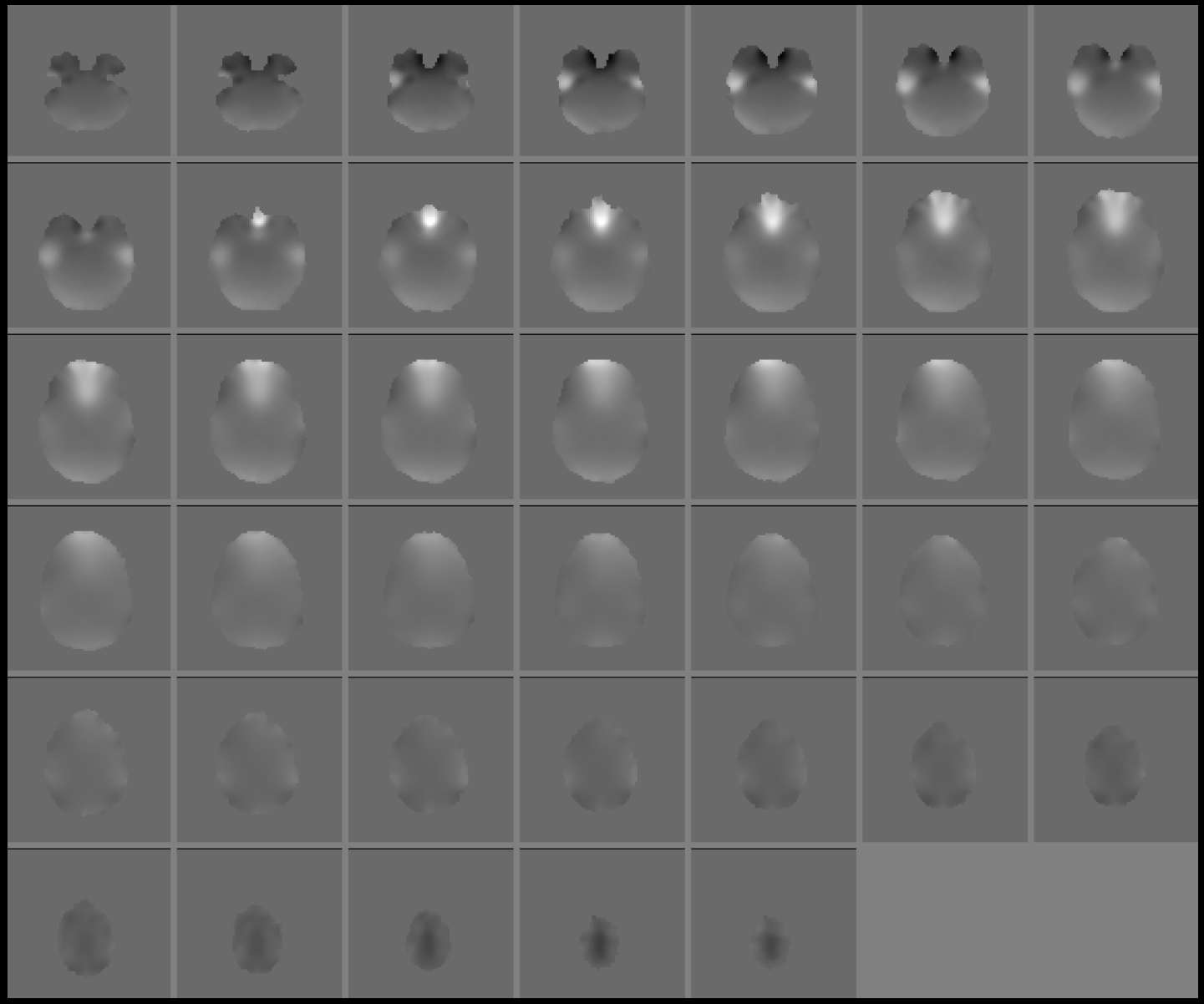
# Fieldmap (ΔB)



# Fieldmap data processing

** Covert fieldmap data from the scanner
Best way: output as PAR/REC, use dcm2nii to convert fieldmap data to .nii

** resample the fieldmap data to match the voxel resolution of imaging data if not the same

** rescale the fieldmap so that the unit is rad
fslmaths ./fieldmap.img -mul 6.28 -mul ./brain_mask.nii.gz ./fm_rads_brain

** fieldmap regularation
fugue --loadfmap=fm_rads_brain -s 3 -m --despike --savefmap=fm_rads_brain_sm3_m_ds

** fieldmap unwrap
fugue -i ../fMRI_S2_PA_14.img --dwell=0.0002128 --loadfmap=fm_rads_brain_sm3_m_ds
--unwarpdir=y- -u fMRI_S2_PA_uw

# Some notes

- After motion correction
- Work better for “stretched” distortion than compressed (pile-up) distortion
- Will not correct signal drop out
- Try both y+ and y- in the script
- Divide esp (dwell time) by the SENSE factor