

NAME

tiffdither - convert a greyscale image to bilevel using dithering

SYNOPSIS

tiffdither [*options*] *input.tif* *output.tif*

DESCRIPTION

tiffdither converts a single channel 8-bit greyscale image to a bilevel image using Floyd-Steinberg error propagation with thresholding.

OPTIONS

- c** Specify the compression to use for data written to the output file: **none** for no compression, **packbits** for PackBits compression, **lzw** for Lempel-Ziv & Welch compression, **zip** for Deflate compression, **g3** for CCITT Group 3 (T.4) compression, and **g4** for CCITT Group 4 (T.6) compression. By default *tiffdither* will compress data according to the value of the *Compression* tag found in the source file.

The CCITT Group 3 and Group 4 compression algorithms can only be used with bilevel data.

Group 3 compression can be specified together with several T.4-specific options: **1d** for 1-dimensional encoding, **2d** for 2-dimensional encoding, and **fill** to force each encoded scanline to be zero-filled so that the terminating EOL code lies on a byte boundary. Group 3-specific options are specified by appending a “:”-separated list to the “g3” option; e.g. **-c g3:2d:fill** to get 2D-encoded data with byte-aligned EOL codes.

LZW compression can be specified together with a *predictor* value. A predictor value of 2 causes each scanline of the output image to undergo horizontal differencing before it is encoded; a value of 1 forces each scanline to be encoded without differencing. LZW-specific options are specified by appending a “:”-separated list to the “lzw” option; e.g. **-c lzw:2** for LZW compression with horizontal differencing.

- f** Specify the bit fill order to use in writing output data. By default, *tiffdither* will create a new file with the same fill order as the original. Specifying **-f lsb2msb** will force data to be written with the *FillOrder* tag set to LSB2MSB, while **-f msb2lsb** will force data to be written with the *FillOrder* tag set to MSB2LSB.
- r** Make each strip have no more than the given number of rows.
- t** Set the threshold value for dithering. By default the threshold value is 128.

NOTES

The dither algorithm is taken from the **tiffmedian**(1) program (written by Paul Heckbert).

SEE ALSO

pal2rgb(1), **fax2tiff**(1), **tiffinfo**(1), **tiffcp**(1), **tiff2bw**(1), **libtiff**(3TIFF)

Libtiff library home page: <http://www.simplesystems.org/libtiff/>