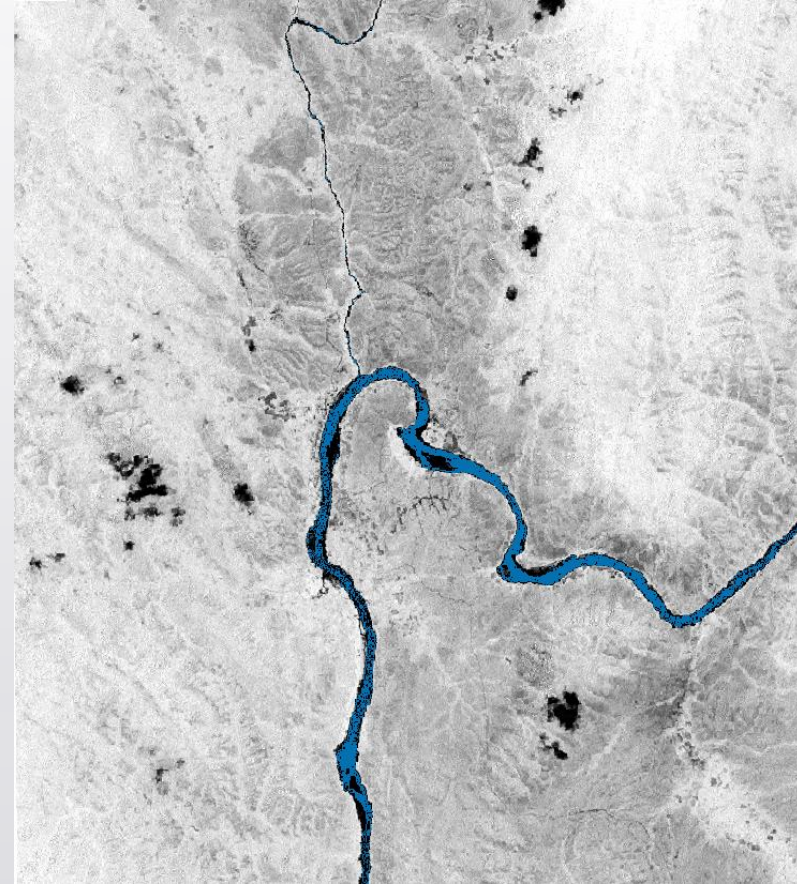
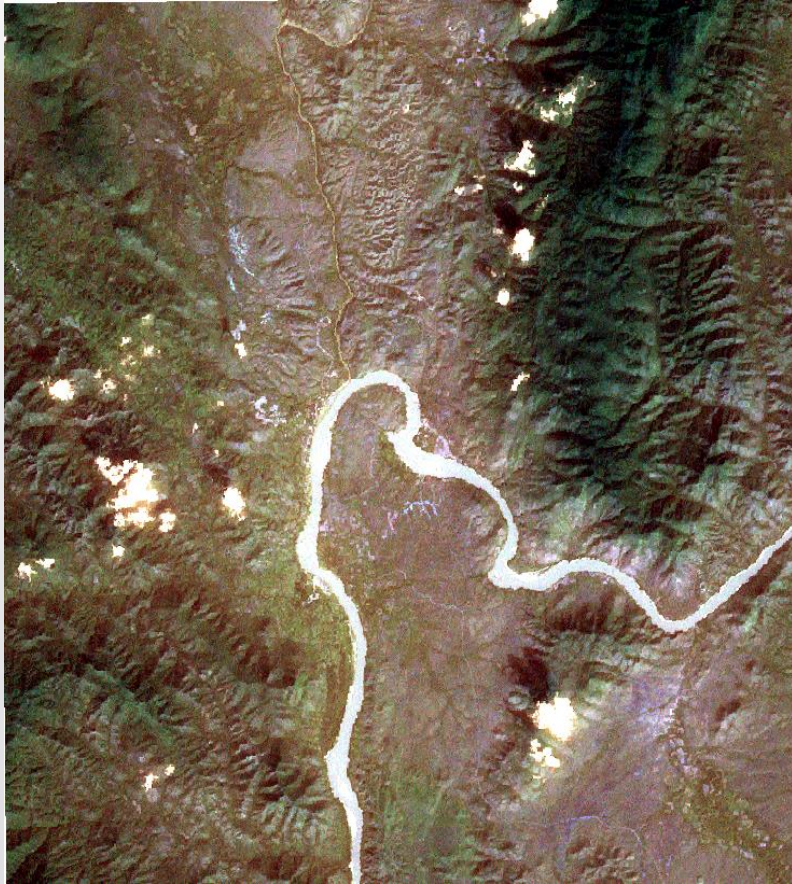




