

From ArcMap GIS 9.0 Help:

Procedure for importing point locations defined by latitude/longitude pairs in an Excel spreadsheet into an ArcMap GIS Point Shape File

(Creating point features from coordinate values using ESRI ArcCatalog)

- 1) Right-click a table in the ArcCatalog tree that has columns containing x,y (or x,y,z) coordinates.
- 2) Point to Create Feature Class and click From XY Table.
- 3) Click the X Field dropdown arrow; click name of column that contains the x coordinates.
- 4) Click the Y Field dropdown arrow; click name of column that contains the y coordinates.
- 5) If appropriate, click the Z Field dropdown arrow and click the name of the column that contains the z coordinates.
- 6) Click Spatial Reference of Input Coordinates to define the coordinate system for the input values.
- 7) Click the shapefile whose coordinate system you want to define.
- 8) Click the File menu and click Properties.
- 9) Click the Fields tab.
- 10) Click the Shape column in the column list.
- 11) In the Properties list below, click the ellipses button (...) next to the Spatial Reference property.
- 12) In the Spatial Reference Properties dialog box, click Select and choose a predefined coordinate system.
- 13) Or click Import and choose the data source whose coordinate system parameters you want to copy. Or click New, click Geographic or Projected, then define a new, custom coordinate system.
- 14) Click OK in the Spatial Reference Properties dialog box.
- 15) In the Shapefile Properties dialog box, the name of the coordinate system appears next to the Spatial Reference property in the Field Properties list.
- 16) Click OK in the Shapefile Properties dialog box.
- 17) Click the Browse button.
- 18) Click the Save as type dropdown arrow and click the format in which to create the new point features. For example, click Shapefile.
- 19) Navigate to the folder or geodatabase in which you want to store the new features.
- 20) Type a name for the new data source.
- 21) Click Save.
- 22) If the output features should have a different coordinate system from the input values, click Advanced Geometry Options.
If the coordinate system is the same, skip to step 23.
- 23) Click the Browse button and define the spatial reference of the output features.
- 24) Click OK, then click OK in the Define Output Geometry dialog box.
- 25) Click OK. A new point data source is created in the appropriate location.

Tip: For more information on defining a shapefile's coordinate system, see "Defining a shapefile's coordinate system" in ArcMAP GIS help.