

# Dartmouth Brain Imaging Center (DBIC)

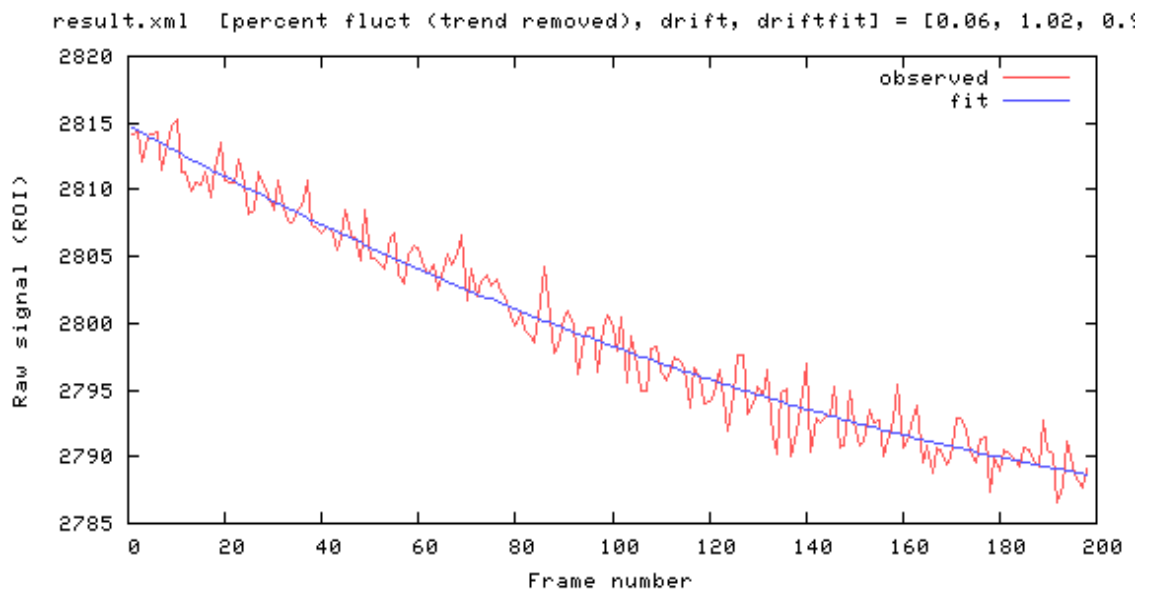
## QA Report 64 CH

05202024

### Measurements

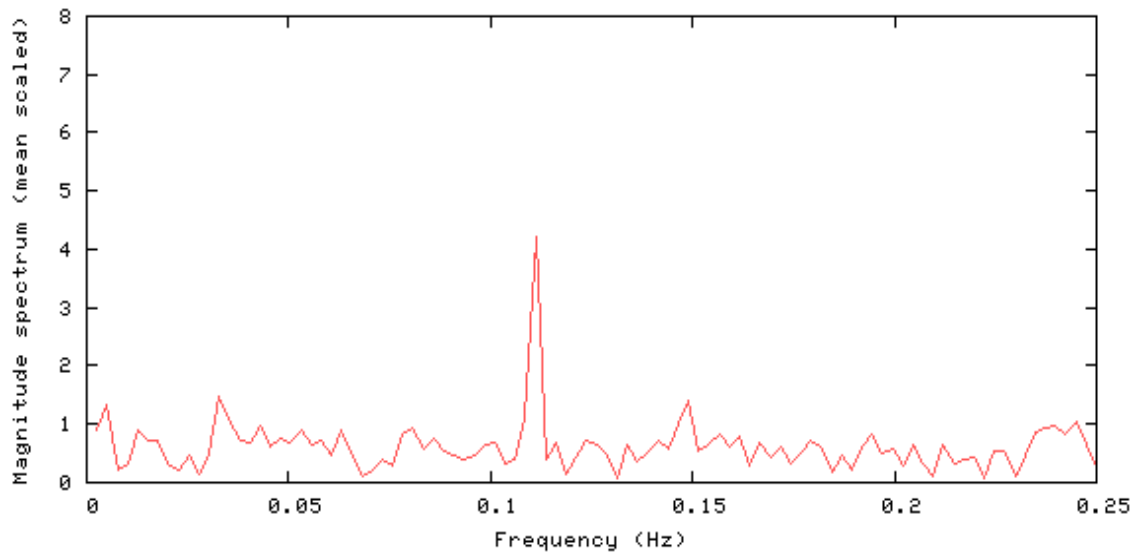
| Measurements                       | Value  |
|------------------------------------|--------|
| mean signal (mean)                 | 2799.5 |
| Signal to Noise Ratio (SNR)        | 181.9  |
| Signal to Fluctuation Ratio (SFNR) | 194.8  |
| Percent Fluctuation                | 0.06   |
| Drift                              | 1.02   |
| Radius of Decorrelation (RDC)      | 9.5    |
| Mean Ghost Percentage              | 2.145  |
| Standard Deviation (std)           | 1.55   |

