

Dartmouth Brain Imaging Center (DBIC)

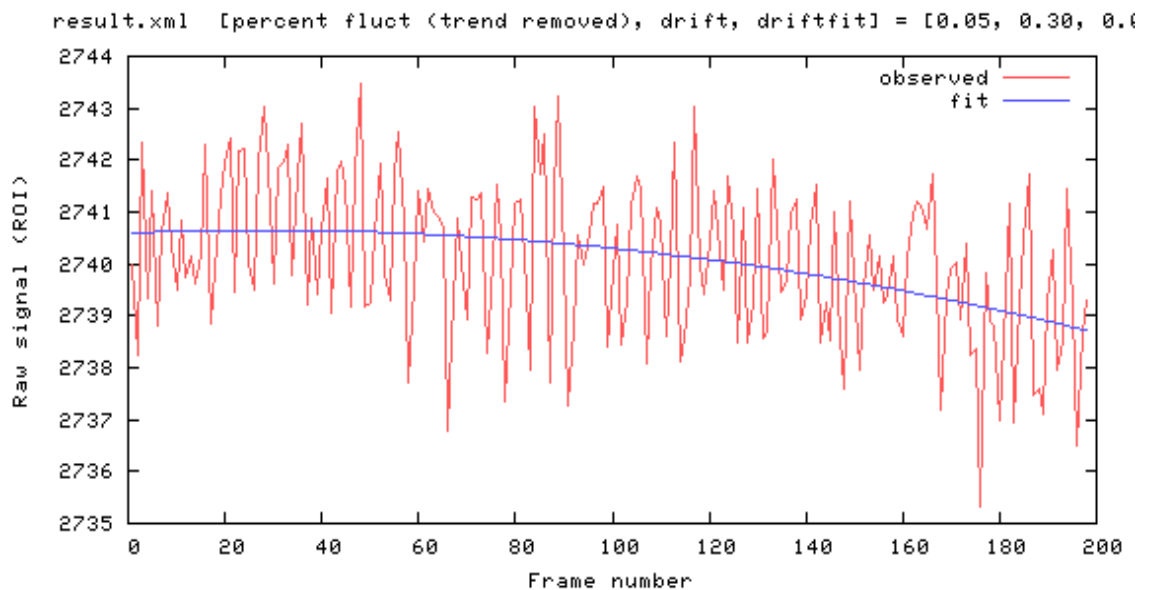
QA Report 64 CH

12162024

Measurements

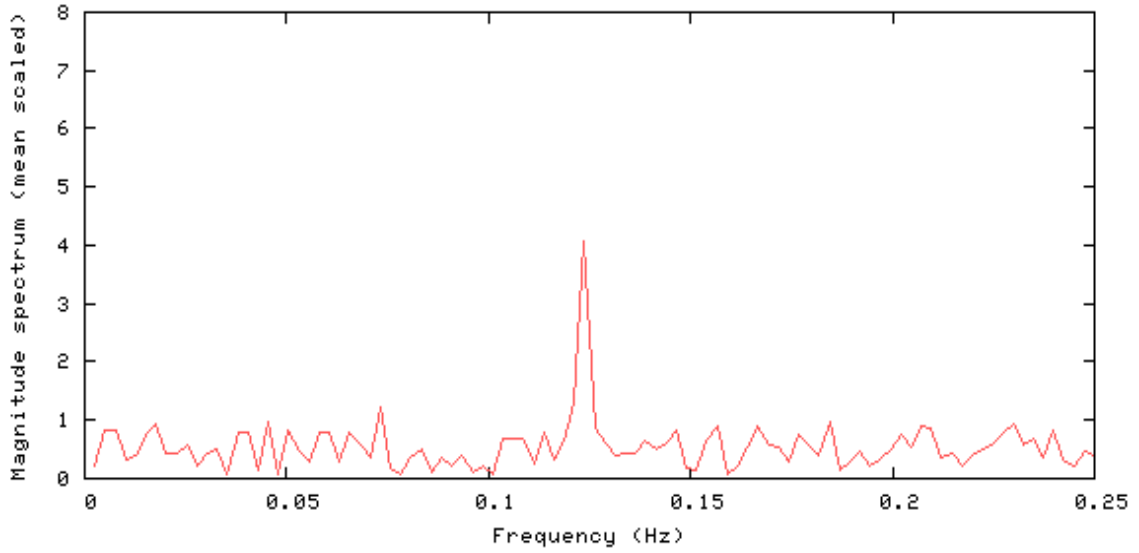
Measurements	Value
mean signal (mean)	2740.1
Signal to Noise Ratio (SNR)	198.9
Signal to Fluctuation Ratio (SFNR)	203.9
Percent Fluctuation	0.05
Drift	0.30
Radius of Decorrelation (RDC)	10.7
Mean Ghost Percentage	2.116
Standard Deviation (std)	1.38

