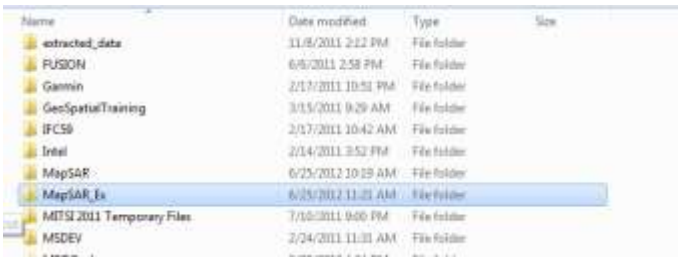
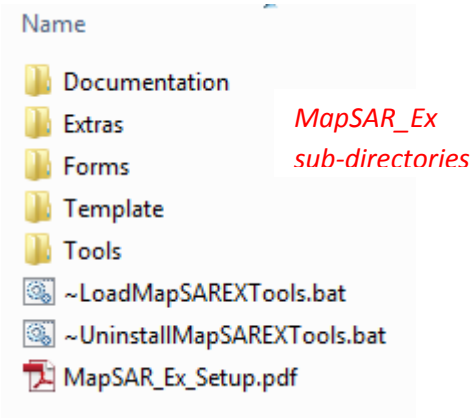
First time setup

1. Unzip MapSAR_Ex.zip to your root directory (C:\). When the fill unzips you should have a folder titled C:\MapSAR_Ex



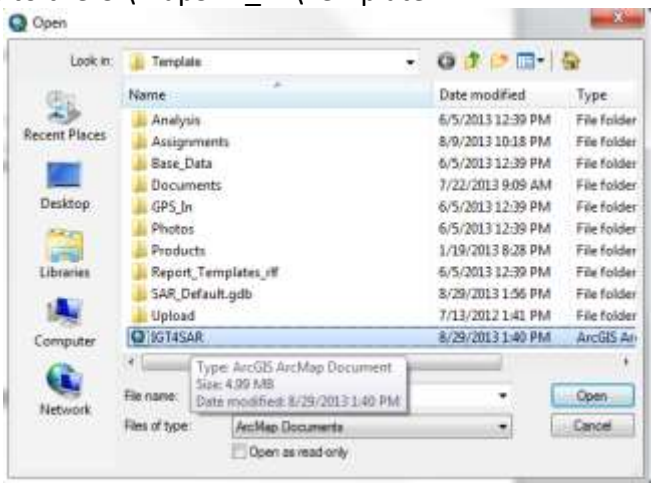


MapSAR_Ex sub-directories

2. Open the C:\MapSAR_Ex folder
    a. Executing (double clicking) the ~LoadMapSAREXTools.bat will permit the installation process to identify the ArcGIS version installed and apply the appropriate settings.
    b. If you're running Windows 7, you will need Administrator rights to install IGT4SAR. Upon running ~LoadMapSAREXTools.bat batch file you will be prompt to utilize Administrator rights to install the template. For Windows XP users, simply double-click ~LoadMapSAREXTools10_x.bat.
    c. Executing this bat file will do the following:
        i. Copy ESRI Add-Ins to the default Add-Ins folder (ArcGIS\Desktop10.x\bin\Addins). The following Add-Ins are included: Attribute Assistant, ConstructWithBuffer, Get_Map_Point_Addin_Tool, GPX, Search_Editor and MapSAREX_Config
        ii. Copy the SAR_Toolbox to the ArcGIS System Toolbox folder (ArcGIS\Desktop10.2\ArcToolbox\Toolboxes).
        iii. Create a Config folder for the Attributes Assistant if it does not already exist
        iv. Copy the Attributes Assistant config xml file (aaloaded.config) to the folder create in ii and rename it to "loaded.config"
        v. Register MeasureAngle.dll with Windows. This adds a tool for dynamic measurement of distance and angle in ArcGIS.
3. Congratulations you have just installed IGT4SAR. Now let's verify the template has installed properly.

