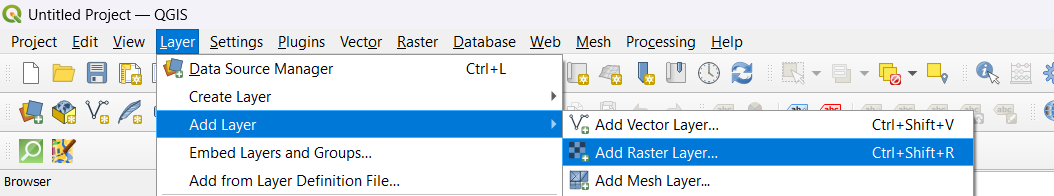
**PRACTICAL NO.3**

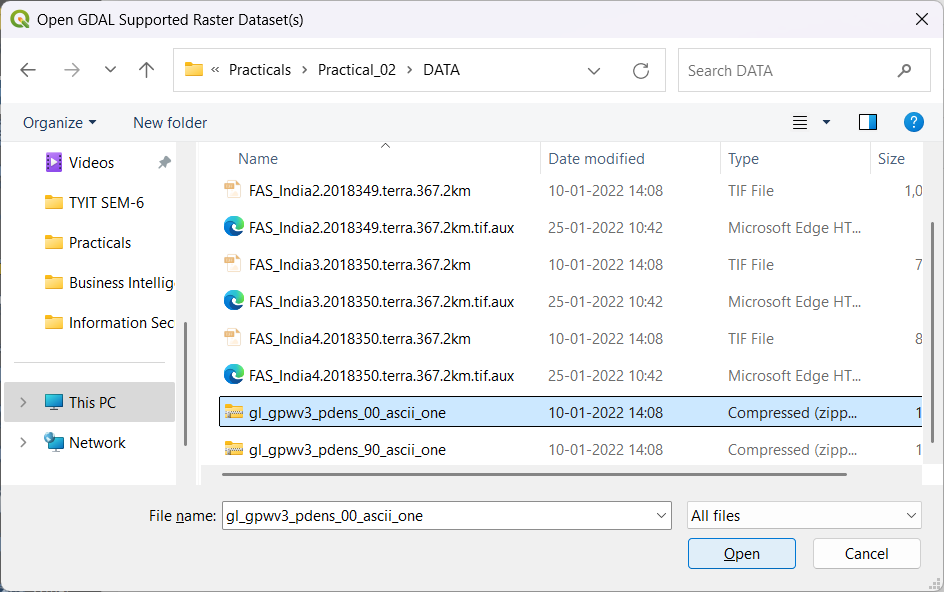
**Exploring and Managing Raster data: Adding raster layers, raster styling and analysis, raster mosaicking and clipping**

**Adding raster layers:**

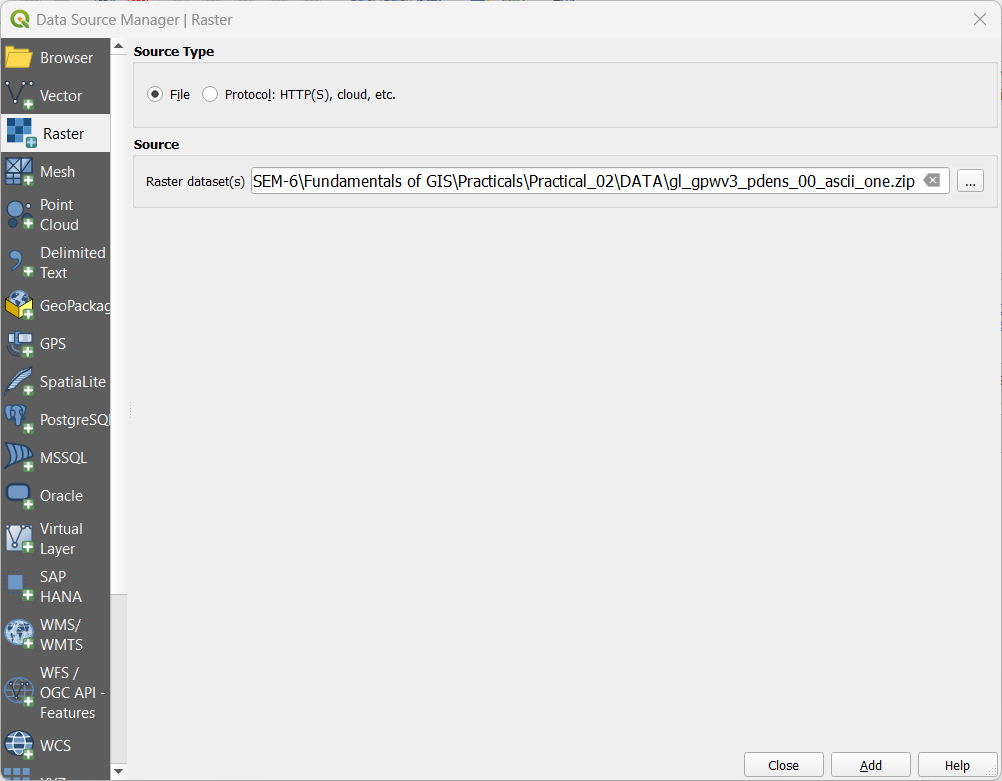
Layer > Add Layer > Add Raster Layer >



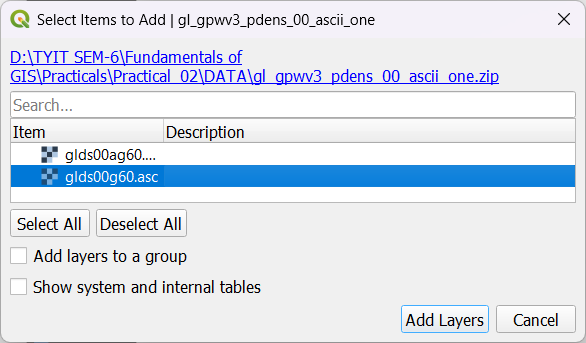
Select gl\_gpwv3\_pdens\_00\_ascii\_one zip file > Open >



