



ASOR Cultural Heritage Initiative

QGIS

Module 02.16: Attribute Tables

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ASOR QGIS Module 02.16 – Attribute Tables

QGIS is a free and open source Geographic Information System (GIS), or geodatabase, licensed under the GNU General Public License. QGIS runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities. Download QGIS here: <https://qgis.org/>.

QGIS users can view, edit, and analyze spatial information through its free software toolkit.

This **ASOR Tutorial (02.16)** covers key features of Attribute Tables in QGIS and how they relate to spatial information.

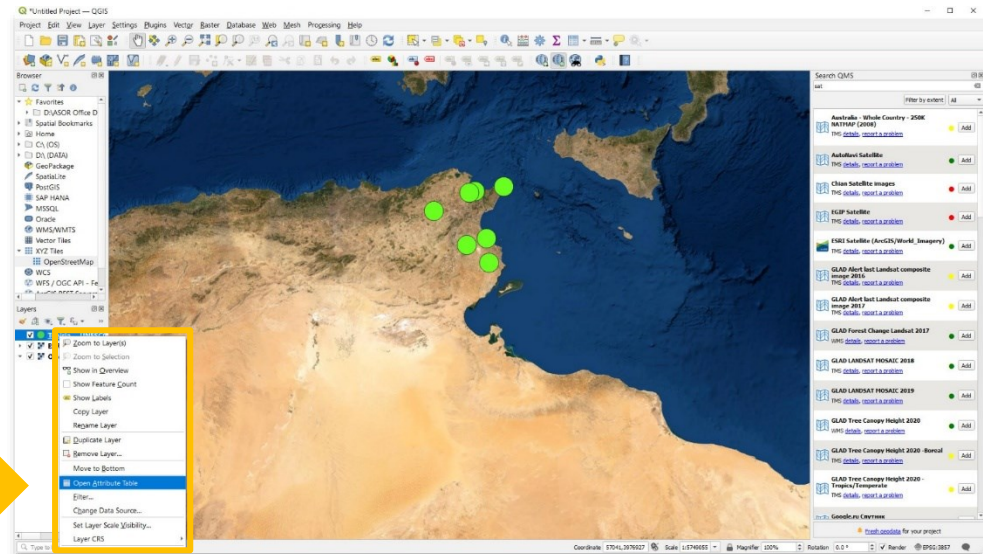
KEY CONCEPTS

- ❖ **Accessing Attribute Tables** – Right-click on a layer and select *Open Attribute Table* to view descriptive information about spatial data.
- ❖ **Data Visualization** – Highlighting rows in the attribute table highlights corresponding points on the map, helping locate specific records within large datasets.
- ❖ **Table Management Tools** – Users can invert selections, select all rows, and hide or reorder columns for better data organization.
- ❖ **Editing Restrictions and Solutions** – Attribute tables from KoboToolbox data cannot be edited directly, but users can enable editing by exporting the dataset as a new shapefile.
- ❖ **Saving and Verifying Edits** – After creating and editing a new shapefile, confirm it overlays correctly on the original layer and remember to save all edits before proceeding.

ATTRIBUTE TABLES

The attributes (or descriptive information) for any layer can be viewed through the **Attribute Table**.

To open the **Attribute Table** right-click on the layer, then select **Open Attribute Table**.



The **Attribute Table** will appear.

You will notice that this table mirrors the CSV file that you imported into QGIS from your KoboToolbox project in **ASOR Tutorial 02.14 (Importing KoboToolbox Data)**.

Tunisia - UNESCO-Inscribed World Heritage Sites - all_versions_labels - 2022-04-11-19-32-13 — Features Total: 7. Filtered: 7. Selected: 0

