

How to Convert a Text file (XY Table format) to a Shapefile for use in ArcGIS

You can create an ArcGIS ready shapefile by converting a Text (.txt) file that contains your GPS points or geographic data (coordinates) in the form of an XY table (long, lat).

Step 1: Set up your data.

First you need to set up the coordinates in the form of an XY table as a Text file.

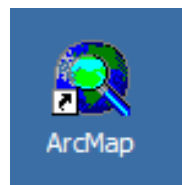
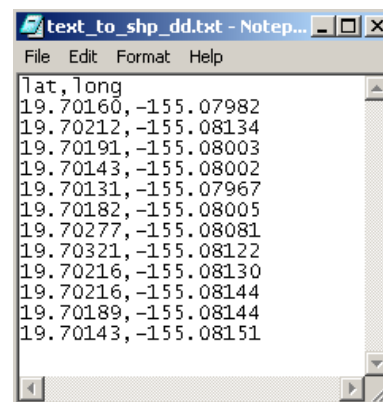
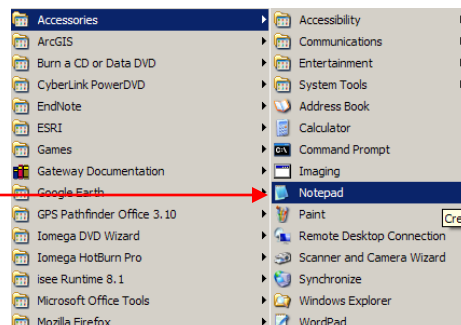
Launch notepad.

(Start=>Programs=>Accessories =>Notepad).

This part is very important: Coordinates must be in decimal degrees and your West coordinates must have a negative sign in front. Also, you must type in your coordinates using commas as separators between lat and long (Y, X), **do not use spaces**. Save your file as a .txt and close it.

It should be noted that you can add other data besides just the lat and long such as tree type for example, just remember to use commas and no

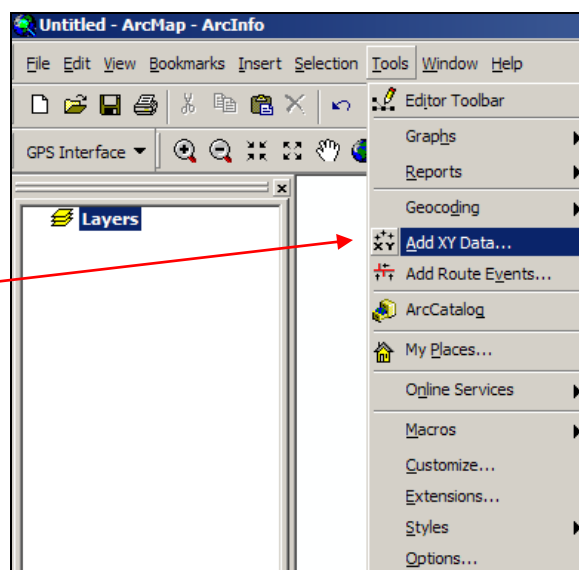
```
lat,long,tree
19.70160,-155.07982,ohia
```



Step 2: Convert the file.

Launch ArcMap.

Navigate to **Tools=>Add XY data**.



The Add XY Data dialog will come up.

Browse for your text file, and click **Add**. The file should be in the dialog box now.

Specify the fields for the X and Y coordinates. The X field should be longitude and the Y field should be latitude.

