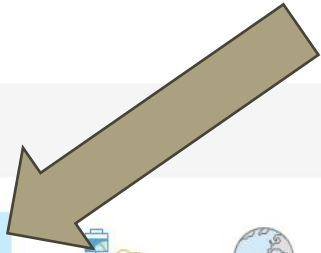


# **Step by Step GIS mapping Assignment 3**

# Create a Folder Assignment X



## New Project



Start without a template

## Recent Projects

Find



Mapping uHMT Location

C:\Users\Tarendra\OneDrive - CUNY\CREST-uHMT\Map-and-Plots\Mapping uHMT Location\Mapping uHMT Location.aprx

7/2/2024 3:09 PM



DEM-ESA-NYC

C:\Users\Tarendra\Documents\ArcGIS\Projects\DEM-ESA-NYC\DEM-ESA-NYC.aprx

3/7/2023 2:12 PM



MyProject30

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject30\MyProject30.aprx

4/16/2024 3:40 PM



MyProject29

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject29\MyProject29.aprx

4/9/2024 5:56 PM



MyProject28

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject28\MyProject28.aprx

4/9/2024 3:32 PM



MyProject27

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject27\MyProject27.aprx

3/12/2024 4:29 PM



MyProject26

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject26\MyProject26.aprx

3/12/2024 4:28 PM



MyProject25

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject25\MyProject25.aprx

3/12/2024 1:18 PM



MyProject24

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject24\MyProject24.aprx

3/5/2024 8:47 PM



MyProject23

C:\Users\Tarendra\Documents\ArcGIS\Projects\MyProject23\MyProject23.aprx

12/12/2023 4:56 PM



Harlem-Schools

C:\Users\Tarendra\Documents\ArcGIS\Projects\Harlem-Schools\Harlem-Schools.aprx

6/27/2023 12:46 PM



Demographics-NYC



Learning Resources

Open another project



## Recent Templates

[Learn more about creating project templates](#)