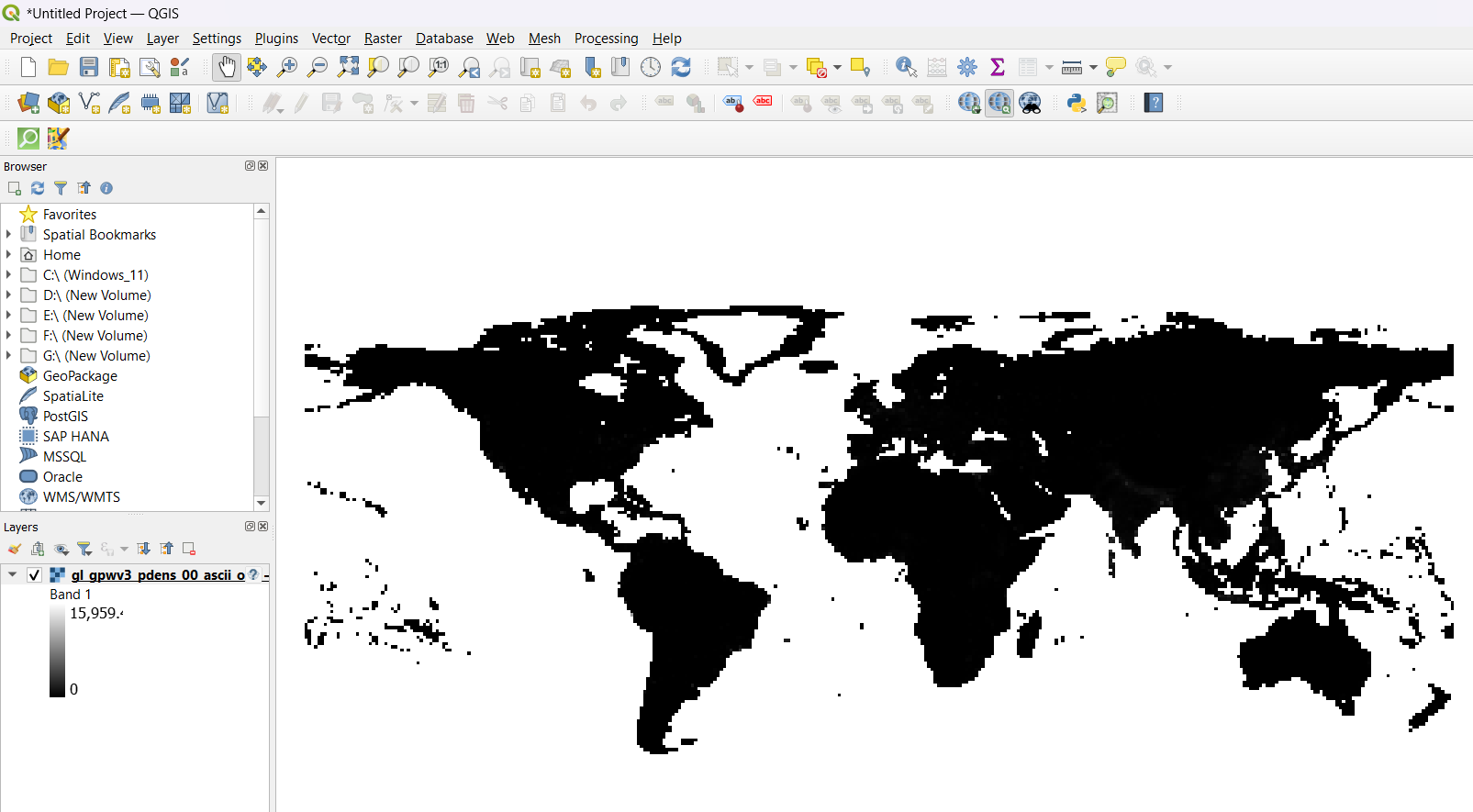
Click on Add >



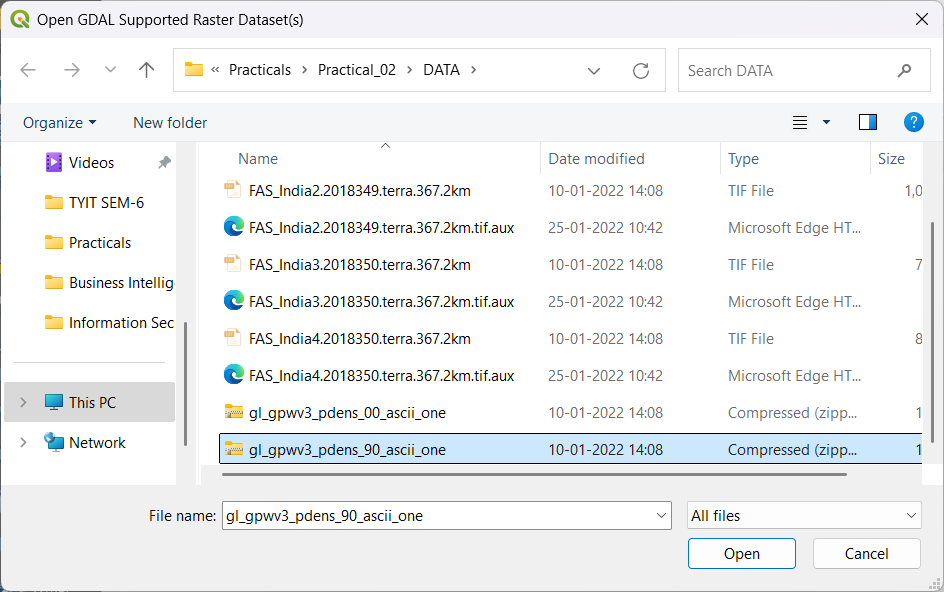
Select Items to Add > Select glds00g60.asc Item > Click Add Layers >



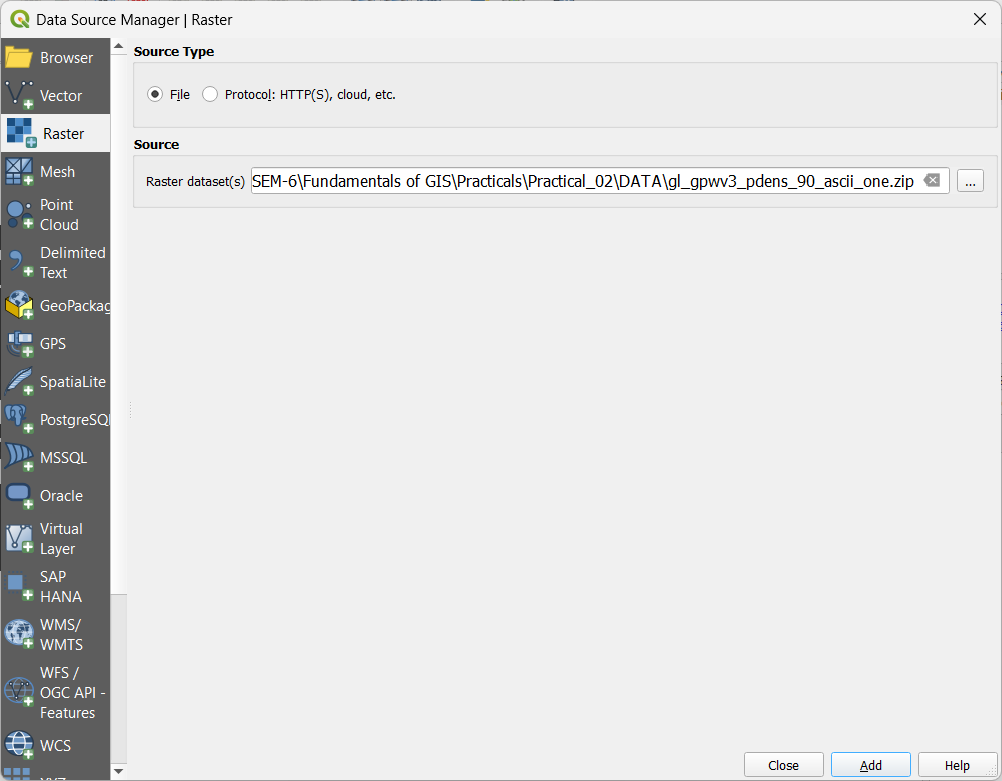
Output after adding Raster Layer : gl\_gpwv3\_pdens\_00\_ascii\_one.zip >



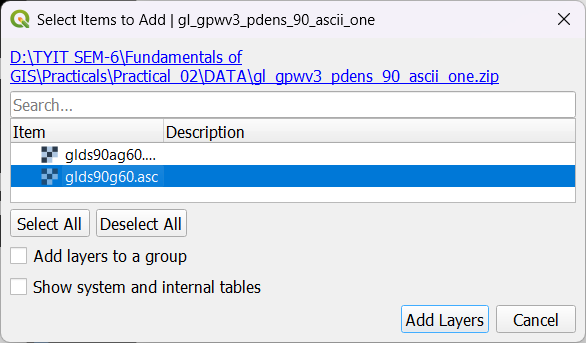
Layer > Add Layer > Add Raster Layer > Select gl\_gpwv3\_pdens\_90\_ascii\_one zip file > Open >



