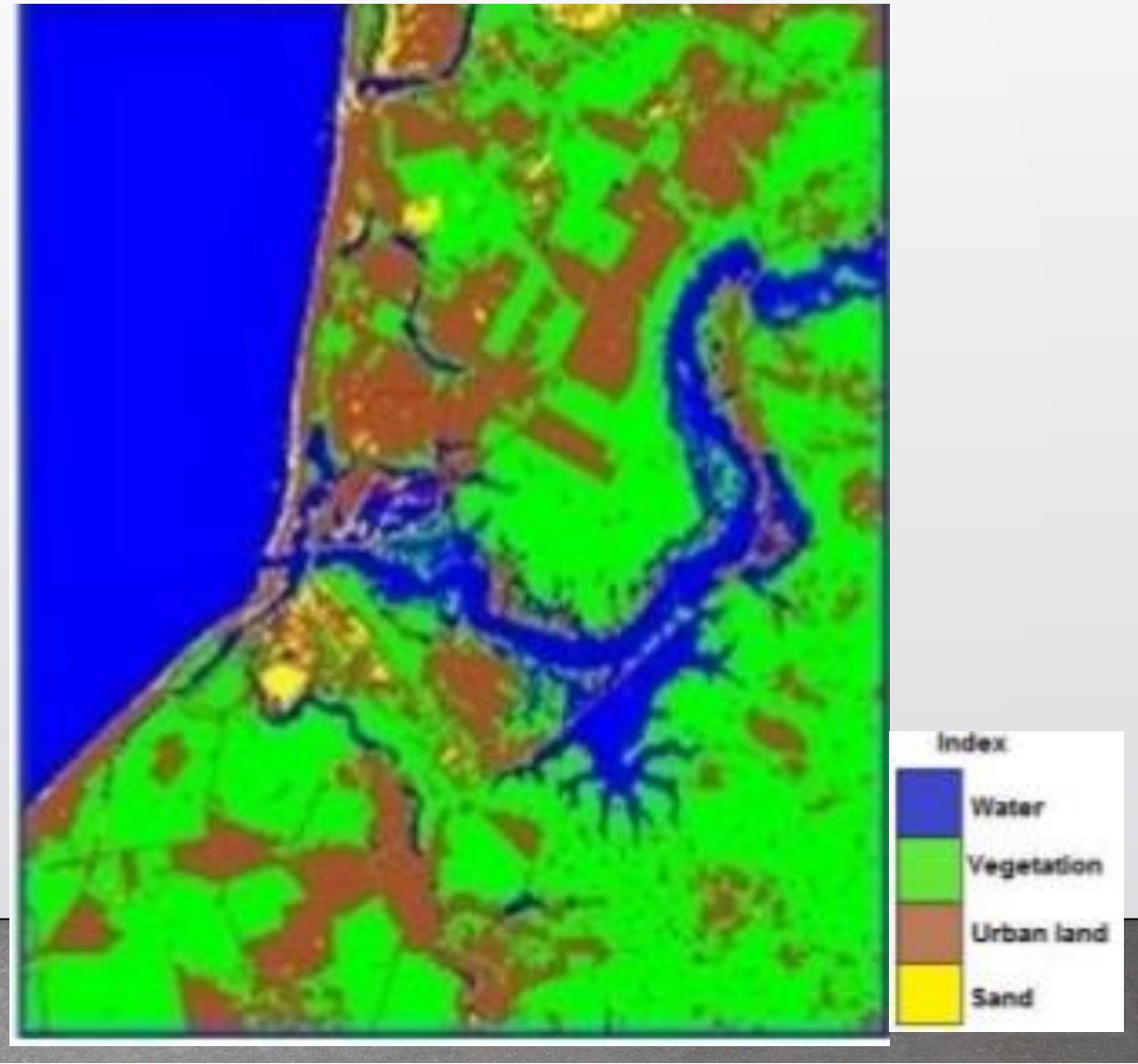
Generating Land Cover Data from Satellite Image

Process: Image Classification



Data Needed:

- Data filename: Landsat7.tif (raster file)

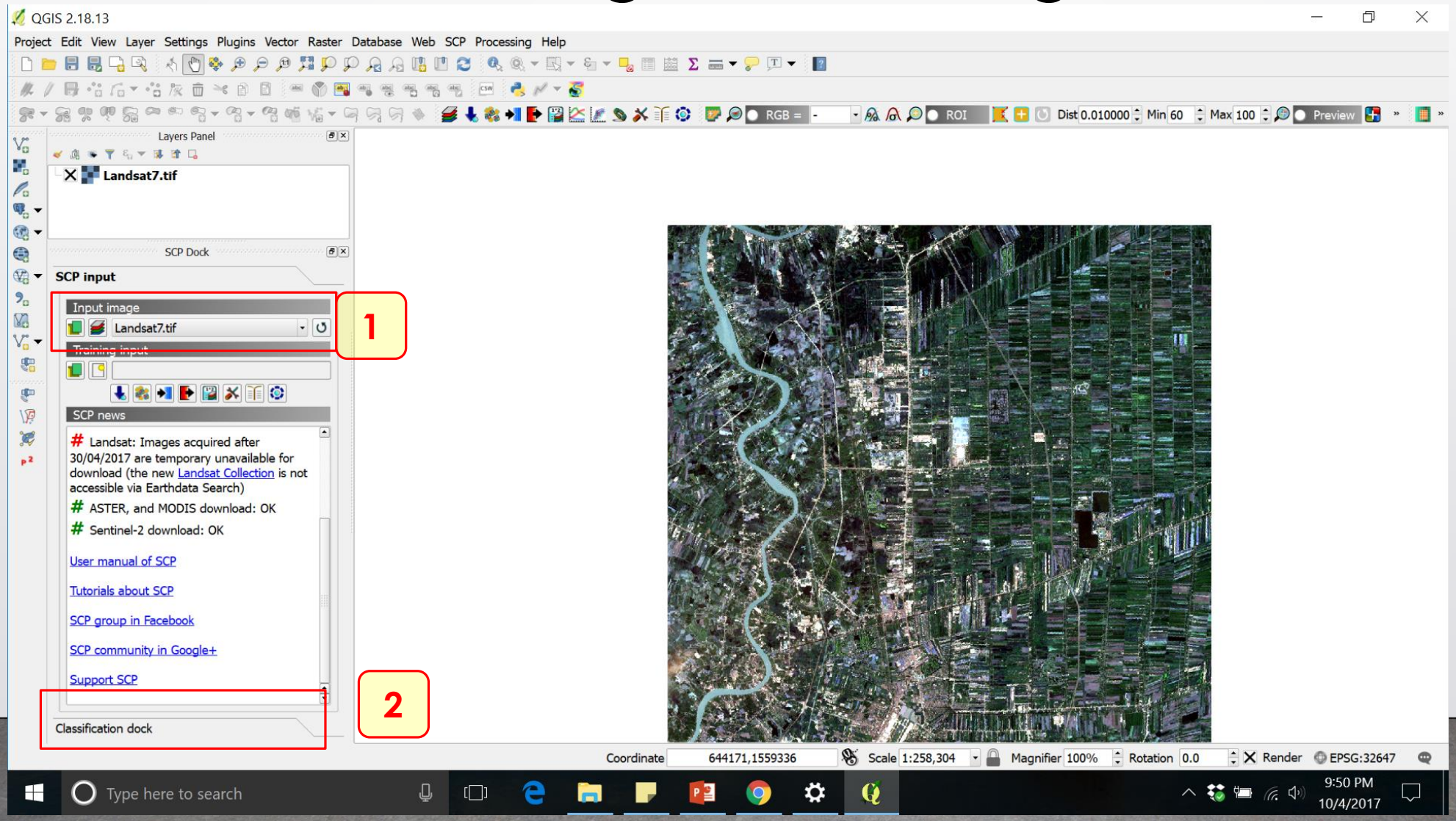
Plugin Needed:

- Semi-Automatic Classification Plugin (SCP)

