

Importing Spreadsheets or CSV files

QGIS Tutorials and Tips



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How to Import CSV Data into QGIS

This tutorial shows you how to import CSV data into QGIS. The data is a CSV file containing earthquake data. The CSV file is located in the following URL: [http://www.ngdc.noaa.gov/data/earthquake/Significant Earthquake Database/Significant Earthquake Database.csv](#).

Step 1: Download the CSV file

Click on the link above to download the CSV file.

Step 2: Import the CSV file into QGIS

NOAA has a database of significant earthquakes that occurred between 1900 and 2015. The database is available in a CSV format. [Learn more.](#)

Download [Significant Earthquake Database](#) text file.

Source: [NGDC]

Step 3: Open the CSV file in QGIS

1. Open QGIS. Click on the 'Layer' menu and select 'Add New Layer'. In the 'Add New Layer' dialog, click on the 'Add Delimited Text Layer' button. In the 'Add Delimited Text Layer' dialog, click on the 'Browse' button to select the CSV file. In the 'Add Delimited Text Layer' dialog, set the 'Encoding' to 'UTF-8' and the 'Delimiter' to 'Comma'. Click on the 'OK' button. The CSV file is now imported into QGIS. The data is displayed in the 'Layers' panel. The data is also displayed in the 'Table of Contents' panel. The data is also displayed in the 'Attribute Table'.

signif.txt - Notepad

STATE	LOCATION_NAME	LATITUDE	LONGITUDE	REGION_CODE	DEATHS	DEATHS_DESCRIPTION
10	ISRAEL	ISRAEL: ARIHA (JERICHO)	31.500	35.300	140	
		9713	Tsu	-480	9	29
		1				2
103.900	30					
GANSU PROVINCE:	LONGXI	34.900	104.700	30	3	
3		41	23			
		UKRAINE	UKRAINE: BLACK SEA	44.700	51	57
		1	3	1001	4	33.300
					67	155
					79	340
350	10					
438	2					
119		477	9	25		
		139	Tsu	551	7	9
				147	558	12
549	9	12			5.5	25
715						
175	745	6	5			7.9
2	3	187		778		
	199	811				
844	9	18				
	219	853				
857	4					