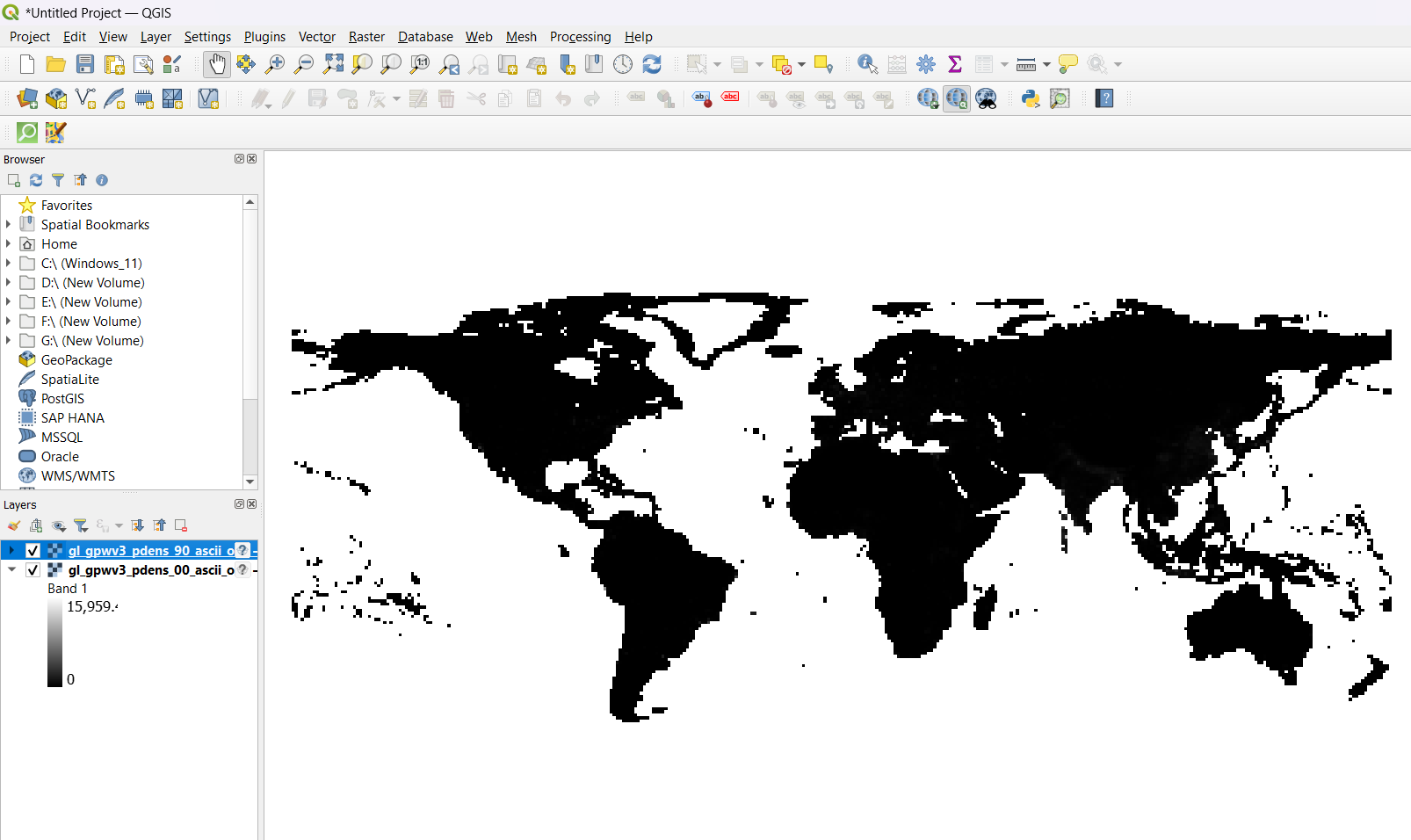
Click on Add >



Select Items to Add > Select glds90g60.asc Item > Click Add Layers >

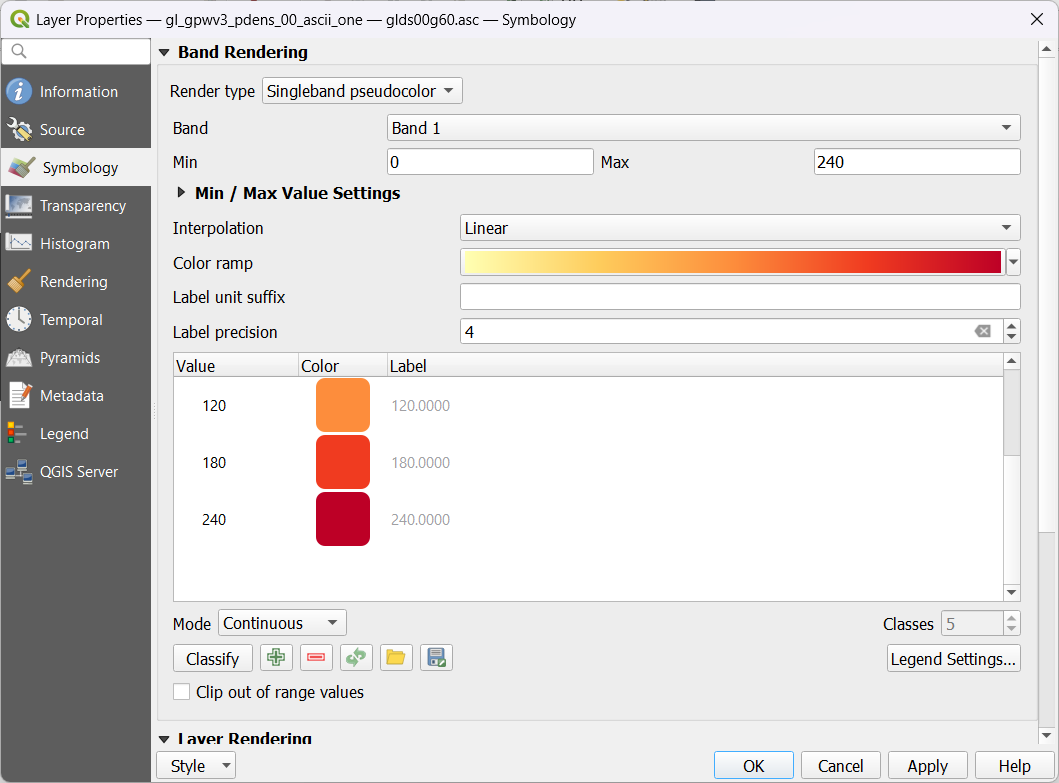


Output after adding Raster Layer : gl\_gpwv3\_pdens\_90\_ascii\_one.zip >

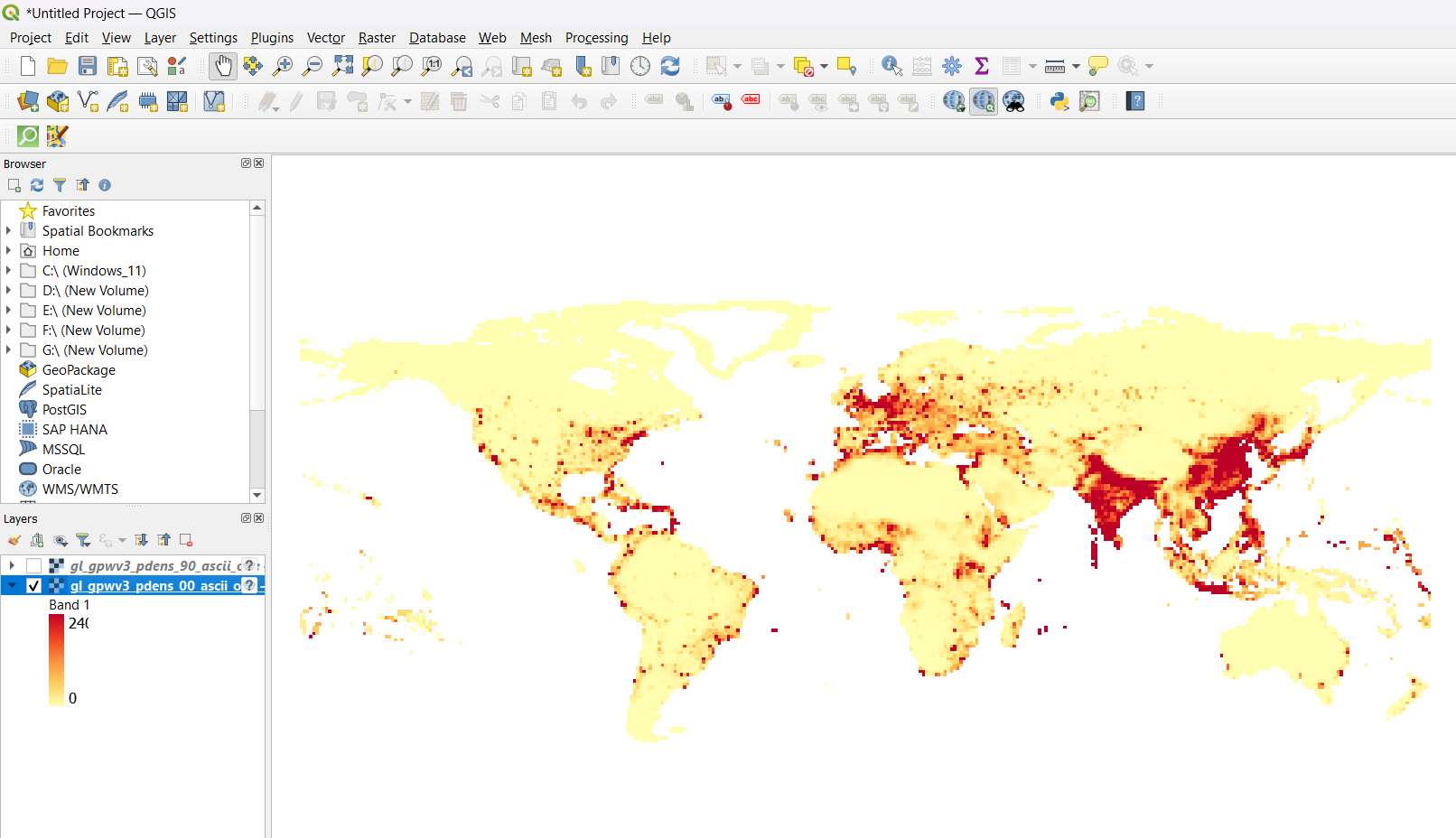


**Raster styling and analysis:**

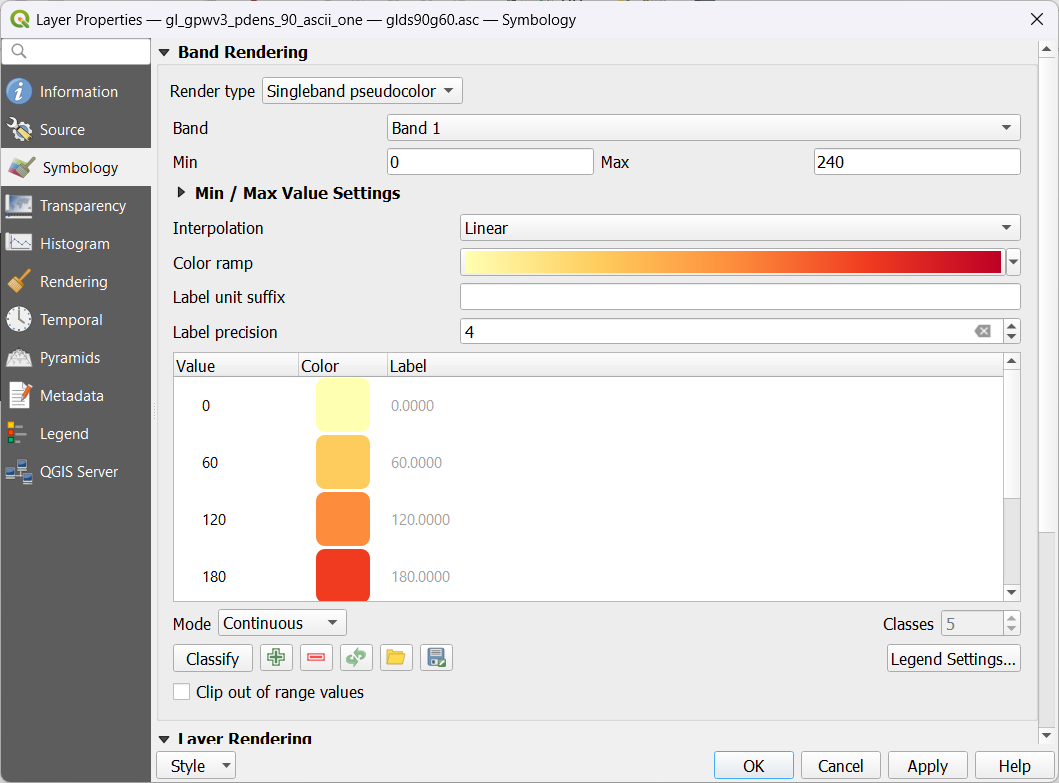
Open Properties of gl\_gpwv3\_pdens\_00\_ascii\_one Layer > Select render type as Singleband pseudocolor > Min : 0 and Max : 240 > select light color ramp > Apply >



