

Exporting TerraSync Data Files to an Esri Shapefile from the Trimble GNSS Device

There may be times when you have to export your TerraSync field data (SSF file) right from the data collector and the process is pretty straight forward. Keep in mind that if you did not receive real-time corrections during your field work session, that autonomous GNSS data can be up to 10 meters off. We do recommend using Pathfinder Office to export the data if you need it to be post processed, or if you need to specify additional GNSS metadata like precisions, correction type, etc.

Follow these steps.

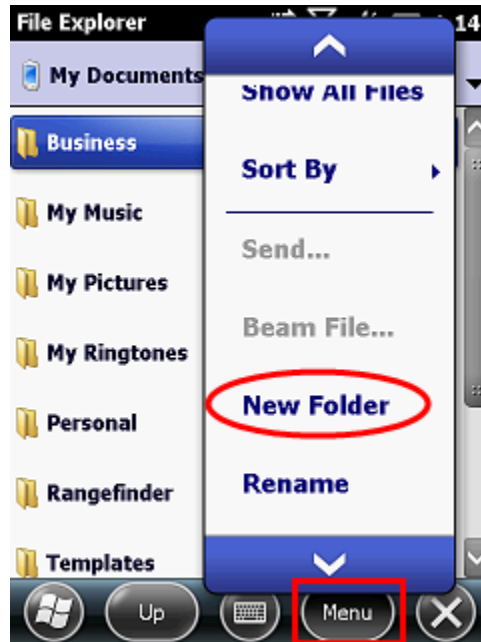
- 1) Create a folder to export the data to on the Trimble GNSS device (ie, Geo7X)
 - a. Click on the **Start** menu and select **File Explorer**



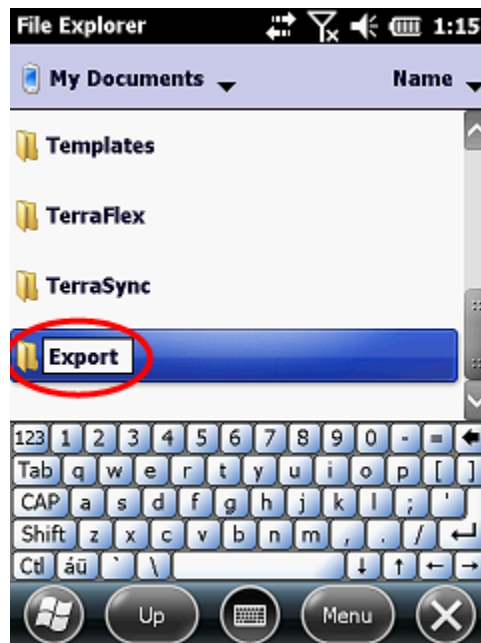
- b. Browse to the My Documents folder or SD Card



- c. Select **Menu**, scroll down and choose **New Folder**



- d. Type in the name of your folder (ie, Export) and press **Enter**



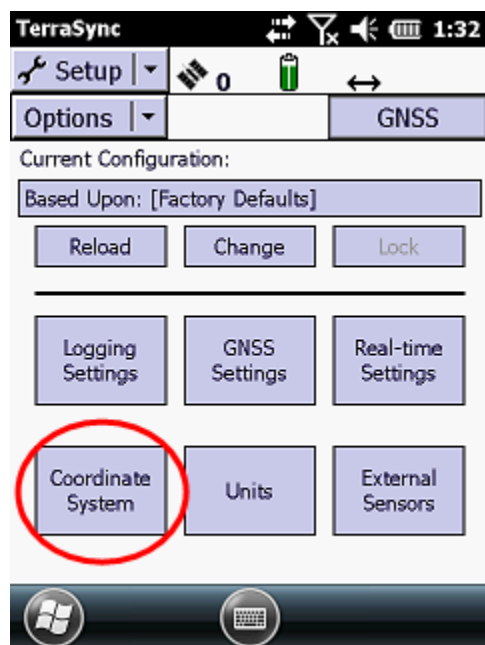
- e. Close (X) out of File Explorer

- 2) Open TerraSync

2. Choose the **TerraSync icon** or go to **Start** menu and choose **TerraSync**
3. Setup the Coordinate System
 - a. Click on **Status** and choose **Setup**

