

Aviatrix technical note

Using background maps in Aviatrix

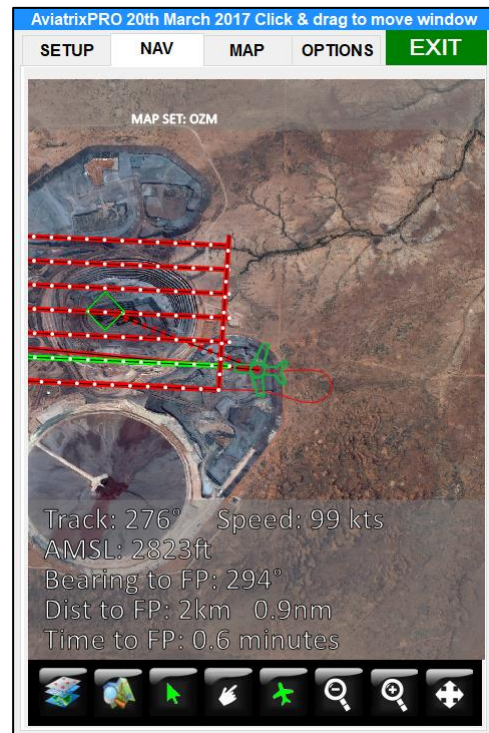
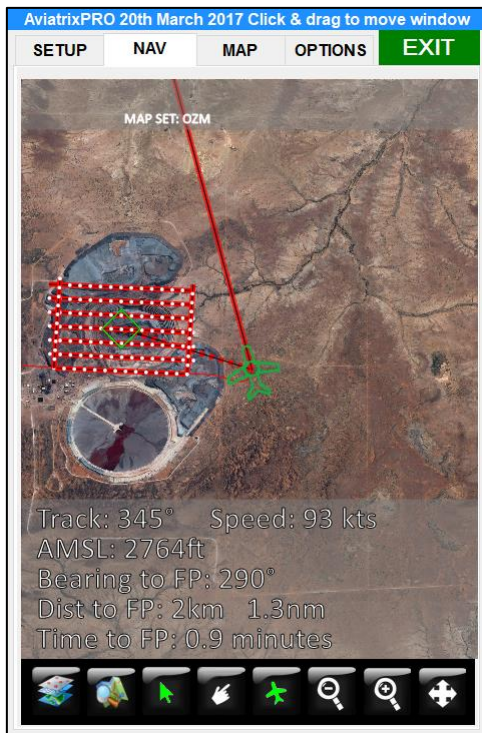
8 October 2019

Background

Functionality exists in Aviatrix to import vector and raster background maps, which are displayed in the navigation (“NAV”) tab. This document explains how to import raster background maps.

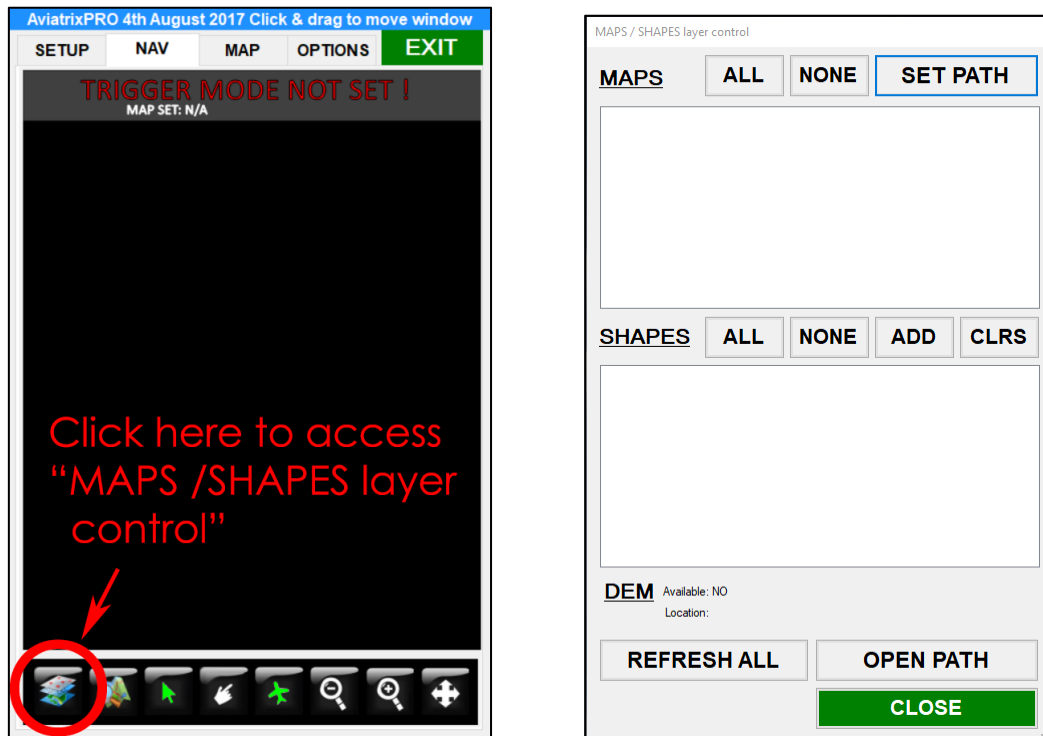
The navigation (“NAV”) tab

The navigation (“NAV”) tab is a GPS-centred display where underlying maps (either raster or vector) can be displayed. It is used to assist the pilot to navigate to the area where the survey will be conducted. The orientation of the NAV tab is always north-up.