Signal



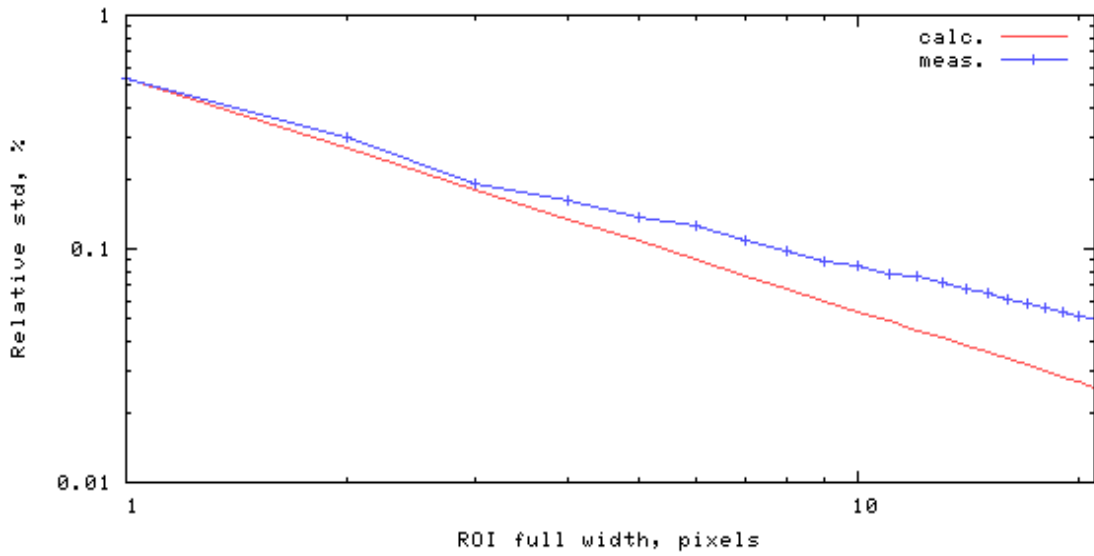
Frequency Spectrum

[mean, SNR, SFNR] = [2740.1 198.9 203.9]