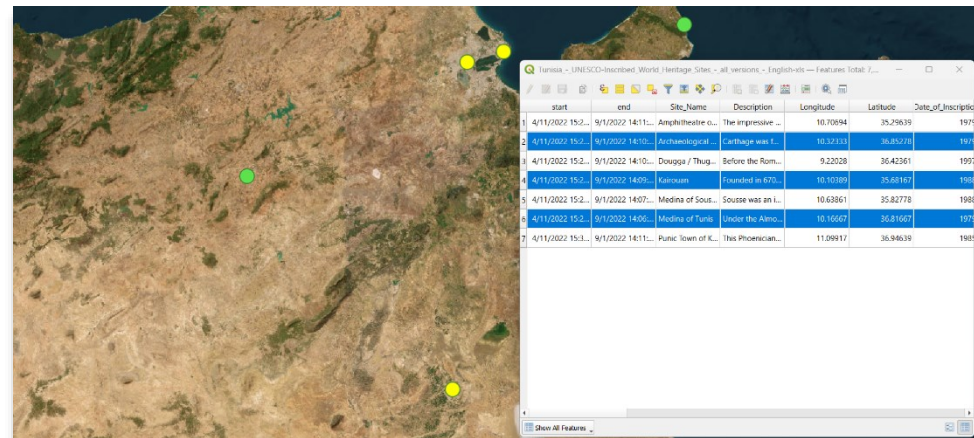
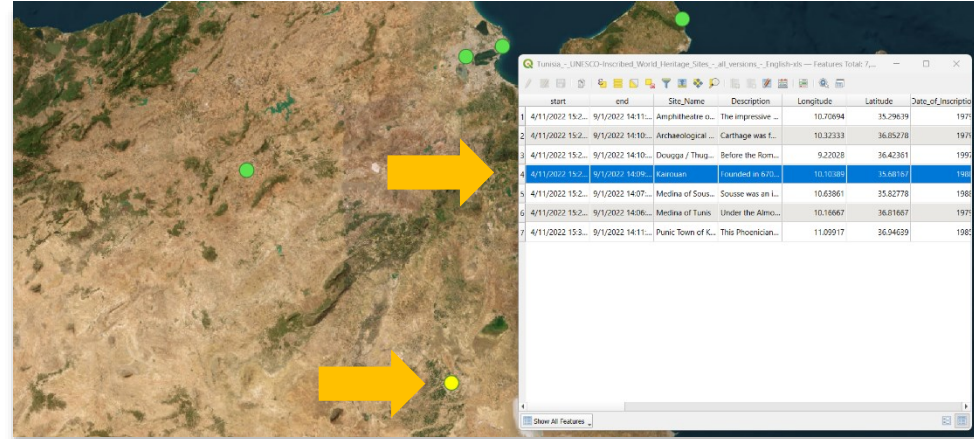
	start	end	Site Name	Description	Longitude	Latitude	ate of Inscriptio	Criterion	Criterion/i	Criterion/ii	Crit
1	11 Apr 2022	11 Apr 2022	Amphitheatr...	The impressi...	10.70694	35.29639	1979 iv vi		0	0	
2	11 Apr 2022	11 Apr 2022	Archaeologic...	Carthage wa...	10.32333	36.85278	1979 ii iii vi		0	0	1
3	11 Apr 2022	11 Apr 2022	Dougga / Th...	Before the R...	9.22028	36.42361	1997 ii iii		0	0	1
4	11 Apr 2022	11 Apr 2022	Kairouan	Founded in 6...	10.10389	35.68167	1988 i ii iii v vi		1	1	1
5	11 Apr 2022	11 Apr 2022	Medina of So...	Sousse was a...	10.63861	35.82778	1988	NULL	NULL	NULL	
6	11 Apr 2022	11 Apr 2022	Medina of Tu...	Under the AL...	10.16667	36.81667	1979 ii iii v		0	0	1
7	11 Apr 2022	11 Apr 2022	Punic Town o...	This Phenici...	11.09917	36.94639	1985 iii		0	0	0

Show All Features

Highlight

Highlighting rows in the attribute table will also highlight the specific point on your map.

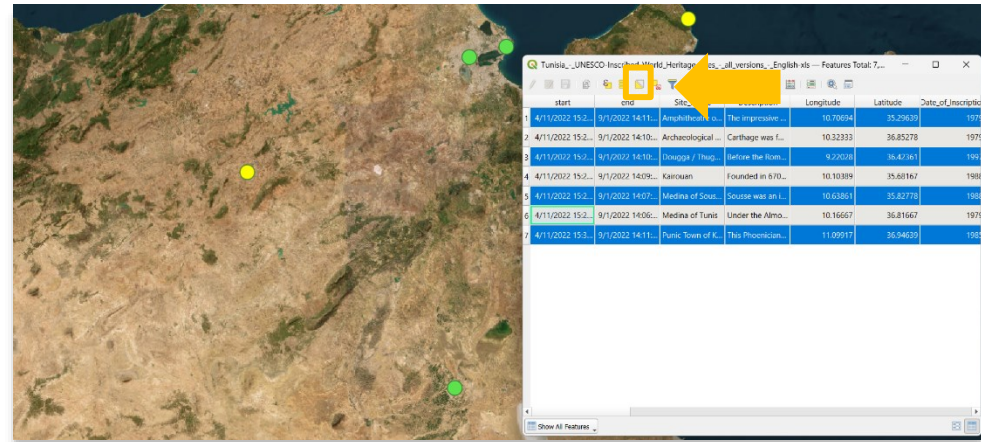
This can be useful when attempting to locate specific points within a large dataset.



