#### **NAME**

rad2tiff - convert RADIANCE rgbe or xyze file to a TIFF file

## **SYNOPSIS**

**rad2tiff** [options] {input.hdr | -} output.tif

# **DESCRIPTION**

Convert RADIANCE rgbe or xyze file to a TIFF file. The input can optionally be "-", indicating that the input image should be read from standard input. Output TIFF file can be either 32 bit float RGB (default) or 8 bit RGB. Pixel values in the TIFF file are adjusted to take into account EXPOSURE records in the RADIANCE file and the different units used in xyze files.

If a VIEW record is available in the header of the input RADIANCE file, the program sets the Focal-LengthIn35mmFormat EXIF tag in the output TIFF file. This allows keeping track of the field of view, which is important in the deva-filer workflow.

## **OPTIONS**

Output is 8 bit RGB (low dynamic range, aka LDR) TIFF file, using the sRGB color profile.
--sRGBprimaries is implied. Note that this i is to uses different from the default behavior of the RADIANCE rad2tiff program, which uses the same R, G, and B color primaries for the TIFF and RADIANCE files, even though the RADIANCE color primaries are different from the sRGB standard, and uses straight gamma-based luminance encoding.

## --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*. Mostly for use with **—ldr**.

### --unadjusted values

Use numeric pixel values in RADIANCE file, ignoring EXPOSURE records in file header. Sometimes this leads to brightness values in an approximately displayable range. Can be combined with —**exposure**=*stop*. Mostly for use with —**ldr**.

## --fullrange

With ——ldr, remaps the brightness brightness range to cover nearly all of the 8-bit range (the top 5% of the range is excluded, to avoid problems with LDC clipping). Without ——ldr, the range of brightness is remapped to [0.0--0.95].

#### --sRGBprimaries

Use sRGB encoding in output file. This will generally result in more accurate color rendition on modern displays. Implied by the —**ldr** flag.

#### --compresszip

Use zip compression for output.

## --compresszipp

Use zip compression with prediction for output.

## --compresslzw

Use LZW compression for output.

# --compresslzwp

Use LZW compression with predittion for output.

## **LIMITATIONS**

Does not currently support writing of Logluv encoded TIFF files or STONITS TIFF tag. The Focal-LengthIn35mmFormat is stored as an integer, and as a result field-of-view information is subject to quantization error.

# **AUTHOR**

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