

----- Practical 5 -----

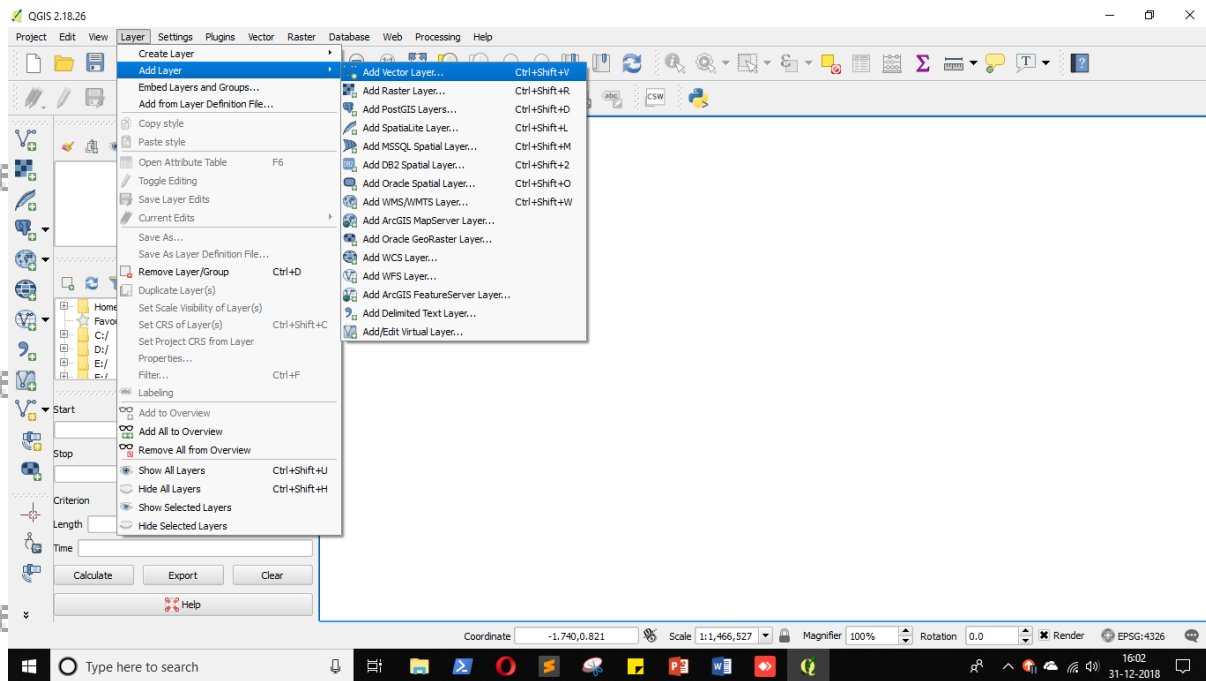
Working with Projections and WMS Data.

Download resources from the link below.

<https://drive.google.com/open?id=1TxBCqKQzT5WBzoUQ0FZ2GVHPm-2R2wTL>

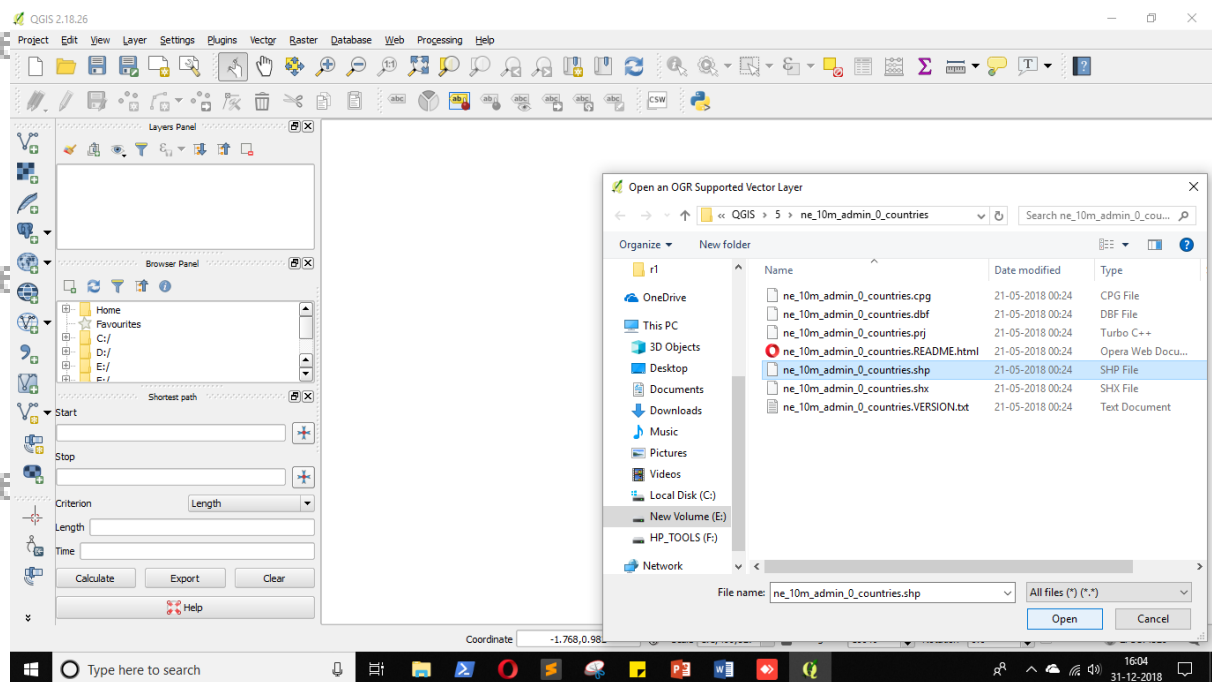
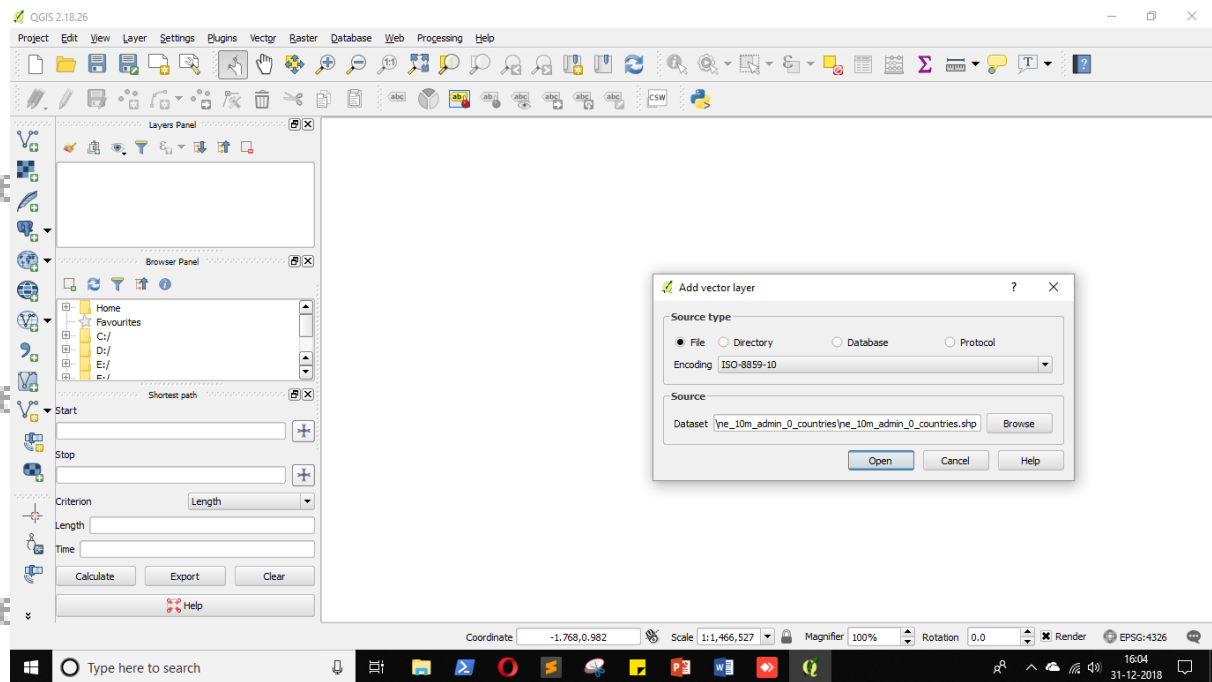
Add vector layer “ne_10m_admin_0_countries.shp”

