

# Dartmouth Brain Imaging Center (DBIC)

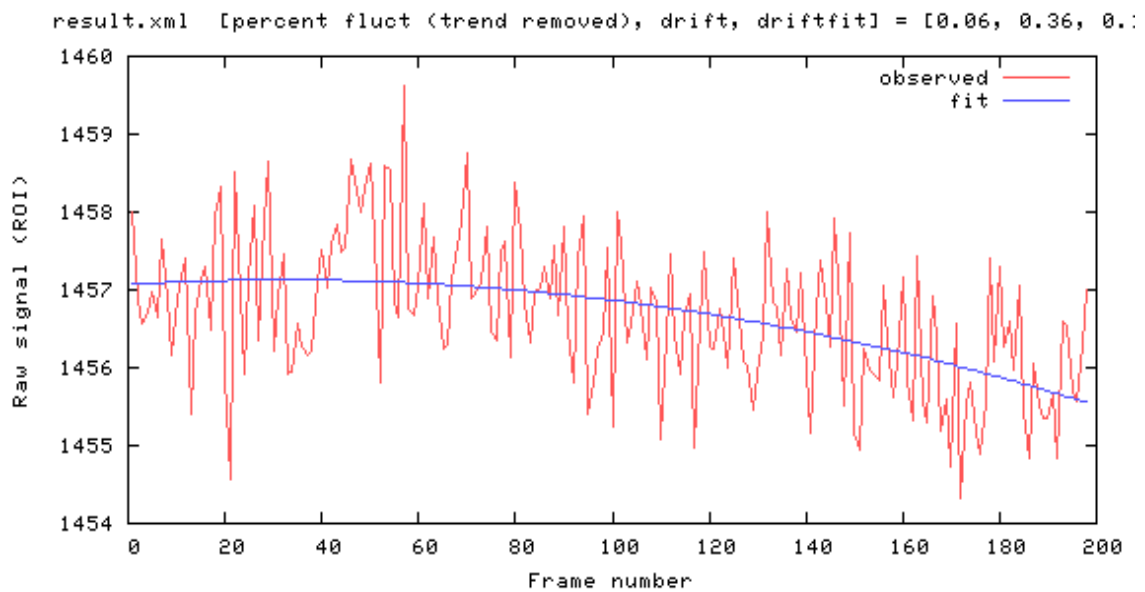
## QA Report 32 CH

08212023

### Measurements

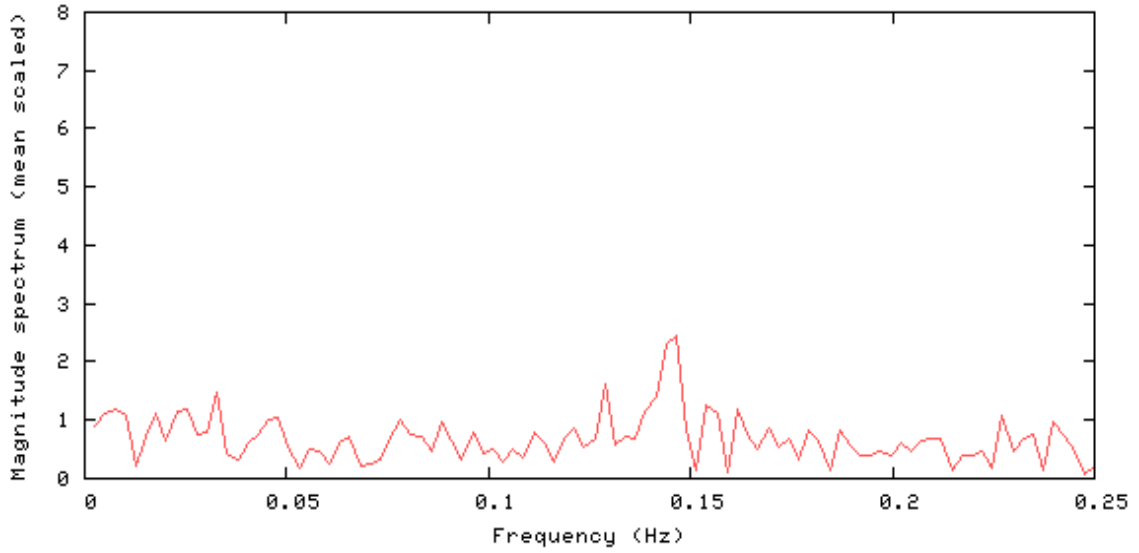
Measurements	Value
mean signal (mean)	1456.7
Signal to Noise Ratio (SNR)	241.2
Signal to Fluctuation Ratio (SFNR)	252.2
Percent Fluctuation	0.06
Drift	0.36
Radius of Decorrelation (RDC)	6.6
Mean Ghost Percentage	2.188
Standard Deviation (std)	0.83