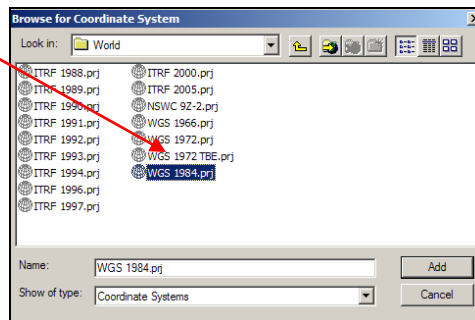
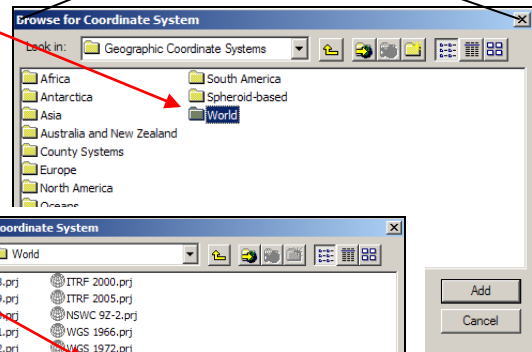
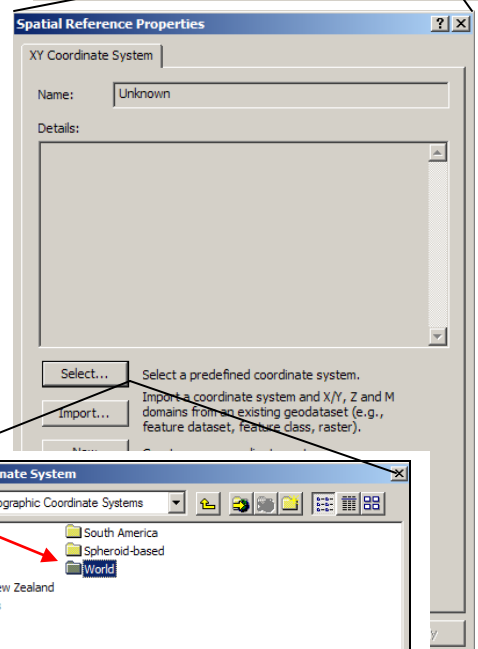
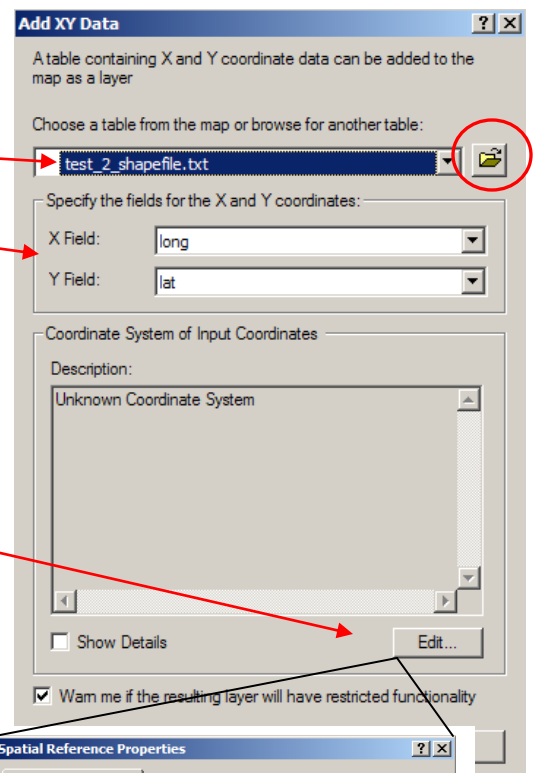
To specify a **Coordinate system** for your data, click on **Edit**.

The **Spatial Reference Properties** dialog will come up. Click **Select**.

The **Browse for Coordinate System** dialog will come up, Select the **Geographic Coordinate System** folder, and click **Add**.

In the **Geographic Coordinate System** folder, Select the **World** folder from the list, click **Add**.

In the **World** folder, select the **WGS 1984** Projection (WGS 1984.prj) from the list and click **Add**.