Layer > Add Layer > Add Vector Layer...

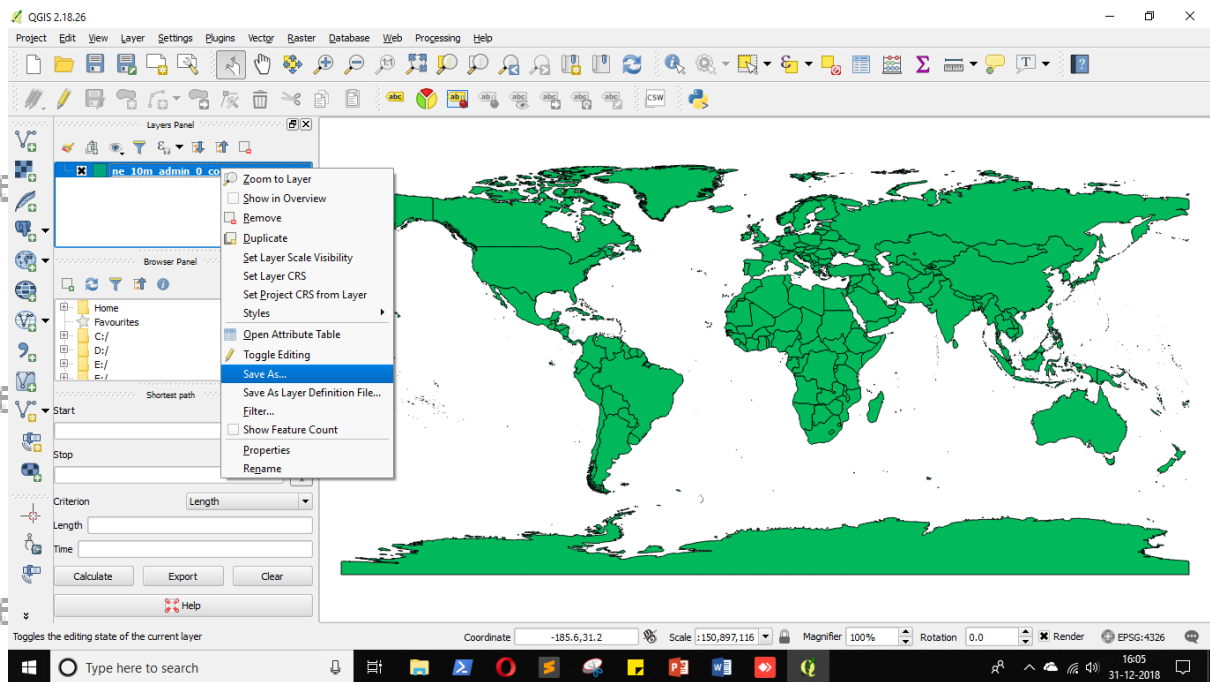


Click on “Browser”

Select “ne_10m_admin_0_countries.shp” file.