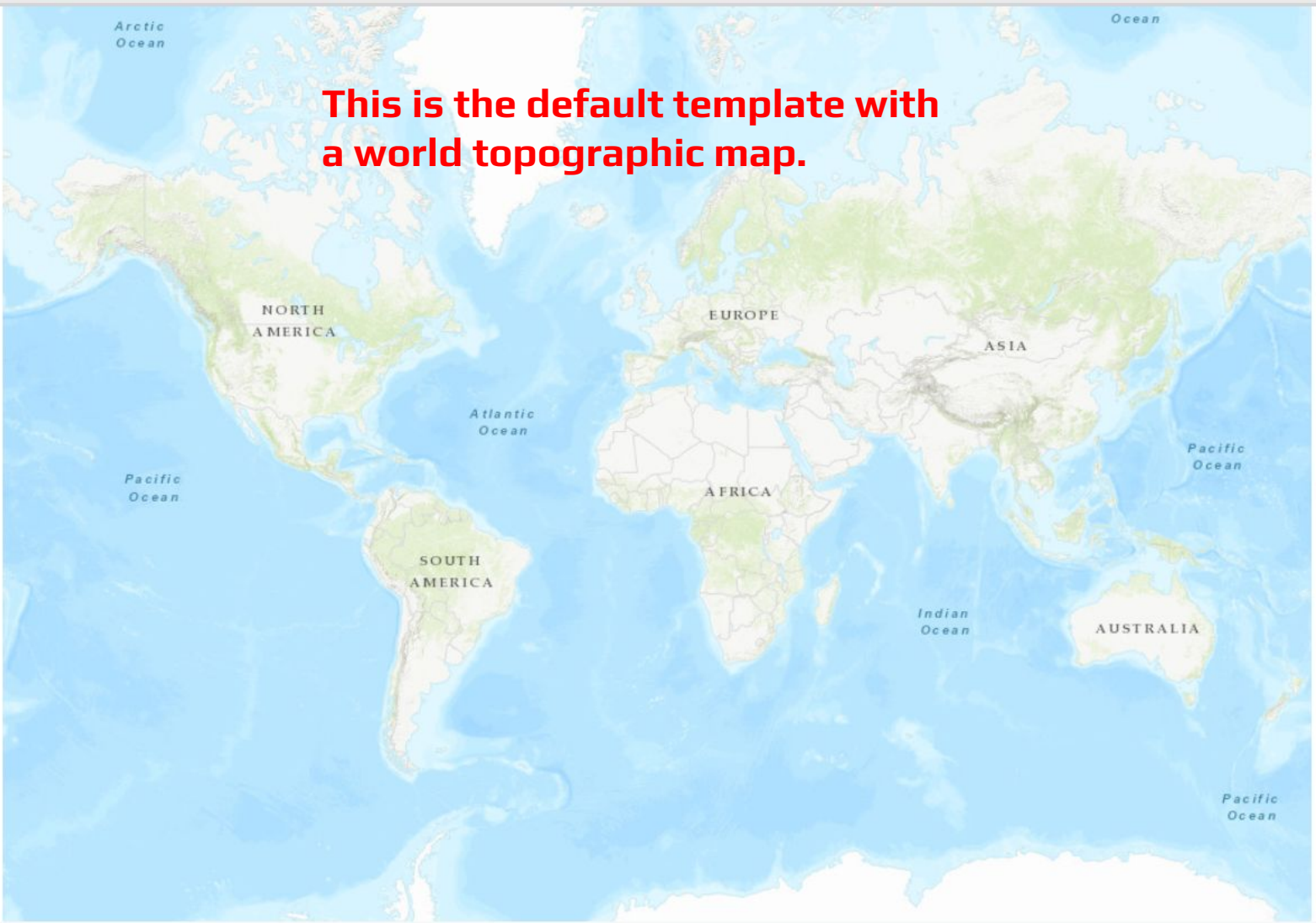
Start with another template

Contents

Search

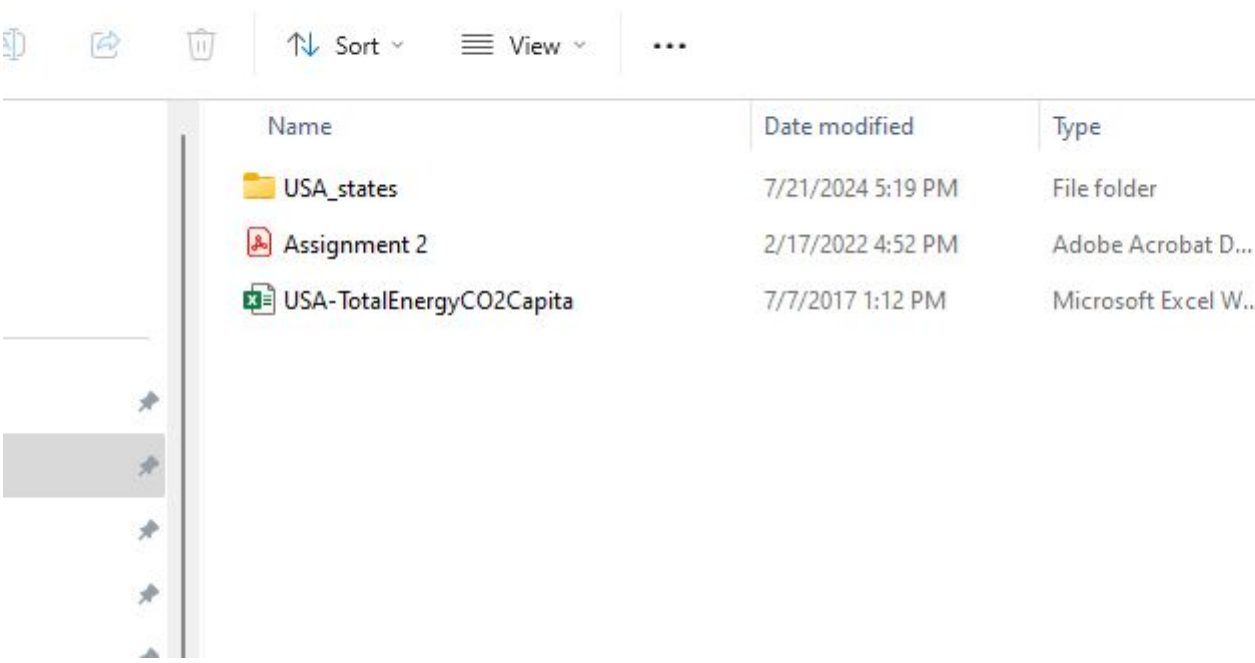
Drawing Order

- Map
- Topographic



**This is the default template with a world topographic map.**

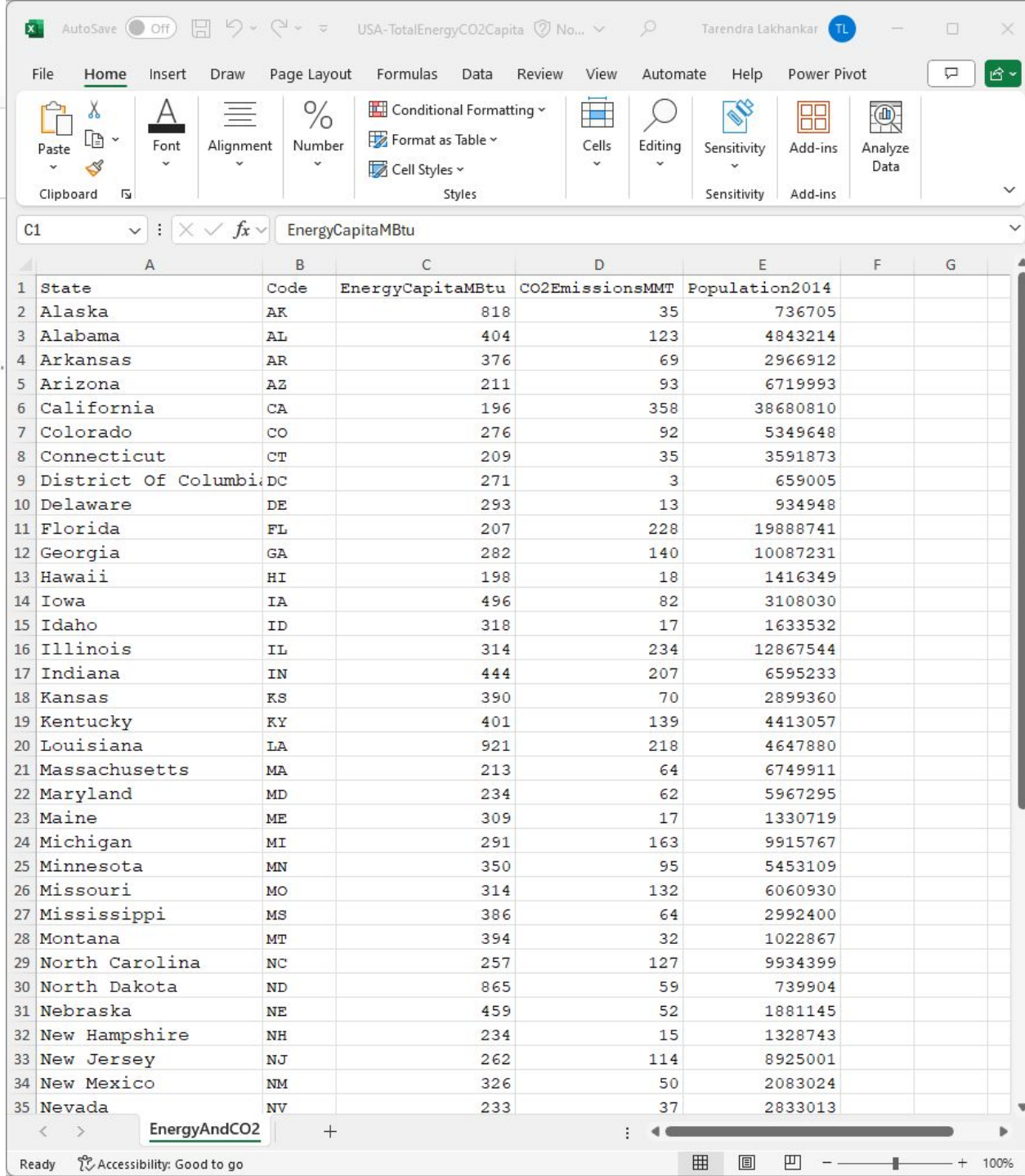
Downloads > Assignment2-USA-Energy >



Name	Date modified	Type
USA_states	7/21/2024 5:19 PM	File folder
Assignment 2	2/17/2022 4:52 PM	Adobe Acrobat D...
USA-TotalEnergyCO2Capita	7/7/2017 1:12 PM	Microsoft Excel W...

