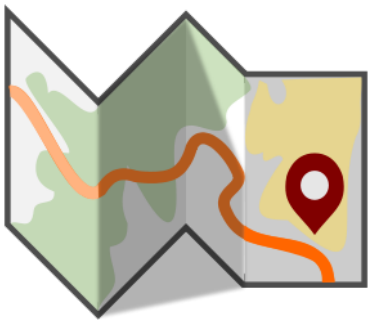
Points in Polygon Analysis

QGIS Tutorials and Tips



Author

Ujaval Gandhi

http://google.com/+UjavalGandhi

Translations by

SongHyun Choi

■■■■■■■ ■ ■■

GIS■ ■■ ■■ ■■■■ ■■■■ ■■■■■ ■■ ■■■■■■ ■■■■■. ■■ ■■■■■ ■■ ■■■■ ■■ ■■■■■ ■■ ■■ ■■■■ ■■■■■ ■■■■■■ ■■ ■■■■ ■ ■■■■ ■■■■■. ■■■■ ■■■■ ■■■■ **Points-in-Polygon**■■■■. ■■■■ ■■■■■ ■■■■ ■■■■■ ■■■■ ■■■■ ■■■■ ■■■■ ■■ ■■ ■■ ■■■■ ■ ■■■■■ ■■■■■ ■■■■■ ■■■■ ■■ ■ ■■■■■■ ■■■■ ■ ■■■■■.

■■ ■■

■■■■■ ■■■■ ■■ ■■ ■■■■■■■ ■■■■■ ■■■■■, ■■ ■■■■ ■■ ■■ ■■■■ ■■■■ ■■■■■■ ■■■■■■ ■■■■■■.

■■■■ ■■

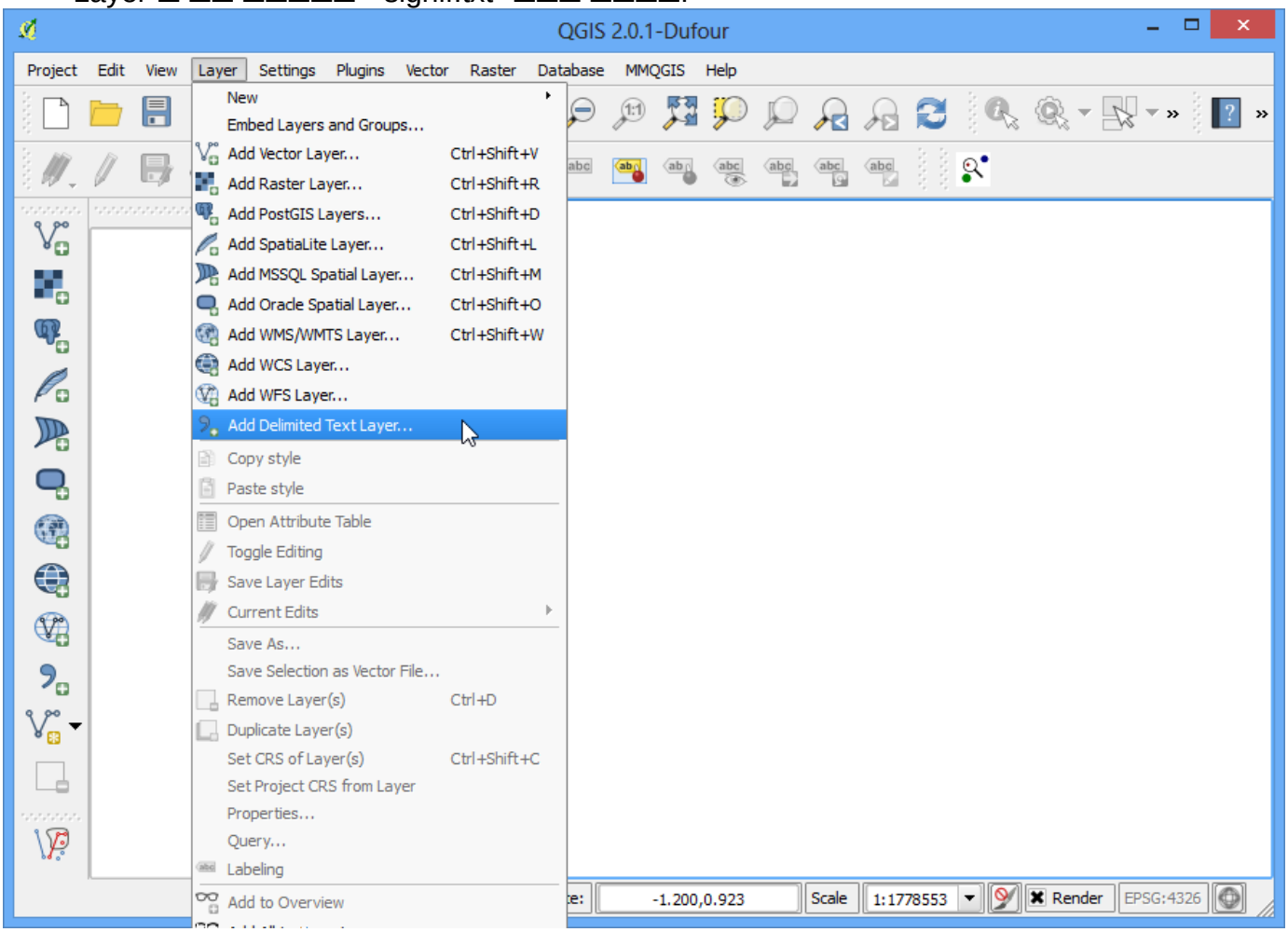
■■ ■■■■ ■■■■ ■■■■■ ■■■■■■ NOAA's National Geophysical Data Center■ `Significant Earthquake Database <http://www.ngdc.noaa.gov/nndc/struts/form?t=101650&s=1&d=1>`_■ ■■■■■■. `tab-delimited earthquake data <http://www.ngdc.noaa.gov/nndc/struts/results?type_0=Exact&query_0=$ID&t=101650&s=13&d=189&dfn=signif.txt>`_■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

