

Connect to WMS HGIS de las Indias

WMS Introduction

A **Web Map Service (WMS)** is a standard protocol for serving (over the internet) georeferenced map images which a map server generates using data from a GIS database. The Open Geospatial Consortium developed the specification and first published it in 1999.

At HGIS de las Indias we use WMS-T, the time enabled Version of WMS. With this option, it is possible to show changes over time. The problem is that only a few WMS viewers support controlling time. But QGIS (an OpenSource Desktop GIS) and ArcGIS both support WMS-T.

With WMS and the Use of GIS Programs it is possible to make your own maps and websites using data from HGIS de las Indias and other sources.

Our WMS-Server

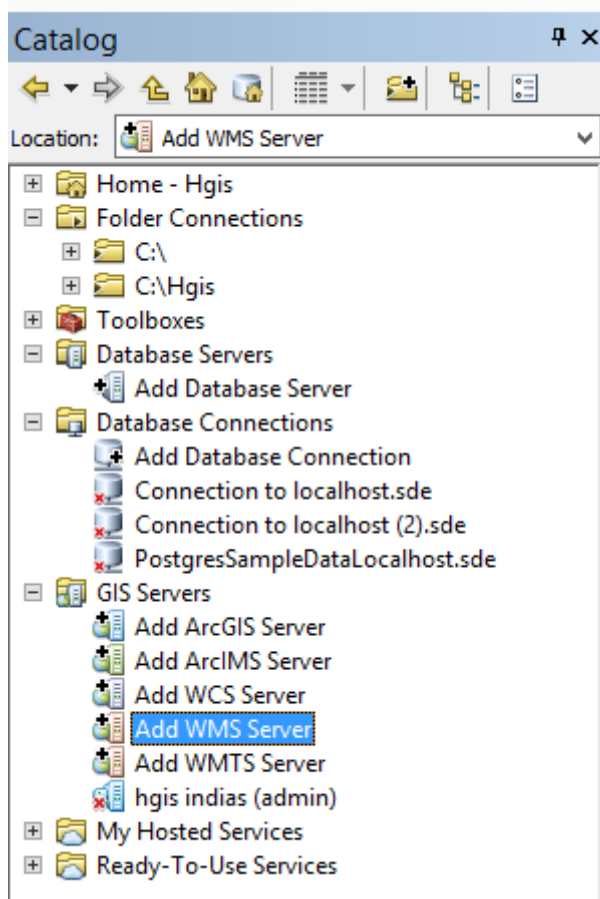
We have different services:

- 1) [https://www.hgis-indias.net:6443/arcgis/services/HGIS/HGIS_WMS_1800/MapServer/WMSServer?](https://www.hgis-indias.net:6443/arcgis/services/HGIS/HGIS_WMS_1800/MapServer/WMSServer?Pure+WMS+without+time)
Pure WMS without time that represents the state of Spanish America by 1800.
- 2) <https://www.hgis-indias.net:6443/arcgis/services/HGIS/territorios/MapServer/WMSServer?>
A WMS-T of the administrative and church organization of territories (1701-1808), including capital places of entities.
- 3) <https://www.hgis-indias.net:6443/arcgis/services/HGIS/Poblaciones/MapServer/WMSServer?>
A WMS-T of populated places (1701-1808), organized by different criteria (type of settlement; church hierarchy).
- 4) https://www.hgis-indias.net:6443/arcgis/services/HGIS/HGIS_Fronteras/MapServer/WMSServer?
A WMS-T of “external” factors (1701-1808), like indigenous territories and tribes, treaty lines, claims of foreign European nations, events of wars and rebellions, etc.
- 5) <https://www.hgis-indias.net:6443/arcgis/services/HGIS/Datos/MapServer/WMSServer?>
A WMS-T of aggregated data to the database (1701-1808), including demographic, economic, cultural, and other features.
- 6) https://www.hgis-indias.net:6443/arcgis/services/HGIS/hgis_fisico/MapServer/WMSServer?
A WMS-T of physical features (rivers/lakes) and historical natural events (1701-1808).
- 7) https://www.hgis-indias.net:6443/arcgis/services/HGIS/HGIS_Comunicaciones/MapServer/WMSServer? A WMS-T of important routes and infrastructure of communications (1701-1808), like ship routes, roads, postal routes and offices, etc.