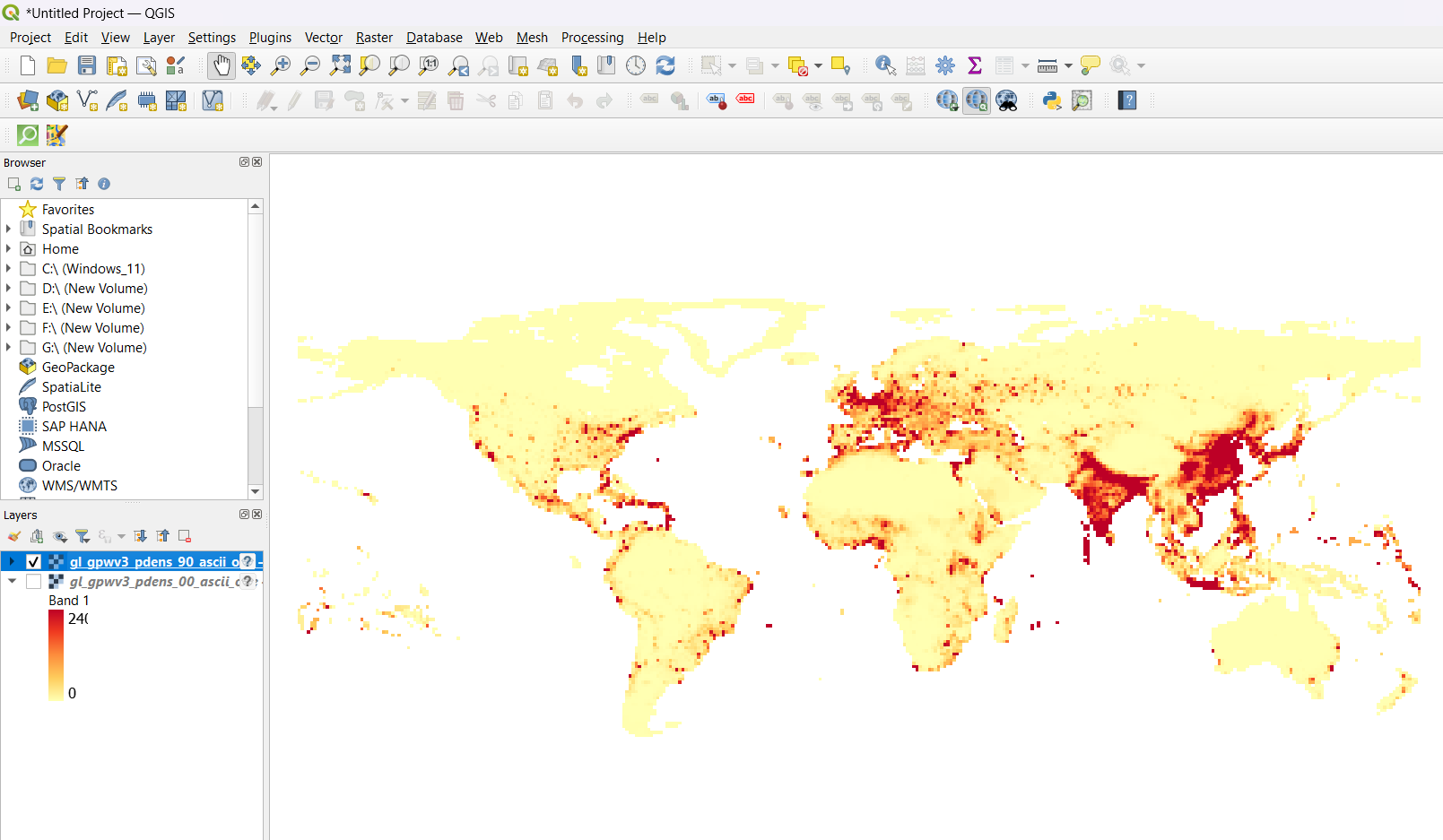
Output After Setting Properties to gl\_gpwv3\_pdens\_00\_ascii\_one Layer >



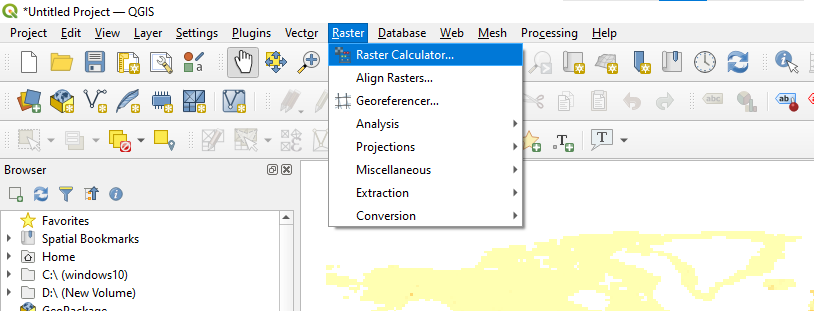
Open Properties of gl\_gpwv3\_pdens\_90\_ascii\_one Layer > Select render type as Singleband pseudocolor > Min : 0 and Max : 240 > select light color ramp > Apply >



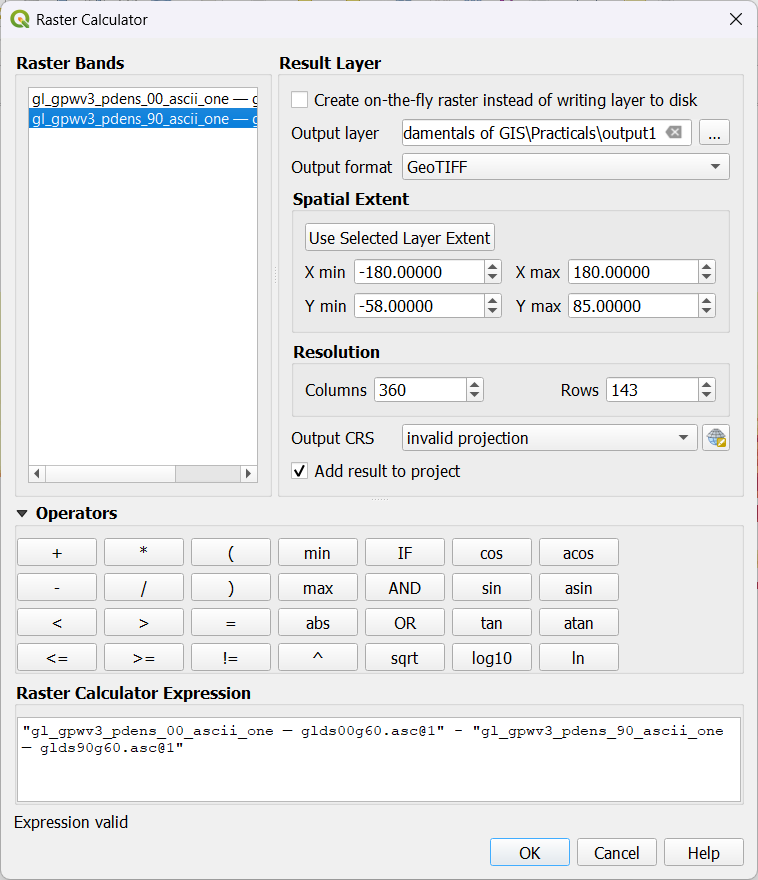
Output After Setting Properties to gl\_gpwv3\_pdens\_90\_ascii\_one Layer >



