Dartmouth Brain Imaging Center (DBIC)
QA Report 32 CH
12112023

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>1628.0</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>259.0</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>258.1</td>
</tr>
<tr>
<td>Percent Fluctuation</td>
<td>0.05</td>
</tr>
<tr>
<td>Drift</td>
<td>0.45</td>
</tr>
<tr>
<td>Radius of Decorrelation (RDC)</td>
<td>7.2</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.137</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Signal

result.xml  [percent fluct (trend removed), drift, driftfit] = [0.05, 0.45, 0.]

![Signal Graph]
Frequence Spectrum

\[ \text{mean, SNR, SFNR} = (1628.0, 259.0, 258.1) \]

Radius of Decorrelation

\( r_{dc} = 7.2 \) pixels
Smoothness - X

Smoothness (FWHM) in mm - X: [min max] = [2.050 2.162 2.264]

Smoothness - Y

Smoothness (FWHM) in mm - Y: [min max] = [2.380 2.444 2.511]
Smoothness - Z

Smoothness (FWHM) in mm - Z: [min mean max] = [1.605 1.988 2.322]

Center of Mass - X

Center of Mass in mm - X: [max displacement drift] = [0.035 0.034]
Ghost

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.13%, 5.72%)
(lower is better)

Odd-Even Difference Image