#### **NAME**

rad2png - convert Radiance file to a PNG file

## **SYNOPSIS**

**rad2png** [options] {input.hdr | -} output.png

## DESCRIPTION

Convert Radiance file to a PNG file. The input can optionally be "-", indicating that the input image should be read from standard input.

Output uses sRGB primaries and sRGB non-linear magnitude encoding. This is different from the Radiance conversion programs such as ra\_tiff, which use Radiance primaries and straight gamma non-linear magnitude encoding. The non-linear sRGB luminance encoding will generally result in more accurate color rendition on modern displays than does the gamma-based Radiance encoding. Conversion to sRGB color primaries typically has has little or no visual effect.

## **OPTIONS**

## --exposure=stop

Adjust the exposure of the output file relative to the input file, specified in f-stops (powers of two). E.g., --exposure=+2 increases the luminance in the output by a factor or four, while --exposure=-1 decreases the luminance by half. Fractional values are allowed.

#### --autoadjust

Auto adjust brightness values to be in an approximately displayable range. Can be combined with **—exposure**=*stop*.

#### **EXAMPLES**

To convert a Radiance image to PNG:

rad2png input.hdr output.png

To convert a Radiance image to PNG with mild lightening:

rad2png --exposure=1.0 input.hdr output.png

To convert a Radiance image to PNG with moderate darkening:

rad2png --exposure=-2.0 input.hdr output.png

#### LIMITATIONS

When converted to 8-bit/color PNG images, many high dynamic range Radiance images will required tone mapping more sophisticated than provided by this program. (See the Radiance routines **pcond** and **normtiff**).

The **—autoadjust** option is not particularly sophisticated, and often produces less that desirable results. This is particularly true if there are regions in the image that much brighter than the rest of the image.

# **AUTHOR**

William B. Thompson