



Exporting TIFF Imagery from ArcGIS for AutoCAD

Abstract

This guide outlines the steps to create an aerial image by exporting a portion of a MrSID file in ArcMap 9.x to TIFF format to be imported to AutoCAD.

Steps: Zoom to desired extent – Confirm desired projection – Right-click the Image name in the Table of Content – Select Data > Export Data – Adjust settings to Data Frame extent and spatial reference, square cells, cell size, save location, and file name and format – Click Save

Details

In order to properly align an image generated from ArcGIS in AutoCAD, the projection in use between these systems must match. If a user is working in AutoCAD without projected coordinates, this will not work at all. The three most commonly used projections in Indiana are both on the NAD 1983 datum and will either be State Plane East or West zones (in feet) or UTM Zone 16 North (in meters).

1. In an ArcMap project which contains the aerial imagery data for the desired county, **zoom in** to your area of interest.



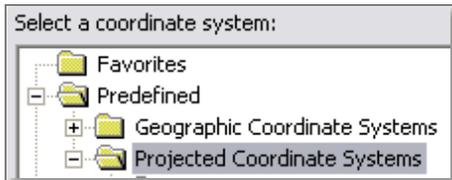
2. **Click View > Data Frame Properties** to open the Data Frame Properties window. **Click** on the **Coordinate System** tab to see the current coordinate system.





- If the coordinate system in use by ArcMap's data frame already matches the projection system being used in AutoCAD, skip to step #5.

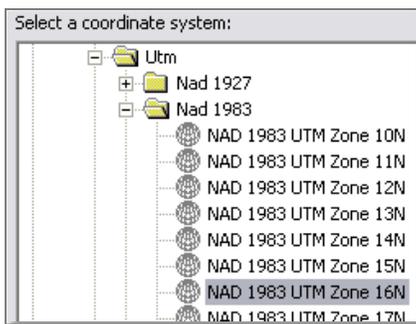
- Change** the coordinate system in ArcMap if you need to get it to match the system you are using in AutoCAD. **Click** the *Predefined* folder. **Click** the *Projected Coordinate Systems* folder.



At this point, the steps diverge depending on the desired projection.

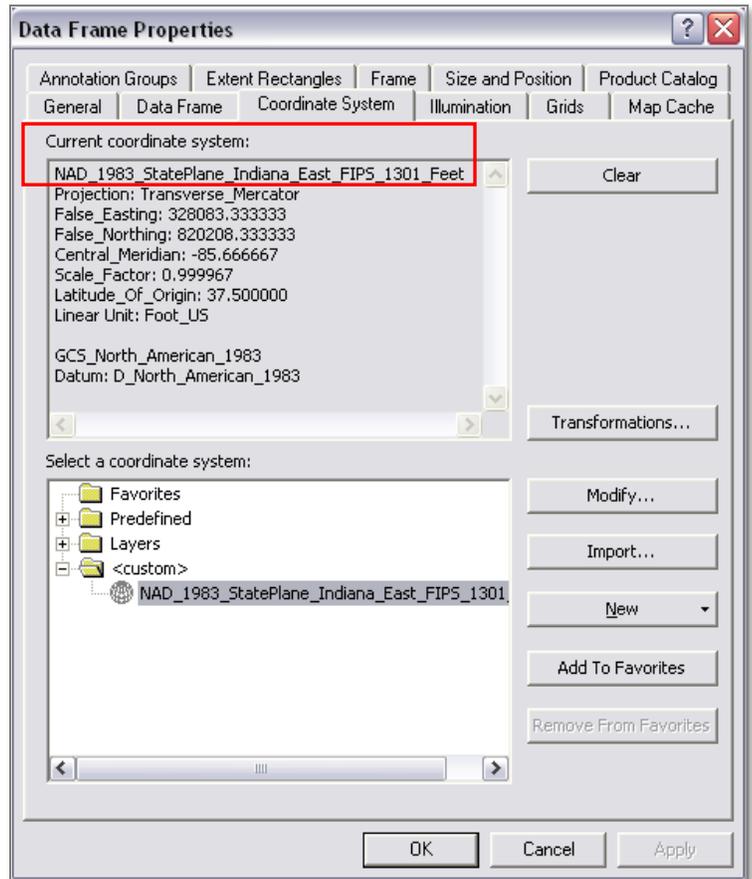
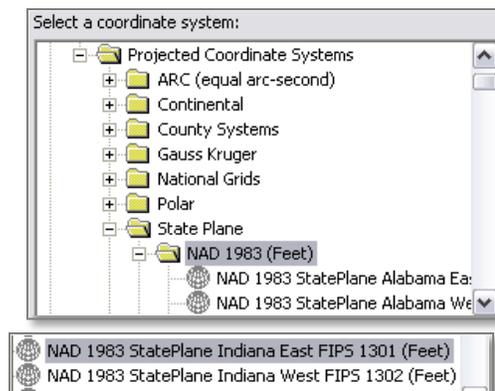
UTM

- **Click** the *UTM* folder
- **Click** the *Nad 1983* folder
- **Click** *NAD 1983 UTM Zone 16N*
- **Click** **OK**.