You have provided the Data in table format in an Excel file.  
State name, code, CO2 emission, Energy Cap in BTU for each state.

**The objective is to create a map using this data to show both data in same map.**



	A	B	C	D	E	F	G
1	State	Code	EnergyCapitaMBtu	CO2EmissionsMMT	Population2014		
2	Alaska	AK	818	35	736705		
3	Alabama	AL	404	123	4843214		
4	Arkansas	AR	376	69	2966912		
5	Arizona	AZ	211	93	6719993		
6	California	CA	196	358	38680810		
7	Colorado	CO	276	92	5349648		
8	Connecticut	CT	209	35	3591873		
9	District Of Columbia	DC	271	3	659005		
10	Delaware	DE	293	13	934948		
11	Florida	FL	207	228	19888741		
12	Georgia	GA	282	140	10087231		
13	Hawaii	HI	198	18	1416349		
14	Iowa	IA	496	82	3108030		
15	Idaho	ID	318	17	1633532		
16	Illinois	IL	314	234	12867544		
17	Indiana	IN	444	207	6595233		
18	Kansas	KS	390	70	2899360		
19	Kentucky	KY	401	139	4413057		
20	Louisiana	LA	921	218	4647880		
21	Massachusetts	MA	213	64	6749911		
22	Maryland	MD	234	62	5967295		
23	Maine	ME	309	17	1330719		
24	Michigan	MI	291	163	9915767		
25	Minnesota	MN	350	95	5453109		
26	Missouri	MO	314	132	6060930		
27	Mississippi	MS	386	64	2992400		
28	Montana	MT	394	32	1022867		
29	North Carolina	NC	257	127	9934399		
30	North Dakota	ND	865	59	739904		
31	Nebraska	NE	459	52	1881145		
32	New Hampshire	NH	234	15	1328743		
33	New Jersey	NJ	262	114	8925001		
34	New Mexico	NM	326	50	2083024		
35	Nevada	NV	233	37	2833013		

# Second assignment is mapping Lat Long data

Shared with me > CUNY HIRES > GIS-ArcGIS

Type People Modified

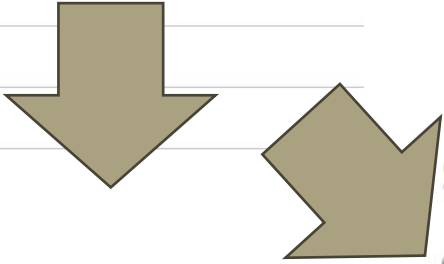
Name ↑

Assignments Data- Downloads

Assignments pdf Map - Uploads

Lessons - Presentations

GIS - Syllabus



Shared ... > Assignments ... > Assignment 3 - L...

Type People Modified

Name ↑	Owner	Last mo... ▼	File size	
 countries_shp	 me	7:55 PM	—	⋮
 Assignment 3.pdf 	 me	Feb 17, 2022	225 KB	⋮
 VolcanoTable.csv 	 me	May 20, 2022	21 KB	⋮