Natural Earth■ Admin 0 - Countries ■■■■■■ ■■■■ ■■■■■. `countries <http://www.naturalearthdata.com/http//www.naturalearthdata.com/download/10m/cultural/ne_10m_admin_0_countries.zip> `_■ ■■

■■■■ ■■: [NGDC] [NATURALEARTH]

■■

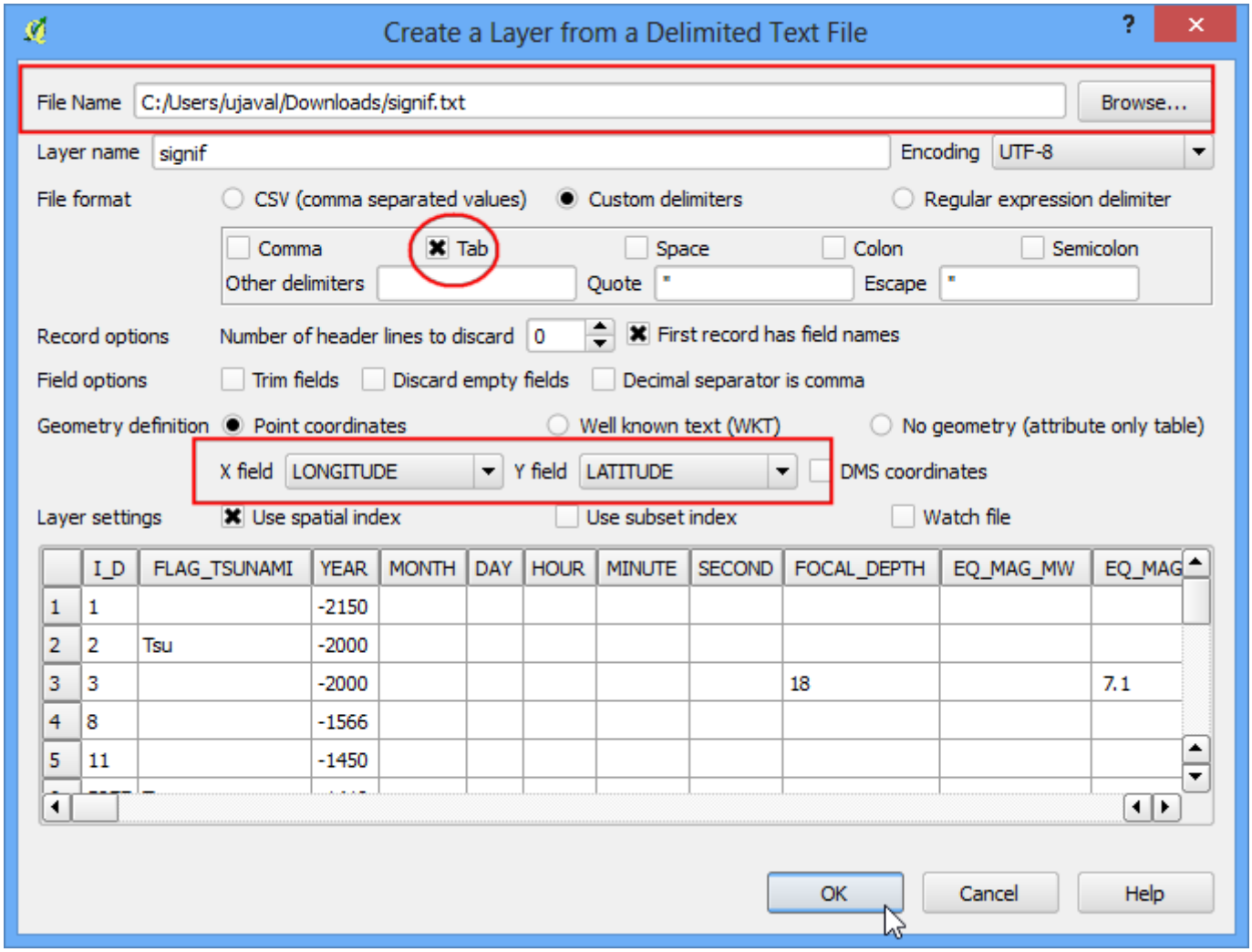
1. ■■ ■■■■ --> ■■■■■ ■■■■ ■■■■ ■■■■ ■■ :menuselection:`Layer --> Add Delimited Text Layer`■ ■■ ■■■■■■ ``signif.txt``■■■■ ■■■■■.