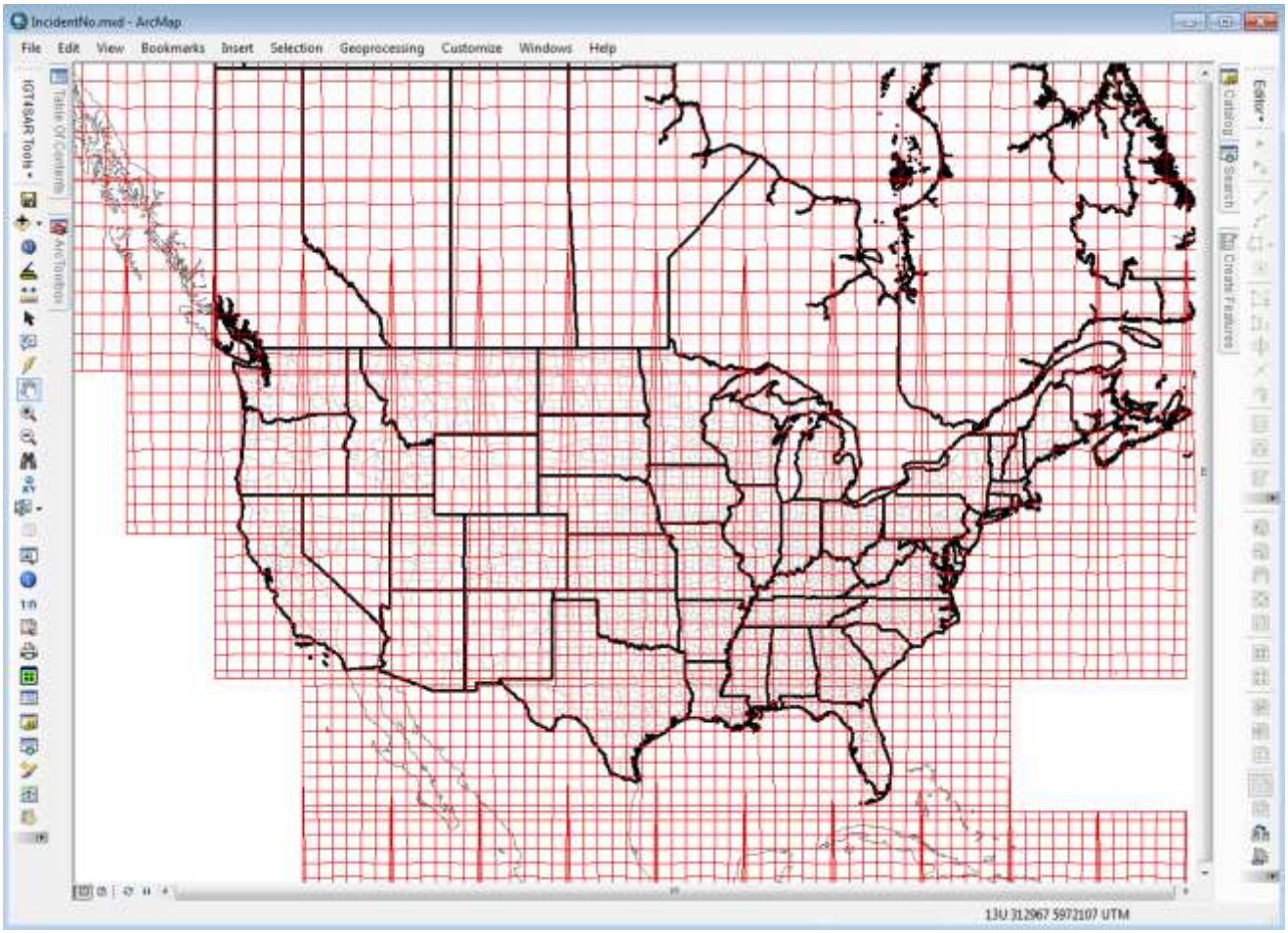
4. We are going to open the main IGT4SAR template to check the add-ins and toolbars have loaded properly. Any changes you make in this template will affect any New Incident you create. You would not normally edit this file.
    a. Open ArcMap (several options for starting ArcMAP, one method shown below.)

b. At the welcome screen select “Browse for more” navigate to the C:\MapSAR_Ex\Template
OR
Select File > Open and navigate to the C:\MapSAR_Ex\Template

