



Práctica 02

CLASE SIG

M.C. ALBA LUCINA MARTÍNEZ HAROS

Guardar el Proyecto

DOCUMENTOS/

2019-01 SIG/

2019-01 SIG P02 ALMH*

* INCIALES

PROPIAS

Desplegar una tabla en Global Mapper

- Al trabajar con Global Mapper es importante revisar que la distribución de las columnas de las coordenadas mantengan el siguiente orden: X, Y, Z, ..., N
- Por lo cual es importante que se revise las tablas antes de empezar cualquier importación.
- Es importante cambiar la extensión el formato de la tabla a CSV ó TXT.

Autoguardado coordenadas 2624 río sonora a

Archivo Inicio Insertar Disposición de página Fórmulas Datos Revisión

Pegar

Portapapeles

Fuente

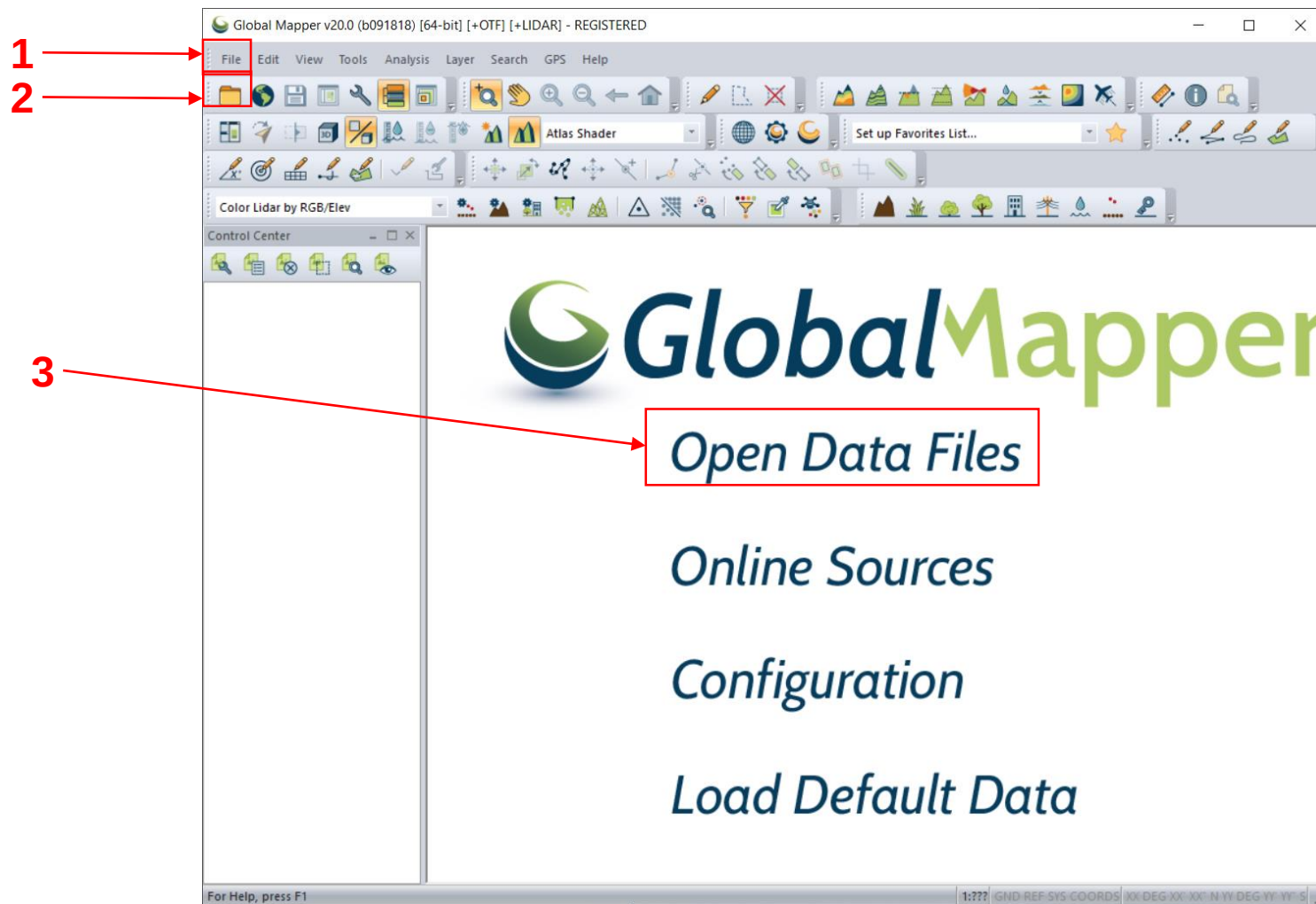
Alineación

Número

	A	B	C	D
1	X_WGS84	Y_WGS84	Z_WGS84	CLAVE_DE_R
2	580385	3356215	817.00	SNR-001
3	578250	3351560	798.00	SNR-002
4	557161	3341754	1020.00	SNR-004
5	573874	3340281	739.00	SNR-005
6	572575	3337274	739.60	SNR-006
7	572286	3334584	719.50	SNR-007
8	572519	3332088	713.00	SNR-008
9	572423	3329933	702.30	SNR-009
10	574278	3325079	684.39	SNR-010
11	571118	3324048	719.00	SNR-011
12	574910	3323983	678.00	SNR-012
13	576433	3317414	649.26	SNR-014
14	575964	3313833	637.90	SNR-015
15	569217	3312775	679.00	SNR-017
16	575678	3311177	629.80	SNR-019
17	574498	3306208	613.80	SNR-020
18	574874	3303347	599.80	SNR-021
19	574789	3298524	592.00	SNR-023
20	576662	3294715	571.50	SNR-024
21	580461	3289055	560.00	SNR-025
22	585815	3286726	619.50	SNR-026
23	580972	3285710	540.00	SNR-027
24	582829	3282439	539.00	SNR-028
25	583751	3279773	522.70	SNR-029
26	584154	3277174	517.08	SNR-030
27	585018	3275261	519.80	SNR-031
28	583776	3273203	500.00	SNR-032
29	580264	3263016	560.00	SNR-036A

