



GeoPDF Mapbook Help Page

10 November 2010


Version 1.2

GeoPDF

A GeoPDF is an easy to use, interactive version of the PDF file format that extends the functionality of the commonly used Adobe Reader file. Maps can be viewed; layers turned on and off, attributes queried, and coordinates can be displayed. The Georeferenced PDF (GeoPDF) gives field personnel the ability to capture and share on-the-ground intelligence in the spatially aware environment. These documents allow non-GIS savvy professionals to interact with complex maps and images anytime, anywhere.



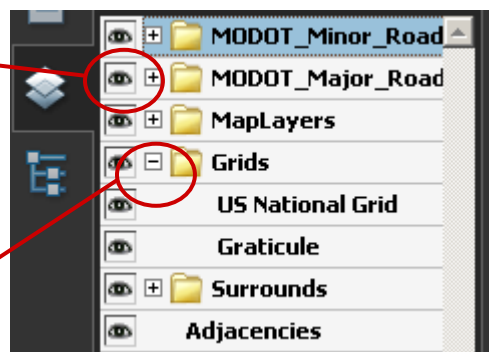
Layers

To see the available layers, click on the “Layers” icon  on the left side of the screen.

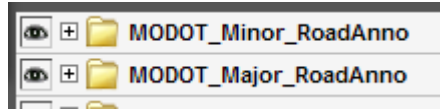
Each layer can be expanded for more options with the + sign.

The visibility of layers and groups of layers can be turned on and off. Click the eye symbol to do this.

Some layers are in groups. These are displayed with a yellow folder icon. To expand these groups, click on the + next to the folder.



**Note: The first two layers are annotation layers, un-checking them will only remove the labels.



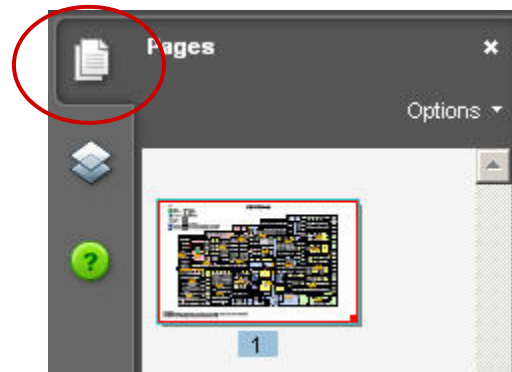
Zooming:

Use the zoom tools on the toolbar to zoom in and out of the map.

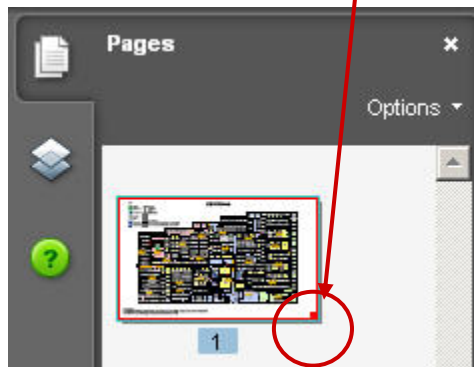


Zoom In or Out:

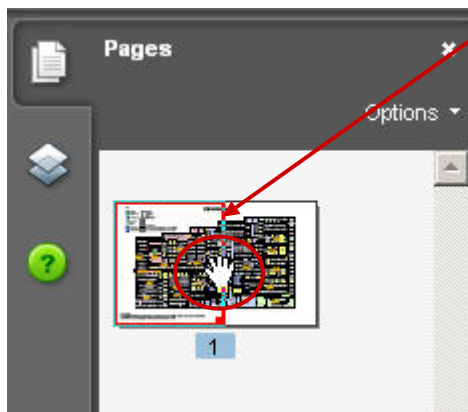
Optionally, you can click on the Pages icon to zoom in closer to a section of the map.



Grab the handle in the lower right of the page to resize the small red box. This will zoom the main page to this area.



Once you have zoomed closer in, place your cursor on the edge of the red outline.



When the cursor turns to the Hand, drag the red box to another section of the page. The main frame will move to the new area.

Search / Find tool

The *Search / Find* tools allow you to find embedded attributes, labeled features or other text in the file.


