



UNIVERSIDAD
DE MÁLAGA



uma.es

QGIS P3

Sistemas de Información

Geográfica para el Marketing (Geomarketing)



LENGUAJES Y
CIENCIAS DE LA
COMPUTACIÓN
UNIVERSIDAD DE MÁLAGA

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Resumen

- Importando CSV

Base de datos de Terremotos

- <https://www.ngdc.noaa.gov/nndc/struts/form?t=101650&s=1&d=1>

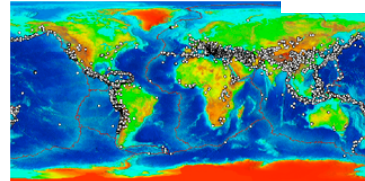
NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOAA > NESDIS > NCEI (formerly NGDC) > Natural Hazards

The **Significant Earthquake Database** contains information on destructive earthquakes from 2150 B.C. to the present that meet at least one of the following criteria: **damage** (approximately \$1 million or more), 10 or more **deaths**, Magnitude **7.5** or greater, Modified Mercalli Intensity **X** or greater, or the earthquake generated a **tsunami**.

Please cite this database as:
National Geophysical Data Center / World Data Service (NGDC/WDS): Significant Earthquake Database. National Geophysical Data Center, NOAA. doi:10.7289/V5TD9V7K

- To display a subset of the Significant Earthquake Database **enter** the information for one or more of the following search options and then click the **Search Database button**.
 - Click the **Clear Form button** for each additional search.
 - To retrieve the entire database, click the **Clear Form button** and the **Search Database button** at the bottom of this page. The file contains over **5500 events** and is **approximately 5.8 MB**.
 - **NOTE: Do not use commas when entering numbers into the form.**
- To **Import** the resulting search into an MS Excel spreadsheet: Select Data Output Options - tab-delimited format (bottom of page)
- The database can also be displayed and extracted with the [Natural Hazards Interactive Map](#)
- **Download** entire significant earthquake data file in tab-delimited format. [Event Variable Definitions](#)



Earthquake Parameters:

Date as a Year (-2150 to present): Beginning: 1000 Ending: 2017

Region Name: none selected

Country: SPAIN

State: none selected

Location Name: ☒ includes or ☐ starts with ☐ matches or ☐ does not match

Data Output Options:

☒ Return All Selected Events in **tab-delimited format** for import into Excel

Search Database

Clear Form

Enter or Select information for one or more of the following search options.

Earthquake Parameters:

Date as a Year (-2150 to present): Beginning: Ending:

Region Name: none selected

Country: none selected

State: none selected

Location Name: ☒ includes or ☐ starts with ☐ matches or ☐ does not match

Range of **Coordinates** in decimal degrees:

Latitude: 0 to 90 (Northern Hemisphere) -90 to 0 (Southern Hemisphere)

Longitude: 0 to 180 (Eastern Hemisphere) -180 to 0 (Western Hemisphere)

Northernmost Latitude

(enter one number from -90 to 90):

Resultados (.tsv) (.txt o .csv)

| I_D | FLAG_TSUNAMI | YEAR | MONTH | DAY | HOUR | MINUTE | SECOND | FOCAL_DEPTH | EQ_PRIMARY | EQ_MAG_MW |
|------------------------------------|-------------------------------|----------------------------------|----------------------------|--------------|--|-------------|------------|-------------|--------------------|---------------|
| | EQ_MAG_MS | | EQ_MAG_MB | EQ_MAG_ML | | EQ_MAG_MFA | EQ_MAG_UNK | DEATHS | DEATHS_DESCRIPTION | COUNTRY STATE |
| MISSING_DESCRIPTION | LOCATION_NAME | LATITUDE | | LONGITUDE | | REGION_CODE | | | | MISSING |
| HOUSES_DESTROYED | HOUSES_DESTROYED_DESCRIPTION | HOUSES_DAMAGED | HOUSES_DAMAGED_DESCRIPTION | TOTAL_DEATHS | | | | | | |
| TOTAL_INJURIES_DESCRIPTION | TOTAL_DAMAGE_MILLIONS_DOLLARS | TOTAL_DAMAGE_DESCRIPTION | TOTAL_INJURIES | | | | | | | |
| TOTAL_HOUSES_DESTROYED_DESCRIPTION | TOTAL_HOUSES_DAMAGED | TOTAL_HOUSES_DAMAGED_DESCRIPTION | | | | | | | | |
| 559 | 1374 | 2 | 2 | | | | | | | |
| | 10 | SPAIN | | SPAIN: | RIBAGORZA | 42.100 | -.300 | 130 | | 3 |
| 591 | 1427 | 5 | 15 | | | | | | | |
| | 11 | SPAIN | | SPAIN: | OLLOT, BARCELONA | 41.700 | 2.200 | 130 | | 3 |
| 594 | 1431 | 4 | 24 | | | | | | | |
| | 9 | SPAIN | | SPAIN: | GRANADA | 37.200 | -3.600 | 130 | | |
| | | 3 | | 3 | | | | | | |
| 624 | 1464 | | | | | | | | | |
| | 9 | SPAIN | | SPAIN: | SEVILLA (SEVILLE) | 37.300 | -5.600 | 130 | | |
| | | | | 3 | | | | | | |
| 664 | 1504 | 4 | 5 | | | | | | | |
| | 10 | SPAIN | | SPAIN: | CARMONA | 37.300 | -5.400 | 130 | | 2 |
| 689 | 1518 | 11 | 9 | | | | | | | |
| | 11 | SPAIN | | SPAIN: | VERA | 37.200 | -1.500 | 130 | | 3 |
| | | | | 4 | | | | | | |
| 695 | 1522 | 9 | 21 | | | | | | | |
| | 11 | SPAIN | | SPAIN: | ALMERIA; MOROCCO: FEZ; AZORES: VILA FRANCA | | | 36.900 | | |

