

Dartmouth Brain Imaging Center (DBIC)

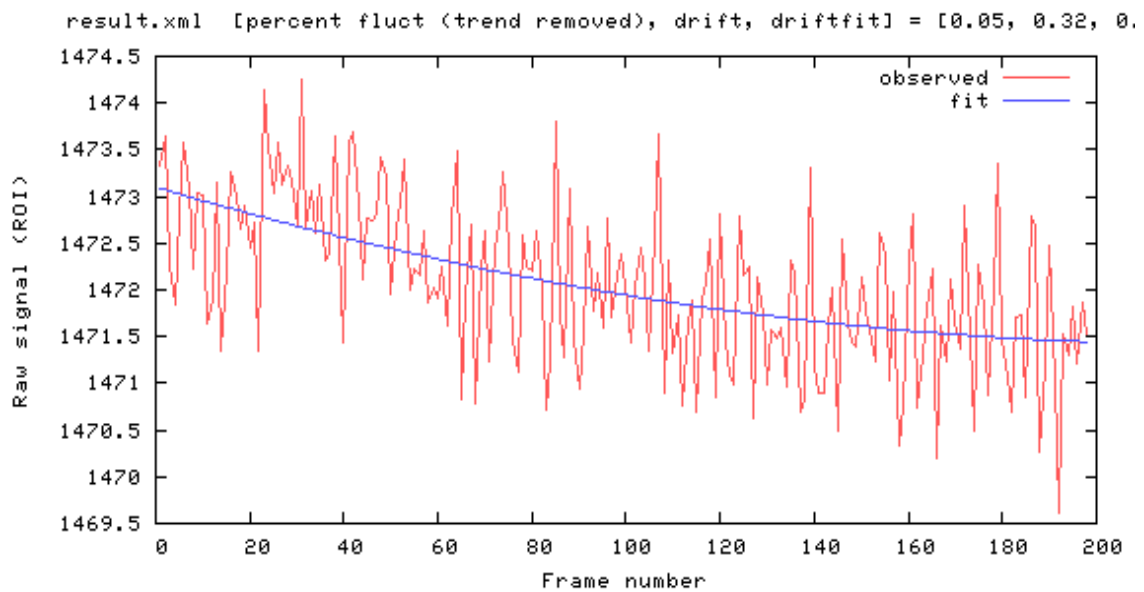
QA Report 32 CH

01032023

Measurements

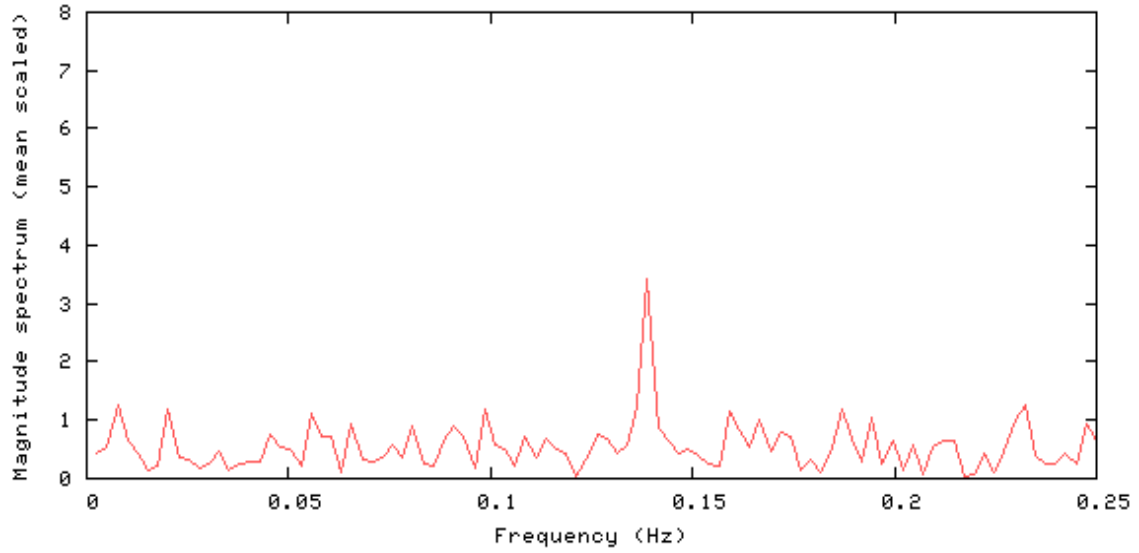
| Measurements | Value |
|------------------------------------|--------|
| mean signal (mean) | 1472.1 |
| Signal to Noise Ratio (SNR) | 247.7 |
| Signal to Fluctuation Ratio (SFNR) | 239.0 |
| Percent Fluctuation | 0.05 |
| Drift | 0.32 |
| Radius of Decorrelation (RDC) | 8.6 |
| Mean Ghost Percentage | 1.966 |
| Standard Deviation (std) | 0.73 |

