NAME

tiff2rad − convert TIFF file to Radiance rgbe file

SYNOPSIS

tiff2rad [*options*] *input.tif* {*output.hdr* | −}

DESCRIPTION

Convert a TIFF file to a Radiance rgbe file. Input TIFF file can be 8-bit grayscale, 8-bit RGB, or 32 bit float RGB. Output Radiance file is always rgbe. The output can optionally be "−", indicating that the output image should be written to standard output.

If STONITS tag is present in the TIFF file, the appropriate EXPOSURE record is added to the Radiance output file header.

8-bit RGB and grayscale files are assumed to have sRGB luminance encoding regardless of whether or not there is an attached color profile and ignoring the actual color profile if attached. This is different from the Radiance **ra_tiff** program for these data types, which assumes straight gamma encoding. Under most circumstances, using the sRGB luminance encoding should produce more accurate images shown on modern displays than does using gamma encoding. As with the Radiance **ra_tiff** program, the default behavior of **tiff2rad** for 32 bit float input is to use the same R, G, and B color primaries for the TIFF and Radiance files, even though the Radiance color primaries are (slightly) different from the sRGB standard.

If the input TIFF file has a FocalLengthIn35mmFormat EXIF tag, it is used to create a VIEW record in the output radiance file with the corresponding horizontal and vertical fields of view. This is not exact, since the TIFF tag is stored as an integer and so is subject to quantization error. Also, the conversion is done assuming that the 35 mm equivalent focal length is computed based on the image diagonal, which is not always the case. See

https://en.wikipedia.org/wiki/35_mm_equivalent_focal_length

for more information on this. This is important in the deva-filer workflow, in particular allowing determination of the FOV for photographically obtained imagry, assuming that the camera sets the tag (and doesn't name the tag something else).

OPTIONS

−−RGBencoding

Assume TIFF file is encoded using sRGB primaries for all pixel types, and convert pixel colors to Radiance primaries.

LIMITATIONS

Does not currently support reading of Logluv encoded TIFF files or writing of Radiance xyze format files.

AUTHOR

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