| A1 | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | LOC |
|-----|--------------|------|-------|-----|------|--------|--------|-------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| I_D | FLAG_TSUNAMI | YEAR | MONTH | DAY | HOUR | MINUTE | SECOND | FOCAL_DEPTH | EQ_PRIMARY | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M | EQ_MAG_M |
| 1 | 559 | 1374 | 2 | 2 | | | | | | | | | | | | | | | SPA |
| 2 | 591 | 1427 | 5 | 15 | | | | | | | | | | | | | | | SPA |
| 3 | 594 | 1431 | 4 | 24 | | | | | | | | | | | | | | | SPA |
| 4 | 624 | 1464 | | | | | | | | | | | | | | | | | SPA |
| 5 | 664 | 1504 | 4 | 5 | | | | | | | | | | | | | | | SPA |
| 6 | 689 | 1518 | 11 | 9 | | | | | | | | | | | | | | | SPA |
| 7 | 695 | 1522 | 9 | 21 | | | | | | | | | | | | | | | SPA |
| 8 | 993 | 1654 | 10 | 20 | | | | | | | | | | | | | | | SPA |
| 9 | 1089 | 1680 | 10 | 9 | 7 | 30 | | | | | | | | | | | | | SPA |
| 10 | 1299 | 1748 | 3 | 23 | 6 | 15 | | | | | | | | | | | | | SPA |
| 11 | 1477 | 1784 | 8 | 15 | | | | | | | | | | | | | | | SPA |
| 12 | 10120 | 1804 | 1 | 13 | 17 | 45 | | | | | | | | | | | | | SPA |
| 13 | 1569 | 1804 | 8 | 25 | 8 | 30 | | | | | | | | | | | | | SPA |
| 14 | 1727 | 1829 | 3 | 21 | 18 | 30 | | | | | | | | | | | | | SPA |
| 15 | 2341 | 1884 | 12 | 25 | 21 | 8 | | | | | | | | | | | | | SPA |
| 16 | 8184 | 1930 | 2 | 16 | | | | 6.7 | | 6.7 | | | | | | | | | SPA |
| 17 | 3415 | 1930 | 7 | 5 | 23 | 12 | | | | | | | | | | | | | SPA |
| 18 | 4043 | 1954 | 3 | 29 | 6 | 17 | | 640 | 7.0 | | | | | | | | | | SPA |
| 19 | 4095 | 1956 | 4 | 19 | 18 | 38 | | | | | | | | | | | | | SPA |
| 20 | 8260 | 1978 | 8 | 14 | 14 | 17 | 50.4 | 30 | 4.4 | | 4.4 | 5.0 | | | | | | | SPA |
| 21 | 5515 | 1999 | 2 | 2 | 13 | 45 | 16.8 | 10 | 4.8 | | | 4.8 | | | | | | | SPA |
| 22 | 5843 | 2005 | 1 | 29 | 7 | 41 | 31.0 | 5 | 4.4 | | | 4.4 | 4.8 | | | | | | SPA |
| 23 | 9821 | 2011 | 5 | 11 | 16 | 47 | 25.7 | 1 | 5.1 | 5.1 | | 5.3 | | | | | | | SPA |

Data Output Options:

☒ Return All Selected Events in **tab-delimited format** for import into Excel

Importar Datos

Crear una capa a partir de un archivo de texto delimitado

Nombre de archivo: /Users/monte/Dropbox/ToDo/Docencia/universidad/2016-2017/Master GGeo/Transparencias y practicas/Practica 3/results.txt Explorar...

Nombre de la capa: results Codificación: UTF-8

Formato de archivo: ☐ CSV (valores separados por coma) ☒ Delimitadores personalizados ☐ Delimitador de expresión regular

☐ Coma ☒ Tabulador ☐ Espacio ☐ Dos puntos ☐ Punto y coma

Otros delimitadores: Comilla: " Escape: "

Opciones de registro: Número de líneas de encabezamiento a descartar: 0 ☒ El primer registro tiene los nombres de campo

Opciones de campo: ☐ Recortar campos ☐ Descartar campos vacíos ☐ El separador decimal es la coma

Definición de geometría: ☐ Coordenadas del punto ☐ Texto bien conocido (WKT) ☐ Ninguna geometría (tabla solo de atributos)

