

Tutorial Set 1: Working with ArcGIS

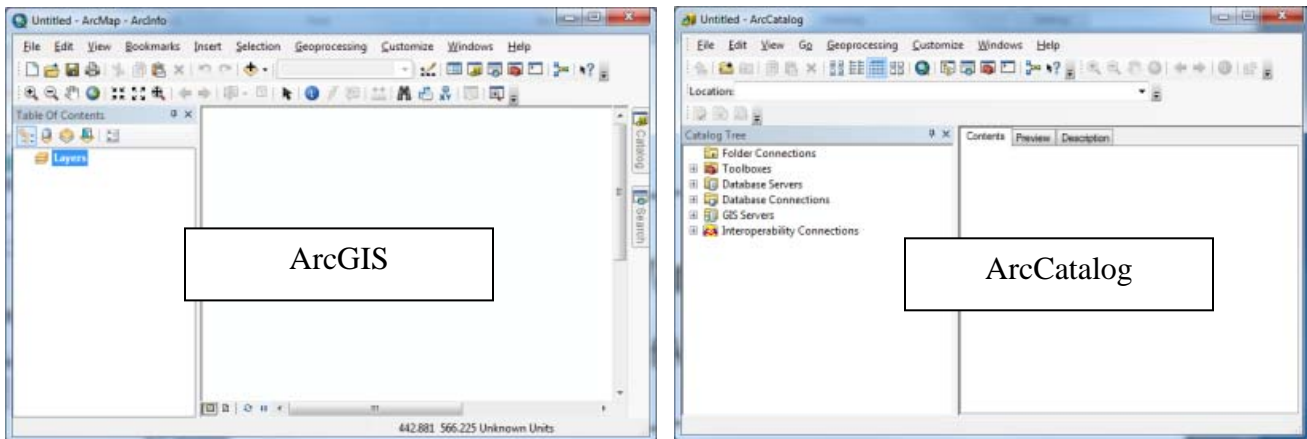
Exercise Site20_1-1 Displaying data and saving projects

- Learning objective:** Adding and displaying data in ArcMap; saving a ArcGIS project
Techniques: ArcGIS project management
Data Source: dataset1.zip

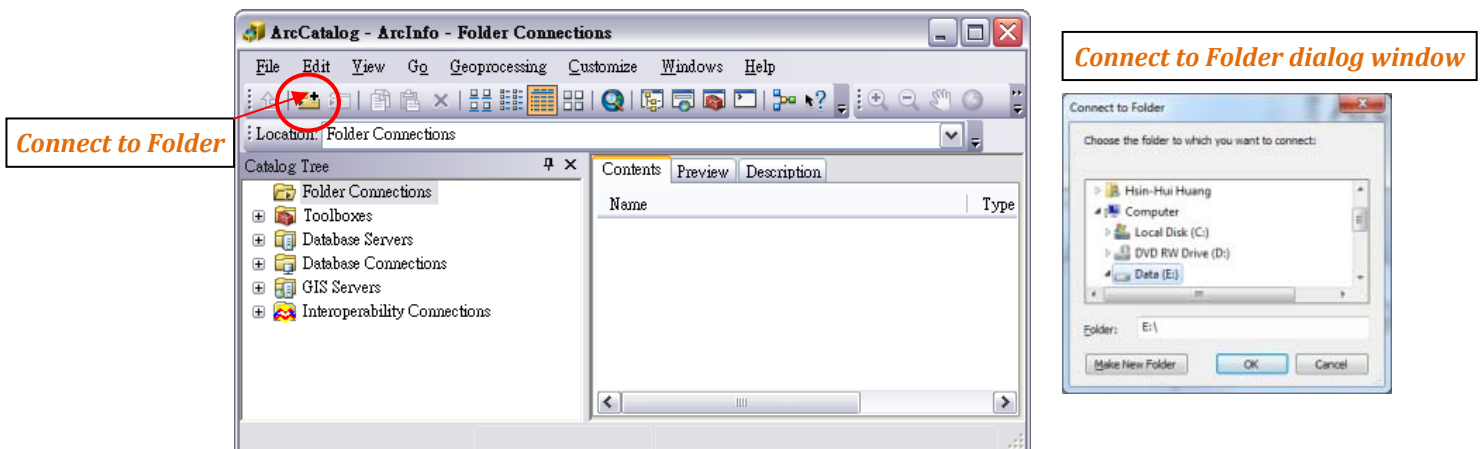
Part 1: Downloading/unzipping *dataset1.zip* onto the local computer or your flash drive