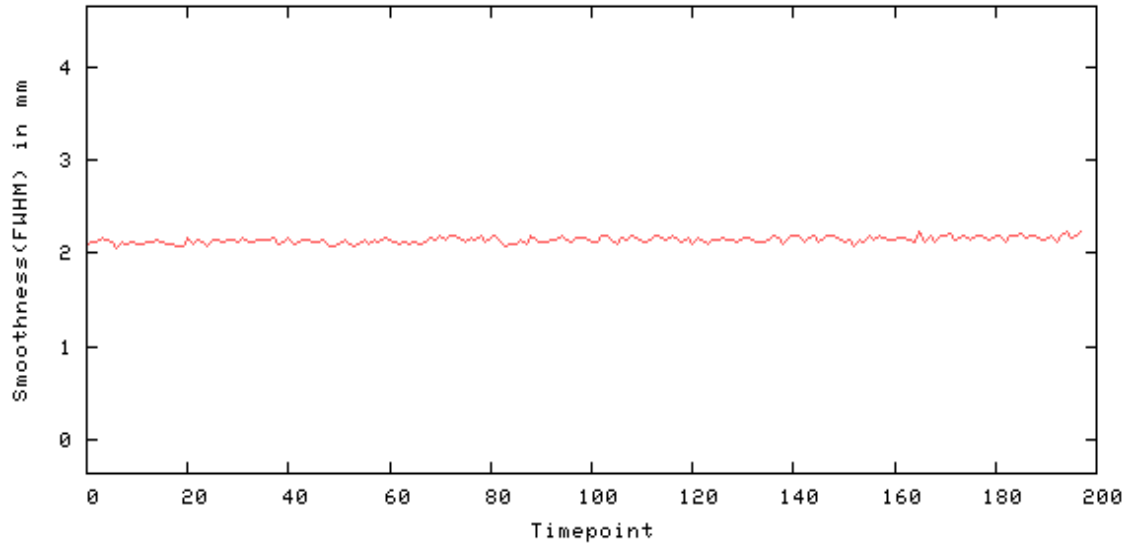
Radius of Decorrelation

rdc = 10.7 pixels



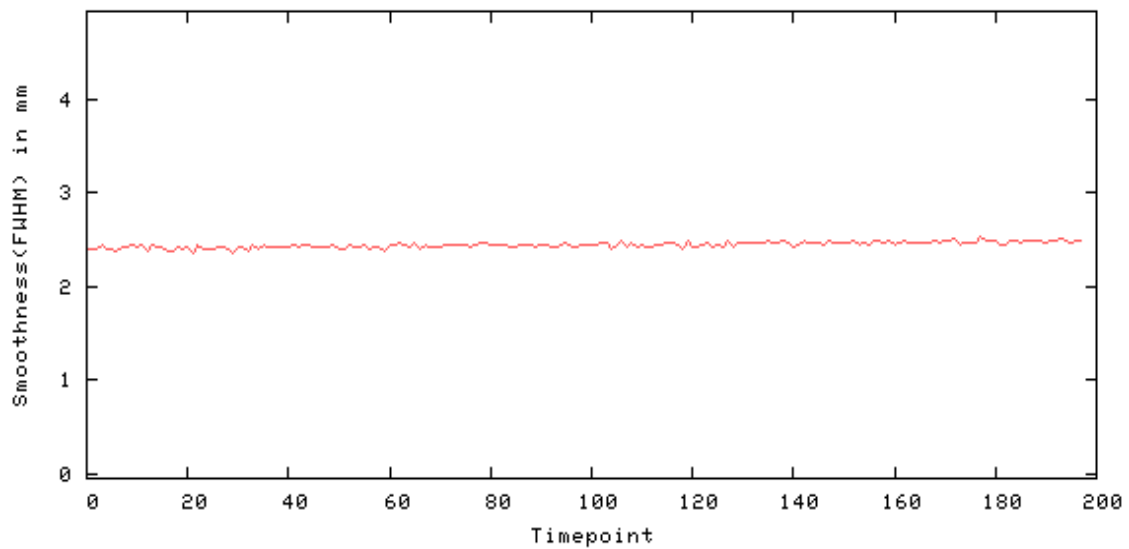
Smoothness - X

Smoothness(FWHM) in mm - X: [min mean max] = [2.049 2.142 2.241]