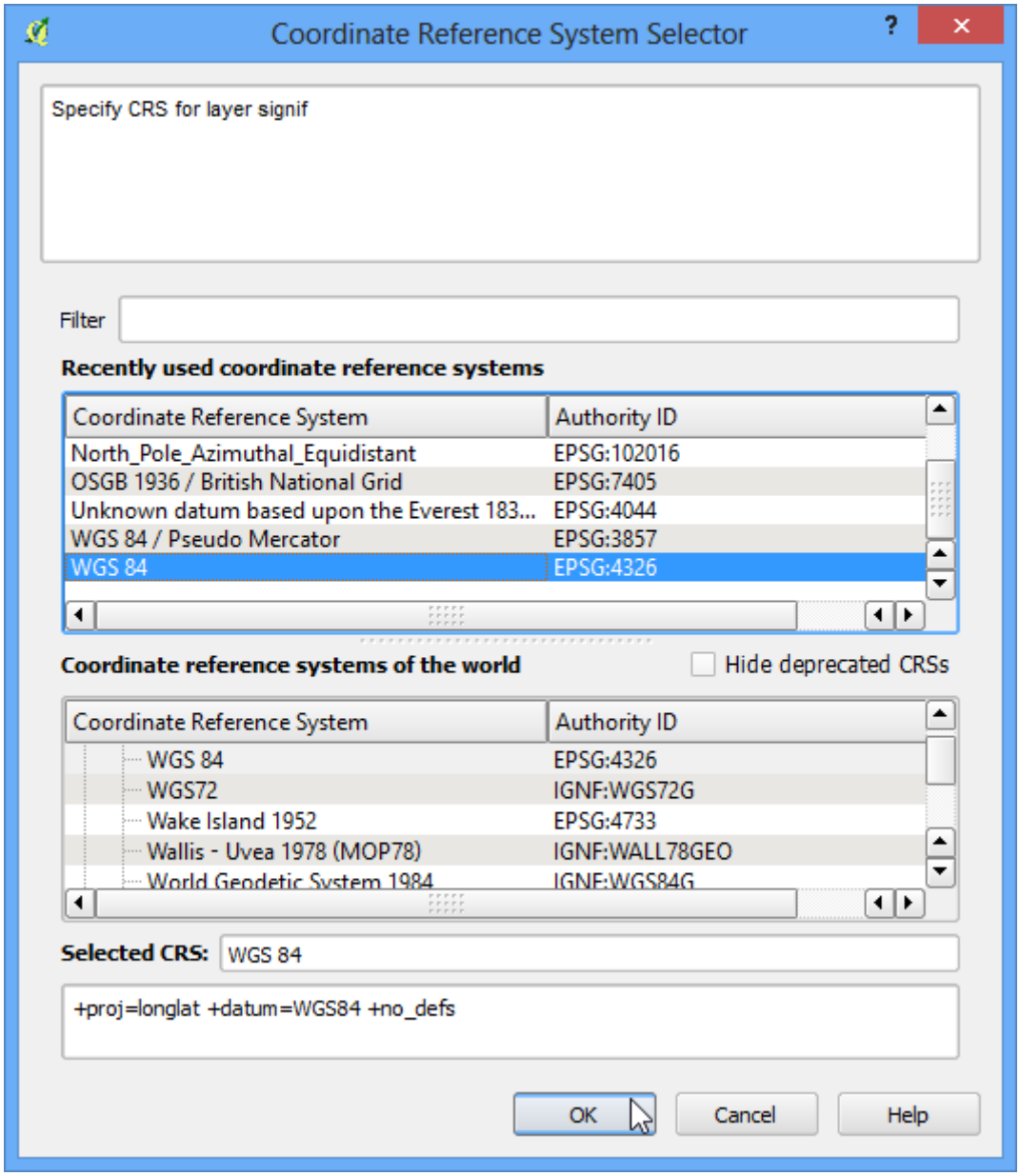
2. ■■■ ■■■ ■■■ ■■ *tab-delimited file*■■■ ■■ ■■ :guilabel:`File format`■ ■ :guilabel:`Tab`■ ■■■■■. X■■ :guilabel:`X field`■ Y■■ :guilabel:`Y field`■ ■■■■■ ■■■■■. :guilabel:`OK`■ ■■■■■.