**Download the data file.**

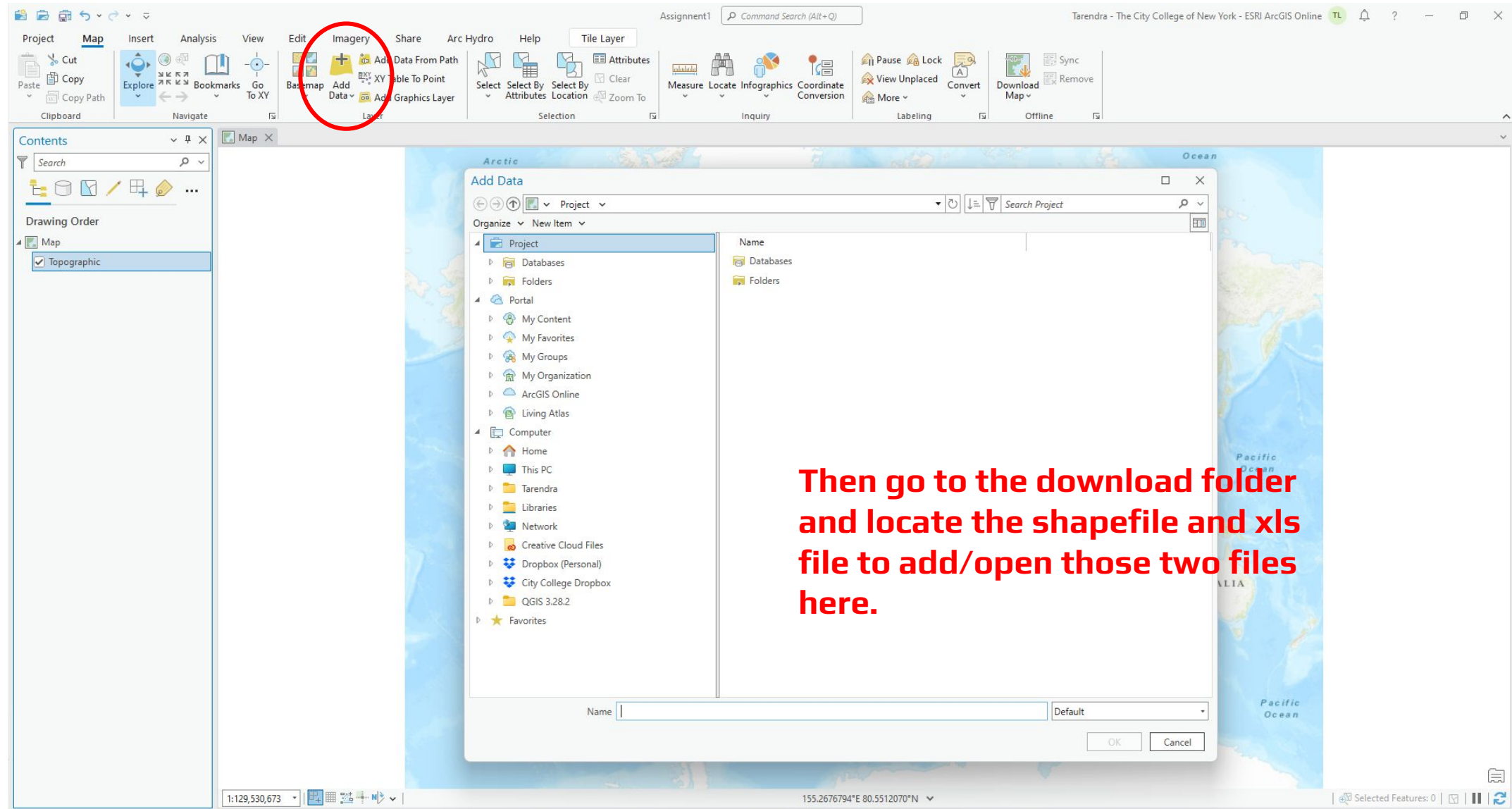
---

**You also provided a *shapefile* of a Global map that has a polygon representing each country.**

**The shapefile is a file that opens in ArcGIS software.**

**So, we will use the global map shapefile and Excel data to create a map of volcanos and associated exact locations using Latitude (Y-axis) and Longitude (X-axis).**

- Now you already extracted the data from the Zip file. Let's add these data to ArcGIS software.



**Contents**

Search

Drawing Order

- Map
  - Topographic

**Add Data**

Tarendra Lakhankar Downloads Assignment3-Lat-Long countries\_shp Search

Organize New Item

Name	Type	Geometry
countries.shp	Shapefile	Polygon

Name: countries.shp | Default

OK Cancel

**Symbology**

Select a layer in the Contents pane.

Contents

Search

Drawing Order

- Map
  - countries
  - Topographic

Add Data

Organization: Assignment3-Lat-Long

Search: Assignment3-Lat-Long

Name	Type	Geometry
countries_shp	Folder	
VolcanoTable.csv	Text File	

Name: VolcanoTable.csv | Default

OK Cancel

Symbology - countries

Primary symbology: Single Symbol

Symbol: [Orange Box]

Label: [Empty Field]

Description: [Empty Field]

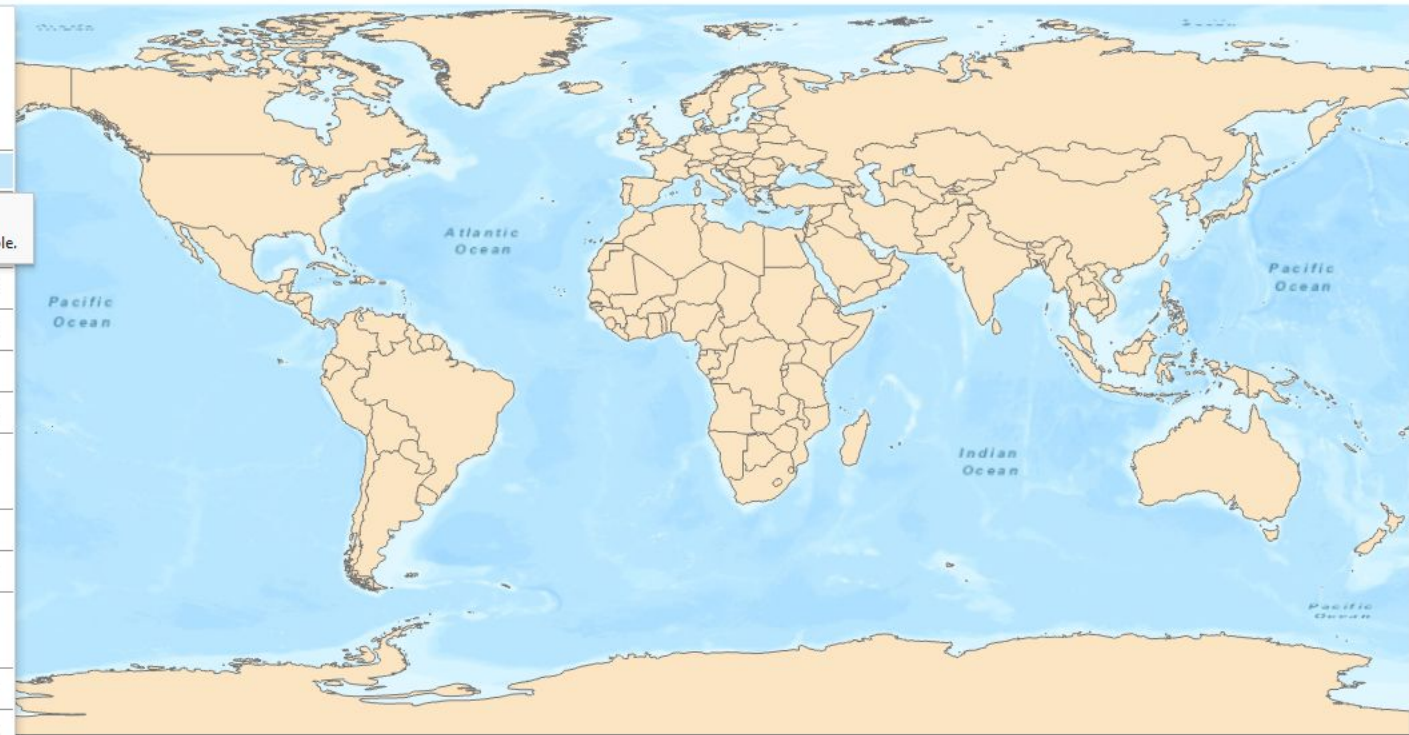
Contents

Search

Drawing Order

- Map
  - countries
  - Topographic
  - Standalone
    - Volcanoes

- Copy (Ctrl+C)
- Paste Properties (Ctrl+Shift+V)
- Remove
- Group
- Open
- Data Engine
  - Open Table** (Open a viewer for the selected table.)
- Data Design
- Create Chart
- New Report
- Joins and Relates
- Create Points From Table
- Geocode Table
- Display Route Events...
- Selection
- Disable Pop-ups
- Configure Pop-ups
- Data
- Sharing
- View Metadata
- Edit Metadata
- Properties