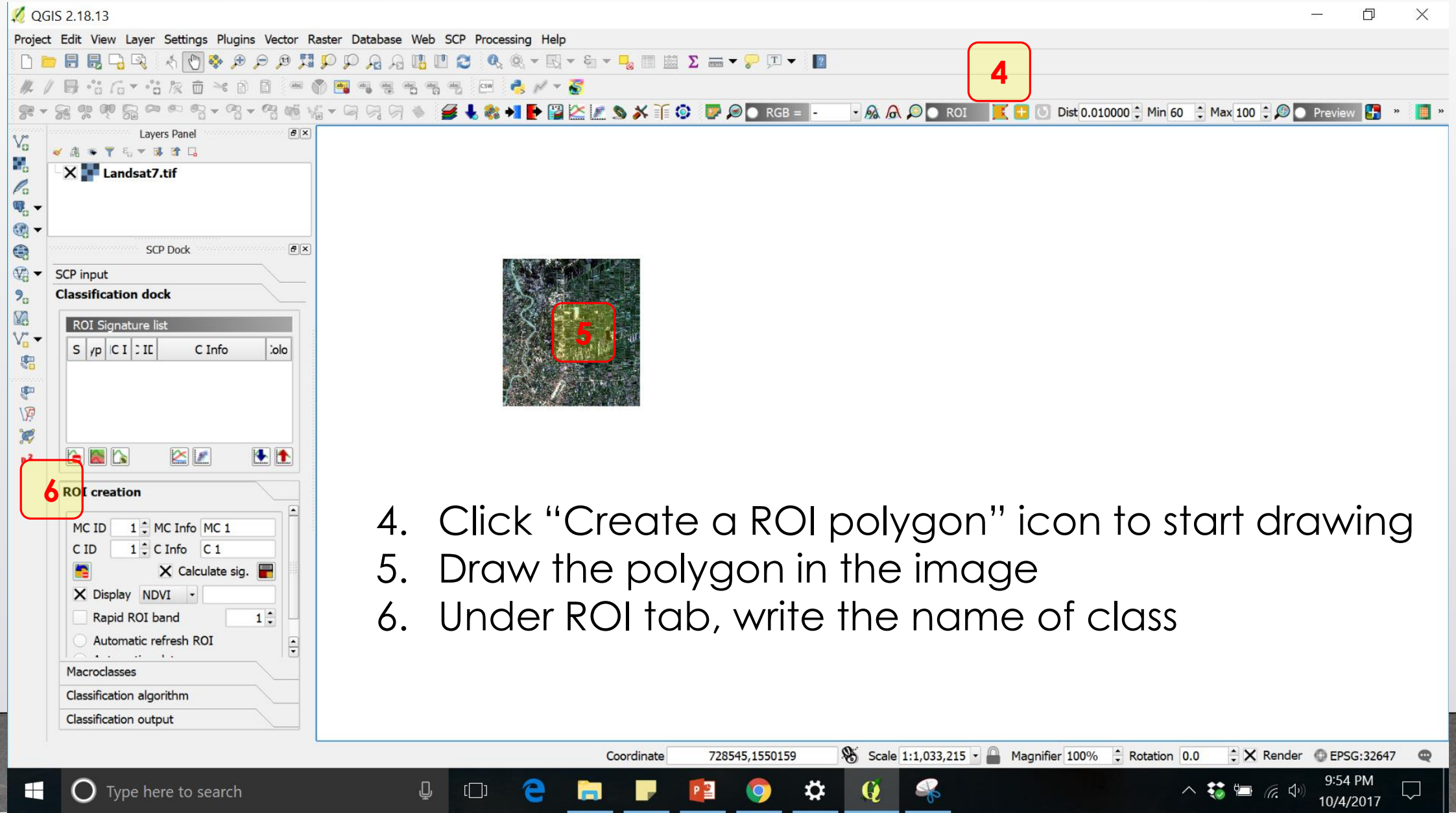
Image classification with SCP

1. Install and activate Semi-automatic classification (SCP)
2. Load the image to be classified

3. Create training area or Region of

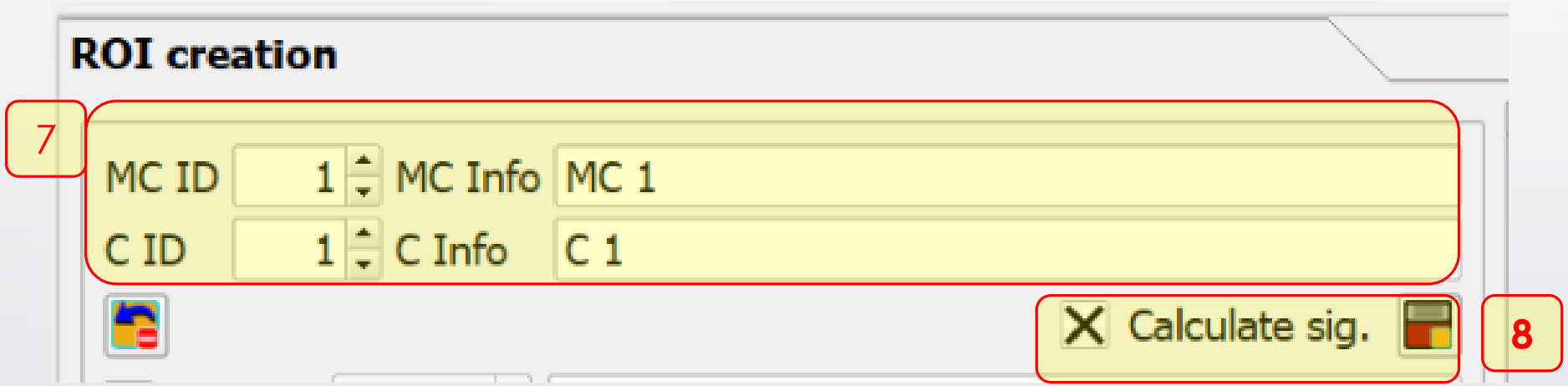


3. Create training area ROI (cont)



4. Click "Create a ROI polygon" icon to start drawing
5. Draw the polygon in the image
6. Under ROI tab, write the name of class