Invert Select



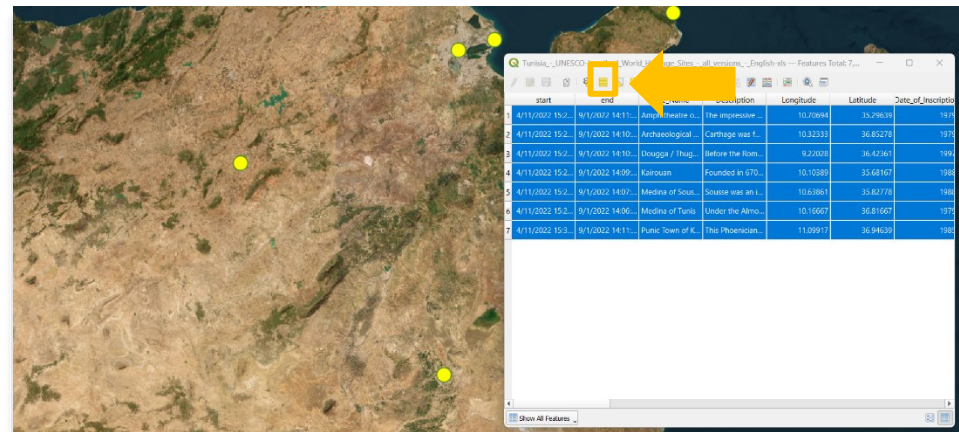
Invert selected rows



Select all



Select all rows in the attribute table



Organize Table Columns



Users can hide and reorder columns

Tunisia_-_UNESCO-Inscribed_World_Heritage_Sites_-_all_versions_-_2022-04-11-19-32-13 — Features Total: 7, Filtered: 7, Selected: 0

	start	end	Site Name	Description	Longitude	Latitude	Date of Inscription	Criterion	Criterion/i	Criterion/ii	Criterion/iii	Criterion/iv
1	11 Apr 2022 ...	11 Apr 2022 ...	Amphitheatr...	The impressi...	10.70694	35.29639	1979	iv vi		0		0
2	11 Apr 2022 ...	11 Apr 2022 ...	Archaeologic...	Carthage wa...	10.32333	36.85278	1979	ii iii vi		0		1
3	11 Apr 2022 ...	11 Apr 2022 ...	Dougga / Th...	Before the R...	9.22028	36.42361	1997	ii iii		0		1
4	11 Apr 2022 ...	11 Apr 2022 ...	Kairouan	Founded in 6...	10.10389	35.68167	1988	i ii iii v vi		1		1
5	11 Apr 2022 ...	11 Apr 2022 ...	Medina of So...	Sousse was a...	10.63861	35.82778	1988	NULL		NULL		NULL
6	11 Apr 2022 ...	11 Apr 2022 ...	Medina of Tu...	Under the Al...	10.16667	36.81667	1979	ii iii v		0		1
7	11 Apr 2022 ...	11 Apr 2022 ...	Punic Town o...	This Phoenici...	11.09917	36.94639	1985	iii		0		0

Show All Features

Organize Table columns

- ☐ start
- ☐ end
- ☒ Site_Name
- ☒ Description
- ☒ Longitude
- ☒ Latitude
- ☒ Date_of_Inscription
- ☒ Criterion
- ☒ Criterion/i
- ☒ Criterion/ii
- ☒ Criterion/iii
- ☒ Criterion/iv