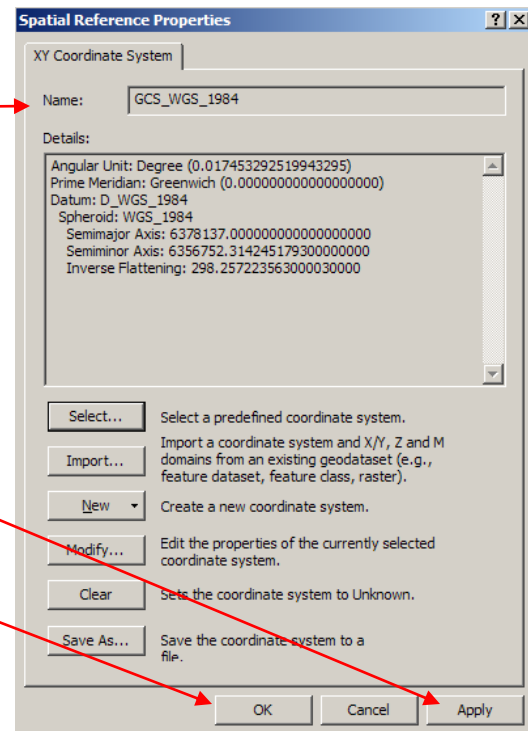


Back at the **Spatial Reference Properties** dialog, your **XY Coordinate System** should be visible in the **Name** box.

The **Details** of the Coordinate System should be listed below it.

Click **Apply**.

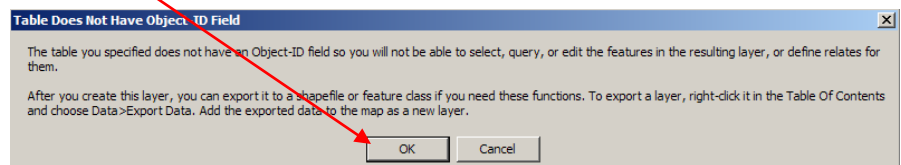
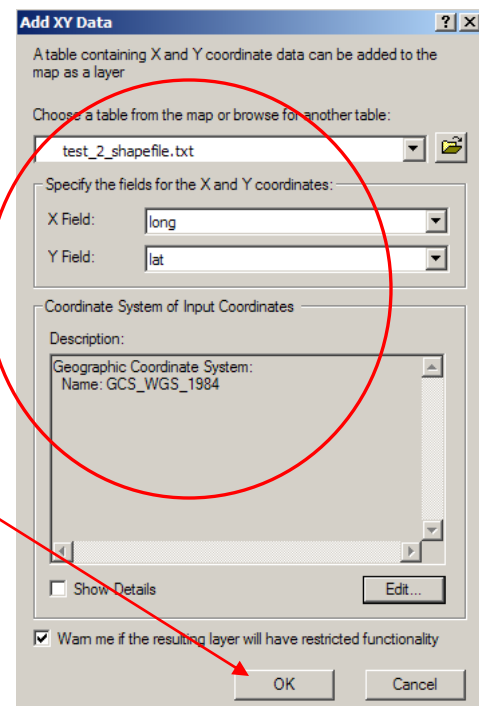
Then click **OK**.



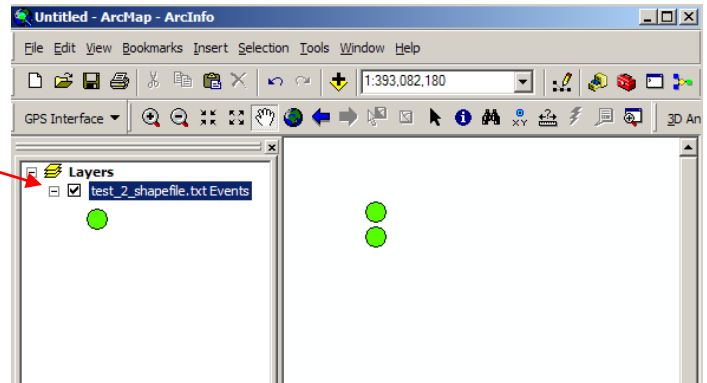
Back at the **Add XY Data** dialog make sure everything you want is there (the correct file, X and Y fields and Coordinate system) and then click **OK**.

The **Table Does Not Have Object-ID Field** box will come up.

This lets you know that once you add the file you just created (a temporary **.txt Events** file) to ArcMap, you need to export the file to create your final Shapefile. Click **OK**.