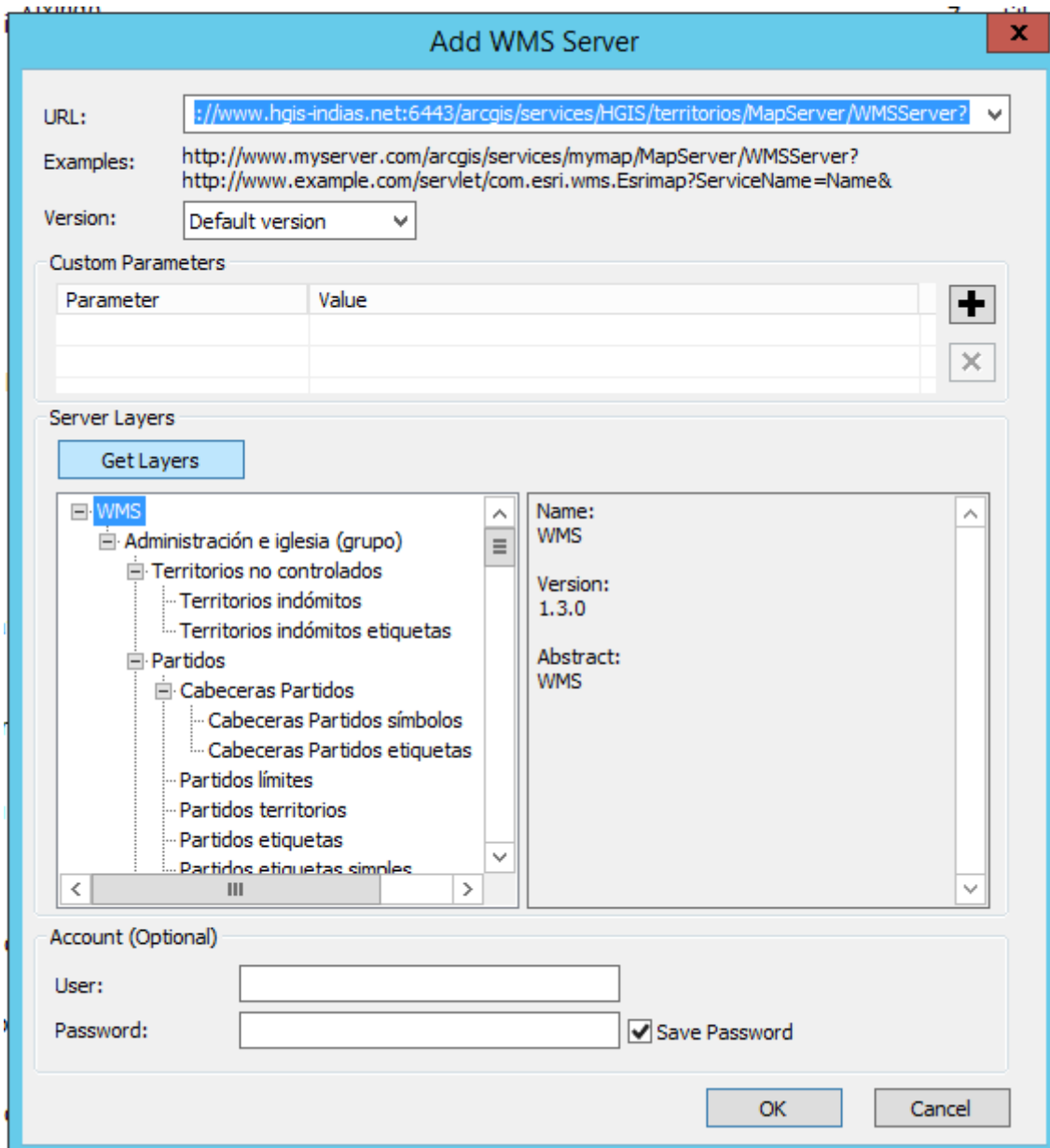
ArcMap

Open ArcMap. In the Catalog Window go to Add WMS Server.

I recommend to pause the drawing in ArcMap (Key F9) because without the Time Toolbar it will load all data from the WMS at once, which needs a long time.



Enter the address and click the Get Layers button.