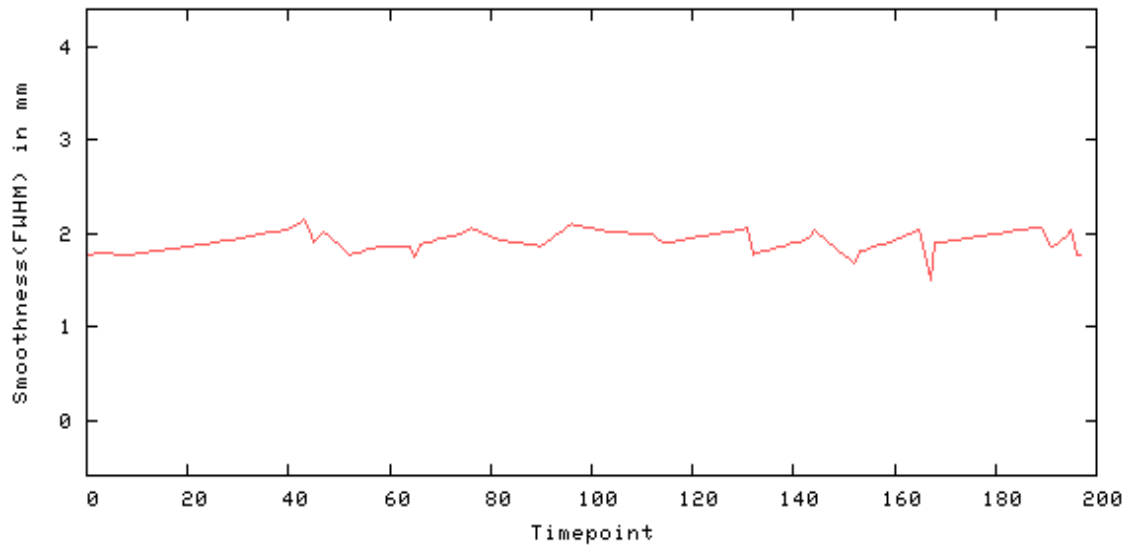
Smoothness - Y

Smoothness(FWHM) in mm - Y: [min mean max] = [2.362 2.448 2.531]



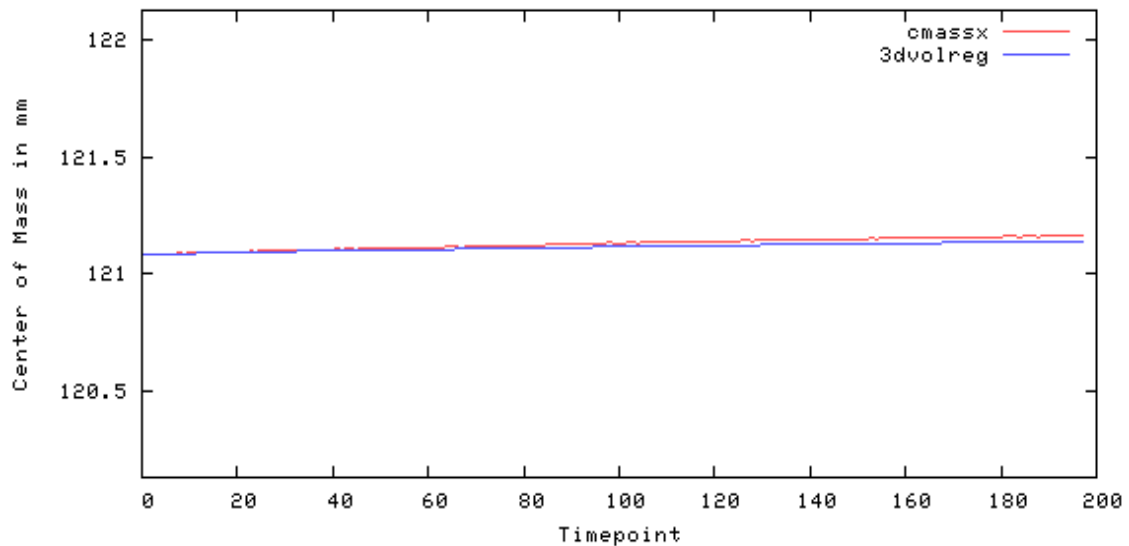
Smoothness - Z

Smoothness(FWHM) in mm - Z: [min mean max] = [1.497 1.904 2.146]



