How to Find Business Data in Reference USA to use in ArcMap

Contents

Searching Reference USA

1. Use this link to access Reference USA: http://libraries.mit.edu/get/ref-usa

You must have MIT Certificates on your computer or be on the MIT Network.

2. Select the database you want to search. This will likely be either US Businesses or Canadian Businesses.

By Jennie Murack, MIT Libraries
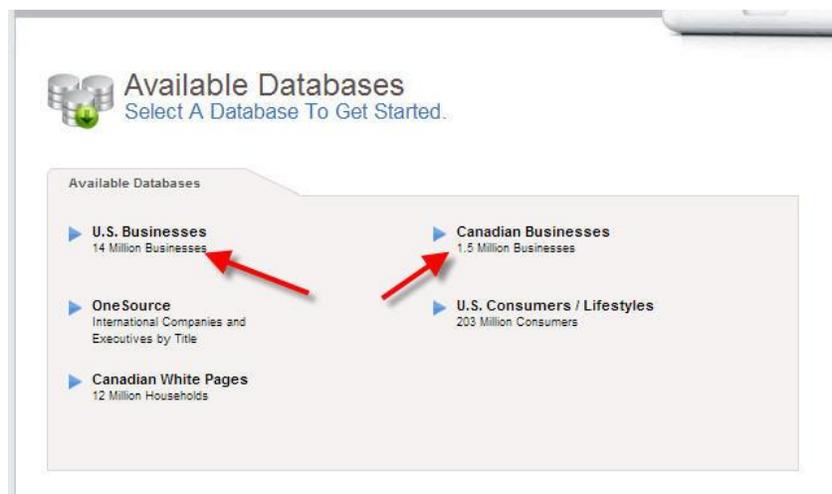
3. Click on the Custom Search tab to reveal more searching options.

4. Use the categories on the left to narrow your search. Geography and Business Type are two useful ways to finds specific types of businesses in specific areas. In the example, restaurants in Belmont were searched for.
5. Click View Results when you have finished searching.

Downloading Data

6. Click on Download to download your list of results as a data table. Only **500 records** can be downloaded at once. If you need to download more records than this, select a smaller geographic area or try using Business Analyst in the GIS Lab.

7. Select your file format. While all these formats can be used in ArcMap, Excel seems to work the best.
8. In Step Two, click on Custom and scroll down the list to select Latitude and Longitude. You can also search for these fields and add other fields of interest. All the fields you select will be included as columns in your data table.
9. Click Download Records at the bottom of the screen.

By Jennie Murack, MIT Libraries

Preparing the Data Table

10. The Latitude and Longitude values have been stored as text, but they need to be a number. Highlight the text that you want to convert. A box will pop up when you hover over the green triangle in the corner of the cell. Click Convert to Number.

11. Save the Excel file as an Excel workbook (.xlsx) and close the file.
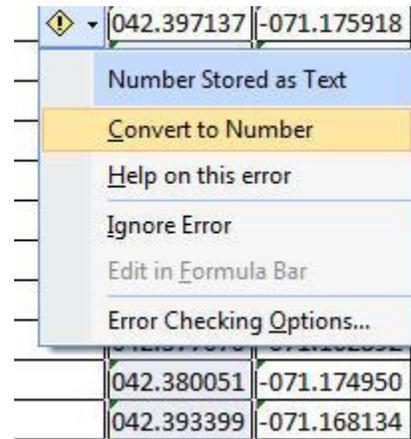
Adding XY Data to ArcMap

1. Open ArcMap.

2. Click the Add Data button ( ) and navigate the location where your excel file is stored. If you cannot see your folder, click the Connect to folder button ( ). Once you have found your table, click Add to select the table and sheet. Your data table will now appear in the Table on Contents on the left-hand side.