Note

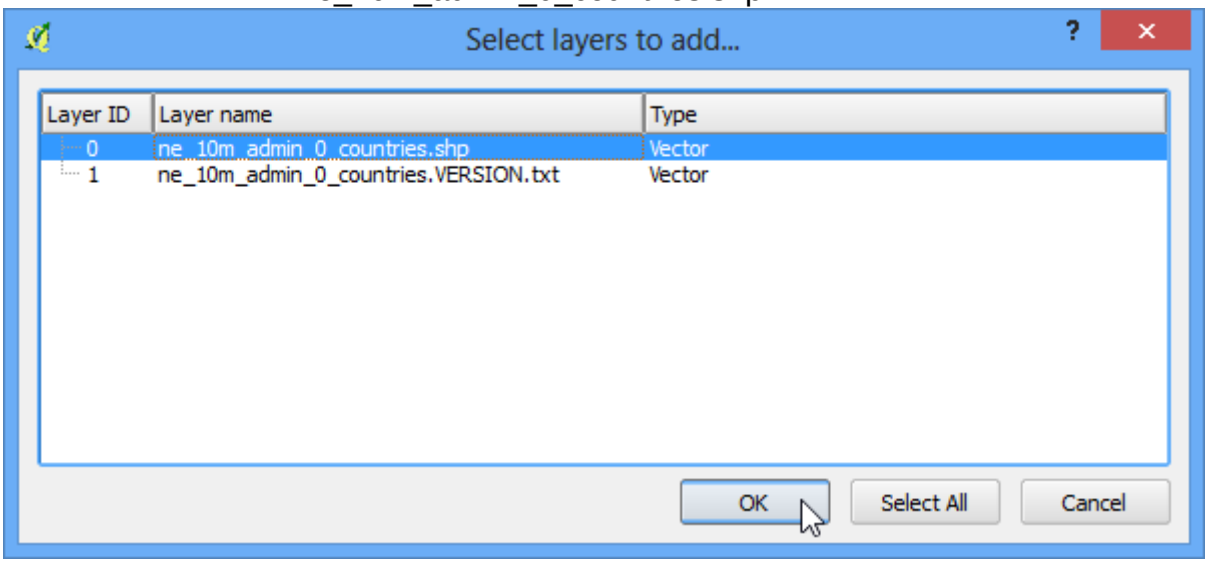
■■■ QGIS■ ■■■■■ ■■■■■ ■■■■■■ ■ ■■■■■. ■■■■ ■■■ ■■■■ ■■■ ■ ■■ ■■■■■■ ■■ ■■■■. ■ ■■■■■ ■■■ ■■■ ■ ■■■■.



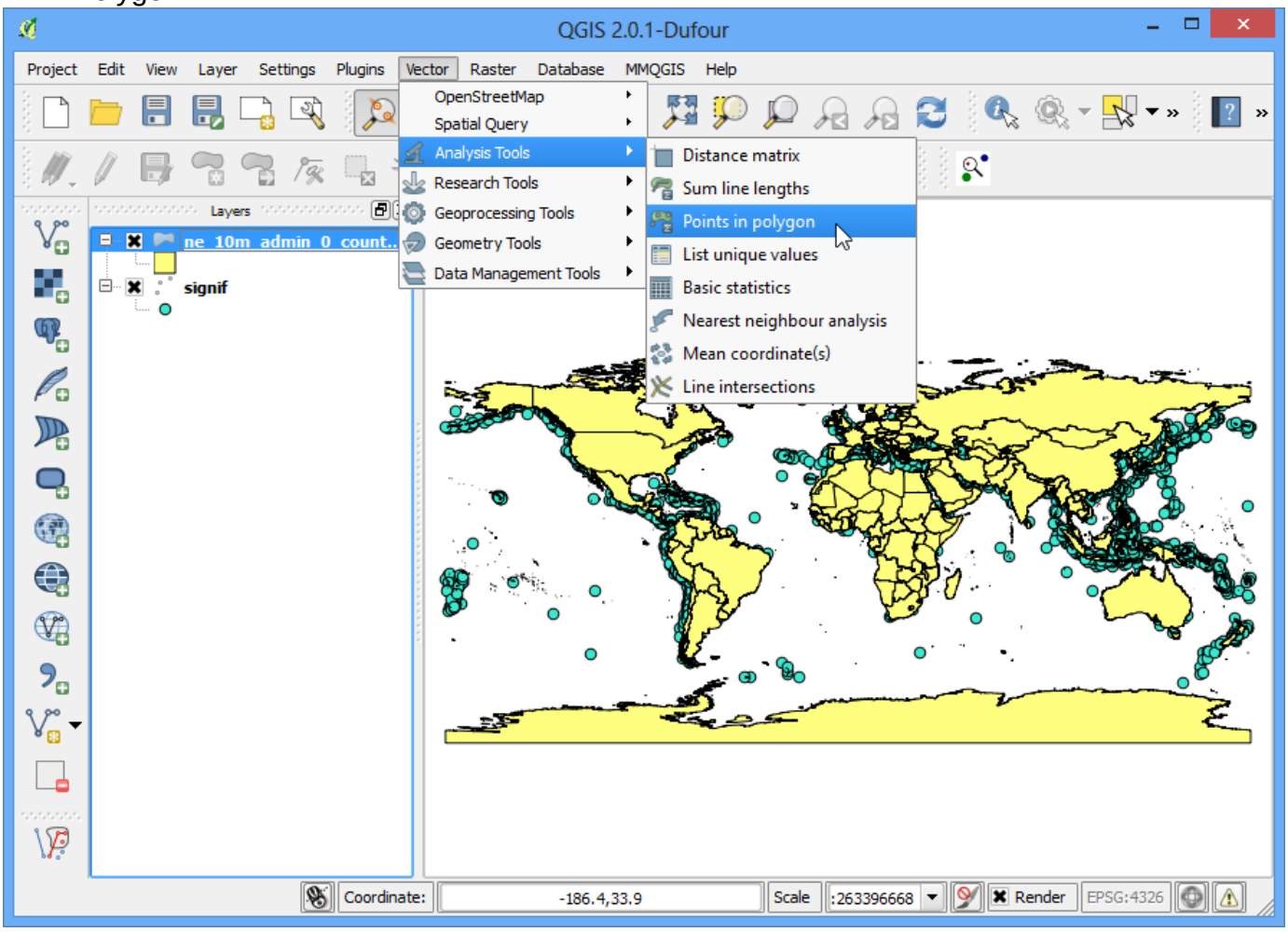
3. ■■ ■■■■■ ■■/■■ ■■■ ■■■■ ■■■■■ *Coordinate Reference System Selector* ■■■■■■■ ■■■■ :guilabel:`WGS 84 EPSG:436`■ ■■■■■.