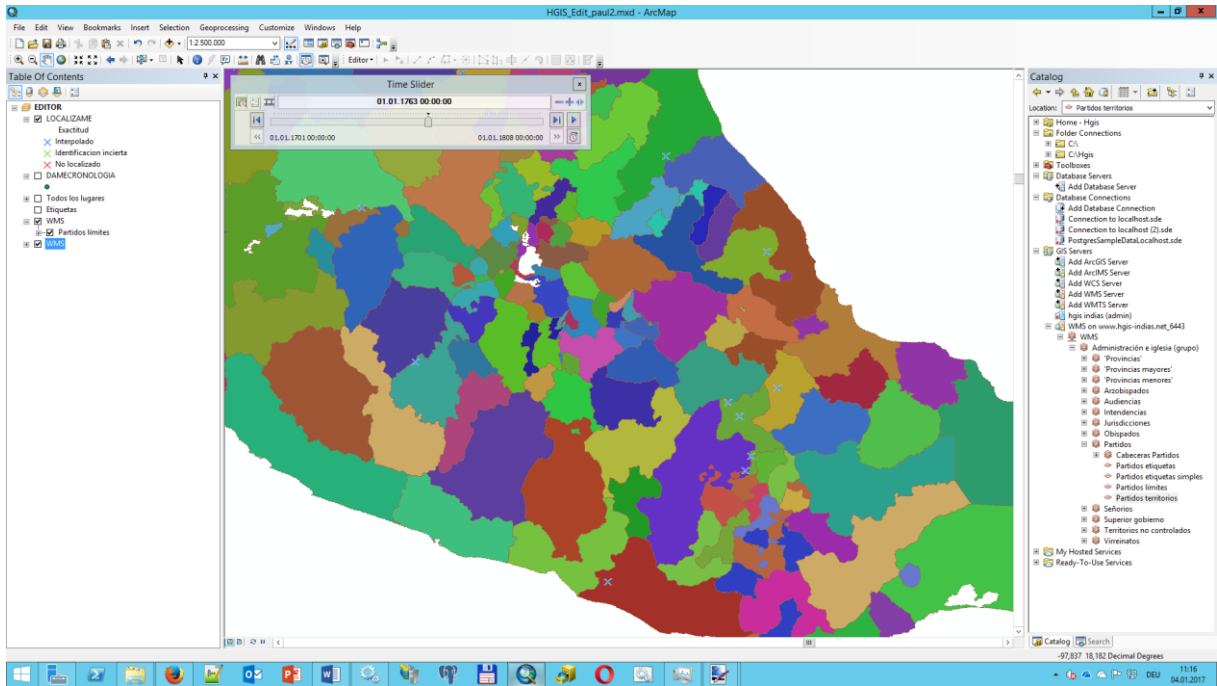


Open the TimeSlider Toolbar



And choose the year you want.

Now it's a good time to reenale the drawing function (Key F9) to see the data.



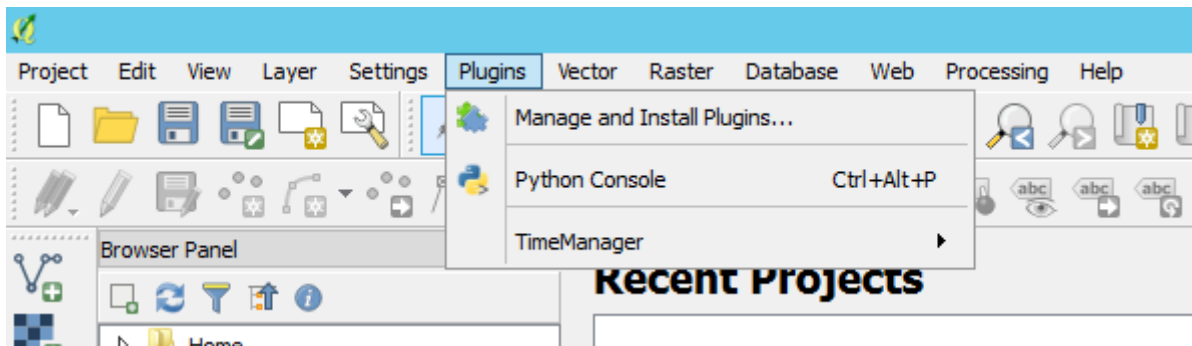
QGIS

The Support for Time is not very good in QGIS. Sometimes the manual works but not all the time

