

# Points in Polygon Analysis

## QGIS Tutorials and Tips



Author

Ujaval Gandhi

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

Translations by

SongHyun Choi

□□□□□□ □ □□

GIS□ □□ □□ □□□ □□□ □□ □□□□ □□□□. □□ □□□□ □□ □□□ □□ □□□□ □□ □□ □□□ □□□□ □□ □□□ □ □□□ □□□□. □□□ □□□ □□□ **\*\*Points-in-Polygon\*\***□□□□. □□□ □□□□ □□□ □□□ □□□ □□□ □□ □□ □□ □□ □□ □□ □□□ □□□□ □□□□ □□□ □□ □ □□□□□ □□□ □ □□□□□.

□□ □□

□□□□ □□□ □□ □□ □□□□□□ □□□□ □□□□, □□ □□□ □□ □□ □□□ □□□ □□□□□ □□□□□ □□□□□.

□□□□ □□

□□ □□□ □□□ □□□□ □□□□□ NOAA's National Geophysical Data Center□ `Significant Earthquake Database <<http://www.ngdc.noaa.gov/nndc/struts/form?t=101650&s=1&d=1>>`\_□ □□□□□□. `tab-delimited earthquake data <[http://www.ngdc.noaa.gov/nndc/struts/results?type\\_0=Exact&query\\_0=\\$ID&t=101650&s=13&d=189&dfn=signif.txt](http://www.ngdc.noaa.gov/nndc/struts/results?type_0=Exact&query_0=$ID&t=101650&s=13&d=189&dfn=signif.txt)>`\_□ □□□□ □□□□.

Natural Earth□ Admin 0 – Countries □□□□□ □□□ □□□□□. `countries <[http://www.naturalearthdata.com/http://www.naturalearthdata.com/download/10m/cultural/ne\\_10m\\_admin\\_0\\_countries.zip](http://www.naturalearthdata.com/http://www.naturalearthdata.com/download/10m/cultural/ne_10m_admin_0_countries.zip)>`\_□ □□□□ □□□□.

For convenience, you may directly download a copy of the dataset from the link below:

[signif.txt](#)

[ne\\_10m\\_admin\\_0\\_countries.zip](#)

□□□ □□: [NGDC] [NATURALEARTH]

□□

1. □□ □□□ --> □□□□ □□□ □□□ □□□ □□ :menuselection: `Layer --> Add Delimited Text Layer` □ □□ □□□□□ `signif.txt` `□□□ □□□□□.







- The earthquake point layer would now be loaded and displayed in QGIS. Let's also open the Countries layer. Go to Layer > Add Vector Layer. Browse to the downloaded *ne\_10m\_admin\_0\_countries.zip* file and click Open. Select the *ne\_10m\_admin\_0\_countries.shp* as the layer in the Select layers to add... dialog.



5. □□ □□ --> □□ □□ --> □□□□ □ :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: 0

	REGION_WB	NAME_LEN	LONG_LEN	ABBREV_LEN	TINY	HOMEPART	PNTCNT
0	Latin America ...	5.00	5.00	5.00	4.00	-99.00	0.000000000000...
1	South Asia	11.00	11.00	4.00	-99.00	1.00	57.000000000000...
2	Sub-Saharan Af...	6.00	6.00	4.00	-99.00	1.00	0.000000000000...
3	Latin America ...	8.00	8.00	4.00	-99.00	-99.00	0.000000000000...
4	Europe & Centr...	7.00	7.00	4.00	-99.00	1.00	44.000000000000...
5	Europe & Centr...	5.00	13.00	5.00	5.00	-99.00	0.000000000000...
6	Europe & Centr...	7.00	7.00	4.00	5.00	1.00	0.000000000000...
7	Middle East & ...	20.00	20.00	6.00	-99.00	1.00	0.000000000000...
8	Latin America ...	9.00	9.00	4.00	-99.00	1.00	20.000000000000...
9	Europe & Centr...	7.00	7.00	4.00	-99.00	1.00	14.000000000000...
10	East Asia & Pac...	14.00	14.00	9.00	3.00	-99.00	0.000000000000...
11	Antarctica	10.00	10.00	4.00	-99.00	1.00	0.000000000000...
12	East Asia & Pac...	23.00	27.00	7.00	-99.00	-99.00	0.000000000000...
13	Sub-Saharan Af...	22.00	35.00	10.00	2.00	-99.00	0.000000000000...
14	Latin America ...	17.00	19.00	6.00	4.00	1.00	0.000000000000...
15	East Asia & Pac...	9.00	9.00	4.00	-99.00	1.00	9.000000000000...
16	Europe & Centr...	7.00	7.00	5.00	-99.00	1.00	4.000000000000...
17	Europe & Centr...	10.00	10.00	4.00	-99.00	1.00	15.000000000000...
18	Sub-Saharan Af...	7.00	7.00	4.00	-99.00	1.00	1.000000000000...
19	Europe & Centr...	7.00	7.00	5.00	-99.00	1.00	2.000000000000...
20	Sub-Saharan Af...	5.00	5.00	5.00	-99.00	1.00	1.000000000000...
21	Sub-Saharan Af...	12.00	12.00	4.00	-99.00	1.00	0.000000000000...

Show All Features

10. 00 00 00 ``PNTCNT``0000 0000 00 00 00 0000 00 0000. 00000000 0000 00  
 ``PNTCNT``00 20 000000. 0000 000000 0000 0000 00 000000 00 000000 000000.







000 00 00 00 00 000 000 000 00 200 000000 000 00000 000 00000. 0000 000  
 0000 00000 0000 00 00000 0000 00 0000 0000 00 0 00 0000 00 0 00 0000.