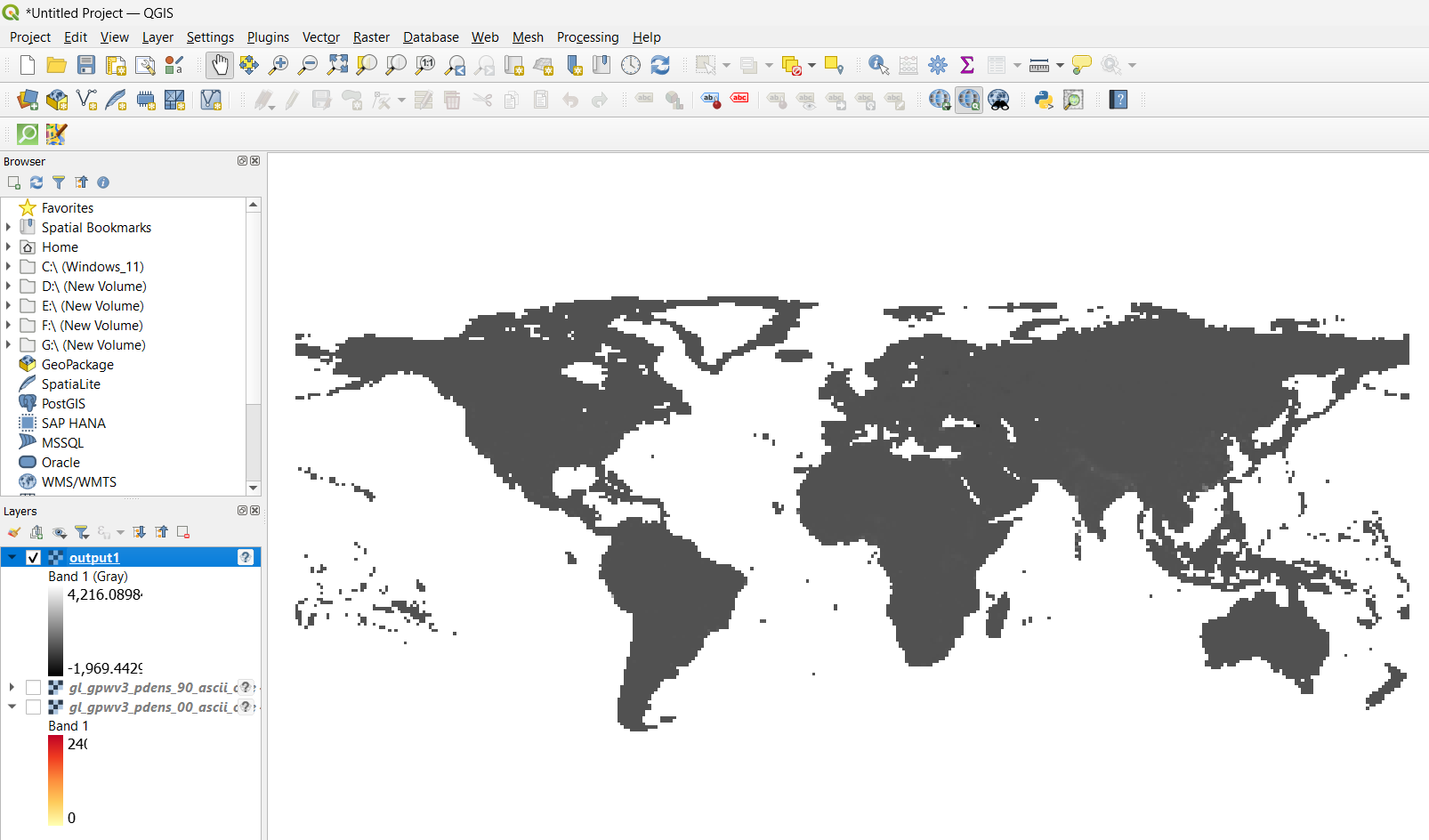
Now Select Raster > Raster Calculator >



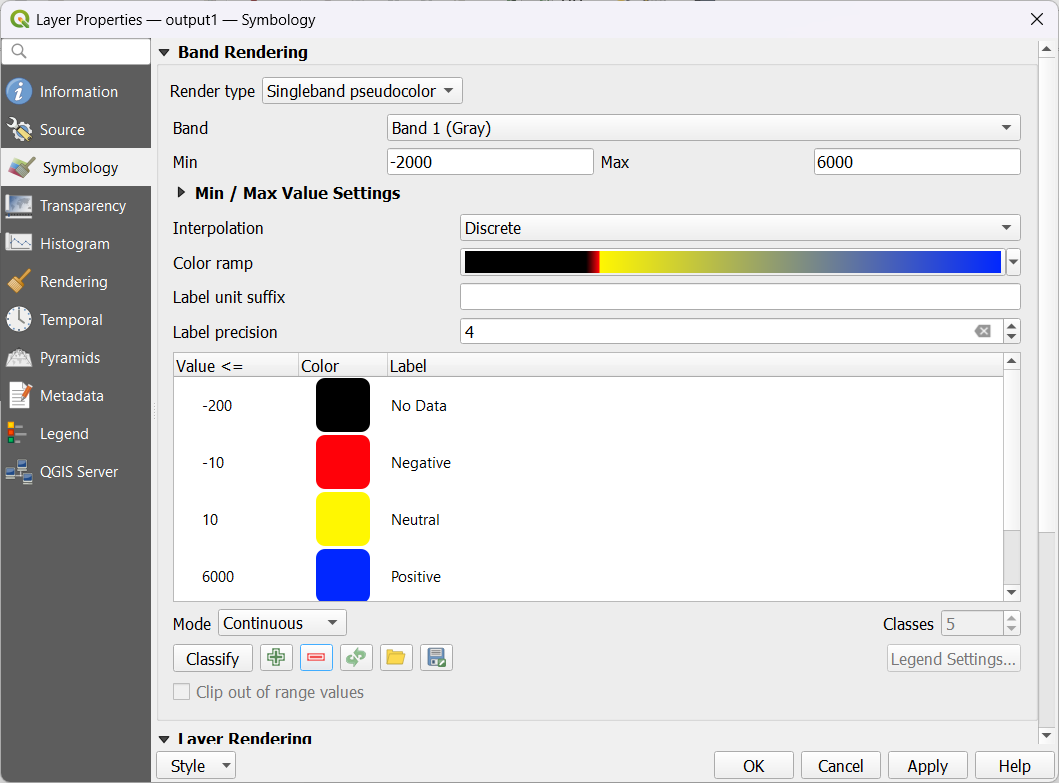
Select gl\_gpwv3\_pdens\_00\_ascii\_one - gl\_gpwv3\_pdens\_90\_ascii\_one for Raster Calculator Expression > Browse the location and file name in Output Layer box > Click Ok >



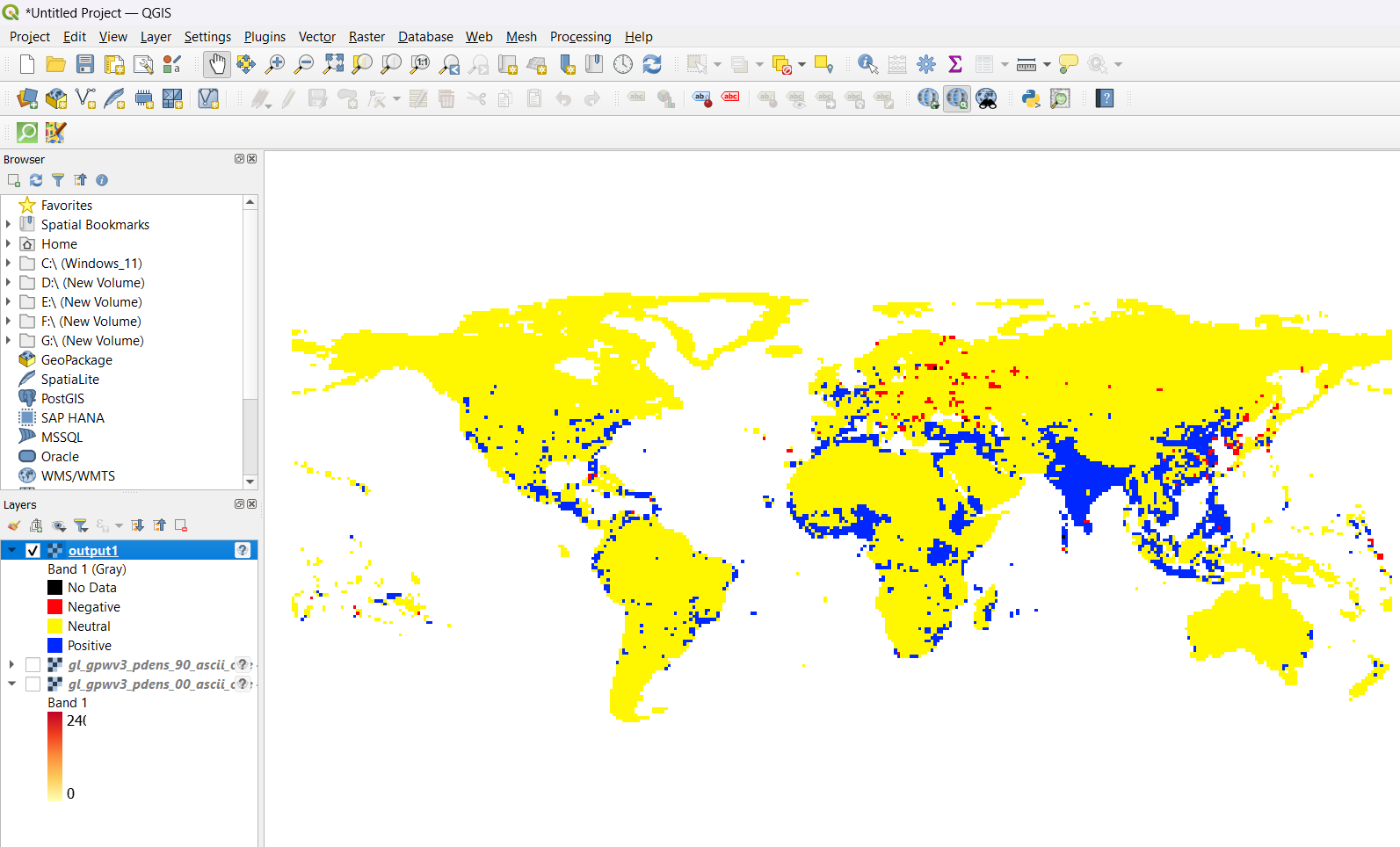
Output after Applying Raster Calculation on two layers >



