

2016 May 9

How to convert geopdf to geotiff using ArcGIS

Finally! After many years, the new release of ArcGIS Desktop 10.4 now supports conversion of USGS geopdf topo quads to geotiffs. ArcGIS 10.3.1 had support for geopdf conversion, but it did not work on USGS topos. The steps below are the workflow I went through to create a seamless, collar-less USGS topographic map of Oahu. A more detailed step-by-step instruction is in the tutorial here, [How To Convert GeoPDF to GeoTIFF using ArcGIS](#).

Step 1: Set the pdf layer's default visibility property

Open the geopdf and set the default property of each layer to on or off. In the Layer Property window make sure that the Initial State section: Export is set to "Exports When Visible". Save the geopdf so the default properties of the layers are set. Double check by re-opening the geopdf again.

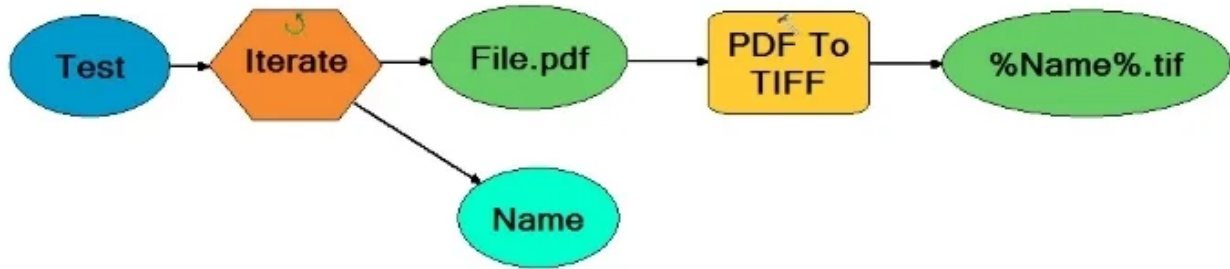
Step 2: Convert geoPDF to geoTIFF using PDF To TIFF tool

Access ArcToolbox in either ArcCatalog or ArcMap. Go to ArcToolbox >> Conversion Tools >> PDF To TIFF tool. In the PDF To TIFF dialog window, set your input parameters. Take note of these input parameter options:

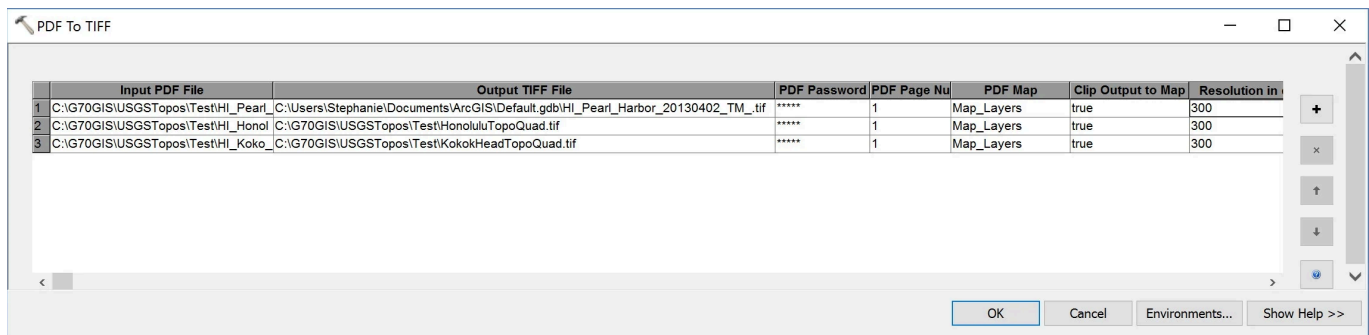
- PDF Map (optional): Map_Layers
- Clip Output to Map (optional): check the box if you want collarless tiff
- Write GeoTiff Tags (optional): check the box to ensure ArcGIS writes out the correct coordinates. Note however, the converted tiff image will say "Unknown Spatial Reference" You will not be able to change/edit the spatial reference of the tiff in ArcGIS, even though it is showing the image to be in the correct coordinates. More details on this and on how to work around the "Unknown Spatial Reference" issue are in the pdf document.

