Dartmouth Brain Imaging Center (DBIC)
QA Report 64 CH
07082024

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>2877.9</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>208.2</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>219.8</td>
</tr>
<tr>
<td>Percent Fluctuation</td>
<td>0.05</td>
</tr>
<tr>
<td>Drift</td>
<td>0.63</td>
</tr>
<tr>
<td>Radius of Decorrelation (RDC)</td>
<td>9.8</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.391</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Signal

```
result.xml [percent fluct (trend removed), drift, driftfit] = [0.05, 0.63, 0.]
```
Frequency Spectrum

[mean, SNR, SFNR] = [2877.9 208.2 219.8]

Radius of Decorrelation

rdc = 9.8 pixels
Smoothness - X

Smoothness(FWHM) in nm - X: [min mean max] = [2.083 2.171 2.244]

Smoothness - Y

Smoothness(FWHM) in nm - Y: [min mean max] = [2.371 2.433 2.506]
Smoothness - Z

Smoothness (FWHM) in mm - Z: [min mean max] = [1.504 1.902 2.171]

Center of Mass - X

Center of Mass in mm - X: [max displacement drift] = [0.044 0.041]
Center of Mass - Y

Center of Mass in mm - Y: [maxdisplacement drift] = [0.049 0.043]

Center of Mass - Z

Center of Mass in mm - Z: [maxdisplacement drift] = [0.035 -0.032]
Ghost

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.391, 6.158)
(lower is better)

Odd-Even Difference Image