

## **Title of assignment: Mosaic and Changing Projection System**

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# Mosaic and Changing Projection System

## List of Images

| Image no | Date       | Type       | Correction Factor |
|----------|------------|------------|-------------------|
| h25      | 19-12-2015 | Modis NDVI | 0.0001            |
| h26      | 19-12-2015 | Modis NDVI | 0.0001            |

## Methodology

1. First we have to add the images in **ArcMap** software.

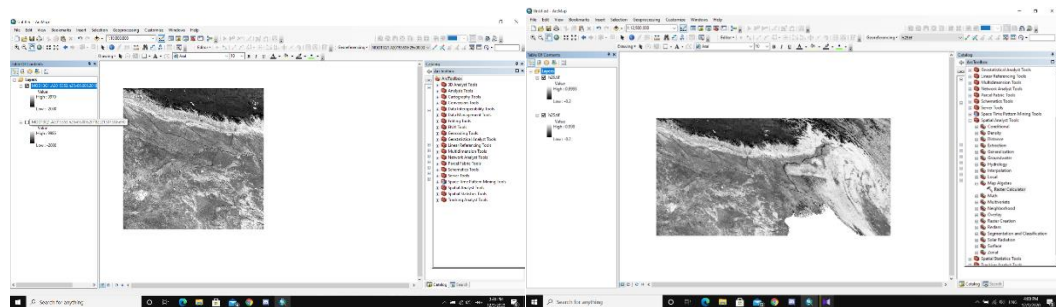


Figure 01: Images on ArcMap software.

2. Then we have to make the NDVI value into normal value. So we have to use **Raster Calculator** tool in order to do this. Here we will multiply 0.0001 with the first image which is the scale factor found from the MODIS NDVI data user guide. Then we have to save the file in **.tif** format. And then we have to close the original image. And lastly we have to check the projection system from layer properties.
3. In the same process we will make the values to normal value for second image. Now we have only two things in the layers which are the .tif format of those two images.

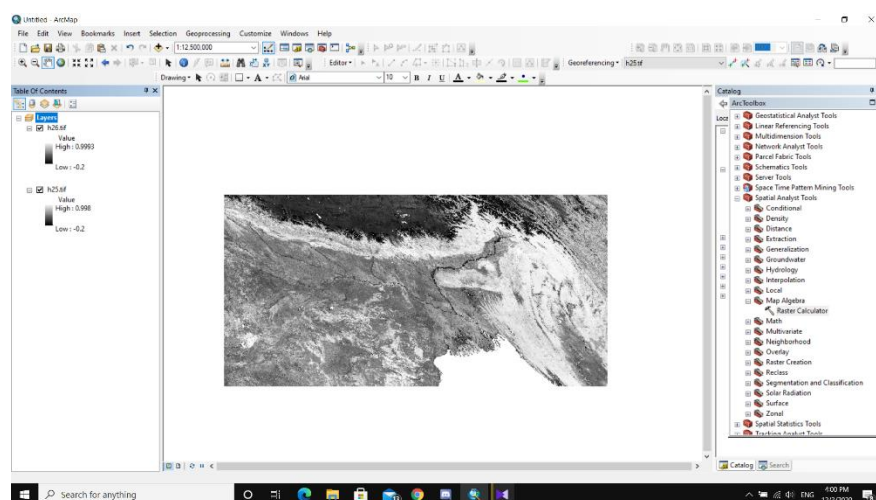


Figure 02: .tif format of images after normalize the data.

4. Now we have to use merge these two .tif files. In order to merge this two images we have to use the **Mosaic tool** in order to merge the two .tif files. Then we need to export this file in **.tif** formate. And we have to save this file named it com.tif.

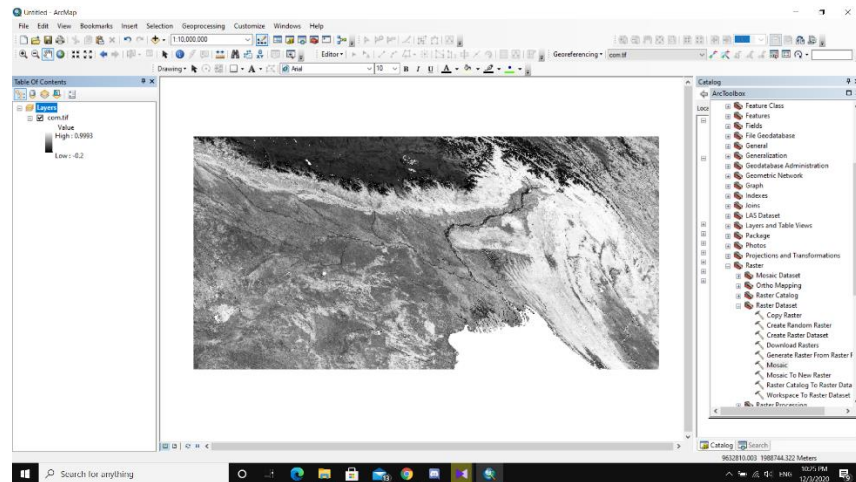


Figure 03: Combined image.