- In Adobe Acrobat versions 8 and 9, type the search value in the *Find* text box, then press *Enter*.
- If you are using an older version of Adobe Reader, it may appear on the toolbar as a Search icon.

The screenshot shows the Adobe Reader interface with a map of Marshall, West Virginia. A search for 'Vandyv.ann' has been performed, resulting in a selection of a feature on the map. The 'Find' dialog box is open at the top right. The toolbar at the top shows the 'Search' icon circled in red. A red callout box points to the search text in the toolbar, stating: 'Typing the text that you want to look up in the Find box will select that feature in the Model Tree.' Another red callout box points to the 'Zoom to Selection' option in the context menu, stating: 'To see the feature, right-click on the selection in the model tree and select "Zoom to Selection"'. The context menu is open over the selected feature on the map. The 'Model Tree' on the left shows a list of features, with 'Day Care : Saline' selected. The 'Properties' panel at the bottom left shows the following data:

Property	Value
Type	LICENSE EXEMPT PROGRAM
Facility	RAGGEDY ANN AND ANDY NURSERY
DWN	000279569
Address	710 E YERBY
City	MARSHALL
Phone	660 886 9386
from_hours	<Null>
to_hours	<Null>
Capacity	0



Object Data Tool

This tool allows you to view attribute data associated with features. To access the **Object Data Tool**, click **Tools** on the main menu, then **Object Data**. Click the GeoPDF file on a feature with  and then view its associated attribute data in the **Model Tree** tab.

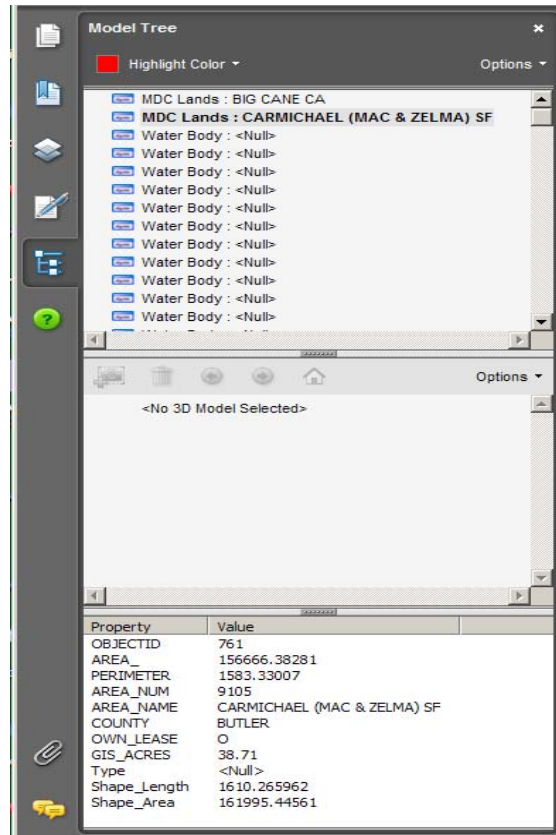
Property	Value
OBJECTID	406922
ComID	62051290
FDate	11/22/2002
Resolution	2
GNIS_ID	<Null>
GNIS_Name	<Null>
LengthKM	3.298
ReachCode	1101000700100
FlowDir	1
WBAreaComID	<Null>
FType	460
FCode	46003
Enabled	1
Shape_Length	3292.524088

- ✓ The selected object is highlighted on the page. Use the Highlight Color menu at the top of the Model Tree to choose a different color

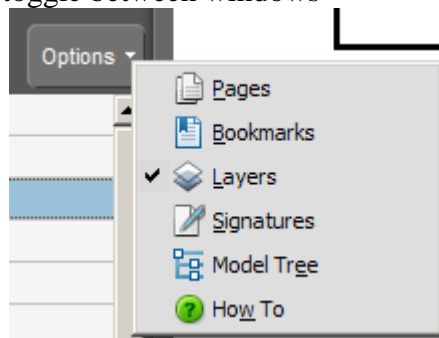


Model Tree

The Model Tree panel appears in the navigation pane on the left side of the work area.

