Reconstruction 4x sub sampling

Uniform
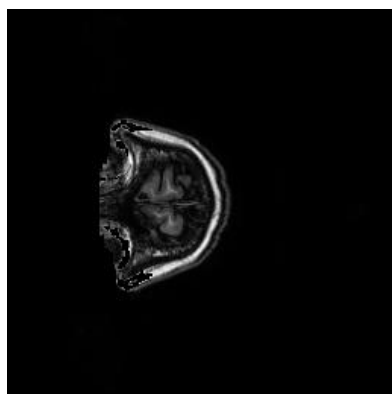
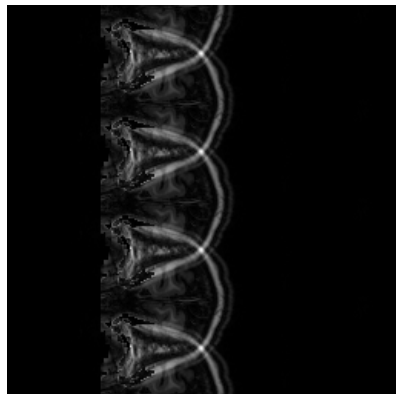| Subjects	SSIM	PSNR
sub-303	0.9124	26.703
sub-304	0.9134	26.888
sub-305	0.9043	26.683
sub-306	0.8932	25.496
sub-308	0.8824	25.086
sub-309	0.8978	25.805
sub-311	0.8972	25.976
sub-313	0.9021	25.673
sub-314	0.8817	25.243
sub-316	0.8595	24.626
sub-318	0.8997	25.63
sub-319	0.8895	25.908
sub-320	0.8874	26.108

Min SSIM: 0.43476843157360606 Max SSIM : 0.9574593290118827
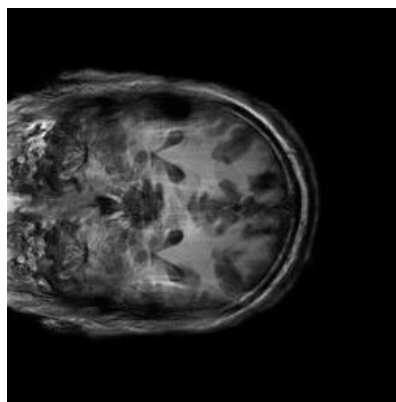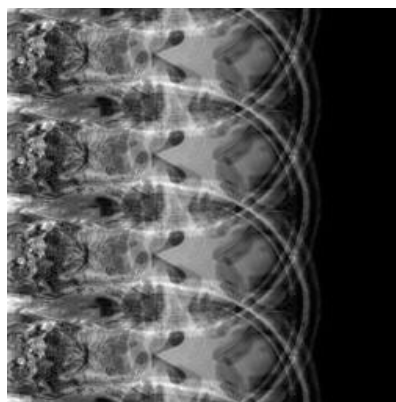
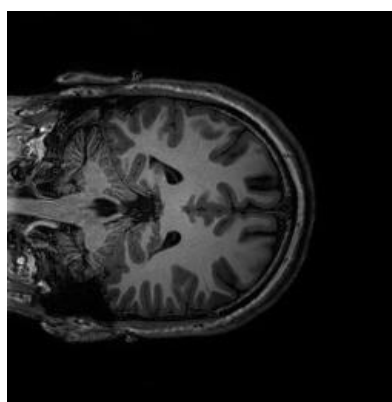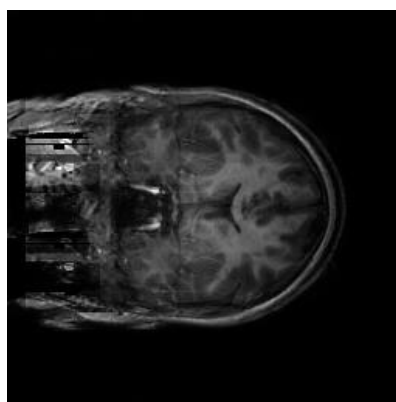Min PSNR: 14.366828723029801 Max PSNR: 37.80193748661323

