

# Points in Polygon Analysis

QGIS Tutorials and Tips



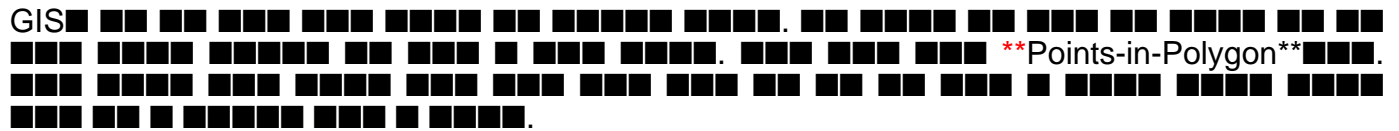
Author

Ujaval Gandhi

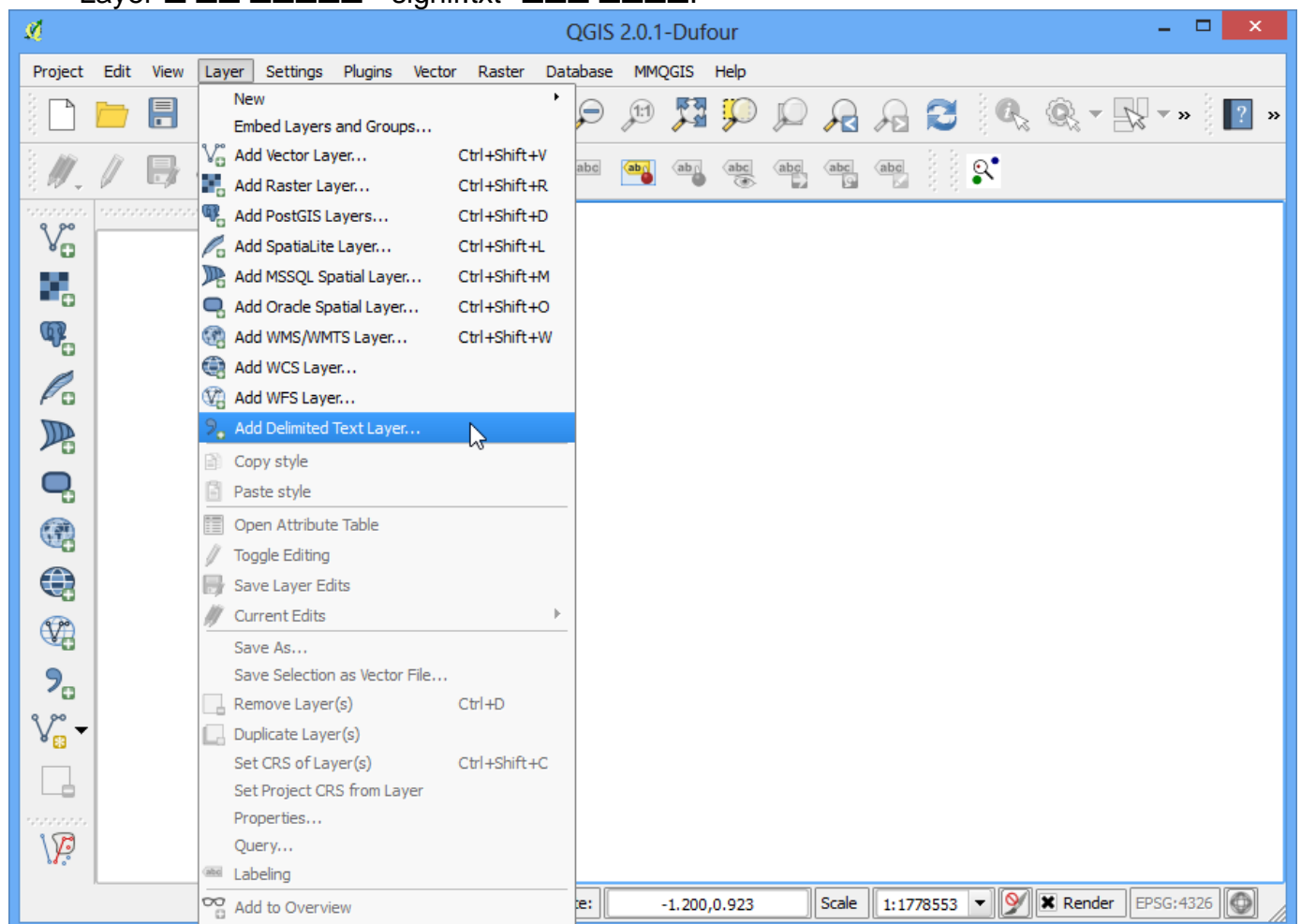
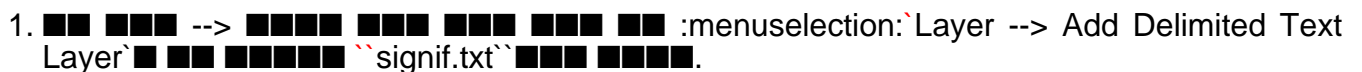
<http://google.com/+UjavalGandhi>