### Signal



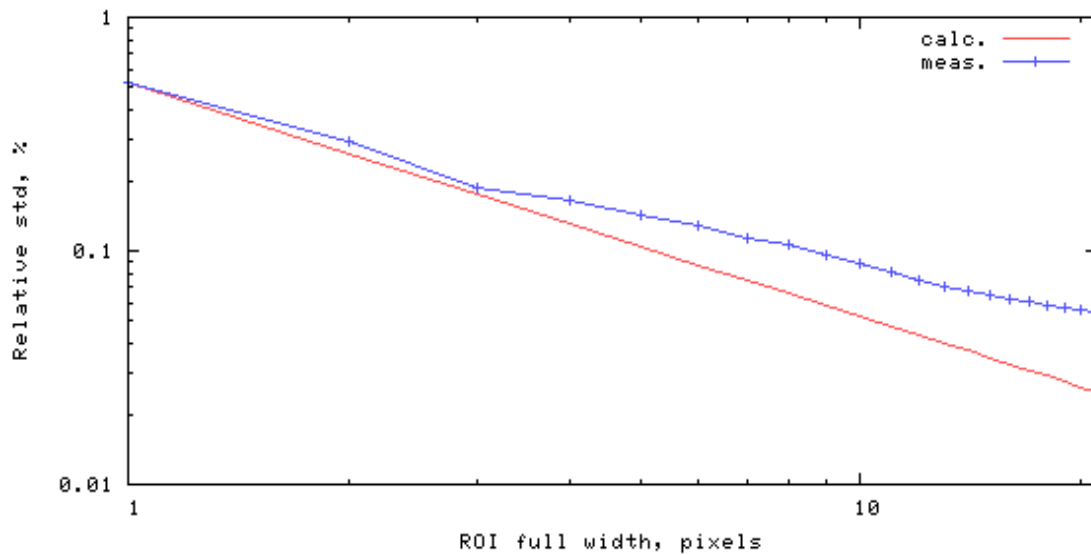
## Frequency Spectrum

[mean, SNR, SFNR] = [2799.5 181.9 194.8]



