Dartmouth Brain Imaging Center (DBIC)
QA Report 64 CH
02262024

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>2797.1</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>194.6</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>194.8</td>
</tr>
<tr>
<td>Percent Fluctuation</td>
<td>0.06</td>
</tr>
<tr>
<td>Drift</td>
<td>0.38</td>
</tr>
<tr>
<td>Radius of Decorrelation (RDC)</td>
<td>9.2</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.109</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Signal

result.xml [percent fluct (trend removed), drift, driftfit] = [0.06, 0.38, 0.]
Frequency Spectrum

(mean, SNR, SFNR) = (2797.1, 194.6, 194.8)

Raduis of Decorrelation

rdc = 9.2 pixels
Smoothness - X

Smoothness (FWHM) in mm - X: [min mean max] = [2.071 2.161 2.254]

Smoothness - Y

Smoothness (FWHM) in mm - Y: [min mean max] = [2.355 2.423 2.520]
Smoothness - Z

Smoothness (FWHM) in mm - Z: [min mean max] = [1.531 1.979 2.255]

Center of Mass - X

Center of Mass in mm - X: [max displacement drift] = [0.029 0.024]
Center of Mass - Y

Center of Mass in mm - Y: \([0.027, 0.019]\)

Center of Mass - Z

Center of Mass in mm - Z: \([0.014, -0.067]\)
Ghost

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.10%, 4.813)
(lower is better)

Odd-Even Difference Image