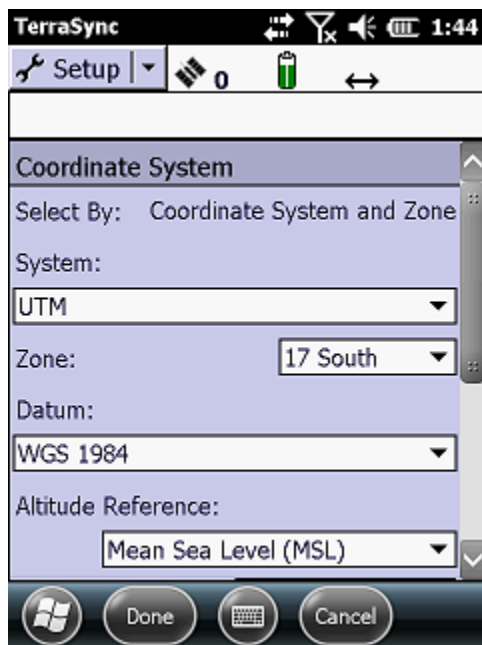


- b. Choose **Coordinate System** tab

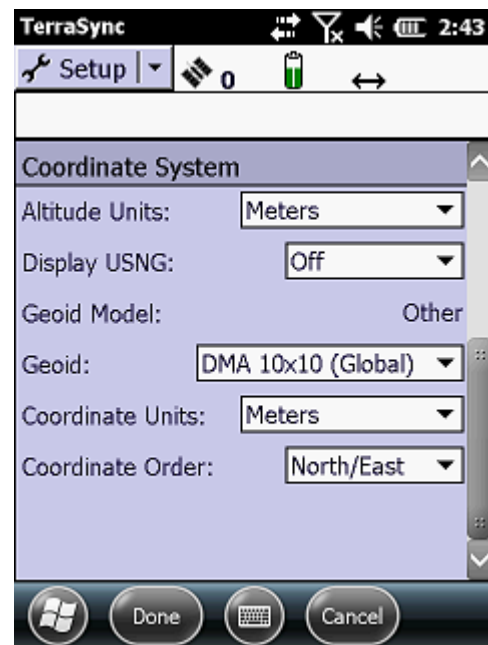


i. Set the following information to match your GIS data:

1. System
2. Zone
3. Datum
4. Altitude Reference
5. Geoid Model
6. Units



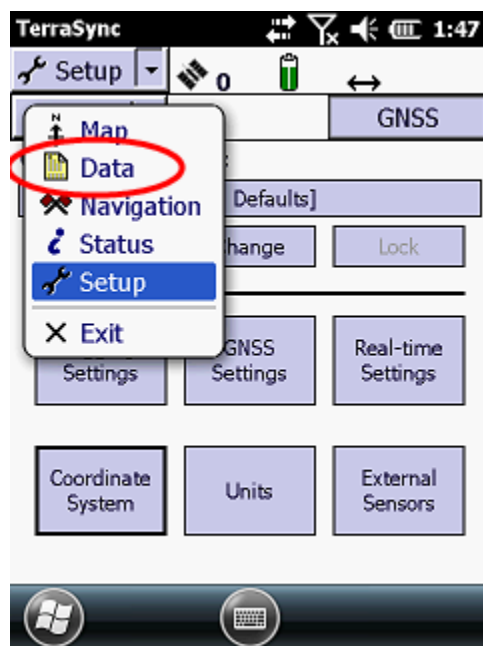
The screenshot shows the 'Setup' screen in the TerraSync application. The 'Coordinate System' section is expanded, showing the following settings: 'Select By: Coordinate System and Zone', 'System: UTM', 'Zone: 17 South', 'Datum: WGS 1984', and 'Altitude Reference: Mean Sea Level (MSL)'. The bottom of the screen has a 'Done' button and a 'Cancel' button.