### Signal



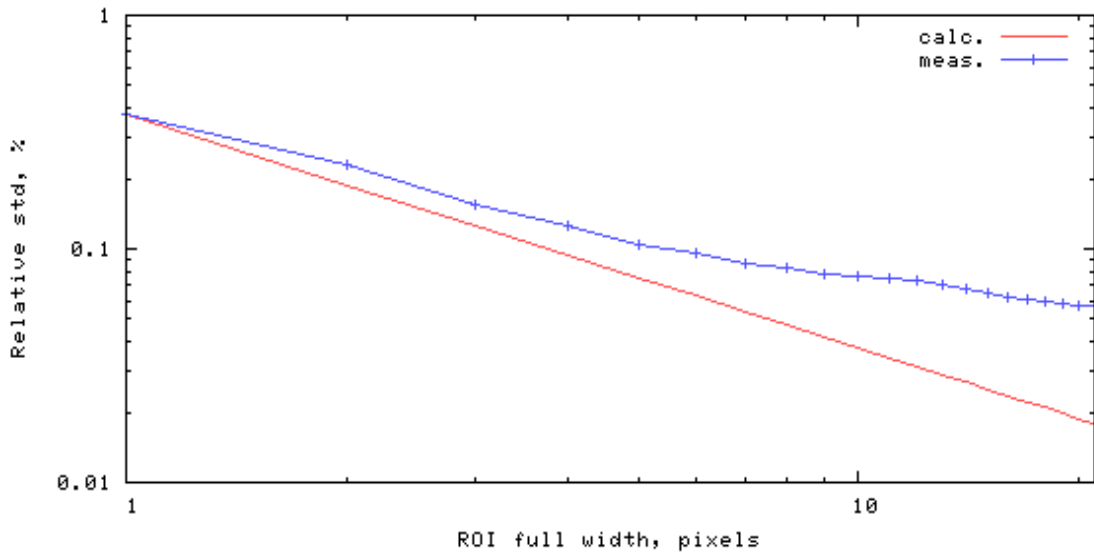
# Frequency Spectrum

[mean, SNR, SFNR] = [1456.7 241.2 252.2]