Part 2: ArcGIS 10 Interface – ArcMap and ArcCatalog

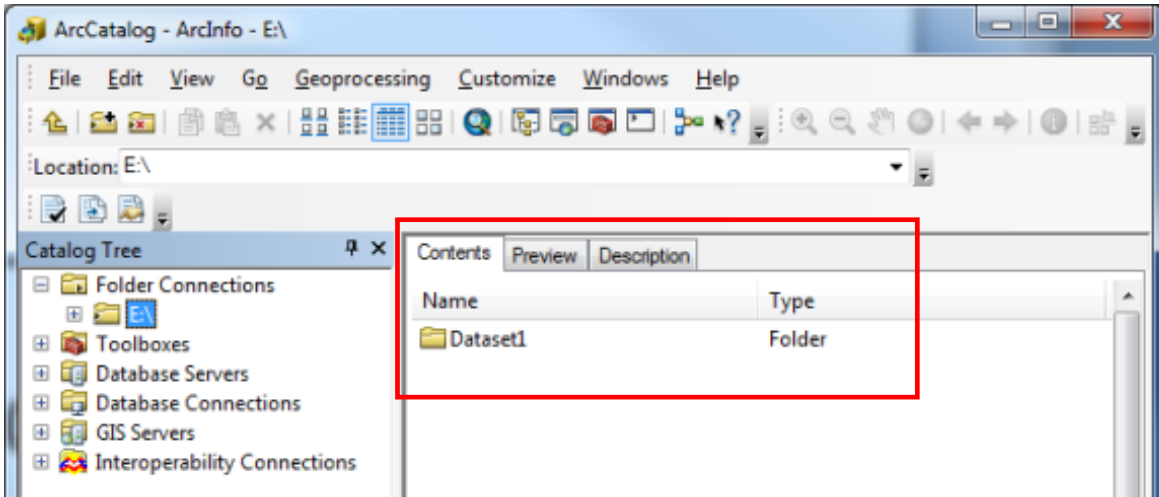
1. Launch ArcCatalog: **Start > Programs > ArcGIS > ArcCatalog.**
2. Launch ArcMap: **Start > Programs > ArcGIS > ArcMap.**
3. Place the two launched interfaces side by side.



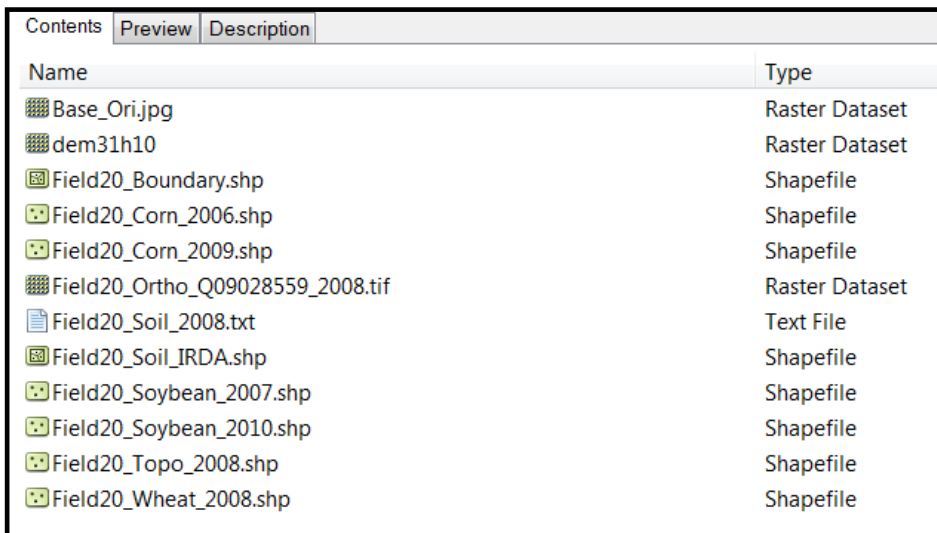
4. In ArcCatalog, click **Connect to Folder** to launch **Connect to Folder** dialog window.