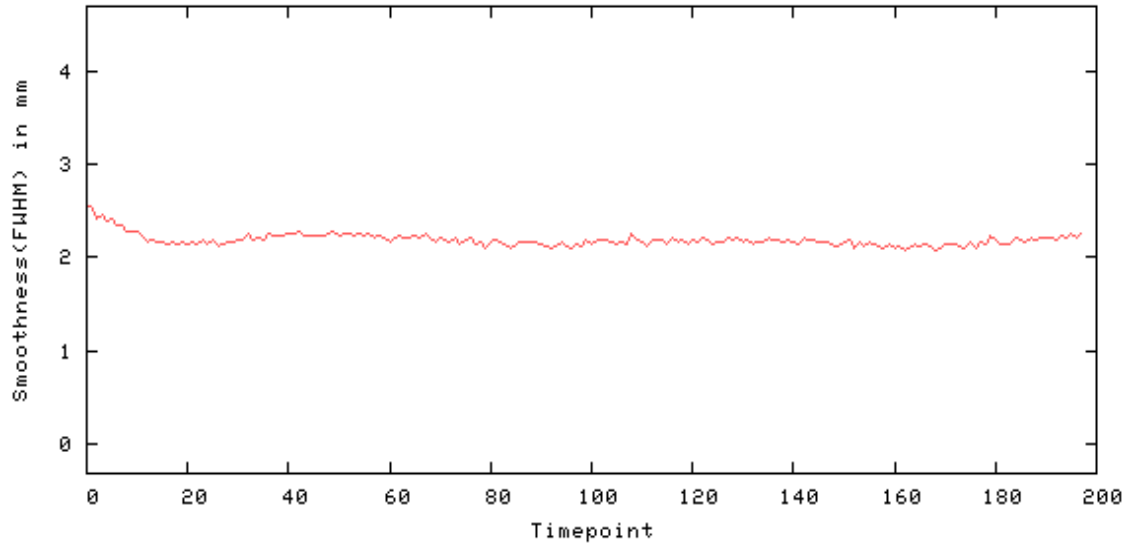
## Radius of Decorrelation

rdc = 9.5 pixels



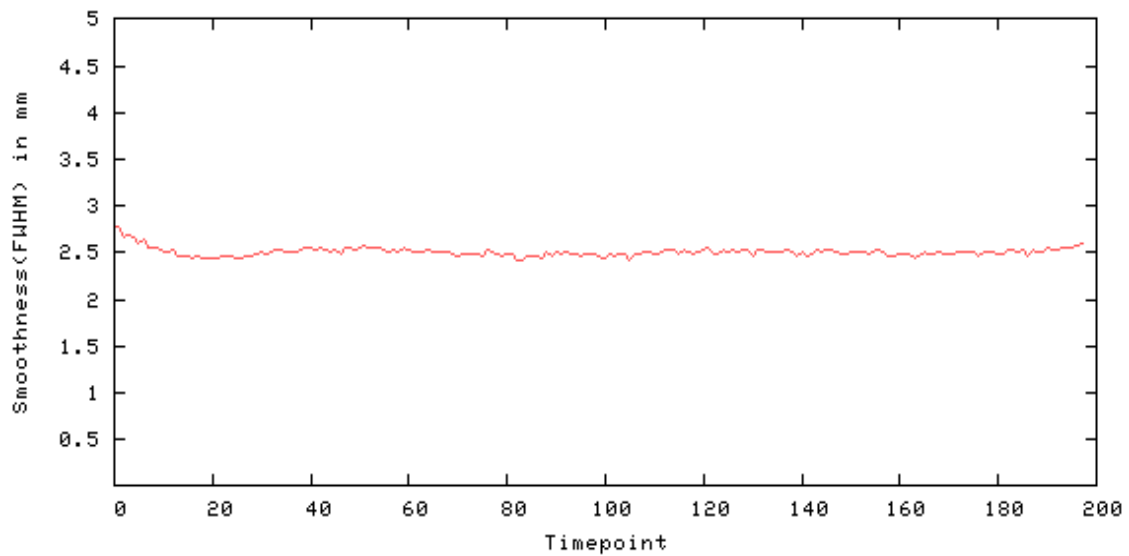
## Smoothness - X

Smoothness(FWHM) in mm - X: [min mean max] = [2.078 2.189 2.574]