State Plane

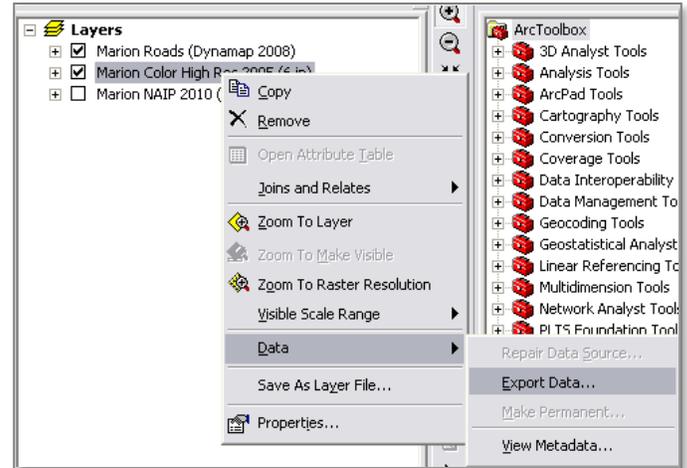
- **Click** the *State Plane* folder
- **Click** the *NAD 1983 (Feet)* folder
- **Click** *NAD 1983 StatePlane Indiana East (or West, as needed)*
- **Click** **OK**.



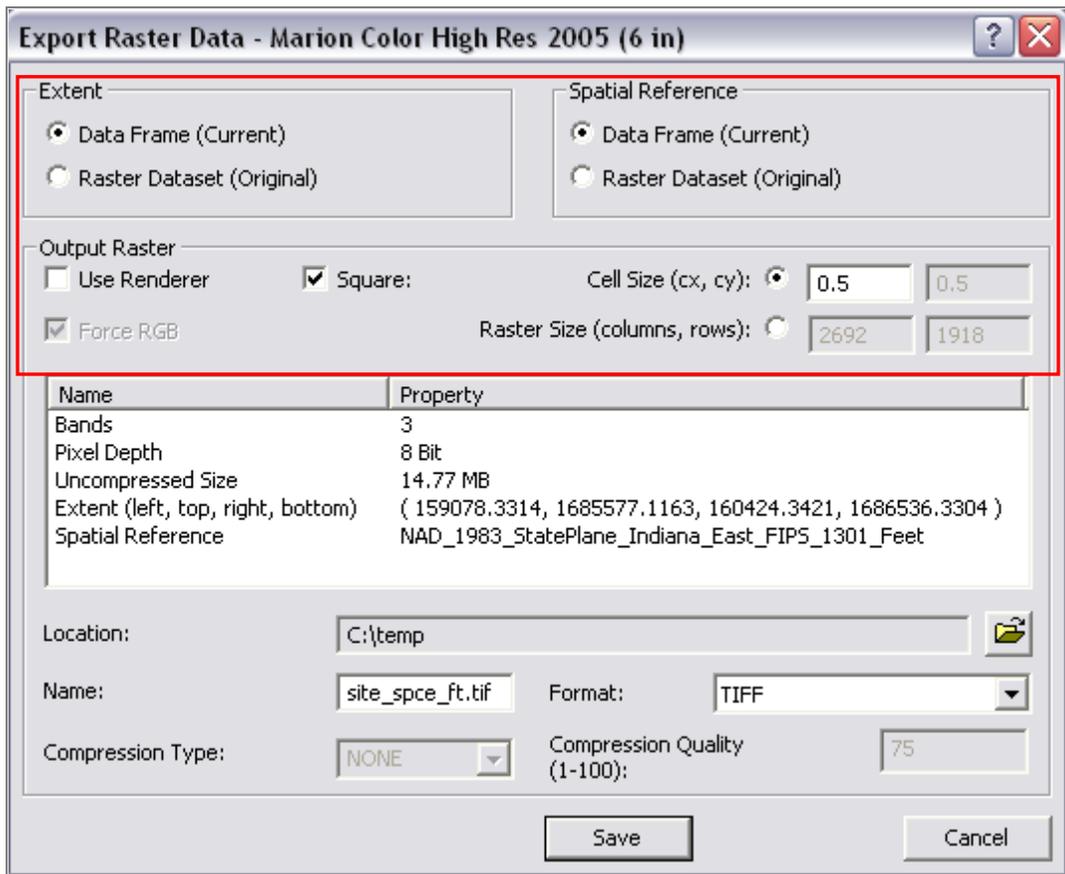
The view of your data in ArcMap may rotate slightly after changing the data frame's projection.



5. **Right-click** the name of the imagery file in ArcMap's Table of Contents and **choose Data > Export Data...**
6. A new window will be displayed. **Do not** export with the default settings or the entire county image will export and create an extremely large file (6+ GB) which may crash your computer.