Translations by

SongHyun Choi



■■■ ■■: [NGDC] [NATURALEARTH]



2. **File format**: **Tab**. **X field**: **LONGITUDE**. **Y field**: **LATITUDE**. **OK**.

## Note

QGIS is a free and open source GIS. It is a powerful tool for working with spatial data. It can be used to create maps, analyze data, and manage spatial information. It is a great tool for anyone who needs to work with spatial data.

**Create a Layer from a Delimited Text File**

File Name:  

Layer name:  Encoding:

File format: ☐ CSV (comma separated values) ☒ Custom delimiters ☐ Regular expression delimiter

☐ Comma ☒ Tab ☐ Space ☐ Colon ☐ Semicolon

Other delimiters:  Quote:  Escape:

Record options: Number of header lines to discard:  ☒ First record has field names

Field options: ☐ Trim fields ☐ Discard empty fields ☐ Decimal separator is comma

Geometry definition: ☒ Point coordinates ☐ Well known text (WKT) ☐ No geometry (attribute only table)

X field:  Y field:  ☐ DMS coordinates

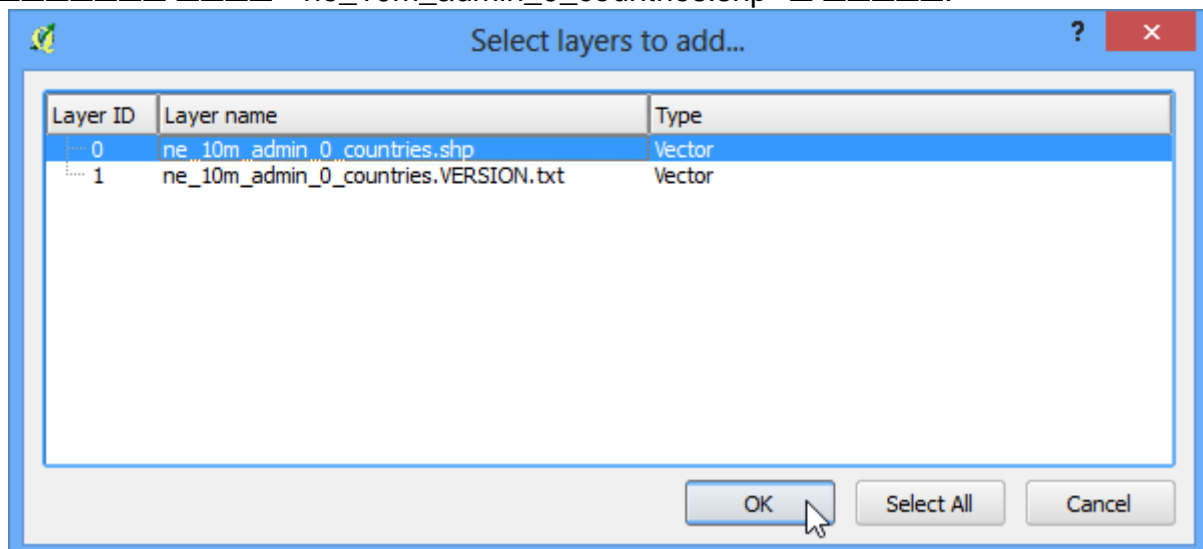
Layer settings: ☒ Use spatial index ☐ Use subset index ☐ Watch file

	I_D	FLAG_TSUNAMI	YEAR	MONTH	DAY	HOUR	MINUTE	SECOND	FOCAL_DEPTH	EQ_MAG_MW	EQ_MAG
1	1		-2150								
2	2	Tsu	-2000								
3	3		-2000						18		7.1
4	8		-1566								
5	11		-1450								

