

# mkmosaic16

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\$Id: mkmosaic16.tex,v 1.1 2005/05/04 17:00:49 greve Exp \$

## 1 Introduction

**mkmosiac16** converts 16 slices (stored in *bfile* format) into a  $4 \times 4$  mosaic stored in a single *bfile*. If each slice has multiple planes, then each plane is also mosaiced and stored as a separate 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.

## 2 Usage

Typing `mkmosaic16` at the command-line without any options will give the following message:

```
USAGE: <cs> mkmosaic16 instem <-o outstem> <-firstslice n> <-heq>
  instem - stem of the 16 input slices
  <-o outstem> - stem of mosaic (default is instem)
  <-firstslice int> - first slice number of the 16 slices
                    (default is 0)
  <-heq> - implement histogram equalization on each mosaic
          (default is no equalization)
```

## 3 Command-line Arguments

**-i instem:** stem of the 16 input slices in *bfile format*.

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

**-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).

## 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.