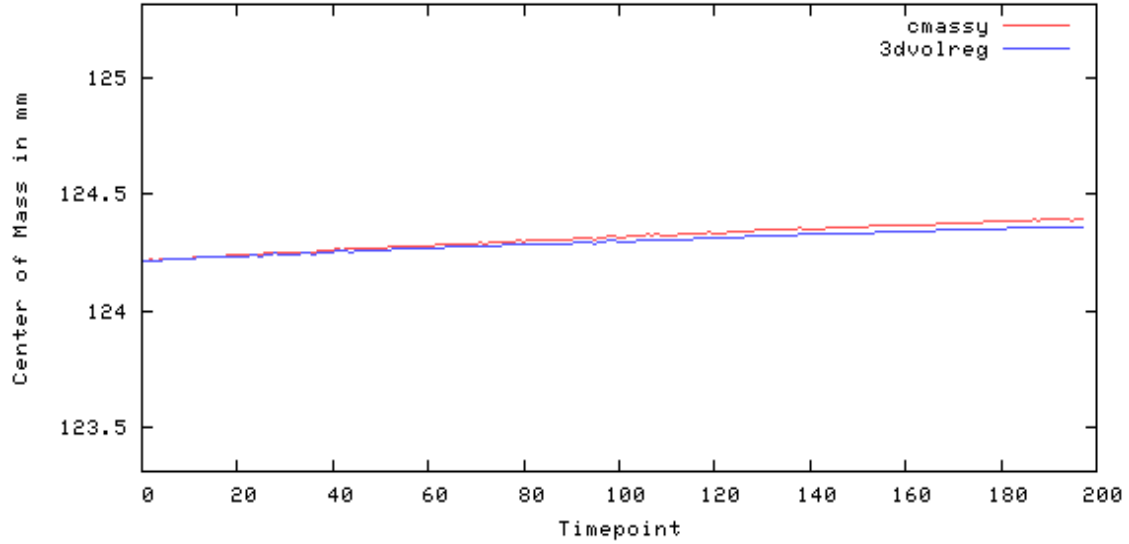
Center of Mass - X

Center of Mass in mm - X: [maxdisplacement drift] = [0.085 0.083]



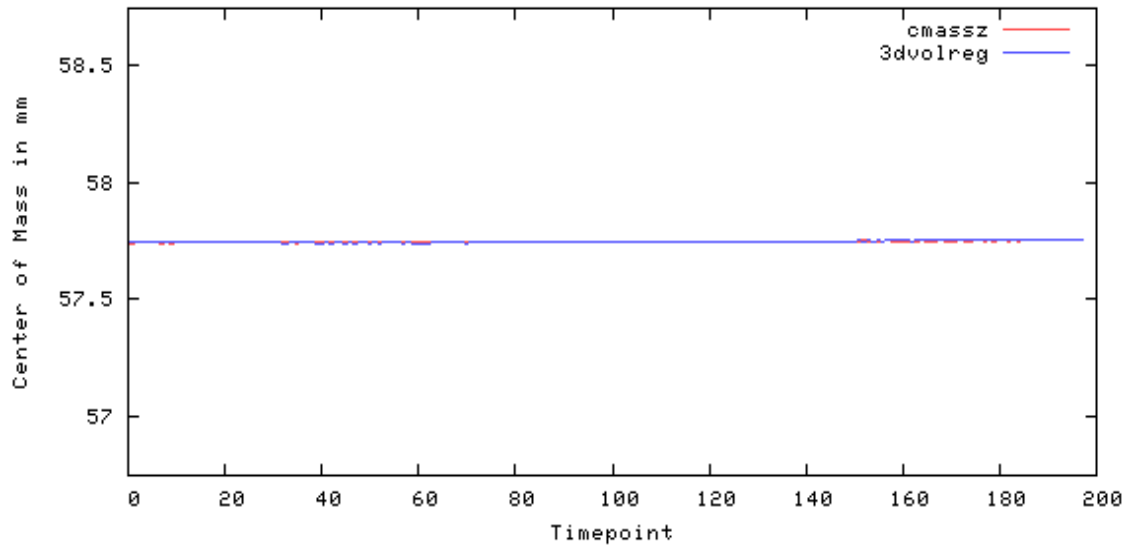
Center of Mass - Y

Center of Mass in mm - Y: [maxdisplacement drift] = [0.185 0.186]