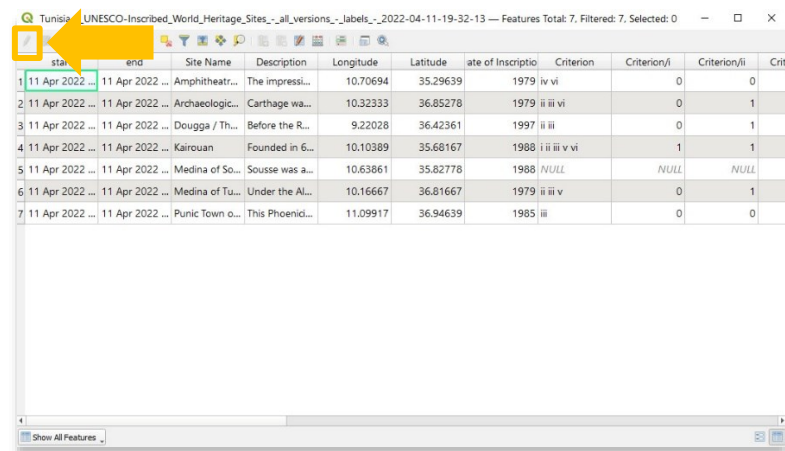
Select All Deselect All OK Cancel

Editing Attribute Data

NOTICE | Users are unable to edit attribute tables when the data has been exported from KoboToolbox.

The edit button is greyed out: 

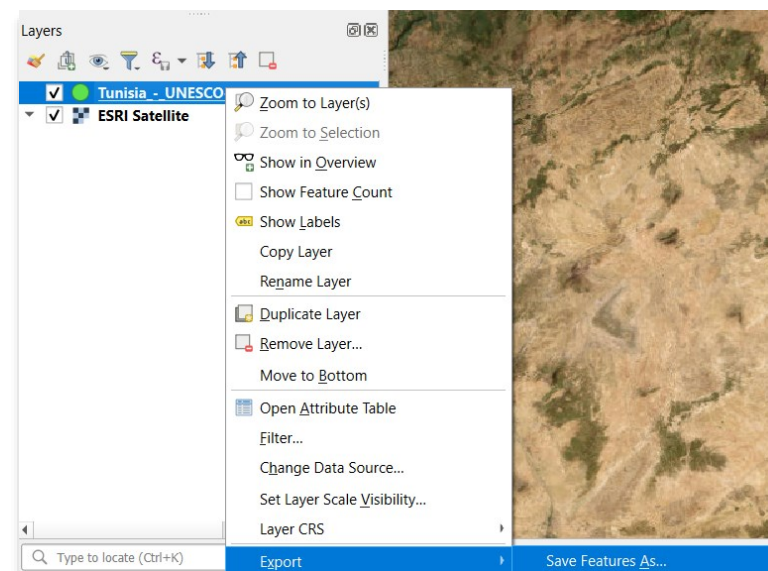
There is a quick fix for this issue: Create a new shapefile from the existing dataset.



	start	end	Site Name	Description	Longitude	Latitude	Date of Inscription	Criterion	Criterion/1	Criterion/2	Criterion/3
1	11 Apr 2022 ...	11 Apr 2022 ...	Amphitheatr...	The impressi...	10.70694	35.29639	1979	iv vi	0		0
2	11 Apr 2022 ...	11 Apr 2022 ...	Archaeologic...	Carthage wa...	10.32333	36.85278	1979	ii iii vi	0		1
3	11 Apr 2022 ...	11 Apr 2022 ...	Dougga / Th...	Before the R...	9.22028	36.42361	1997	ii iii	0		1
4	11 Apr 2022 ...	11 Apr 2022 ...	Kairouan	Founded in 6...	10.10389	35.68167	1988	i ii iii v vi	1		1
5	11 Apr 2022 ...	11 Apr 2022 ...	Medina of So...	Sousse was a...	10.63861	35.82778	1988	NULL	NULL		NULL
6	11 Apr 2022 ...	11 Apr 2022 ...	Medina of Tu...	Under the Al...	10.16667	36.81667	1979	ii iii v	0		1
7	11 Apr 2022 ...	11 Apr 2022 ...	Punic Town o...	This Phoenici...	11.09917	36.94639	1985	iii	0		0

Duplicate Shapefile

Right-click on layer > Export > Save Feature as...



Give the new shapefile a unique name and follow the settings shown here.

Select "Ok" to process the shapefile.

Save Vector Layer as...