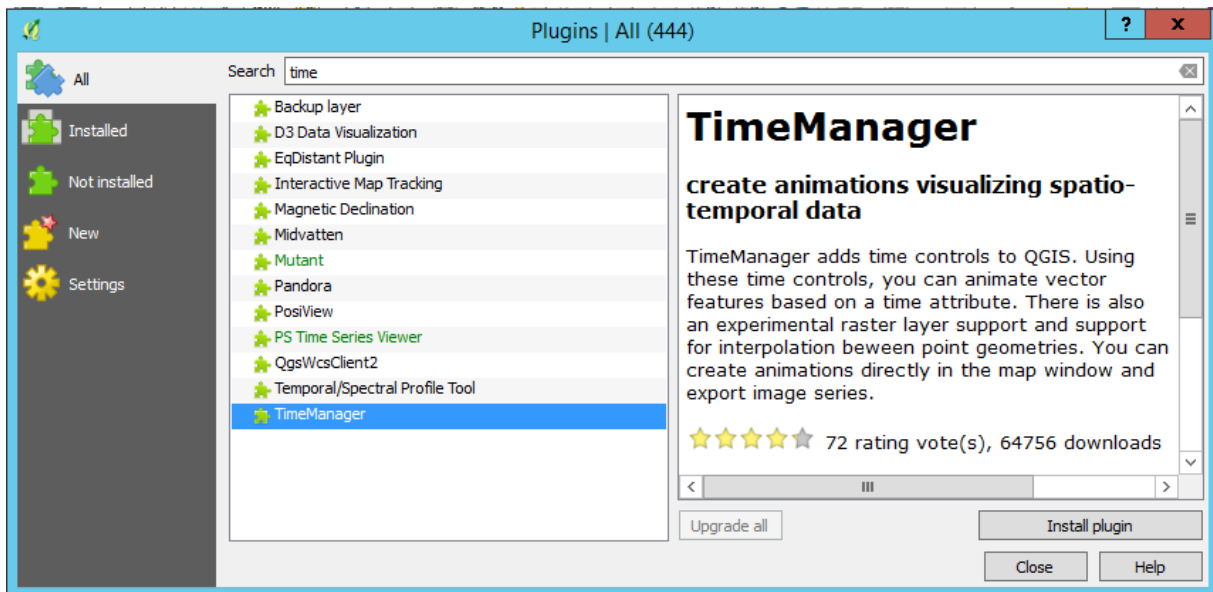
Installing the TimeManager Plugin

To work with Time enabled Data it's necessary to install the TimeManager Plugin first

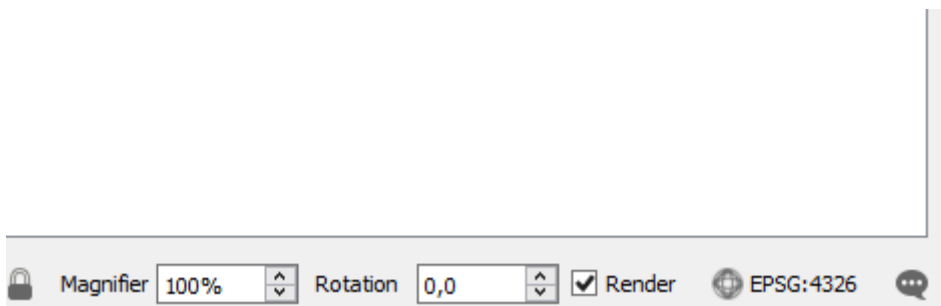
Open QGIS. In the Menu bar click "Plugins" and then select "Manage and Install Plugins..."