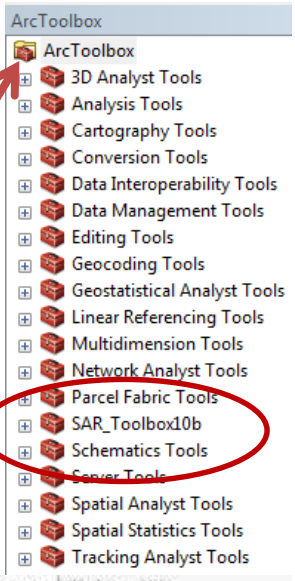


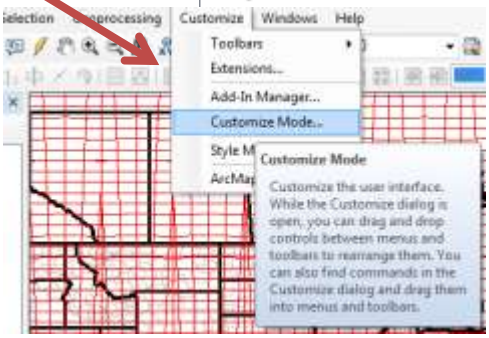
c. Select IGT4SAR.mxd

5. When IGT4SAR starts you should have a screen that looks similar to the following



6. There are couple of key items to look at to make sure you have IGT4SAR configured correctly
    a. Verify the SAR_Toolbox10b is in the list of ArcToolboxes. If it does not appear in the list than you will need to add it manually. You should only have to do this once in the main IGT4SAR Template.
    b. If the SAR_Toolbox10b is NOT present than
        i. Right click on ArcToolbox and select Add Toolbox
        ii. Navigate to the "Program File" \ ArcGIS\Desktop10.2\ArcToolbox\Toolboxes\
        iii. Select "SAR_Toolbox100.tbx" from the list
        iv. You will also need to correct the IGT4SAR Tools on the IGT4SAR Toolbar and is done by selecting ***Customize > Customize Mode*** from the Top Toolbar in ArcMap
        v. Select the ***Commands*** tab and under ***Categories*** scroll down to ***[Geoprocessing Tools]***.
        vi. Delete the three tools listed under Commands
        vii. Now link to the correct tools by selecting ***Add Tools*** and navigating Toolboxes \ System Toolboxes \ SAR_Toolbox100.tbx \ UpdateParameters and select the three tools listed there.
        viii. Use these three tools to replace the three that appear in the dropdown list in IGT4SAR Tools on the IGT4SAR toolbar.
        ix. Exit ***Customize Mode***
        x. Save IGT4SAR.mxd and exit ArcMap





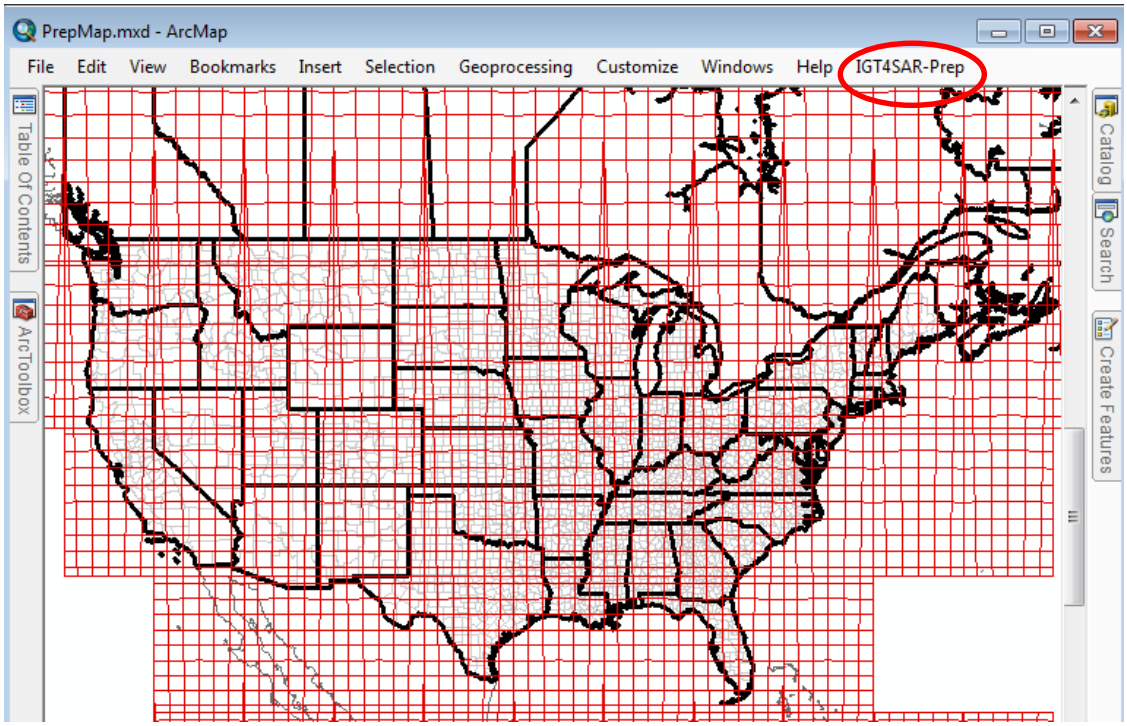
7. Once you have corrected the main IGT4SAR Template you should not have to change it again.
8. You are now ready to create a "New Incident" and begin entering data.