Signal



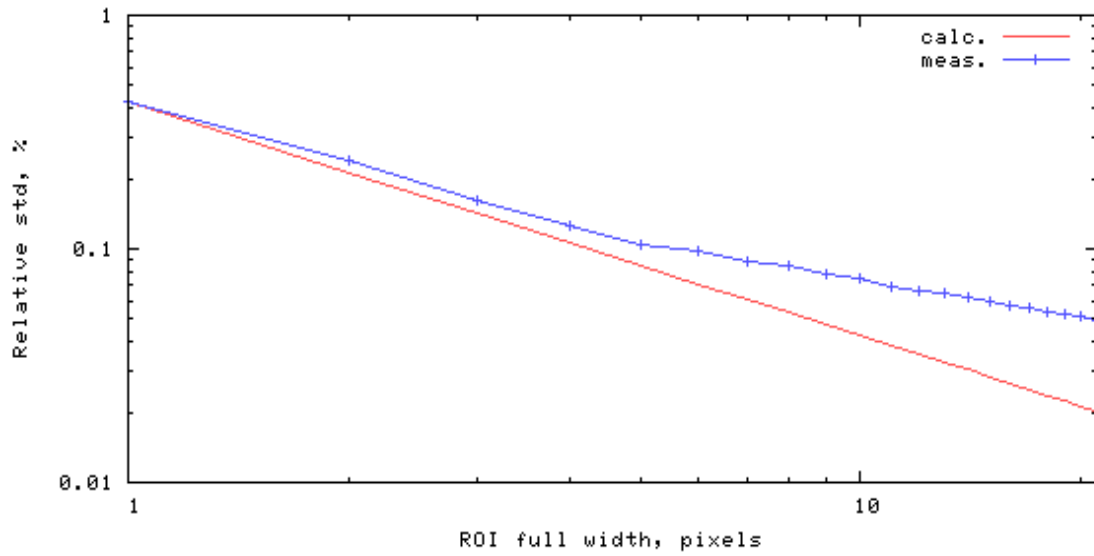
Frequency Spectrum

[mean, SNR, SFNR] = [1472.1 247.7 239.0]