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. ■■ ■■ --> ■■ ■■ --> ■■■■ ■ :menuselection:`Vector --> Analysis Tools --> Point in Polygon`■ ■■■■■.

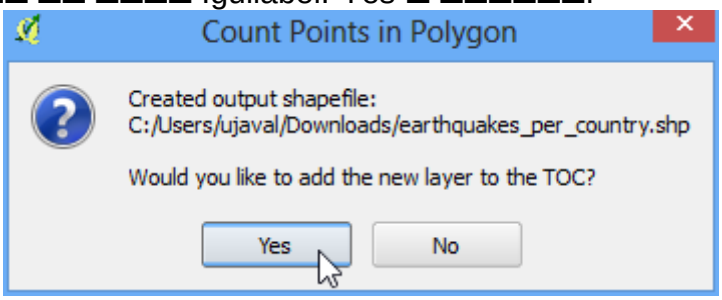


6. ■■■■■■ ■■■ ■■■■■ ■■■ ■■■■■ ■■ ■■■■■■. ■■ ■■■■■ ``earthquake_per_coutry.shp``■ ■■■■■ :guilabel:`OK`■ ■■■■■■.

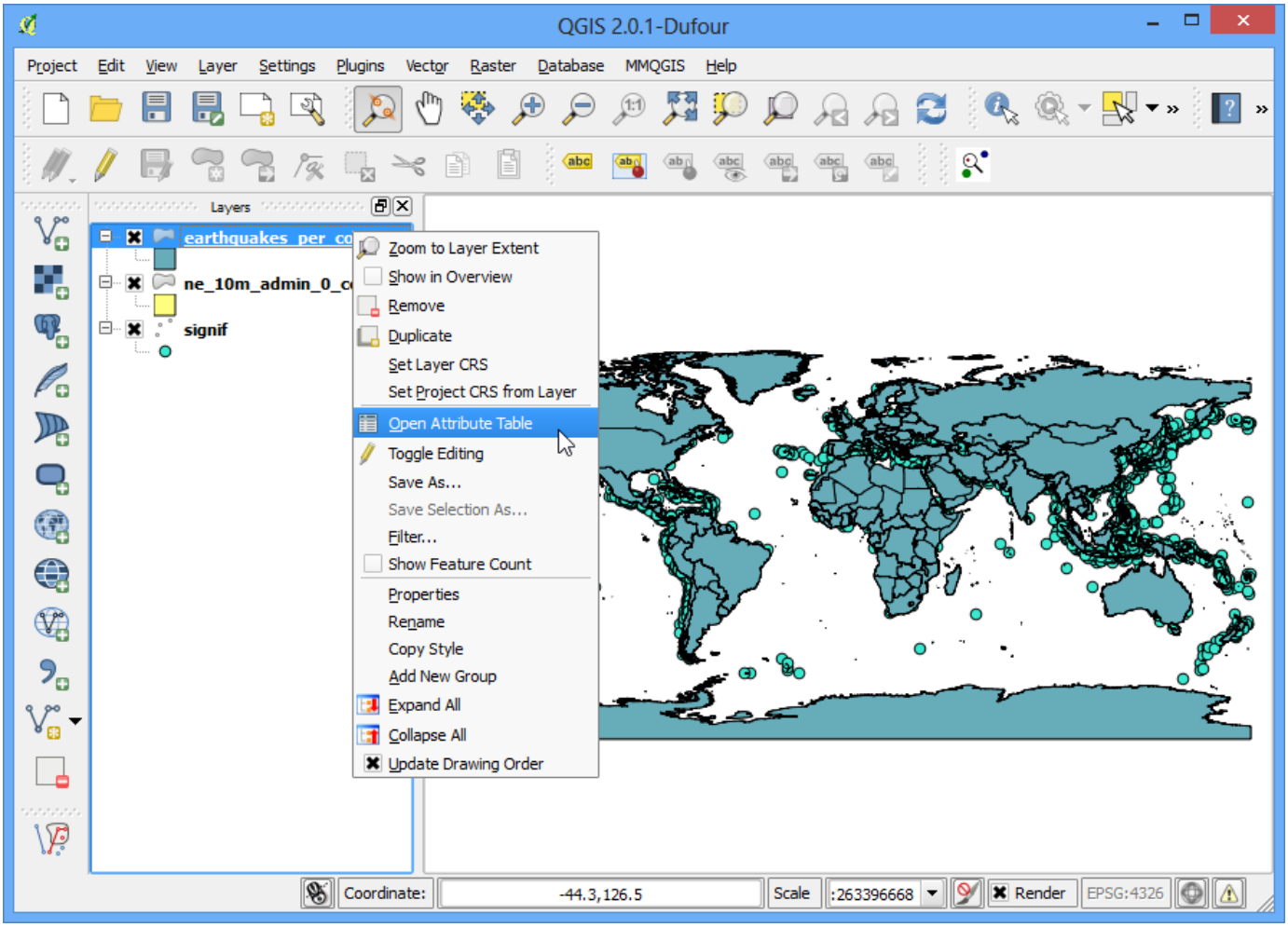
Note

OK■ ■■ ■ ■■■■■■. QGIS■ ■■■■ ■■■■■■■ ■■ 10■■ ■■■■ ■ ■■■■■.