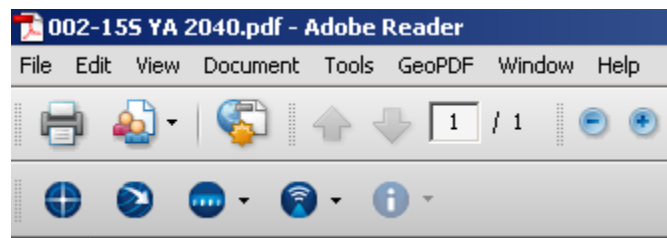


Options: Enables users to toggle between windows



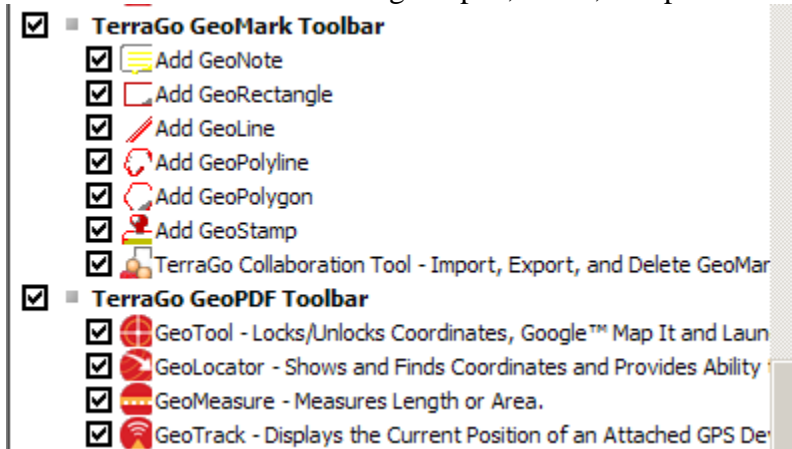
Turning on Tools

- Select *Tools*, *Customize Toolbars*, **GeoPDF Toolbar**




Once the toolbar has been installed select Tools on the menu bar then choose Customize Toolbars. An alternative way to access the More Tools dialog box is to right click on the grey area near the top of the window and select More Tools. Tools can be turned on and off from the More Tools GUI.

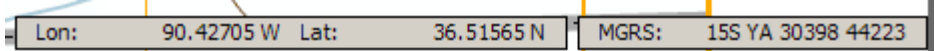
Scroll down to find the TerraGo GeoMark Toolbar and the TerraGo GeoPDF Toolbar. Other Adobe tools can also be turned on here including the pan, zoom, and previous view tools.



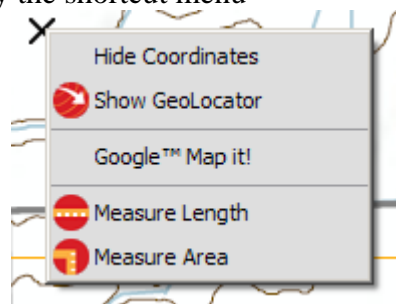
GeoTool

The **GeoTool** tool allows you to freeze and unfreeze the coordinate display, center the location on the screen and from the shortcut menu, hide coordinates, open the **GeoLocator**, open Google™ Map It, and measure length and area.

- Place your cursor over the map 
- Single-click to freeze and unfreeze the coordinate display
- An **X** appears at the location clicked and the mini-coordinate display no longer tracks the coordinates as you move your mouse



- Single left-click again to unfreeze the coordinate
- Right-click to display the shortcut menu

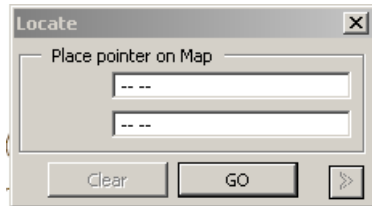





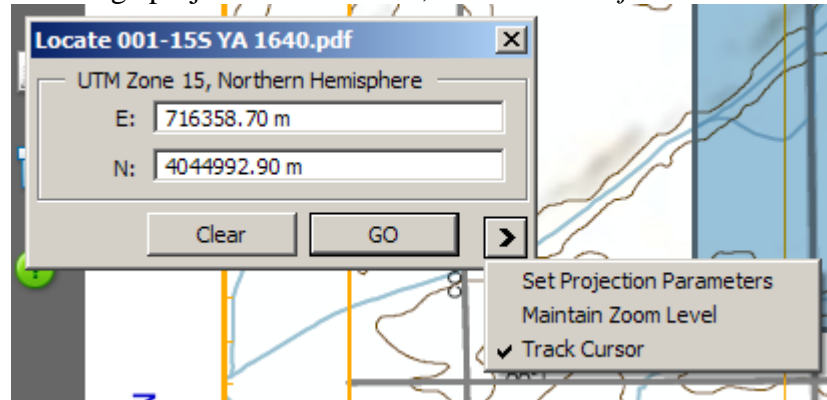
GeoLocator

The GeoLocator tool opens the locate dialog box through which you can center the map base on user coordinates and place a mark at the location. You can change the user coordinate system that displays, maintain your current zoom level and track your cursor in the coordinate readout.

- In the *Locate* dialog box, type coordinates in the text boxes provided or use your mouse to locate a coordinate

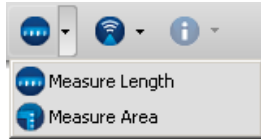


- Click **Go**
 - The map centers at the coordinates provided and places and mark on the point
- To clear the existing coordinates, click **Clear**
- To change projection click , select *Set Projection Parameters*



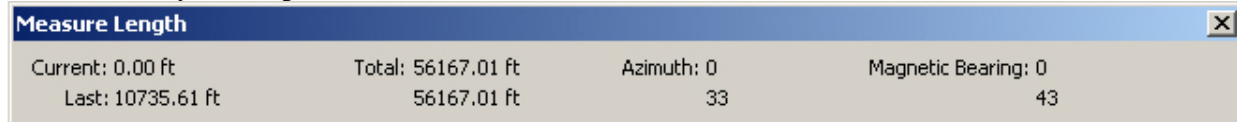
GeoMeasure

The GeoMeasure tool contains two measurement tools: **Measure Length** and **Measure Area**. When you select a measure tool, the appropriate measure box appears displaying total feet or total area, azimuth and magnetic bearing if configured, of what you want to measure.



To measure length

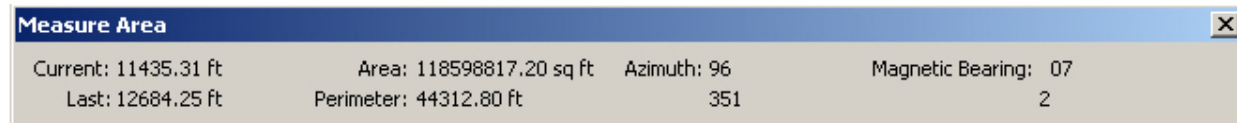
- Click your map to create the starting point
 - A single-click inserts a vertex. A right-click removes the last segment
- Continue clicking your map to create the length to measure
- Double-click your map to finish the line measurement



- To modify the units select **Edit** on the main menu, click **Preferences**, then GeoPDF. Modify the fields as needed and then click **OK**.


To measure area

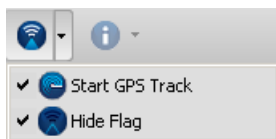
- Click your map to create the starting point
 - A single-click inserts a vertex. A right-click removes the last segment
- Continue clicking your map to create the area to measure
- Double-click your map to finish the area measurement or to automatically complete the polygon



GeoTrack

This tool contains two tracking tools: **Start GPS Track**  and **Hide/Show Flag** .



The **Start GPS Track**  tool allows you to track the map position of an attached GPS device. **Hide/Show Flag** displays or hides a flag (marker) that shows your current GPS location on the map



GPS Tracking



Your GPS device should display coordinates in the same data as your GeoPDF - NAD83.

Before the GPS device can track your position you must either specify the COMM port to which the GPS device is connected or allow the GeoTrack Start GPS Track tool to automatically detect the COMM port. You can choose the method as well as specify the seconds between tracking points in the **GPS Options** group box in the *TerraGo Preferences* dialog box. To access this dialog box, from **Edit** on the main menu, click **Preferences**, then **GeoPDF**. Modify the fields as needed and then click **OK**.

- Click the **GeoTrack** , then **Start GPS Track** .
- In the *GeoPDF Map Frame Selector* dialog box, select the map frame in which the GPS device should track your location.
- Click **GPS Track**.
- Click **GeoTrack**, then **Start GPS Track** to stop tracking your location.

