

NAME

falsecolor - make a false color RADIANCE picture

SYNOPSIS

falsecolor [**-i** input] [**-p** picture] [**-cb** | **-cl**] [**-e**] [**-s** scale] [**-l** label] [**-n** ndivs] [**-log** decades] [**-m** mult] [**-r** redv] [**-g** grnv] [**-b** bluv]

DESCRIPTION

Falsecolor produces a false color picture for lighting analysis. Input is a rendered Radiance picture.

By default, luminance is displayed on a linear scale from 0 to 1000 nits, where dark areas are blue and brighter areas move through the spectrum to red. A different scale can be given with the *-s* option. The default multiplier is 179, which converts from radiance or irradiance to luminance or illuminance, respectively. A different multiplier can be given with *-m* to get daylight factors or whatever. For a logarithmic rather than a linear mapping, the *-log* option can be used, where *decades* is the number of decades below the maximum scale desired.

A legend is produced for the new image with a label given by the *-l* option. The default label is "Nits", which is appropriate for standard Radiance images. If the *-i* option of *rpict(1)* was used to produce the image, then the appropriate label would be "Lux".

If contour lines are desired rather than just false color, the *-cl* option can be used. These lines can be placed over another Radiance picture using the *-p* option. If the input picture is given with *-ip* instead of *-i*, then it will be used both as the source of values and as the picture to overlay with contours. The *-cb* option produces contour bands instead of lines, where the thickness of the bands is related to the rate of change in the image. The *-n* option can be used to change the number of contours (and corresponding legend entries) from the default value of 8.

The *-e* option causes extrema points to be printed on the brightest and darkest pixels of the input picture.

The remaining options, *-r*, *-g*, and *-b* are for changing the mapping of values to colors. These are expressions of the variable v , where v varies from 0 to 1. These options are not recommended for the casual user.

If no *-i* or *-ip* option is used, input is taken from the standard input. The output image is always written to standard output, which should be redirected.

EXAMPLES

To create a false color image directly from *rpict(1)*:

```
rpict -vf default.vp scene.oct | falsecolor > scene.pic
```

To create a logarithmic contour plot of illuminance values on a Radiance image:

```
rpict -i -vf default.vp scene.oct > irradi.pic
rpict -vf default.vp scene.oct > rad.pic
falsecolor -i irradi.pic -p rad.pic -cl -log 2 -l Lux > lux.pic
```

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SEE ALSO

getinfo(1), pcomb(1), pcompos(1), pextrem(1), pfilt(1), pflip(1), protate(1), psign(1), rpict(1), ximage(1)