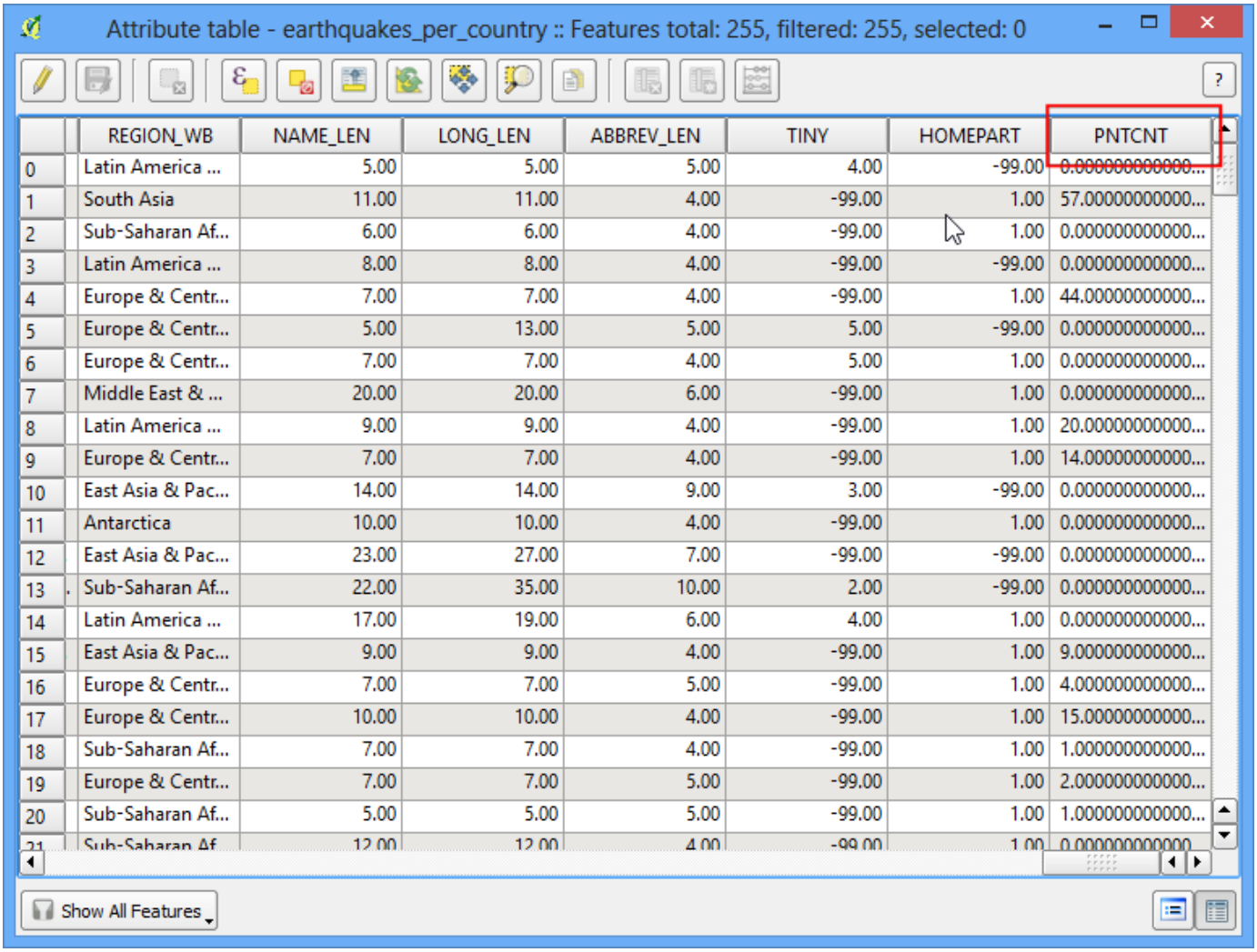
7. ■■■■■ TOC■ ■■■■ ■■ ■■■■■ :guilabel:`Yes`■ ■■■■■■■.