Creating a New Incident

For each new Mission you will want to create a New Incident. This process will copy the contents from the Template folder, re-project it into a desired Map Projection (i.e. Datum) and enter some initial information about the incident. The user is lead through the process of generating a new incident by executing the "Create New Incident" tool from the SAR_Toolbox (SAR_Toolbox100.tbx). This tool can be executed from within ArcMap or ArcCatalog resulting in a process that is very similar regardless of the choice. Regardless of how you execute the "Create New Incident" tool, the IGT4SAR template must be closed when the tool is run. With the template open, SCHEME LOCK's are placed on files within the SAR_Default.gdb within the template. This is normal and is used to prevent simultaneous multi-user access to the same file. Therefore, exit from the template before executing the "Create New Incident" tool.

The "Create New Incident" tool can be run directly from the SAR_Toolbox in either ArcMap or ArcCatalog, however the user has the option of using the "PrepMap" map file from within ArcMap to aid in determining the appropriate map projection to use for the incident. Again the use of "PrepMap" is optional as the "Create New Incident" tool can be run directly from ArcToolbox - SAR_Toolbox100. As the process is similar regardless of method used, the example of using the "PrepMap" is demonstrated below.

1. Open ArcMap then click File - Open
    a. Open the file C:\MapSAR_Ex\preMap\PrepMap.mxd – When open, this will look similar to the IGT4SAR Template but with a few noticeable difference as shown below. Notice that the IGT4SAR Toolbar is no longer present however a new item (IGT4SAR-Prep) appears on the main toolbar at the top of the screen.



2. The IGT4SAR-Prep menu item contains a dropdown list with just one tool, “Create New Incident”. Once the user has identified the appropriate Map Projection to use click on the “Create New Incident” tool with begin the processing of creating a new incident for the current mission.

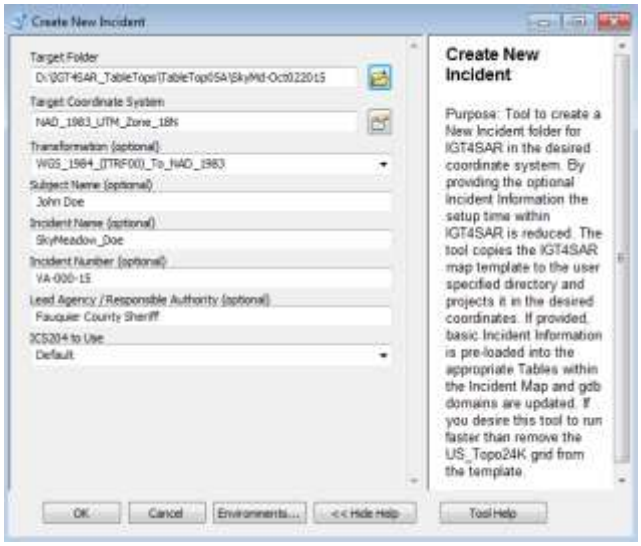
   The remaining steps are valid regardless if you use the PrepMap map or just execute the “Create New Incident” tool from within the SAR_Toolbox100.

3. Double click on ***Create New Incident*** to initiate the tool.

4. The tool will open and you will need to select a ***Target Folder*** to store the New Incident. The Target Folder can be located anywhere but should be a NEW folder as its contents will be replaced. Give the folder a descriptive name relative to the Incident.

5. Select the Target Coordinate System using the desired Map Projection. All map projections within ArcMap are available. If the selected map projection requires a coordinate Transformation a drop-down list will appear in the Transformation box and you will need to select the appropriate one (usually the one at the top of the list). If no list appears than a Transformation is not required.

6. The user has the option of entering additional information about the Incident which will be used to begin populating various tables and parameters within the New Incident. If an Incident Number is provided it will be used as the name for the new “.mxd” file created for the new incident. If no Incident Number is provided the default name used is “IGT4SAR.mxd”. Providing Subject Name and Lead Agency will generate an entry in the Subject Information and Lead Agency Tables, respectively. The Incident Information table will also be populated with the relevant information provided.