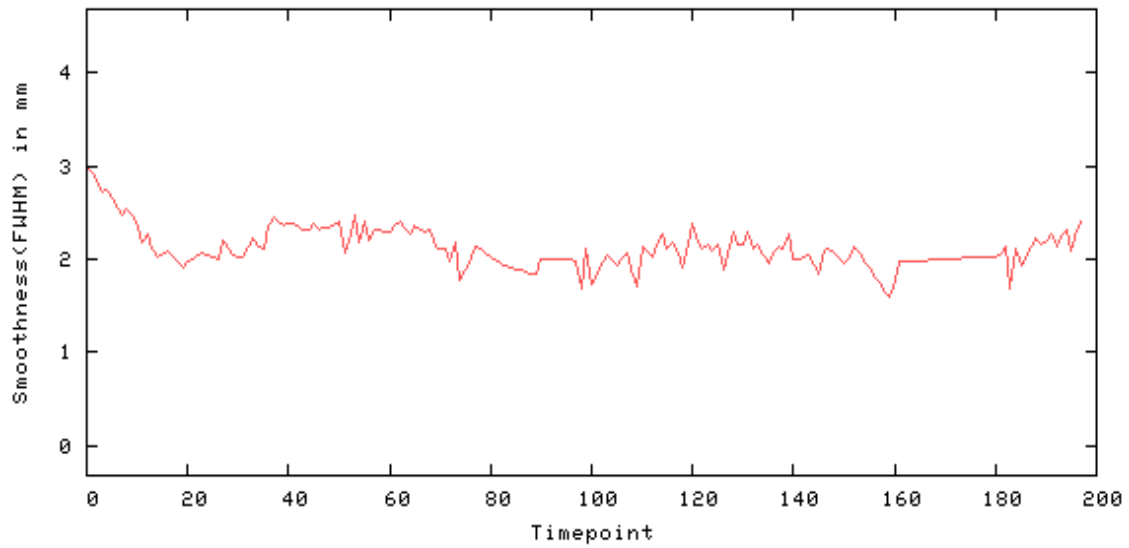
## Smoothness - Y

Smoothness(FWHM) in mm - Y: [min mean max] = [2.409 2.507 2.777]



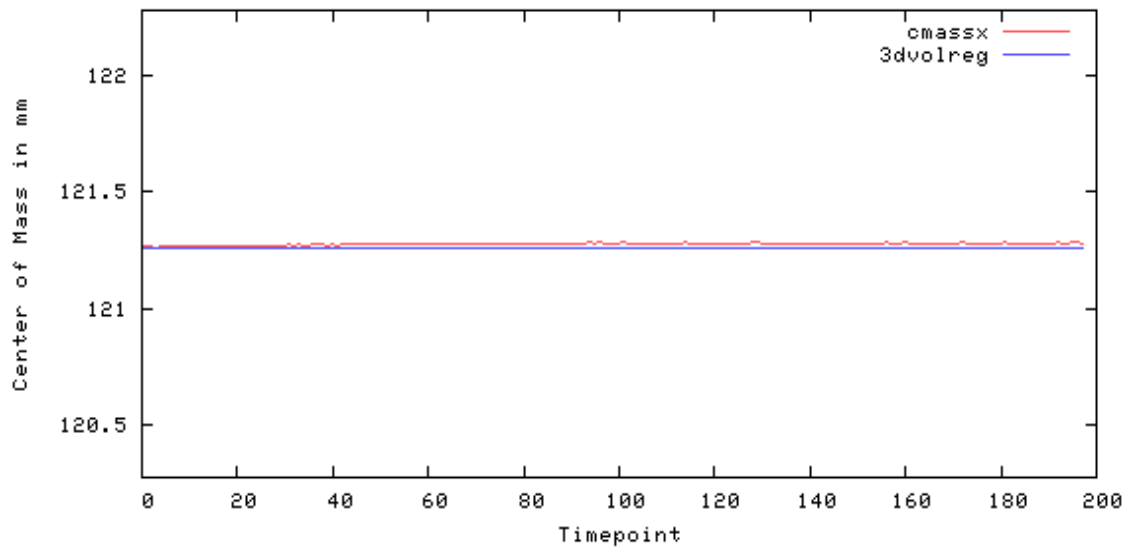
## Smoothness - Z

Smoothness(FWHM) in mm - Z: [min mean max] = [1.588 2.179 3.000]