Change the properties of Output layer > Render Type as Singleband pseudocolor > Min : -2000 and Max : 6000 > Interpolation as Discrete > change color classes as below > Apply >

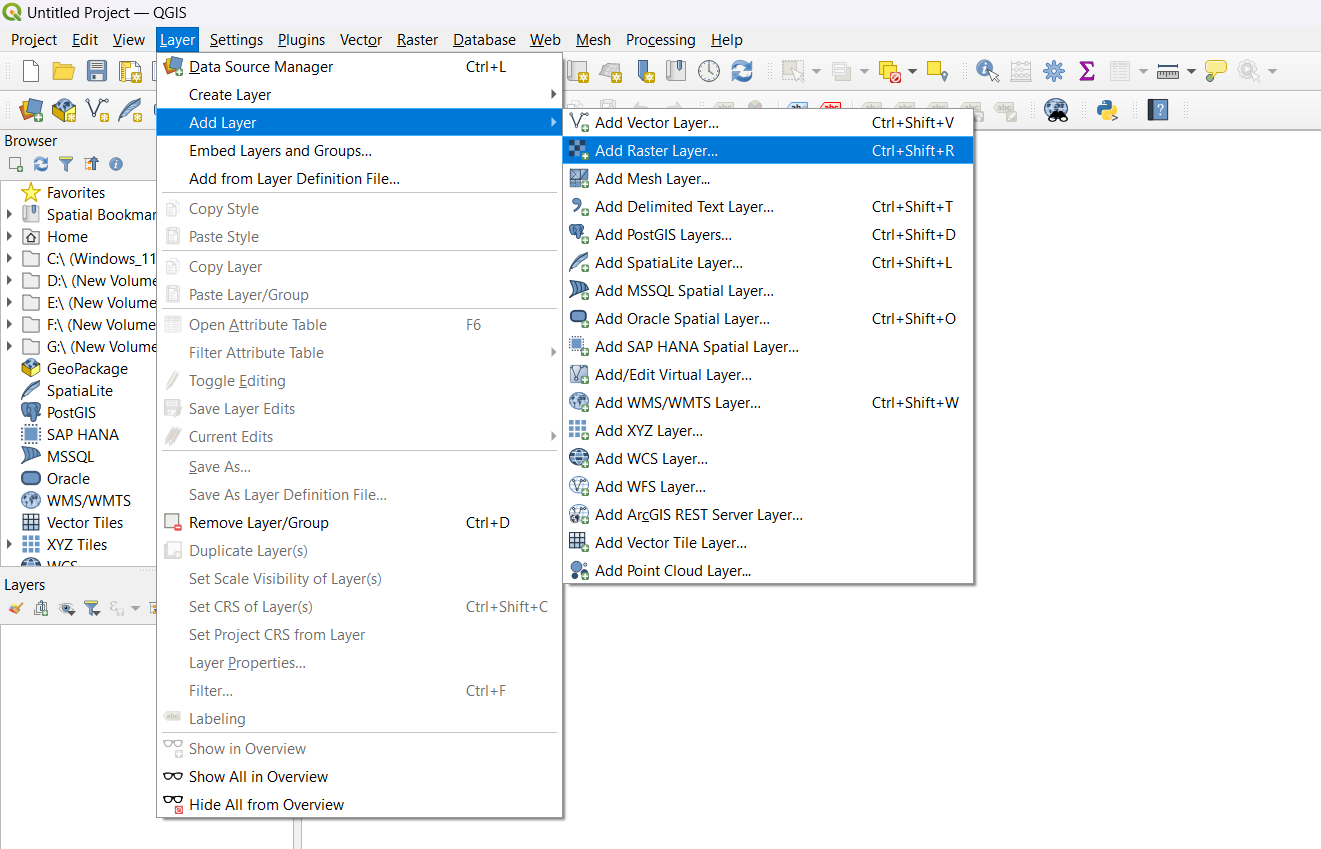


Final Output of Raster Analysis :