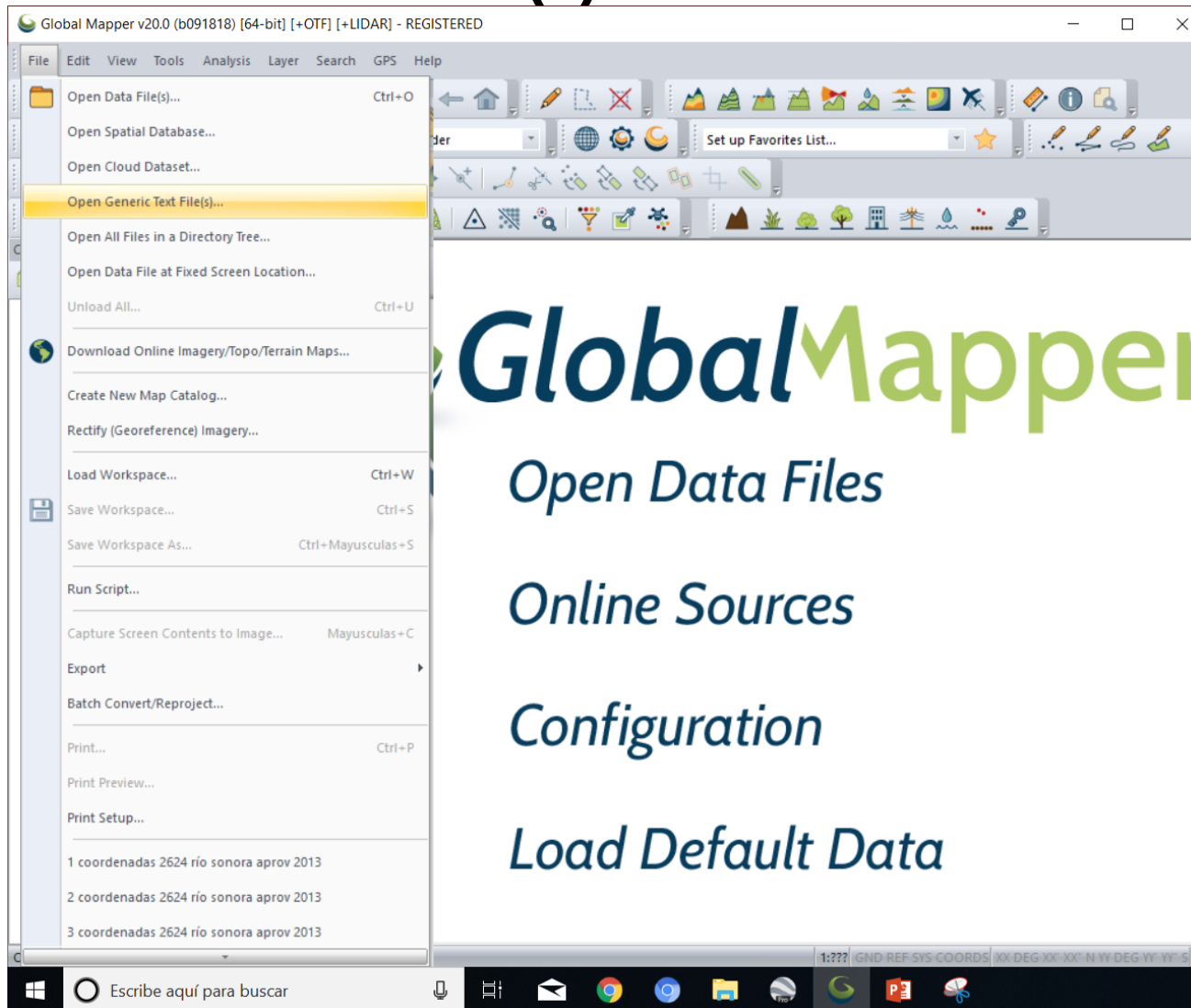
2624 río sonora aprov 2013

Para abrir las tablas se pueden usar las siguientes vías

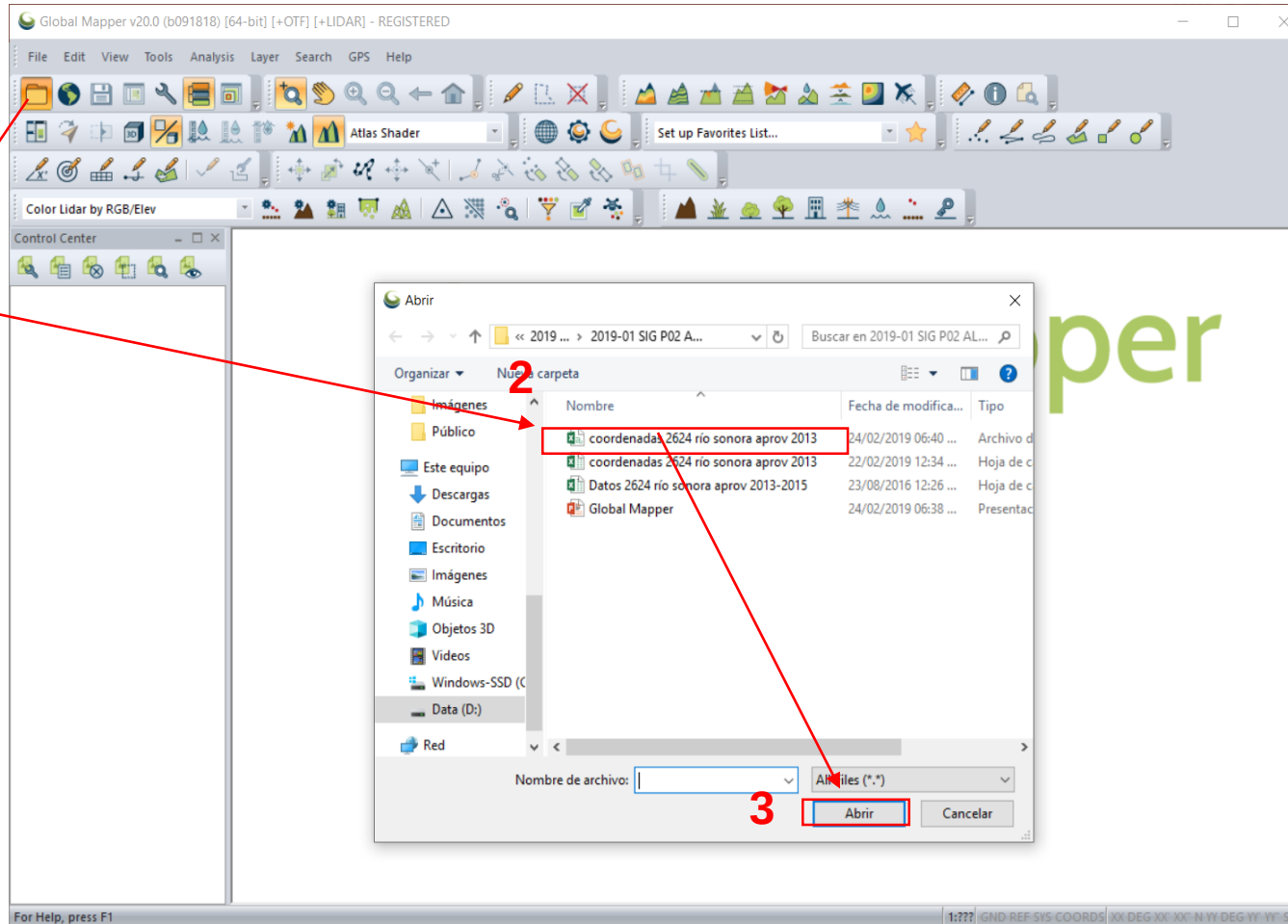


File

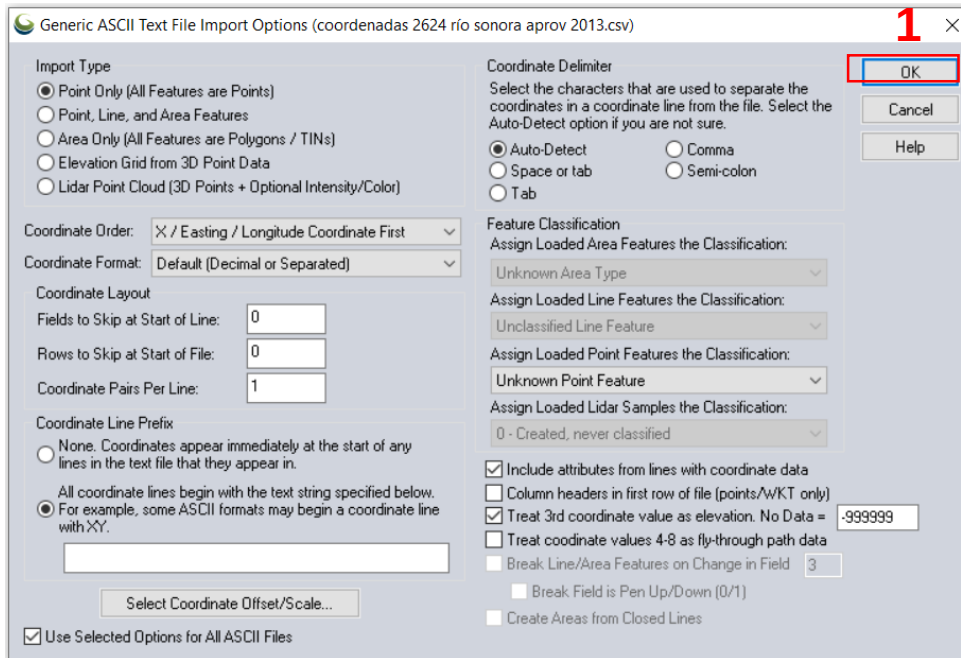
Open Generic Text File(s)



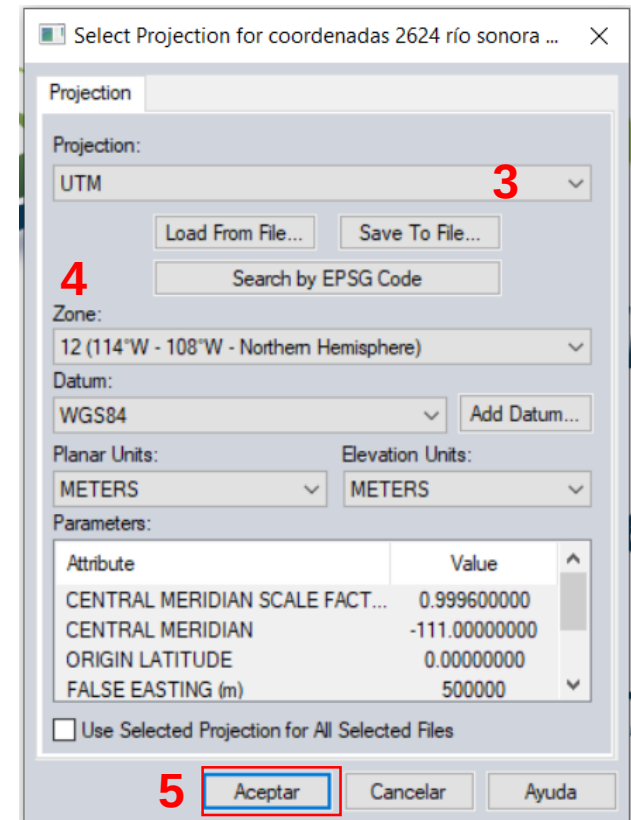
En el icono de la carpeta debemos de irnos a buscar los archivos en donde se indica la práctica 02 y seleccionar el archivo donde se encuentran las coordenadas (csv o txt)



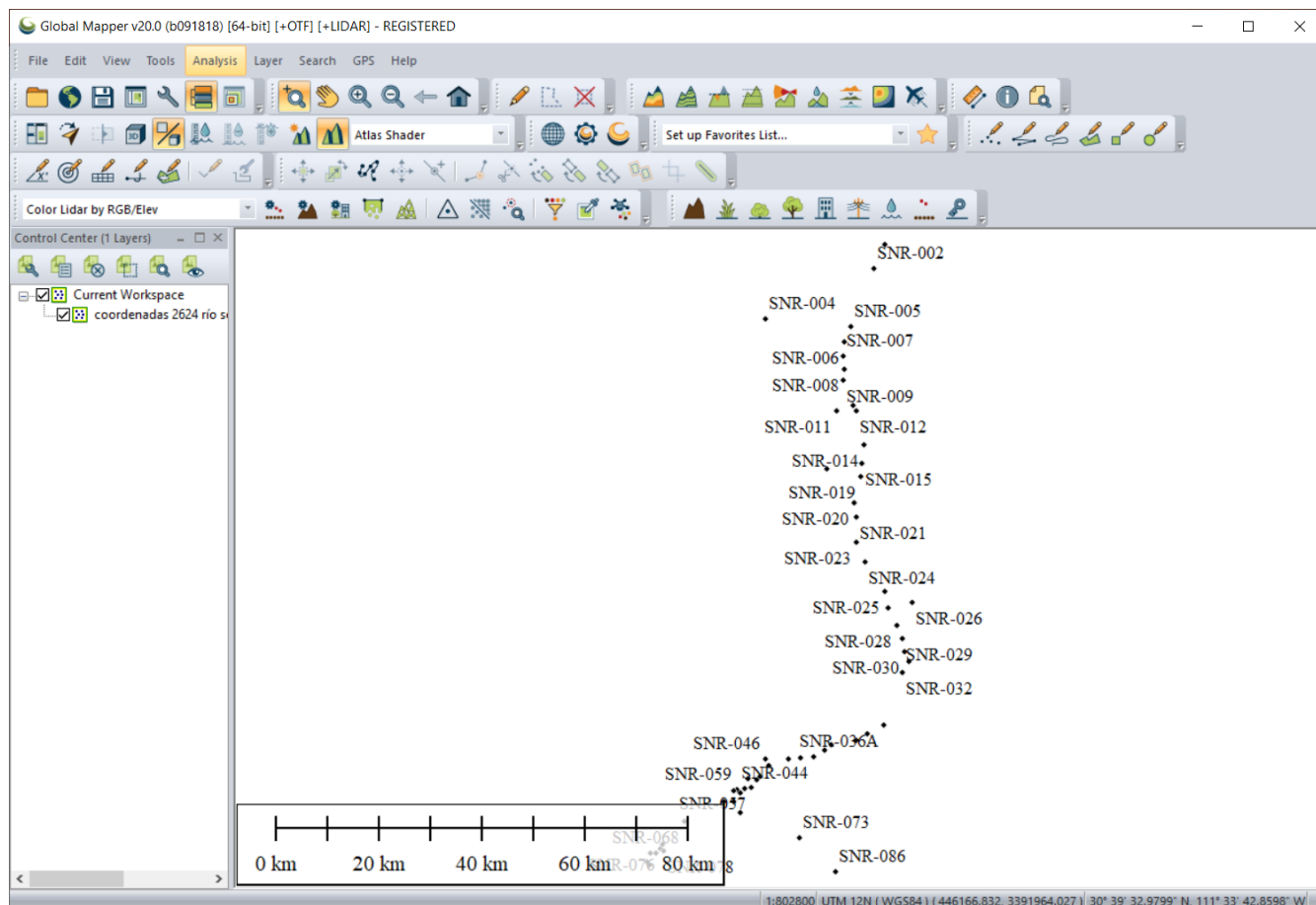
Como se trata de un caso de puntos se selecciona la primera opción y el resto por default