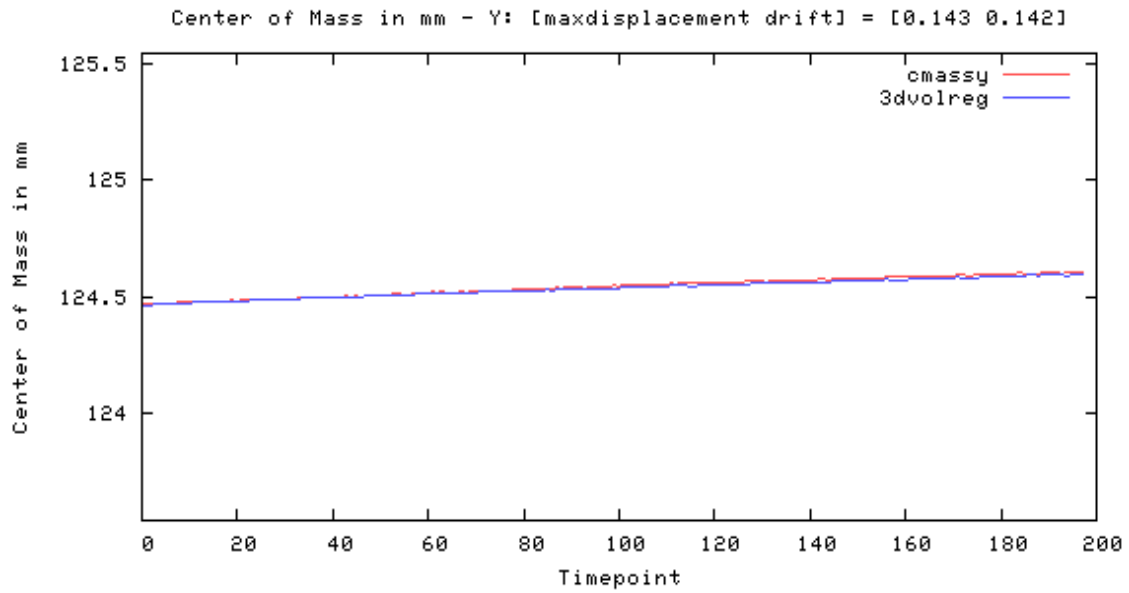


## Center of Mass - X

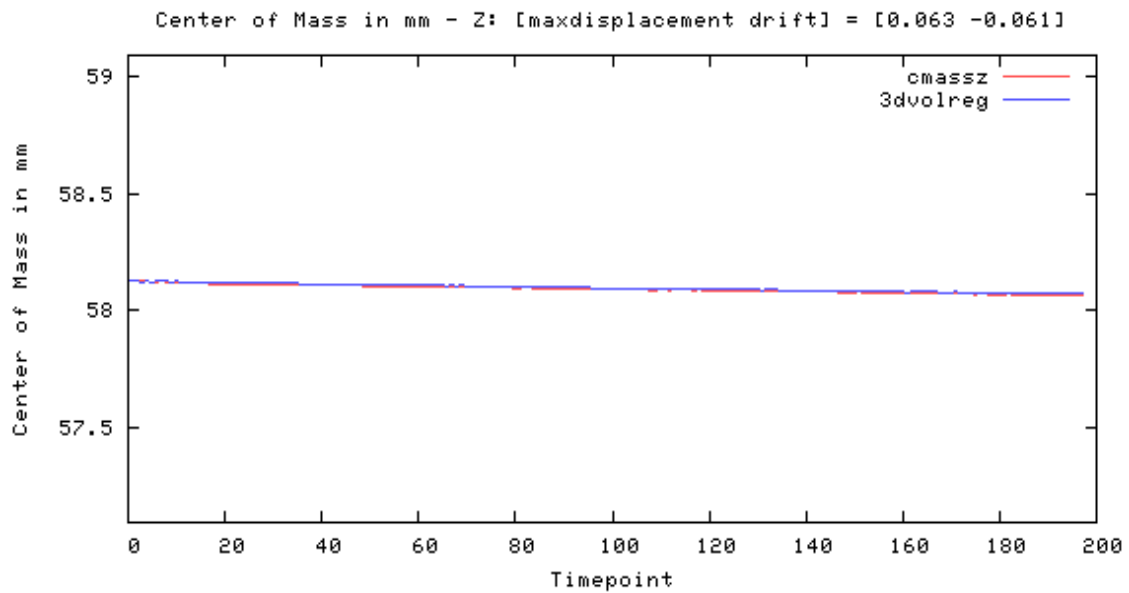
Center of Mass in mm - X: [maxdisplacement drift] = [0.022 0.017]



