OpenJUMP GIS-Exercise

Mock Exercise for acquaintance of OpenJUMP

SELECTION OF A SITE FOR NUCLEAR POWER STATION

Criteria and Conditions:
Site to be a
1. **State Capital**
2. **Not to be within a radius of 800 km from GONDWANAS**
   (Gondwanas are Coal bearing rocks. Keeping a distance from them
   makes the plant worth while.. else you can use coal for power as well)
3. **Sites to be within 10 km from sea coast**
   (A port city has its advantages in importing machinery etc)
4. **Within 3 km distance to a river**
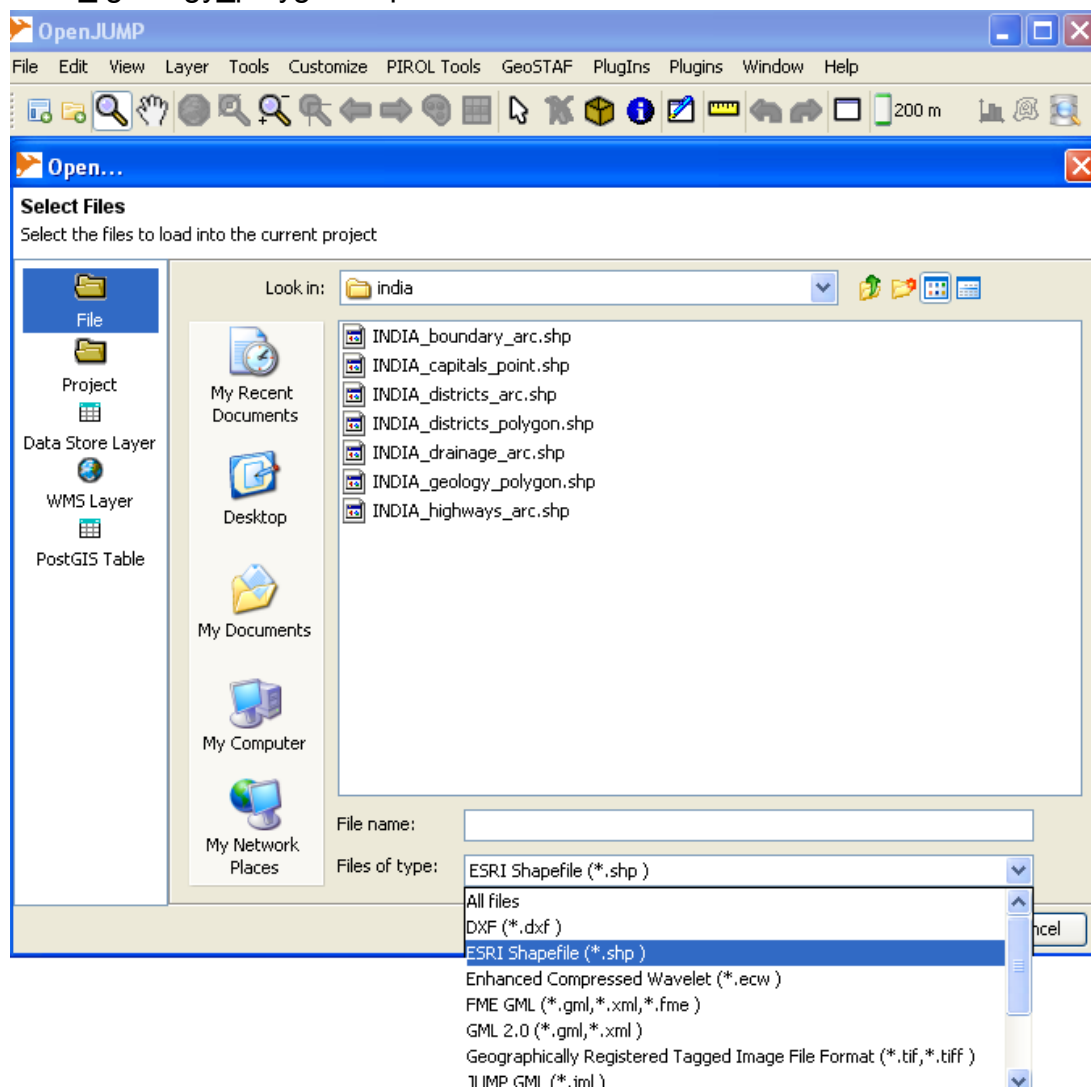   **(you need water for industry)**