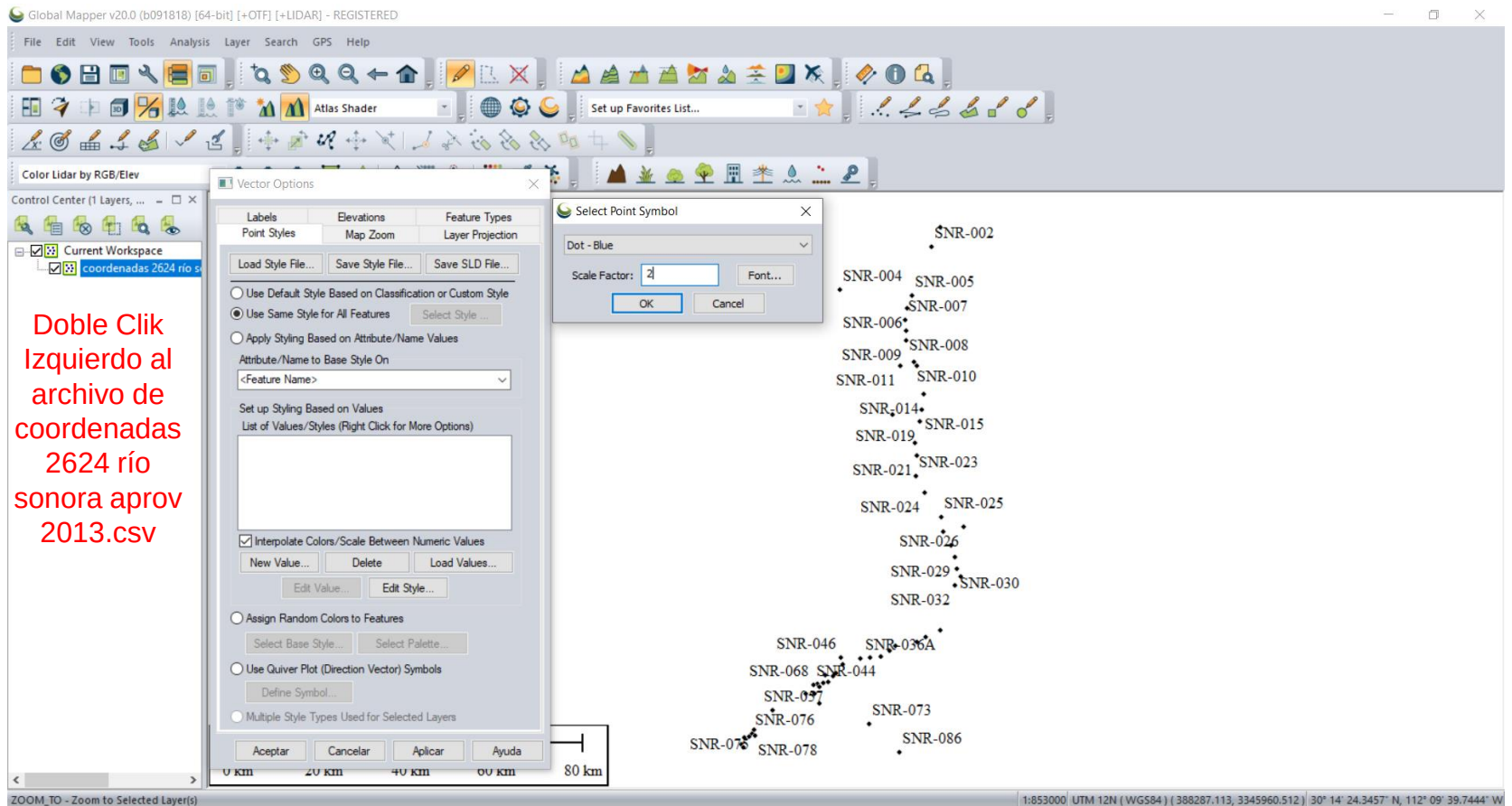
Buscar:
Proyección y zona adecuada
para nuestro proyecto, y
aceptar



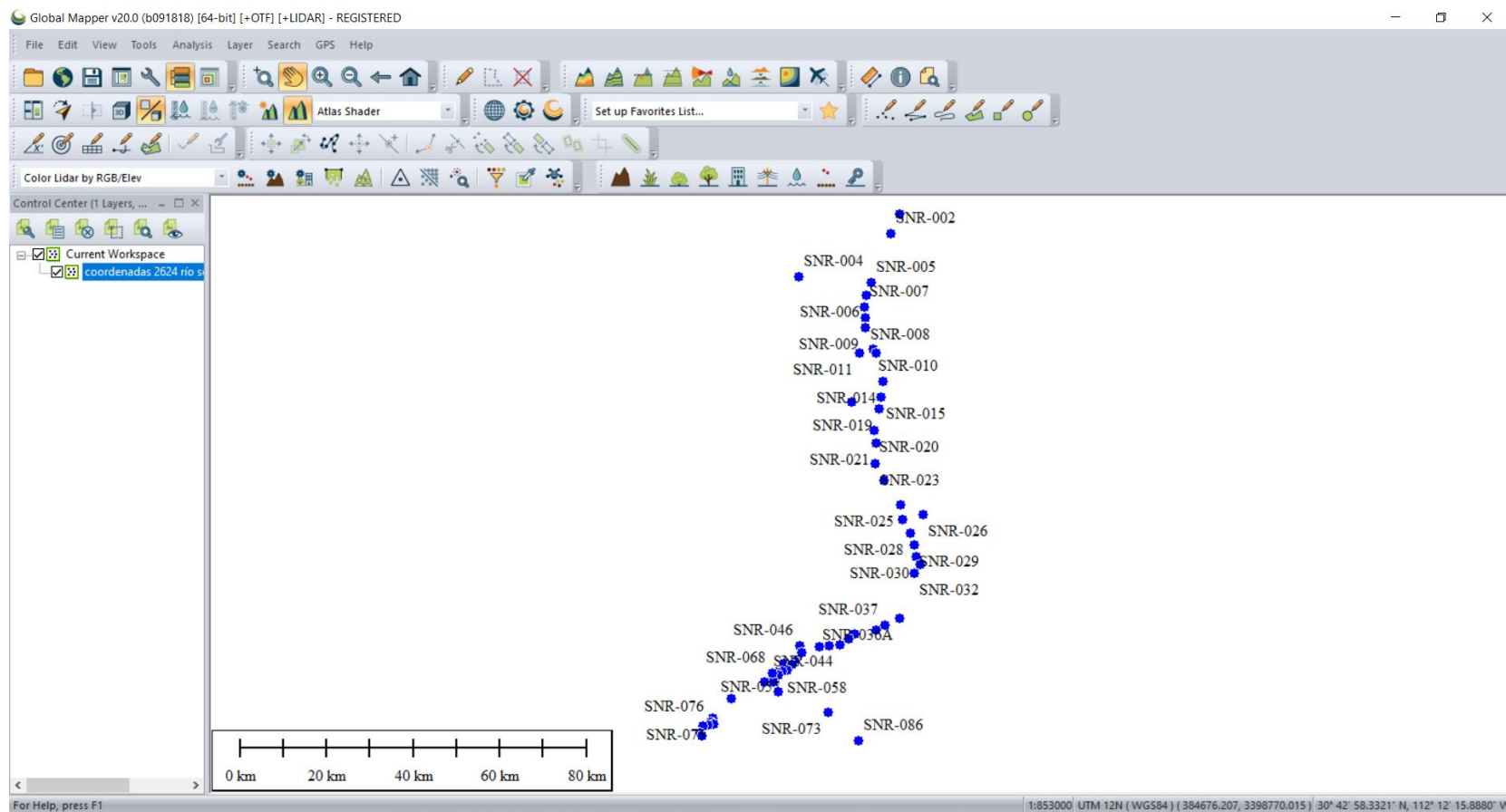
La información desplegada deberá de verse de esta manera