Generating NDVI mask from Satellite Image for flood monitoring

Process: NDVI Masking

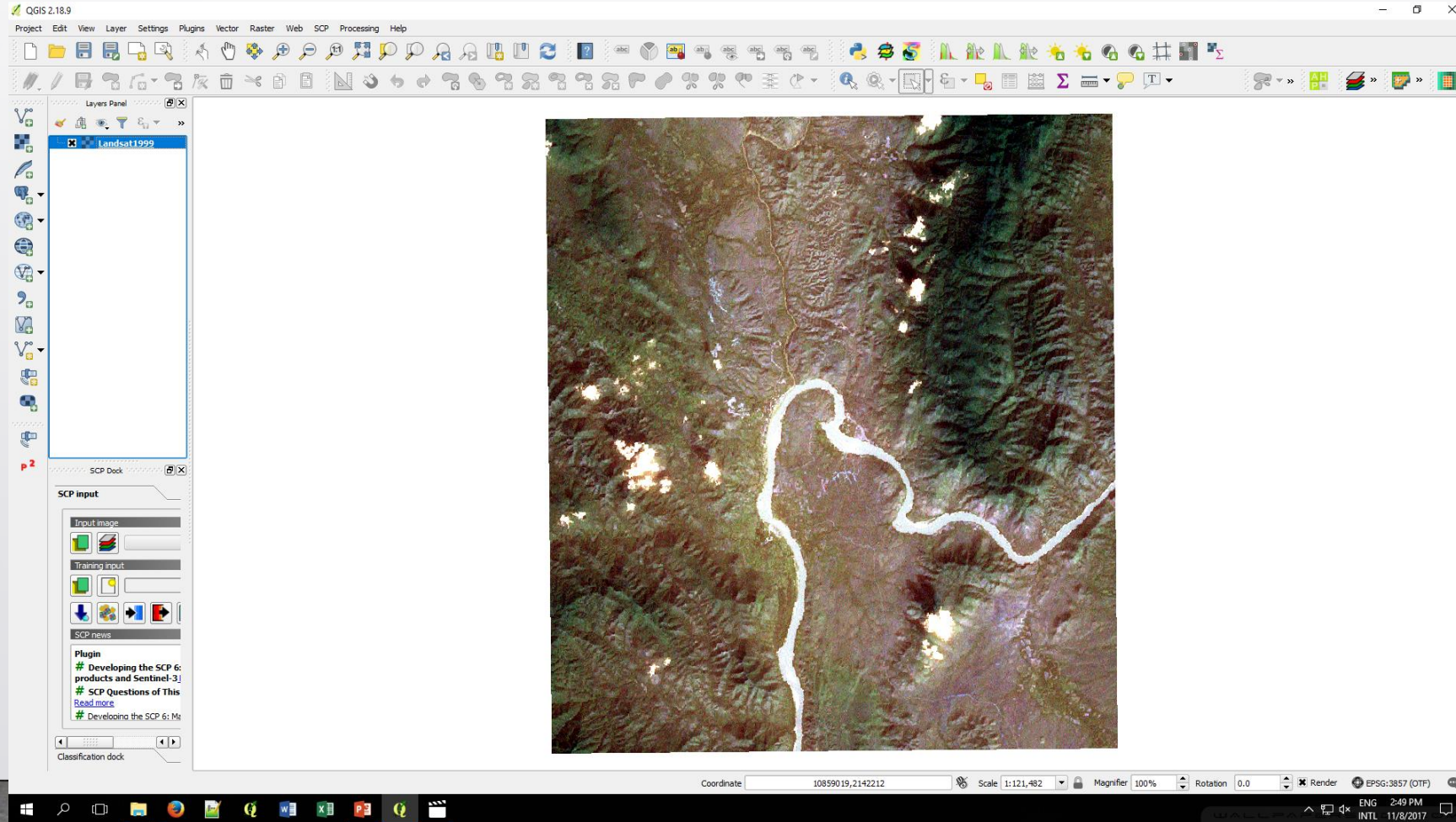




Data Needed:

- Data filename: Landsat1999.tif (raster file)

1. Load the satellite image



2. Generating NDVI from satellite using raster calculator