- In **Connect to Folder** dialog window, browse through the directory to locate the drive where the **Dataset1** folder is stored (e.g., Dataset 1 was stored under E:\).
- Click **OK** to add the **Dataset1** folder) to **Catalog Tree** in ArcCatalog.



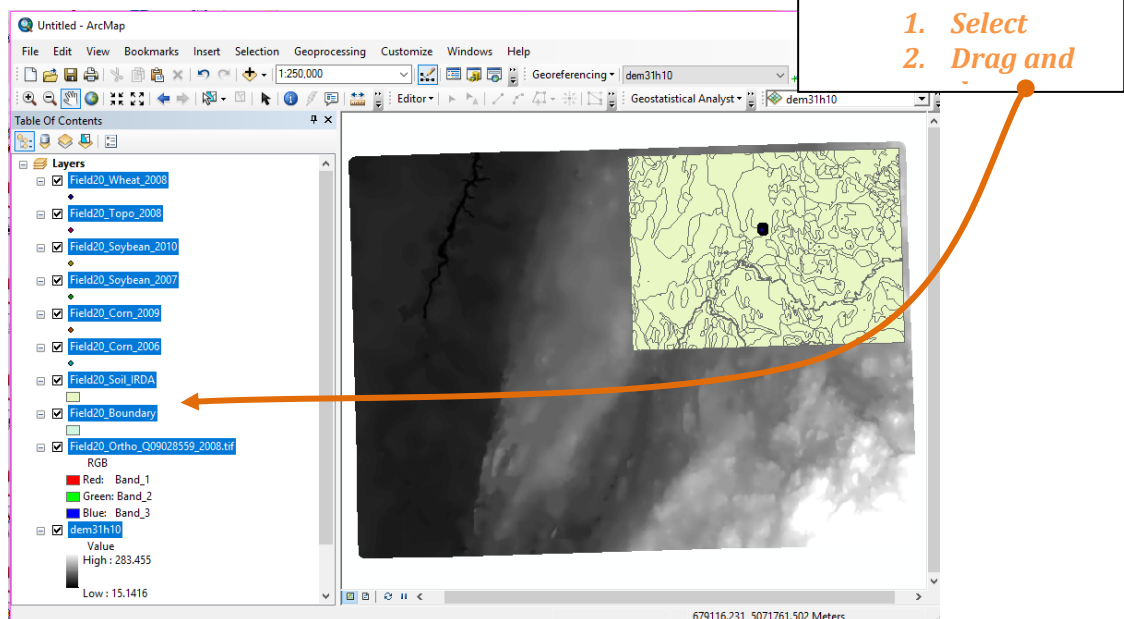
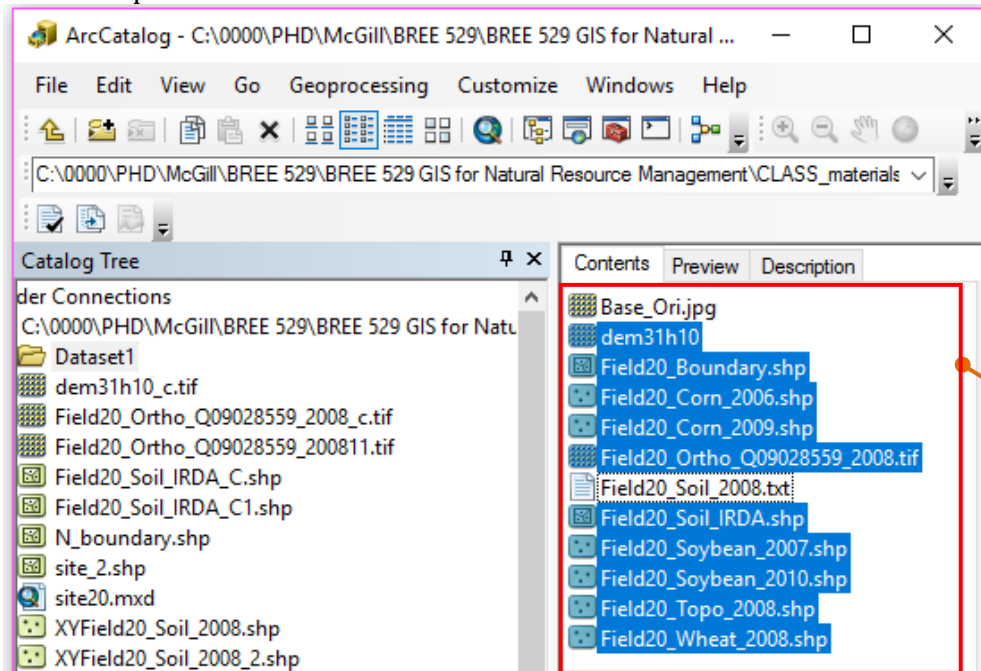
- Double click on the **Dataset1** folder to view it's file contents in **Contents** window (see below).