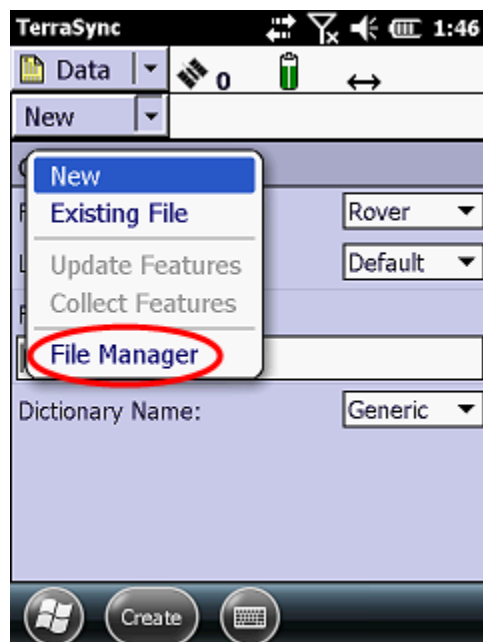
The screenshot shows the 'Setup' screen in the TerraSync application. The 'Coordinate System' section is expanded, showing the following settings: 'Altitude Units: Meters', 'Display USNG: Off', 'Geoid Model: Other', 'Geoid: DMA 10x10 (Global)', 'Coordinate Units: Meters', and 'Coordinate Order: North/East'. The bottom of the screen has a 'Done' button and a 'Cancel' button.

ii. Click on Done

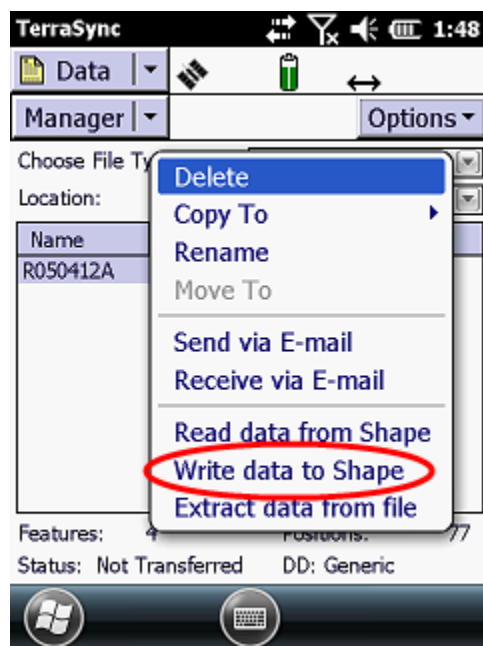
4. Export the Data
 - a. Click on **Setup** and choose the **Data** Menu



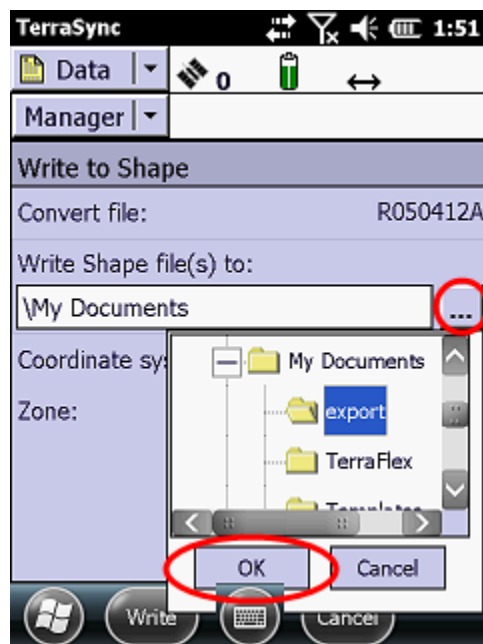
- b. Click on the submenu "**New**" and choose **File Manager**



- c. **Highlight** the data file you wish to export
- d. Choose **Options** and select **Write data to Shape**



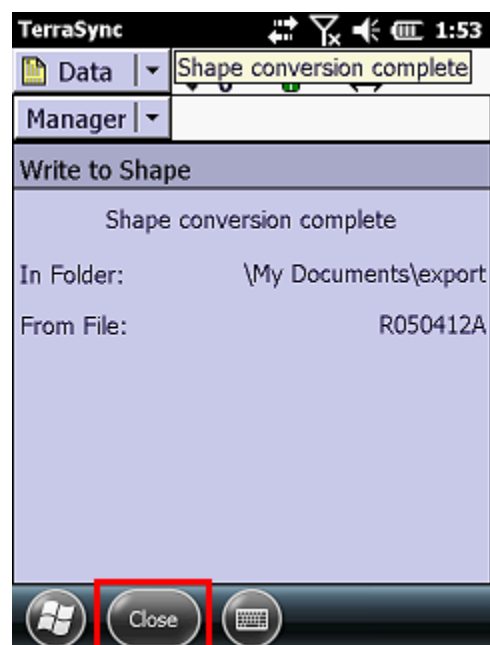
- e. **Browse** to the location of the **Folder** you created in **Step 1** and click on **OK**