To hide the flag that shows the current GPS location

When you start GPS tracking the **Show Flag** menu option is selected by default and a flag shows your current GPS location on the map. The flag appears as a crosshair and your position refreshes according to the value in the **Poll Interval: Seconds** text box in the **GPS Options** group box in the *TerraGo Preferences* dialog box. To access this dialog box, from **Edit** on the main menu, click **Preferences**, then **TerraGo**. Modify the interval value as needed and then click **OK**.

- Click **GeoPDF Track** , then **Hide Flag** .
- Click **GeoTrack**, then **Show Flag** to see the crosshair that represents the current GPS location on the map.



GeoNote

Tool allows you to insert a point on a map and then manage the exportable comments, links, attachments and attributes associated with that point.

- Click **GeoNote**
- Click the map where you want to insert a comment.
- In the field provided, type a comment about the specific point on the map.
- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.

To delete an attachment from your GeoMark, click the attachment and then click **Remove**.

- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.

To delete a link from your GeoMark, click the link and then click **Remove**.

- Click the top right corner of the *Sticky Note* to minimize the point to a **GeoNote GeoMark**.



GeoRectangle

Tool allows you to insert a rectangle on a map and then manage the exportable comments, links, attachments and attributes associated with that rectangle.

- Click **Add GeoRectangle** .

You can also click **GeoPDF** on the main menu, then **GeoMark Toolbar**, then **Add GeoRectangle**.

- Click and hold the mouse button down at the location on the map where you want to insert a rectangle, then drag the mouse to draw the rectangle.
- Double-click the GeoRectangle to open the *GeoMark Editor* window. The Adobe *Rectangle* note also appears.
- In the field provided, type a comment about the GeoRectangle on the map.
- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.

To delete an attachment from your GeoMark, click the attachment and then click **Remove**.

- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.


To delete a link from your GeoMark, click the link and then click **Remove**.

- Click  in the top right corner of the *Rectangle* note to minimize the rectangle to a

GeoRectangle  **GeoMark**.

GeoLine



Tool allows you to insert a line on a map and then manage the exportable comments, links, attachments and attributes associated with that line.

- Click **GeoLine** .
- Click and hold the mouse button down at the location on the map where you want to insert a line, then drag the mouse to draw the line.
- Double-click the GeoLine to open the *GeoMark Editor* window. The Adobe *Line* note also appears.
- In the field provided, type a comment about the GeoLine.
- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.

To delete an attachment from your GeoMark, click the attachment and then click **Remove**.


- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.

To delete a link from your GeoMark, click the link and then click **Remove**.

- Click  in the top right corner of the *Line* note to minimize the line to a **GeoLine** 
GeoMark

GeoPolyline

Tool allows you to insert a polyline on a map and then manage the exportable comments, links, attachments and attributes associated with that polyline.



- Click GeoPolyline 
- Click the map where you want to start the polyline.
A single-click creates a vertex.
- Continue to click the map to create your polyline, then double-click to complete the polyline.
- Double-click the GeoPolyline to open the *GeoMark Editor* window. The Adobe *Polygonal Line* note also appears.

- In the field provided, type a comment about the GeoPolyline.
- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.

To delete an attachment from your GeoMark, click the attachment and then click **Remove**.

- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.


To delete a link from your GeoMark, click the link and then click **Remove**.

- Click  in the top right corner of the *Polygonal Line* note to minimize the polyline to a **GeoPolyline**  **GeoMark**.



GeoPolygon



The **Add GeoPolygon** tool allows you to insert a polygon on a map and then manage the exportable comments, links, attachments and attributes associated with that polygon.

- On the GeoMark Toolbar, click **Add GeoPolygon** .
- Click the map where you want to start the polygon.
A single-click creates a vertex.
- Continue to click the map to create your polygon.
The **Add GeoPolygon** tool displays a box at the initial insertion point  after you add the second segment to the polygon.
- Double-click to automatically complete the polygon.
- Double-click the GeoPolygon to open the *GeoMark Editor* window. The Adobe *Polygon* note also appears.
- In the field provided, type a comment about the GeoPolygon.
- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.


To delete an attachment from your GeoMark, click the attachment and then click **Remove**.

- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.