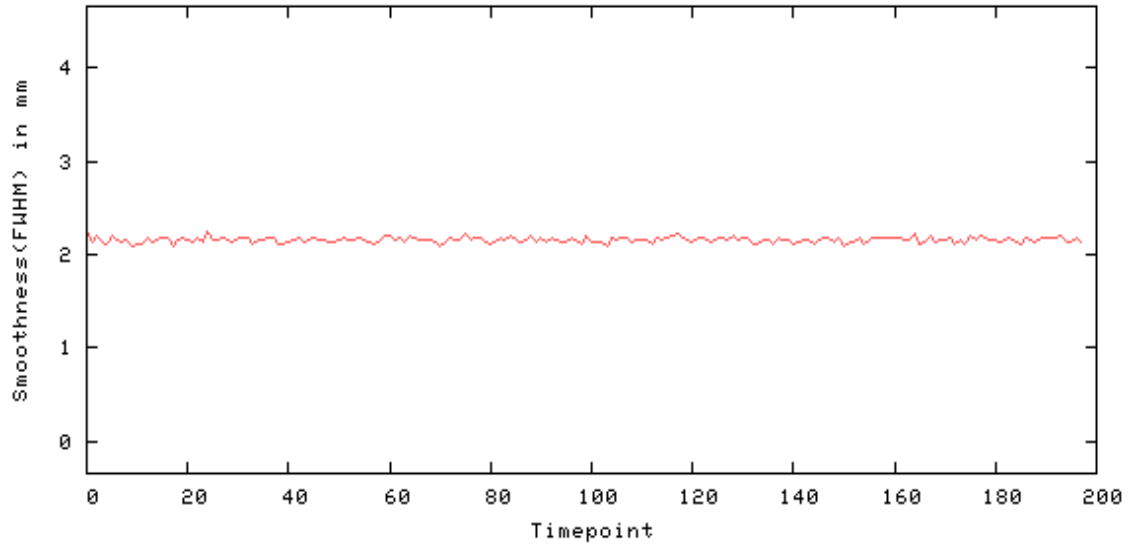
# Radius of Decorrelation

rdc = 6.6 pixels



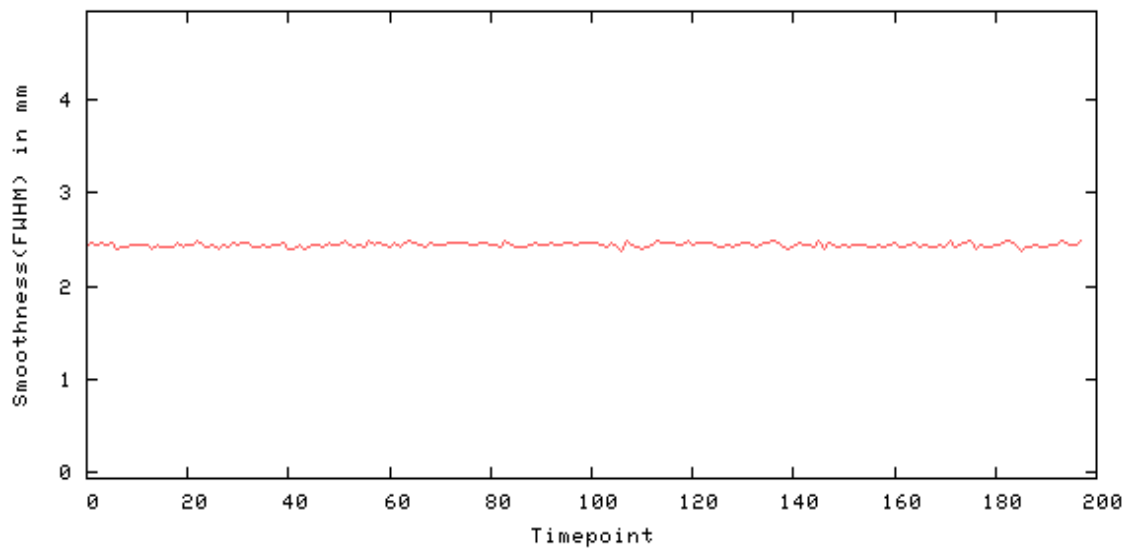
## Smoothness - X

Smoothness(FWHM) in mm - X: [min mean max] = [2.086 2.156 2.236]