3. Right click on the data table and select Display XY data…

By Jennie Murack, MIT Libraries
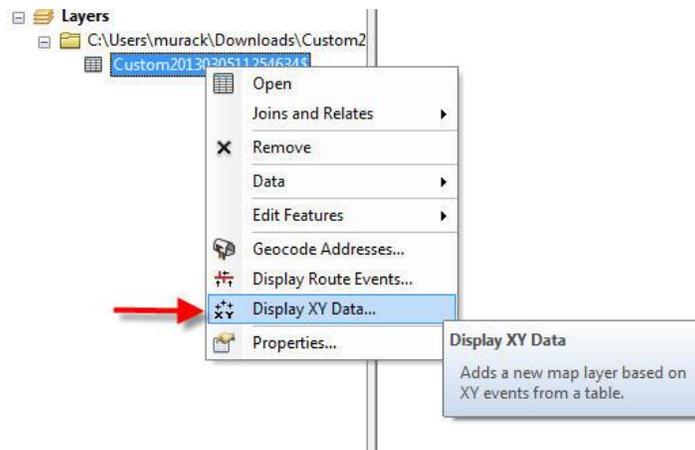
4. Choose your x and y values. Y is typically latitude and X is typically longitude.
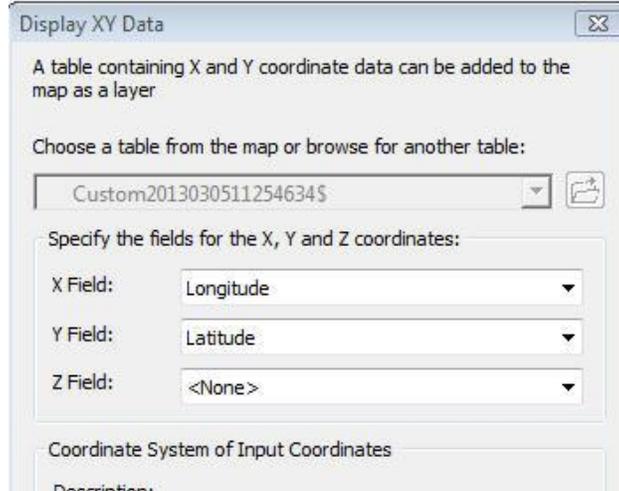

5. Click Edit to define a coordinate system. You need to do this so that your points show up in the correct area of them map.
6. Select WGS 1984 unless you know your data were collected in a different coordinate system. Expand Geographic Coordinate Systems and World and then scroll down and click on WGS 1984. Click OK twice to plot your points on the map.

By Jennie Murack, MIT Libraries

Your points will now be added as a layer in the Table of Contents and on your map.

7. To save the data layer, right click and select Data > Export Data.

By Jennie Murack, MIT Libraries
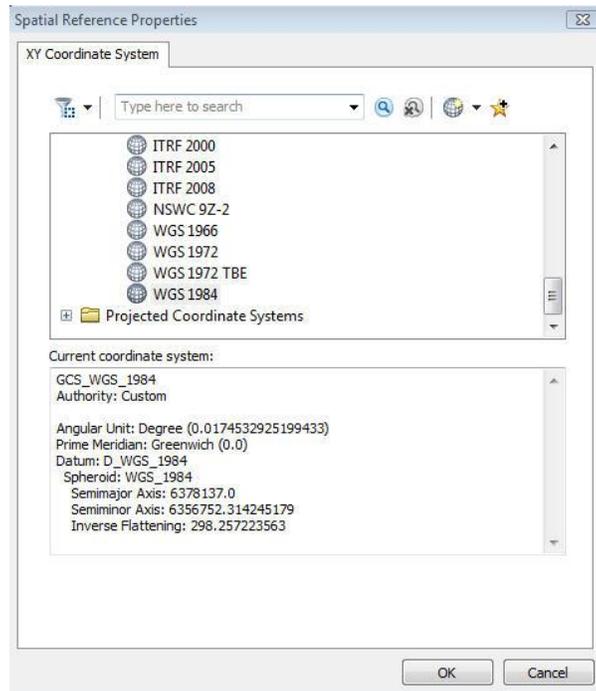
8. Click the browse folder (⬜) to select a location and name for your new file. Make sure the file type is set as Shapefile. Click Save and then OK.
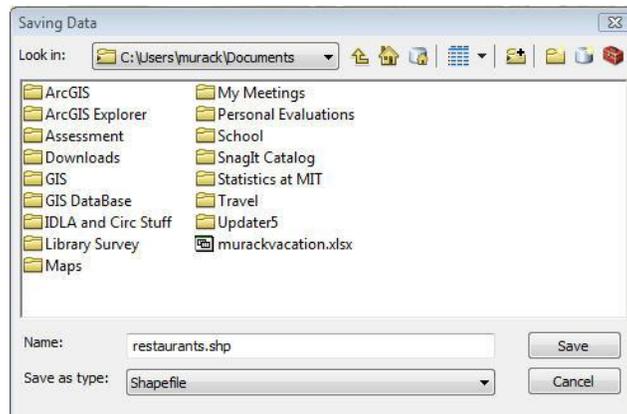
9. When prompted, add the new layer to the map. Right click on the old layer and select Remove.

Troubleshooting

ArcMap has an error when I try to add my table to the map.
- Your table may be open. Close it and try again.
- Make sure the table is saved in .xlsx format.

I can't see my latitude and longitude columns when I select Add XY Data…
- Your columns are probably saved as text, rather than number. See the section above on Preparing the Data Table.

My points don't show up in the correct locations.
- You may have switched latitude and longitude values. Run Add XY Data again and use the other columns.
- You might not have defined a projection. See #5 and #6 in the section above called Adding XY Data.

By Jennie Murack, MIT Libraries