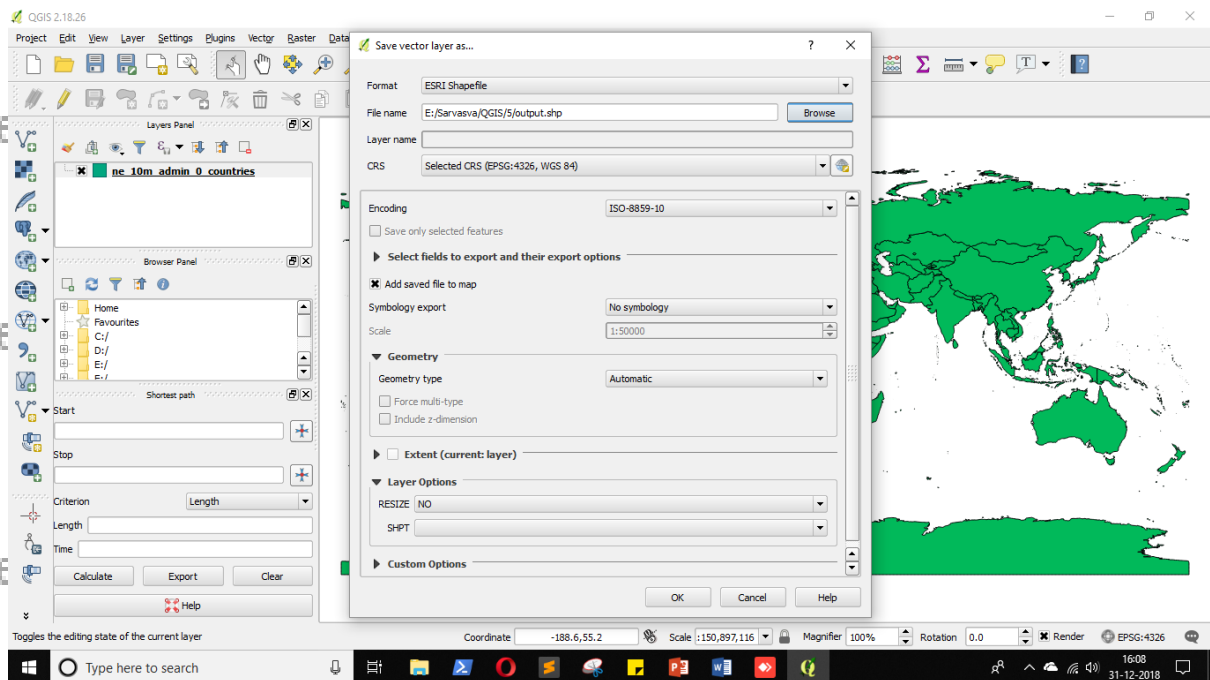


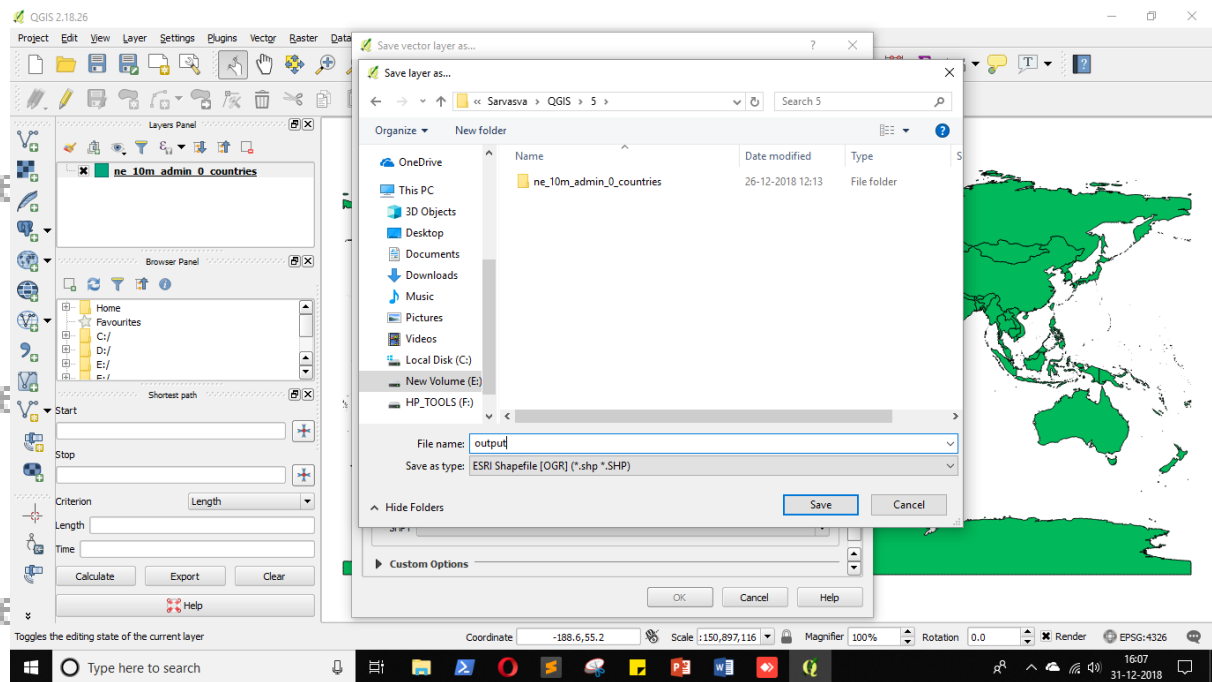
“Right click” on “ne_10m_admin_0_countries” layer and select “Save As...”.



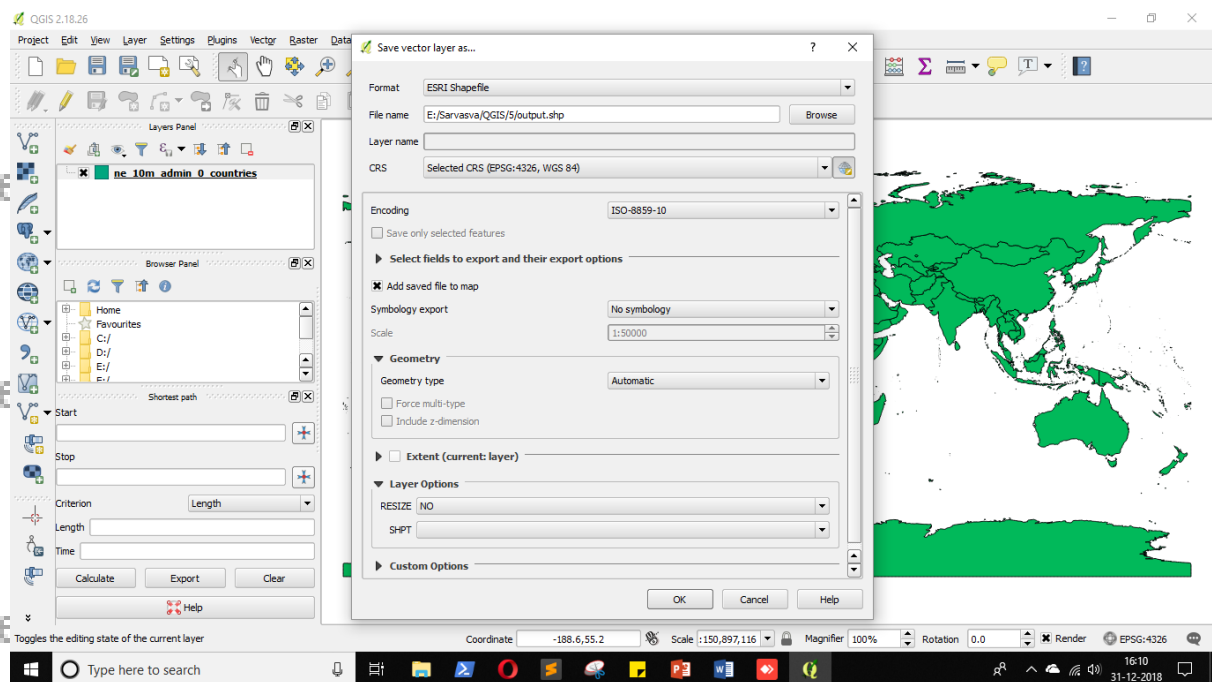
Select "ESRI Shape file" in "Format" dropdown list.

In "File name" give path and name to output file.





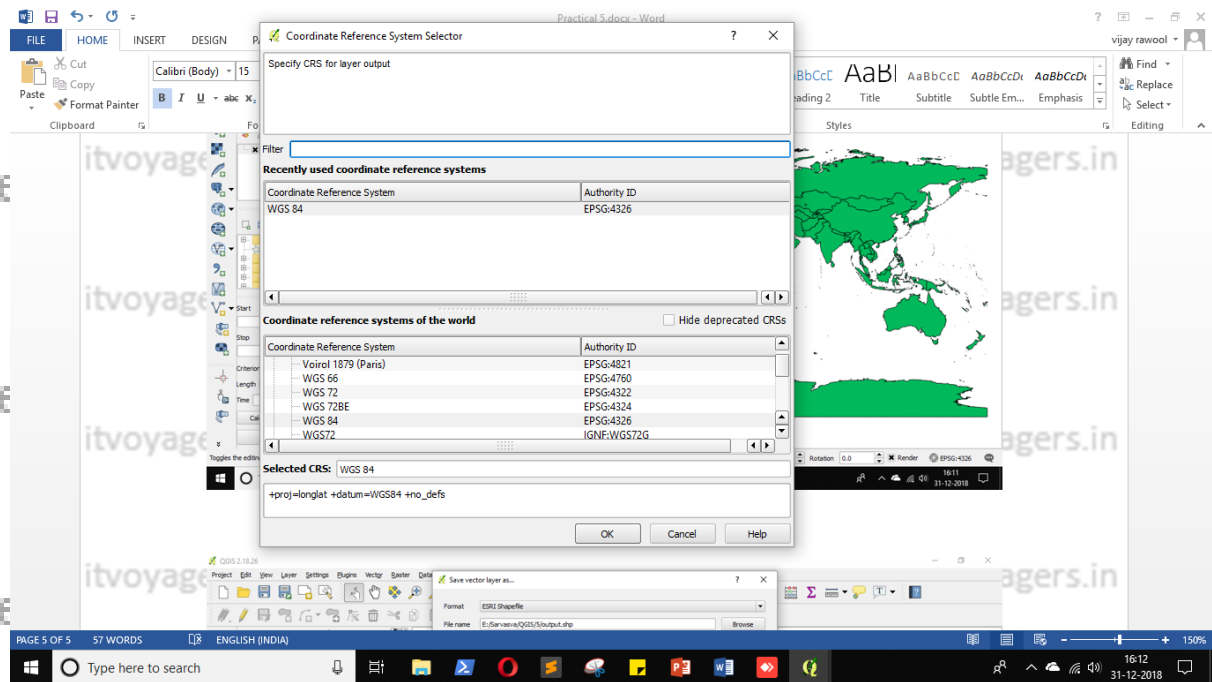
In CRS click on  button. New window will pop-up.