1. Open raster calculator under raster menu

2. Input NDVI equation in raster calculator

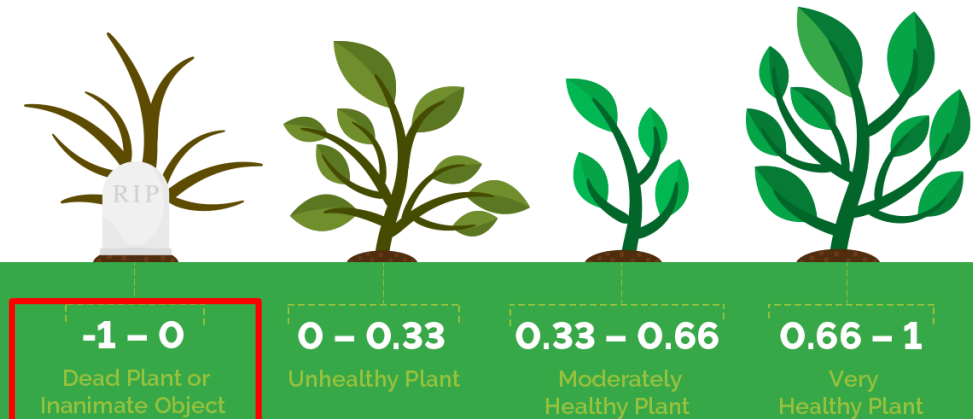
Raster calculator expression:

$$\left(\frac{(\text{"Landsat1999@4"} - \text{"Landsat1999@3"})}{(\text{"Landsat1999@4"} + \text{"Landsat1999@3"})} \right)$$