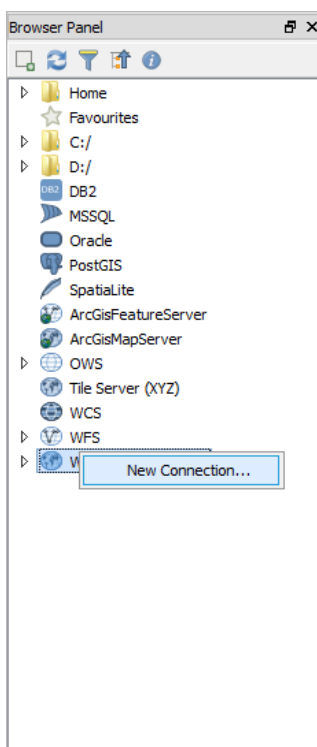
Search for "time" in the Search Field and select the TimeManager Plugin, then click the "Install plugin" button. After the installation is complete, close the Pluginmanager.



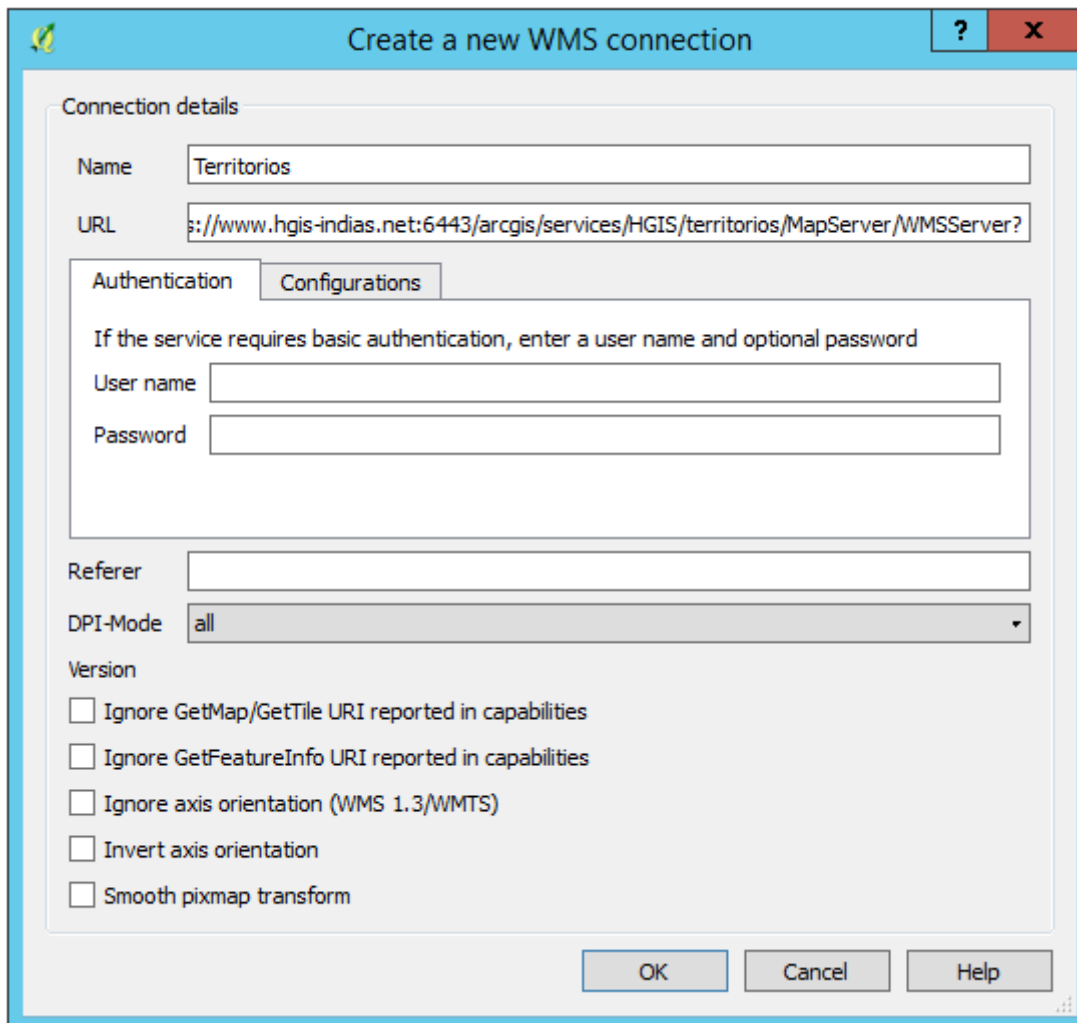
Now it's a good time to disable the Rendering Function of QGIS, because when you open the WMS without the proper time settings you must wait a long time. To disable it uncheck Render.




