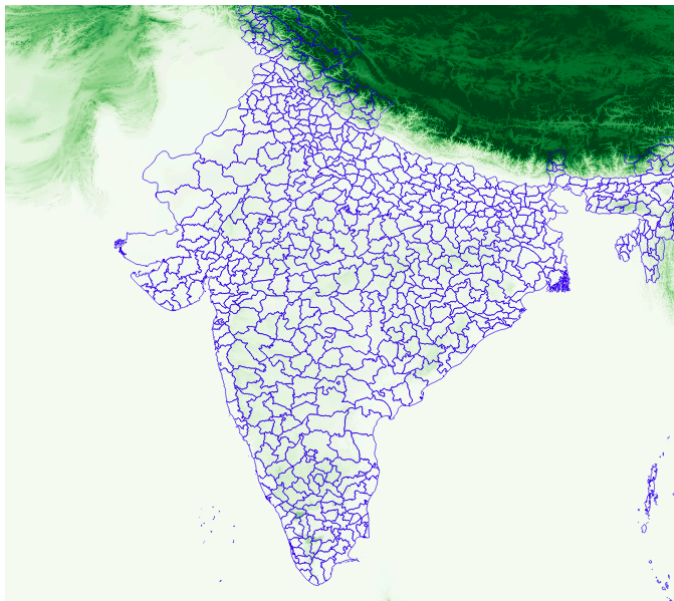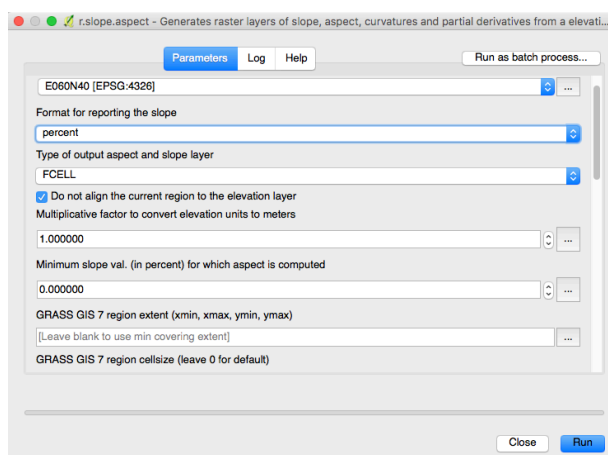# Exercise 3A Zonal Statistics - Elevation:

1. From folder Exercise 3 load shapefile IND_adm2.shp

2. From folder Exercise 3 load E060N40.DEM

3. Check CRS
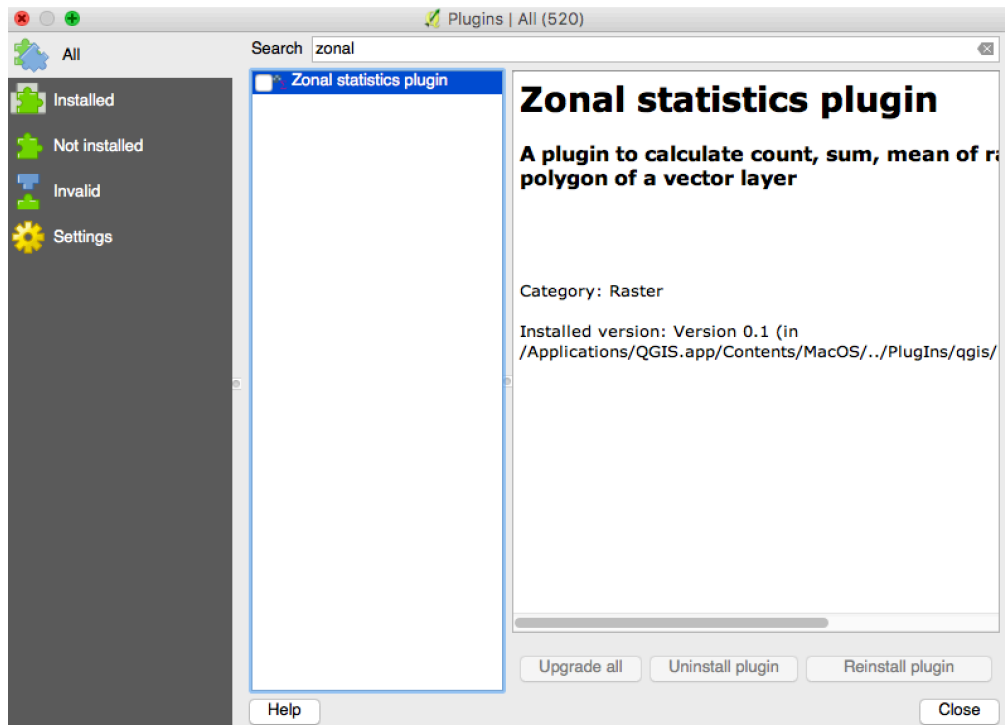
4. Change shapefile IND_adm2.shp to transparent fill

5. Try the hillshade tool
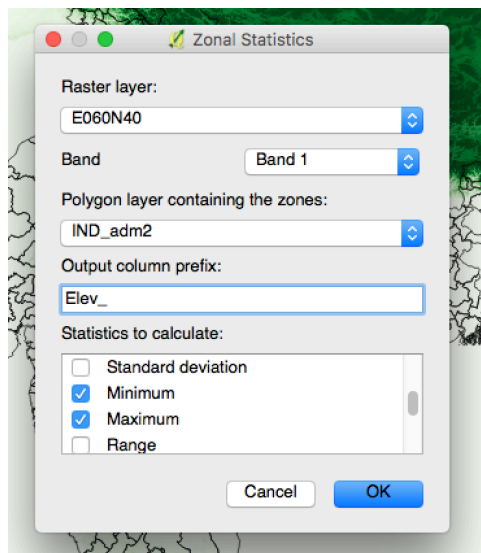   Raster | Analysis | DEM (Terrain models)

6. Try the slope tool

   Processing | r.slope.aspect
   in percent

7. Install Zonal Statistics Plugin

8. Raster | Zonal Statistics | Zonal Statistics
   Pick Statistics that you want to calculate (Mean, Median, Std. Dev., Min., Max. ...)


9. Check the attribute table of IND_adm2.shp

DIY-Exercise 3B Zonal Statistics - Population:

1. From folder Exercise 3 load gpw-v4-population-count_2010.tif

2. Check CRS

3. Calculate Zonal stats (Sum, Mean)

4. Check if the population figures for each state line up with India's total population in 2010 (1,231,000,000 (World Bank).

5. Create a new shapefile of ADM2 regions where the mean elevation is above 1,000m.

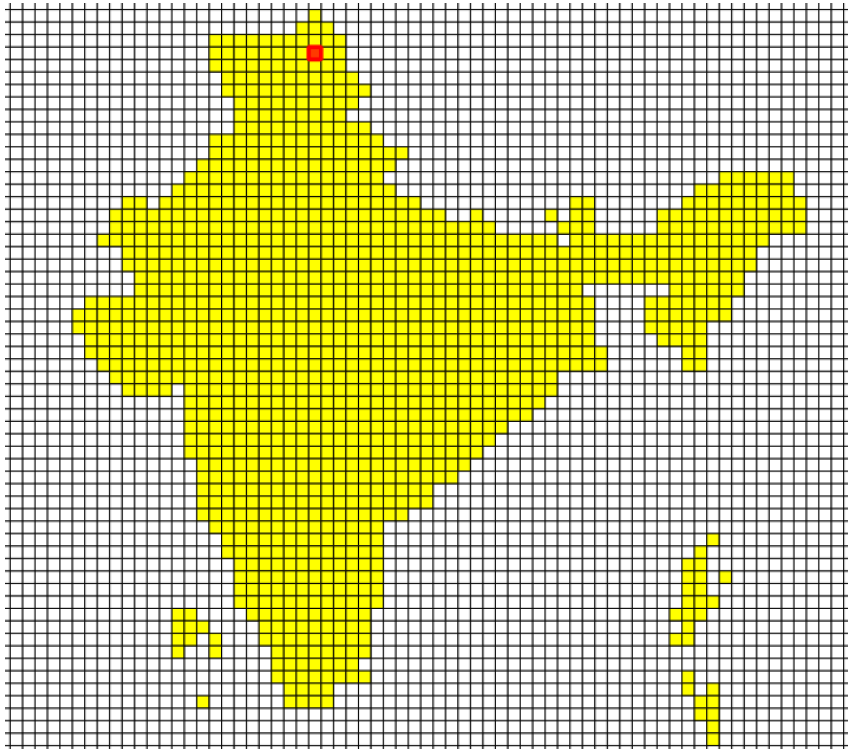6. Calculate the fraction of the Indian population that lives above 1,000.

Exercise 3C – Zonal Statistics at the GRID Level

1. From folder Exercise 3 load shapefile IND_adm2.shp

2. From folder Exercise 3 load priogrid_cell.shp

3. Check CRS

4. Run a Spatial Query

   Vector | Spatial Query |Spatial Query
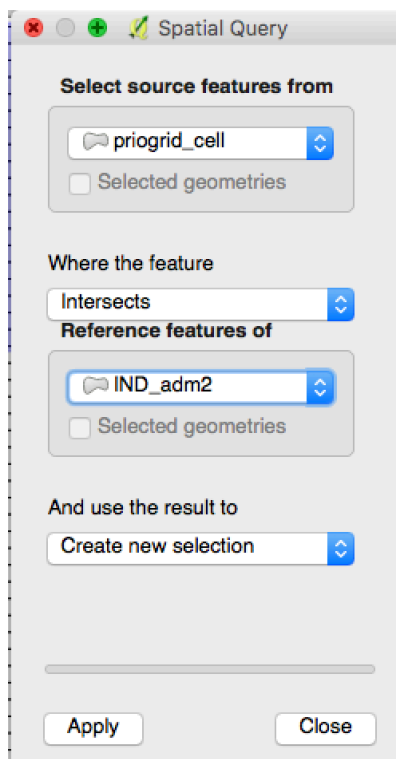
5. Result

6. Save Selected Features as new Shapefile

7. Rmove prio grid and India adm layers

8. From folder Exercise 3\Data\suit\suit load raster file w001001.adf

9. Run Zonal statistics.