- f. Verify your Coordinate System is set properly
- g. Click on **Write**

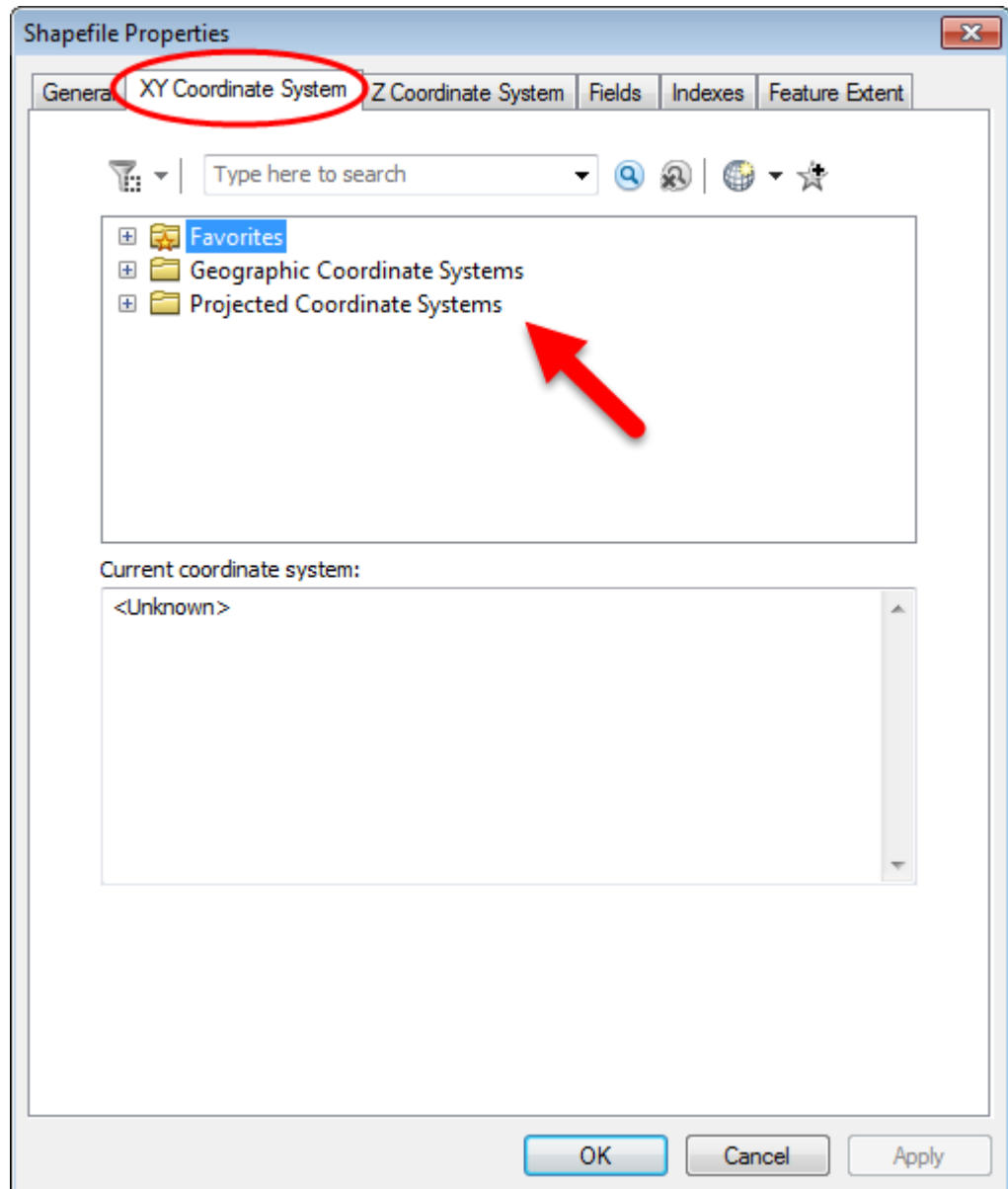


- h. Select **Close** when the Shape conversion is complete



5. Transfer the data from the Geo7X to your computer

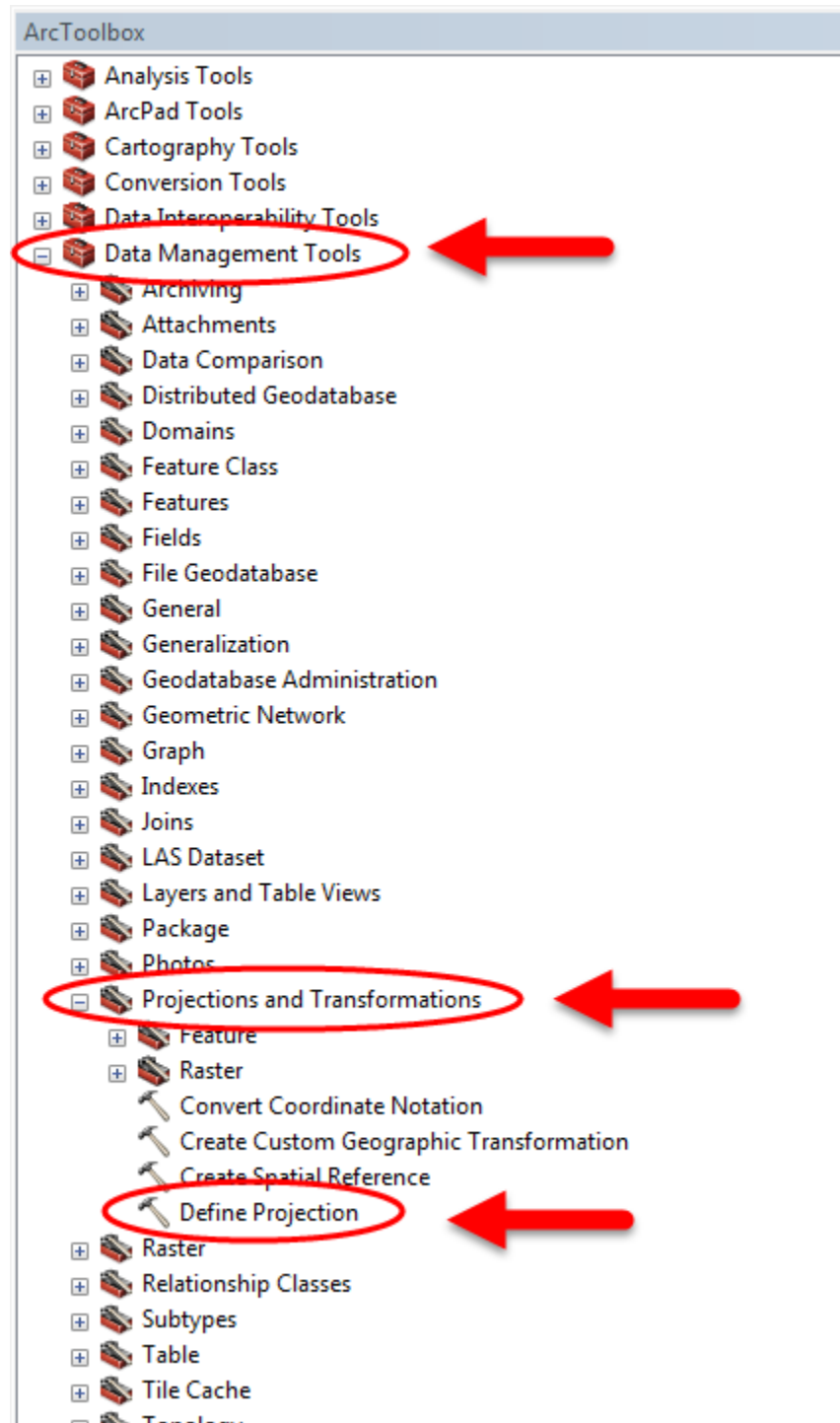
6. Define the Esri Shapefile projection. There are a couple of ways to accomplish this.
 - a. Define Projection in ArcCatalog
 - i. **Browse** to the shapefile
 - ii. **Right-click** on the shapefile and choose **Properties**
 - iii. Choose the **XY Coordinate System** Tab