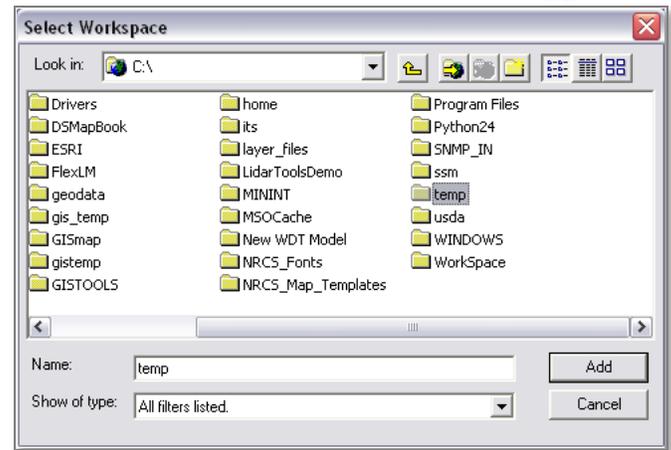


7. **Select Data Frame (Current)** for *Extent* and *Spatial Reference*.
8. **Select the Square** option for *Output Raster*. Usually, the default *Cell Size* will be correct after choosing *Square*. The actual number will vary quite a bit depending on the projection of the input imagery and the data frame as well as the pixel size of the input imagery.

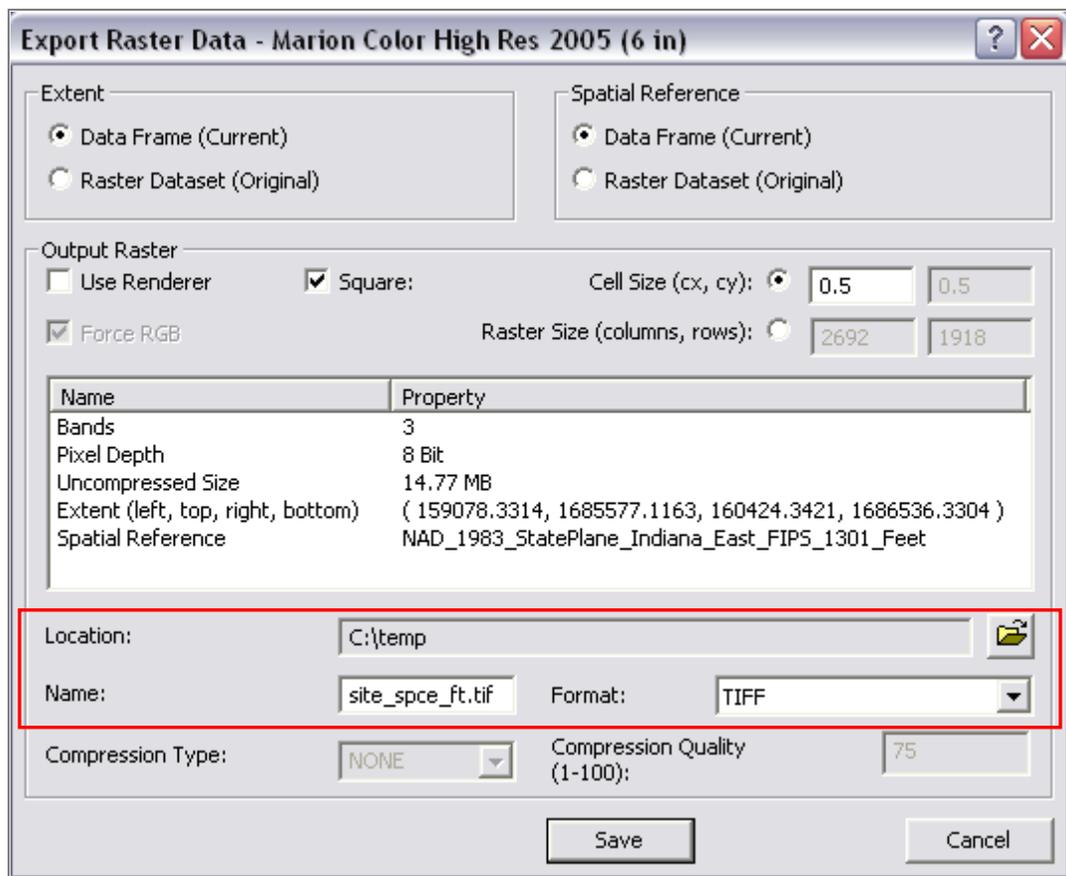




- For *Location*, **Click** the **folder** icon to open a navigation window. Using the window, navigate to the folder on your computer where the file will be saved. **Select** but **do not open** the folder. With the desired save location folder selected, **click Add**.



- Change** the format from the default to **TIFF**.
- Type** a name for the file using underscores instead of spaces and ending in ".tif"



- Click Save**. A new TIFF file of the image clipped to the extent of the data frame will be created with a corresponding world file (stores the coordinate information) at the specified save location. The file will have the name previously specified in the export window.
- A prompt will come up to add the image to the map. **Click No**.
- The image is now ready to be imported into AutoCAD.