Geneva International Centre for Humanitarian Demining
Centre International de Déminage Humanitaire - Genève

Country Masks

March 2008 GICHD Fact Sheet for Mine Action

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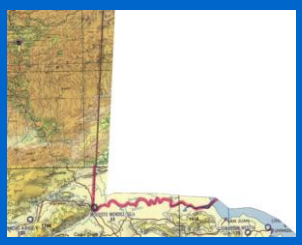


Why Use Country Masks?

Why do we need to use the country masks?
Several raster datasets, such as satellite images and scanned paper maps, are available for use as base map images in IMSMA. These datasets are very large files. In order to increase the operational speed of IMSMA and to make downloading the images faster, they have been compressed. The ERMapper compressed file format, .ecw, is the most efficient for use with IMSMA. However, the ERMapper file format does not compresses background values well. Background values appear in the images on the outside of the country border. The ERMapper file compression adds a fuzzy black border to the background area. The fuzzy border does not affect the imagery of the country, but they are unattractive.

What are Country Masks?

Country masks are the solution. The country masks are ESRI shapefiles that cover the fuzzy black border created by the ERMapper compression. The masks are like a sheet of paper with the shape of the country cut out of the middle. They were created using the country borders provided by ERSI with a 10 km buffer to ensure that the border area is adequately covered. The same 10 km buffer was used to clip the raster imagery so the country masks and the imagery align perfectly.

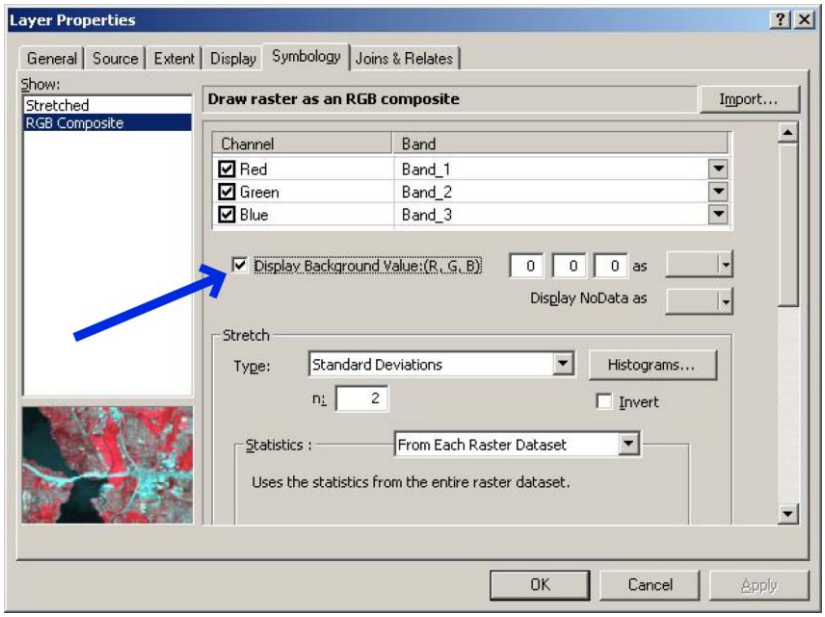
Operational Recommendations

How do I use the country maps in ArcGIS?

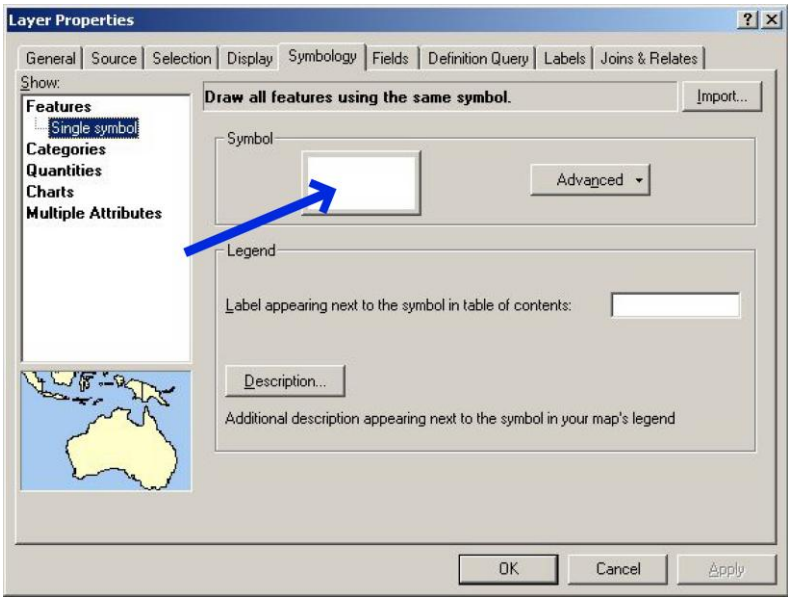
- After opening the raster image in ArcGIS, right click on the name of the image in the Table of Contents on the left of the screen. Select *Properties*.
- Check the *Display Background Value: (R,G,B)* option. Make sure that all three values are set to zero (Black). When you click the *OK* button, the black image background will be made transparent, except for the fuzzy border caused by the ERMapper compression.

Key Tips:

- Place the country mask above all of the raster images and below all of the vector datasets.
- Set the *Fill Color* and the *Outline Color* to white in order to cover the fuzzy border created by the ERMapper compression.



- Add the country mask to the map. The mask is a shapefile with the following naming convention: *country name*_mask.shp. The country mask will be assigned a fill color automatically.
- Next, you need to change the fill color of the country mask. Right click on the name of the mask in the Table of Contents and select *Properties*.
- Click on the large button in the *Symbol* section of the window and set the *Fill Color* to white and the *Outline Color* to white. Click *OK* twice.
- The image is now displayed appropriately.



- If you add additional images, be sure to place them under the country mask. Vector datasets should be placed above the country mask.

Contact Us

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