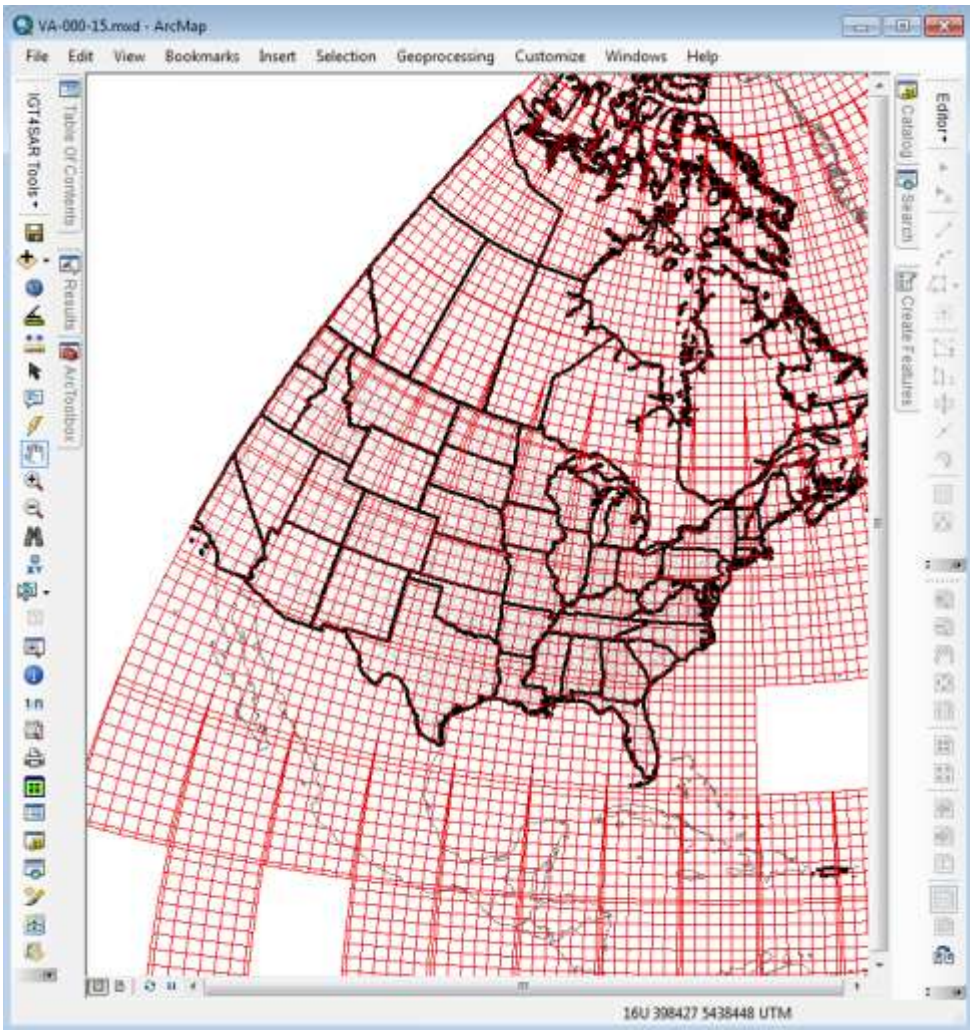


7. The user can also specify which ICS 204 form to use when creating task assignments. Several forms have been included and more are always being added.

8. Select ***OK*** to execute the tool. A progress window will appear providing you details of the progress in creating the new incident. You will be notified when the tool is finished with a message of "Completed script CreateNewIncident…"

9. Click close.

10. In ArcMap navigate to the folder where you created the new incident. If you provided an "Incident Number" open the "incidentNumber".mxd file, otherwise look for the default file named IGT4SAR.mxd. The map will look similar to the IGT4SAR Template with a few changes based on values entered in the "Create New Incident" tool. In addition to the name of the mxd file being changed to the "incident number", the name Data Frame will be changed to the Incident Name if provided. If optional information was entered the appropriate tables will be populated with the appropriate data.



11. You are now ready to plot the initial planning point and begin the incident data entry.

Uninstall

1. To uninstall run the appropriate **~UninstallMapSAREXTools.bat** from the C:\MapSAR_EX folder. Make sure to use the same version of the bat file as used for the install.
2. Delete the C:\MapSAR_Ex folder