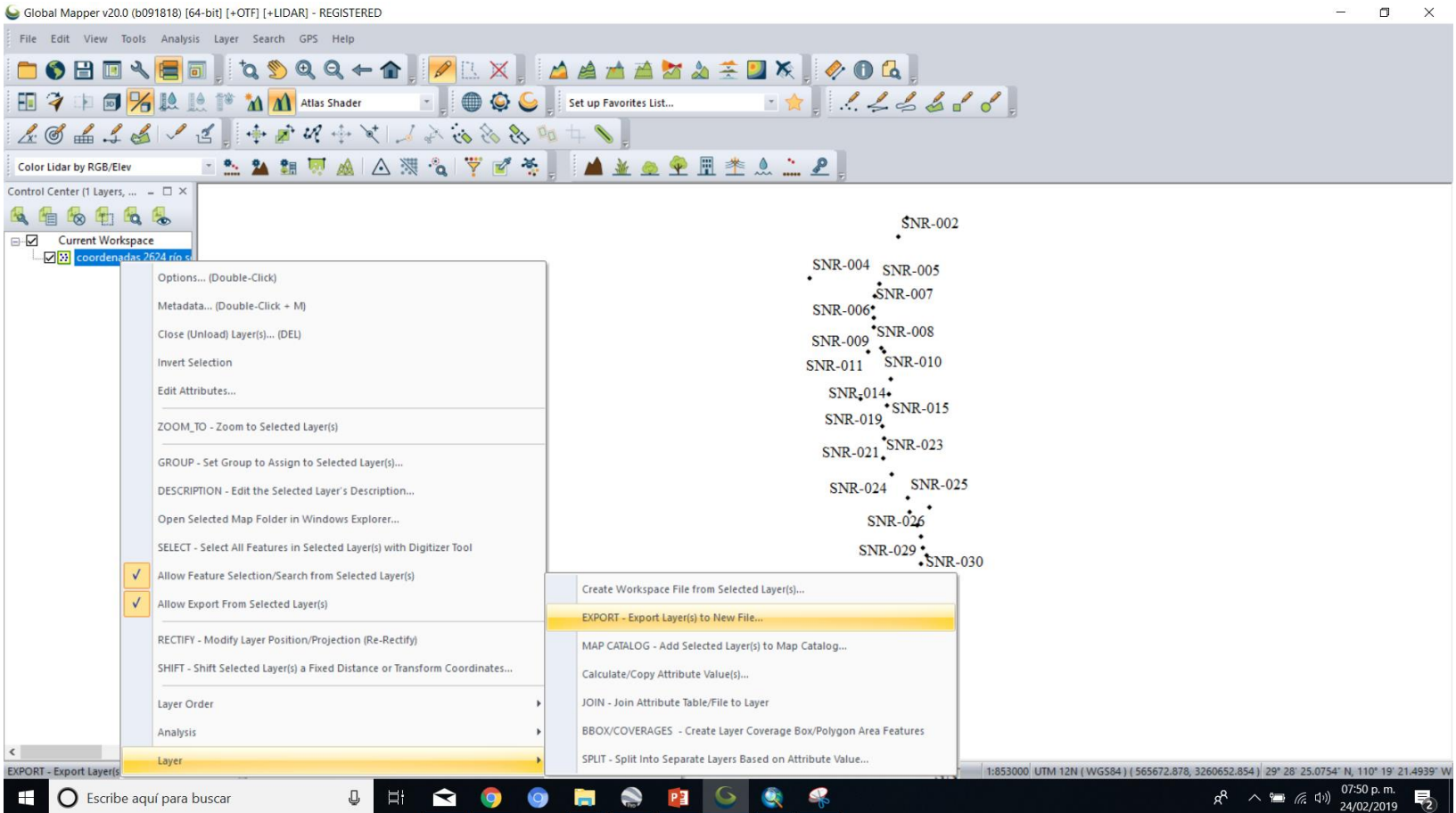
Editar los puntos de la tabla importados



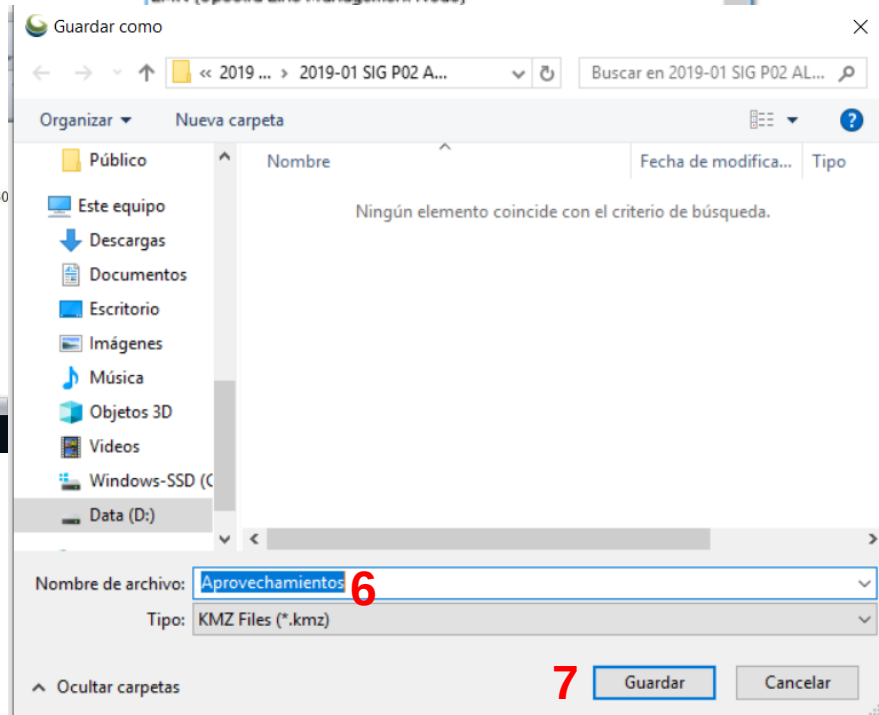
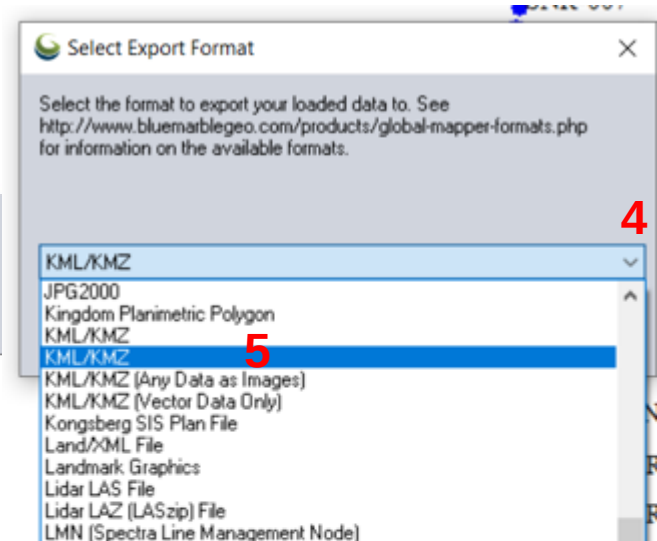
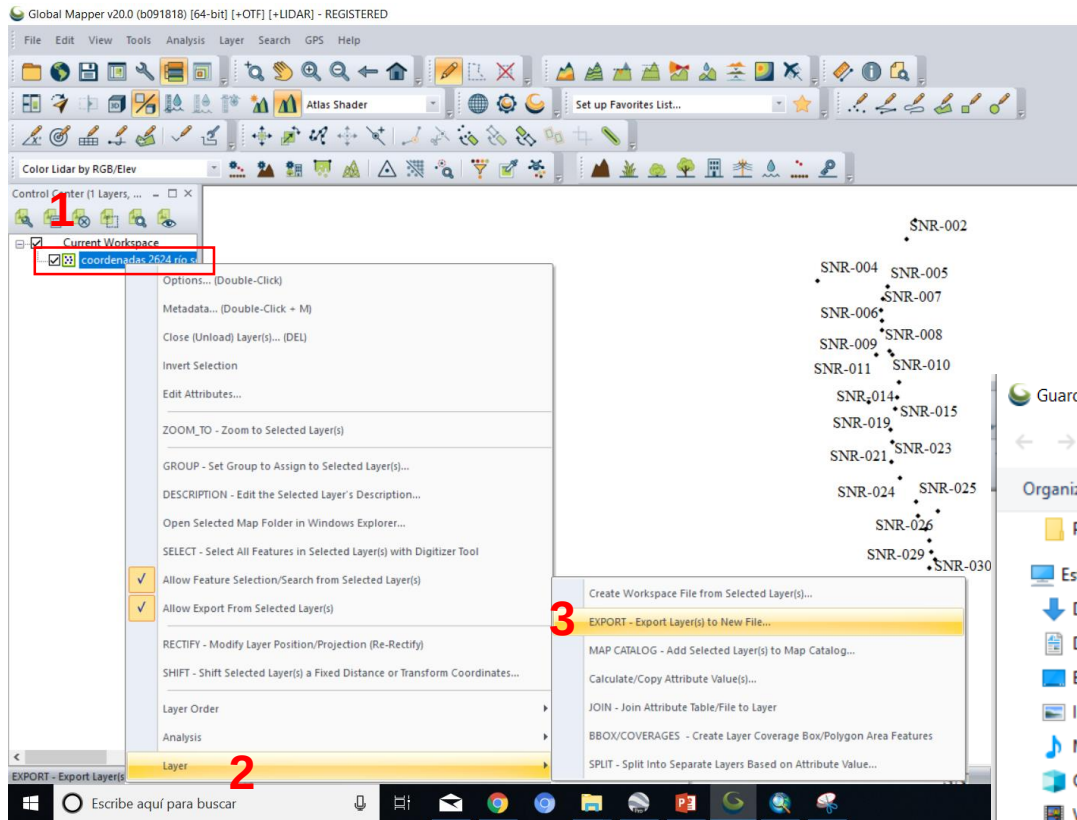
Explorar los distintos estilos que se tienen para el despliegue de los puntos