3. Create training area ROI (cont)



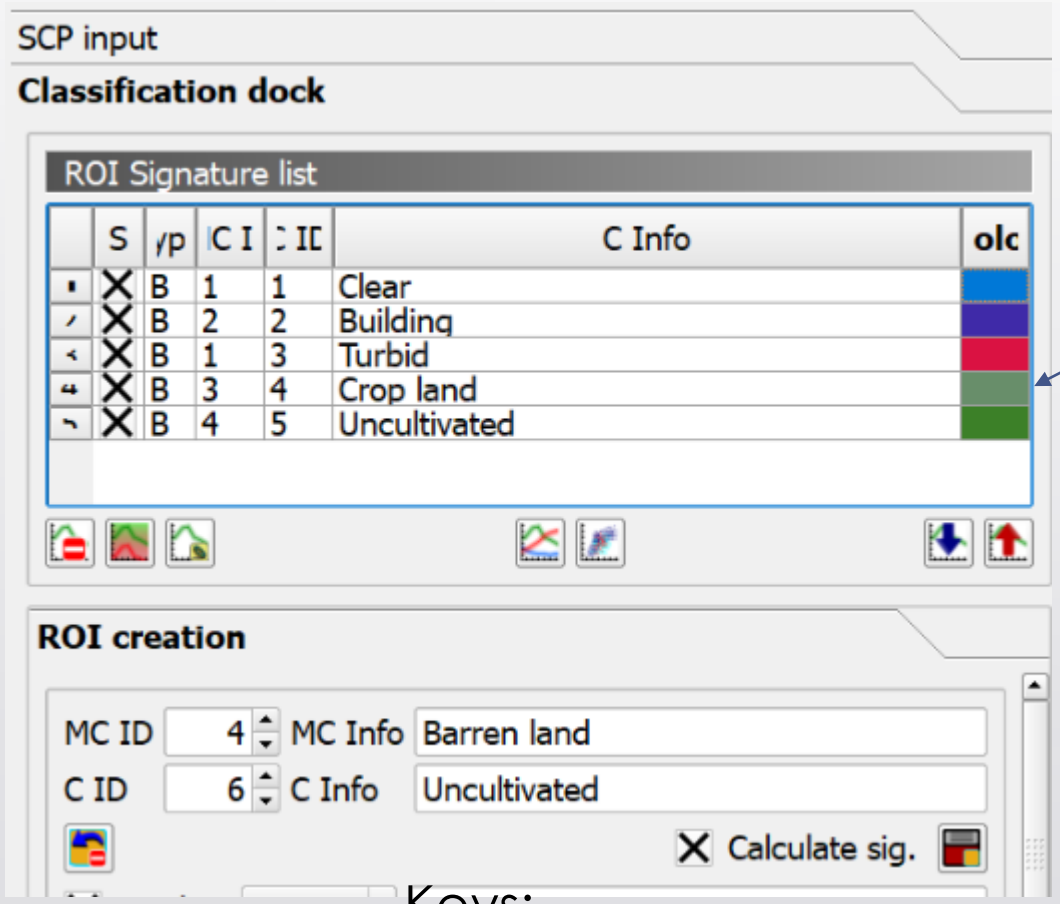
MC ID – is General Class ID
MC Info – is General Class Name

