

# Importing Spreadsheets or CSV files

QGIS Tutorials and Tips



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## CSV files

GIS files are often in CSV format. This page shows how to open a CSV file in GIS.

### Open a CSV file

Open a CSV file in QGIS.

### Download a CSV file

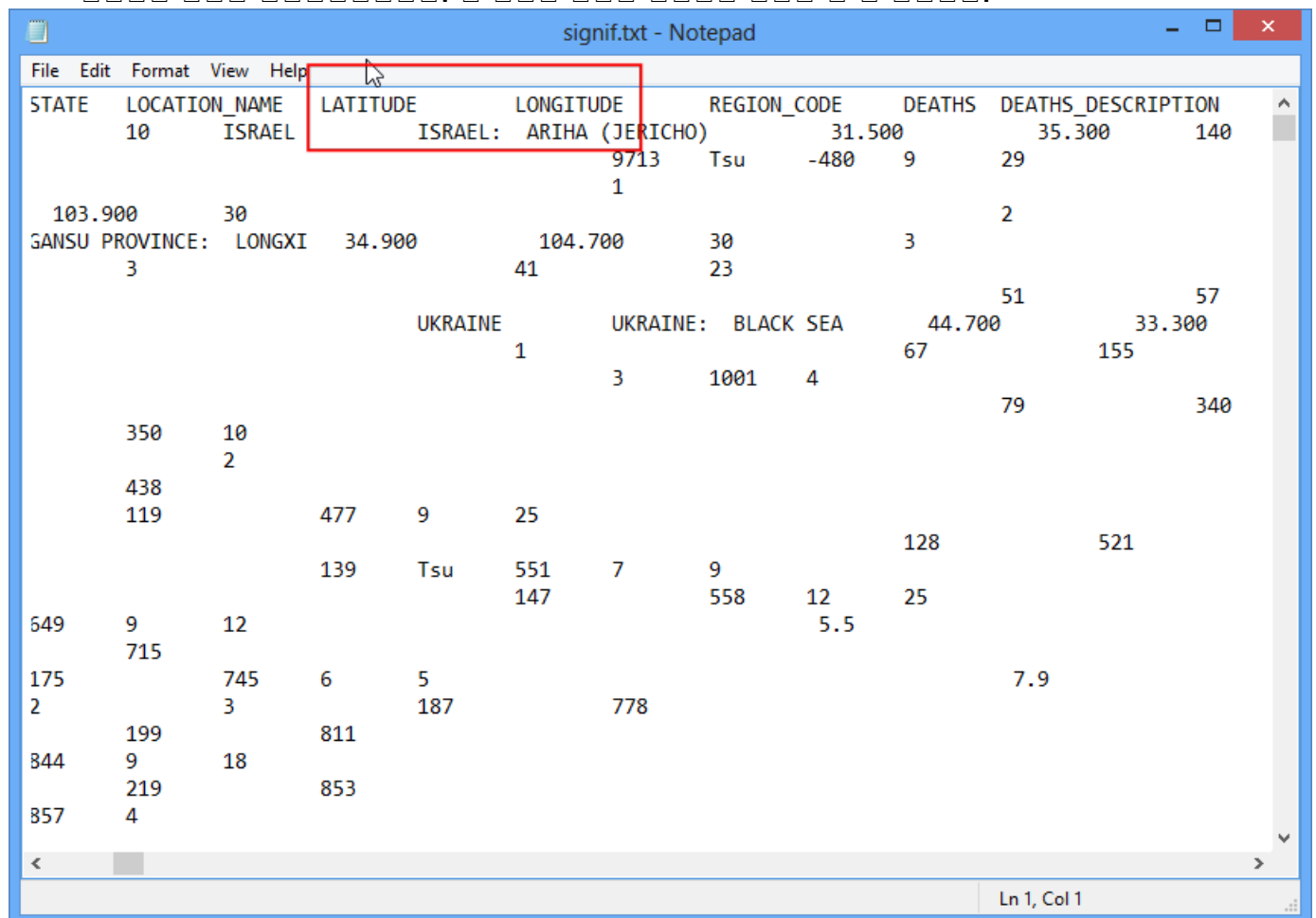
NOAA has a database of significant earthquakes. [Learn more.](#)

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

or [\[NGDC\]](#)

### Steps

1. Open the CSV file in QGIS. The file is named 'Significant Earthquake Database' and is located in the 'Data' folder. The file is a 'Comma Separated Values (CSV)' file. The file contains a list of earthquakes with columns for 'STATE', 'LOCATION\_NAME', 'LATITUDE', 'LONGITUDE', 'REGION\_CODE', 'DEATHS', and 'DEATHS\_DESCRIPTION'. The file is named 'signif.txt'.



| 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                       | 3                  | 1001        | 4      | 33.300             |
|                 |               |                         |                    |             | 67     | 155                |
|                 |               |                         |                    |             | 79     | 340                |
| 350             | 10            |                         |                    |             |        |                    |
| 438             | 2             |                         |                    |             |        |                    |
| 119             |               | 477                     | 9                  | 25          |        |                    |
|                 |               | 139                     | Tsu                | 551         | 7      | 9                  |
|                 |               |                         |                    | 147         |        | 128                |
|                 |               |                         |                    | 558         | 12     | 521                |
| 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             |                         |                    |             |        |                    |

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. □□□□ :guilabel: `Coordinate Reference System Selector` □□ □□□ CRS□ □□□□ □□□□. □□ □□□ □□□ □□□□□ `WGS 84`□ □□□□ :guilabel: `OK`□ □□□□□□.



6. □□□ □□□□ □□□□□ QGIS□□□□ □□□□ □□ □ □ □□ □□□□.

