After running MCs, the next step is to create niftii files of the headvol and sensitivity profiles. For this, I have created a loop through script for 6 mo and 9 mo, called Sixloop.m and Nineloop.m. Both of those scripts call AVAdotVol3pt2nii.m and AVfwVol2AnatNii.m. Path names will need to be changed in the scripts. They should create a headvol.nii and nifty files for each of the channels.

Then, I change the filenames of the sensitivity files from AdotVol\_S#\_D#\_C#.nii to A1.nii.. etc, for ease of reference across projects. The scripts that do these are MCs-convert\_6mo.sh and MCs-convert\_9mo.sh

Next, there is NIRS processing to extract the betas. More details on this later today.

Moving on, next step – image reconstruction. The script is called ICs\_6mo.m and ICs\_9mo,m. Here, folder paths will need to be changed to be able to access the sensitivity profiles and the beta files. This should create beta images for each condition and chromophore (for each subject).

Next, I transform the beta images to the study template. The scripts that does this are called Transform\_6mo.sh and Transform\_9mo.sh. They both call out to registerCommon.sh.

The resolution is very fine at this point (< 1x1x1 mm3) and Group analyses always fails. It also might be a little pointless to have such fine precision for NIRS – but this is open to debate. Anyway, Resmapling.sh resamples the resolution to 2x2x2.

After this, I run a Group ANOVA. I have added a sample script called Load\_MVM.txt.