Dartmouth Brain Imaging Center (DBIC)
QA Report 32 CH
12062022

Measurements

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean signal (mean)</td>
<td>1764.6</td>
</tr>
<tr>
<td>Signal to Noise Ratio (SNR)</td>
<td>269.2</td>
</tr>
<tr>
<td>Signal to Fluctuation Ratio (SFNR)</td>
<td>258.0</td>
</tr>
<tr>
<td>Percent Fluctuation</td>
<td>0.06</td>
</tr>
<tr>
<td>Drift</td>
<td>0.34</td>
</tr>
<tr>
<td>Radius of Decorrelation (RDC)</td>
<td>6.8</td>
</tr>
<tr>
<td>Mean Ghost Percentage</td>
<td>2.116</td>
</tr>
<tr>
<td>Standard Deviation (std)</td>
<td>0.98</td>
</tr>
</tbody>
</table>

Signal

result.xml [percent fluct (trend removed), drift, driftfit] = [0.06, 0.34, 0.]

![Signal Graph](image)
Frequency Spectrum

\[ \text{[mean, SNR, SFNR]} = [1764.6, 269.2, 258.0] \]

Raduis of Decorrelation

\[ \text{rdc} = 6.8 \text{ pixels} \]
Smoothness -X

Smoothness (FWHM) in mm - X: [min mean max] = [2.145 2.348 2.564]

Smoothness -Y

Smoothness (FWHM) in mm - Y: [min mean max] = [2.515 2.726 3.036]
Smoothness -Z

Smoothness(FWHM) in mm - Z: [min mean max] = [2.302 2.726 3.240]

Center of Mass -X

Center of Mass in mm - X: [max displacement drift] = [0.037 0.035]
Center of Mass -Y

Center of Mass in mm - Y: \([\text{maxdisplacement drift}] = [0.018 \ 0.015]\)

Center of Mass -Z

Center of Mass in mm - Z: \([\text{maxdisplacement drift}] = [0.024 \ 0.024]\)
Ghost

Mean of ghost voxels as % of non-ghost [masked] mean
(ghostmean, brightghostmean) = (2.116, 5.705)
(lower is better)

Odd-Even Difference Image