

1 Program ftosh

1.1 Purpose

Convert float images to shorts.

1.2 Usage

ftosh [options] **image_files** ...

where the **image_files** are in the same format to3d accepts

1.3 Options

| | | |
|----------------------|---------------------------------|--------------------------------|
| -prefix pname | pname = prefix for output files | Default pname = 'sh' |
| -suffix sname | sname = suffix for output files | Default sname = nothing at all |
| -start si | initial index number | Default si = 1 |
| -step ss | index number increment | Default ss = 1 |

The output files will be named in the format:

'pname.index.sname'

where 'pname' and 'sname' are strings given by the first 2 options, and 'index' is a number, given by 'si+(i-1)*ss' for the i-th output file, for i=1,2,...

| | |
|--------------------|--|
| -nsize | Enforce the 'normal size' option, to make the output images 64x64, 128x128, or 256x256. |
| -scale sval | Scale factor for output (see below). |
| -base bval | Baseline value for output (see below). |
| -top tval | Used to set default value for sval (see below). |

- 'sval' and 'bval' are numeric values; if sval is given, then the output images are formed by scaling the inputs by the formula:

$$\text{output} = \text{sval} * (\text{input} - \text{bval}).$$

- Default sval is determined by finding:

$$\begin{aligned} V &= \text{largest } \text{abs}(\text{input} - \text{bval}) \text{ in all the input images, and then} \\ \text{sval} &= \text{tval} / V. \end{aligned}$$

- Default tval is 32000; note that tval is only used if sval is not given on the command line.
- Default bval is 0.