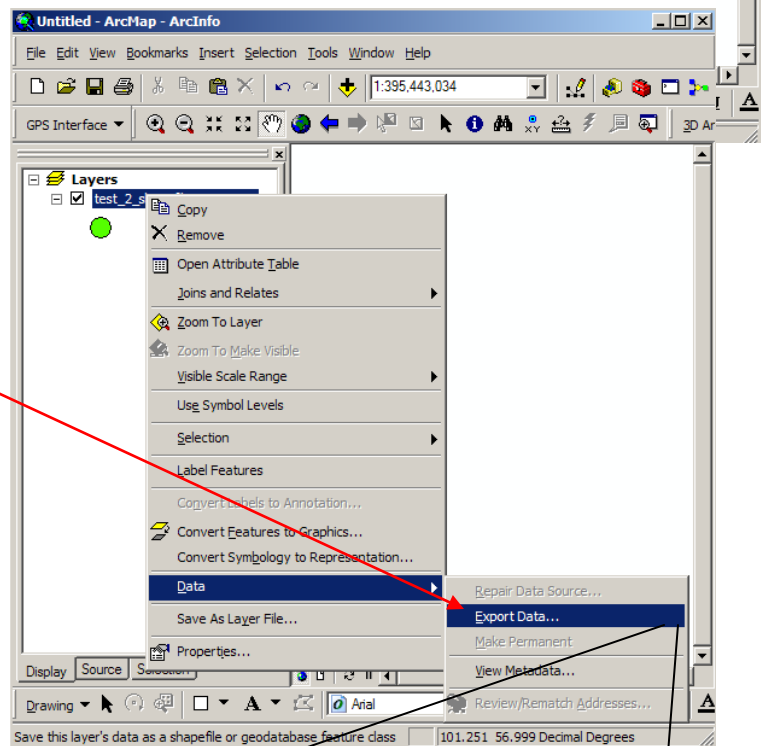


The data (temporary file) should now be visible as a **Layer** in ArcMap.

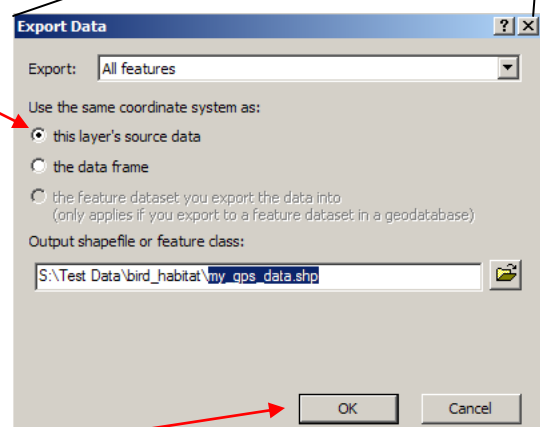


Step 3: Create the final Shapefile.

Right Click on your **Layer** (the file you just created), navigate down the pop-up menu to **Data => Export Data**.



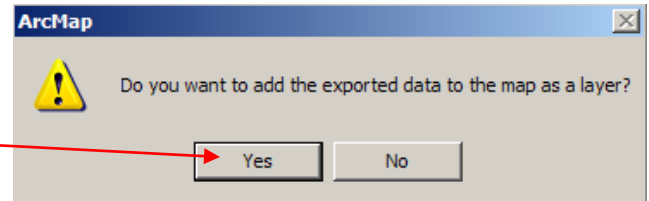
In the **Export Data** dialog, choose the same coordinate system as: **this layer's source data** (which is what we just did when we defined the projection for the data in step 2).



Browse to where you want the file to be stored (the default destination will be in a temporary folder on the desktop or local disk (C: drive), so be sure to save the file a permanent location that won't be erased upon logging out). When naming your file (any GIS file) make sure there are no spaces in the name, use underscores instead.

Click **OK**.

A pop-up dialog will ask you if you want to add the exported data to the map as a layer, if you do, click **Yes**.



Your final product (a Shapefile) will now be visible as a layer in ArcMap.

Now you can remove the temporary (.txt Events) file and work with your new Shapefile in ArcMap.

