

through the graphical user interface (GUI).

Quality of Surface Reconstruction:

Software packages have decent and comparable inflation procedures. Hence, there was no systematic difference between the final surfaces of either of the packages.

First pass surface creation in both packages takes approximately the same amount of time (20-30 minutes).

One advantage of FreeSurfer is that it can process both hemispheres simultaneously, while SureFit does only one hemisphere at a time.

The quality of the first pass surface is comparable between the two packages.

Figures 3 show flowcharts from the FreeSurfer and SureFit manuals, which describe the processing steps and resulting volumes and surfaces for each package.

Figure 2. Processing Sequence and Resulting Output Volumes and Surfaces for FreeSurfer

FREE SURFER STEPS	Output Files
REFORMAT/AVERAGE Reformat Correct/ Average	- mri/orig
PROCESS VOLUME Resample Intensity	- mri/T1

Figure 3. Processing Sequence and Resulting Output Volumes and Surfaces for SureFit

PROCESS	VOLUME
I. Orient Volume	-----
Define Volume of interest (VOI)	-----
Resample (optional)	-----
	Ori