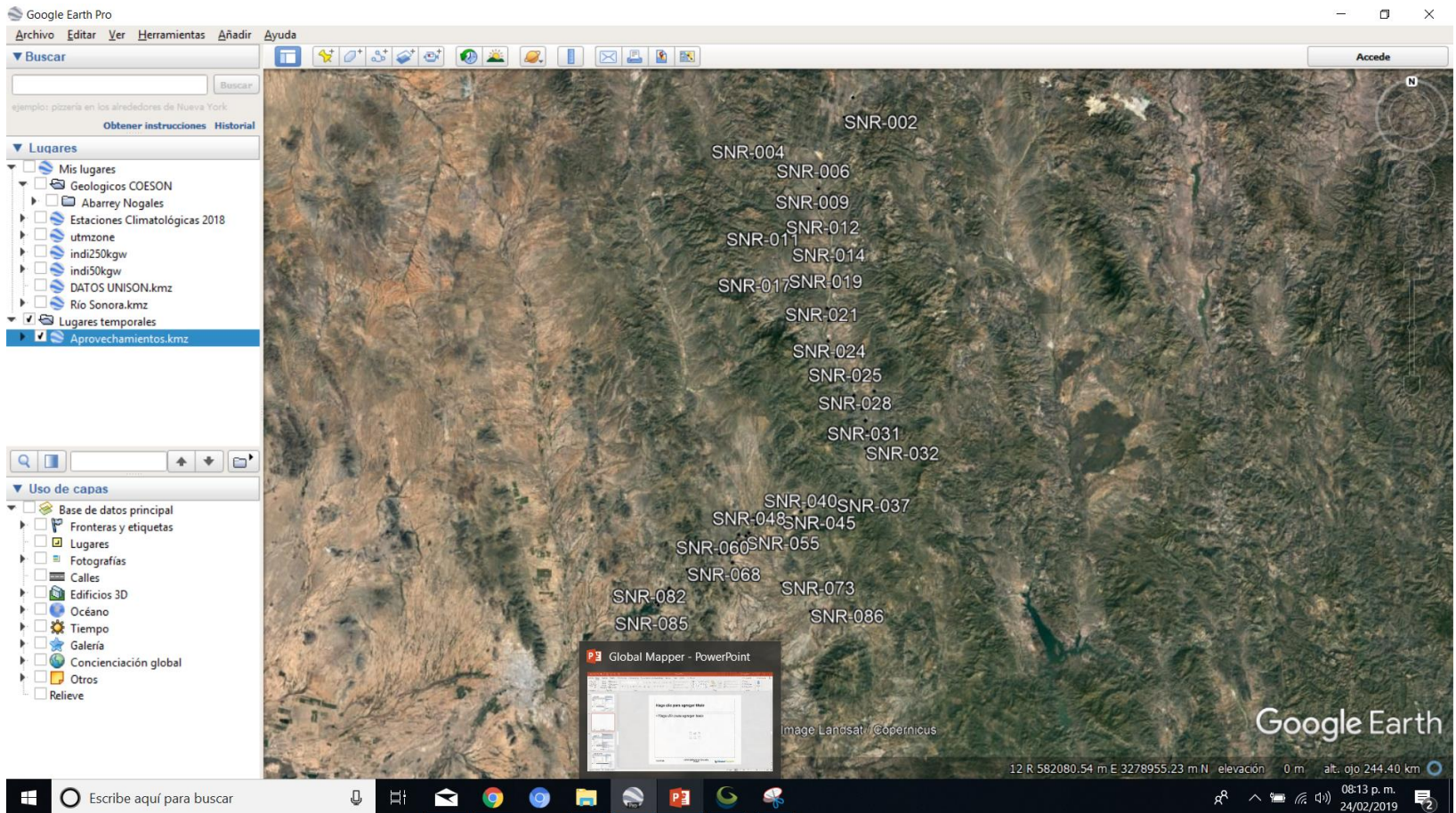
Exportar tabla a formato kmz, shp y dwg

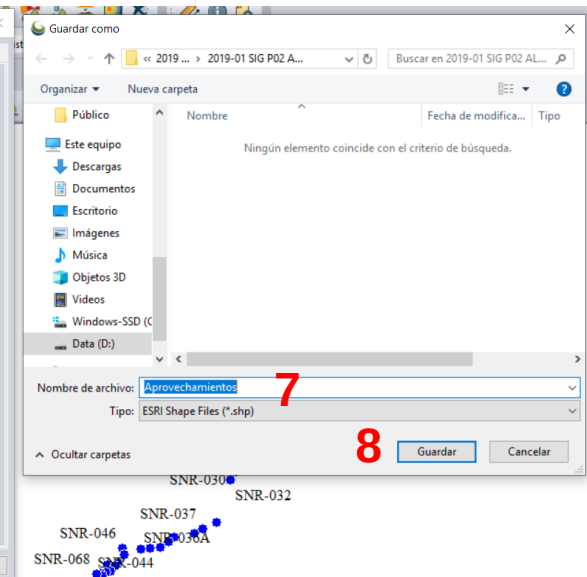
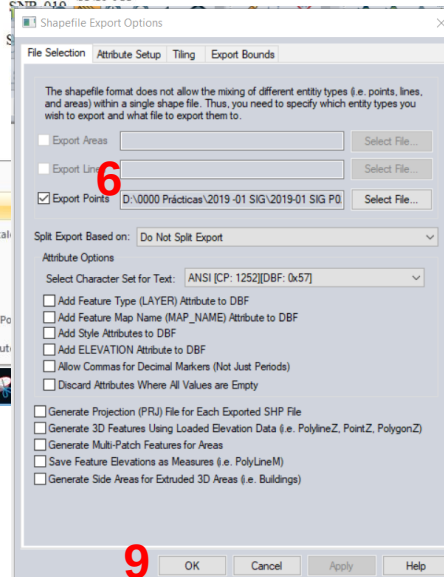
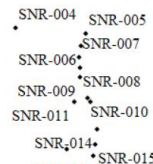