We have to select

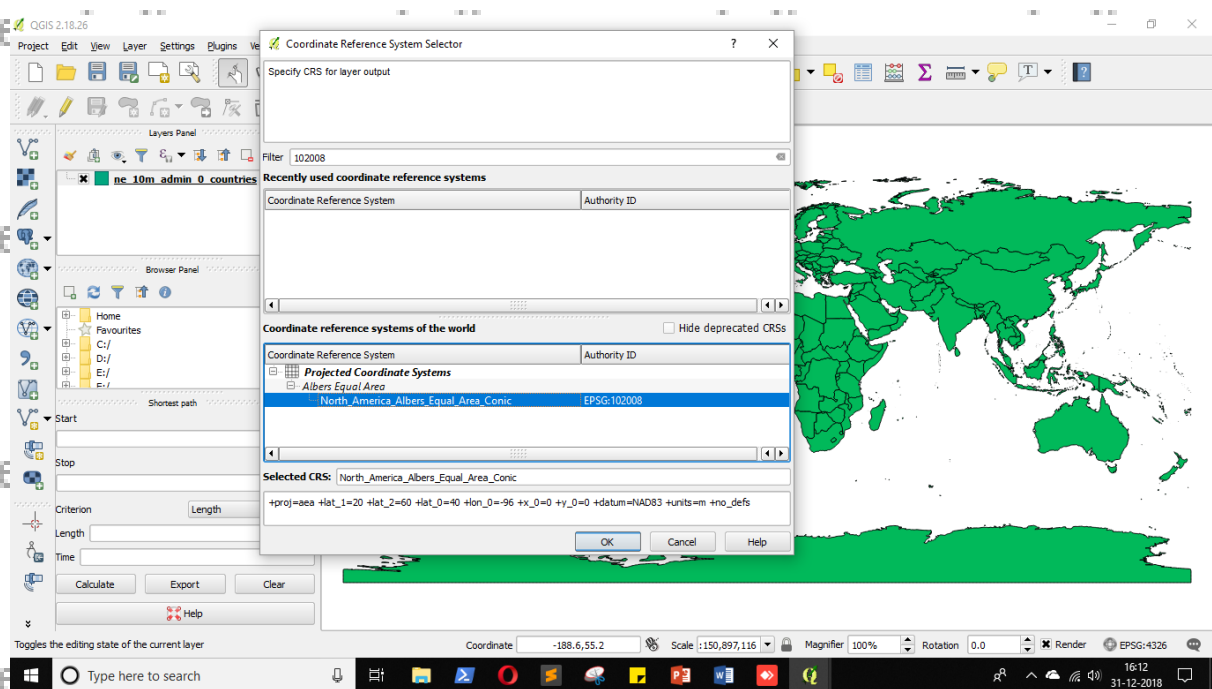
“North_America_Albers_Equal_Area_Conic EPSG: 102008”.

To search it we have to use **“Filter”**.

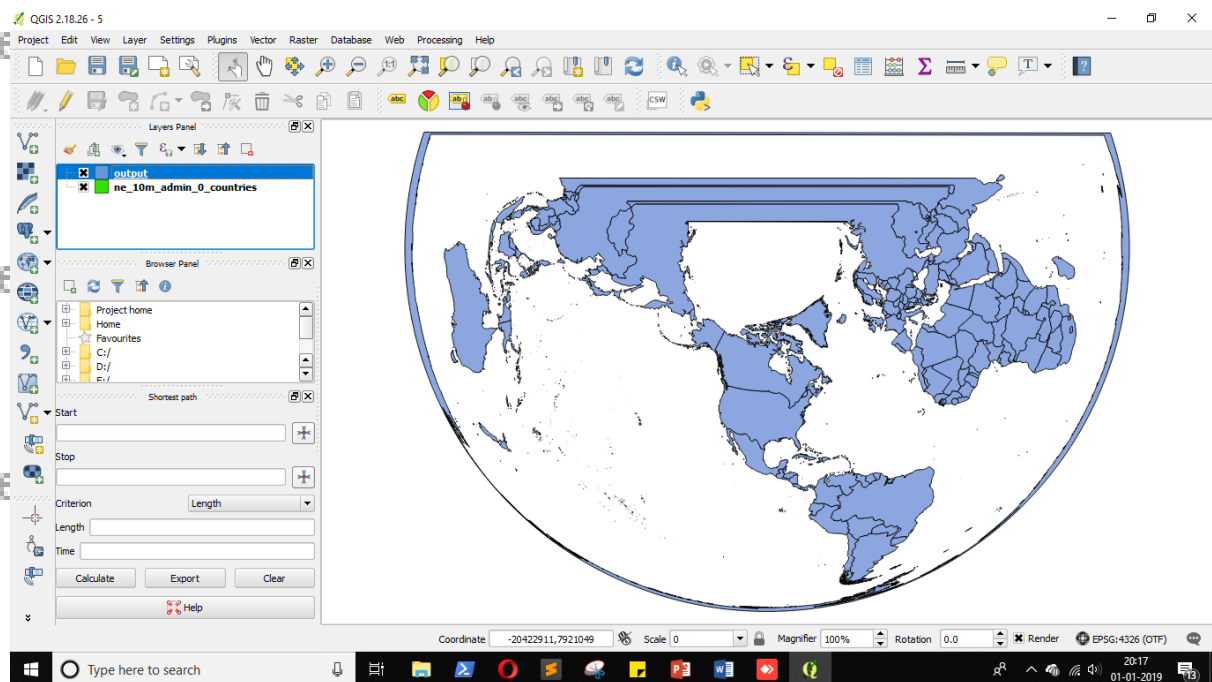
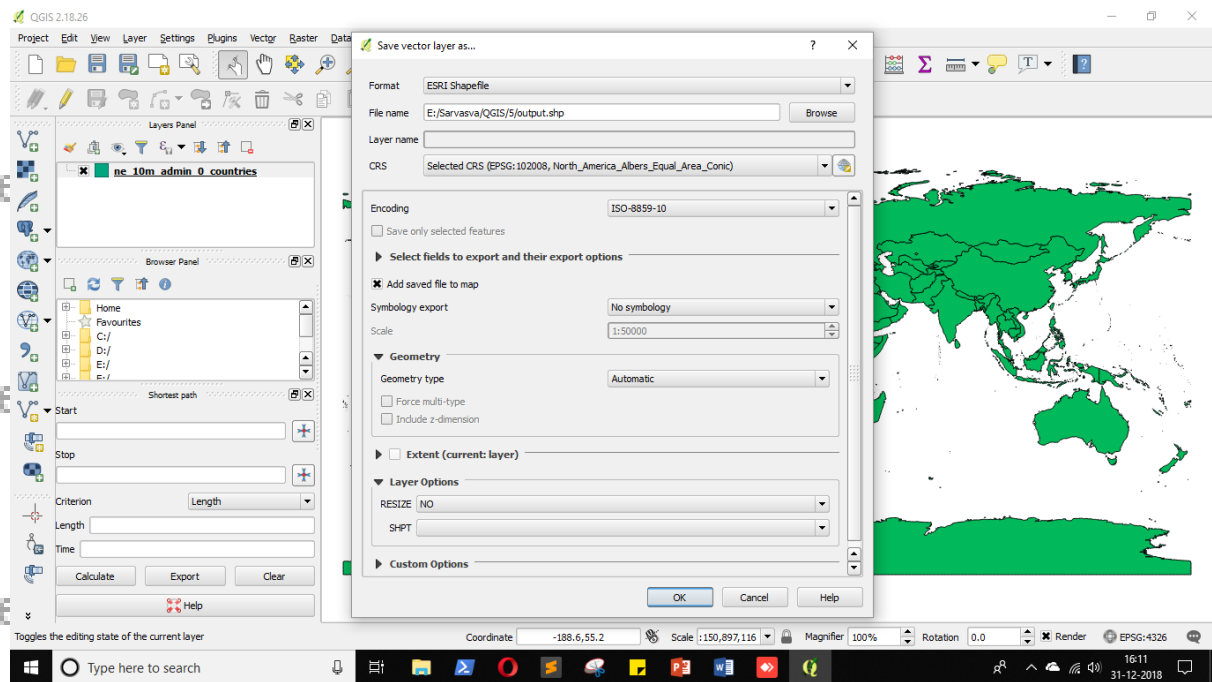