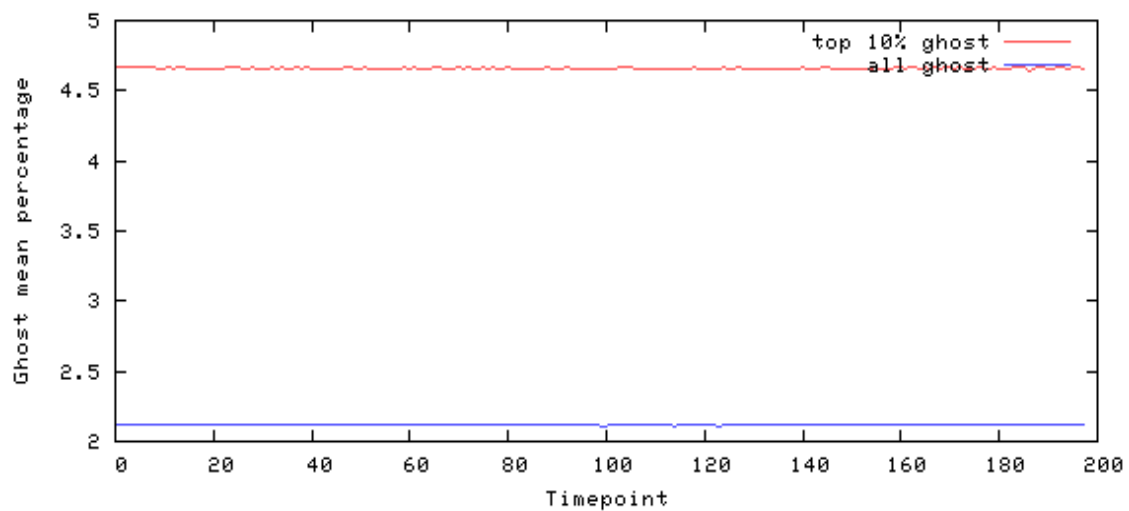
Center of Mass - Z

Center of Mass in mm - Z: [maxdisplacement drift] = [0.014 0.007]