Formato KMZ

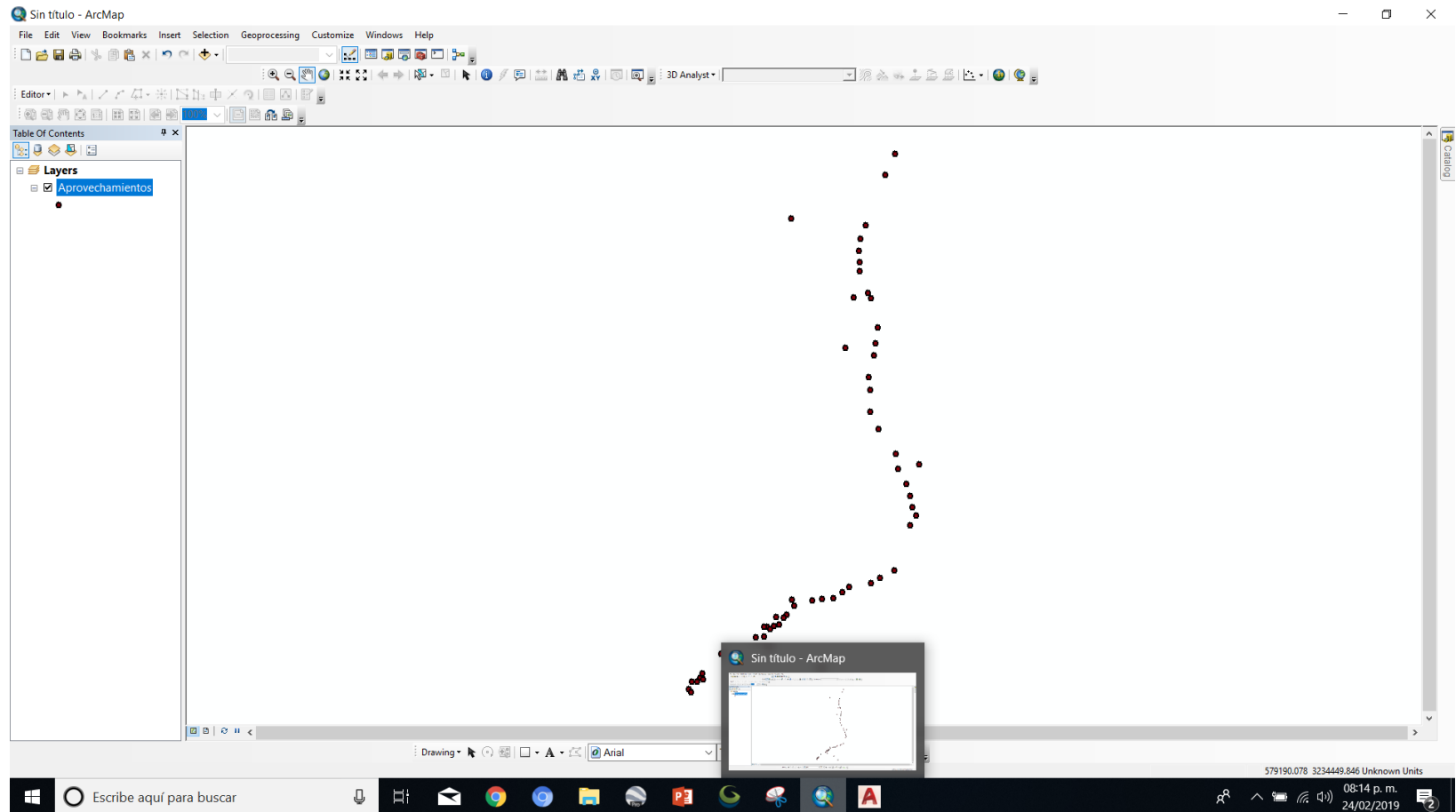


Despliegue en Google Earth



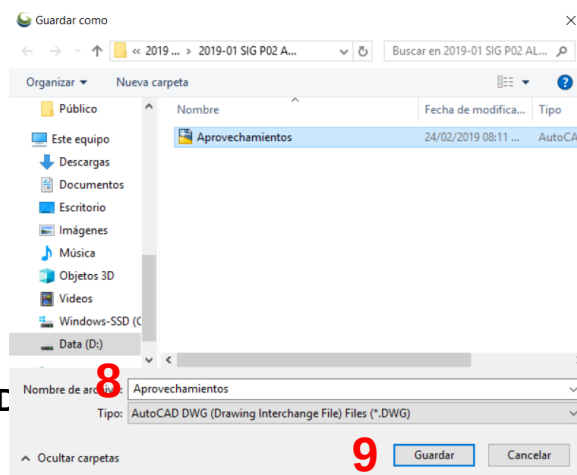
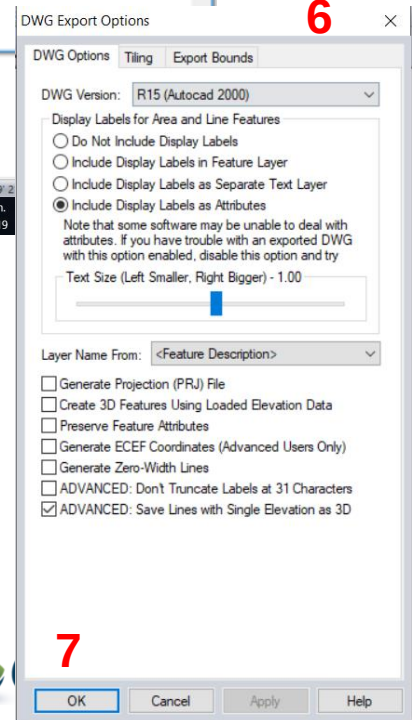
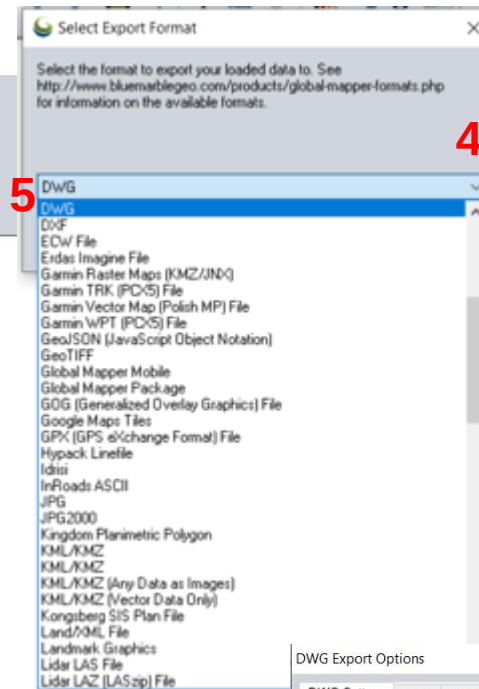
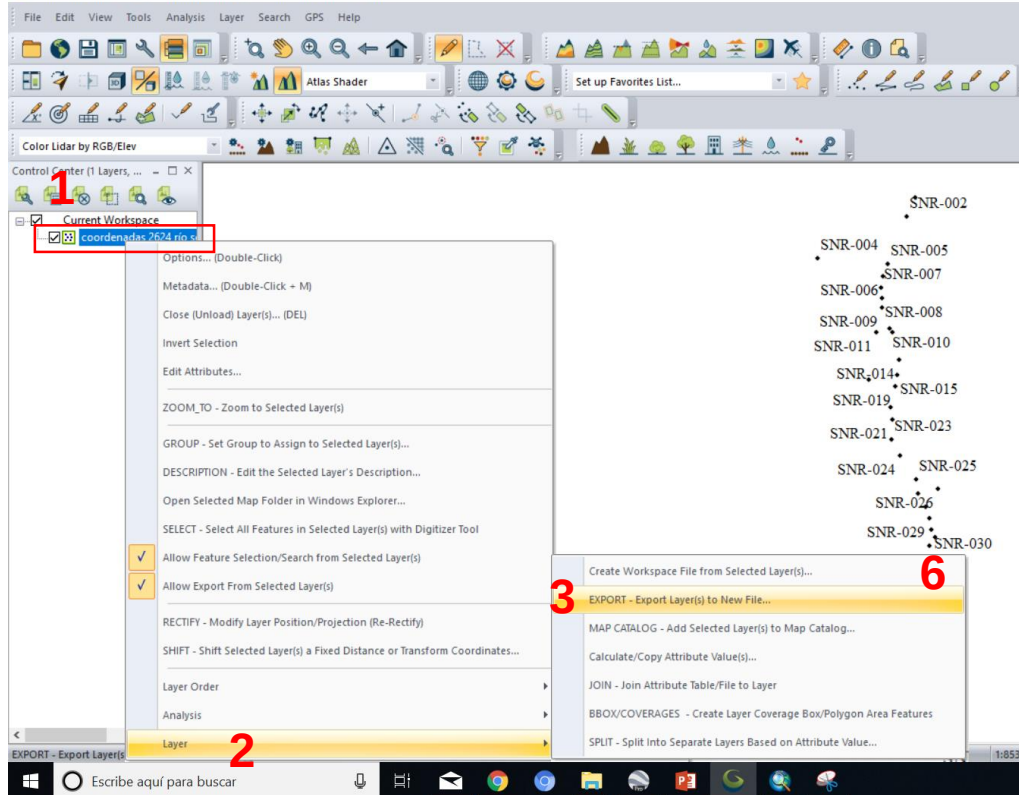


Despliegue en ArcGIS

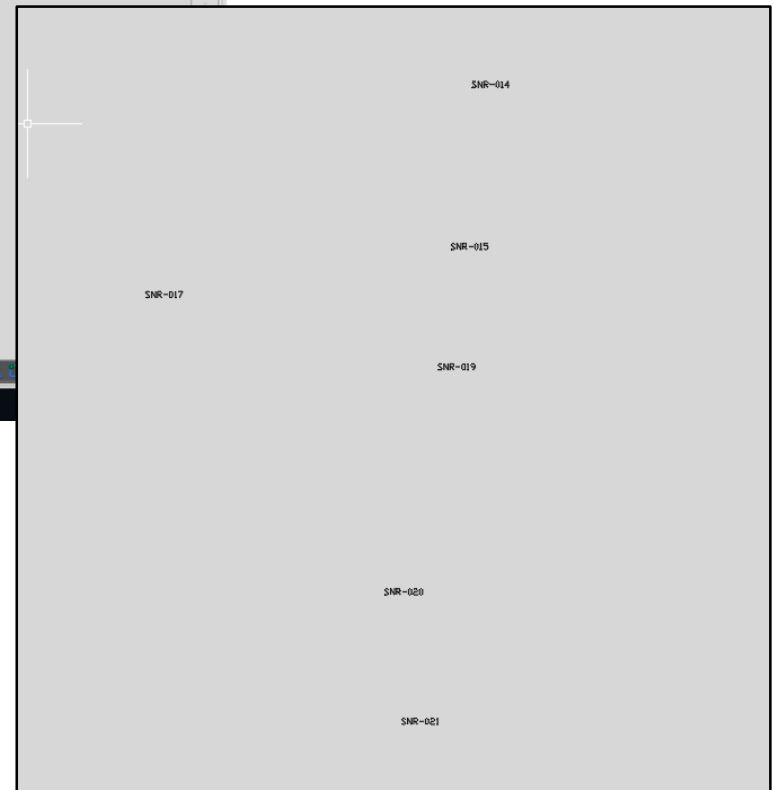
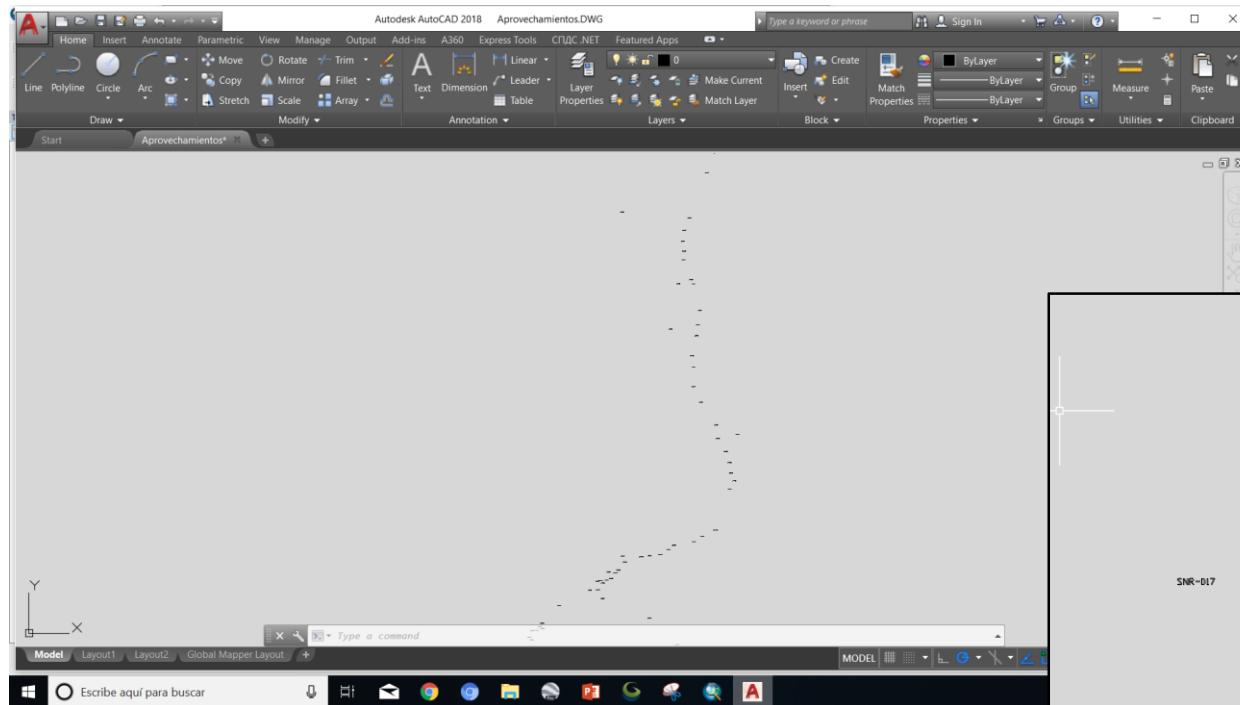


Formato DWG o DXF

Global Mapper v20.0 (b091818) [64-bit] [+OTF] [+LIDAR] - REGISTERED



Despliegue en Autocad



Para descargar la Modelo de Elevación Digital MED

The image shows the Global Mapper v20.0 interface. The File menu is open, and the 'Download Online Imagery/Topo/Terrain Maps...' option is highlighted with a red box and a red arrow pointing to the 'Select Online Data Source to Download' dialog box. The dialog box shows the 'TERRAIN DATA' section with 'ASTER GDEM v2 Worldwide Elevation Data (1-arc-second Resolution)' selected. The 'Connect' button is highlighted with a red box and a red arrow. The dialog box also shows the 'Select Area to Download' section with 'Current Screen Bounds' selected. The 'Display Options' section shows 'Resampling Method' set to 'Bilinear Interpolation' and 'Detail Level' set to 'Default'. The 'IMPORTANT NOTE' at the bottom states: 'These data sources are on external servers that we have no control over. The data may draw/export very slowly or become unavailable at any time. We have no control over this.'