## Center of Mass - Y

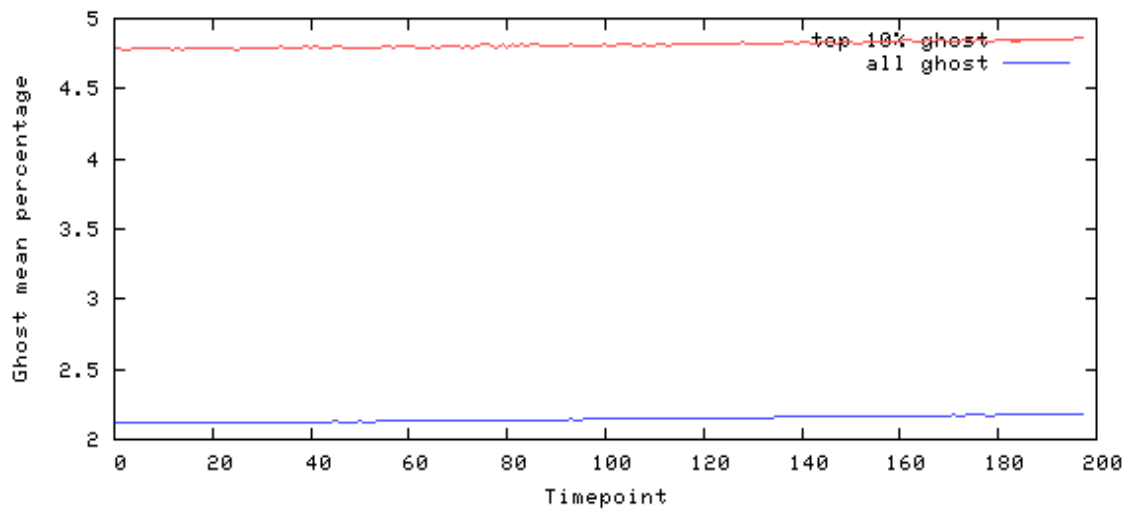


## Center of Mass - Z

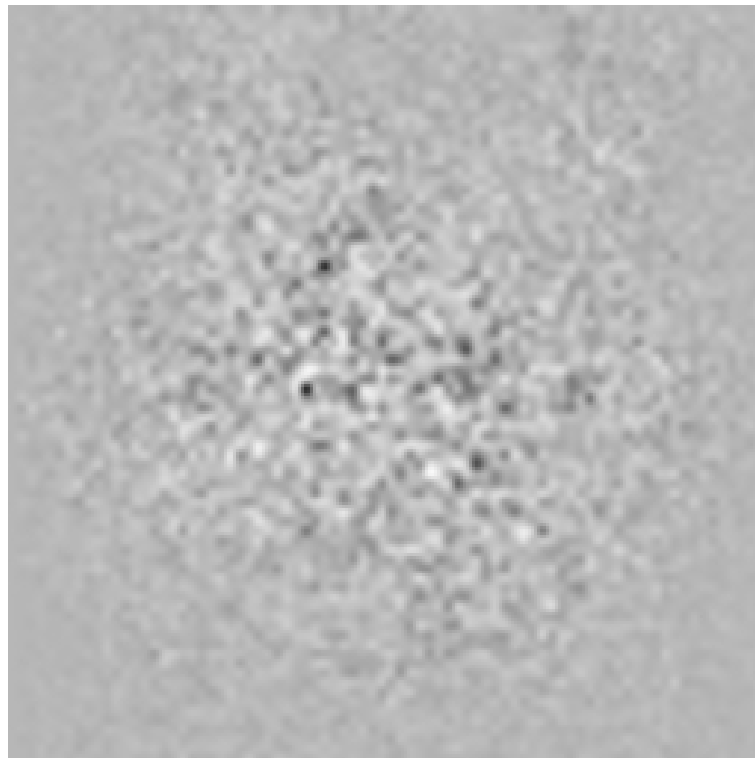


# Ghost

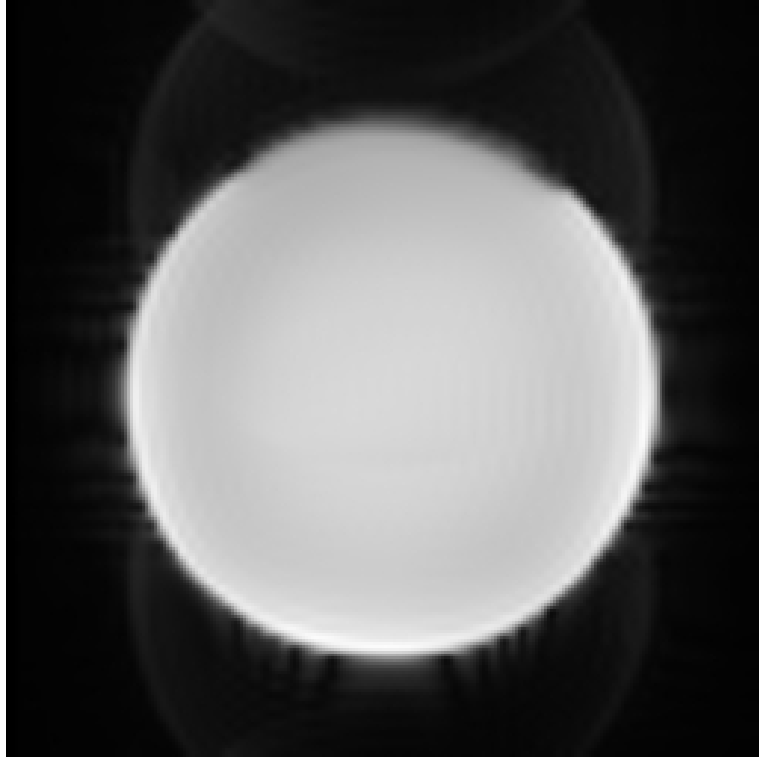
Mean of ghost voxels as % of non-ghost [masked] mean  