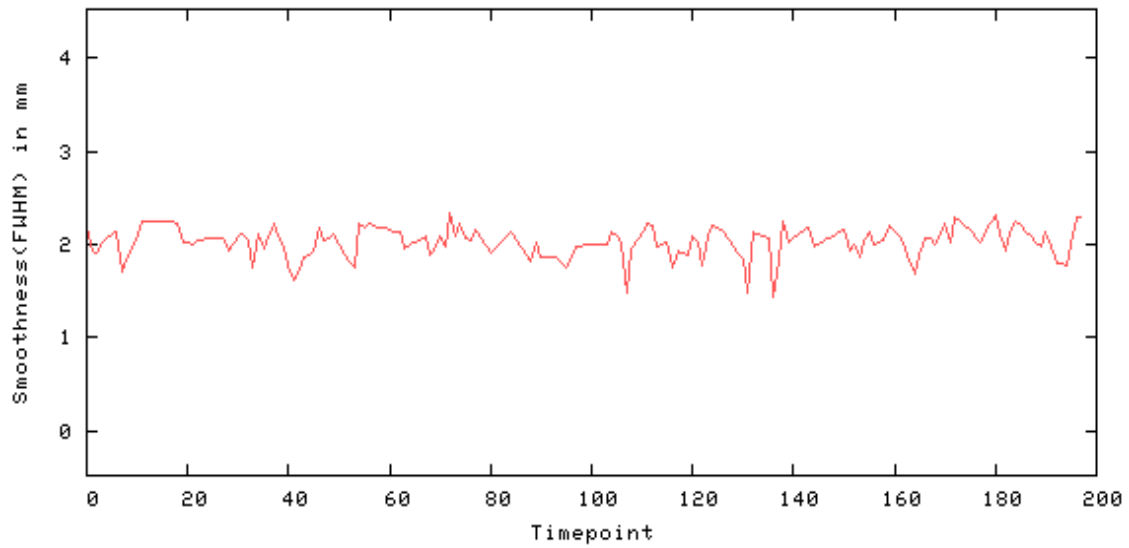
## Smoothness - Y

Smoothness(FWHM) in mm - Y: [min mean max] = [2.380 2.442 2.494]



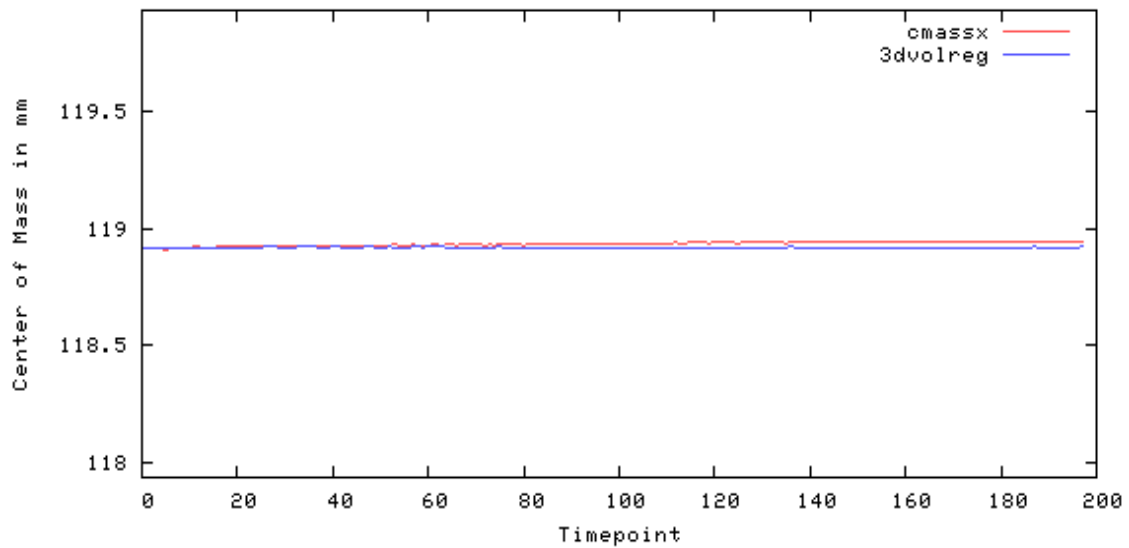
## Smoothness - Z

Smoothness(FWHM) in mm - Z: [min mean max] = [1.432 2.021 2.333]