Format: ESRI Shapefile

File name: Tunisia UNESCO

Layer name:

CRS: EPSG:4326 - WGS 84

Encoding: UTF-8

☐ Save only selected features

► Select fields to export and their export options

☒ Persist layer metadata

▼ Geometry

Geometry type: Automatic

☐ Force multi-type

☐ Include z-dimension

► ☐ Extent (current: none)

▼ Layer Options

RESIZE: NO

SHPT:

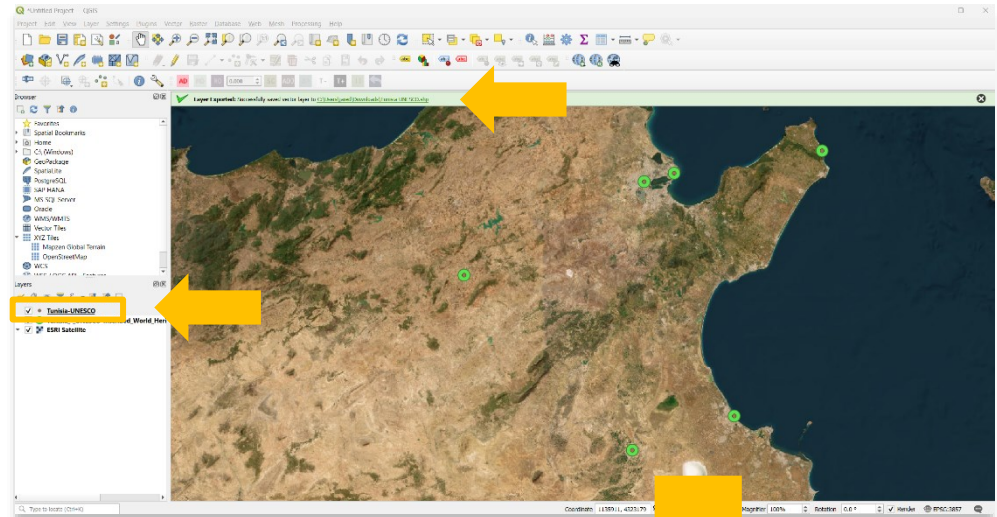
► Custom Options

☒ Add saved file to map

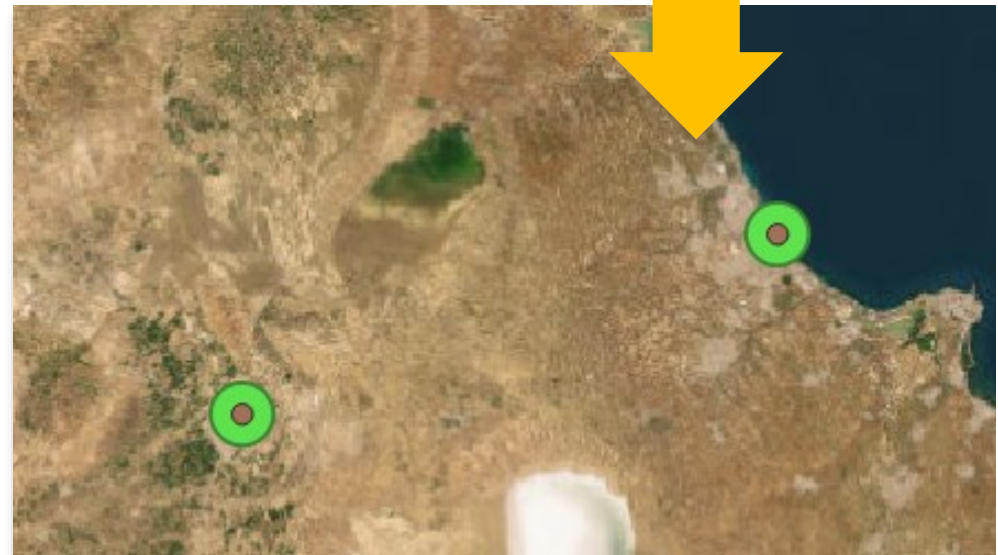
OK Cancel Help

Look for a confirmation message at the top of the map viewer.

A new shapefile is now present in the Layers panel.



Verify that the new layer overlays on top of the original layer.



Open the attribute table for the newly-created shapefile.