Note: See the table below for details of the dataset:

File Name	Description	Format
<i>Base_Ori.jpg</i>	A GoogleMaps snapshot	*.jpg
<i>dem31h10</i>	Digital elevation model	ArcGIS GRID
<i>Field20_Boundary.shp</i>	Field boundary	ArcGIS shapefile (polygon)
<i>Field20_Corn_2006.shp</i>	Corn yield 2006	ArcGIS shapefile (point)
<i>Field20_Corn_2009.shp</i>	Corn yield 2009	ArcGIS shapefile (point)
<i>Field20_Ortho_Q09028559_2008.tif</i>	MRNF Orthophoto 2008	TIFF
<i>Field20_Soil_2008.txt</i>	2008 Soil analysis data	Text file
<i>Field20_Soil_IRDA.shp</i>	IRDA's soil map	ArcGIS shapefile (polygon)
<i>Field20_Soybean_2007.shp</i>	Soybean yield 2007	ArcGIS shapefile (point)
<i>Field20_Soybean_2010.shp</i>	Soybean yield 2010	ArcGIS shapefile (point)
<i>Field20_Topo_2008.shp</i>	2008 Topographic data	ArcGIS shapefile (point)
<i>Field20_Wheat_2008.shp</i>	Wheat yield 2008	ArcGIS shapefile (point)

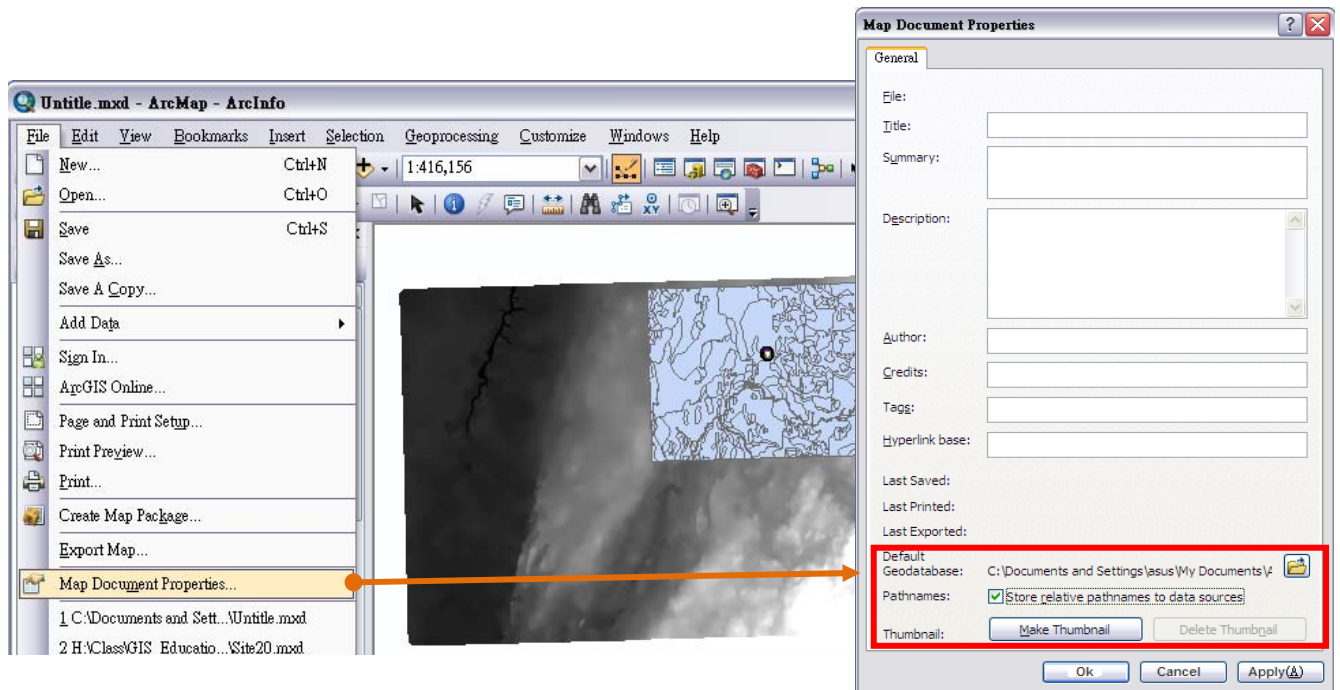
- In ArcCatalog, select all the files (except *Field20_Soil_2008.txt* and the *Base_Ori.jpg*) from **Contents** window, and then drag and drop the selected files to **Table of Contents** in ArcMap.