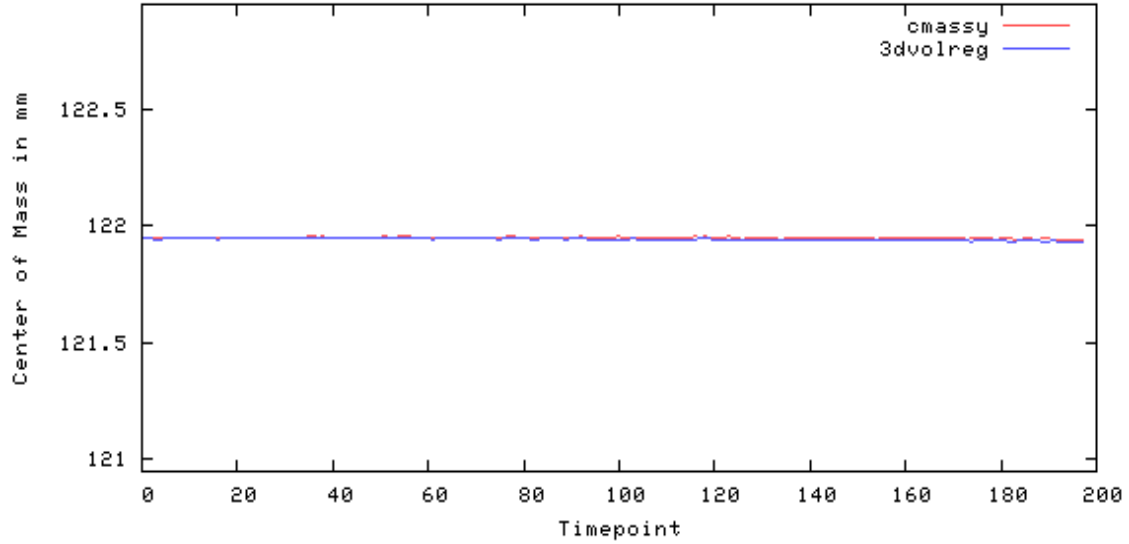
## Center of Mass - X

Center of Mass in mm - X: [maxdisplacement drift] = [0.037 0.027]



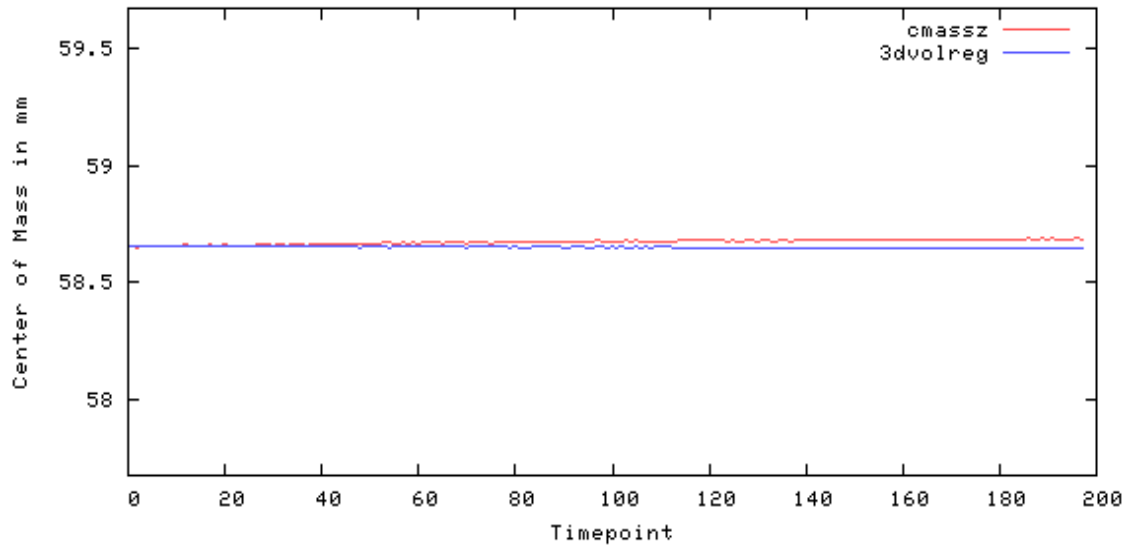
## Center of Mass - Y

Center of Mass in mm - Y: [maxdisplacement drift] = [0.016 -0.006]



