

QA fMRI Report

■ Information:

Date : 20231020
Coil : Nova 8Tx/32Rx Head

■ Basic analysis parameters:

Matrix Size : 150 x 150
Slices : 69
Resolution : 1.47 x 1.47 x 1.73 mm3
TR : 1159 ms
Ref Slice Num : 34
ROI width : 21
Total vols : 200
Analysis vols : 198

■ QA metrics

Mean Signal Intensity : 2106.629
Peak Frequency : 0.0697 Hz
STD of Detrended Signal : 1.656
SNR : 127.988
TFN : 16.589
SFNR : 127.406
tSNR : 124.277
Percent Fluctuation : 0.079 %
Drift : 0.657 %
Drift Fit : 0.433 %
RDC : 9.112 pixel
Spectrum MAD : 18.370
Ghost Rate : 3.386 %
Background Noise Rate : 1.299 %

■ Notice

DIFF = Difference between Odd-volumes and Even-volumes

SNR = Signal-to-Noise Ratio

= (mean signal)/(standard deviation of DIFF)

TFN = standard deviation of detrended signal

SFNR = Signal-to-Fluctuation-Noise Ratio

= (mean signal)/(standard deviation of detrended signal)

tSNR = temporal Signal-to-Noise Ratio

= (mean signal)/(standard deviation of signal)

Percent Fluctuation = (STD of residuals of 2nd-fit-time-series)/(mean signal)

Drift = (max - min)/(mean signal)

Drift Fit = (maxfit - minfit)/(mean signal)

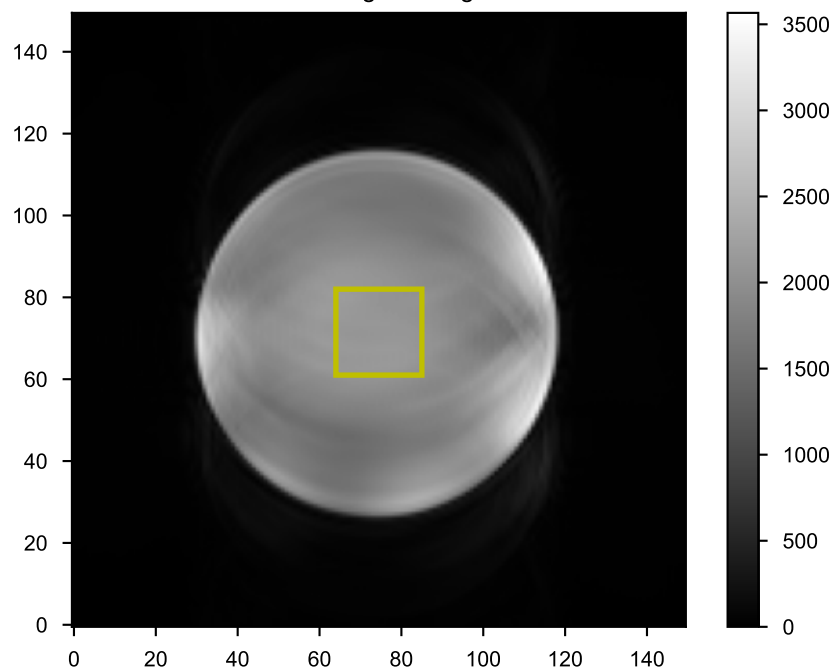
CV = Coefficient of Variance RDC = Radius of DeCorrelation, CV(1)/CV(max)

MAD = Median Absolute Deviation = (max)/(median of Absolute Deviation)

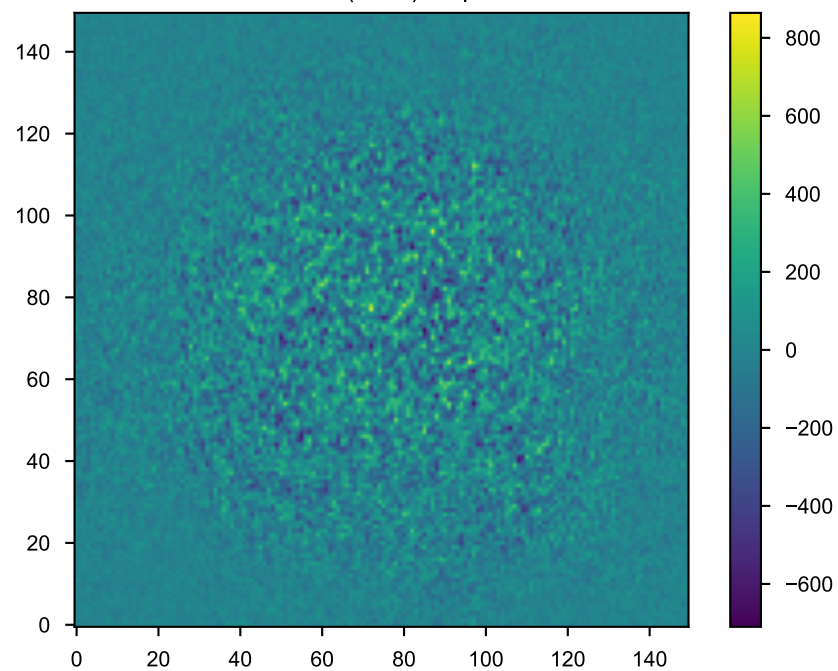
Ghost Rate = (mean ghost)/(mean signal)

Background Rate = (mean background)/(mean signal)