Enter “102008” in “Filter” textbox we will find out “North_America_Albers_Equal_Area_Conic” in “Coordinate reference system of the world”.

Click on “OK”.

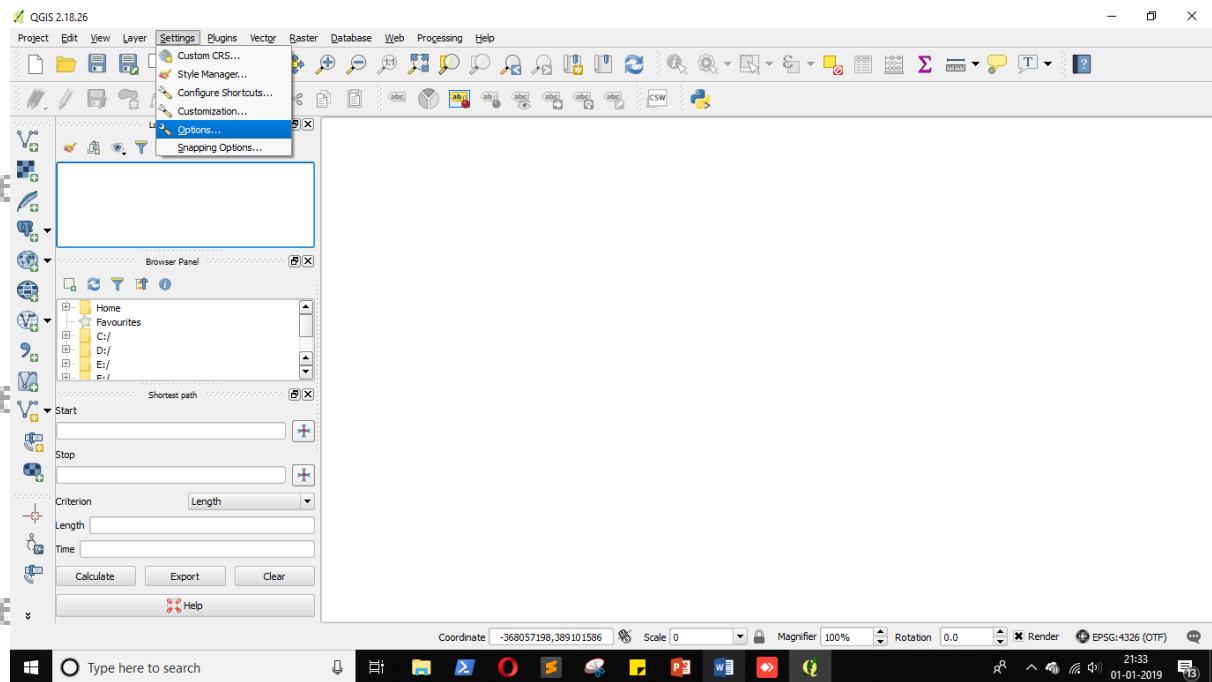


Click on “OK” on “Save vector layer as...” window.

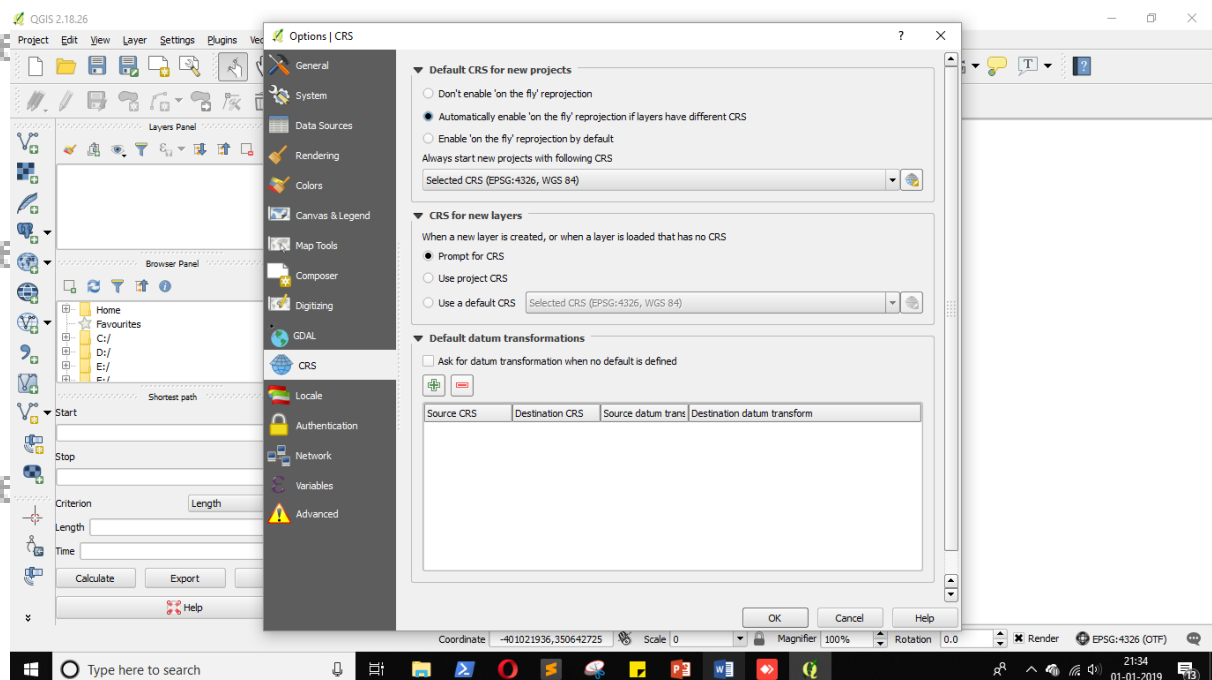


NOTE: If your map doesn't look like the above don't worry it's because "OTF (ON THE FLY)". On bottom right hand corner we can see (OTF) next to "EPSG: 4326". QGIS does it automatically, if there are layers which has different CRS then QGIS projects layer in such way that they overlap on each other. You can change this by going in