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

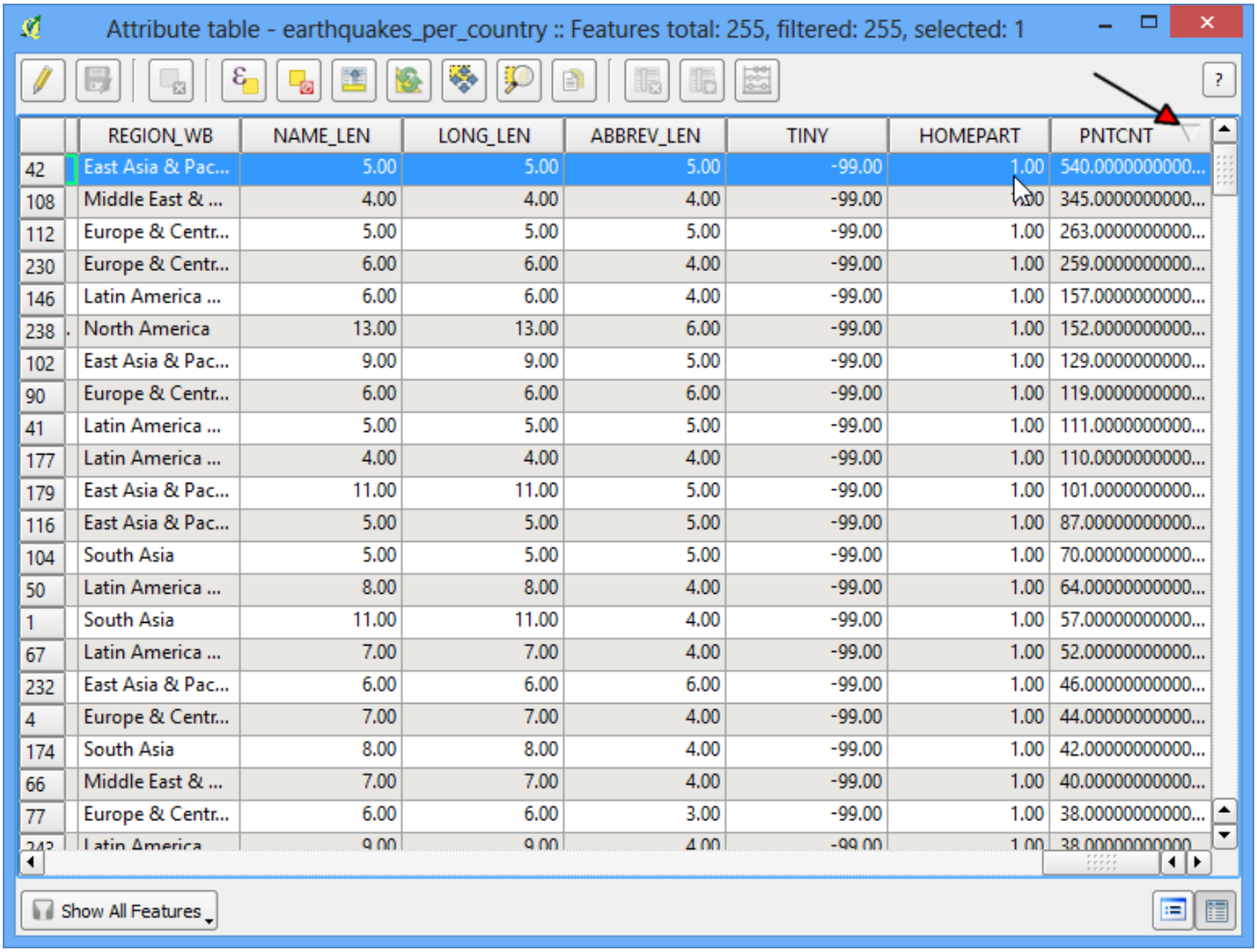

QGIS 2.0.1-Dufour
Project Edit View Layer Settings Plugins Vector Raster Database MMQGIS Help
Layers
earthquakes_per_co
ne_10m_admin_0_c
signif
Zoom to Layer Extent
Show in Overview
Remove
Duplicate
Set Layer CRS
Set Project CRS from Layer
Open Attribute Table
Toggle Editing
Save As...
Save Selection As...
Filter...
Show Feature Count
Properties
Rename
Copy Style
Add New Group
Expand All
Collapse All
Update Drawing Order
Coordinate:
-44.3,126.5
Scale
:263396668
Render
EPSG:4326