Symbology

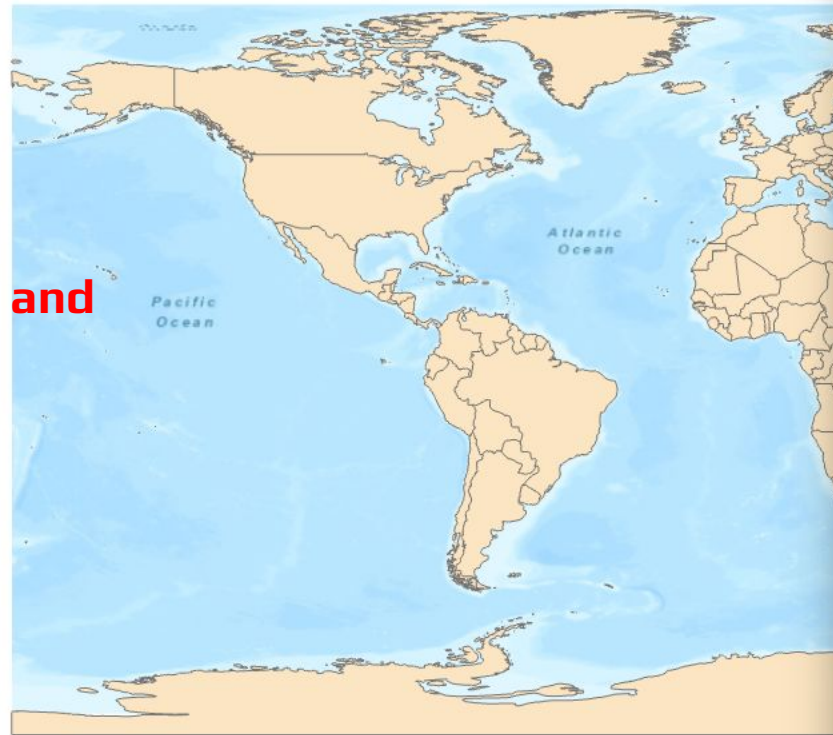
Select a layer in the Contents pane.

Contents

Search

Drawing Order

- Map
- countries
- Topographic
- Standalone Tables
  - VolcanoTable.csv



**Right click on Volcano Table, and Open the file.**

VolcanoTable.csv - MyProject31 - ArcGIS Pro

Field:	Selection:	Rows:				
VolcanoName	Country	Type	Latitude	Longitude	Elevation	
1	Abu	Japan	Shield	34.5	131.6	641
2	Acamarachi	Chile	Stratovolcano	-23.3	-67.62	6046
3	Acatenango	Guatemala	Stratovolcano	14.5	-90.88	3976
4	Acigöl-Neveshir	Turkey	Caldera	38.57	34.52	1689
5	Adams	USA	Stratovolcano	46.21	-121.49	3742
6	Adams Seamount	Pacific Ocean	Submarine	-25.37	-129.27	-39
7	Adatara	Japan	Stratovolcano	37.64	140.29	1718
8	Adwa	Ethiopia	Stratovolcano	10.07	40.84	1733
9	Afderà	Ethiopia	Stratovolcano	13.08	40.85	1295
10	Agrigan	Mariana Islands	Stratovolcano	18.77	145.67	965
11	Agua	Guatemala	Stratovolcano	14.47	-90.74	3760
12	Agua de Pau	Azores	Stratovolcano	37.77	-25.47	947
13	Aguilera	Chile	Stratovolcano	-50.35	-73.75	2546
14	Agung	Lesser Sunda Islands	Stratovolcano	8.24	-115.54	3143
15	Ahyi	Mariana Islands	Submarine	20.42	145.03	-137
16	Akademia Nauk	Russia	Shield	53.98	159.45	1180
17	Akagi	Japan	Stratovolcano	36.56	139.2	1828
18	Akan	Japan	Caldera	43.38	144.01	1499
19	Akhtang	Russia	Shield	55.43	158.65	1956
20	Akita Komagatake	Japan	Stratovolcano	39.76	140.8	1637
21	Akita Yakeyama	Japan	Stratovolcano	39.96	140.76	1366
22	Akuseki-jima	Japan	Stratovolcano	29.46	129.6	584
23	Akutan	USA	Stratovolcano	54.13	-165.99	1303
24	Alaid	Russia	Stratovolcano	50.86	155.55	2339
25	Alamanan	Mariana Islands	Stratovolcano	17.6	145.83	744

0 of 431 selected Filters: 100%

**Here you see Volcano's locations given in latitude and longitude.**

Project Map Insert Analysis View Edit Imagery Share Arc Hydro GRAIP Lite Help Standalone Table

Clipboard: Copy (Ctrl+C), Paste Properties (Ctrl+Shift+V), Remove, Group, Open, Data Engineering (Ctrl+Shift+D), Add Error Layers, Data Design, Create Chart, New Report, Joins and Relates, Create Points From Table, Geocode Table, Display Route Events..., Selection, Disable Pop-ups, Configure Pop-ups, Data, Sharing, View Metadata, Edit Metadata, Properties