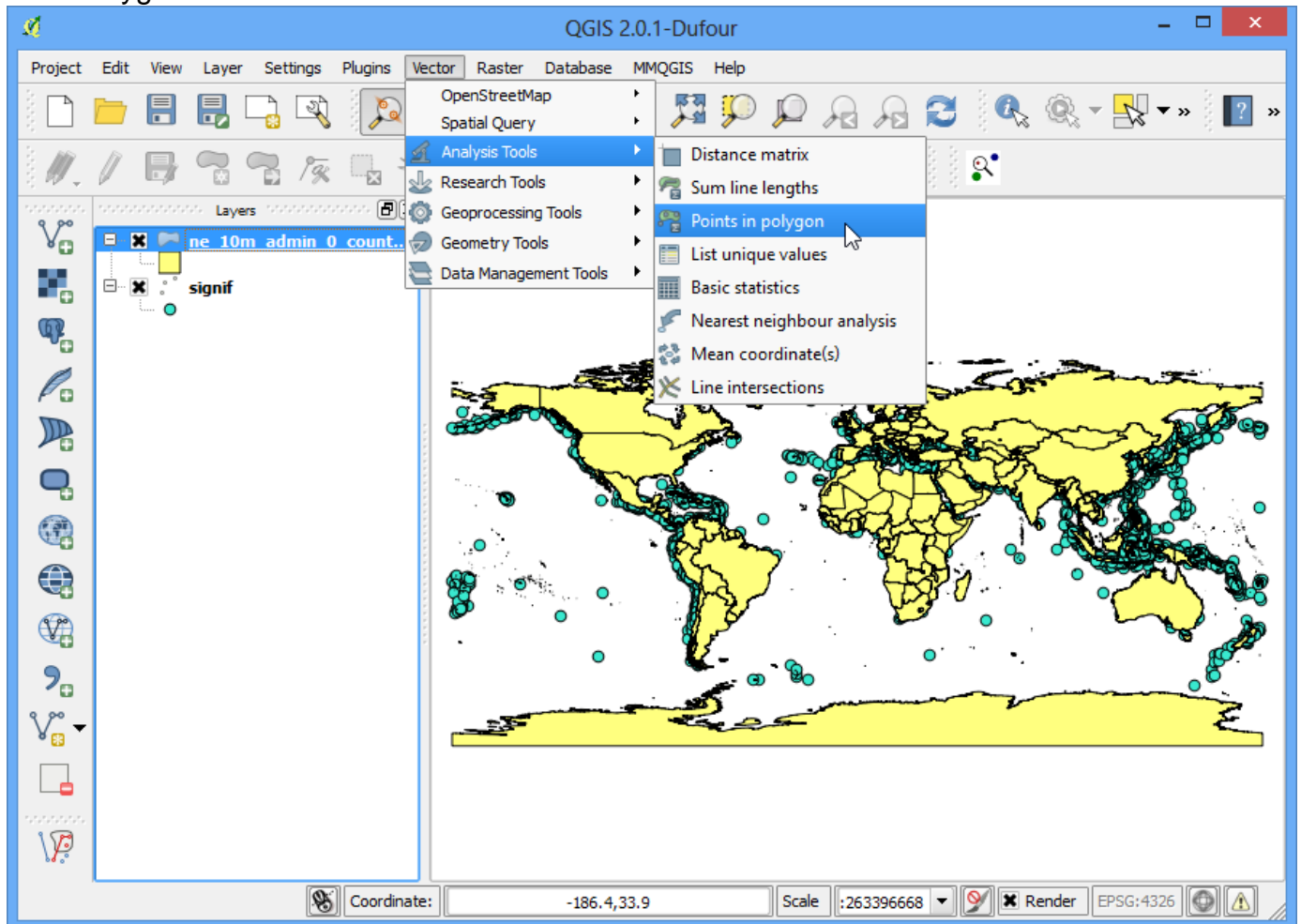
3. **Coordinate Reference System Selector**: **WGS 84 EPSG:436**.