Global Mapper v20.0 (b091818) [64-bit] [+OTF] [+LIDAR] - REGISTERED

File Edit View Tools Analysis Layer Search GPS Help

Open Data File(s)... Ctrl+O

Open Spatial Database...

Open Cloud Dataset...

Open Generic Text File(s)...

Open All Files in a Directory Tree...

Open Data File at Fixed Screen Location...

1 Unload All... Ctrl+U

Download Online Imagery/Topo/Terrain Maps...

Create New Map Catalog...

Rectify (Georeference) Imagery...

Load Workspace... Ctrl+W

Save Workspace... Ctrl+S

Save Workspace As... Ctrl+Mayusculas+S

Run Script...

Capture Screen Contents to Image... Mayusculas+C

Export

Batch Convert/Reproject...

Print... Ctrl+P

Print Preview...

Print Setup...

1 coordenadas 2624 río sonora aprov 2013

2 coordenadas 2624 río sonora aprov 2013

3 Datos 2624 río sonora aprov 2013-2015

sources

1:802800 UTM 12N (WGS84) (479301.310, 3338014.300) | 30° 10'

Select Online Data Source to Download

Select Data Source

TERRAIN DATA

ASTER GDEM v2 Worldwide Elevation Data (1-arc-second Resolution)

Backup Source - ASTER GDEM Worldwide Elevation Data (1.5-arc-second Resolution)

Intermap NEXT Map Elevation-DSM [PREMIUM CONTENT]

Intermap NEXT Map Elevation-DTM [PREMIUM CONTENT]

Korean VWorld Server - DEM

MapMart On Demand (Worldwide Data) [PREMIUM CONTENT]

NOAA Digital Coast (Lidar/Terrain) (Download via NOAA Web Site)

SRTM Worldwide Elevation Data (1-arc-second Resolution, SRTM Plus V3)

SRTM Worldwide Elevation Data (3-arc-second Resolution)

United States Elevation Data (NED) (10m Resolution)

OLD UNRELIABLE SOURCES

TOPO MAPS

Add New Source... Remove Source Delete Cached Files... Add Sources from File... Load EDCW from Web...

Select Area to Download

Current Screen Bounds

Within 1 miles of address

Within 1 miles of latitude 29.7833312311496 longitude -110.375621741734

Specify Latitude/Longitude Bounds of Area

West -111.47401051946 North 30.364347285642 East -109.27723296400 Draw Box...

South 29.202315176657

(NOTE: Longitude values in the Western Hemisphere and latitude values in the Southern hemisphere must be negative.)

Download Within Currently Selected Polygon(s)

Entire Data Source Bounds

Display Options

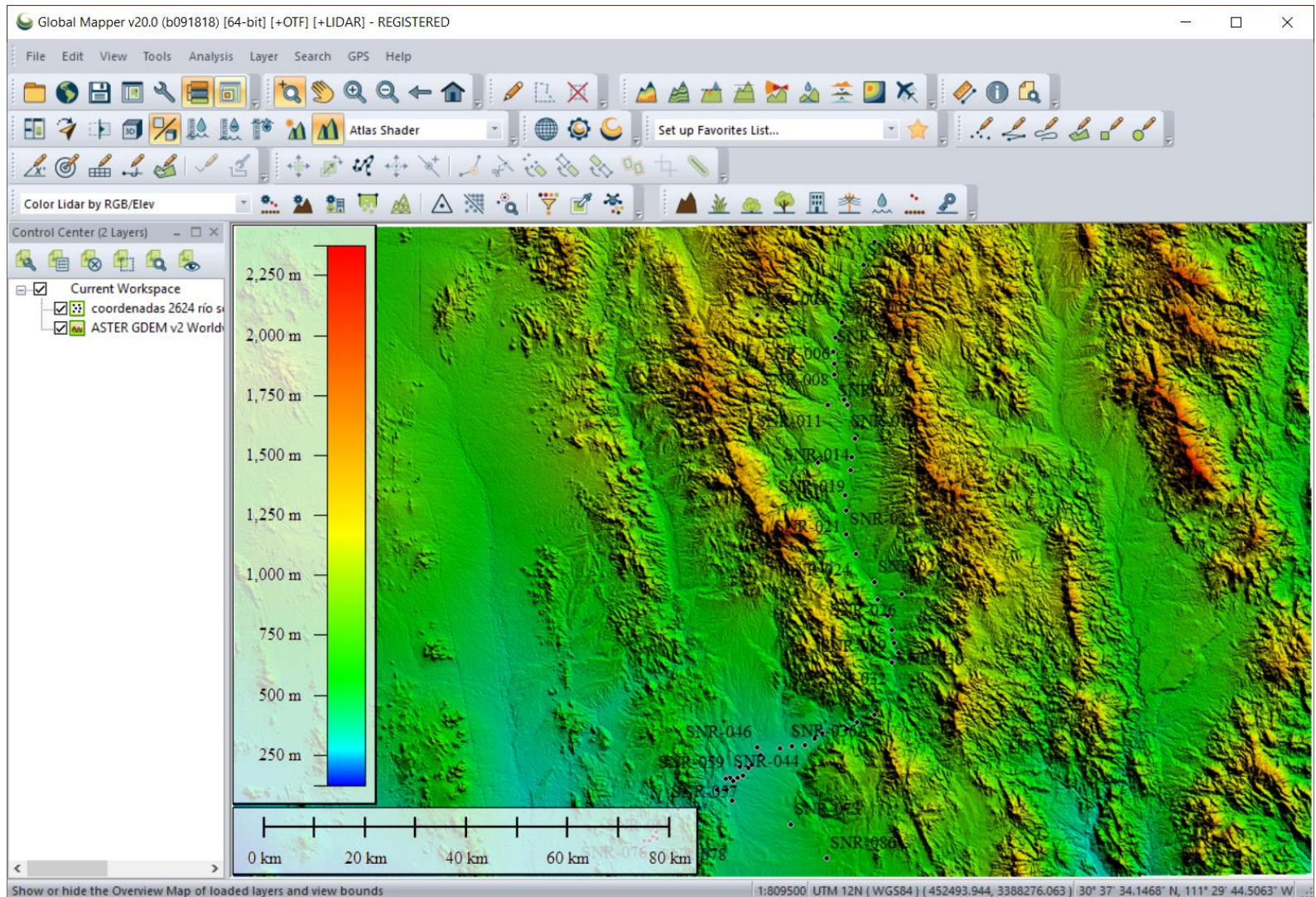
Resampling Method: Bilinear Interpolation Detail Level: Default

Restrict Source to Selected Bounds (i.e. Don't Allow Panning Entire Data Set) Less Default More

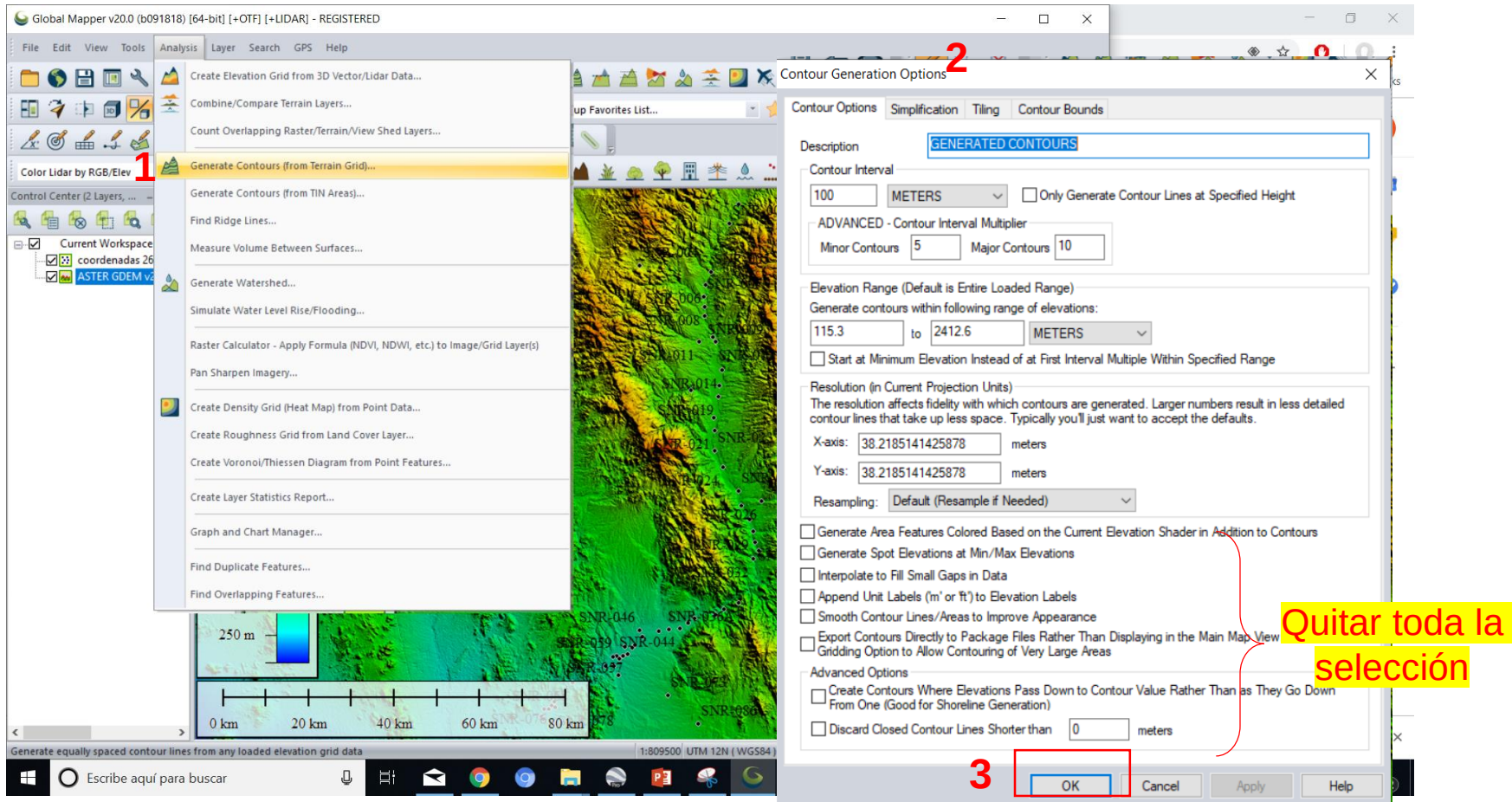
IMPORTANT NOTE: These data sources are on external servers that we have no control over. The data may draw/export very slowly or become unavailable at any time. We have no control over this.