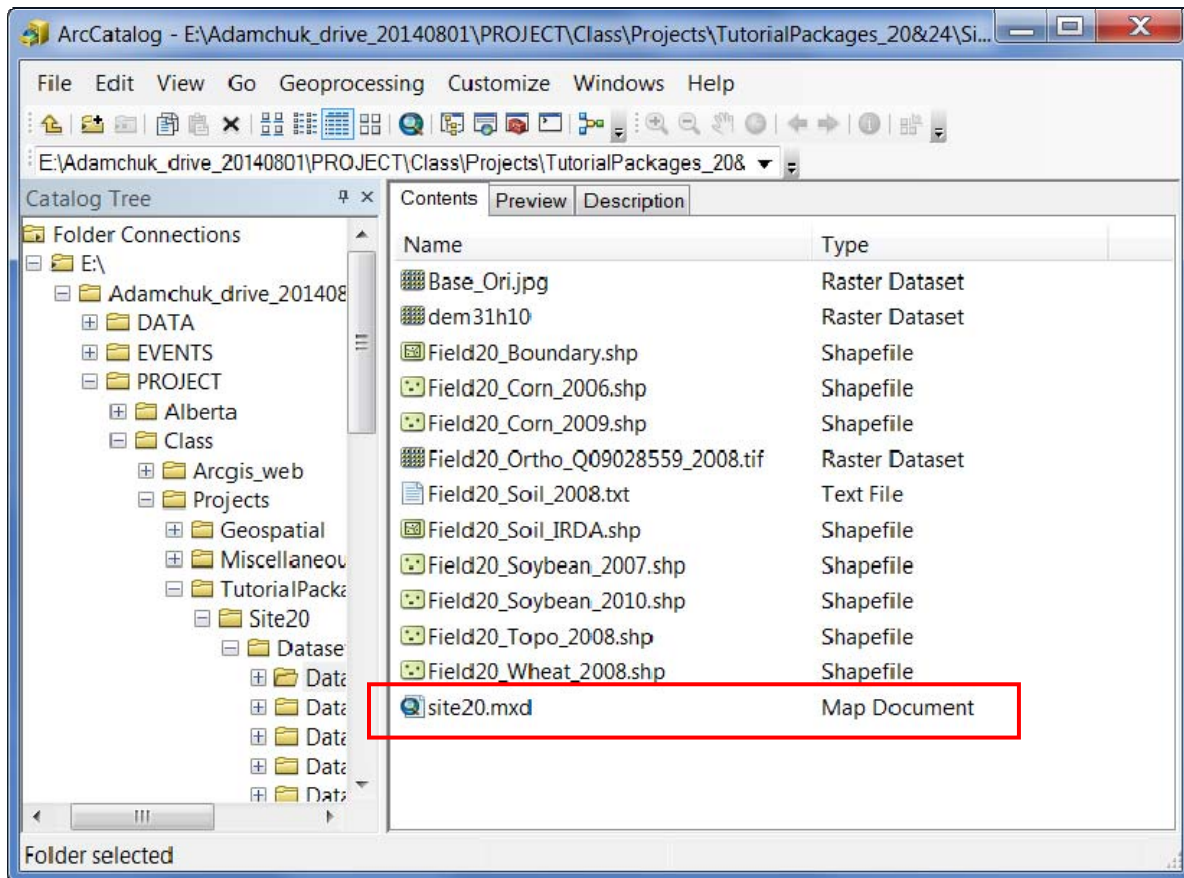


Part 3: Saving a ArcGIS project (*.mxd) using relative-pathname

- In ArcMap, click on **Menu Bar > File > Map Document Properties**.
- Select **Store relative pathnames to data sources**.
- Click **Apply** and **OK**.
- Click on **Menu Bar > File > Save As ...**

5. Save the project with desired name (i.e., site20.mxd) in the same folder as the data layers.
6. Close the ArcMap





ABOUT *.mxd ~

When saving a ArcGIS project (*.mxd), it does not store or contain the data layers. Instead, it only stores the **links** to the data layers. When opening a *.mxd file, the program uses the stored data-links to make data layers appear.

Without using "store relative pathname", the data-link is stored using complete file path, such as E:\Adamchuk_drive_ \ PROJECT\Class \ Therefore, the data link can be broken if data is moved to different locations. As it is very likely to move data from one computer to another one, it is strongly recommended to use "store relative pathname" function to ensure data linkage.

Keep in mind that, the relative pathname is based on the relationship between the ArcGIS project (*.mxd file) and its contained data layers. So, once a mxd file with relative pathname is saved, the information is registered. After that, if the project files and the associated data layers are placed differently into different locations, the links will still be broken. In this case, even the project is opened, no layers will appear. No need to worry, the link can be fixed.

Part 4: Saving ArcGIS project to the older version (if it is required)

Be aware that there are different versions of ArcGIS. Sometimes a project (.mxd) saved in newer version cannot be opened in the older one (ex., *.mxd of 10.2.2 is not opened the one of 10.0).*

So, when sharing ArcGIS project with other users using different version, you can just save the project using the desired version following the steps below. .

1. In Menu bar, go to **File > Save A Copy ...**
2. Choose to save as **10.0 document** to be opened in 10.1 version