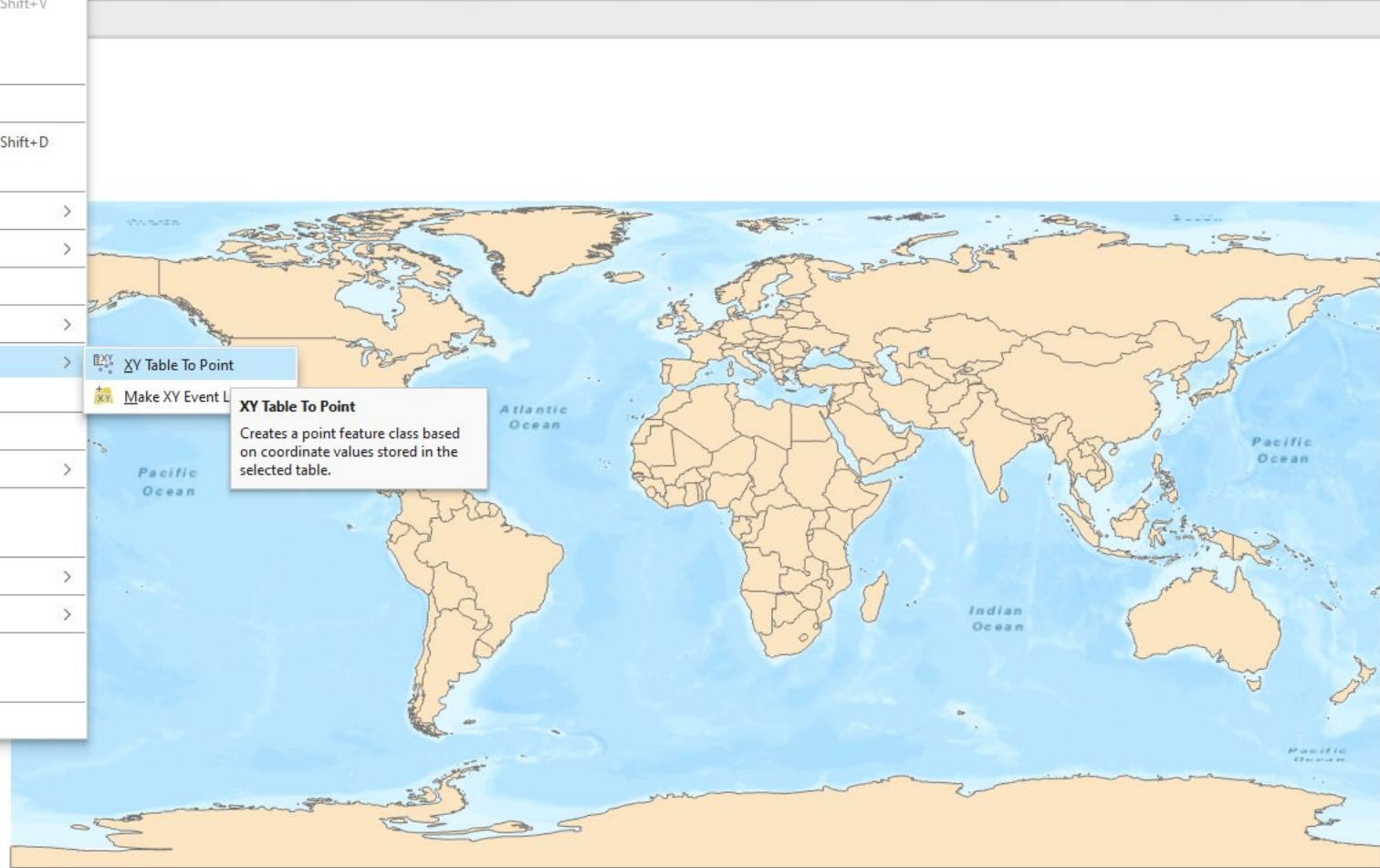
Layer: Add Graphics Layer

Selection: Select, Select By Attributes, Select By Location, Clear, Zoom To

Inquiry: Measure, Locate, Infographics, Coordinate Conversion

Labeling: Pause, Lock, View Unplaced, More, Convert

Offline: Download Map, Sync, Remove



**XY Table To Point**  
Creates a point feature class based on coordinate values stored in the selected table.

### Symbology

Select a layer in the Contents pane.

Project Map Insert Analysis View Edit Imagery Share Arc Hydro GRAIP Lite Help Standalone Table

Cut Copy Paste Add Graphics Layer Select Select By Attributes Select By Location Zoom To Measure Locate Infographics Coordinate Conversion Pause Lock View Unplaced Convert Download Map Sync Remove

