Dartmouth Brain Imaging Center (DBIC)
QA Report 32 CH
10232023

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>1676.3</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>247.6</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>267.7</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>7.3</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.024</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Signal

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

![Graph showing signal and fit](image)
Frequence Spectrum

[mean, S/N, SF/N] = [1676.3  247.6  267.7]

Raduis of Decorrelation

rdc = 7.3 pixels
Smoothness - X

Smoothness (FWHM) in mm - X: [min mean max] = [2.181 2.181 2.271]

Smoothness - Y

Smoothness (FWHM) in mm - Y: [min mean max] = [2.379 2.440 2.511]
Smoothness - Z

Smoothness (FWHM) in mm - Z: [min mean max] = [1.470 1.897 2.251]

Center of Mass - X

Center of Mass in mm - X: [max displacement drift] = [0.015 0.082]
Center of Mass - Y

Center of Mass in mm - Y: [max displacement drift] = [0.029 0.020]

Center of Mass - Z

Center of Mass in mm - Z: [max displacement drift] = [0.049 0.046]
Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.024, 5.288)
(lower is better)

Odd-Even Difference Image