Coordenada X: LONGITUDE Coordenada Y: LATITUDE

Configuración de la capa: ☐ Usar índice espacial ☐ Usar índice de subconjuntos ☐ Vigilar archivo

| | INTENSITY | COUNTRY | STATE | LOCATION_NAME | LATITUDE | LONGITUDE | REGION_CODE | DEATHS | DEATHS_DESCRIPTION | MISSING |
|----|-----------|---------|-------|--------------------------|----------|-----------|-------------|--------|--------------------|---------|
| 1 | 10 | SPAIN | | SPAIN: RIBAGORZA | 42.100 | -.300 | 130 | | 3 | |
| 2 | 11 | SPAIN | | SPAIN: OLOT, BARCELONA | 41.700 | 2.200 | 130 | | 3 | |
| 3 | 9 | SPAIN | | SPAIN: GRANADA | 37.200 | -3.600 | 130 | | | |
| 4 | 9 | SPAIN | | SPAIN: SEVILLA (SEVILLE) | 37.300 | -5.600 | 130 | | | |
| 5 | 10 | SPAIN | | SPAIN: CARMONA | 37.300 | -5.400 | 130 | | 2 | |
| 6 | 11 | SPAIN | | SPAIN: VERA | 37.200 | -1.500 | 130 | | 3 | |
| 7 | 11 | SPAIN | | SPAIN: ALMERIA; MORO... | 36.900 | -2.500 | 130 | | 3 | |
| 8 | 10 | SPAIN | | SPAIN | 37.900 | -4.800 | 130 | | | |
| 9 | 9 | SPAIN | | SPAIN: MENORCA (MIN... | 40.100 | 3.600 | 130 | | 3 | |
| 10 | 9 | SPAIN | | SPAIN: MALAGA | 36.500 | -4.400 | 130 | 70 | 2 | |
| 11 | 9 | SPAIN | | SPAIN: VALENCE | 39.000 | -.650 | 130 | | 3 | |
| 12 | 9 | SPAIN | | SPAIN: L'ARNES SYssel | 40.900 | .300 | 130 | | | |
| 13 | 9 | SPAIN | | SPAIN: ALMERIA; DALIAS | 36.900 | 0.900 | 130 | | | |

Help Cancel OK

Datos Geográficos

Selector de sistema de referencia de coordenadas

Especificar SRC para la capa results

Filtrar

Sistemas de referencia de coordenadas usados recientemente

| Sistema de referencia de coordenadas | ID de la autoridad |
|--------------------------------------|--------------------|
|--------------------------------------|--------------------|

Sistemas de referencia de coordenadas del mundo ☐ Esconder SRC obsoletos

| Sistema de referencia de coordenadas | ID de la autoridad |
|---|--------------------|
| ► Sistemas de coordenadas geográficas | |
| ► Sistemas de coordenadas proyectadas | |
| ► Sistemas de coordenadas definidos por el usuario | |

SRC seleccionado:

Help Cancel OK

Selector de sistema de referencia de coordenadas

Especificar SRC para la capa results

Filtrar

Sistemas de referencia de coordenadas usados recientemente

| Sistema de referencia de coordenadas | ID de la autoridad |
|--------------------------------------|--------------------|
|--------------------------------------|--------------------|

Sistemas de referencia de coordenadas del mundo ☒ Esconder SRC obsoletos

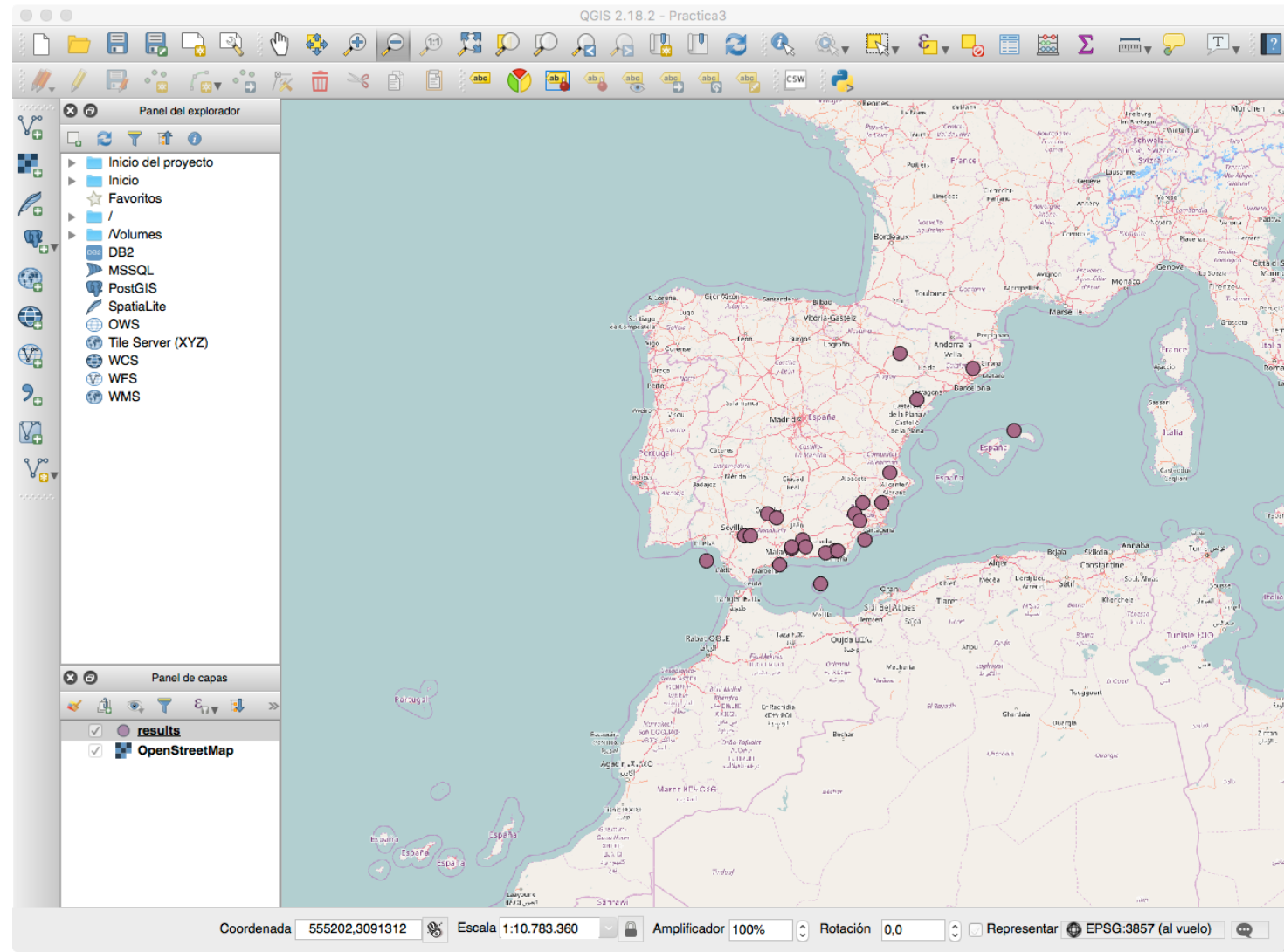
| Sistema de referencia de coordenadas | ID de la autoridad |
|--------------------------------------|--------------------|
| WGS 66 | EPSG:4760 |
| WGS 72 | EPSG:4322 |
| WGS 72REF | EPSG:4324 |
| WGS 84 | EPSG:4326 |
| WGS72 | IGNF:WGS72G |
| Wake Island 1952 | EPSG:4733 |
| Wallis - Uvea 1978 (MOP78) | IGNF:WALL78GEO |
| World Geodetic System 1984 | IGNF:WGS84G |
| WGS 1984 | EPSG:4326 |