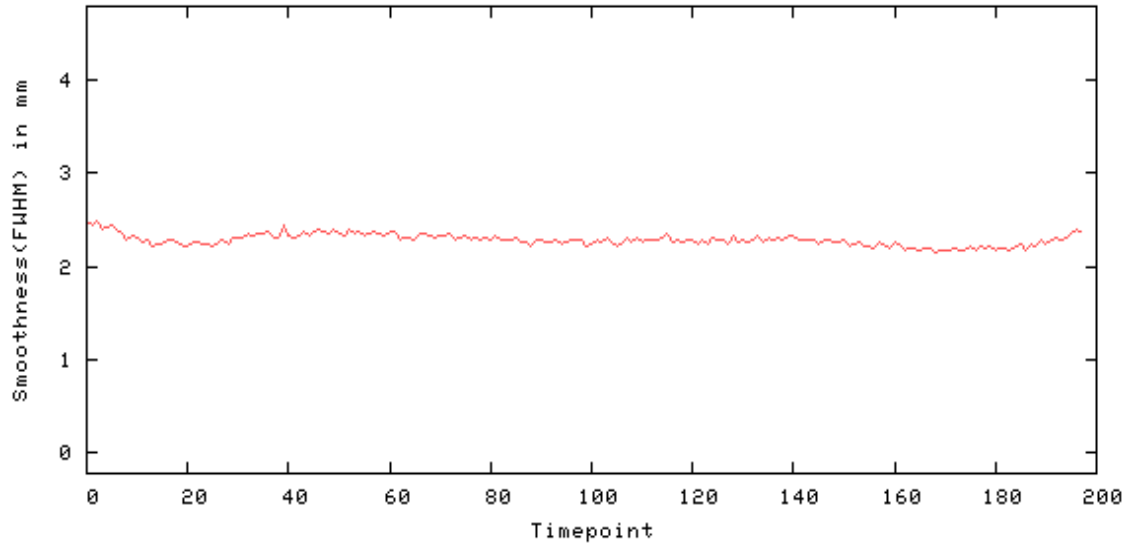
Radius of Decorrelation

rdc = 8.6 pixels



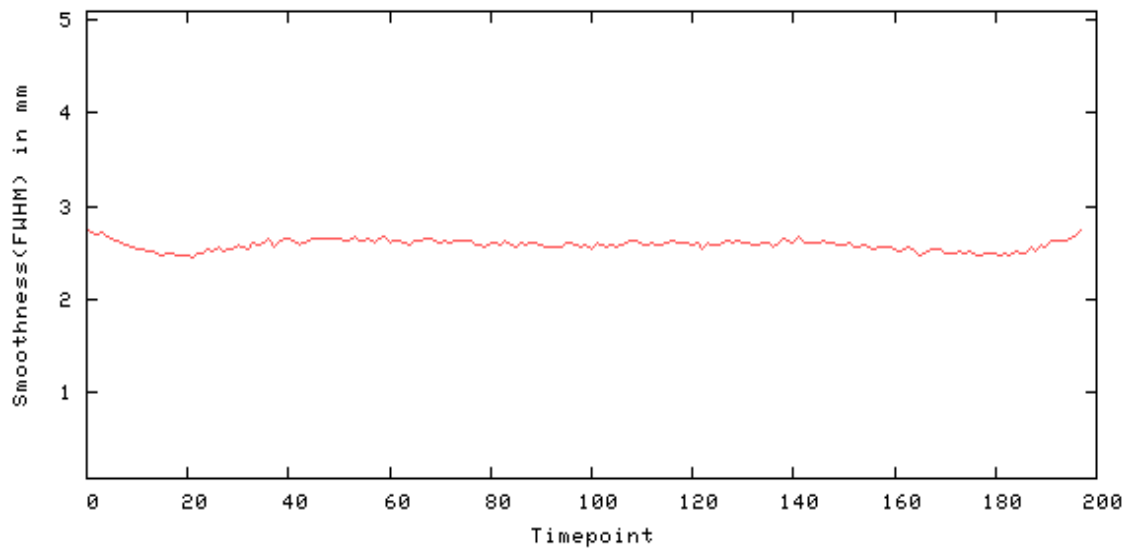
Smoothness -X

Smoothness(FWHM) in mm - X: [min mean max] = [2.156 2.286 2.494]



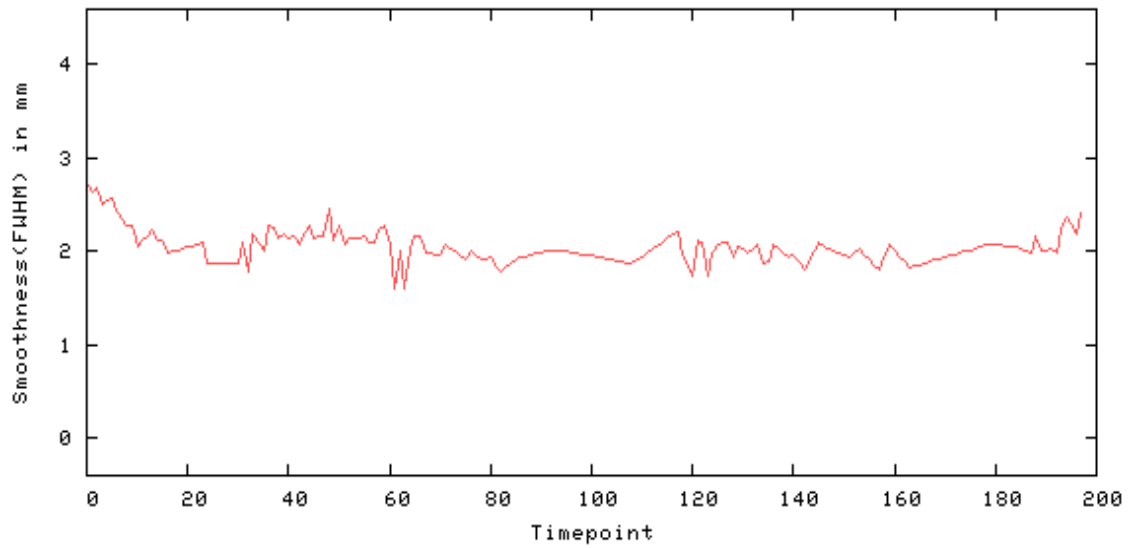
Smoothness -Y

Smoothness(FWHM) in mm - Y: [min mean max] = [2.453 2.586 2.751]