Step 3: Batch convert geoPDF using Model Builder

If you want to batch convert many geopdfs to geotiffs, you can use a file iterator in Model Builder or the PDF To TIFF tool's Batch Grid mode. I prefer to use the Model Builder method as the model is more portable and can be easily modified and shared. With The PDF To TIFF Batch Grid, you have to input each individual file and set its parameters, which if you have many geopdfs to convert gets to be tedious.



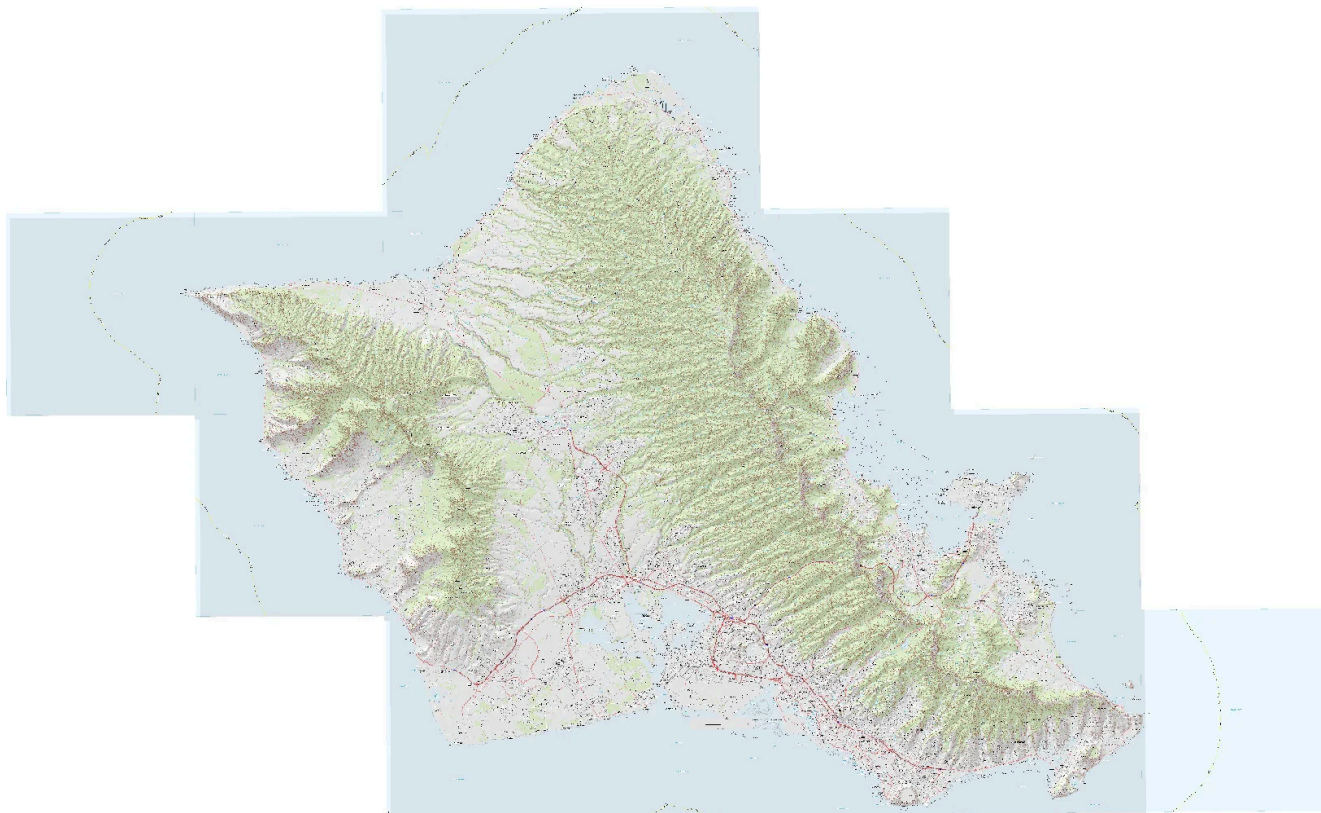
A Model Builder example



PDF To TIFF Batch Grid Mode

Step 4: Create raster catalog and/or mosaic of the geotiffs

After converting the geopdfs to geotiffs, you can create a raster catalog or mosaic to create a seamless set of quads. Make sure to specify the correct spatial reference when creating the catalog or mosaic.



Raster catalog of 17 topo quads for Oahu.

< How to convert geopdf to
geotiff using GDAL

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