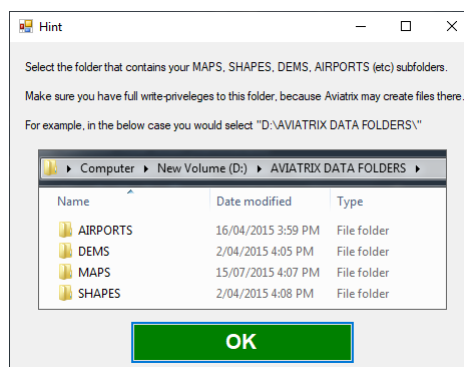


Importing maps for display in the NAV tab

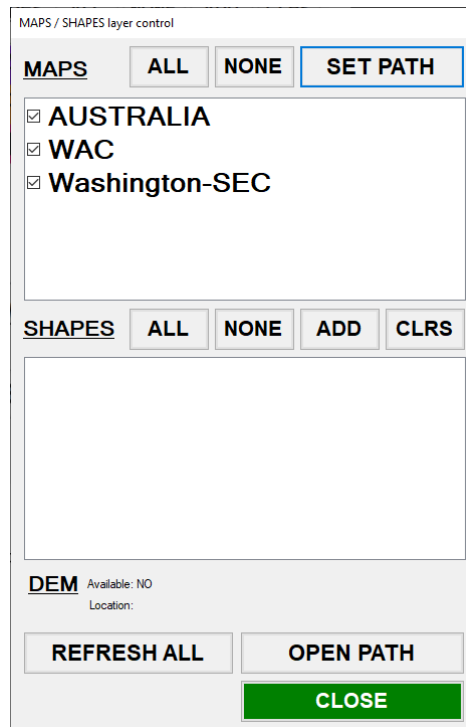
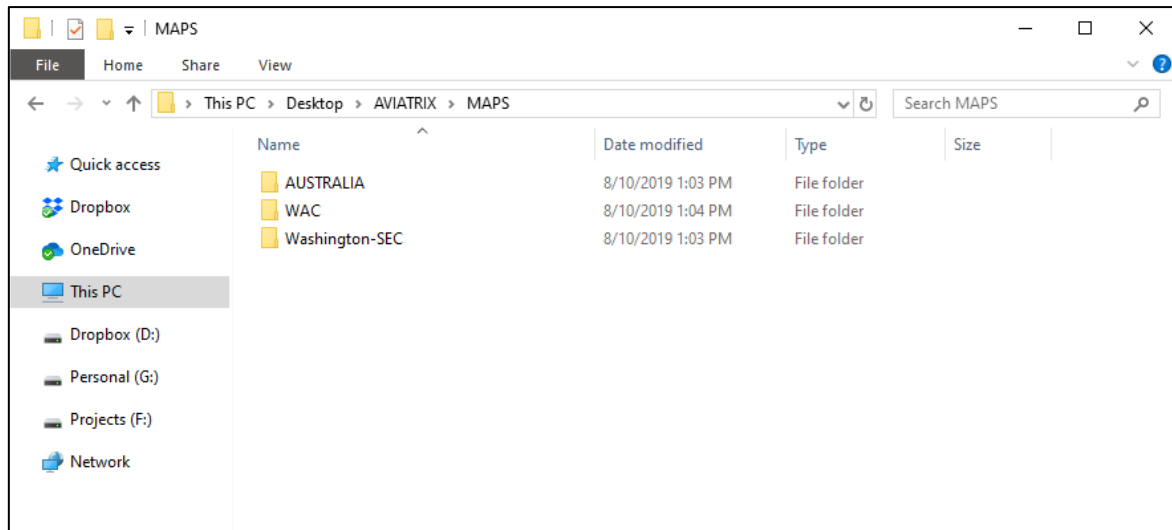
To import a raster map, click the button at the bottom left. The “MAPS / SHAPES layer control” window will open.



On the “MAPS / SHAPES layer control” window, click the SET PATH button, to point Aviatrrix at the location on the computer where the maps are stored. A hint window (below) will appear each time.



When selecting the location where maps and shapes are stored, it’s important to select the folder which INCLUDES the following subfolders: MAPS, DEMS, SHAPES. For example, if the maps are stored in a folder named AVIATRIX on the desktop, then the folder “AVIATRIX” should be selected.



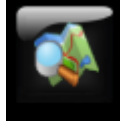
Note that maps for each area should be in their own sub-folders. In this example, there are three map sub-folders: AUSTRALIA, WAC and Washington-SEC. Each sub-folder would normally contain a single map and its associated meta data files. For example, the “Washington-SEC” subfolder contains three files: Washington.jpg (the raster map), Washington.jgw (the corresponding world file), and Washington.prj (the corresponding projection file). All three files are required for maps to be loaded successfully.

If a particular map covers a large area, it should be tiled before it is loaded into Aviatrix. The map should be split into non-overlapping tiles, each with its own world file and projection file. Any common GIS can be used to do this. Maximum recommended tile size is 10,000 by 10,000 pixels.

Choosing which map to display in the NAV tab

By clicking on each map in the “MAPS / SHAPES layer control” window, the user can choose which maps are displayed in the NAV window. If the checkbox is ticked, then that map will be available for display; if the box is not ticked, the map won't be displayed.

To display a specific map in the NAV window, the map toggle button can be used:



By repeatedly clicking on the map toggle button, each map that was selected in the “MAPS / SHAPES layer control” window will be displayed in turn.

It is important to remember that the NAV window is GPS centred. If the selected background map does not intersect with the current GPS location, then that map will not be visible.