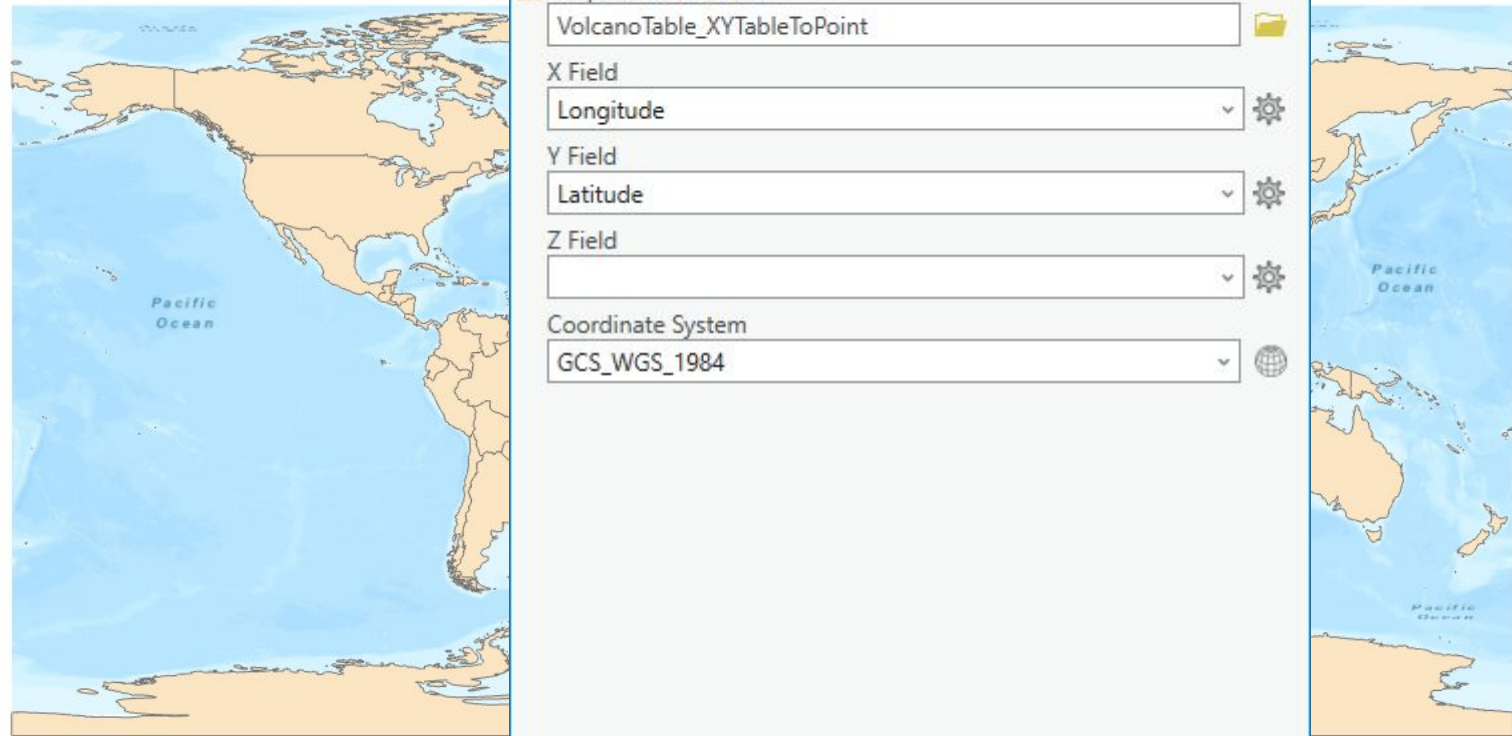
Contents

Search

Drawing Order

- Map
  - countries
  - Topographic
  - Standalone Tables
    - VolcanoTable.csv

Map



XY Table To Point

Parameters Environments

Input Table: VolcanoTable.csv

Output Feature Class: VolcanoTable\_XYTableToPoint

X Field: Longitude

Y Field: Latitude

Z Field:

Coordinate System: GCS\_WGS\_1984

OK

Symbology

Select a layer in the Contents pane.

Project Map Insert Analysis View Edit Imagery Share Arc Hydro GRAIP Lite Help Feature Layer Labeling Data