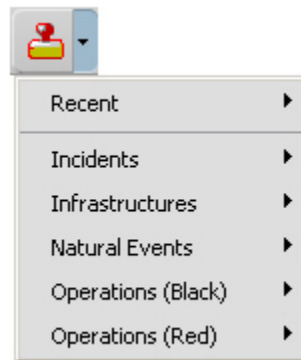
To delete a link from your GeoMark, click the link and then click **Remove**.

Click  in the top right corner of the *Polygon* note to minimize the polygon to a **GeoPolygon**  **GeoMark**.

GeoStamp

The **Add GeoStamp**  tool allows you to insert stamps that represent incidents, infrastructure, natural events, and operations on a map and then manage the exportable comments, links, attachments and attributes associated with those stamps.

When you use the **Add Stamp** tool you can add only the last used stamp to the file.



- On the GeoMark Toolbar, click **Add GeoStamp** .

To add the last used stamp, click **GeoPDF** on the main menu, then **GeoMark Toolbar**, then **Add GeoStamp**. You can also click the **Add GeoStamp** tool, then **Recent**, then navigate to the last used stamp.


- Navigate to the stamp you want to insert on the map.
- Click the map where you want to insert the stamp.
- In the field provided, type a comment about the GeoStamp.

- To add attachments to your GeoMark, click the **Attachments** tab, then click **Attach**. In the selection window, navigate to the file you want to add as an attachment. To view attachments, double-click the attachment in the Attachments tab.

To delete an attachment from your GeoMark, click the attachment and then click **Remove**.

- To add a link to your GeoMark, click the **Attachments** tab, then click **Link**. In the Add Link window, type the location you wish to add. To view links, double-click the link in the Attachments tab.



To delete a link from your GeoMark, click the link and then click **Remove**.



- In the *GeoMark Editor* window, click **OK**.
- Click  in the top right corner of the *<stamp-specific>* note to minimize the stamp to a **GeoStamp GeoMark**

EOC Operations



Collaboration Tool – Import, Export and Delete GeoMarks



The **Collaboration**  tool contains three information tools: **Import as GeoMarks** ,

Delete GeoMarks  and **Export GeoMarks** . The **Import as GeoMarks** tool allows you to import features in common geospatial formats such as kml / kmz, .shp or .gpx. In addition, the **Import as GeoMarks** allows you to import the TerraGo Collaboration payload (.twz) into your GeoPDF file or geospatially-aware PDF file, which is the recommended format when working within the TerraGo suite of products. The TerraGo Collaboration package (.twz or .zip file) contains the photos, form data, video files, audio files, and icon images collected in the field using TerraGo Mobile, TerraGo Composer or the TerraGo Toolbar. The **Delete GeoMarks** tool allows you to remove all GeoMarks and annotations contained in your map. The **Export GeoMarks** tool allows you to save GeoMarks and annotations into .shm, .kml / kmz or .twz file format so that you can then import the GeoMarks and annotations into a GIS, Google Earth, TerraGo Mobile or TerraGo's Publisher Suite.



Import as GeoMarks

To successfully import GeoMarks, you must know the Coordinate Reference System (CRS) of the data to be imported. If the coordinate systems do not match, the features may appear to be off or outside the map.

- From the GeoMark Toolbar, click the **TerraGo Collaboration Tool** , then **Import as GeoMarks** .

You can also click **TerraGo** on the main menu, then **GeoMark Toolbar**, then **Collaboration > Import as GeoMarks**.

- From the **Look in** list box, navigate to the location where the .kml / .kmz, .shp, .twx / .twz, zip, or .gpx, import file resides.
- Select the file to import and then click **Open**.
- The *Features* dialog box data grid displays the feature layers to be imported. The **File** column provides the names of the input files; **Total** provides the total number of features in each file; **In** provides the number of features in each file that fall inside the map frame based on the selection in the **Exclude Features** list box; **Out** provides the number of features in each file that fall outside the map frame based on the selection in the **Exclude Features** list box; and, **CRS** provides the Coordinate Reference System associated with each file.
- **If no CRS exists for the file to be imported, click the button under the CRS column.**

By default, this button is labeled Lon/Lat - WGS 84.

- **In the *Coordinate System Selector* window, click one of the following tabs to specify the new coordinate system:**
- From the **Exclude Features** list box, click one of the following options:
- Click **Select Map Frame** to choose the map frame into which the data should be imported.