To begin the exercise: Goto File>open>click on " file "icon option>goto filetype>select ESRI shape file>Navigate to India folder>double click>select fallowing shape files by using ctrl button
india_capital_point.shp
india _boundary_arc.shp
india _drainage_arc.shp
India_ geology_polygon.shp

Task: Select Gondwana polygons from India_ geology_polygon.shp
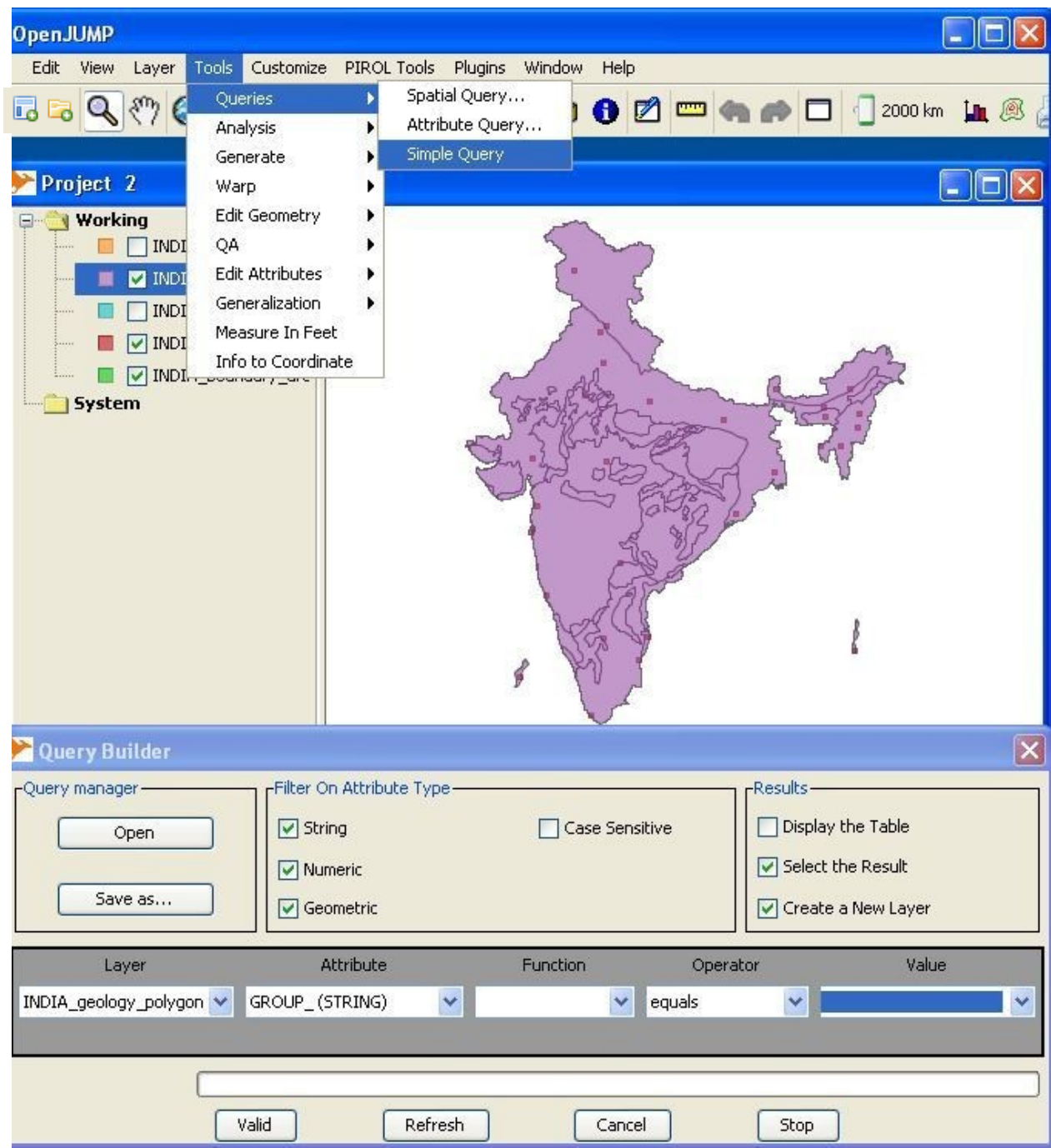select India_ geology_polygon.shp in the layers list,
goto Tools>Queries>Simple Query>
select attribute Group=Gondwana and select create a new layer as below and click Valid