Turn on editing:



Tunisia-UNESCO — Features Total: 7, Filtered: 7, Selected: 0

	start	end	Site_Name	Descriptio	Longitude	Latitude	Date_of_In	Criterion	Criterion/	Criterio_1
1	2022/04/11 15:...	2022/09/01 14:...	Amphitheatre o...	The impressive ...	10.7069399999...	35.2963900000...	1979	iv vi		0
2	2022/04/11 15:...	2022/09/01 14:...	Archaeological ...	Carthage was f...	10.3233300000...	36.8527800000...	1979	ii iii vi		0
3	2022/04/11 15:...	2022/09/01 14:...	Dougga / Thug...	Before the Rom...	9.220280000000...	36.4236099999...	1997	ii iii		0
4	2022/04/11 15:...	2022/09/01 14:...	Kairouan	Founded in 670...	10.1038900000...	35.6816699999...	1988	i ii iii v vi		1
5	2022/04/11 15:...	2022/09/01 14:...	Medina of Sous...	Sousse was an I...	10.6386100000...	35.8277799999...	1988	iii iv v		0
6	2022/04/11 15:...	2022/09/01 14:...	Medina of Tunis	Under the Almo...	10.1666700000...	36.8166700000...	1979	ii iii v		0
7	2022/04/11 15:...	2022/09/01 14:...	Punic Town of K...	This Phoenician...	11.0991700000...	36.9463900000...	1985	iii		0

Show All Features

Tunisia-UNESCO — Features Total: 7, Filtered: 7, Selected: 0

abc start = [E] abc [v] Update All Update Selected

	start	end	Site_Name	Descriptio	Longitude	Latitude	Date_of_In	Criterion	Criterion/	Criterio_1
1	2022/04/11 15:...	2022/09/01 14:...	Amphitheatre o...	The impressive ...	10.7069399999...	35.2963900000...	1979	iv vi		0
2	2022/04/11 15:...	2022/09/01 14:...	Archaeological ...	Carthage was f...	10.3233300000...	36.8527800000...	1979	ii iii vi		0
3	2022/04/11 15:...	2022/09/01 14:...	Dougga / Thug...	Before the Rom...	9.220280000000...	36.4236099999...	1997	ii iii		0
4	2022/04/11 15:...	2022/09/01 14:...	Kairouan	Founded in 670...	10.1038900000...	35.6816699999...	1988	i ii iii v vi		1
5	2022/04/11 15:...	2022/09/01 14:...	Medina of Kairouan	Sousse was an I...	10.6386100000...	35.8277799999...	1988	iii iv v		0
6	2022/04/11 15:...	2022/09/01 14:...	Medina of Tunis	Under the Almo...	10.1666700000...	36.8166700000...	1979	ii iii v		0
7	2022/04/11 15:...	2022/09/01 14:...	Punic Town of K...	This Phoenician...	11.0991700000...	36.9463900000...	1985	iii		0

Show All Features

NOTICE | You can now make edits to the data table.



Save edits before moving on to other actions

Tunisia-UNESCO Features Total: 7, Filtered: 7, Selected: 0

start	end	Site_Name	Descriptio	Longitude	Latitude	Date_of_In	Criterion	Criterion/	Criterio_1
1 2022/04/11 15:...	2022/09/01 14:...	Amphitheatre o...	The impressive ...	10.7069399999...	35.2963900000...	1979	iv vi	0	
2 2022/04/11 15:...	2022/09/01 14:...	Archaeological ...	Carthage was f...	10.3233300000...	36.8527800000...	1979	ii iii vi	0	
3 2022/04/11 15:...	2022/09/01 14:...	Dougga / Thug...	Before the Rom...	9.2202800000...	36.4236099999...	1997	ii iii	0	
4 2022/04/11 15:...	2022/09/01 14:...	Kairouan	Founded in 670...	10.1038900000...	35.6816699999...	1988	i ii iii v vi	1	
5 2022/04/11 15:...	2022/09/01 14:...	Medina of Sous...	Sousse was an i...	10.6386100000...	35.8277799999...	1988	iii iv v	0	
6 2022/04/11 15:...	2022/09/01 14:...	Medina of Tunis	Under the Almo...	10.1666700000...	36.8166700000...	1979	ii iii v	0	
7 2022/04/11 15:...	2022/09/01 14:...	Punic Town of K...	This Phoenician...	11.0991700000...	36.9463900000...	1985	iii	0	

Show All Features

RESOURCES

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