4. ■■■ ■■■■ ■■■■ QGIS ■■■■■. ■■ ■■ ■■■■ ■■■■. ■■ ■■■■ --> ■■ ■■■■ ■■  
 Layer ■ Add Vector Layer` ■■■■■. ■■■■■ ``ne\_10m\_admin\_0\_countries.zip` ■■■■ ■■  
 ■■ :guilabel:`Open` ■■■■■. ■■■■ ■■■■ ■■ :guilabel:`Select layers to add...`  
 ■■■■■■ ■■■■ ``ne\_10m\_admin\_0\_countries.shp` ■■■■■■.



5. **Vector --> Analysis Tools --> Points in Polygon** :menuselection: `Vector --> Analysis Tools --> Point in Polygon`.

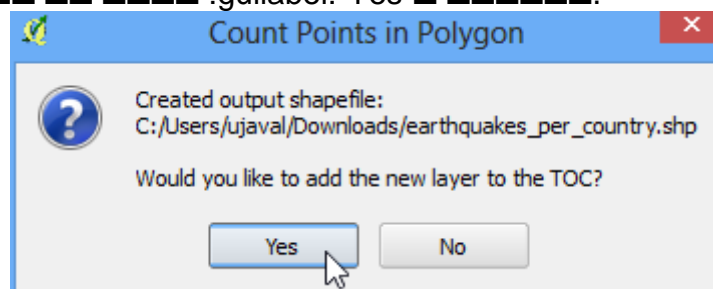


6. **earthquake\_per\_coutry.shp** :guilabel: `OK`.

### Note

OK. QGIS 10.

7. **TOC** :guilabel: `Yes`.



8. **TOC** :guilabel: `Open Attribute Table`.



9. ■■■ ■■■■■ ``PNTCNT``■■■ ■■■■ ■■■■ ■■■■ ■■■■ ■■■■. ■■■■ ■■■■ ■■■■ ■■■■  
 ■■■■■■■■■■ ■■■■ ■■■■ ■■■■ ■■■■.



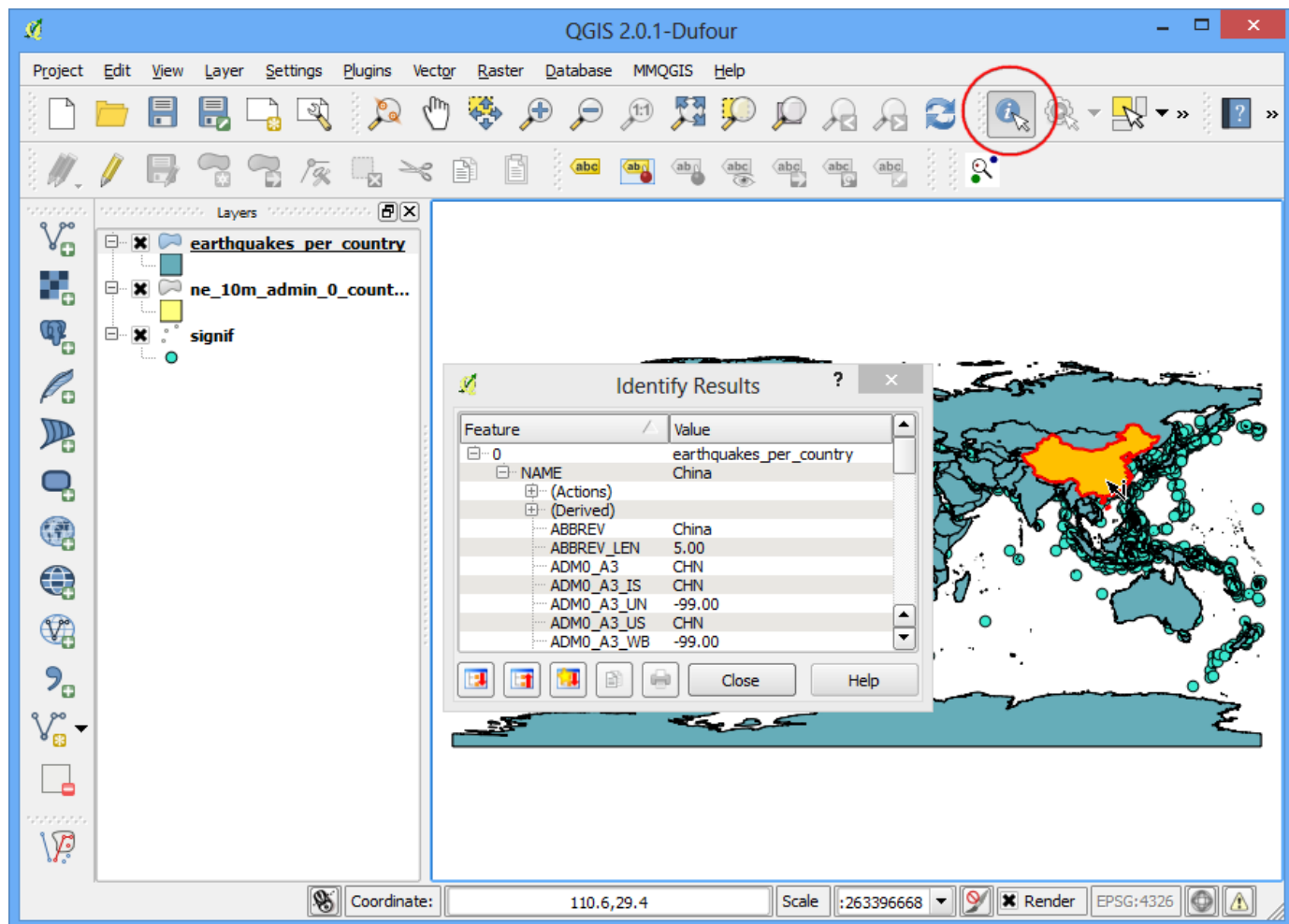
Attribute table - earthquakes\_per\_country :: Features total: 255, filtered: 255, selected: 1