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



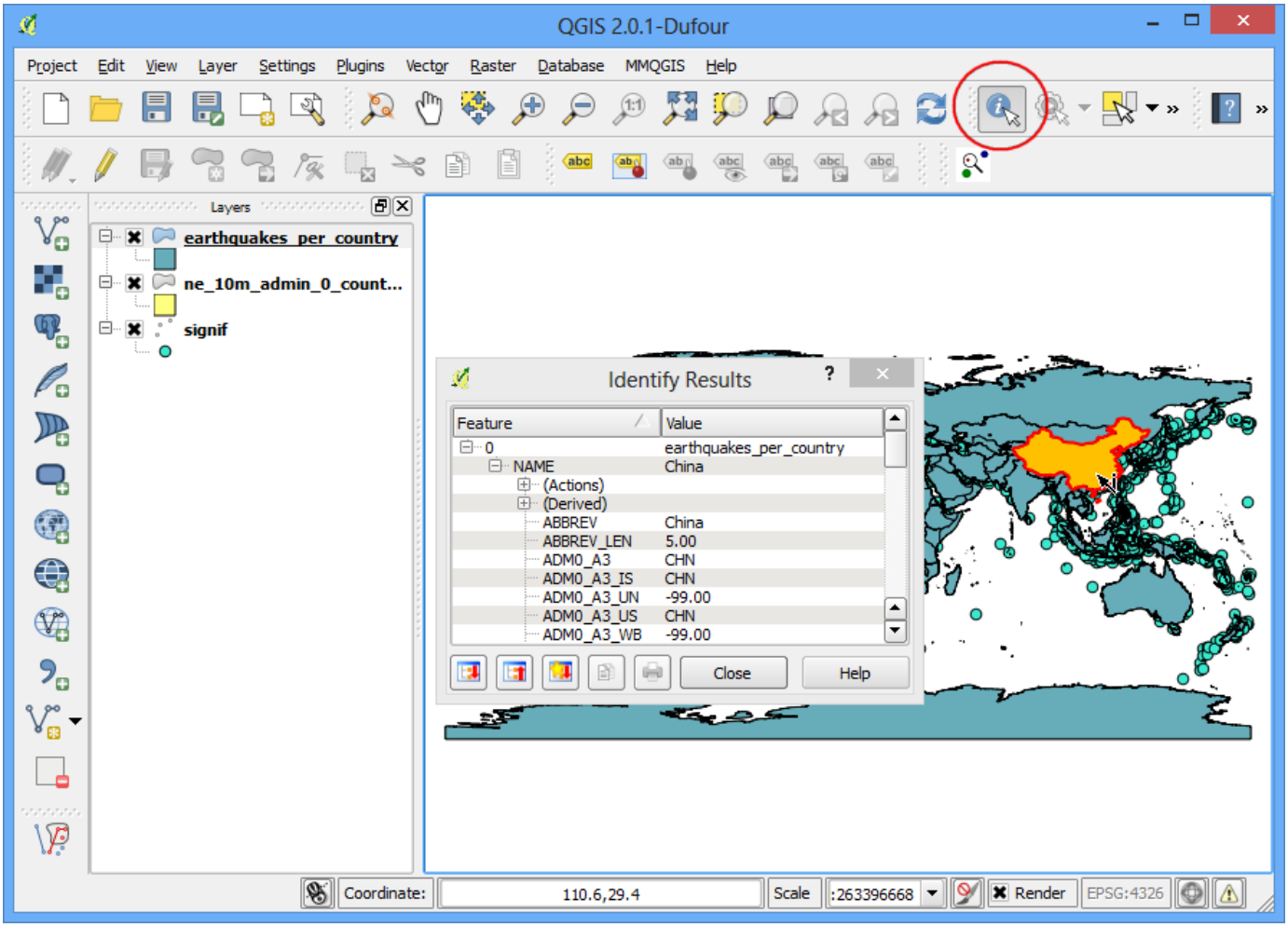
	REGION_WB	NAME_LEN	LONG_LEN	ABBREV_LEN	TINY	HOMEPART	PNTCNT
0	Latin America ...	5.00	5.00	5.00	4.00	-99.00	0.000000000000...
1	South Asia	11.00	11.00	4.00	-99.00	1.00	57.000000000000...
2	Sub-Saharan Af...	6.00	6.00	4.00	-99.00	1.00	0.000000000000...
3	Latin America ...	8.00	8.00	4.00	-99.00	-99.00	0.000000000000...
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...

10. ■■ ■■ ■■ ``PNTCNT``■■■ ■■■■ ■■ ■■ ■■ ■■■ ■■ ■■■. ■■■■■■ ■■■■ ■■ ``PNTCNT``■■ 2■ ■■■■■. ■■■ ■■■■ ■■■ ■■■ ■■ ■■■■ ■■ ■■■■ ■■■■.



	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	87.00000000000...
104	South Asia	5.00	5.00	5.00	-99.00	1.00	70.00000000000...
50	Latin America ...	8.00	8.00	4.00	-99.00	1.00	64.00000000000...
1	South Asia	11.00	11.00	4.00	-99.00	1.00	57.00000000000...
67	Latin America ...	7.00	7.00	4.00	-99.00	1.00	52.00000000000...
232	East Asia & Pac...	6.00	6.00	6.00	-99.00	1.00	46.00000000000...
4	Europe & Centr...	7.00	7.00	4.00	-99.00	1.00	44.00000000000...
174	South Asia	8.00	8.00	4.00	-99.00	1.00	42.00000000000...
66	Middle East & ...	7.00	7.00	4.00	-99.00	1.00	40.00000000000...
77	Europe & Centr...	6.00	6.00	3.00	-99.00	1.00	38.00000000000...
243	Latin America	9.00	9.00	4.00	-99.00	1.00	38.00000000000

11. QGIS ■■■ ■■■■■ ■ ■■■ ■■■■■ ■■ ■■■ ■■ ■■■■■. ■■■ ■■■■■■■ ■■ ■■ ■■■ ■■■ ■■ ■■■ ■■■■■. ■■ ■■ :guilabel:`Identify`■■ ■■■■ ■■■■ ■■■■■. ■■■ ■■■■■ ■■ ■■ ■■■ ■■ **China**■■ ■ ■ ■■■■.


QGIS 2.0.1-Dufour
Project Edit View Layer Settings Plugins Vector Raster Database MMQGIS Help
Layers
earthquakes_per_country
ne_10m_admin_0_count...
signif
Identify Results
Feature
Value
0
earthquakes_per_country
NAME
China
(Actions)
(Derived)
ABBREV
China
ABBREV_LEN
5.00
ADM0_A3
CHN
ADM0_A3_IS
CHN
ADM0_A3_UN
-99.00
ADM0_A3_US
CHN
ADM0_A3_WB
-99.00
Close
Help
Coordinate:
110.6,29.4
Scale
:263396668
Render
EPSG:4326

[redacted]