CID – is Sub-class ID
C Info – is Subclass Name

Example:
MC ID – 1
MC Info – Water

CID – 1

3. Create training area ROI (cont)



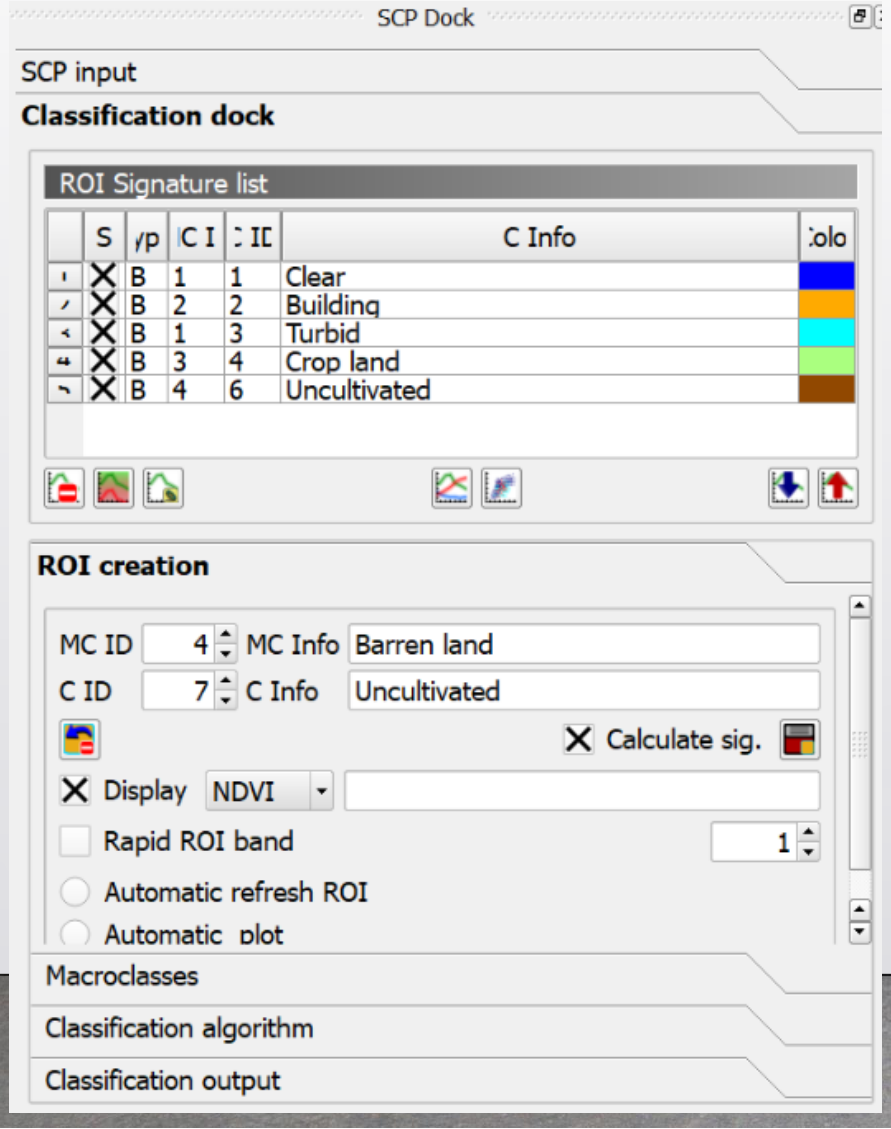
Change color symbol

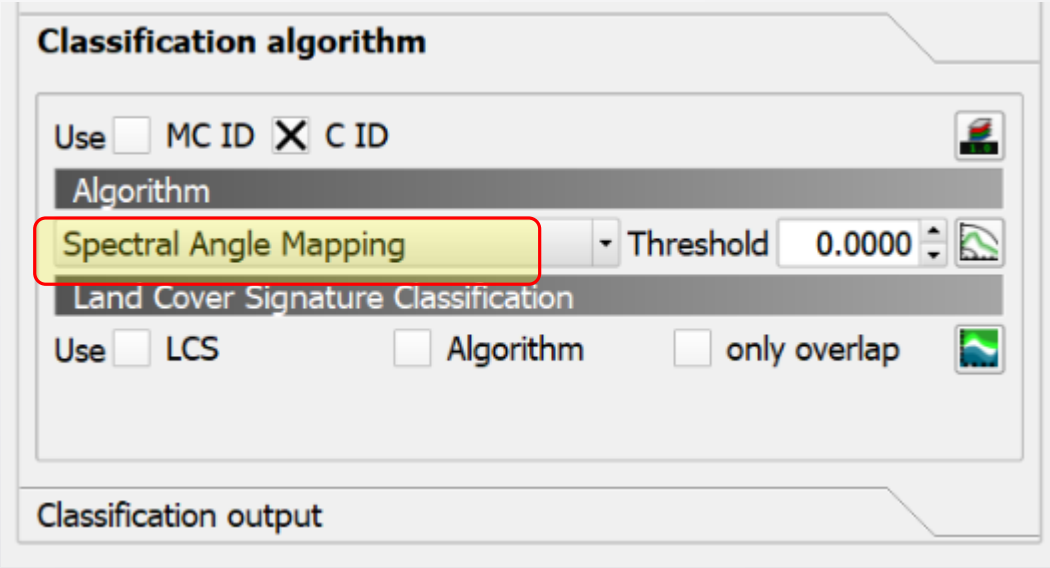
Note: After each class, click "Calculate sig

Keys:

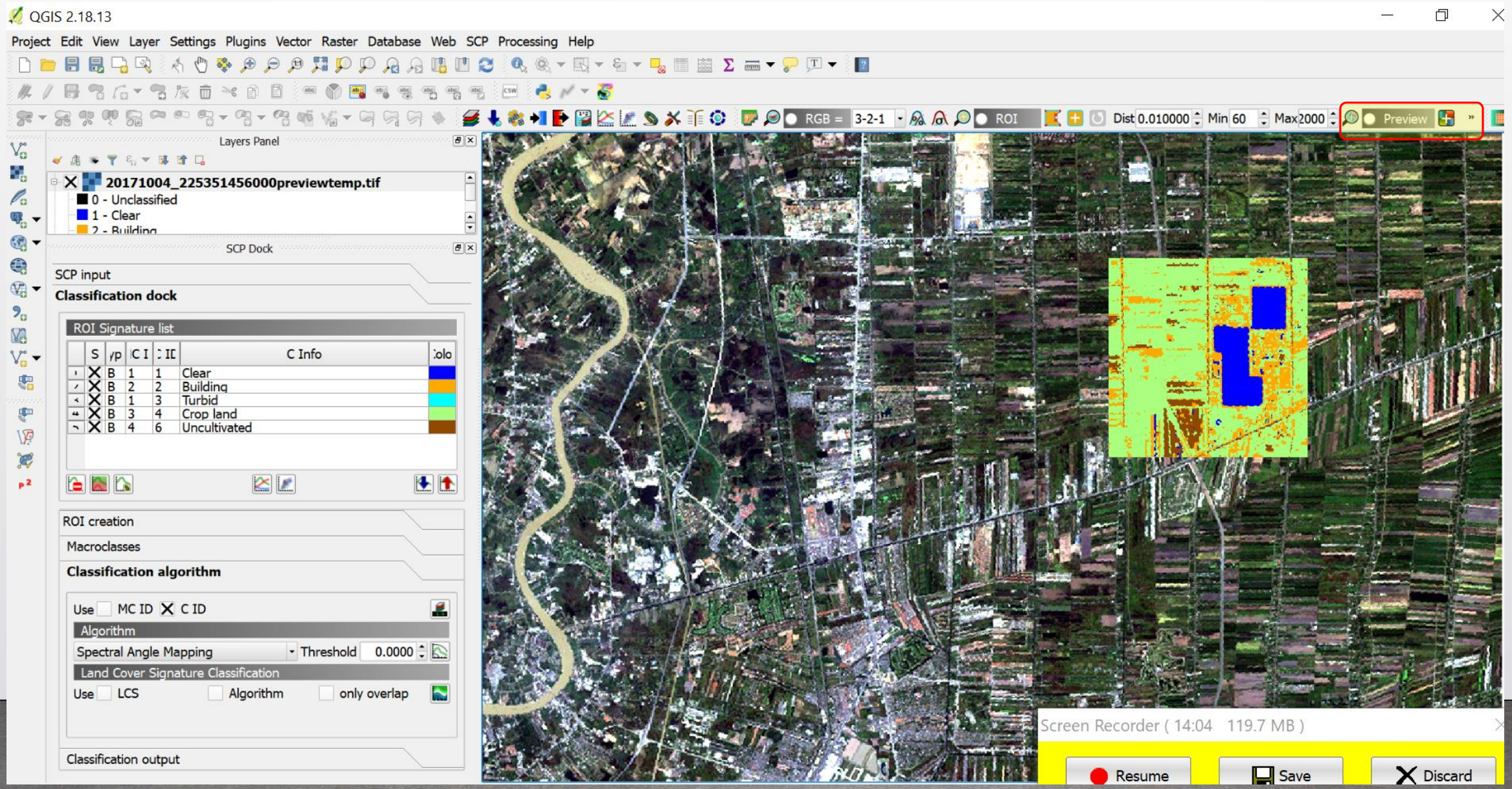
1. To end drawing: right click
2. To draw another polygon of the same class name: right click + Crtl