	REGION_WB	NAME_LEN	LONG_LEN	ABBREV_LEN	TINY	HOMEPART	PNTCNT
42	East Asia & Pac...	5.00	5.00	5.00	-99.00	1.00	540.0000000000...
108	Middle East & ...	4.00	4.00	4.00	-99.00	1.00	345.0000000000...
112	Europe & Centr...	5.00	5.00	5.00	-99.00	1.00	263.0000000000...
230	Europe & Centr...	6.00	6.00	4.00	-99.00	1.00	259.0000000000...
146	Latin America ...	6.00	6.00	4.00	-99.00	1.00	157.0000000000...
238	North America	13.00	13.00	6.00	-99.00	1.00	152.0000000000...
102	East Asia & Pac...	9.00	9.00	5.00	-99.00	1.00	129.0000000000...
90	Europe & Centr...	6.00	6.00	6.00	-99.00	1.00	119.0000000000...
41	Latin America ...	5.00	5.00	5.00	-99.00	1.00	111.0000000000...
177	Latin America ...	4.00	4.00	4.00	-99.00	1.00	110.0000000000...
179	East Asia & Pac...	11.00	11.00	5.00	-99.00	1.00	101.0000000000...
116	East Asia & Pac...	5.00	5.00	5.00	-99.00	1.00	87.0000000000...
104	South Asia	5.00	5.00	5.00	-99.00	1.00	70.0000000000...
50	Latin America ...	8.00	8.00	4.00	-99.00	1.00	64.0000000000...
1	South Asia	11.00	11.00	4.00	-99.00	1.00	57.0000000000...
67	Latin America ...	7.00	7.00	4.00	-99.00	1.00	52.0000000000...
232	East Asia & Pac...	6.00	6.00	6.00	-99.00	1.00	46.0000000000...
4	Europe & Centr...	7.00	7.00	4.00	-99.00	1.00	44.0000000000...
174	South Asia	8.00	8.00	4.00	-99.00	1.00	42.0000000000...
66	Middle East & ...	7.00	7.00	4.00	-99.00	1.00	40.0000000000...
77	Europe & Centr...	6.00	6.00	3.00	-99.00	1.00	38.0000000000...
242	Latin America	9.00	9.00	4.00	-99.00	1.00	38.0000000000...

Show All Features

11. QGIS 是一个开源的地理信息系统。它允许用户查看、编辑和分析地理数据。用户可以通过 :guilabel:`Identify` 工具来识别地图上的要素。例如，用户可以选择一个要素，然后查看其属性。在属性表中，用户可以看到要素的 ID、名称、长度等信息。例如，对于中国，属性表中会显示 ID 为 1，名称为 China，长度为 11.00。





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