SRC seleccionado: WGS 84

+proj=longlat +datum=WGS84 +no_defs

Help Cancel OK

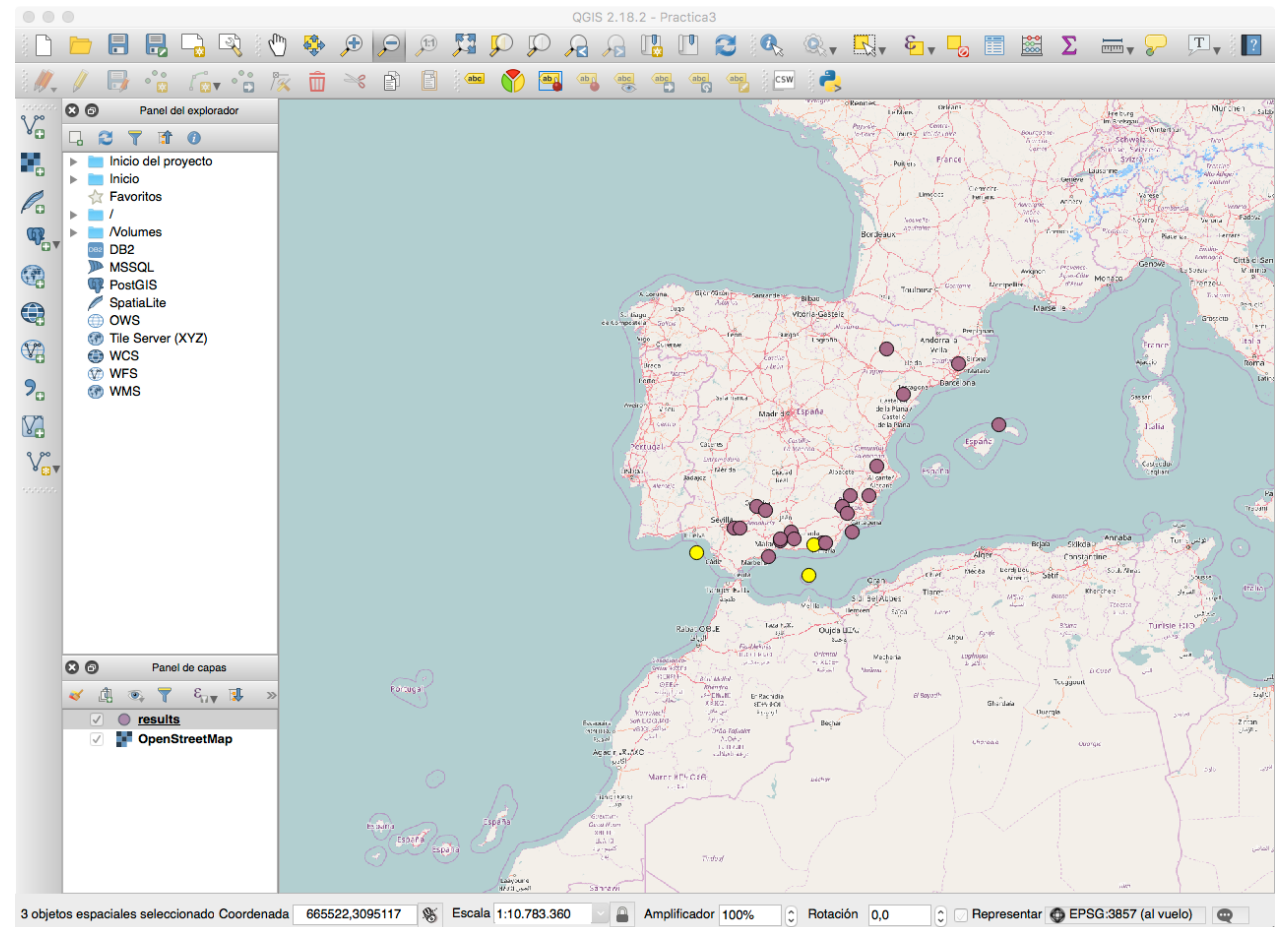
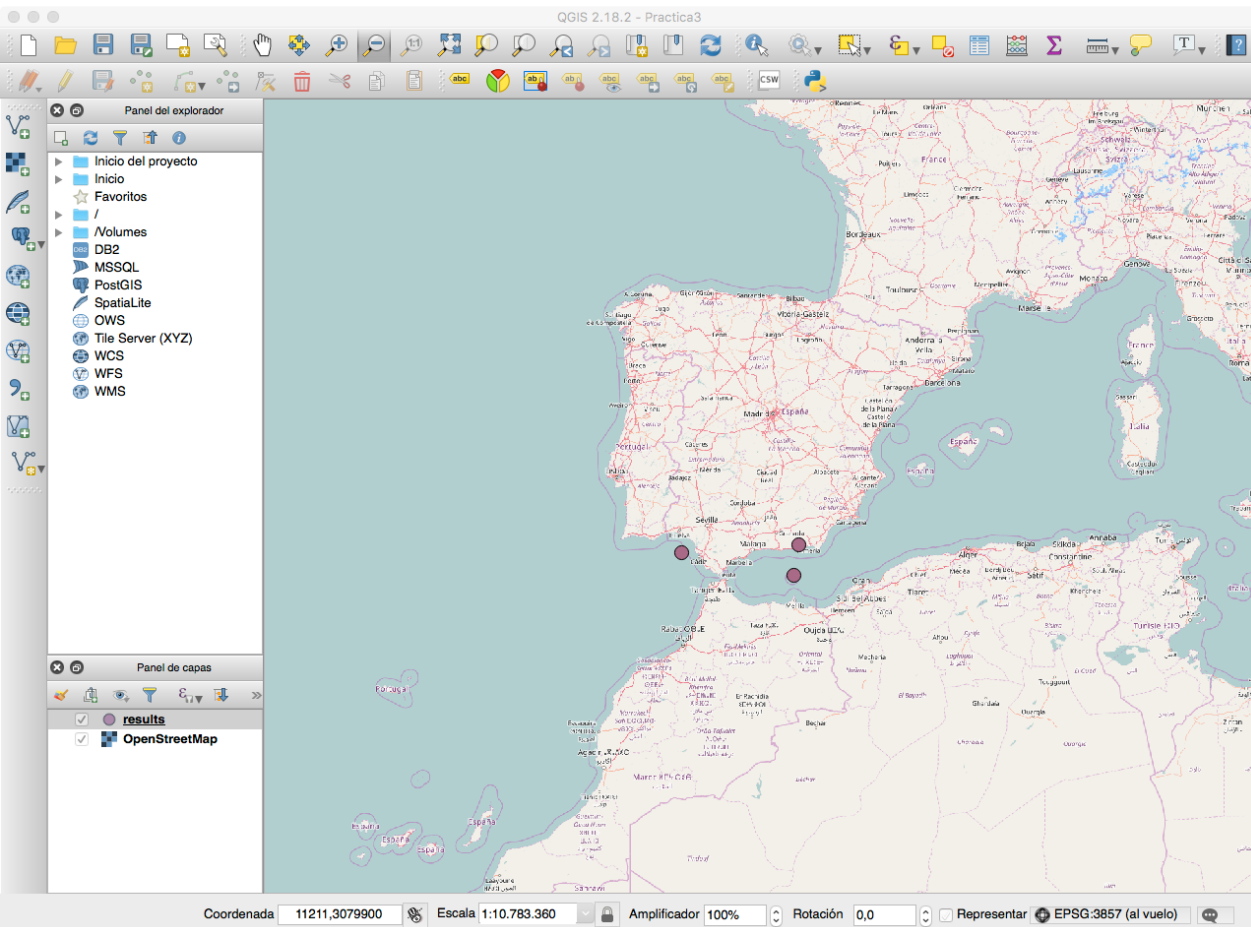
Resultado