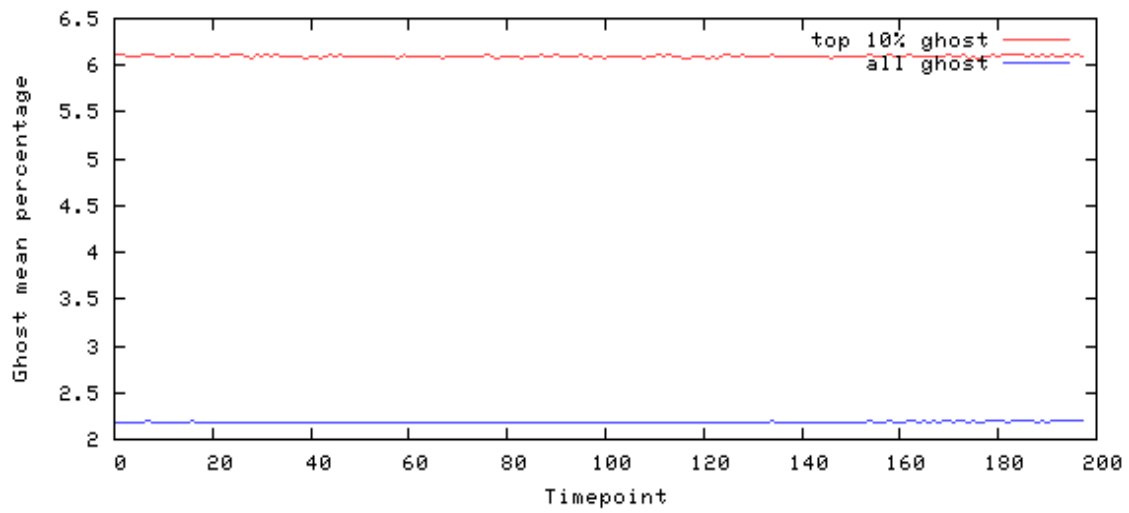
## Center of Mass - Z

Center of Mass in mm - Z: [maxdisplacement drift] = [0.037 0.032]