This button is enabled only if multiple map frames exist in the GeoPDF file or geospatially-aware PDF file.

Click the **Largest**, **Center Most**, **Top**, or **Bottom** radio button to determine the map frame to which the data should be imported, or click the **Selected** radio button and then in the box at the right, select the map frame name.

Selected – The map frame selected in the box at the right in the *Select Map Frame* dialog box.

Largest – The map frame in the file that occupies the greatest area on the page.

Center Most – The map frame that is centermost in the current page view.

Top – Allows the file creator to control the base map. The top map frame is determined by the order of GeoRegistration.

Bottom – Allows the file creator to control the base map, which is a 'stack' of map frames in the GeoPDF file or geospatially-aware PDF file. The bottom map frame is determined by the order of GeoRegistration.

Insert a check mark in the **Use As Default** check box to use the selection parameter for all data to be imported.

Click **OK** to return to the *Features* dialog box.

- Click **OK** again to import the data.

Delete GeoMarks

- From the GeoMark Toolbar, click **TerraGo Collaboration Tool** , then **Delete GeoMarks** .

You can also click **TerraGo** on the main menu, then **GeoMark Toolbar**, then **Collaboration > Delete GeoMarks**.

- In the *Select Annotation Types* dialog box, insert a check mark in the check box adjacent to the annotation type that you want to delete from the GeoPDF file or geospatially-aware PDF file.

If **All Annotations** is selected, all Adobe annotations will be deleted including

hyperlinks.

To delete specific annotations from the *Comments List* in the Adobe program, click **Comments** on the main menu, then **Comment View**, then **Show Comments List**. You can also delete specific annotations by selecting the annotation in the file and pressing **Delete** on your keyboard.

- Click **OK**, then click **Yes** at the confirmation prompt.

Export GeoMarks

- From the GeoMark Toolbar, click **TerraGo Collaboration Tool** , then **Export GeoMarks** .

You can also click **TerraGo** on the main menu, then **GeoMark Toolbar**, then **Collaboration > Export GeoMarks**.

- From the **Save in** list box, navigate to the location where the .shm, .kml / .kmz or .twz file should be saved.
- In the **File name** list box, type the name of the export data file.
- From the **Save as type** list box, click the file format to which the data should be exported.
- Click **Save**.
- In the *Select Annotation Types* dialog box, insert a check mark in the check box adjacent to the annotation type(s) that you want to export, then click **OK**.

GeoMarks – The GeoMarks added to your map.

All Annotations – The standard Adobe annotations on your map that are to be converted to GeoMarks.

- In the *Select Annotation Types* dialog box, select the coordinate system for the exported data.

WGS 84 – The data will be transformed to WGS 84 from the mapframe's native coordinate system.

Mapframe's – The data will be exported using the mapframe's native coordinate system.

- Click **Select Map Frame** to choose the map frame from which to export data from the GeoPDF file or geospatially-aware PDF file.

This button is enabled only if multiple map frames exist in the GeoPDF file or geospatially-aware PDF file.

Click the **Largest**, **Center Most**, **Top**, or **Bottom** radio button to determine the map frame to which the data should be imported, or click the **Selected** radio button and then in the box at the right, select the map frame name.

Selected – The map frame selected in the box at the right in the *Select Map Frame* dialog box.

Largest – The map frame in the file that occupies the greatest area on the page.

Center Most – The map frame that is centermost in the current page view.

Top – Allows the file creator to control the base map. The top map frame is determined by the order of GeoRegistration.

Bottom – Allows the file creator to control the base map, which is a 'stack' of map frames in the GeoPDF file or geospatially-aware PDF file. The bottom map frame is determined by the order of GeoRegistration.

Insert a check mark in the **Use As Default** check box to use the selection parameter for all data to be imported.

- If you are exporting to TerraGo's collaboration package (.twz), additional export options are available. Click **Options** and choose one or both of the options.

Google Earth – Includes a .kml file with your exported GeoMarks as a part of the export package (.twz file).

Map – Includes the GeoPDF file as a part of the export package (.twz file).

- Click **OK** to return to the *Select Annotation Types dialog box*.
- Click **OK** to export the data.

