Dartmouth Brain Imaging Center (DBIC)

QA Report 32 CH

10032022

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>1576.3</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>236.6</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>235.2</td>
</tr>
<tr>
<td>Percent Fluctuation</td>
<td>0.05</td>
</tr>
<tr>
<td>Drift</td>
<td>0.48</td>
</tr>
<tr>
<td>Radius of Decorrelation (RDC)</td>
<td>7.9</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.166</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Signal

[result.xml] [percent fluct (trend removed), drift, driftfit] = [0.05, 0.48, 0.]

![Signal Plot]

Frame number

Raw signal (ROI)
Frequence Spectrum

[mean, SNR, SFNR] = [1576.3, 236.6, 235.2]

Radius of Decorrelation

\( r_{dc} = 7.9 \) pixels
Smoothness -X
Smoothness (FWHM) in μm - X: [min mean max] = [2.110 2.184 2.208]

Smoothness -Y
Smoothness (FWHM) in μm - Y: [min mean max] = [2.396 2.471 2.552]
Smoothness -Z

Smoothness (FWHM) in mm - Z: [min mean max] = [1.564 1.959 2.299]

Center of Mass -X

Center of Mass in mm - X: [max displacement drift] = [0.025 -0.019]
Center of Mass -Y

Center of Mass in mm - Y: [maxdisplacement drift] = [0.034 0.025]

Center of Mass -Z

Center of Mass in mm - Z: [maxdisplacement drift] = [0.019 0.014]
**Ghost**

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.166, 5.502)
(lower is better)

**Odd-Even Difference Image**