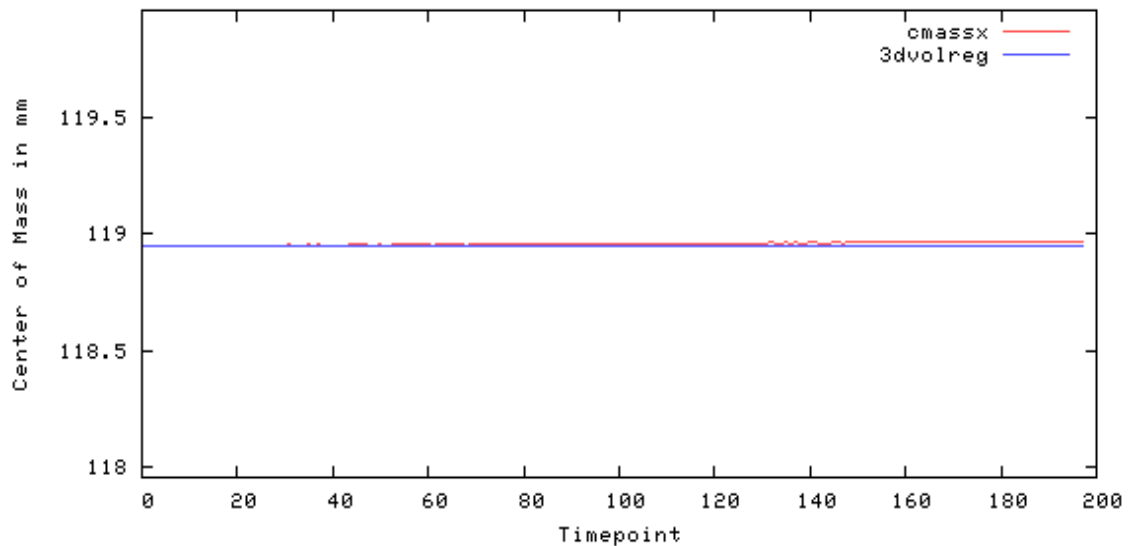
Smoothness -Z

Smoothness(FWHM) in mm - Z: [min mean max] = [1.602 2.094 2.722]



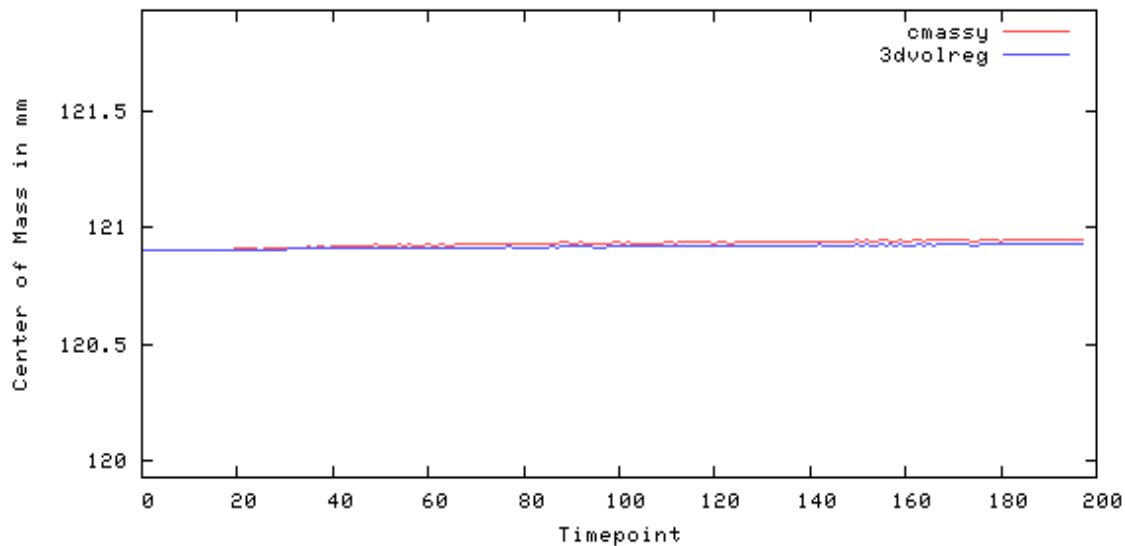
Center of Mass -X

Center of Mass in mm - X: [maxdisplacement drift] = [0.025 0.018]



