

# Using Other GIS Layers with WIMS Data

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## Section 1 - Checking Out Data Layers using ArcPad Tools

NOTE: Image layers can be very large and use vast resources on your handheld unit. For efficiency, it is best to compress your imagery and transfer only what you need for your daily field collection. This process of “checking out” data using ArcPad tools is an efficient way to prepare imagery and other layers for use with WIMS data on your handheld.

TIP: If using ArcGIS version 9.1, you must install Service Pack 1!

<http://support.esri.com/index.cfm?fa=downloads.patchesServicePacks.viewPatch&PID=43&MetalD=1097>

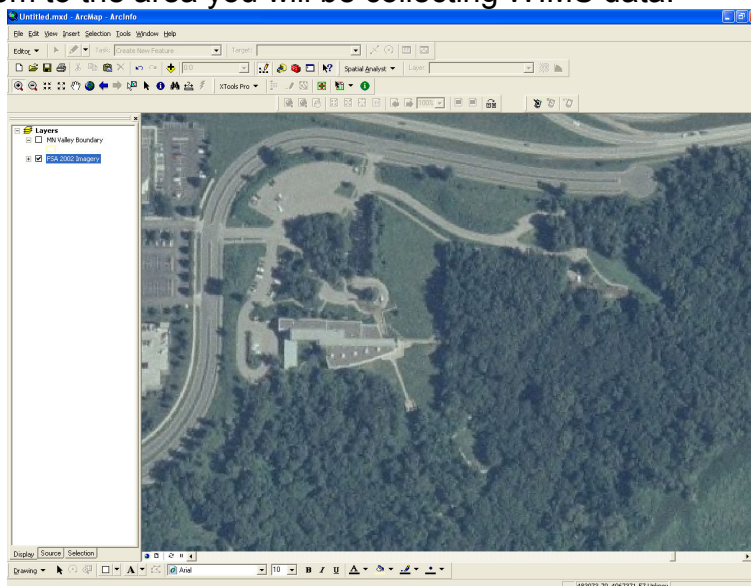
- 1) Open ArcMap.
- 2) Add the layers you wish to bring into the field. NOTE: These layers must be in the same coordinate system using either UTM or Lat/Lon referenced to NAD83 or WGS84.


*In this example, the layers are in UTM – Zone 15, referenced to NAD83.*

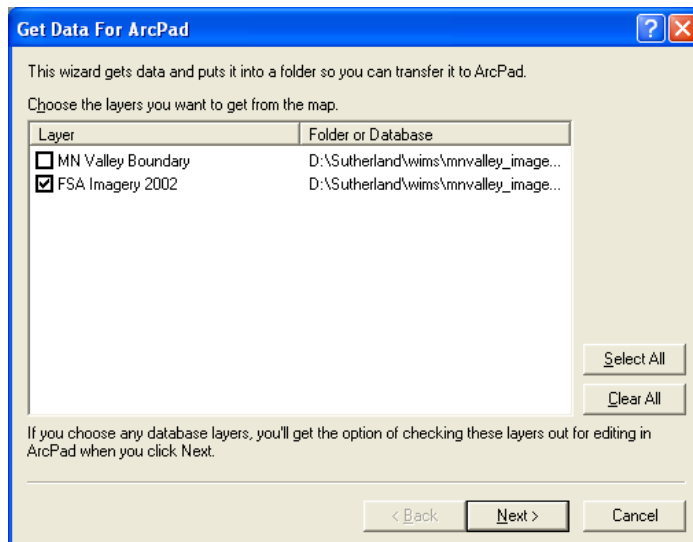
- 3) From the *View* menu, choose *Toolbars* and click **ArcPad**. This loads the ArcPad Tools Toolbar.



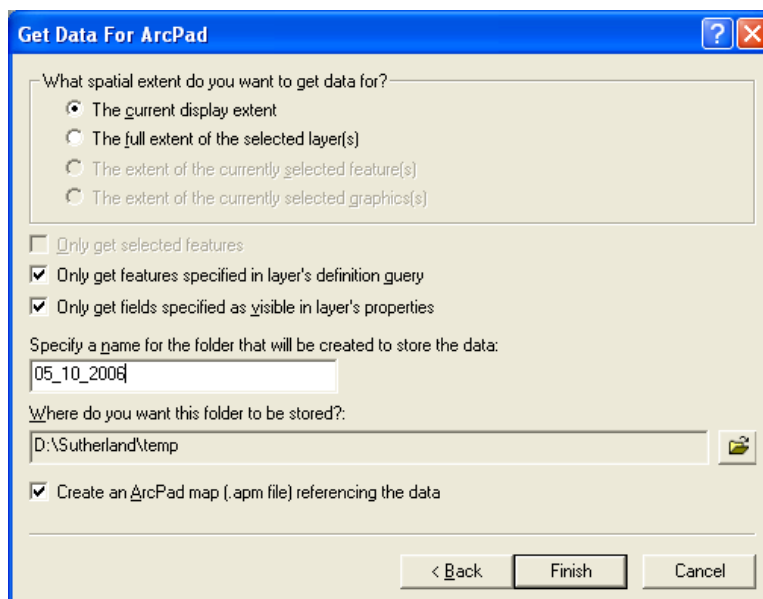
- 4) Zoom to the area you will be collecting WIMS data.