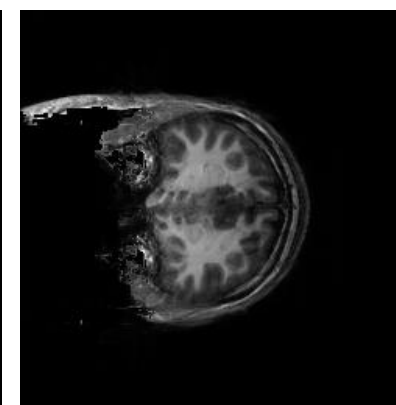slice → np.fft.fft2(slice) np.fft.fftshift(slice) → x Uniform down-sampling matrix → sub-sampled frequency-domain slice → sub-sampled image-domain slice
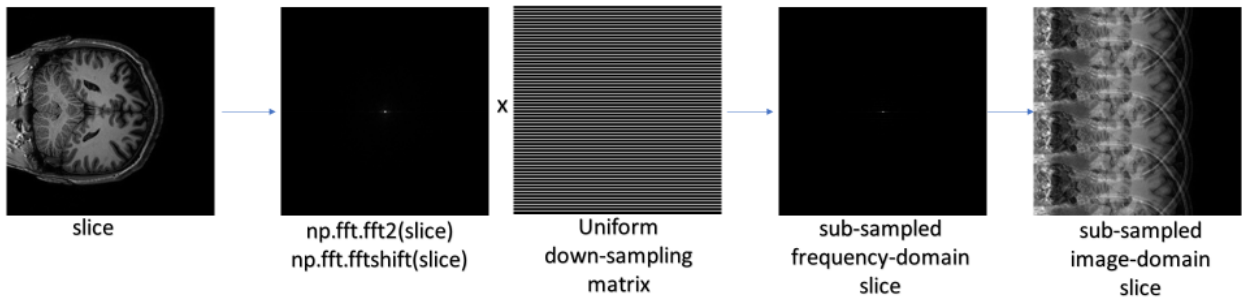
| Ground Truth | Input | Predicted |
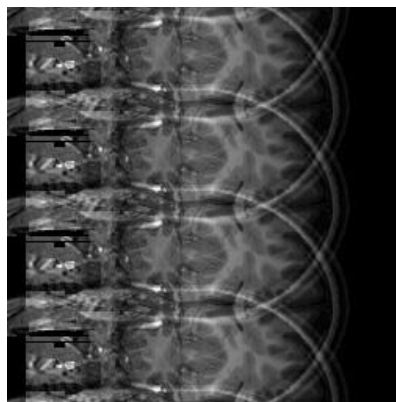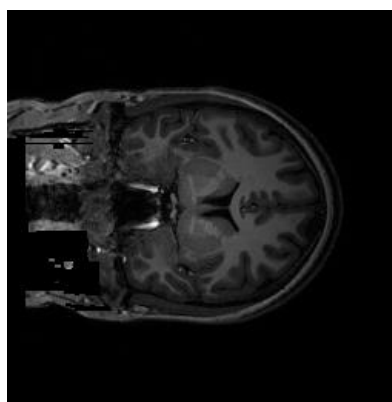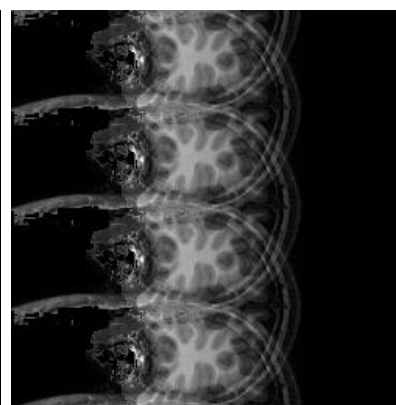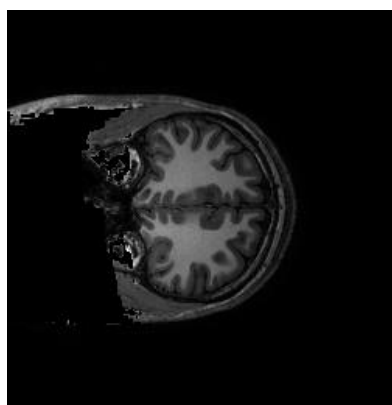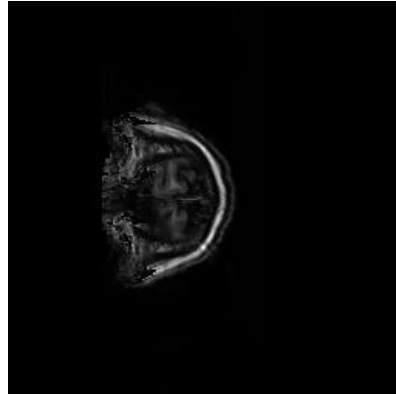
Gaussian:

Subjects	SSIM	PSNR
sub-303	0.9449	30.414
sub-304	0.9497	31.225
sub-305	0.9318	30.198
sub-306	0.9502	31.353
sub-308	0.9376	29.681
sub-309	0.9432	29.997
sub-311	0.9453	30.721
sub-313	0.9491	30.493
sub-314	0.9383	30.259
sub-316	0.9335	29.33
sub-318	0.943	30.484
sub-319	0.9451	30.785
sub-320	0.9459	30.394

