

STEPS TO USE FREEVIEW

1. We don't need mri_convert since FreeSurfer already includes FreeView. When we want to see from 3d slicer, we can use
2. We do not need a watershed since Freesurfer does it internally; we only need it if things fail. So I am running to create surfaces.

```
export SUBJECTS_DIR=/home/hp/freesurfer_subjects
```

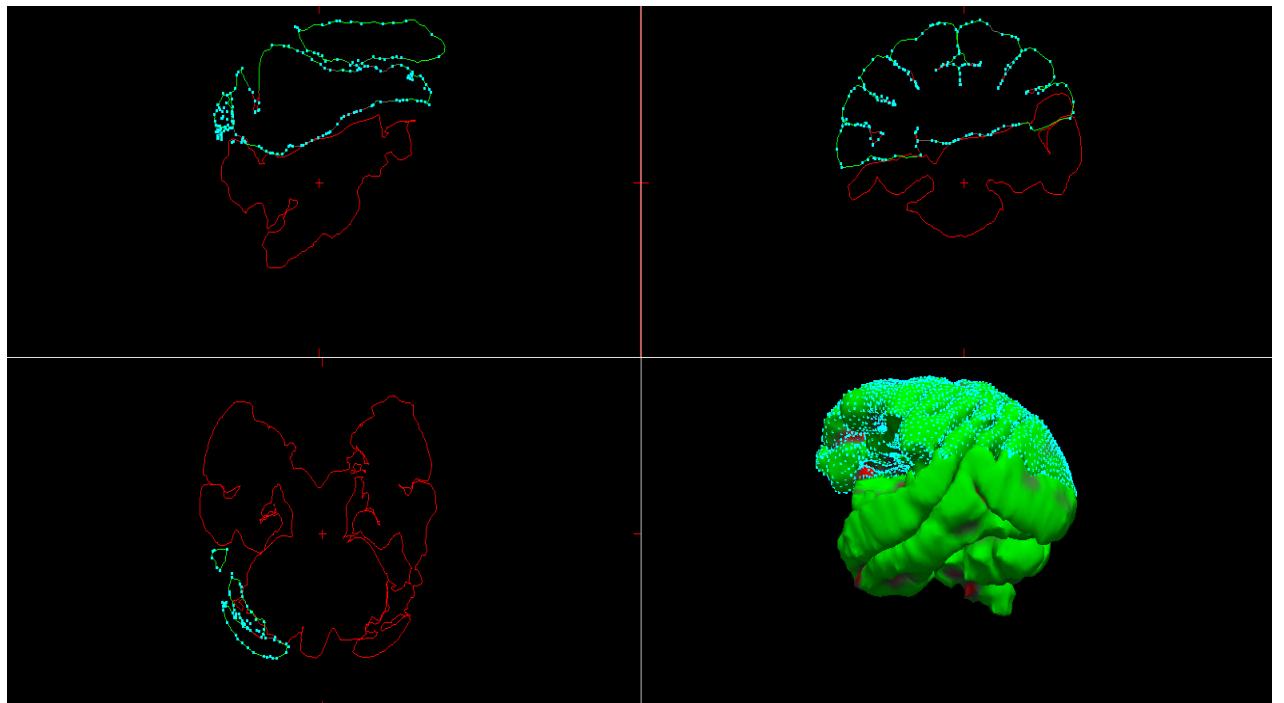
```
mne watershed_bem --subject cello_subject --overwrite
```

3. FreeSurfer **already includes its own templates and probabilistic atlases**, mainly:
 - ✓ fsaverage
 - ✓ Talairach atlas

