

# paint

Comments or questions: analysis-bugs@nmr.mgh.harvard.edu\  
\$Id: paint.tex,v 1.1 2005/05/04 17:00:49 greve Exp \$

## 1 Introduction

**paint** is a program for mapping voxel intensities from a functional volume onto a surface.

## 2 Usage

Typing **paint** at the command line without any options will give the following message:

```
Usage: paint input\_file hemi surf output\_file -options
input\_file - eg, stem\_\\%03d.bfloat
surf - surface name (eg, orig, smoothwm, etc)
hemi - lh or rh
output\_file - eg, stem-lh.w
options:
-imageoffset n - zero-based frame number to paint <0>
-nslices n - number of input slices
-regdat fname - name of register file <register.dat>
-dmax dist - distance (mm) to project along normal <0>
-dstep stepsize - size (mm) of projection step <0.25>
```

## 3 Command-line Arguments

**input\_file**: this is the input stem of the functional input volume in bfile format. It will take the form *stem\_\\%03d.bfloat*.

**surf**: name of the surface upon which to paint (eg, orig, smoothwm, etc).

**hemi**: hemisphere string (lh or rh).

**output\_file**: name of the file where the results will be stored. This file must have a “w” extension.

**-imageoffset** : the functional data may have many different time-points (also known as planes or frames) for each voxel, however, the point output can only represent one of these frames. The number of frames in a functional volume is indicated by the third item in the functional volume’s header file. The image offset allows the user to choose which frame to paint.

**-nslices**: number of slice files in the input functional volume.

**-regdat**: this allows the user to specify a registration file. The default is to use the one in the current directory.

## 4 Example

Consider the case where there is a functional volume with stem *pavf* with 32 slice files. Running the unix *ls* in the directory will show bfiles of the form *pavf\_000.bfloat*, *pavf\_001.bfloat*, ..., *pavf\_031.bfloat* and their corresponding header files (with *.hdr* extension).