3 Connect

Obtenemos:



Generación de curvas de nivel



Es importante verificar que los atributos de la columna de elevación se mantengan con datos numéricos. Si esto no ocurre es muy probable que cuando se exporten estos contornos a otro software p.e. ArcGIS no se puedan elaborar procesos como generación de TIN o RASTER

1. Clic derecho al archivo de GENERATED CONTOURS

2. Edit Attributes...

3. Attribute Editor (GENERATED CONTOURS)

<Feature Name>	<Feature Type>	ELEVATION	CLOSED_CONTOUR	<Feature Description>	<Feature Layer Name>	<Index in Layer>	<Last Modified Time>
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17597	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17596	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17595	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17594	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17593	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17592	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17591	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17590	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17589	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17588	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17587	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17586	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17585	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17584	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17583	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17582	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17581	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17580	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17579	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17578	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17577	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17576	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17575	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17574	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17573	2019-02-24T19:33:01
1000	Contour Line, ...	1000	YES	Contour Line, Major	GENERATED CONTO...	17572	2019-02-24T19:33:01

Al generarse las contornos procederemos a convertir un archivo SHAPEFILE

Debemos darle clic derecho al archivo de GENERATED CONTOURS para que se despliegue la ventana 1

The image shows a composite of several windows from the Global Mapper v20.0 software, illustrating the steps to export a shapefile from generated contours. The main map window displays a topographic map with contour lines labeled with elevation values (e.g., 1,000 m, 750 m, 500 m, 250 m). A red box highlights the 'Layer' dropdown menu in the 'Options' window, which is labeled with a red '1'. The 'Options' window is open, showing the 'Layer' dropdown menu. A red '2' is placed next to the 'EXPORT - Export Layer(s) to New File...' option in the dropdown menu. The 'Select Layers' window is open, showing the 'GENERATED CONTOURS' layer selected, with a red '3' next to the 'OK' button. The 'Select Export Format' window is open, showing 'Shapefile' selected, with a red '4' next to the 'OK' button. The 'Shapfile Export Options' window is open, showing the 'File Selection' tab, with a red '5' next to the 'Export Lines' checkbox. The 'Guardar como' (Save As) window is open, showing the file name 'Curvas de Nivel' and the file type 'ESRI Shape Files (*.shp)', with a red '6' next to the file name and a red '7' next to the 'Guardar' button.

Global Mapper v20.0 (b)

Options... (Double-Click)

Metadata... (Double-Click + M)

Close (Unload) Layer(s)... (DEL)

Invert Selection

Edit Attributes...

ZOOM_TO - Zoom to Selected Layer(s)

GROUP - Set Group to Assign to Selected Layer(s)...

DESCRIPTION - Edit the Selected Layer's Description...

SELECT - Select All Features in Selected Layer(s) with Digitizer Tool

Allow Feature Selection/Search from Selected Layer(s)

Allow Export From Selected Layer(s)

RECTIFY - Modify Layer Position/Projection (Re-Rectify)

SHIFT - Shift Selected Layer(s) a Fixed Distance or Transform Coordinates...

Layer Order

Analysis

Layer

EXPORT - Export Layer(s) to New File...

MAP CATALOG - Add Selected Layer(s) to Map Catalog...

Calculate/Copy Attribute Value(s)...

JOIN - Join Attribute Table/File to Layer

BBOX/COVERAGES - Create Layer Coverage Box/Polygon Area Features

SPLIT - Split Into Separate Layers Based on Attribute Value...

Create Workspace File from Selected Layer(s)...

Select the layer(s) to operate on:

☐ coordenadas 2624 río sonora aprov 2013.csv

☐ ASTER GDEM v2 Worldwide Elevation Data (1 arc-second F

☒ GENERATED CONTOURS

Check All Clear All

OK Cancel

Select Export Format

Select the format to export your loaded data to. See <http://www.blumablegeo.com/products/global-mapper-formats.php> for information on the available formats.

Shapefile

OK Cancel

Shapfile Export Options

File Selection Attribute Setup Tiling Export Bounds

The shapfile format does not allow the mixing of different entity types (i.e. points, lines, and areas) within a single shape file. Thus, you need to specify which entity types you wish to export and what file to export them to.

☐ Export Areas

☒ Export Lines

☐ Export Points

Split Export Based on: Do Not Split Export

Attribute Options

Select Character Set for Text: ANSI (CP: 1252)[DBF: 0x57]

☐ Add Feature Type (LAYER) Attribute to DBF

☐ Add Feature Map Name (MAP_NAME) Attribute to DBF

☐ Add Style Attributes to DBF

☐ Add ELEVATION Attribute to DBF

☐ Allow Commas for Decimal Markers (Not Just Periods)

☐ Discard Attributes Where All Values are Empty

☐ Generate Projection (PRJ) File for Each Exported SHP File

☐ Generate 3D Features Using Loaded Elevation Data (i.e. PolylineZ, PointZ, PolygonZ)

☐ Generate Multi-Patch Features for Areas

☐ Save Feature Elevations as Measures (i.e. PolyLineM)

☐ Generate Side Areas for Extruded 3D Areas (i.e. Buildings)

OK Cancel Apply Help

Guardar como

Organizar Nueva carpeta

Nombre

Fecha de modifica...

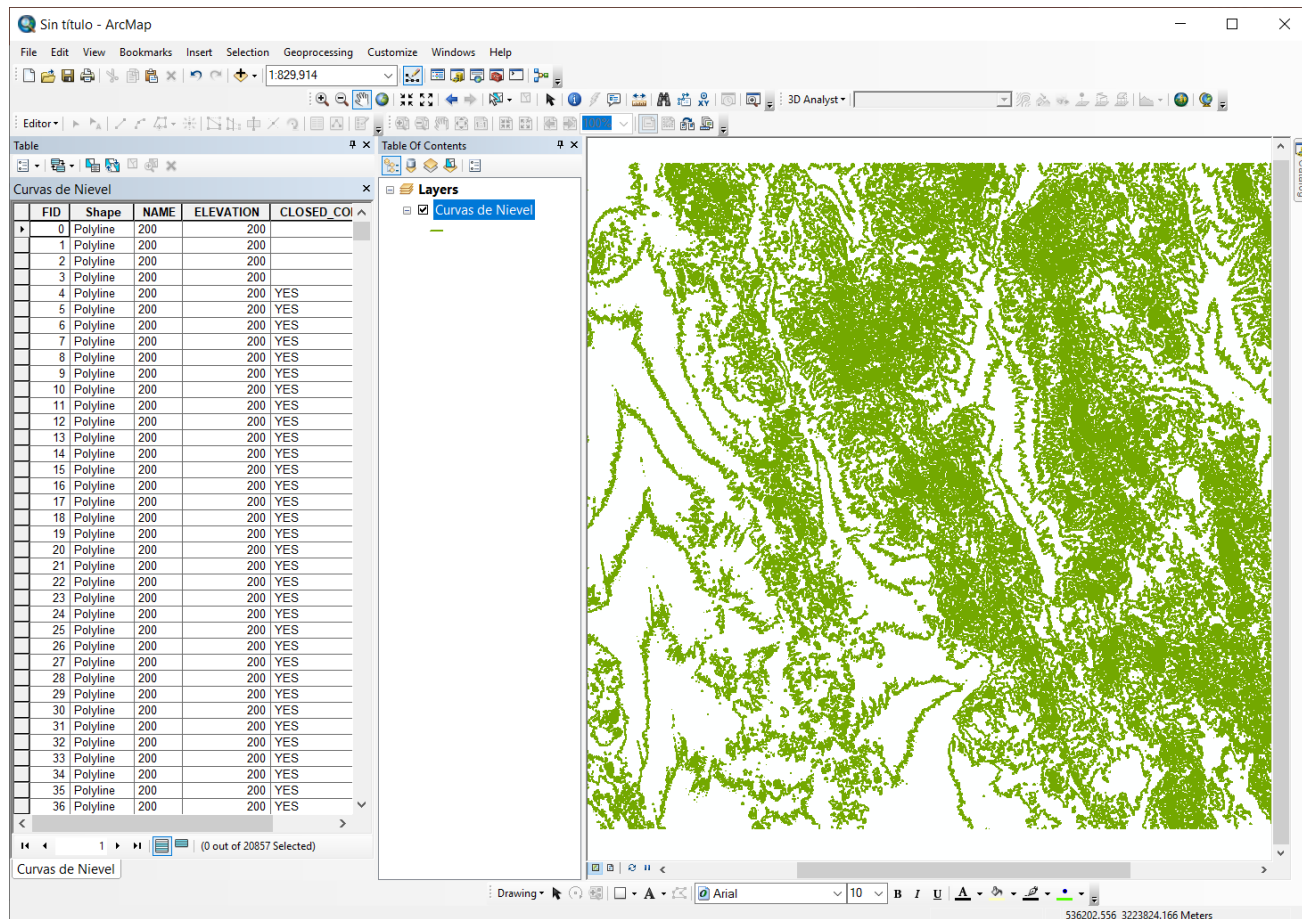
Tipo

Nombre de archivo: Curvas de Nivel

Tipo: ESRI Shape Files (*.shp)

Guardar Cancel

Una vez exportado el SHP se puede desplegar en ArcGIS o en otro software de SIG



Nota:

Las curvas de nivel también pueden ser exportadas en KMZ, DWG, DXF, etcétera, según las necesidades del proyecto.

Archivos a enviar en una carpeta comprimida con el nombre de 2019-01 SIG P02 ALMH*

- KMZ de los aprovechamientos y de las curvas de nivel
- SHP de los aprovechamientos y de las curvas de nivel

• * LAS INICIALES PROPIAS

EDICIÓN DE PLANO

La edición se realizara en clase