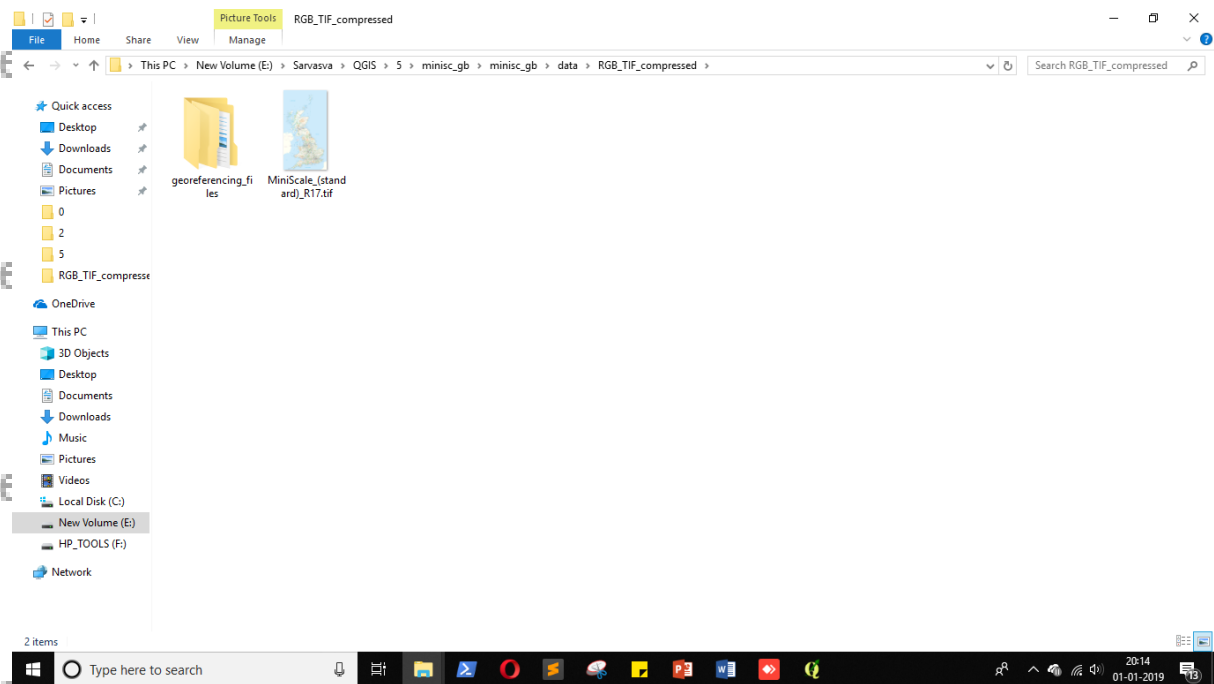
Setting > Options...



In “CRS” tab we can see in “Default CRS for new projects” section “Automatically enable ‘on the fly’ reprojection if layer have different CRS” option is selected. We can select “Don’t enable ‘on the fly’ reprojection” and click on “OK”.

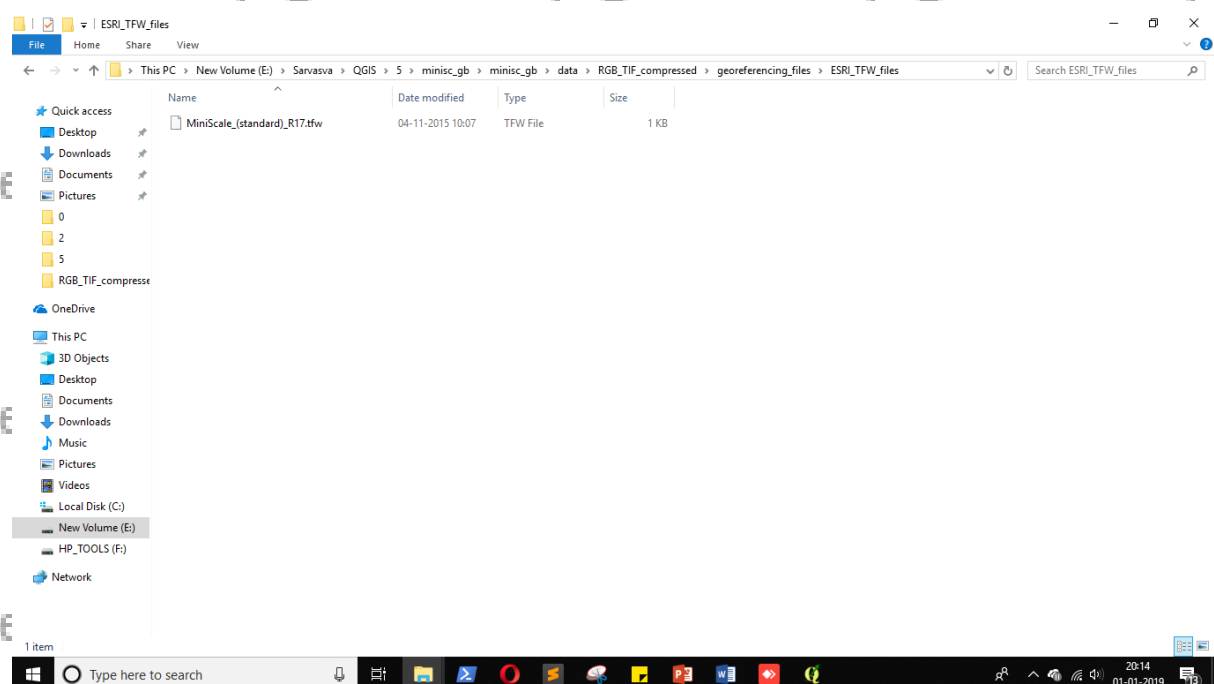


Now we have to load “MiniScale_(standard)_R17.tif” file but “.tif” file doesn’t have the information regarding projections.