Ln 1, Col 1

2. QGIS :menuselection: `Layers --> Add Delimited Text Layer`

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

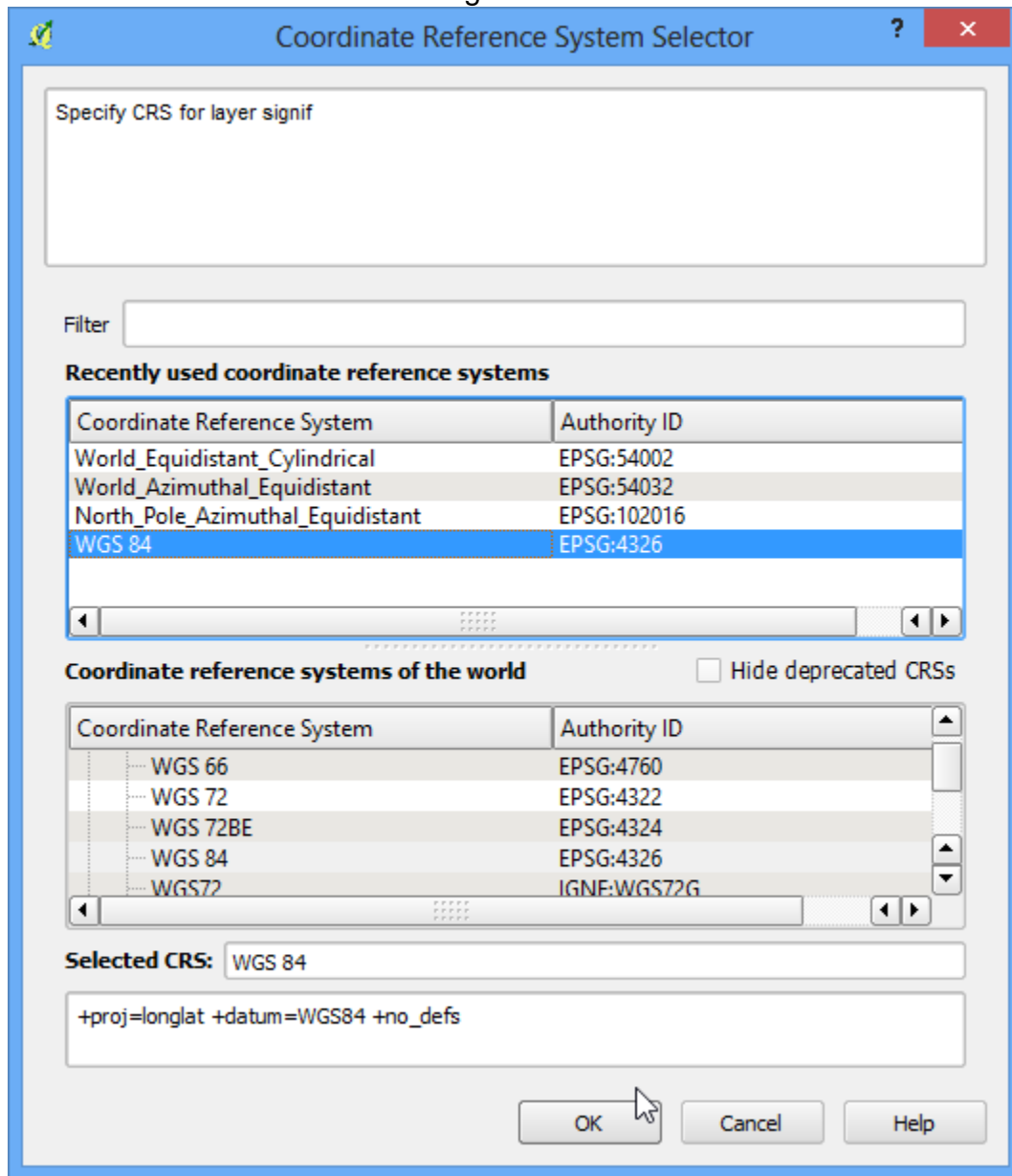
	I_D	FLAG_TSUNAMI	YEAR	MONTH	DAY	HOUR	MINUTE	SECOND	FOCAL_DEPTH	EQ_MAG_MW	EQ_MAG
1	1		-2150								
2	3		-2000						18		7.1
3	2	Tsu	-2000								
4	8		-1566								
5	11		-1450								

4. ■■■ ■■■■■■■■ ■■■■■■■■ ■■■■ ■■■■. ■ ■■■■ ■■■ X, Y■■■■ ■■■■ ■■■ ■■■■■■■■. ■ ■■■■■■■■ ■■■■ ■■■■■ ■■■■ ■ ■■■■■. ■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■.

Delimited text file errors

Errors in file C:/Users/ujaval/Downloads/signif.txt
 49 records discarded due to missing geometry definitions
 6 records discarded due to invalid geometry definitions
 The following lines were not loaded into QGIS due to errors:
 Invalid X or Y fields at line 306
 Invalid X or Y fields at line 2253
 Invalid X or Y fields at line 3239
 Invalid X or Y fields at line 3324
 Invalid X or Y fields at line 3365
 Invalid X or Y fields at line 3420

5. `crs_dialog = QgsCoordinateReferenceSystemSelector()` `crs_dialog.crs = QgsCoordinateReferenceSystem('EPSG:4326')`
`crs_dialog.crs = QgsCoordinateReferenceSystem('EPSG:4326')` `crs_dialog.ok()`



6. `crs_dialog = QgsCoordinateReferenceSystemSelector()` `crs_dialog.crs = QgsCoordinateReferenceSystem('EPSG:4326')` `crs_dialog.ok()`