4. Define Classification Algorithm

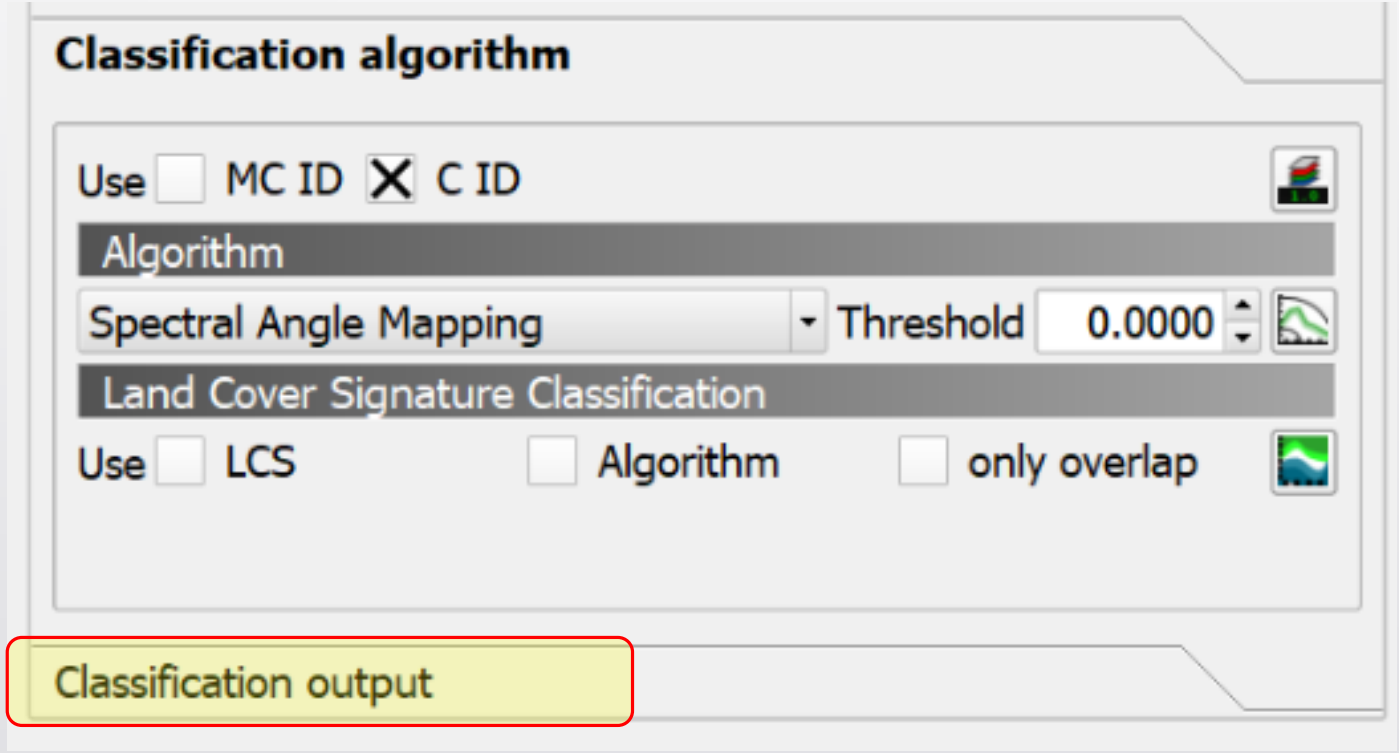




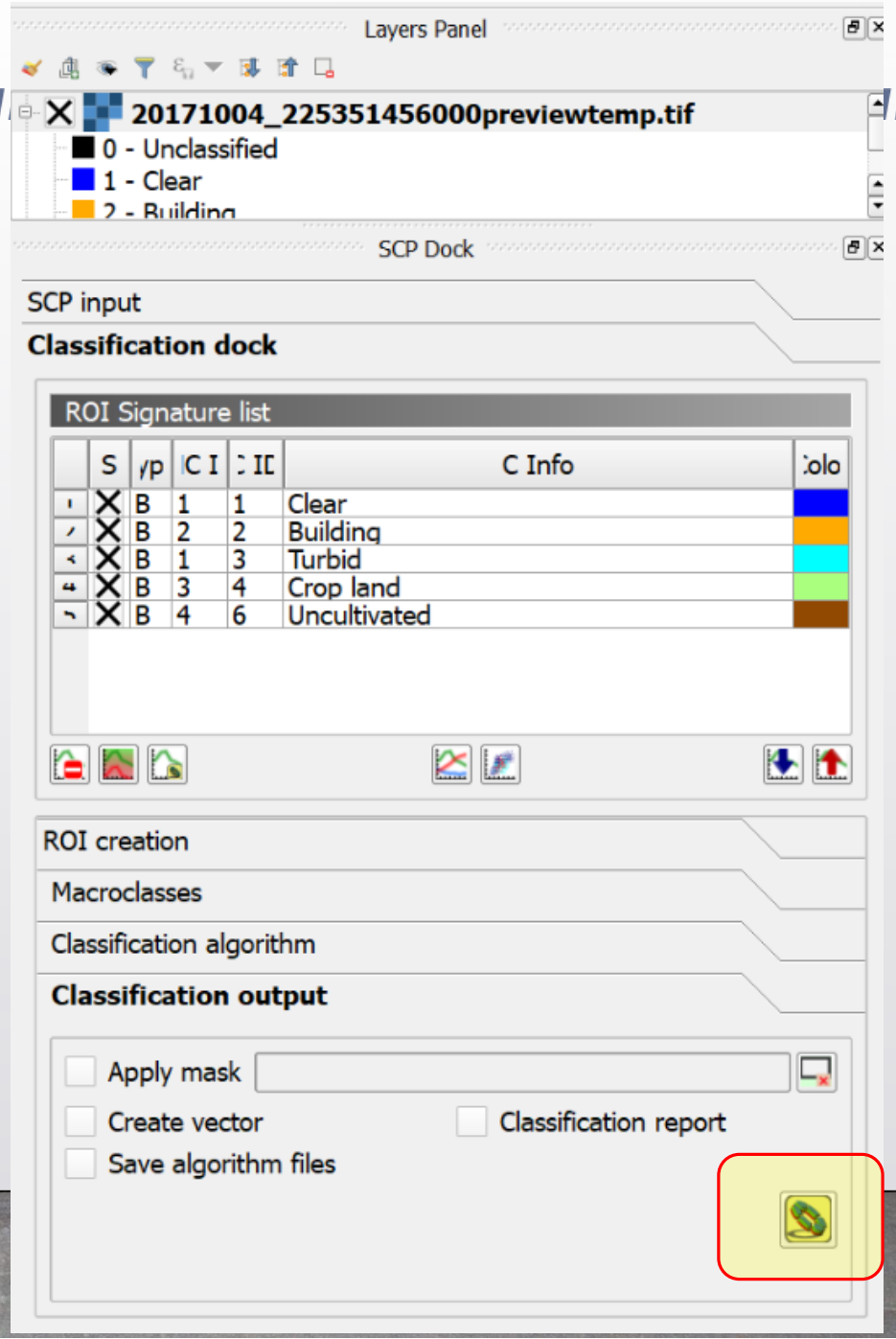
5. Preview first



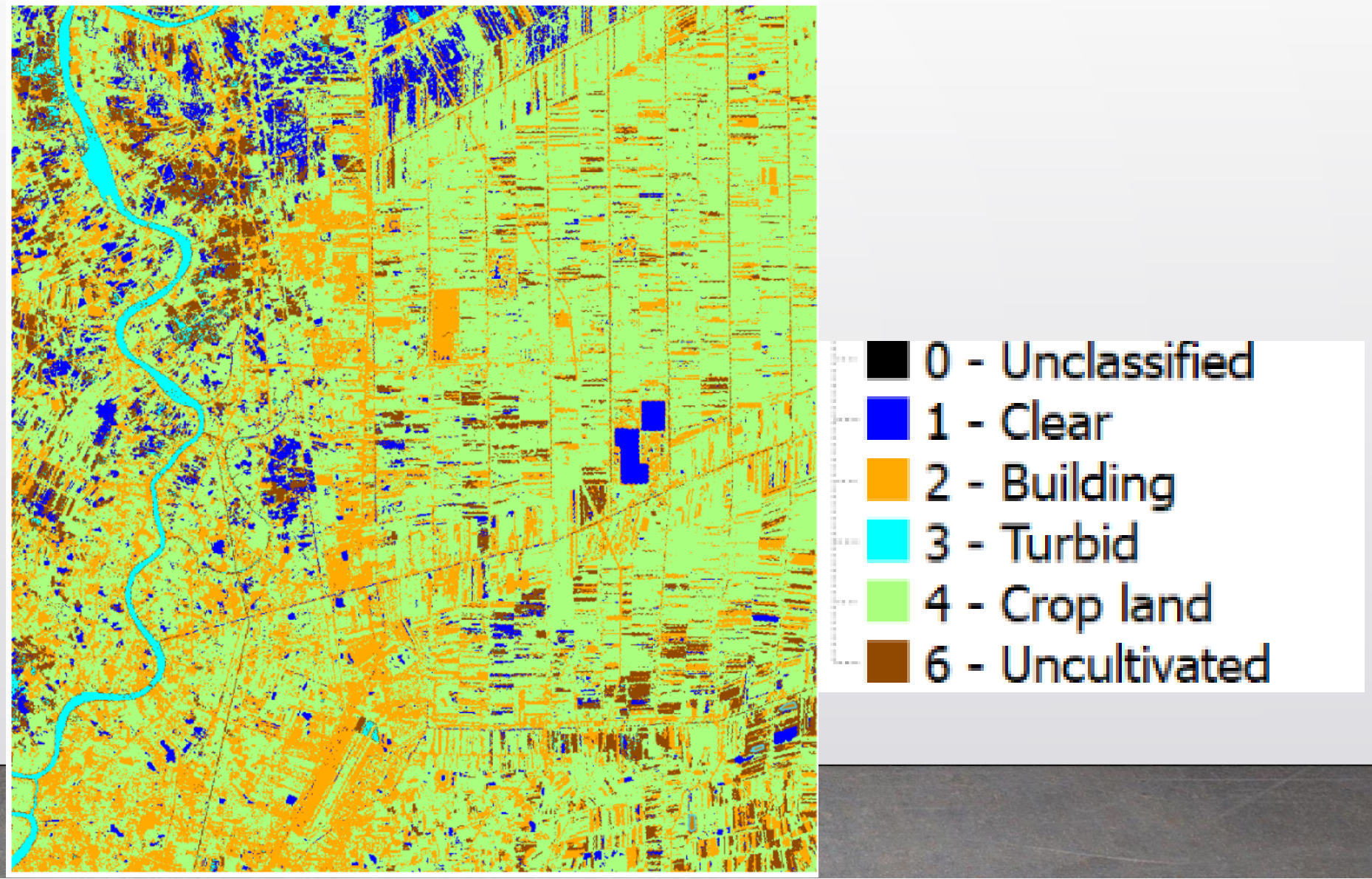
6. Specify classification output



7. Run


Layers Panel
20171004_225351456000previewtemp.tif
0 - Unclassified
1 - Clear
SCP Dock
SCP input
Classification dock
ROI Signature list
C Info
Clear
Building
Turbid
Crop land
Uncultivated
ROI creation
Macroclasses
Classification algorithm
Classification output
Apply mask
Create vector
Classification report
Save algorithm files

8. Output


0 - Unclassified
1 - Clear
2 - Building
3 - Turbid
4 - Crop land
6 - Uncultivated

Thank you