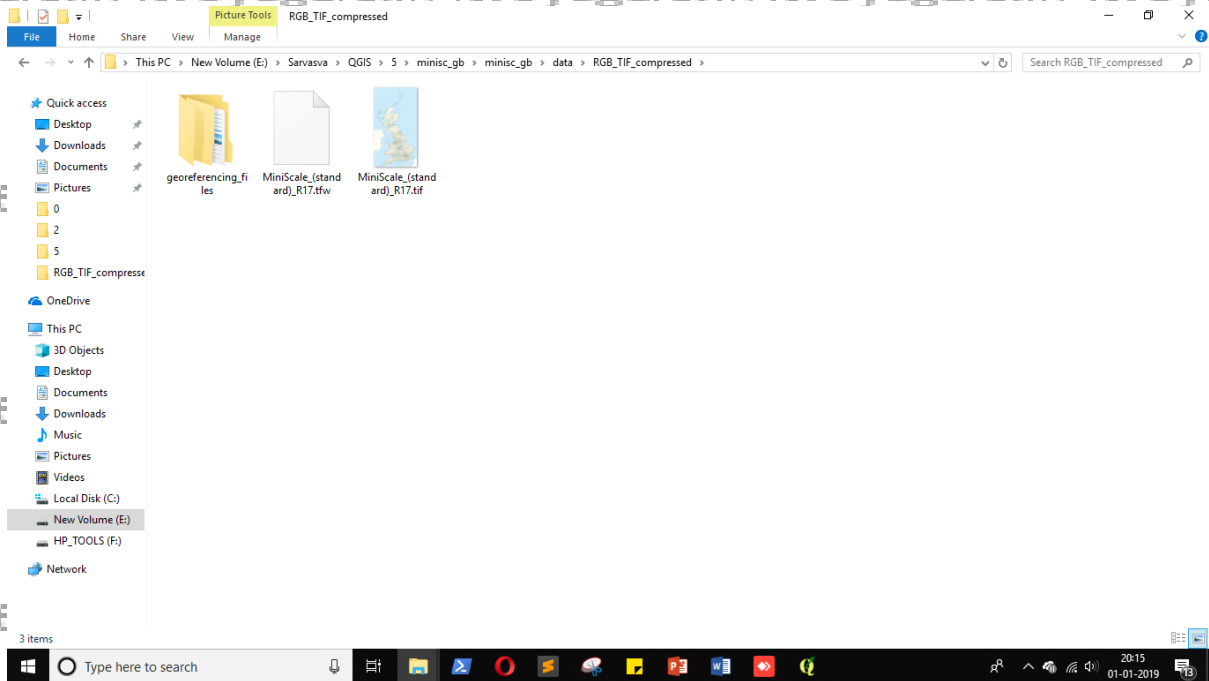


For that we have to use “.tfw” file which you can find in “\RGB_TIF_compressed\georeferencing_files\ESRI_TFW_files”.

We will get “MiniScale_(standard)_R17.tfw” file. We have to keep both “.tif” and “.tfw” files in same locations with same name.

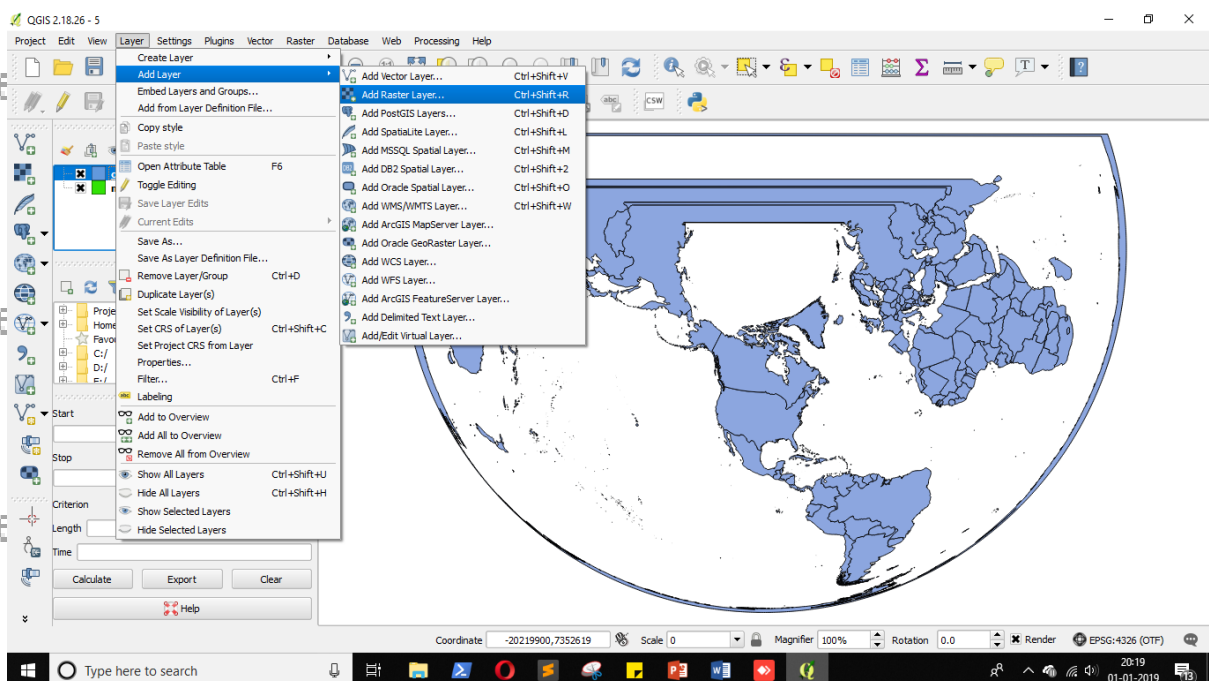


We have to copy “MiniScale_(standard)_R17.tfw” file and paste it with
“MiniScale_(standard)_R17.tif” file

