

1 Program 3dfractionize

1.1 Purpose

The purpose of this program is to allow the resampling of a mask dataset (the input) from a fine grid to a coarse grid (defined by the template). When you are using the output, you will probably want to threshold the mask so that voxels with a tiny occupancy fraction aren't used. This can be done in `3dmaskave`, by using `3dcalc`, or with the '-clip' option below.

This program will also work in going from a coarse grid to a fine grid, but it isn't clear that this capability has any purpose.

1.2 Usage

`3dfractionize [options]`

1.3 Options

-template tset Use dataset 'tset' as a template for the output.

-input iset Use dataset 'iset' for the input. Only the sub-brick #0 of the input is used. You can use the sub-brick selection technique described in '3dcalc -help' to choose the desired sub-brick from a multi-brick dataset.

-prefix ppp Use 'ppp' for the prefix of the output. [default = 'fractionize']

-clip fff Clip off voxels that are less than 'fff' occupied. 'fff' can be a number between 0.0 and 1.0, meaning the fraction occupied, can be a number between 1.0 and 100.0, meaning the percent occupied, or can be a number between 100.0 and 10000.0, meaning the direct output value to use as a clip level. [default = 0.0]

1.4 Notes

- For each voxel in the output dataset, this program computes the fraction of it that is occupied by nonzero voxels from the input.
- The fraction is stored as a short in the range 0..10000, indicating fractions running from 0..1.
- The template dataset is used only to define the output grid; its brick(s) will not be read into memory.
- The actual values stored in the input dataset are irrelevant, except in that they are zero or nonzero.