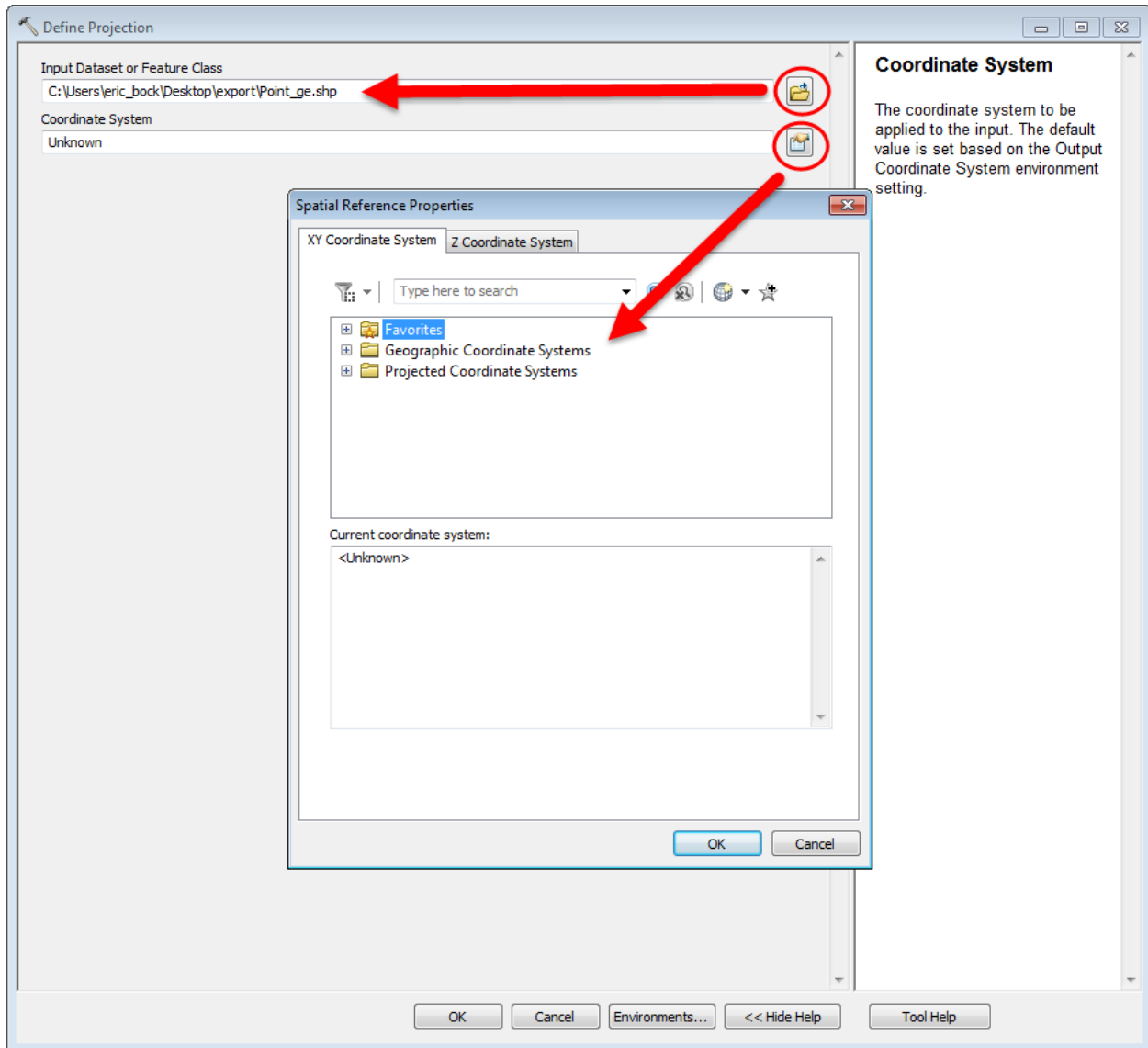
- iv. **Browse** to the projection that was setup during Export
 - v. Click **OK**
 - vi. Repeat as necessary



- b. Define the Projection ArcToolbox
 - i. Navigate to **Data Management Tools, Projections and Transformations** and choose **Define projection**



- ii. Under **Input Dataset**, browse to your Shapefile and click on Add



- iii. Under **Coordinate System**, browse to your coordinate system to match your TerraSync export settings.
- iv. Click **OK** and click **OK** again to start the Define Projection tool.

Please contact NEI support at 1-800-949-1446 or log a [support ticket online](#) for more information.