

The Fsl\_prepare\_fieldmap GUI requires the following inputs:

- Phase image (currently SIEMENS-style only)
- Brain extracted magnitude image
- Difference of Echo Times in ms

**Step 1:**

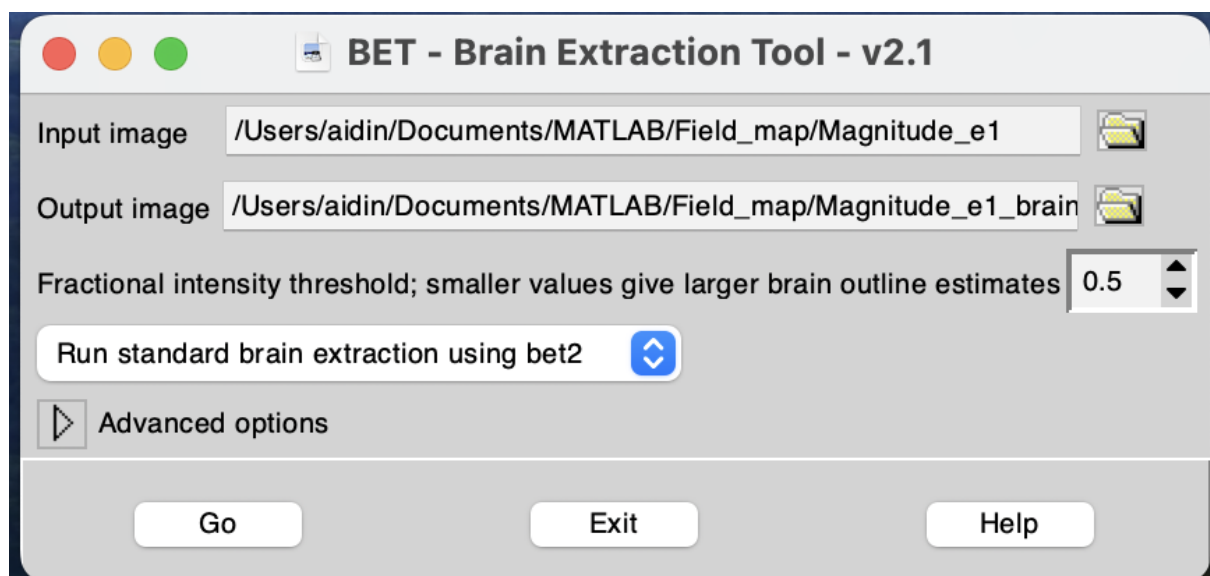
Get the magnitude and phase difference Dicom images off the scanner, and convert them to Nifti files (i.e. \*.nii.gz).

**Step 2:**

Note the difference of echo times from the console in ms.

**Step 3:**

Use the best looking magnitude image, and brain extracted (i.e. mask the background noise) through FSL Bet by typing *bet\_gui* in the command line:



Brain extraction of the magnitude image is very important and must be *tight* - that is, it must exclude all non-brain voxels and any voxels with only a small partial volume contribution. The reason for this is that these areas are normally very noisy in the phase image.

#### Step 4:

Through the command line, type *Fsl\_prepare\_fieldmap\_gui*, and upload the phase difference data, brain extracted magnitude data, and the difference of the echo times in ms (i.e. default is usually 2.46ms on Siemens), and set the name and location of the output file, as desired:

