Tutorial Set 1: Working with ArcGIS

Exercise Site20_1-4 Converting coordinate systems

Learning objective: Converting a shapefile from geographic coordinate system to

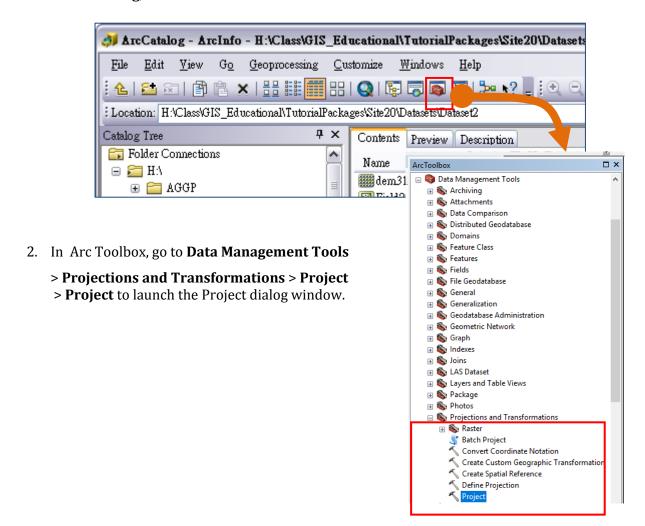
projected coordinate system

Techniques: ArcToolbox – Projection and Transformation

Data Source: Dataset1 folder

Part 1: Converting coordinates from a geographic coordinate system to a projected coordinate system

1. In ArcCatalog, launch Arc Toolbox.



1)

2)

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OK

Cancel

×

3. In the **Project** dialog window, set:

1) Input Dataset or Feature Class = Field20_Soil_2008_WGS84.shp

2) Output Dataset or Feature Class = Field20_Soil_2008.shp

Input Dataset or Feature Class

H:\Class\GIS_Educational\TutorialPackages\Site20\Datasets\Dataset1\Field20_Soil_2008_WGS84.shp
Input Coordinate System (optional)

Output Dataset or Feature Class

H:\Class\GIS_Educational\TutorialPackages\Site20\Datasets\Dataset1\Field20_Soil_2008.shp

Output Coordinate System

NAD_1983_UTM_Zone_18N

Geographic Transformation (optional)

Spatial Reference Properties

XY Coordinate System

XY Coordinate System

Z Coordinate System

OK.

Type here to search

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Current coordinate system:

NAD_1983_UTM_Zone_18N
WKID: 26918 Authority: EPSG

False_Easting: 500000.0 False_Northing: 0.0 Central_Meridian: -75.0 Scale_Factor: 0.9996 Latitude_Of_Origin: 0.0 Linear Unit: Meter (1.0)

Projection: Transverse Mercator

MAD 1983 UTM Zone 18N

NAD 1983 UTM Zone 19N

NAD 1983 UTM Zone 20N

NAD 1983 UTM Zone 21N
 NAD 1983 UTM Zone 22N
 NAD 1983 UTM Zone 28N
 NAD 1983 UTM Zone 58N
 NAD 1983 UTM Zone 59N
 NAD 1983 UTM Zone 60N
 NAD 1983 UTM Zone 60N

3) Output Coordinate System =

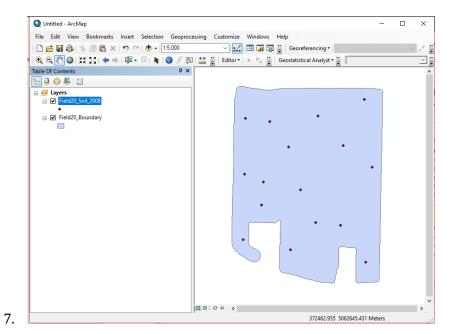
NAD_1983_To_WGS_1984_5

Launch **Spatial Reference Properties** Click **Select**

- > Projected Coordinated Systems
- > UTM
- > NAD 1983
- > NAD 1983 UTM Zone 18N.prj

Click **OK** to exit **Spatial Reference Properties** Click **OK** to exit **Project** Tool.

- 4. Now, the projected layer *Field20_Soil_2008.shp* is shown in **Contents** window in **ArcCatalog**.
- 5. Drag/drop *Field20_Soil_2008.shp and Field20_boundary.shp* to ArcMap for visualization.
- 6. Close the ArcMap



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