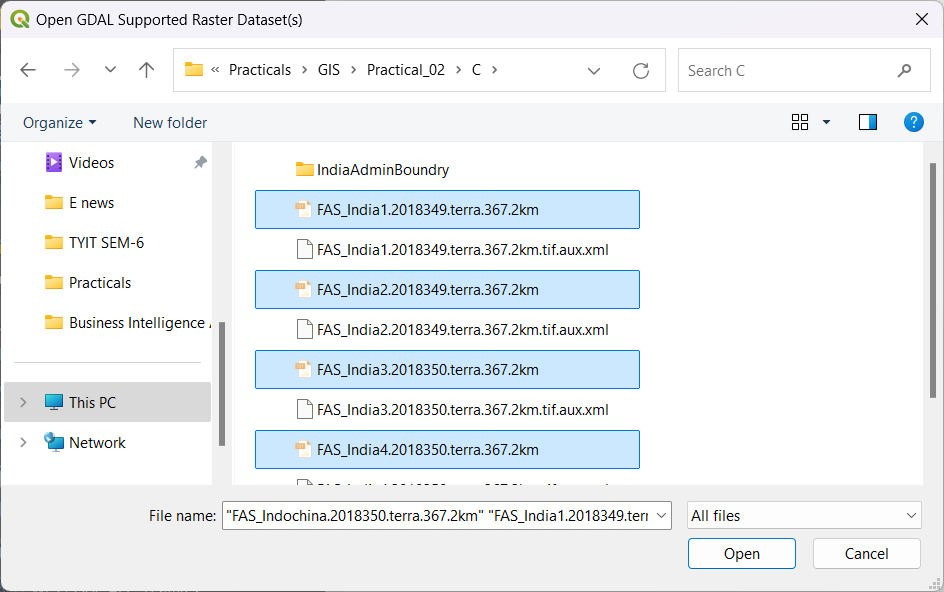


**Raster mosaicking and clipping:**

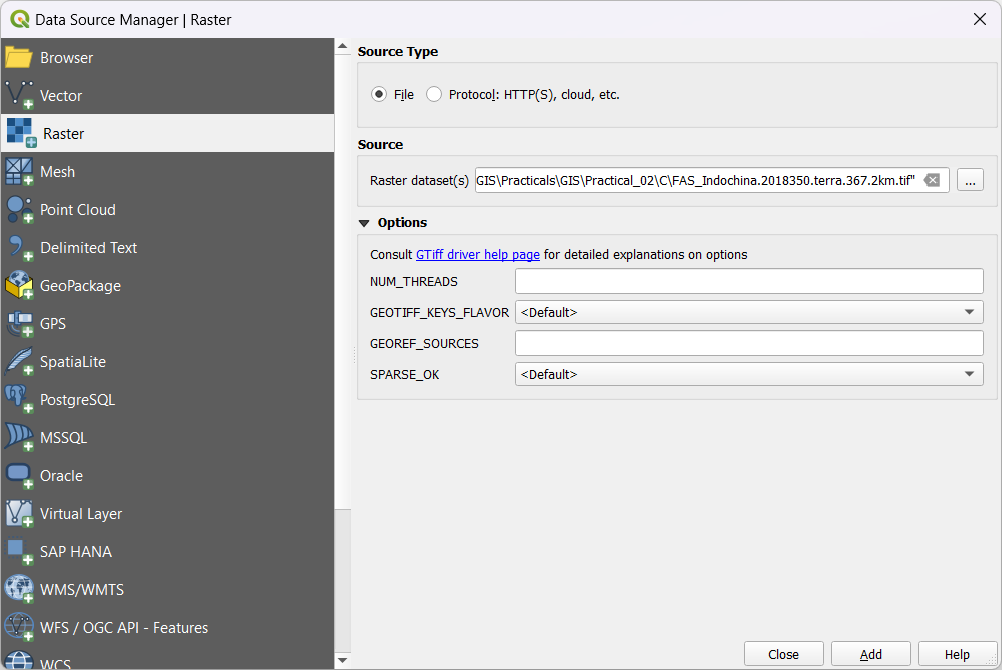
Layer > Add Layer > Add Raster Layer >



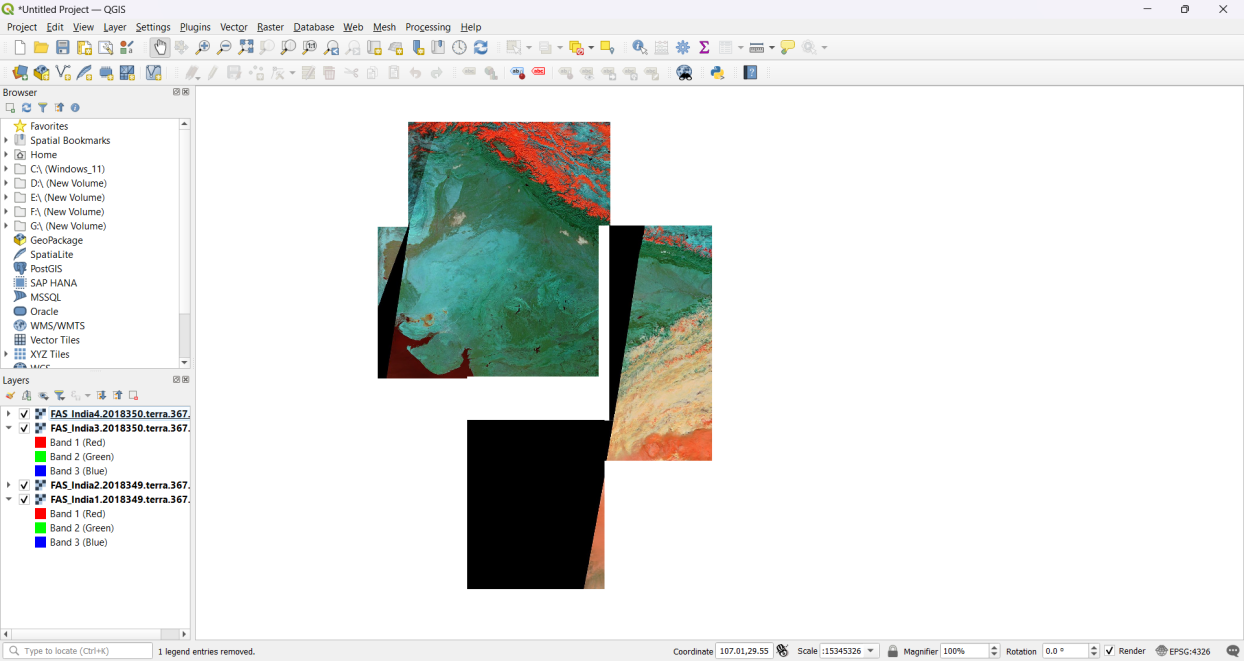
Select all .2km files > Open >



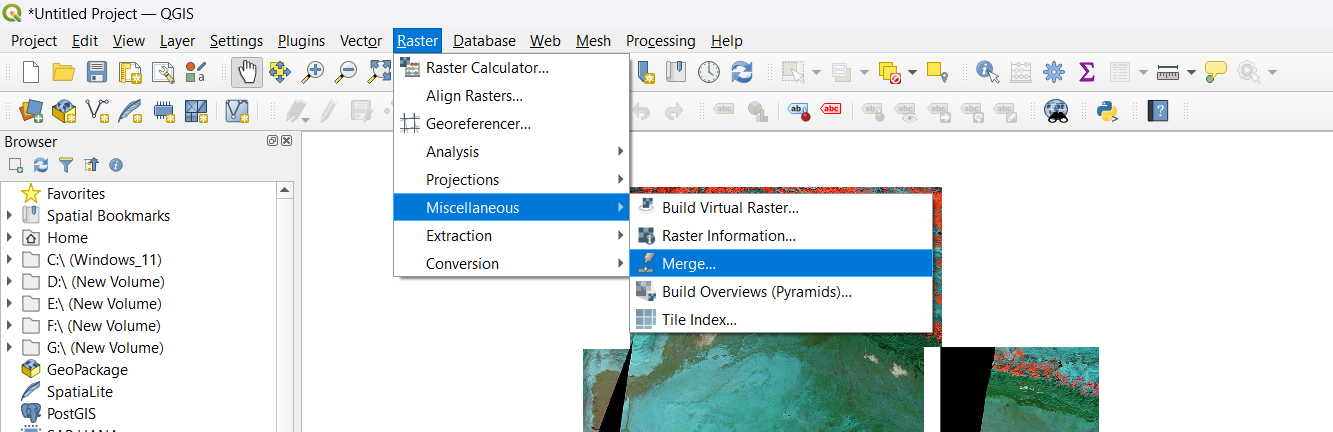
Add the Selected layers >



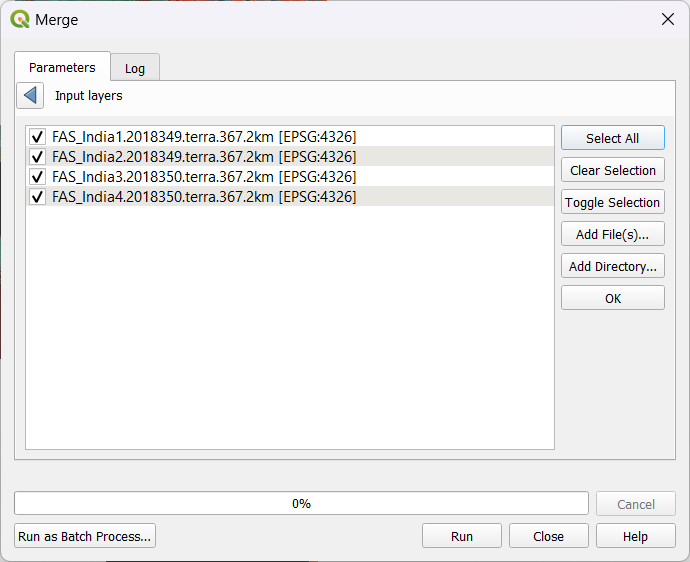
Output of added Layers >



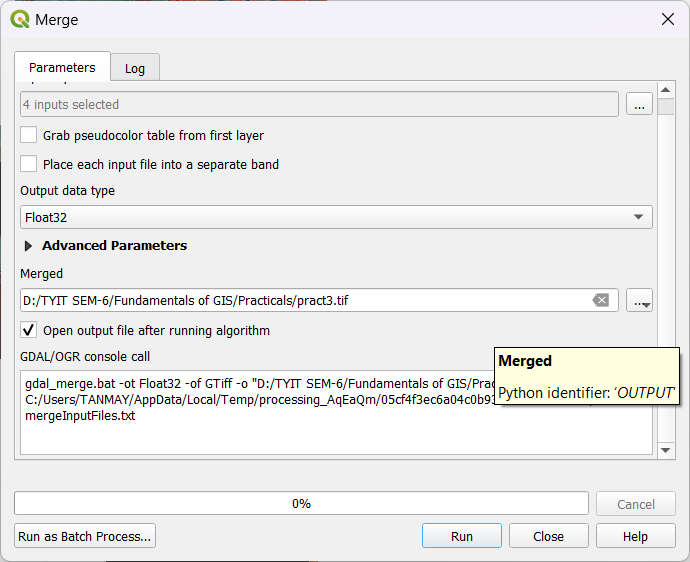
Raster > Miscellaneous > Merge >



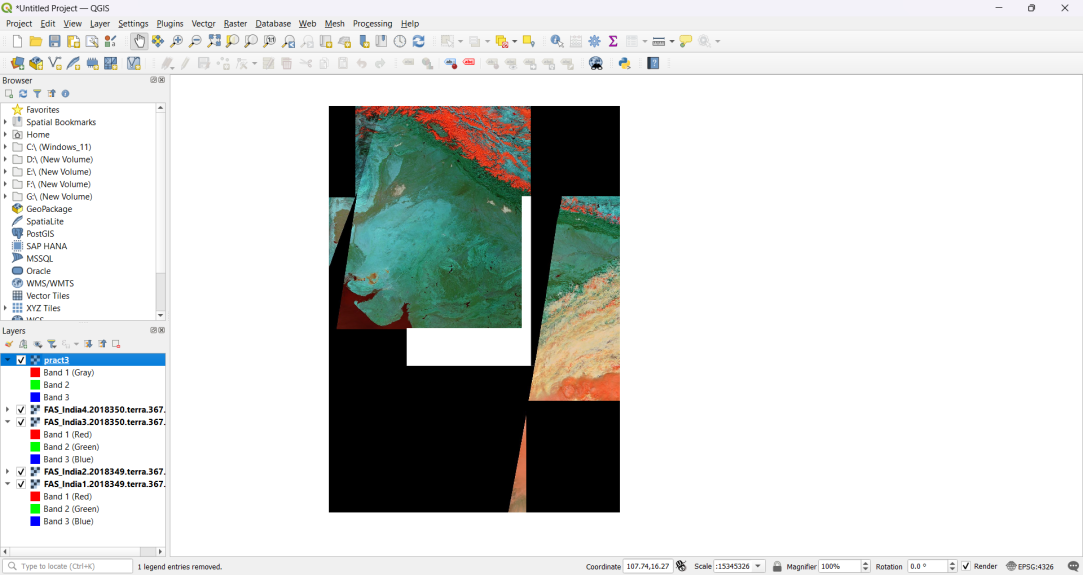
Select All .2km files > Ok >



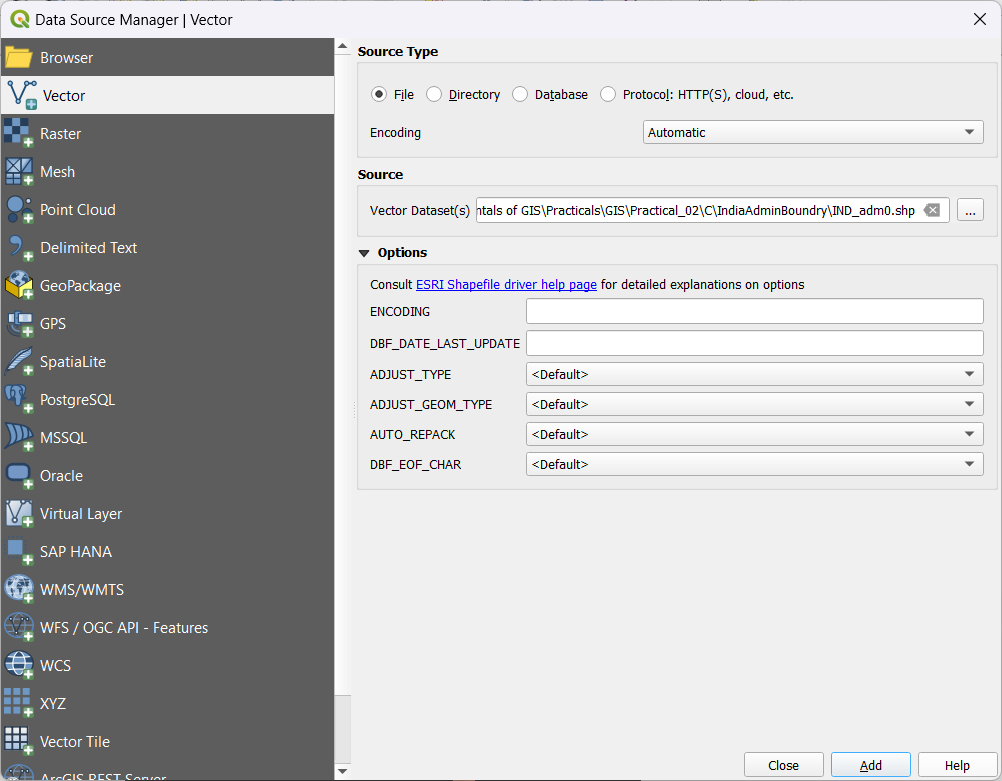