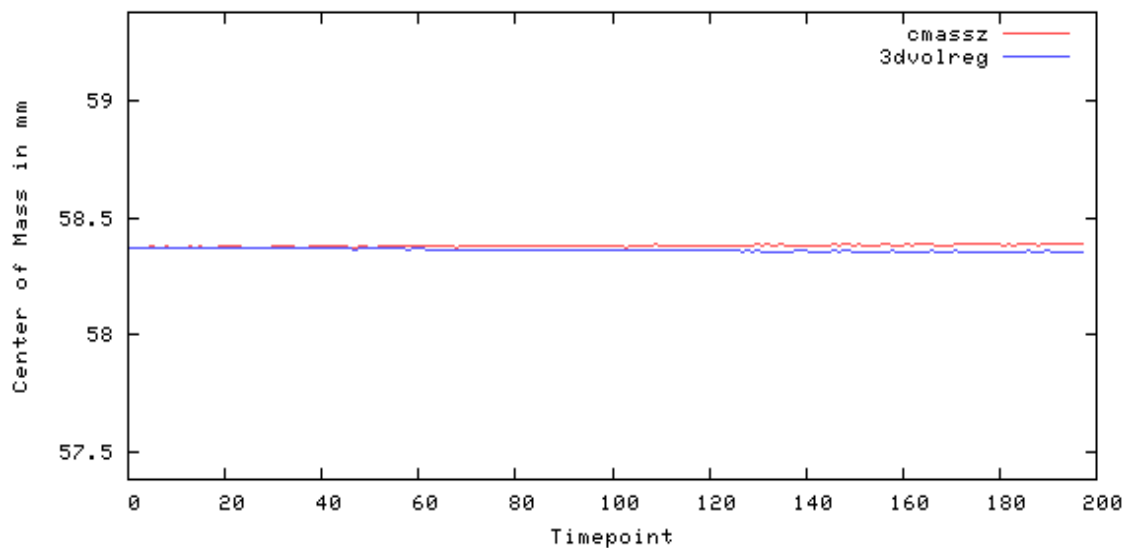
Center of Mass -Y

Center of Mass in mm - Y: [maxdisplacement drift] = [0.052 0.050]



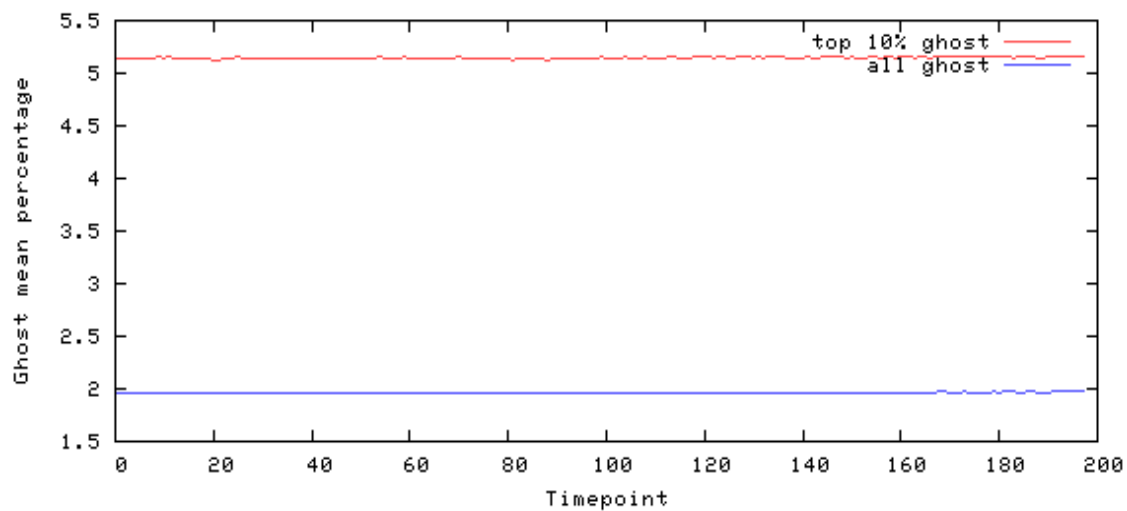
Center of Mass -Z

Center of Mass in mm - Z: [maxdisplacement drift] = [0.018 0.018]

