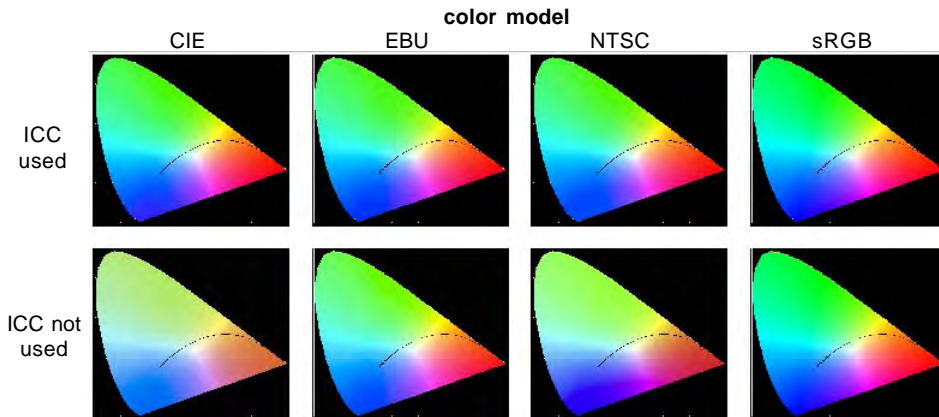


# Directly Use PNG Files

PNG (Portable Network Graphics) is an extensible file format for the lossless, portable, well-compressed storage of raster images supporting color mapped (8- and 16-bit), grayscale (8- and 16-bit), and truecolor (16- and 24-bit RGB) images with an optional alpha channel. The alpha channel is an 8-bit opacity mask, which can provide semitransparency as well as transparency. There can be a variety of information in a PNG file aimed at getting the best colors for display and printing. This information may include an International Color Consortium (ICC, called ICM on the Mac) profile, gamma and chromaticity information, and an alpha channel.

The screen-captured illustration at the left shows the effect of using the color profile for a number of different color models: CIE (Comite International d'Eclairage, French for International Lighting Committee), EBU (European Broadcasting Union), NTSC (National Television System Committee), and sRGB (standard SRB). Each tile represents the projection of sRGB color space into two dimensions. Because sRGB is the standard color



The effect of using the ICC/ICM color profiles for four different color models is shown above.

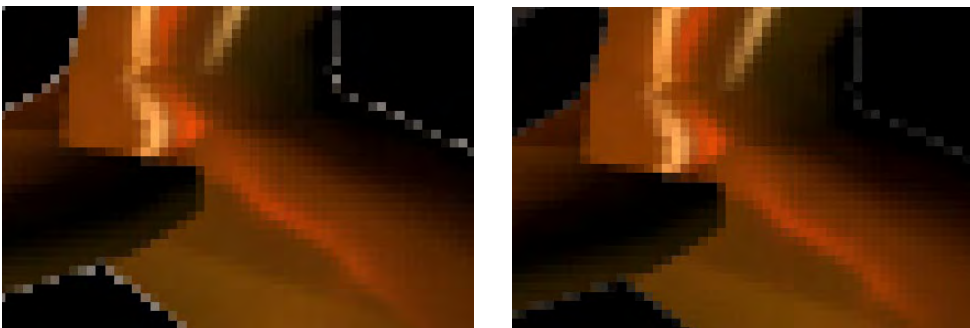
model for computer monitors, it appears the same in screen capture whether or not its color profile information is used. Files that use other color models need their ICC/ICM color profiles applied in order to match the sRGB monitor display standards.

Gamma and chromaticity sections of the PNG file are found with older files or files created by older applications. If a PNG file has gamma and chromaticity sections, it will not have an ICC/ICM profile and vice versa. On import to the TNT products, gamma and chromaticity information is converted to an ICC profile created as a subobject of the raster.

Because the alpha channel of a PNG file is an 8-bit opacity mask rather than a binary mask, it can provide antialiasing using partial transparency. A value of 255 in the opacity mask means that the display of the image raster is unaffected by the mask (100% opaque) while a value of zero means the image raster is transparent to the background (0% opaque, 100% transparent). Values in between have varying amounts of transparency. The alpha channel is accessed (direct display) or saved (import) as a subobject of the image raster object. Select this subobject just as you would any other mask to provide transparency in display.



with (above) and without (below) alpha channel selected as mask



Antialiasing can be effectively provided when the alpha channel is selected as an opacity mask. The mask is selected at the right but not at the left.

