1 Program abut

1.1 Purpose

This program can be used to put a set of noncontiguous functional slices together to produce a contiguous set, as required by `to3d`. It works by supplying slices of all zeros in the 'gaps'. If the gaps are not integer multiples of the data slices thickness (by the way, all the data slices must be the same thickness), then the data slices will be subdivided to produce a higher resolution (in the z-direction) new set of slices. The subdivided slices may be simple replicas of the parent slices, or they may be interpolated from the parent slices.

1.2 Usage

abut [-dzin thickness] [-dzout thickness] [-root name]
[-linear | -blocky] [-verbose] [-skip n+gap] ... images ...

1.3 Options

-dzin The thickness value in mm. If not given, it is taken to be 1.0 (in which case, the output thickness and gap sizes are simply relative to the slice thickness, rather than absolute)

-dzout The output slice thickness, usually smaller than the input thickness. If not given, the program will compute a value (the smaller the ratio dzout/dzin is, the more slices will be output)

-root name 'name' is the root (or prefix) for the output slice filename. For example, '-root fred.' will result in files fred.0001, fred.0002, ...

-linear If present, this flag indicates that subdivided slices will be linearly interpolated rather than simply replicated – this will make the results smoother in the through-slice direction (if dzout < dzin)

-blocky Similar to -linear, but uses *AFNI*'s 'blocky' interpolation when possible to put out intermediate slices. Both interpolation options only apply when dzout < dzin and when an output slice has a non-gappy neighbor.

-skip n+gap Indicates that a gap is to be inserted between input slices #n and #n+1, where n=1,2,...; for example, -skip 6+5.5 means put a gap of 5.5 mm between slices 6 and 7. More than one -skip option is allowed. They must all occur before the list of input image filenames.