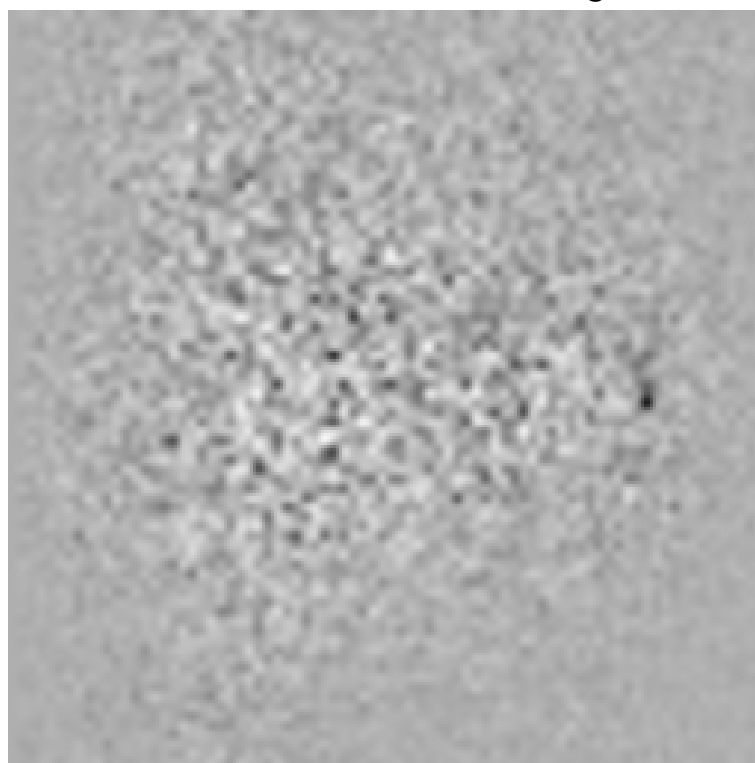


Ghost

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (1.966, 5.147)
(lower is better)



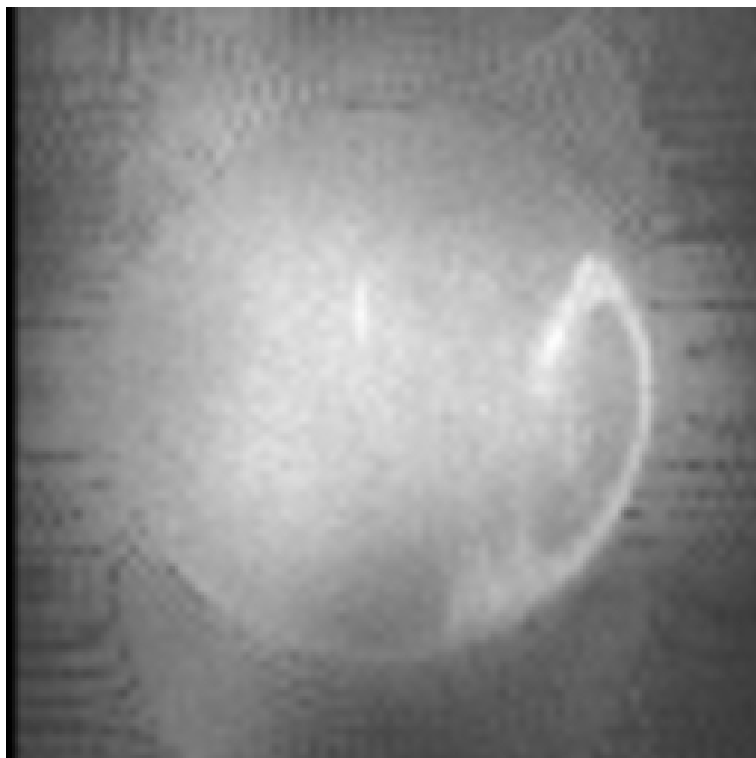
Odd-Even Difference Image



Mean Image



Standard Deviation Image



SFNR Image