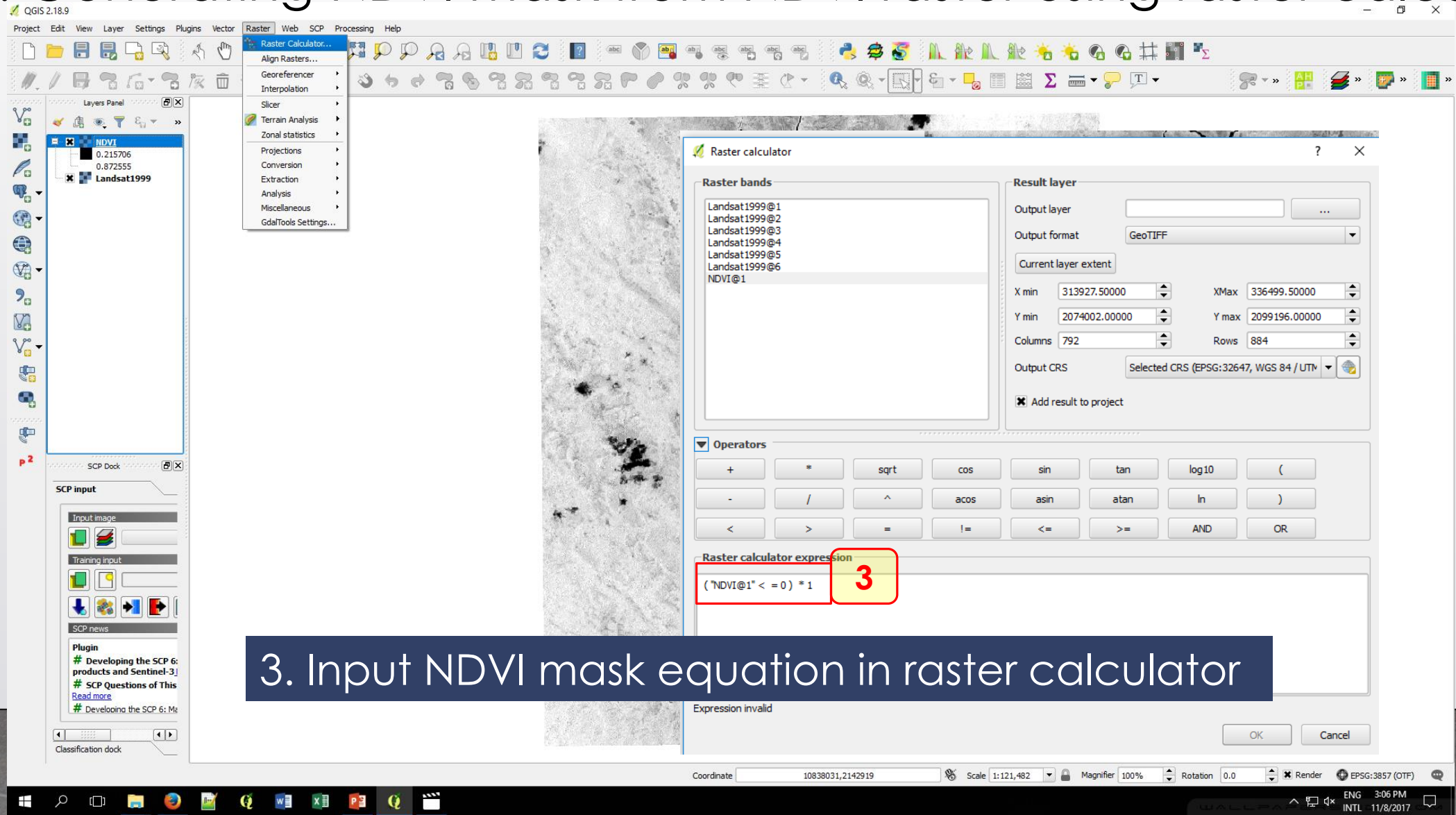
2. Generating NDVI from satellite using raster calculator