5. We have to change the projection system into degree decimal. So firstly , we have to check the existing projection system and then we need to use the **project raster tool** in order to change the projection system into **WGS 1984**. We have to export the file to **.tif** file.
6. If the file looks distorted, we need to change the projection system again . We have to change the projection system **WGS 1984** to **BTM**. And we have to export this file in **.tif** formate.

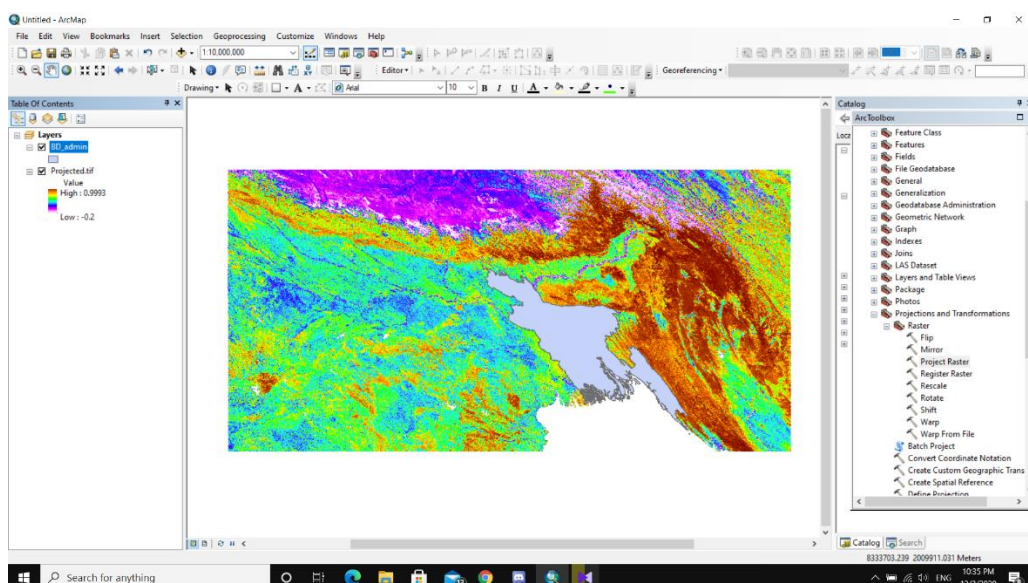


Figure 04: Projected image.

7. If we open a new window and add the latest BTM projected file, we can find the final result. Bangladesh area will be fine although the other area is still distorted.
8. Now we can use Bangladesh shape file and cut the image by using **extract by mask** tool to see only the Bangladesh portion.

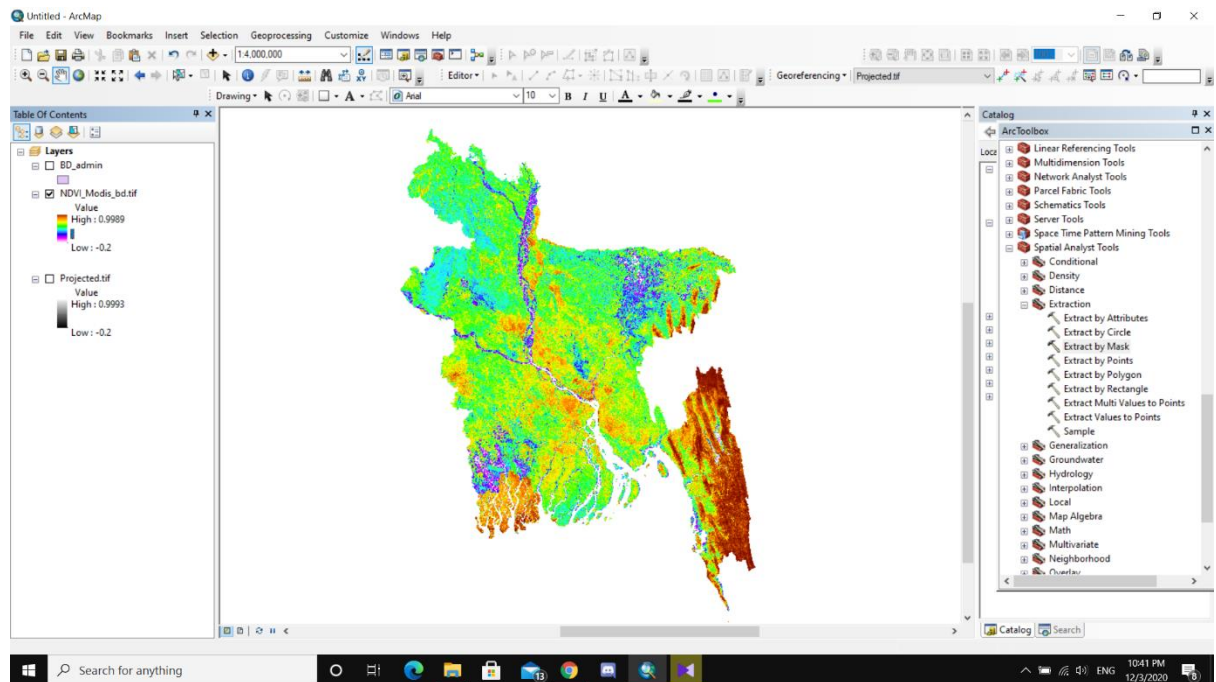


Figure 05: Final format of the image .