In the Browser Panel right click on "WMS" and select "New Connection"

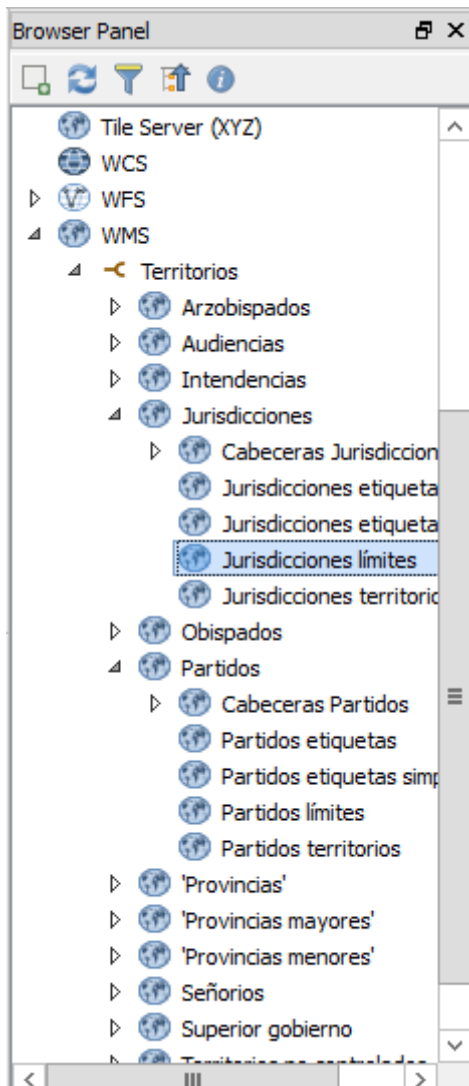


In the next window enter a name and then enter one of the urls of the WMS. Click okay

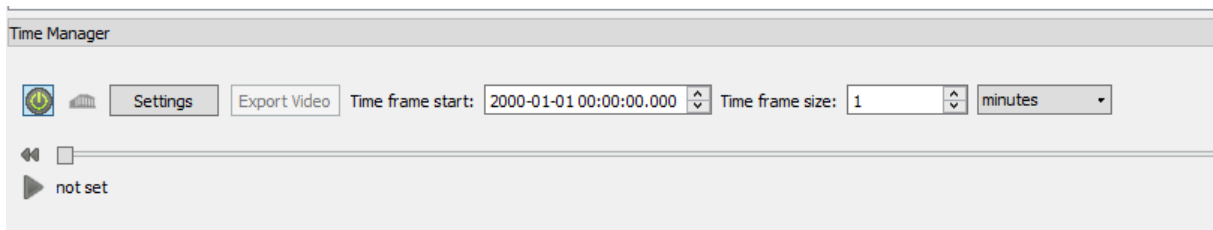


Now it's possible to add an WMS Layer to QGIS when you refresh the BrowserPanel (click on the refresh symbol )