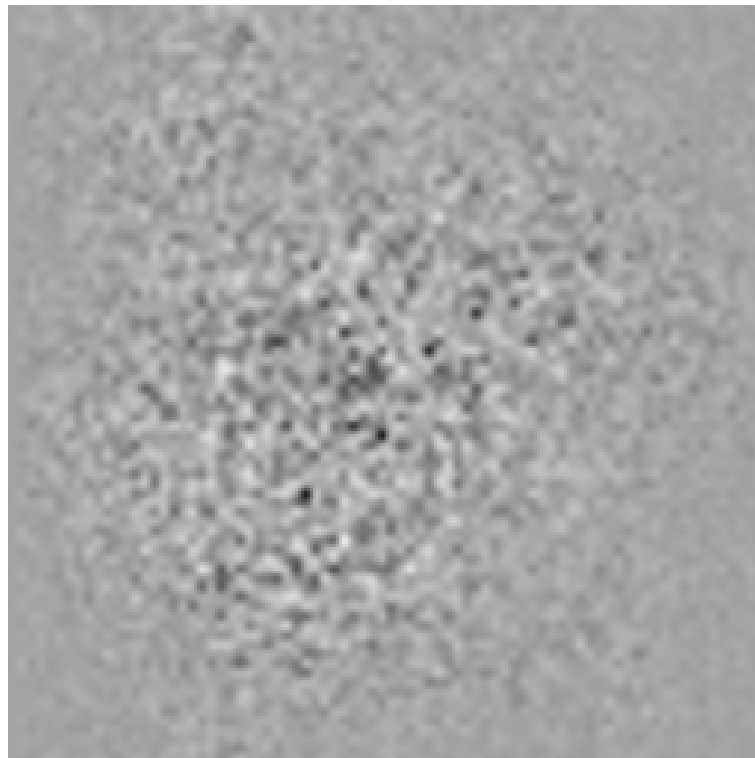


# Ghost

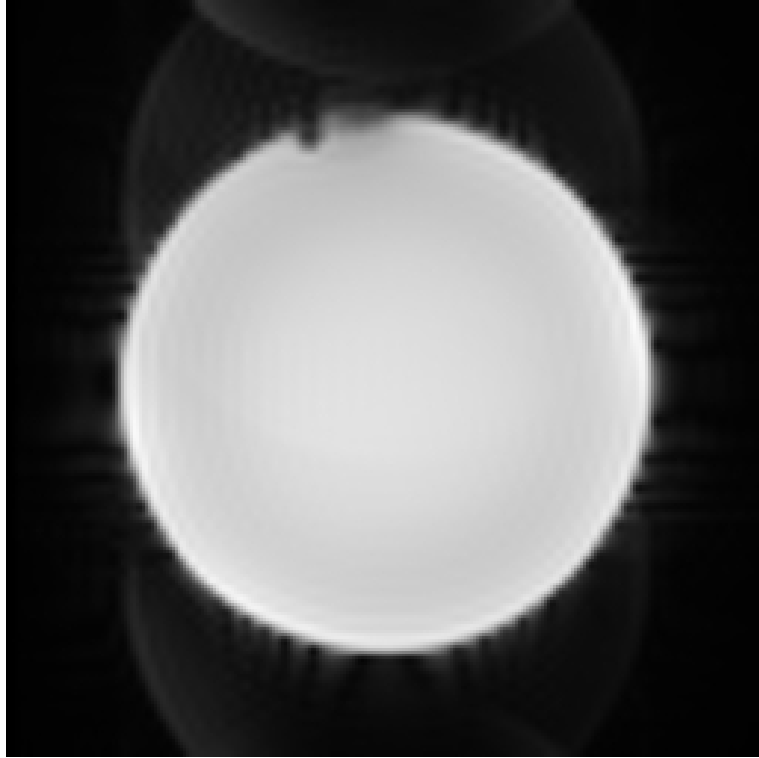
Mean of ghost voxels as % of non-ghost [masked] mean  
(ghostmean, brightghostmean) = (2.188, 6.098)  
(lower is better)



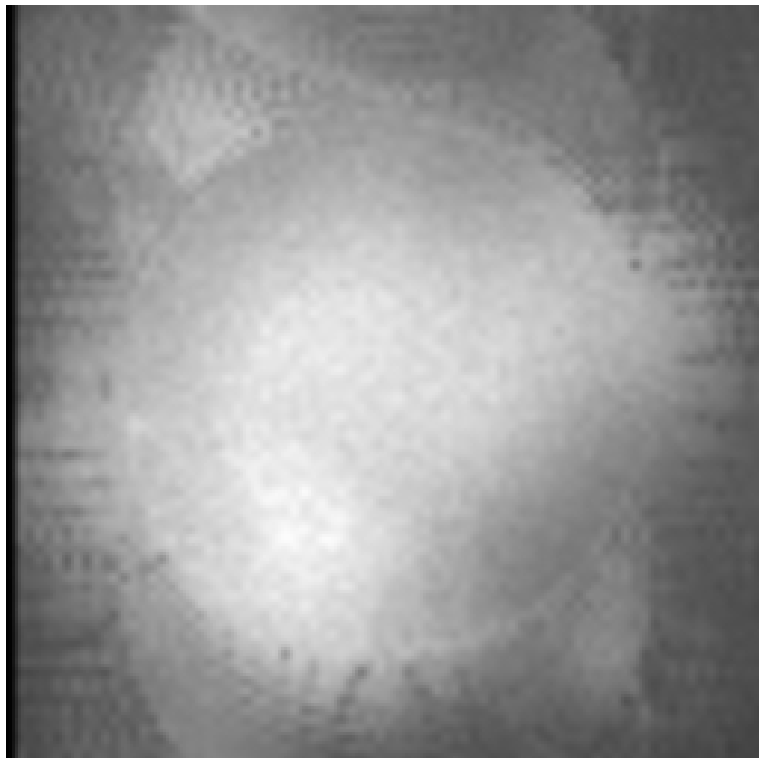
## Odd-Even Difference Image



Mean Image



Standard Deviation Image



SFNR Image