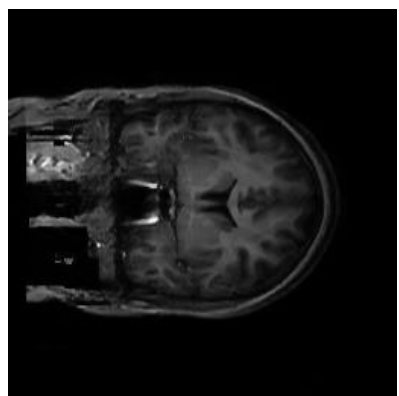Min SSIM: 0.4148610857613572 Max SSIM : 0.9700842576939596

Min PSNR: 13.30418993075732 Max PSNR: 40.37968766900666

slice → np.fft.fft2(slice) np.fft.fftshift(slice) → x gaussian down-sampling matrix → sub-sampled frequency-domain slice → sub-sampled image-domain slice
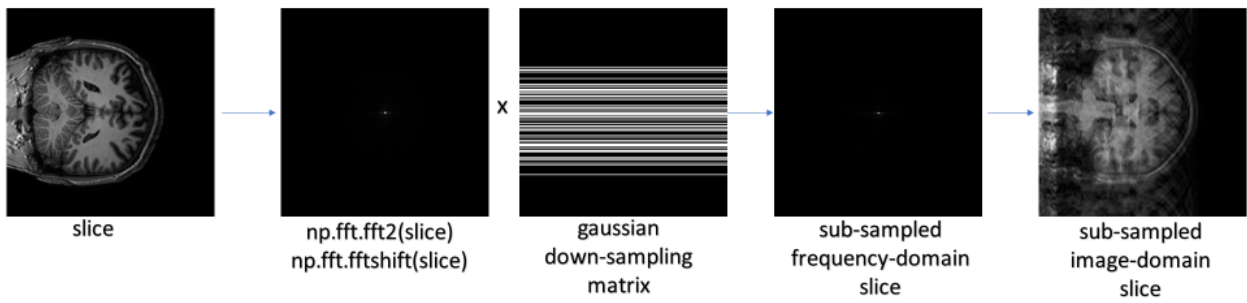
Ground Truth	Input	Predicted
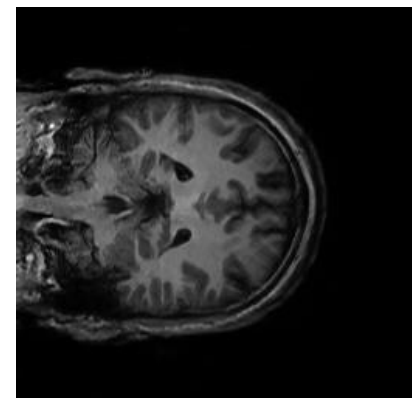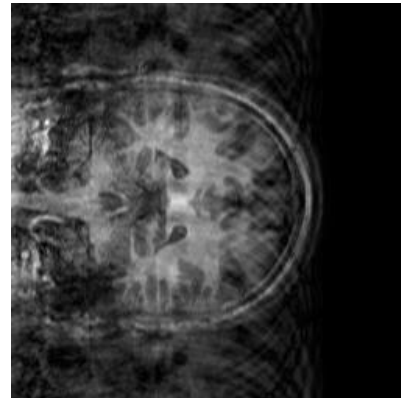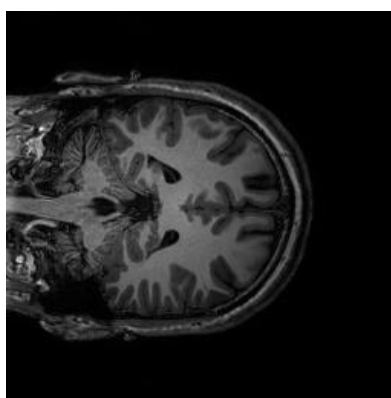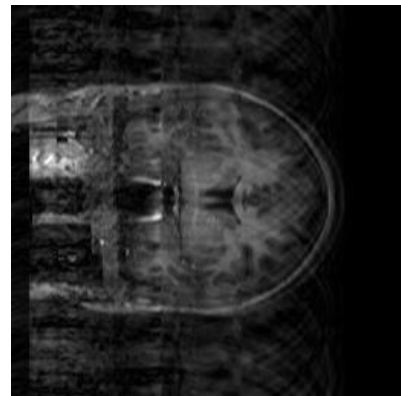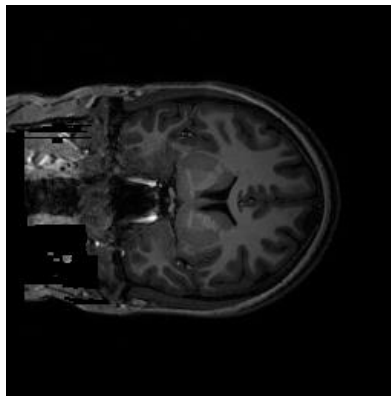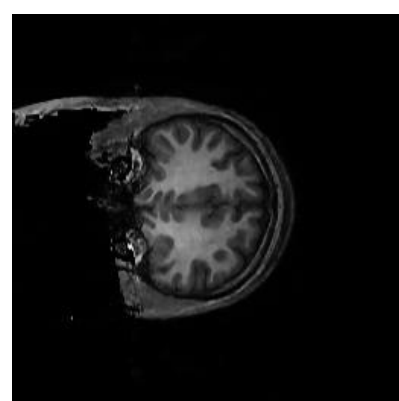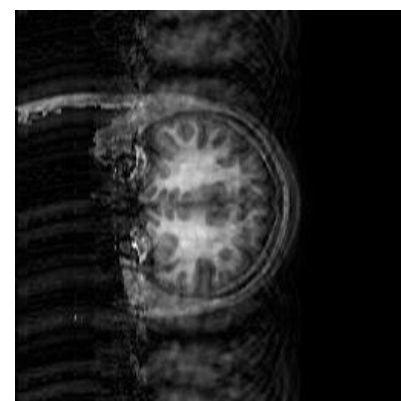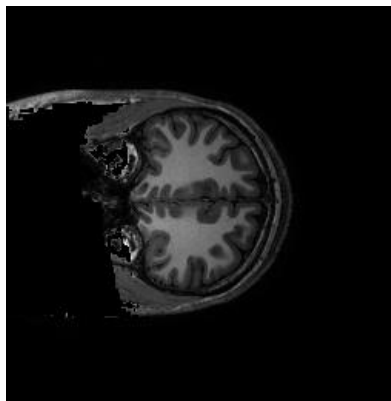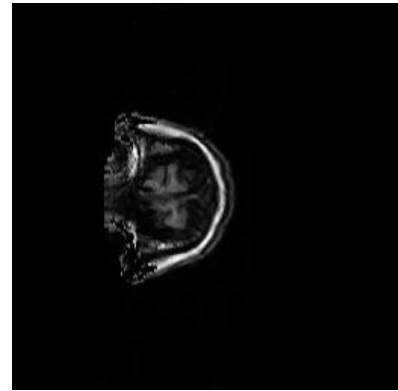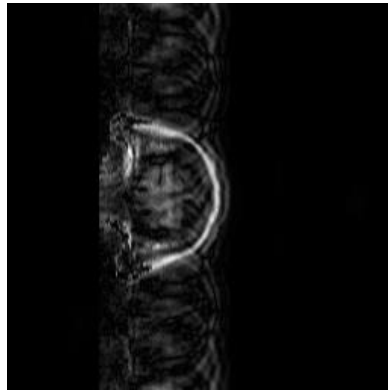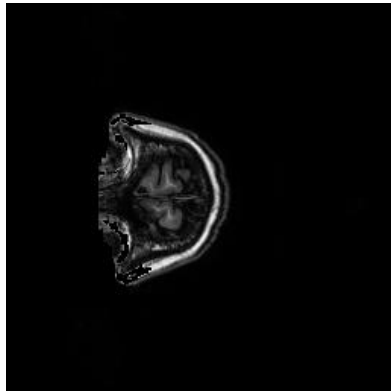
Low Frequency

Subjects	SSIM	PSNR
sub-303	0.955	30.13
sub-304	0.9589	31.026
sub-305	0.9552	30.932
sub-306	0.9549	30.456
sub-308	0.9486	29.54
sub-309	0.9497	29.398
sub-311	0.9553	30.347
sub-313	0.9546	30.177
sub-314	0.9495	30.032
sub-316	0.9471	29.586
sub-318	0.9558	30.748
sub-319	0.9467	30.105
sub-320	0.9559	30.611

Min SSIM: 0.4346226104886255 Max SSIM : 0.9858740121087397

Min PSNR: 13.515495904567754 Max PSNR: 40.62116143073694

slice → np.fft.fft2(slice) np.fft.fftshift(slice) x Low frequency down-sampling matrix → sub-sampled frequency-domain slice → sub-sampled image-domain slice

Ground Truth   **Input**   **Predicted**