A new layer Gondwana is created out of Geology layer.
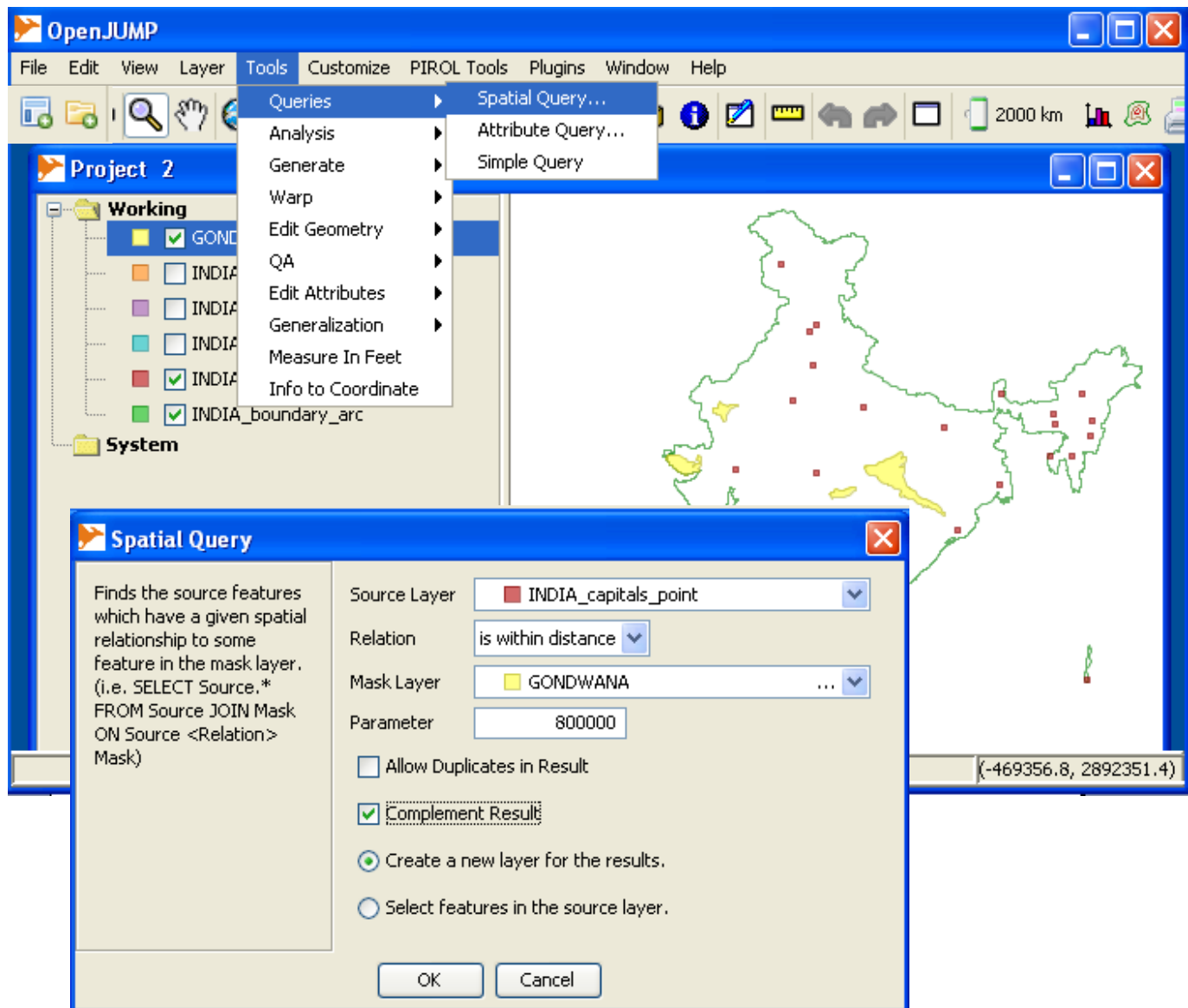Deselect India_ geology_polygon.shp or remove it.

Name the new layer as Gondwana.

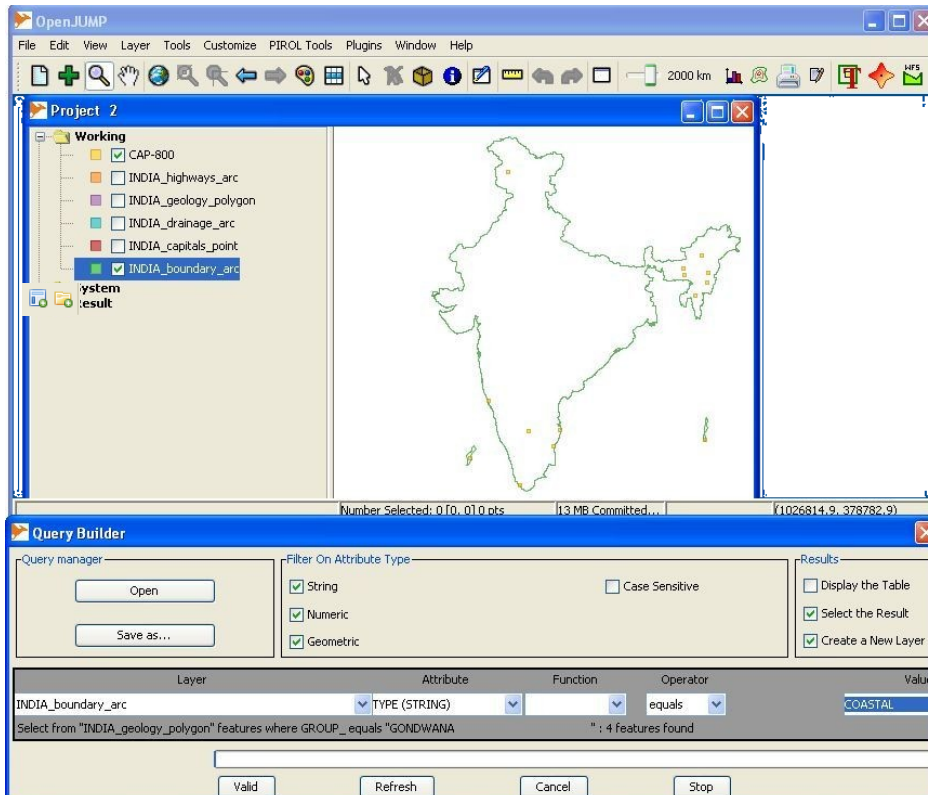**Task: Select Capitals away from GONDWANAS by 800 km.**
Query --> Spatial Query as in the picture below.
Check tick box 'Complement' for result and make layer 'cap-800'. Shift the layer up
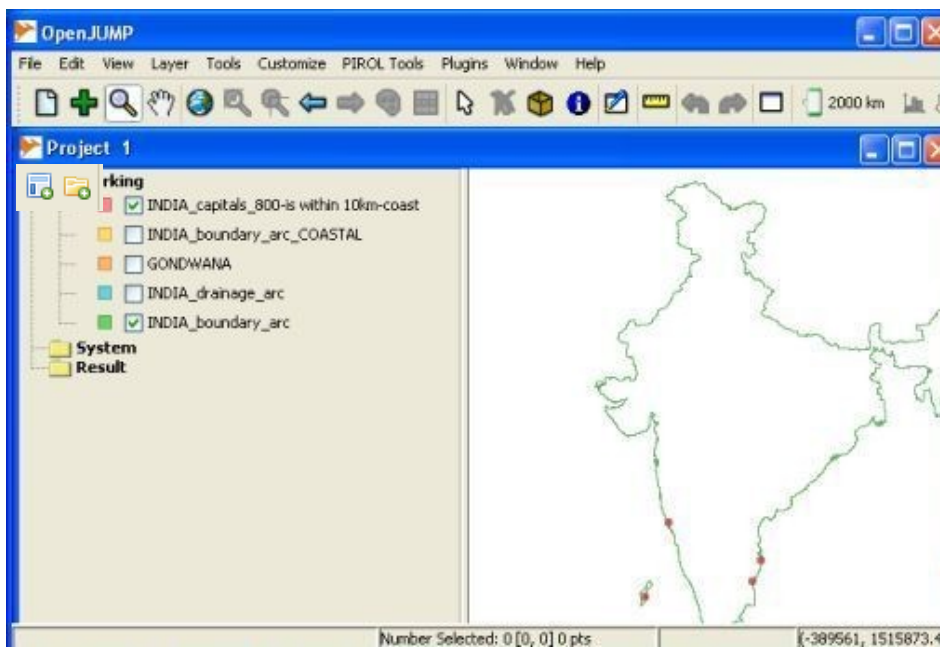

Remove unwanted layers.

Task: To select Coastal boundary from the India_boundary.shp

As you have done for creating GONDWANA layer, use simple query, select 'Type= Coast' in the layer india_boundary_arc', and name the new layer as 'Coast'. Shift the layer up.

Using cap-800 layer as target run a query to find those within 10 km from 'Coast' and make a new layer 'Capitals'. Remember to uncheck compliment results while doing spatial query.

Now that you have done a good job so far, try and figure out how you will select from layer 'Capitals', those falling within 3km from a river. Use style tool to complete rendering and labeling to get the result.

Cheers; Contributors