(ghostmean, brightghostmean) = (2.145, 4.814)  
(lower is better)



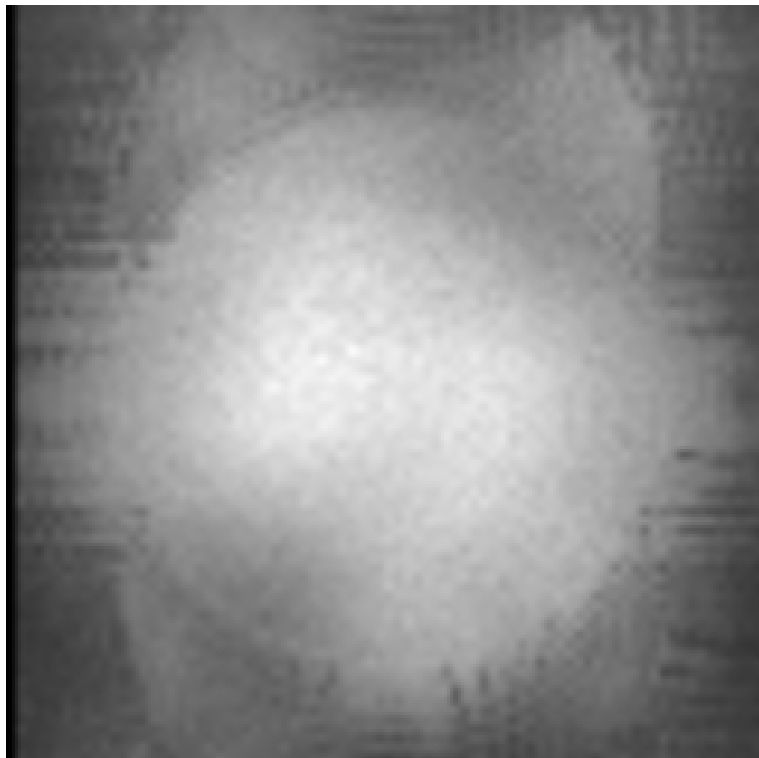
## Odd-Even Difference Image



Mean Image



Standard Deviation Image



SFNR Image