Clipboard: Cut, Copy, Copy Path, Paste, Explore, Bookmarks, Go To XY

Layer: Basemap, Add Data

Selection: Select, Select By Attributes, Select By Location, Clear, Zoom To

Inquiry: Measure, Locate, Infographics, Coordinate Conversion

Labeling: Pause, Lock, View Unplaced, More, Convert

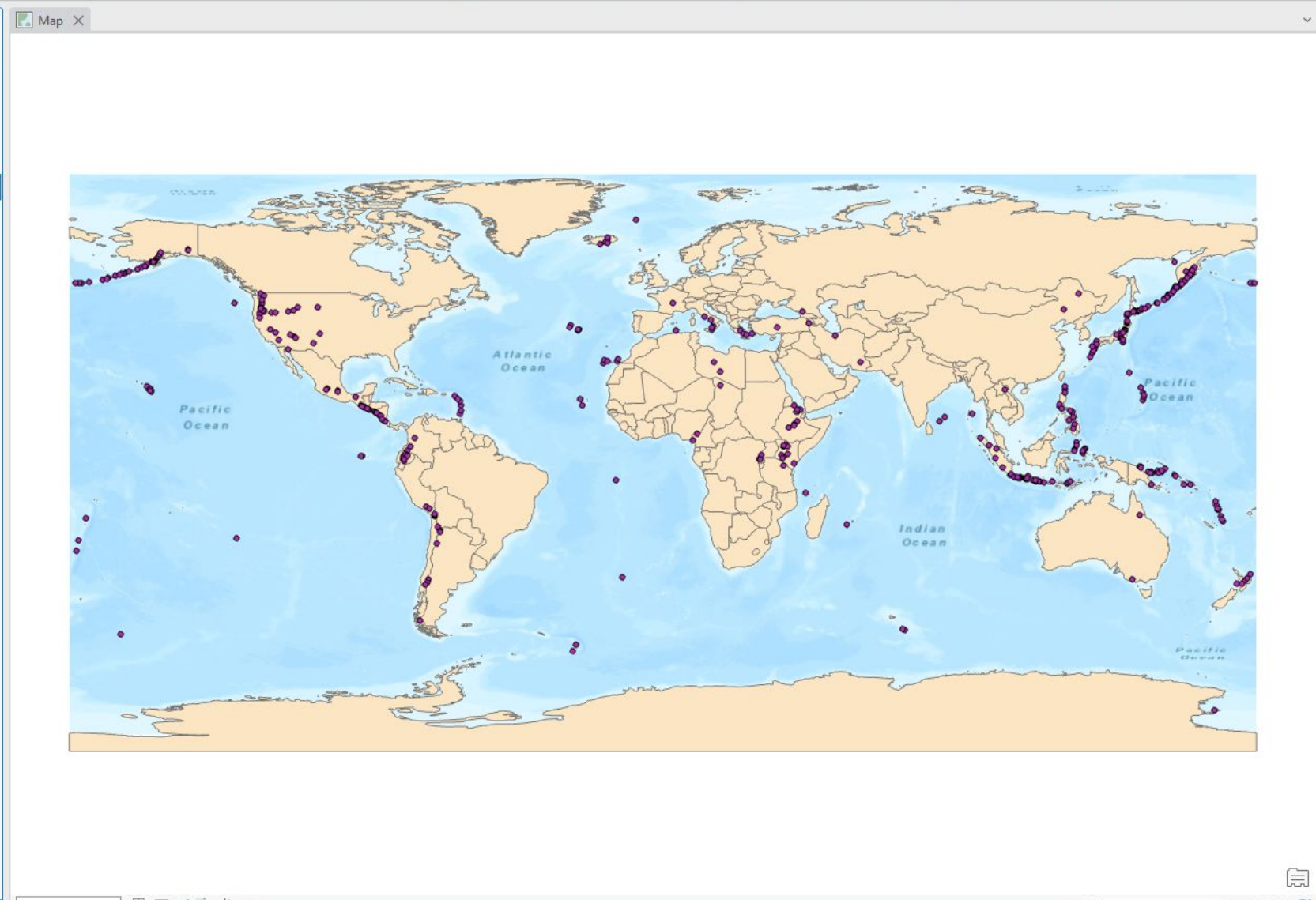
Offline: Download Map, Sync, Remove

Contents

Search

Drawing Order

- Map
  - VolcanoTable\_XYTableToPoint
  - countries
  - Topographic
- Standalone Tables
  - VolcanoTable.csv



Symbology - VolcanoTable\_XYTableToPoint

Primary symbology: Single Symbol

Symbol:

Label:

Description:

---

**You can use different color or shape to  
show your data.**

**Its time to show your **creativity**.**

---

**Then, add new layout and add the map  
you just created.**

**You should use landscape page size.**

Project Layout **Insert** Analysis View Imagery Share Arc Hydro GRAIP Lite Help Map Frame

New Map New Layout New Report New Notebook Import Map Import Layout Task

Connections Add Folder New Investigation Map Frame Extent Indicator Grid Refresh Map Series

North Arrow Scale Bar Legend Chart Frame Table Frame Additional Surrounds

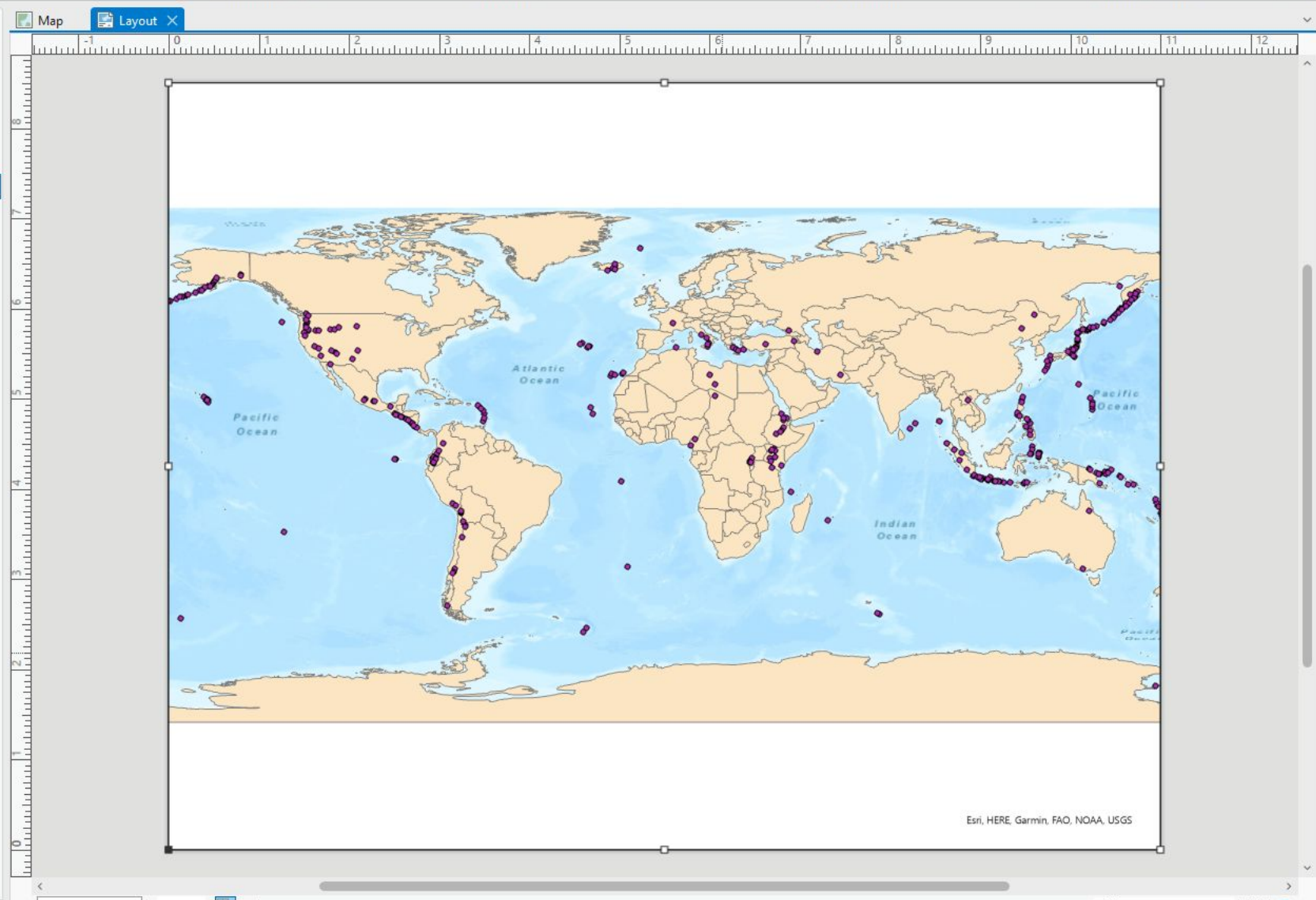
Graphics and Text Dynamic Text Add New Import Add Item

Contents

Search

Drawing Order

- Layout
  - Map Frame
    - Map
      - VolcanoTable\_XYTableToPoint
      - countries
      - Topographic
      - Standalone Tables
        - VolcanoTable.csv



Symbology

Select a layer in the Contents pane.

---

**Now you can follow same process you did in assignment 1 to add Title, North Arrow, Scale Bar, Your Name and Export the map as pdf to upload at Google Folder that has been shared with you.**