

Image Analysis for ArcGIS FAQs¹



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How Do I Create a Natural Color Image from a Color IR Image?

Use the Image Analysis extension in ArcMap to create a natural color image from a color infrared image. This document explains how to perform this operation using ArcGIS. This is a useful technique to create a simulated natural color image from a multispectral image that contains near-infrared, red and green bands, but no blue band.

What You Will Need and Other Assumptions

- A multispectral image (ERDAS Imagine format) that does not contain a blue band

Overview of Steps

1. Use the Spectral Enhancement tools of the Image Analysis extension in ArcMap to create a simulated natural color image from an existing multispectral image.

Step-by-Step Example

1. Start ArcMap from your Desktop, or on the Windows Taskbar click **Start | Programs | ArcGIS | ArcMap**. Ensure the Image Analysis extension is visible. If not, from ArcMap's main menu select: 1) **Tools | Extensions** and enable **Image Analysis**; and 2) **View | Toolbars** and enable **Image Analysis**.
2. Use the **Add Data** button on the main toolbar of ArcMap to add your multispectral image to the Data Frame.
3. Using the Image Analysis extension, click **Image Analysis | Spectral Enhancement | Color IR to Natural Color**.
4. In the Color IR to Natural Color dialog, specify your **Input Image** (your multispectral image), choose the correct **Near Infrared Band**, **Visible Red Band**, **Visible Green Band**, and specify a location and filename for your new **Output Image** (the simulated natural color image to be created). Click **OK** to create your new natural color image. *Note: it is very important that you know which band numbers correspond to the actual NIR, Visible Red, and Visible Green bands in your image. Otherwise the resulting simulated natural color image will be incorrect!*
5. Inspect your results.

¹ Produced by the USDA Forest Service RSAC (<http://fsweb.rsac.fs.fed.us>). A Forest Service version of Image Analysis for ArcGIS was used to develop this reference document. No warranty is made as to completeness or accuracy.