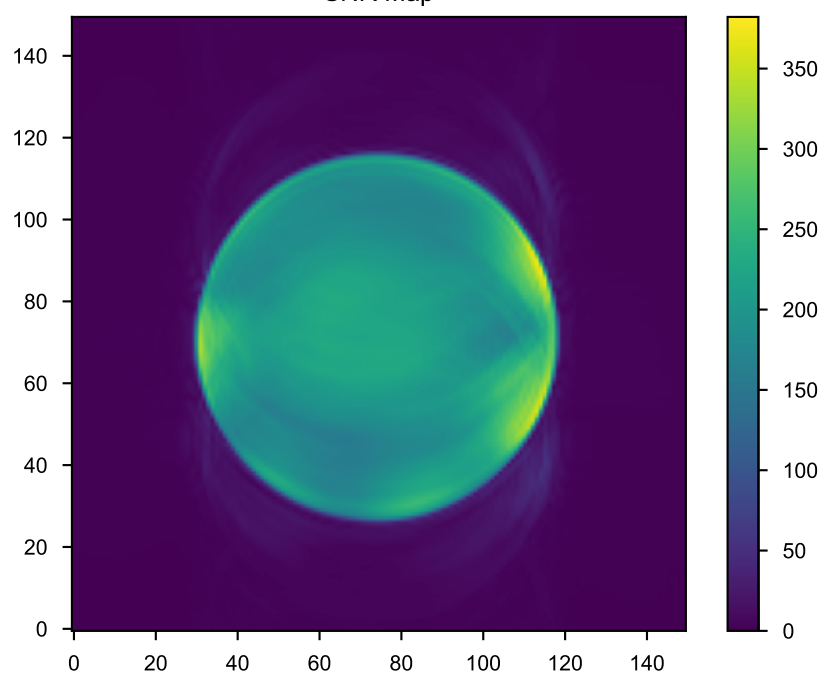
Mean Signal Image



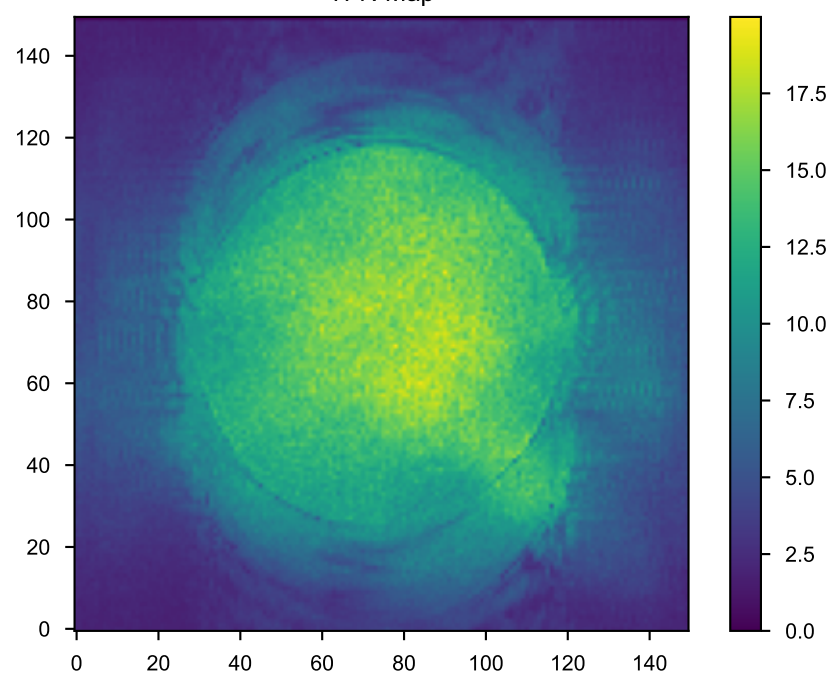
SSN (DIFF) Map



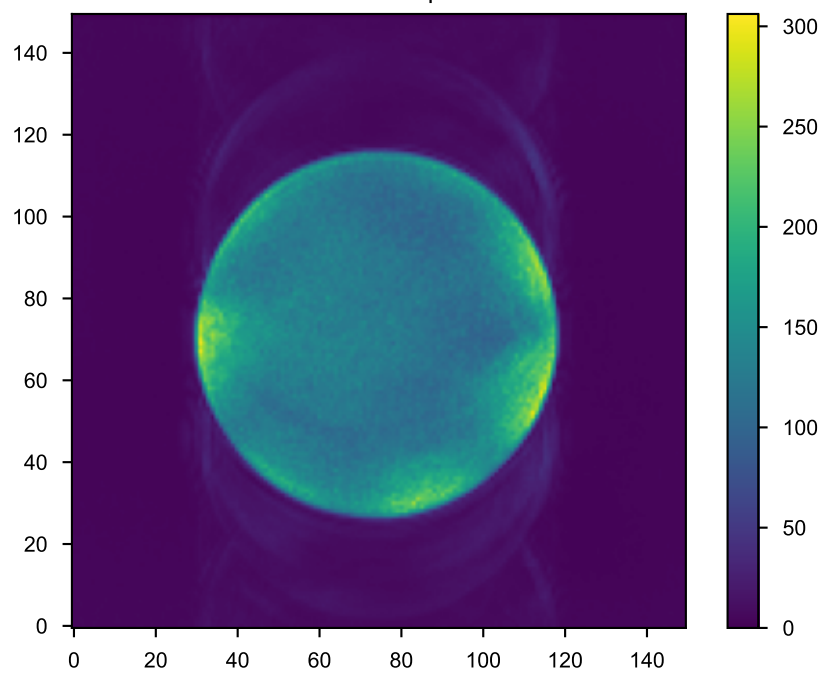
SNR Map



TFN Map



SFNR Map



tSNR Map