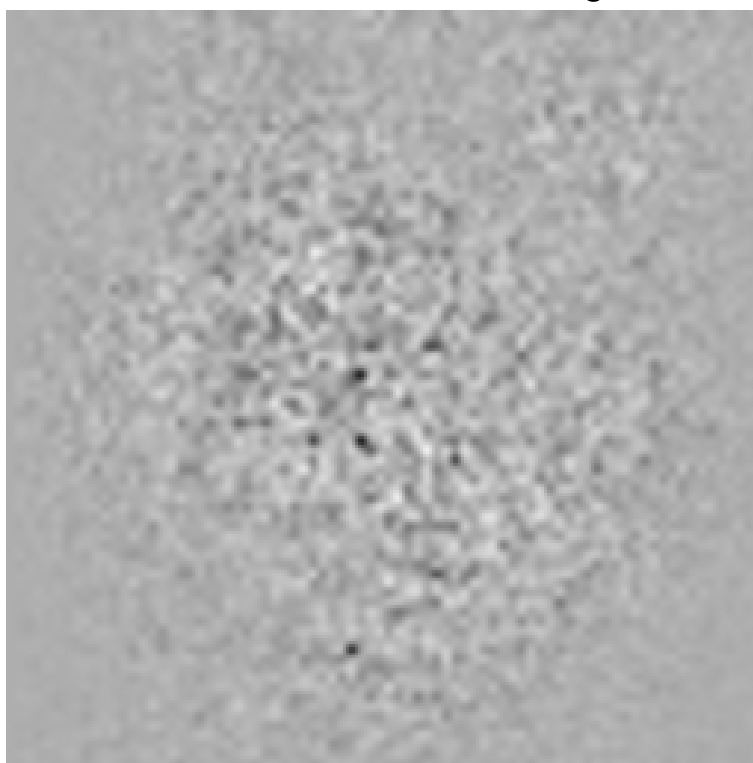


Ghost

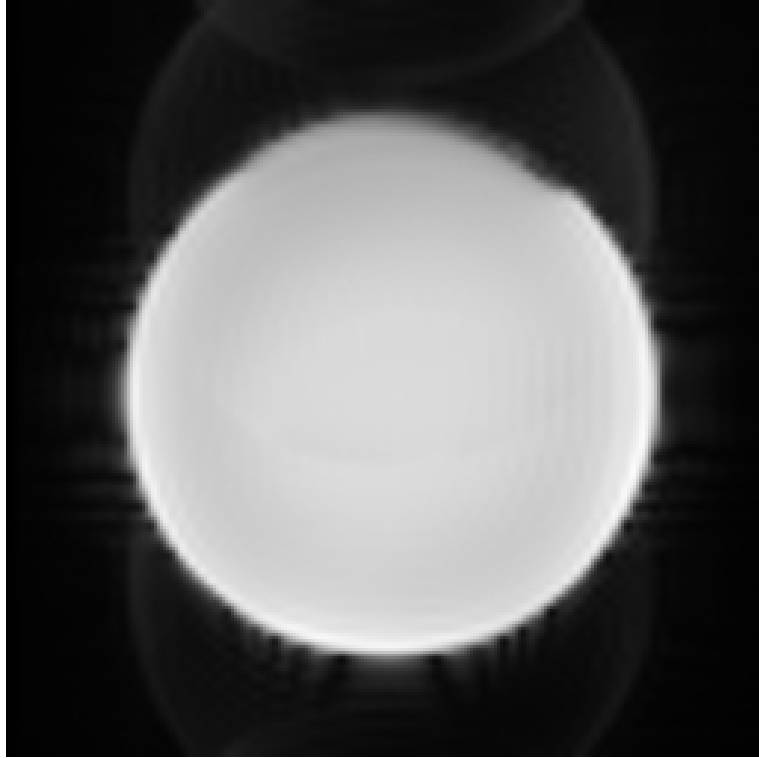
Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.116, 4.660)
(lower is better)



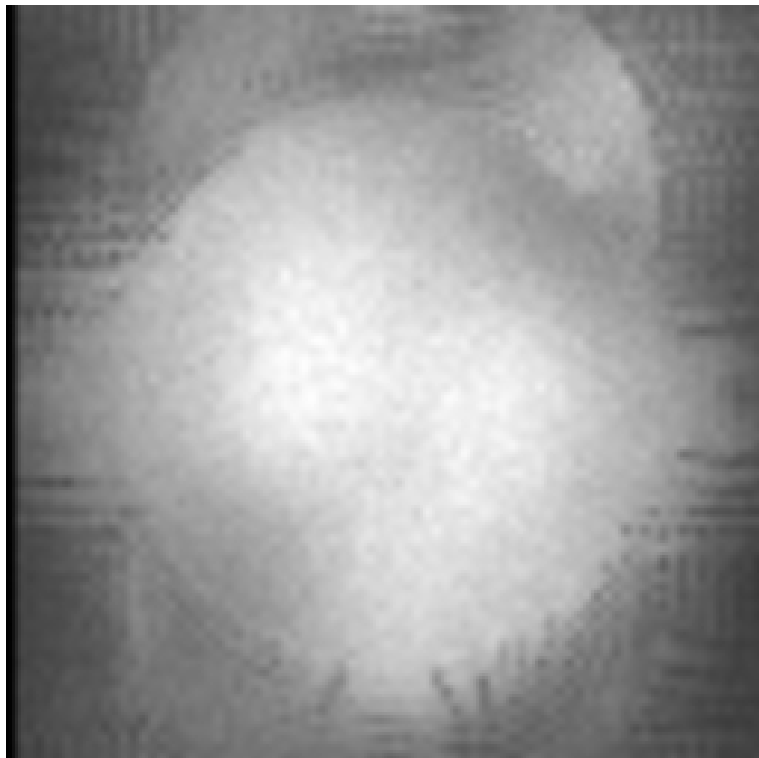
Odd-Even Difference Image



Mean Image



Standard Deviation Image



SFNR Image

