

# Importing Spreadsheets or CSV files

QGIS Tutorials and Tips



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## CSV

GIS uses the CSV format to store data. The CSV format is a simple text file that stores data in a table. The data is organized into rows and columns. The first row is the header row, which contains the names of the columns. The following rows contain the data. The CSV format is used by many GIS applications, including QGIS.

QGIS

QGIS is a free and open source GIS application. It can be used to view, edit, and analyze spatial data. QGIS can also be used to create maps and reports.

QGIS

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

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

[NGDC]

QGIS

1. Open the CSV file in QGIS. The CSV file is a text file that contains data in a table. The data is organized into rows and columns. The first row is the header row, which contains the names of the columns. The following rows contain the data. The CSV format is used by many GIS applications, including QGIS.

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		51	57
		1			44.700	33.300
		3	1001	4	67	155
					79	340
350	10					
	2					
438						
119		477	9	25		
		139	Tsu	551	7	9
				147		521
549	9	12		9	128	
	715			558	12	25
					5.5	
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. `self.pushButton.setText('X, Y')
self.pushButton.clicked.connect(self.open_dialog)
self.pushButton.setEnabled(True)`

**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. `self.pushButton.setText('Coordinate Reference System Selector')
self.pushButton.clicked.connect(self.open_dialog)
self.pushButton.setEnabled(True)`



6. ■■■■ ■■■■ ■■■■■■ QGIS■■■■■ ■■■■ ■■ ■ ■ ■■■■.

