mkmosaic

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1 Introduction

mkmosiac converts an arbitrary number of slices (stored in bfile format) into a mosaic stored in a single bfile. If each slice has multiple planes, then each plane is also mosaiced and stored as a sepearate plane in the mosaic file. There is also an option to equalize the distribution of voxel intensities so as to improve the contrast (good for structurals). Requires matlab 5.2 or higher.

Note: this is different from **mkmosaic16** in that arbitrary number of input slices can be converted. The options used in **mkmosaic16** apply to **mkmosaic**. In addition, **mkmosaic** requires a *-ncols* option to indicate the number of column tiles in the mosaic.

2 Usage

Typing mkmosaic at the command-line without any options will give the following message:

```
USAGE: <csh> mkmosaic instem <-o outstem> <-firstslice n> <-heq>
   instem - stem of the  input slices
   <-e inext> - input extension
   <-o outstem> - stem of mosaic (default is instem)
   <-firstslice int> - first slice number of the  slices
             (default is 0)
   <-heq> - implement histogram equalization on each mosaic
           (default is no equalization)
   -ncols - number of tile columns in the mosaic
```

3 Command-line Arguments

-i instem: stem of the input volume in *bfile format*.

-o outstem: optional stem of the output mosaic file. If not specified, the outstem is set to the intsem.

-firstslice slicenumber: the slice number of the first slice to include in the mosaic.

-h heq: implement histogram equalization. This can greatly improve the image contrast for structural images. Note that this alters the intensity values of the image, and so it should only be used for images in which the actual intensity values are of no importance (eg, in structural images).

-ncols n : the number of tiles in a row of the mosaic.

4   Output

The mosaic file will be called *outstem_mos.bxxxxx* where xxxxx is either "float" or "short" depending upon the extension of the input slices. If outstem is not specified, it is set to instem.