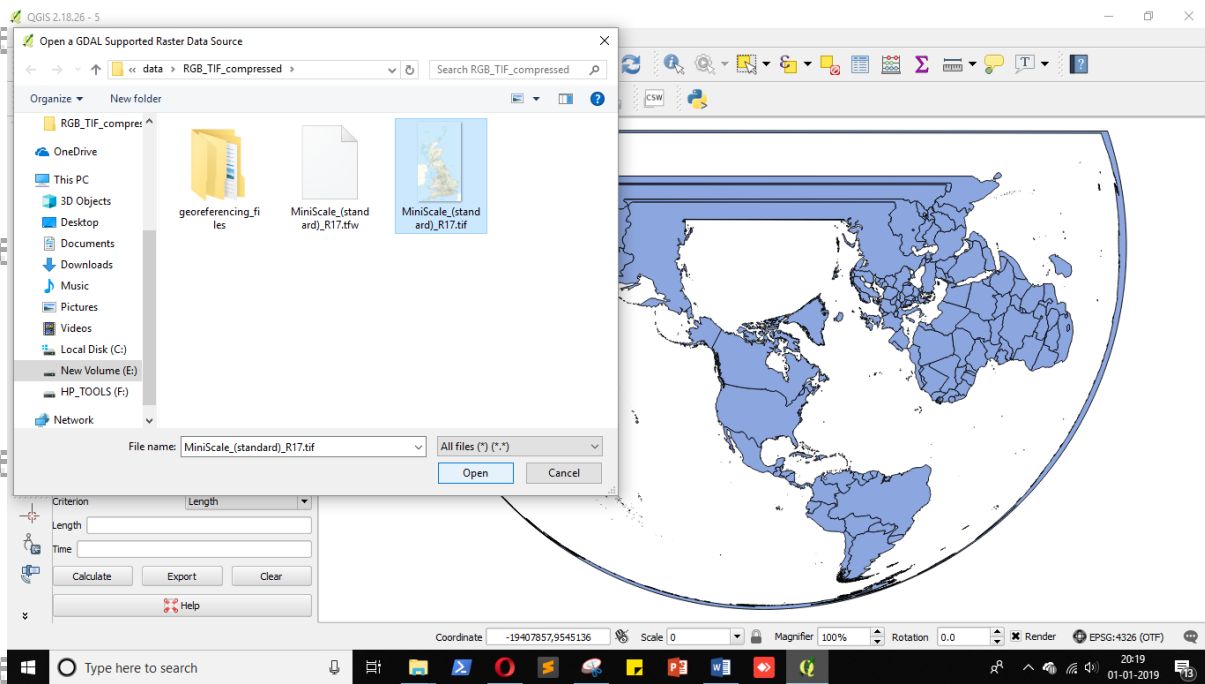


Now go to QGIS to load “MiniScale_(standard)_R17.tif” file. For that go
to

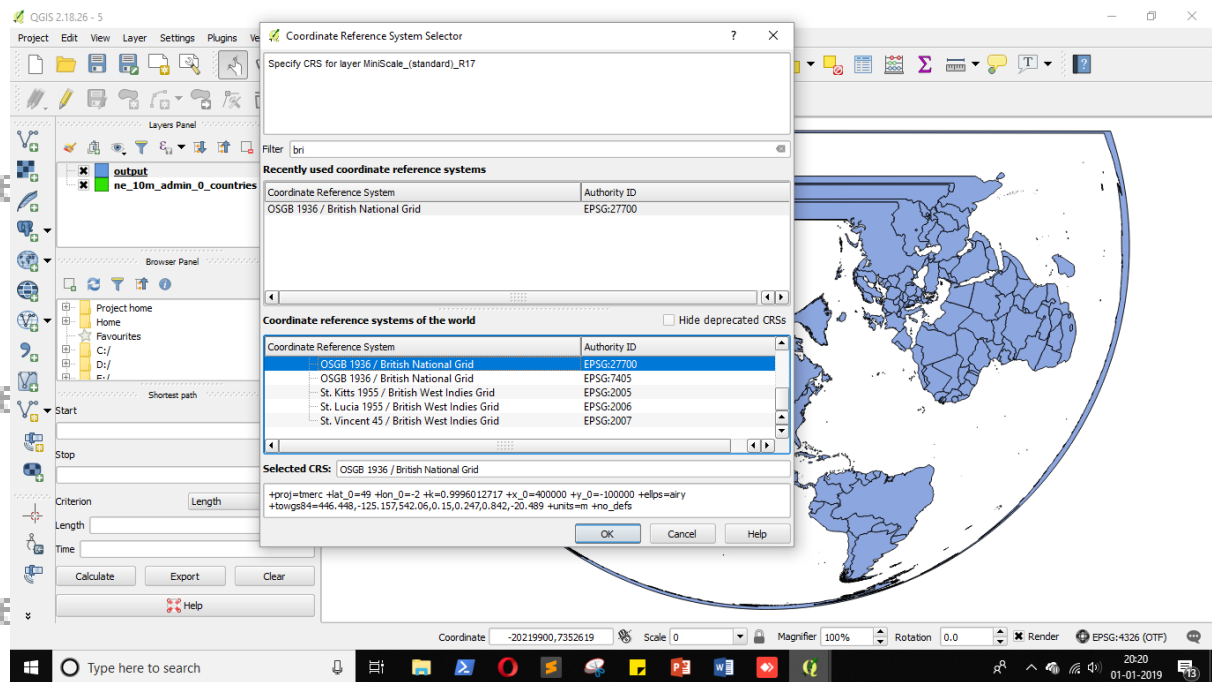
Layer > Add Layer > Add Raster Layer...



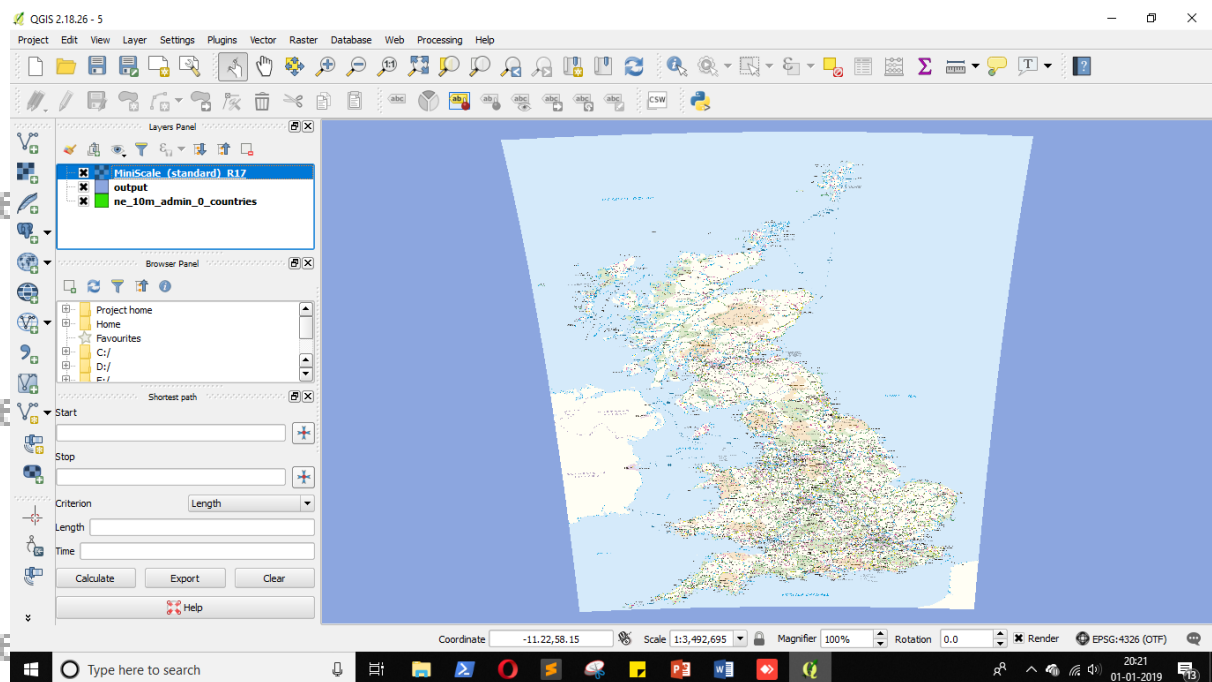
Select “MiniScale_(standard)_R17.tif” file and click on “Open” button.



“Coordinate Reference System Selector” window will appear. We have to select “OSGB 1936/British National Grid EPSG: 27700” for this we have to type “bri” in “Filter” textbox. Now select “OSGB 1936/British National Grid EPSG: 27700” and click on “OK”.



If your canvas looks like this you have to deselect “output” layer.



Your “MiniScale_(standard)_R17” map layer will overlap on exact same location where it is on “ne_10m_admin_0_countries” layer.