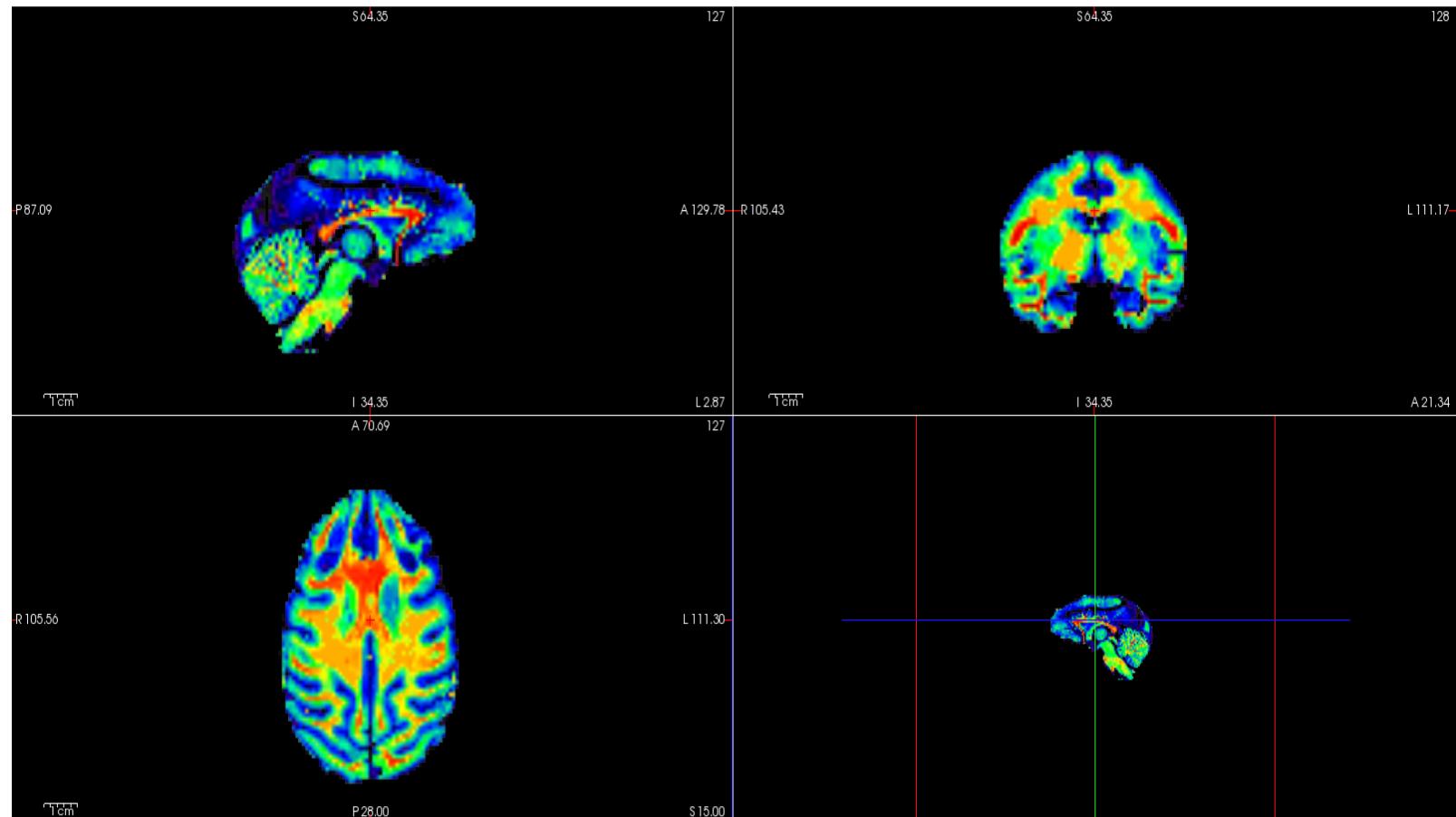
In the case of a non-human brain, my Talairach atlas failed, so I skipped that check while running. But for a non-human brain, we need to provide a head template.

4. We have T1 images, which are skull-free. So single conductivity
5. Use two scripts, one with mne to get fif files. Then convert fif to generate one complete head model.
6. Finally, generating the head model file.

Freeview lh. pial and rh. pial



Freeview orig.mz and brainmask.mz



Note: I can add more visualizations for free surfer

MATLAB OUTPUT FOR HEADMODEL

```
C = data.Cortex  
whos C  
  
C =  
  
struct with fields:  
  
    lh_rr: [14006x3 double]  
    lh_tris: [28008x3 int32]  
    rh_rr: [18716x3 double]
```

```
rh_tris: [37428x3 int32]
```

Name	Size	Bytes	Class	Attributes
C	1x1	1571232	struct	
size(C.lh_rr)				
size(C.rh_rr)				
total_vertices = size(C.lh_rr,1) + size(C.rh_rr,1)				
ans =				
14006		3		
ans =				
18716		3		
total_vertices =				
32722				