Scroll down and select browse at Merged > Save to File > Run >



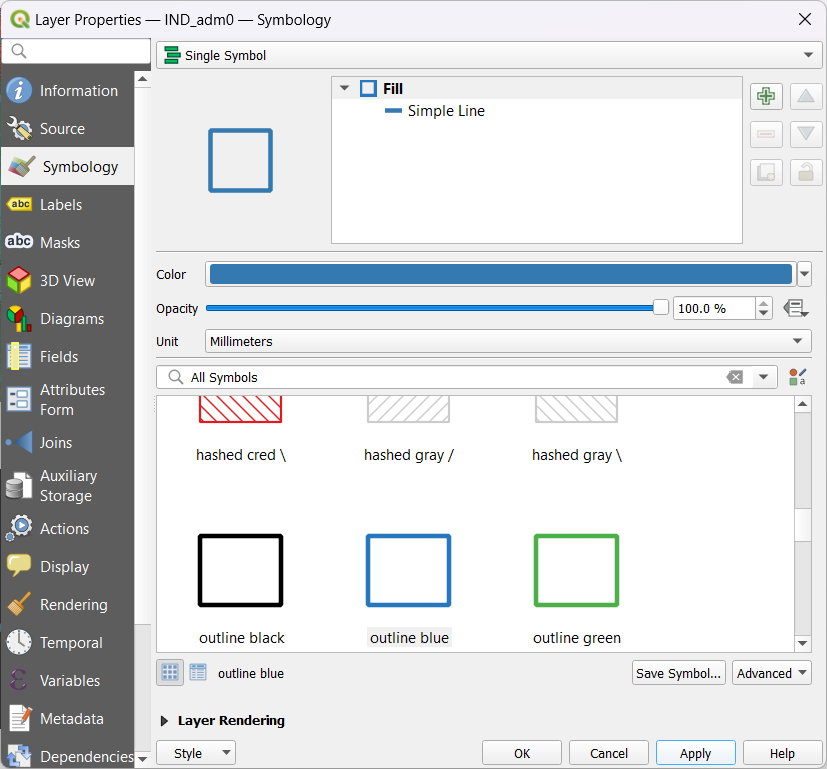
Output After Merging >



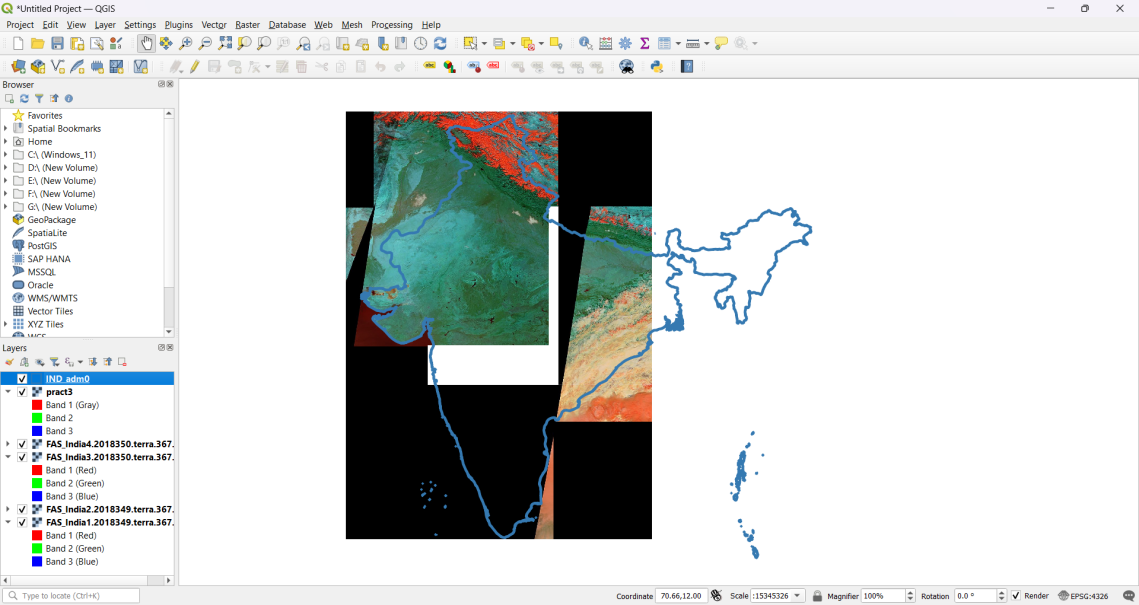
Layer > Add vector layer > Select IND\_adm0.shp > Add >



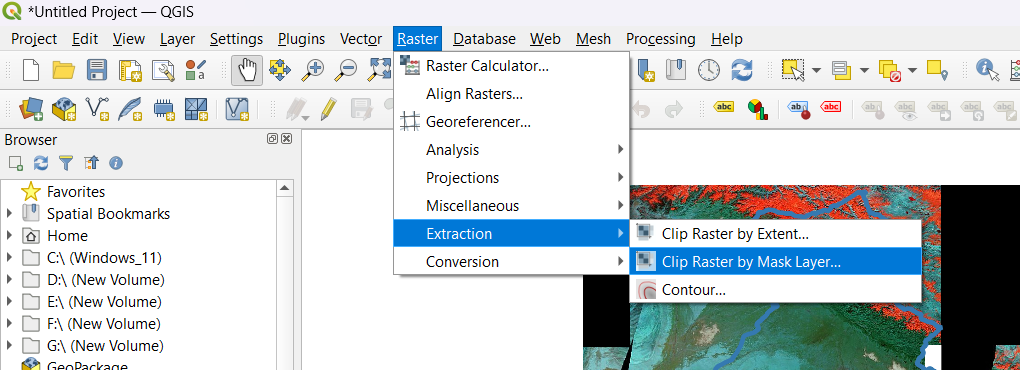
Open Properties > Change Color as Outline blue > Apply >



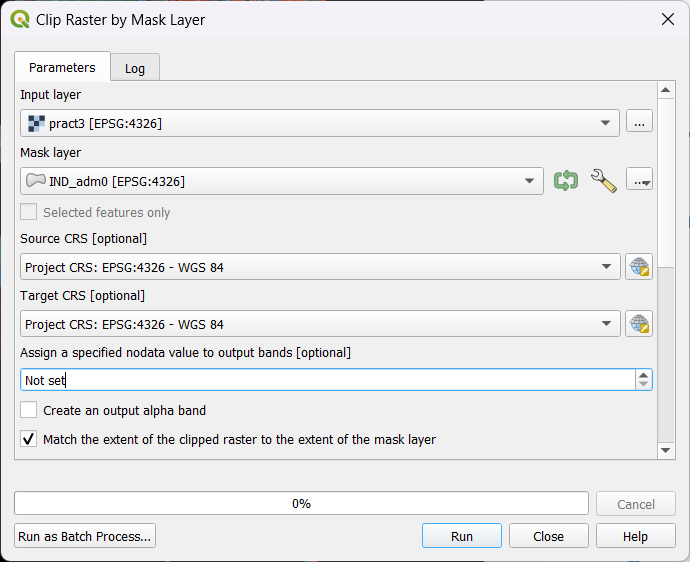
Output After adding IND\_adm0 Layer >



Raster > Extraction > Clip Raster by Mask Layer.. >



Select Saved Merged Layer > Select Source CRS As WGS 84 > Run >



Final Output After Clip raster by Mask Layer >