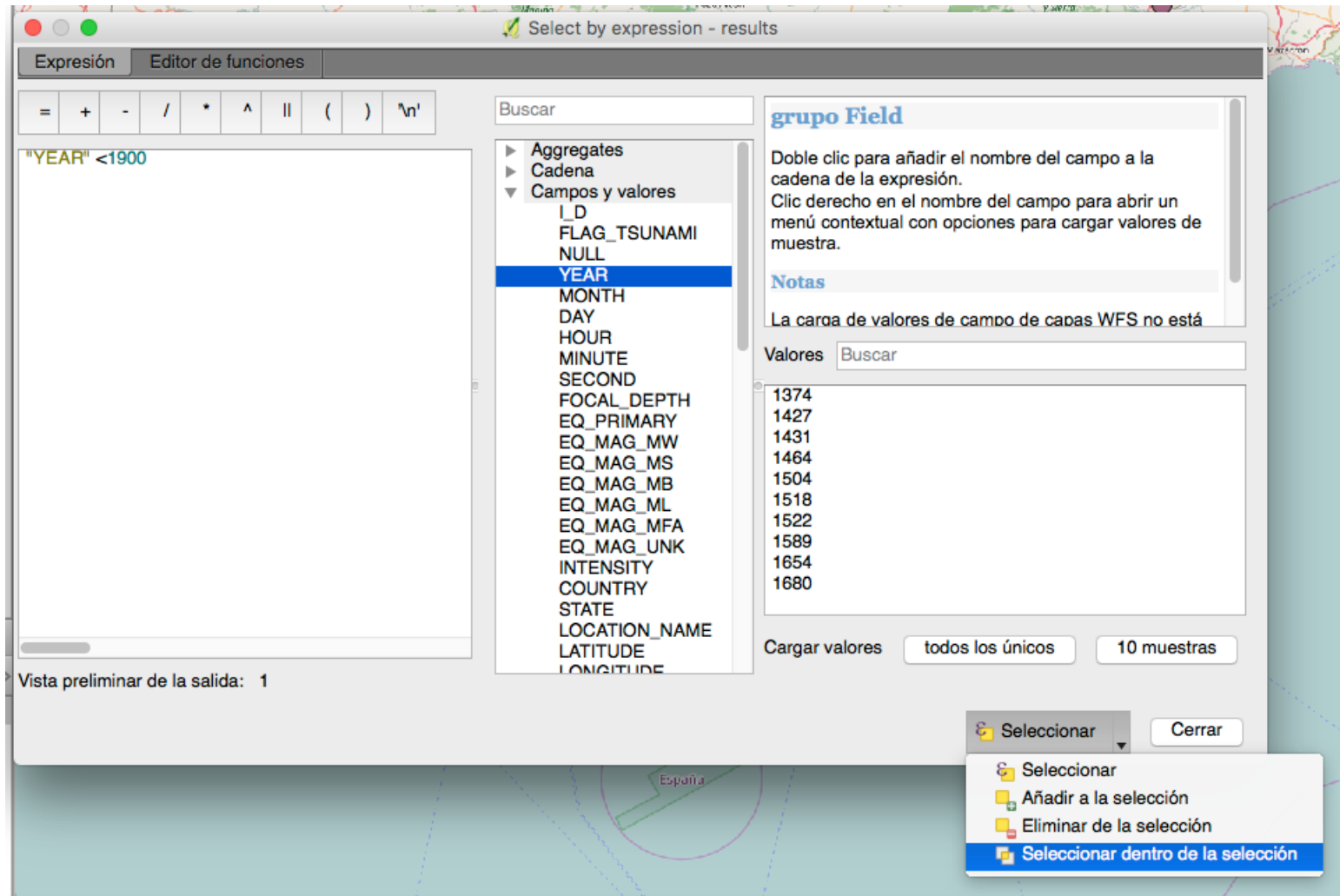
Ejercicio

Tsunami

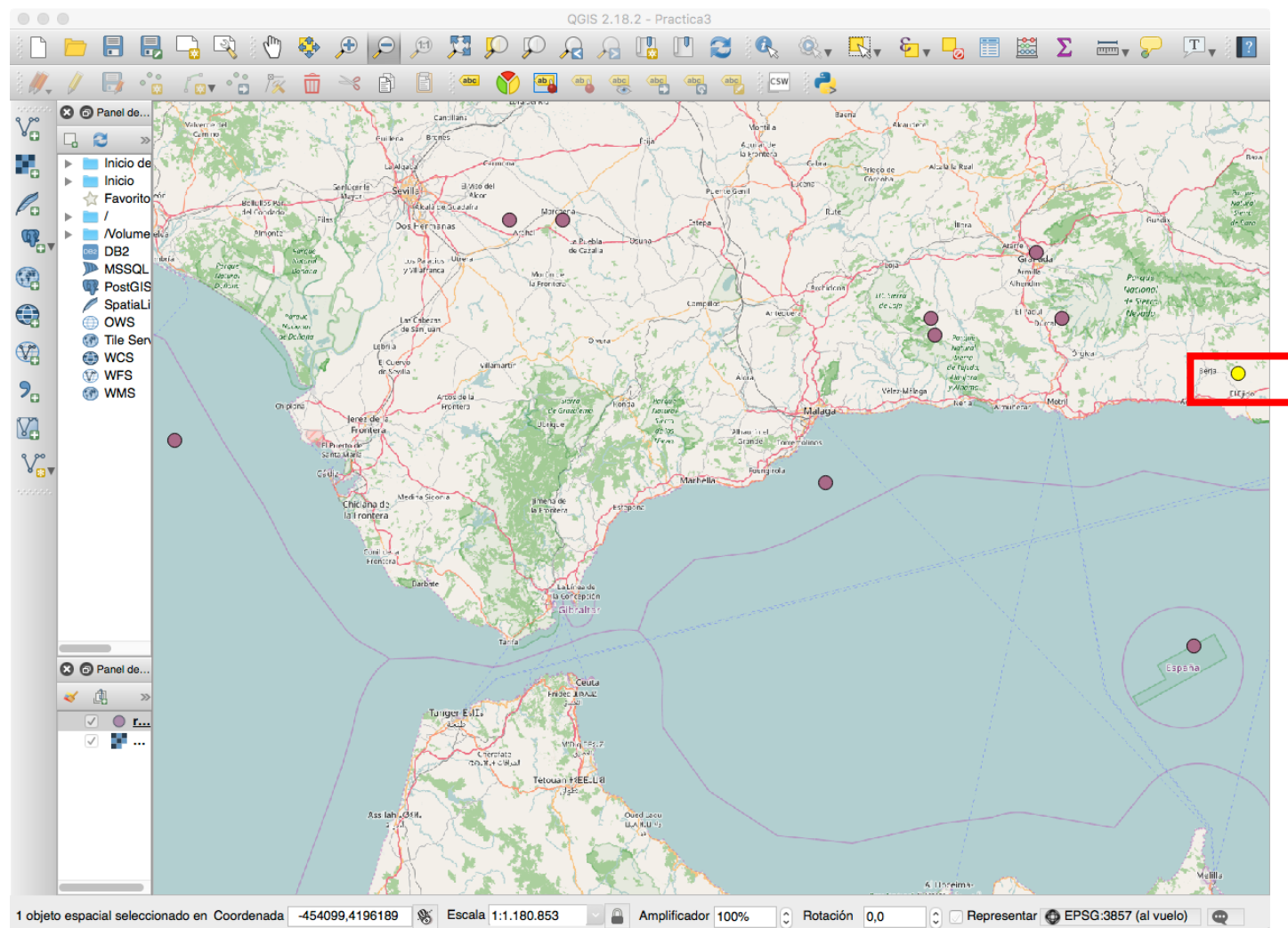
Consulta vs Selección (Tsunami)



