Tutorial Set 1: Working with ArcGIS

Exercise Site20_1-3 Creating soil sampling map

Learning objective:Creating a soil analysis point layer from a text file containing
coordinates and soil properties for numerous sampling locationsTechniques:Create Feature Class from the XY TableData Source:Dataset1

Part 1: Creating a point shapefile from a text file

1. In ArcCatalog, locate *Field20_Soil_2008.txt* in the folder Dataset1

2. Right click on this file, select **Create Feature Class > From XY Table**.

📣 ArcCatalog - ArcInfo - H:\Class\GIS_Educational\TutorialPackages\Site20\Datasets\Dataset1 🛛 📃 🗖 🔀				
<u>File E</u> dit <u>V</u> iew G <u>o</u> <u>G</u> eoprocessing <u>C</u>	ıstomize <u>W</u> indows <u>H</u> elp			
[i ▲ 😂 ☞ 🖹 🖹 × ☵ 🏥 🧱 ፡፡ Q 🕼 🗟 💿 🖸 🐎 አ? 📮 🔍 Q 🖉 ⊘ ← → O 용 🍃				
Elocation: H./Class/GIS_Educational/TutorialPackages/Site20/Datasets/Dataset1				
Catalog Tree 4 ×	Contents Preview Description			
Folder Connections	Name Type			
E C AGGP	dem 31h10 Raster Da	xtaset		
🕀 🚞 Alberta	Image: Weight of the second			
E Class	Field20_Com_2009.shp Shapefile			
	Field20_Ortho_Q09028559_2008.tif Raster Da	xtaset		
🕀 🚰 Geospatial	Field20_Soil_2008			
🖃 🚰 TutorialPackages	Field20_Soybean_1 Rename F2 hapefile			
E Contraction E Contr	Field20_Soybean_:			
🕀 🗁 Dataset1	Field 20_Topo_200 hapefile	www.VV.Tabla		
🕀 🚰 Dataset2	Site20.mxd	ument		
⊞ ⊒ Dataset3 ⊞ 🚰 Dataset4	Soil_IRDA_ExtraL	3		
	Properties			

- 3. In Create Feature From XY Table dialog window, set
 - a. X Field: Longitude
 - b. Y Field: Latitude
 - c. Z field: (leave it empty)
 - d. Click **Coordinate System of Input Coordinates** to launch the **Spatial Reference Properties** dialog window to define its coordinate system.

Create Feature Class From XY Table 🛛 🔹 🔀	Spatial Reference Properties	×
Input Fields	XY Coordinate System	
X Field:		
Longitude 💌		
Y Field:	 	
Latitude 🗸 🗸	. 🕀 🛅 Projected Coordinate Systems	
Z Field:	٥	
<none></none>	C	
Coordinate System of Input Coordinates		
Output	Current coordinate system:	
Specify output shapefile or feature class:	<unknown></unknown>	
Configuration keyword:		
	×	
Advanced Geometry Options		
OK Cancel	OK Cancel	

e. In **Spatial Reference Properties** dialog window, click **Select** to choose the coordinate system in the folder **Geographic Coordinate Systems > World > WGS 1984**. Click **Ok**.

(Hint: since the point data is collected using a GPS device, the coordinate system should be WGS84)

- f. Specify output feature name: *Field20_Soil_2008_WGS84.shp* in the folder of Dataset1
- 4. Click **Ok**.
- 5. Right click the on the **Contents** in ArcCatalog and click **Refresh** the data layers, the *Field20_Soil_2008_WGS84.shp* is appeared.
- 6. Open the shape file in a ArcMap document, if you want to see the map

Note: The shape has geographic coordinate system (Decimal degrees), need to convert project coordinate system for measurement and analysis in ArcGIS (next exercise - 1.4).