Note: NDVI less than or equal to zero could be used for masking water areas

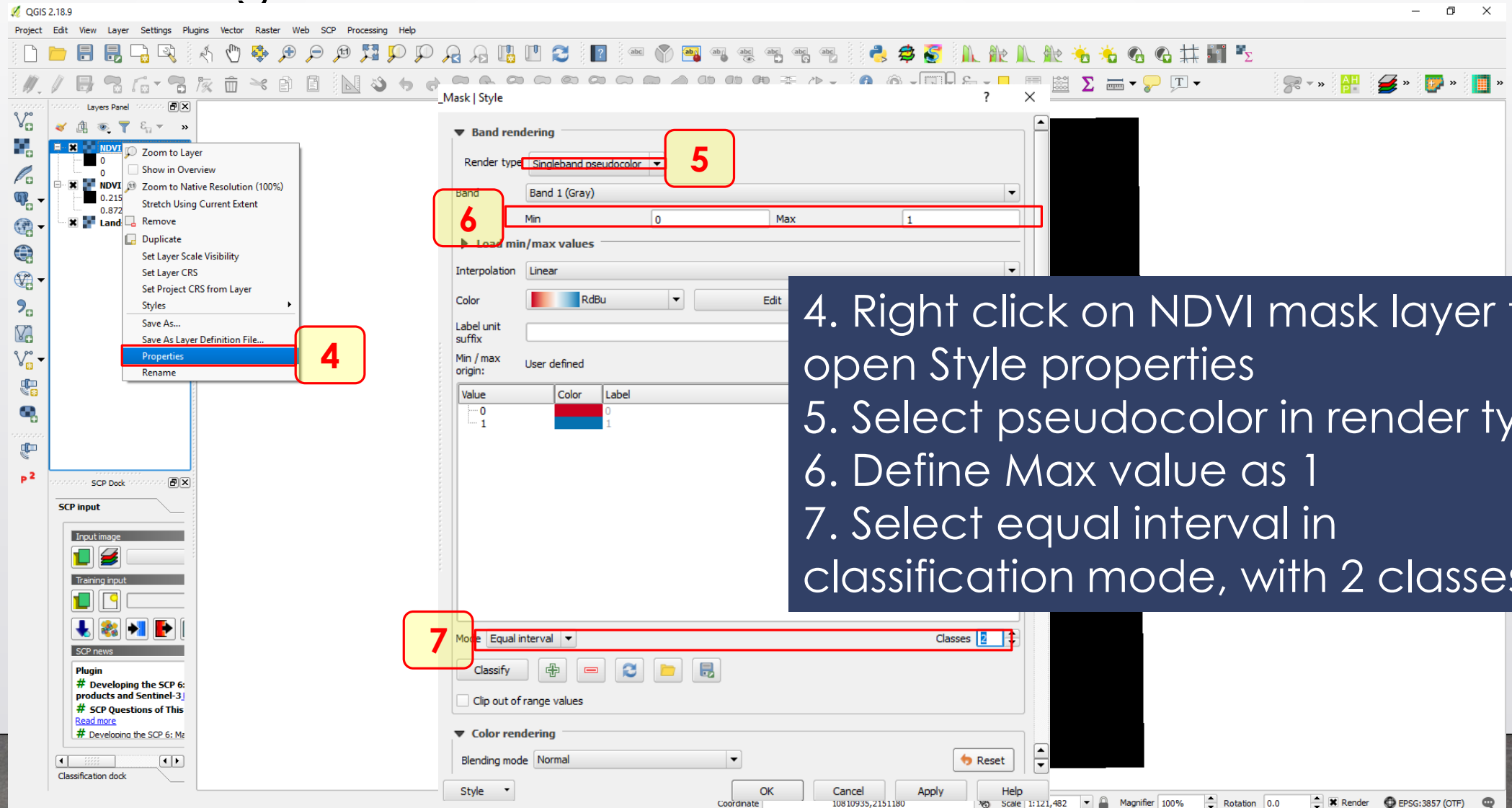


3. Generating NDVI mask from NDVI raster using raster calculator



3. Input NDVI mask equation in raster calculator

4. Visualizing NDVI mask



4. Visualizing NDVI mask (continued)

QGIS 2.18.9

Project Edit View Layer Settings Plugins Vector Raster Web SCP Processing Help

Layers Panel

- NDVI 0
- NDVI 0.215
- NDVI 0.872
- Land

Context menu for NDVI 0:

- Zoom to Layer
- Show in Overview
- Zoom to Native Resolution (100%)
- Stretch Using Current Extent
- Remove
- Duplicate
- Set Layer Scale Visibility
- Set Layer CRS
- Set Project CRS from Layer
- Styles
- Save As...
- Save As Layer Definition File...
- Properties
- Rename

Band rendering dialog:

Render type: Singleband pseudocolor

Band: Band 1 (Gray)

Min: 0 Max: 1

Load min/max values

Interpolation: Linear

Color: RdBu

Label unit suffix:

Min / max origin: User defined

Value	Color	Label
0	Red	8
1	Blue	

Change color dialog:

Recent colors:

- #4fce00
- #ff0000
- #ffbf01
- #cc53be
- #44cbfc

Opacity: 0%

HTML notation: #ca0020

Current: Red

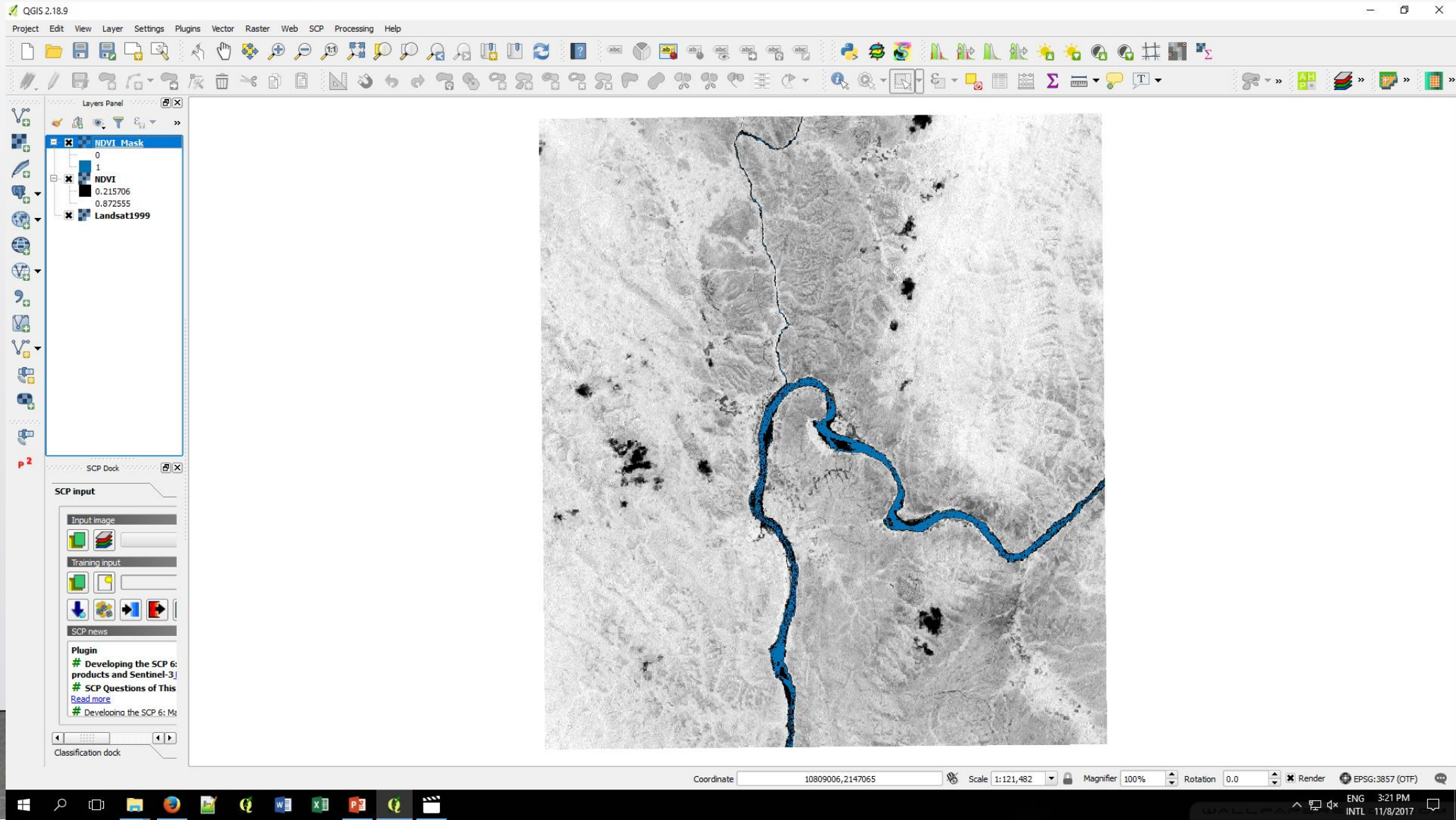
Old: Red

Buttons: OK, Cancel, Reset

8. Double click on the red color representing zero mask value

9. Select 0% opacity to see thru this class

4. Visualizing NDVI mask (continued)





Thank you