Tsunamis antes 1900



Solución Uno sólo ¿Dónde?



Solución

QGIS 2.18.2 - Practica3

Panel de...

- Inicio de...
- Inicio
- Favorito
- /
- /Volume
- DB2
- MSSQL
- PostGIS
- SpatialL...
- OWS
- Tile Ser...
- WCS
- WFS
- WMS

Panel de...

Coordenada -529346,4515811 Escala 1:2.061.488 Amplificador 100% Rotación 0,0 Representar EPSG:3857 (al vuelo)

Resultados de la identificación

| Objeto espacial | Valor |
|---------------------------|------------------------|
| ▼ results | |
| ▼ LOCATION_NAME | SPAIN: ALMERIA: DALIAS |
| ▶ (Derivado) | |
| ▶ (Acciones) | |
| L_ID | 10120 |
| FLAG_TSUNAMI | Tsu |
| YEAR | 1804 |
| MONTH | 1 |
| DAY | 13 |
| HOUR | 17 |
| MINUTE | 45 |
| SECOND | |
| FOCAL_DEPTH | NULL |
| EQ_PRIMARY | NULL |
| EQ_MAG_MW | NULL |
| EQ_MAG_MS | NULL |
| EQ_MAG_MB | NULL |
| EQ_MAG_ML | NULL |
| EQ_MAG_MFA | NULL |
| EQ_MAG_UNK | NULL |
| INTENSITY | 8 |
| COUNTRY | SPAIN |
| STATE | |
| LOCATION_NAME | SPAIN: ALMERIA: DALIAS |
| LATITUDE | 36.833 |
| LONGITUDE | -2.833 |
| REGION_CODE | 130 |
| DEATHS | NULL |
| DEATHS_DESCRIPTION | NULL |
| MISSING | |
| MISSING_DESCRIPTION | |
| INJURIES | NULL |
| INJURIES_DESCRIPTION | NULL |
| DAMAGE_MILLIONS_DOLLARS | NULL |
| DAMAGE_DESCRIPTION | NULL |
| HOUSES_DESTROYED | NULL |
| HOUSES_DESTROYED_DESCR... | NULL |
| HOUSES_DAMAGED | NULL |
| HOUSES_DAMAGED_DESCRIP... | NULL |
| TOTAL_DEATHS | NULL |
| TOTAL_DEATHS_DESCRIPTION | NULL |
| TOTAL_MISSING | NULL |
| TOTAL_MISSING_DESCRIPTION | NULL |
| TOTAL_INJURIES | NULL |

Modo Capa actual

Ver Árbol

Ayuda

Ejercicio 3

Aparcamientos Públicos Málaga

Aparcamientos SMASSA

Aparcamientos SMASSA

Seguidores
0

Organización




ACCESIBILIDAD Y MOVILIDAD

[Conjunto de datos](#) [Grupos](#) [Flujo de Actividad](#)

Aparcamientos SMASSA

Datos y Recursos

 **CSV**
Aparcamientos de SMASSA en formato CSV

[Explorar](#)

[aparcamientos](#) [smassa](#)

Información Adicional

| Campo | Valor |
|--|---|
| Autor | Responsable Area de movilidad |
| Descargas recientes | 5 |
| Descargas totales | 26 |
| Fecha última actualización del fichero | 05 Mayo 2017, 06:15 |

CSV

[Ir al recurso](#) [API de datos](#)

URL: http://datosabiertos.malaga.eu/recursos/aparcamientos/smassa/smassa_aparcamientos.csv

Aparcamientos de SMASSA en formato CSV

[Tabla](#) [Mapa](#)

[Incrustar](#)

Add Filter

71 records

[Go »](#)

« 1 - 71 »

| _id | PolID | name | descripti.. | LAT | LON | altitude | address | telephone | email | category... |
|-----|-------|--------------|-------------|-------------|-------------|----------|-------------|-----------|-------|-------------|
| 17 | 4 | Acceso p... | | 36.71713... | -4.42775... | 3.341649 | Avenida ... | | | 1 |
| 18 | 4 | Acceso p... | | 36.71713... | -4.42775... | 3.341649 | Avenida ... | | | 1 |
| 19 | 5 | Entrada v... | | 36.72020... | -4.42449... | 186700 | Calle Ca... | | | 1 |

Crear una capa

Crear una capa a partir de un archivo de texto delimitado

Nombre de archivo Explorar...