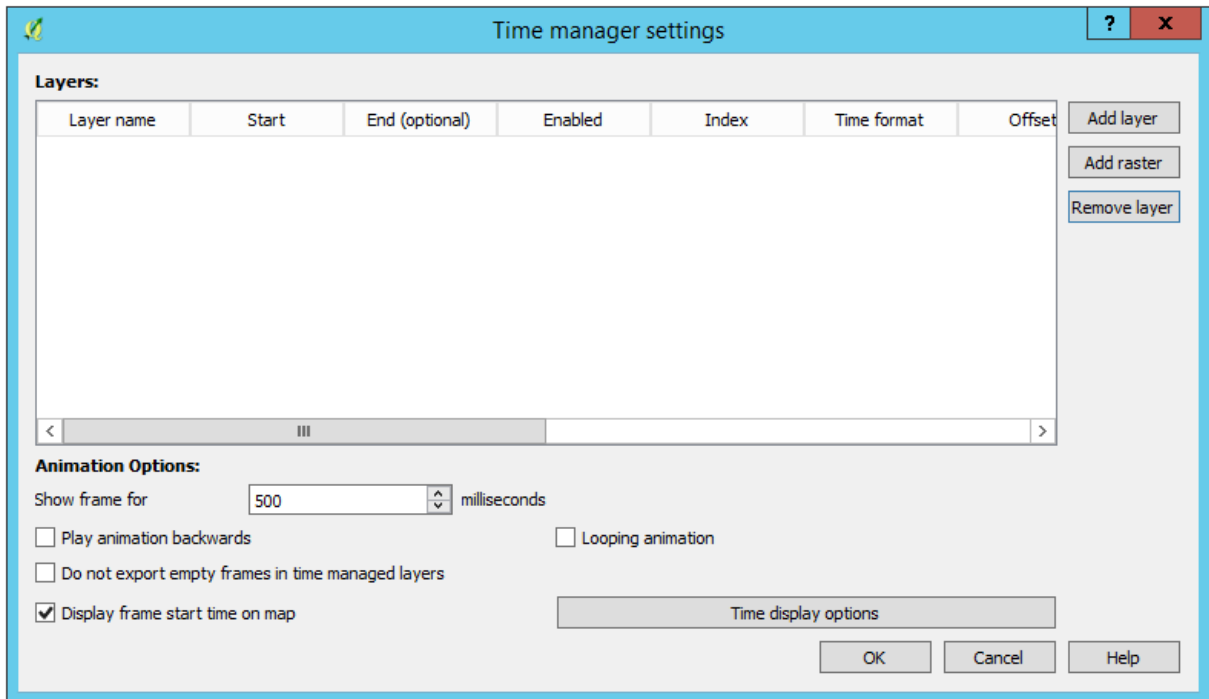
Double click the desired layer to add to the map.



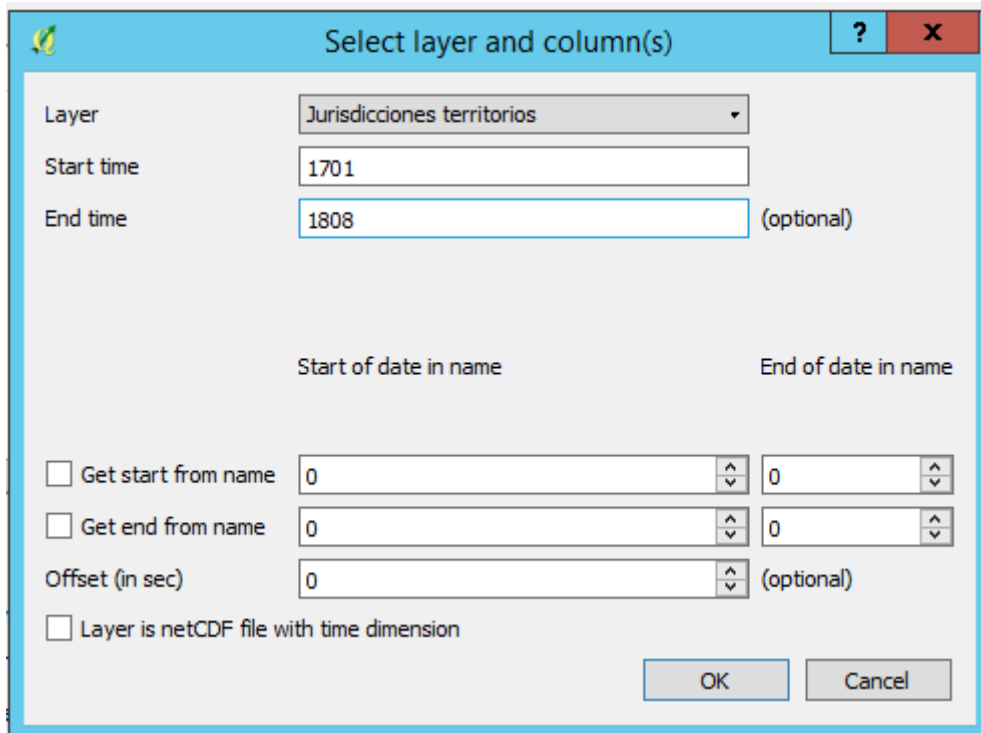
Now open the settings of the Time Manager



The next step is to enable the timefunction. Click the “Settings” Button in the TimeManager Window
Click “Add raster”



Enter 1701 for the Start Time and 1808 for the End Time. click okay



Now Click on the Time format (you must do this)

