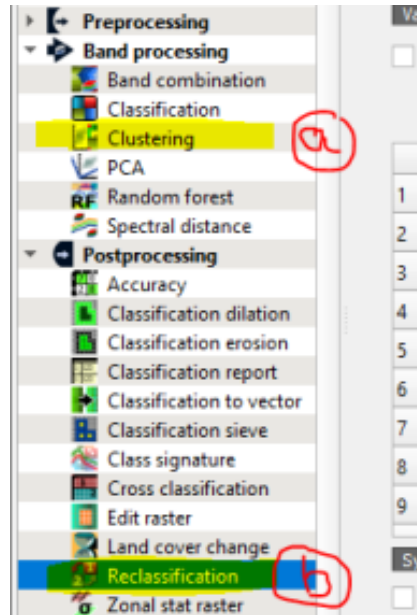
CREATING UNSUPERVISED CLASSIFICATION

1) Install the SCP plugin

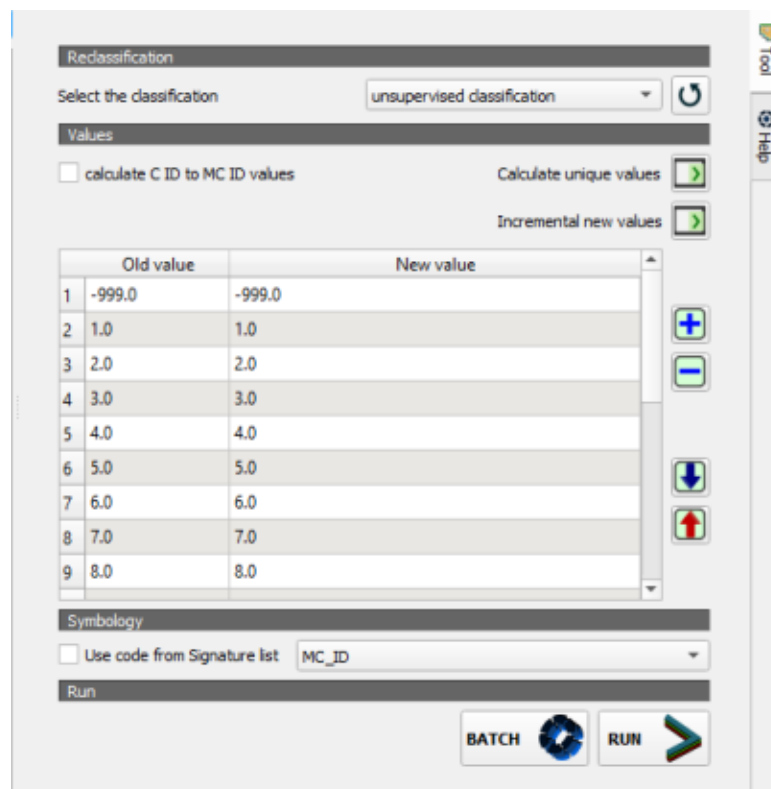


2)unzip the downloaded file and brouse the extracted files

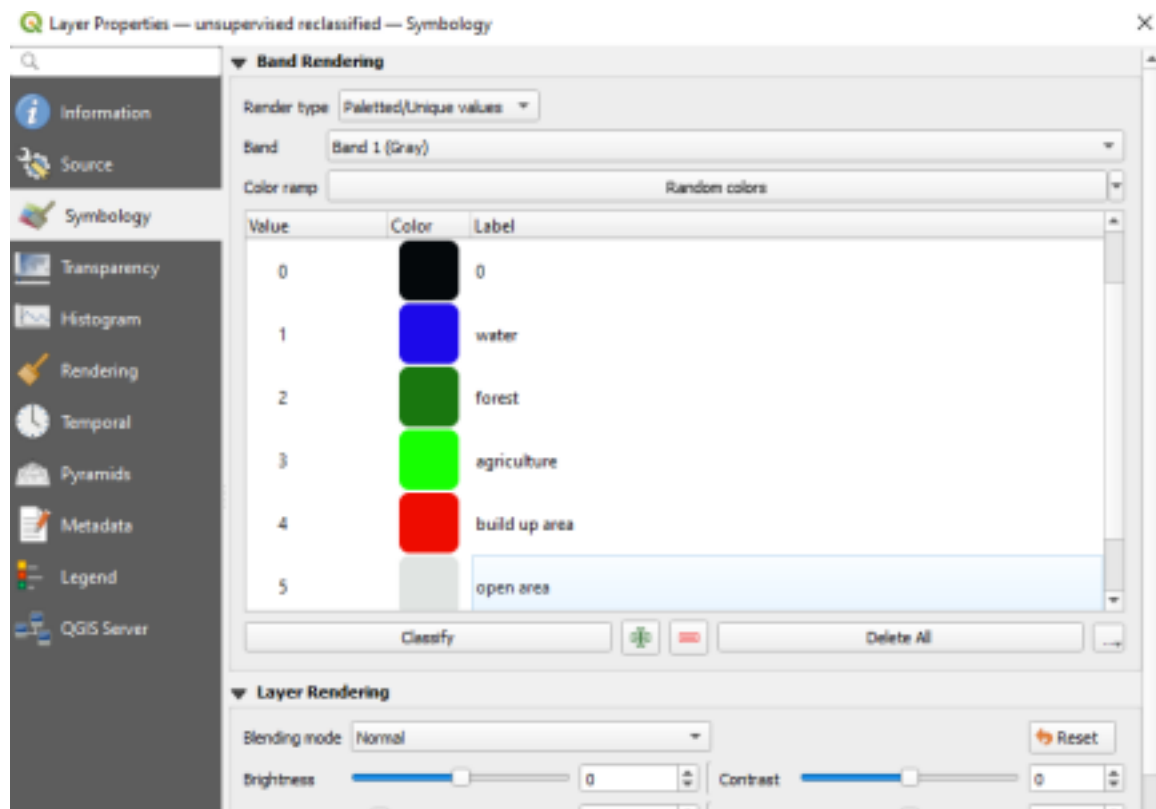
3) Cluster(a) the above downloaded data for one unsupervised classification



4)Now in post processing select reclassification(b) to create a different layer which will be having the data of the required, provide the new values of the band set and then run.



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



6) Print the layout (add north, grids, scale, legend, coordinates) and export it as image.

Conclusion: We created an unsupervised classification of an area whose exported image is attached below

