**Steps performed:**

**1. fslorient -getorient**

**2. Bet brain extraction (using Gui with the “originaldwi.nii.gz” as input):**

fsl /home/ainara/fsl/bin/bet /home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/LND/10135/PruebaBET/10135\_DTInew1280810135 /home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/LND/10135/PruebaBET/10135\_DTInew1280810135\_brain -f 0.3 -g 0 -m

Mask were visually inspected for correction in order to assure that they covered all the B0 volume of the DWI. Some of them were manually edited for a greater accuracy.

**3. Eddy [Parameters were changed when needed (i.e.: different number of slices for some patients)]**

eddy\_cuda9.1 --imain=originaldwiimage.nii.gz --mask=maskobtainedfrombet.nii.gz --acqp=acqparams.txt --index=index.txt --bvecs=bvecs.bvec --bvals=bvals.bval --niter=8 --fwhm=10,8,4,2,0,0,0,0 --repol --out=outputname --mporder=12 --json=jsonfile.json --s2v\_niter=5 --s2v\_lambda=1 --s2v\_interp=trilinear --verbose

**4. DTIFIT (using Gui with “diffusionandnondiffusionimageaftereddy.nii.gz” as input image and rotated bvecs after eddy as bvecs).**

/home/ainara/fsl/bin/dtifit --data=/home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/NC/30119\_GT2426/eddy\_corrected\_data\_A\_P\_acqparam012\_mporder12\_json.nii.gz --out=/home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/NC/30119\_GT2426/dti --mask=/home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/NC/30119\_GT2426/30119\_GT2426\_DTInew12808GT2426\_brain\_mask\_edited.nii.gz --bvecs=/home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/NC/30119\_GT2426/eddy\_corrected\_data\_A\_P\_acqparam012\_mporder12\_json.eddy\_rotated\_bvecs --bvals=/home/ainara/Desktop/DTI\_LND/Orginal\_GZ\_20201006T070724Z\_001/Orginal\_GZ/NC/30119\_GT2426/bvals.bval

**5. TBSS**

5.1. tbss\_1\_preproc \*.nii.gz

5.2. tbss\_2\_reg -n

5.3. tbss\_3\_postreg -S

5.4. tbss\_4\_prestats 0.2

**6. Randomise**

randomise -i ../../all\_FA\_skeletonised.nii.gz -o LNDLNV12vsNC8\_age\_TIV\_sec -m ../../mean\_FA\_skeleton\_mask.nii.gz -d LNDLNV12vsNC8\_age\_TIV\_sec.mat -t LNDLNV12vsNC8\_age\_TIV\_sec.con -n 5000 --T2 -V -D --uncorrp

Covariates were all converted into Z scores: age, TIV and DTI sequence.