

**Hands On**

# **Generation of contours, slope and aspect using DEM**

**Training Course on  
'Geospatial Techniques for coastal mapping and monitoring'**

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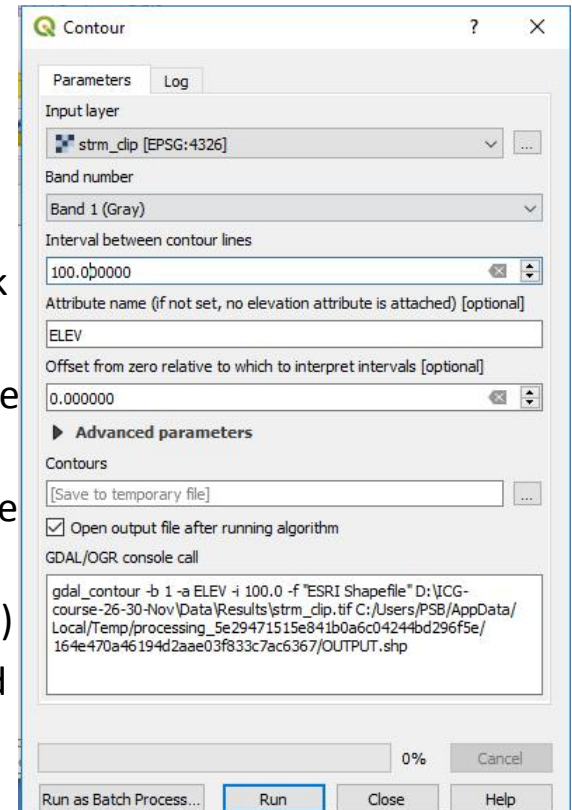
**International Training Centre for operational Oceanography(ITCOcean),**

**INCOIS, Hyderabad, India**

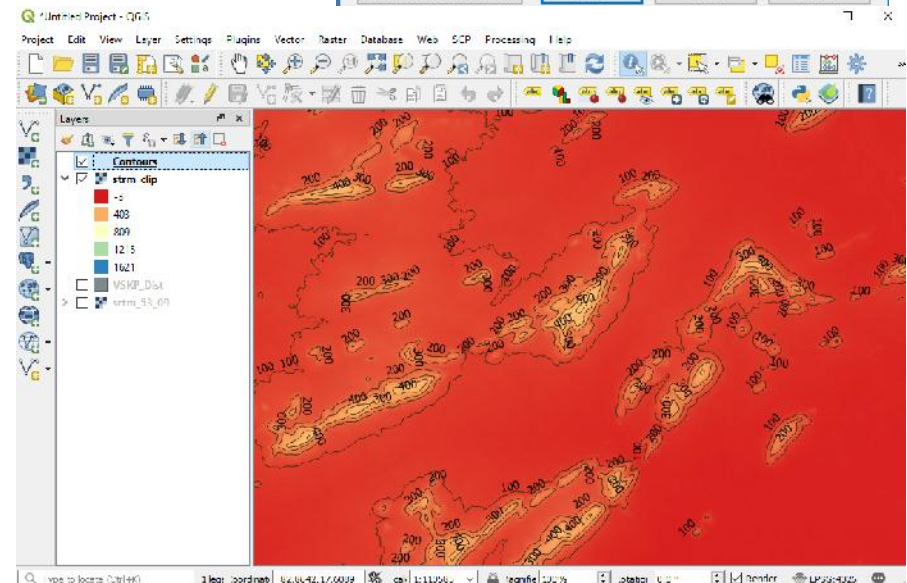


# Generation of contours

- Open the srtm data *srtm\_53\_09.tif* and clip the raster to the Vskp\_boundary extent.
- In the **Processing toolbox** go to **GDAL -> Raster extraction** and click on **Contour**
- In the Contour window, set **Input layer** as **DEM** (previously generate DEM)
- Set **Interval between contour lines** as 100.00 (A contour line for every 100m)
- Attribute name as ELEV (field name of elevation data in DEM raster)
- Set the output names of the contours shapefile in the **Contours** field
- Click Run and the add the generated contours will be added to the window



- Now, go to the Properties of the contour file select the Labels tab
- Select Single labels in the first field and in the Label with field select **ELEV**(field name) and click **Ok**



# Generation of slope and aspect

- Open the SRTM data *srtm\_clip.tif* clipped to our boundary extent in qgis
- In **Processing toolbox** go to **Grass -> Raster** and select **r.slope.aspect** tool
- In the **Elevation** field provide the file *srtm\_clip.tif*
- Select **degrees** in **Format for reporting the slope**
- Select **CELL** in Type of output aspect and slope layer
- Next save only **Slope** and **Aspect** and set remaining all layers to **Skip output**
- Click **Run** and close the tool after the results are completed and added to qgis window