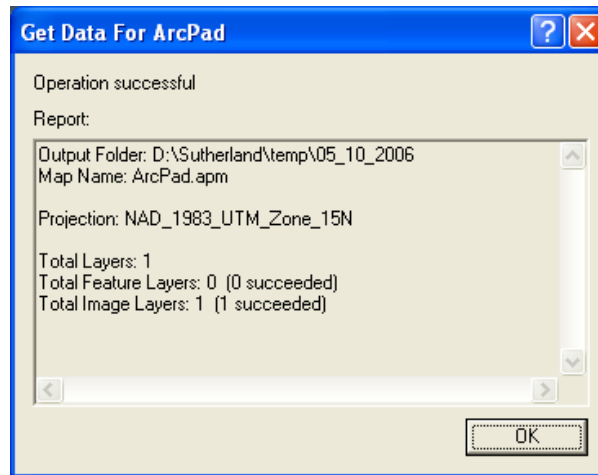
- 5) Click on the **Get Data for ArcPad**  button .
- 6) Check the layers you wish to transfer to your PDA.



- 7) Click **Next**.
- 8) Assign a name for the new folder that will be created in this checkout process. It is good file management to use the date for the folder name. Next, change the path to your working folder so you can easily find the new folder once it is created. Leave all other values with the defaults. Click **Finish**.



- 9) After several seconds, you will be notified that your operation was successful. Click **OK**.



TIP: If you receive the error message below during this process, you have exceeded the file size limitation for encoding raster data! You will need to decrease you zoom extents.

All users of ArcGIS can only encode individual, uncompressed rasters smaller than 50 MB. The 50 MB size rule will be evaluated as follows: **Image Width \* Image Height \* Number of Bands cannot be greater than 50 million**. If you purchase the MrSid extension from Lizard Tech, then your file size limit is 500 MB.



- 10) Close ArcMap.

## **Section 2 – Assigning WGS84 Projection Files to your Layers**

NOTE: WIMS data layers are referenced to WGS 84 datum. Most field stations have their data layers referenced to NAD83. These two datums are essentially the same. Therefore, to keep all layers consistent for use in ArcPad, you need to assign the WGS84 datum to all NAD83 layers you exported in *Section 1*.

- 1) Open Windows Explorer.
- 2) Navigate to the following folder:  
  
*C:\Program Files\ArcGIS\Coordinate Systems\Projected Coordinate Systems\UTM\Wgs 1984*
- 3) Locate and select the following projection file:  
  
*WGS 1984 UTM Zone 15N.prj*
- 4) From the *Edit* menu, select **Copy**.
- 5) Navigate to the folder created in *Section 1* above  
*\sutherland\temp\05\_10\_2006*
- 6) From the *Edit* menu, select **Paste**.
- 7) Right click on the projection file and rename it to match your image layer but retaining the PRJ extension.
- 8) Repeat steps 6-7 for all layers that you will be using with WIMS data.

TIP: If your layers are in Lat/Lon, use the appropriate “geographic” coordinate system projection file.

*C:\Program Files\ArcGIS\Coordinate Systems\Geographic Coordinate Systems\World\WGS 1984.prj*

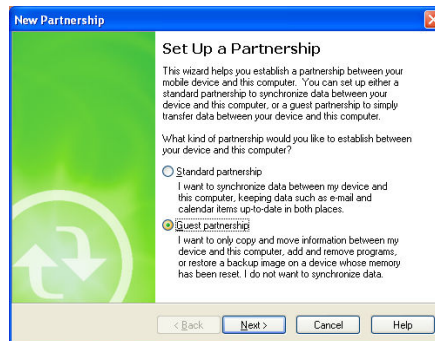
## **Section 3 – Using ActiveSync to Transfer Files to Recon/WIMS**

The software used to transfer files from your handheld device to your PC or vice versa is called ActiveSync. This software is free and the latest version can be downloaded from the following website.

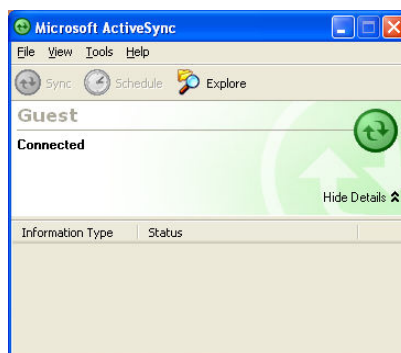
<http://www.microsoft.com/windowsmobile/resources/downloads/pocketpc/default.msp>

NOTE: These instructions were developed using ActiveSync version 4.1 and assume that you have not established a partnership between the GeoCE device and your PC. A “partnership” is not recommended for transferring your GIS files and the “guest” method is the preferred option.

1. Connect the USB cable from your Recon to PC.
2. The Recon will automatically turn on and ActiveSync should detect your device. If not, check your connections and try again.
3. Check **NO**, when asked to set up a partnership and connect as a guest.

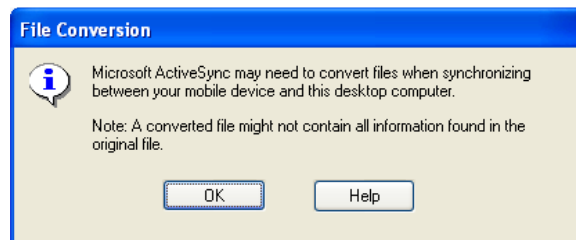


4. Click **Next**. The Microsoft ActiveSync dialog appears and your connection status is displayed in the window below *Guest*. Ensure you have a connection (**Connected** appears below *Guest* in the dialog window).



5. Click on **Explore**.

6. Navigate to the folder you created in *Section 1* and select it.  
*\sutherland\temp\05\_10\_2006*
7. From the **Edit** menu, choose **Copy**.  
  
TIP: You can also use *CTRL+C* on your keyboard.
8. Navigate to the following folder under Mobile Device.  
  
*My Windows Mobile Based Device\Built-In Storage\Wims*
9. From the **Edit** menu, select **Paste**.  
  
TIP: You can also use *CTRL+V* on your keyboard.
10. Click **OK** when notified about file conversion. ActiveSync does not convert any of your GIS files.



11. Congratulations! You have successfully transferred the files you will use in the field with your WIMS data.