Nombre de la capa Codificación

Formato de archivo ☐ CSV (valores separados por coma) ☒ Delimitadores personalizados ☐ Delimitador de expresión regular

☒ Coma ☐ Tabulador ☐ Espacio ☐ Dos puntos ☒ Punto y coma

Otros delimitadores Comilla Escape

Opciones de registro Número de líneas de encabezamiento a descartar ☒ El primer registro tiene los nombres de campo

Opciones de campo ☐ Recortar campos ☐ Descartar campos vacíos ☐ El separador decimal es la coma

Definición de geometría ☒ Coordenadas del punto ☐ Texto bien conocido (WKT) ☐ Ninguna geometría (tabla solo de atributos)

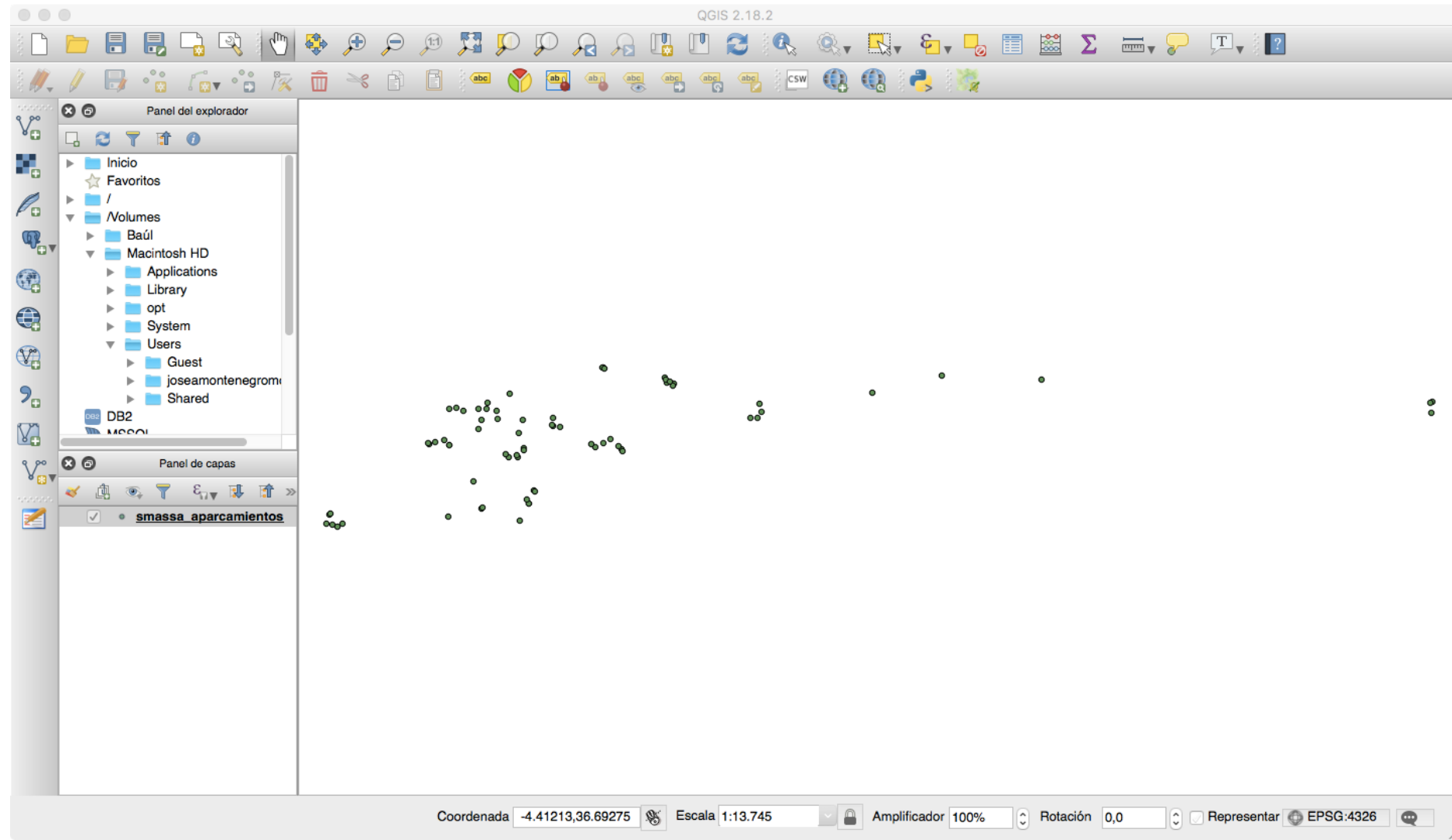
Coordenada X Coordenada Y ☐ Coordenadas GMS

Configuración de la capa ☐ Usar índice espacial ☐ Usar índice de subconjuntos ☐ Vigilar archivo

| | PolID | name | description | LAT | LON | altitude | address | telephone | email | categoryID | locat |
|---|-------|---------|-------------|------------|------------|-----------|------------------------|-----------|-------|------------|-------|
| 1 | 1 | Salitre | | 36.7132149 | -4.4276681 | 13.243120 | Calle Salitre - Málaga | | | 1 | 1 |
| 2 | 1 | Salitre | | 36.7132149 | -4.4276681 | 13.243120 | Calle Salitre - Málaga | | | 1 | 1 |
| 3 | 1 | Salitre | | 36.7132149 | -4.4276681 | 13.243120 | Calle Salitre - Málaga | | | 1 | 1 |
| 4 | 1 | Salitre | | 36.7132149 | -4.4276681 | 13.243120 | Calle Salitre - Málaga | | | 1 | 1 |

Help Cancel OK

Resultado Capa



Añadiendo Raster

