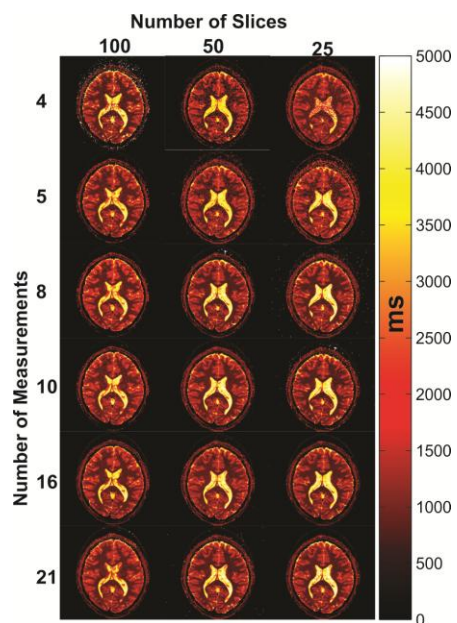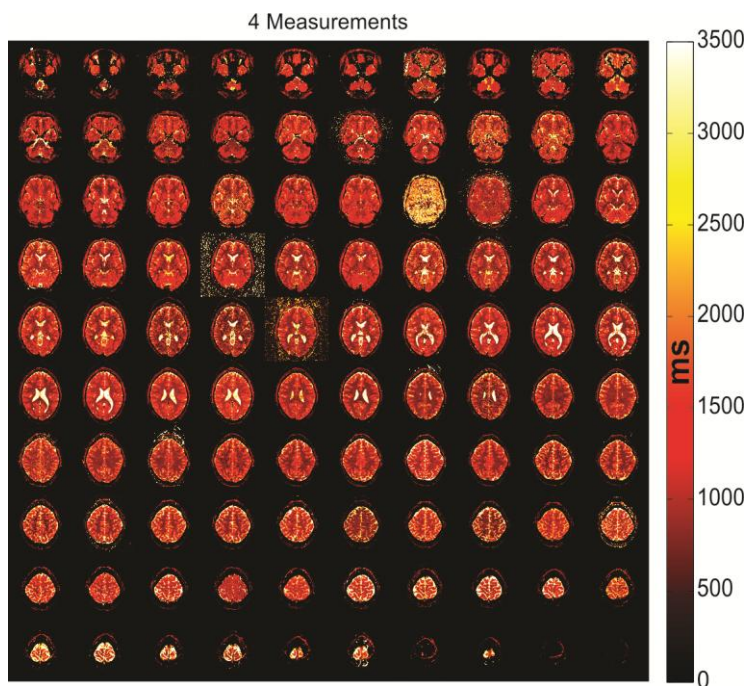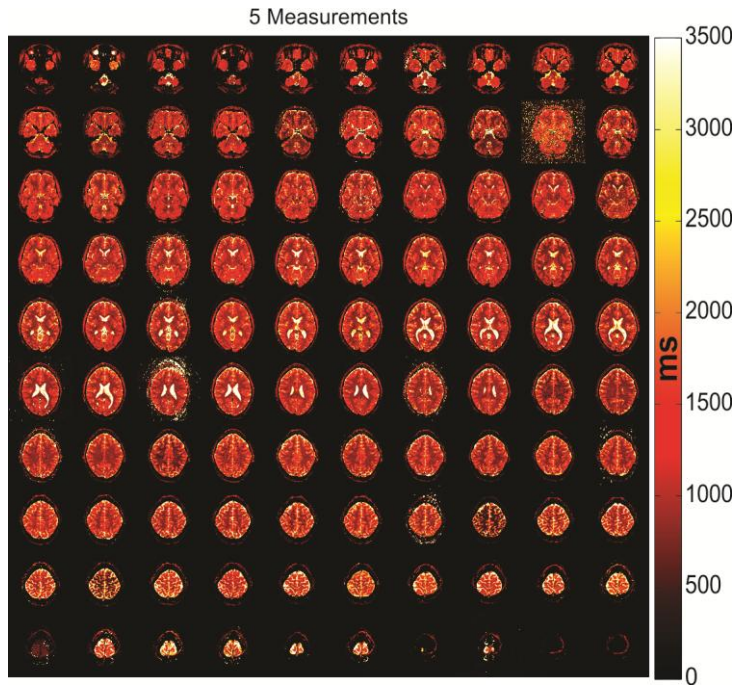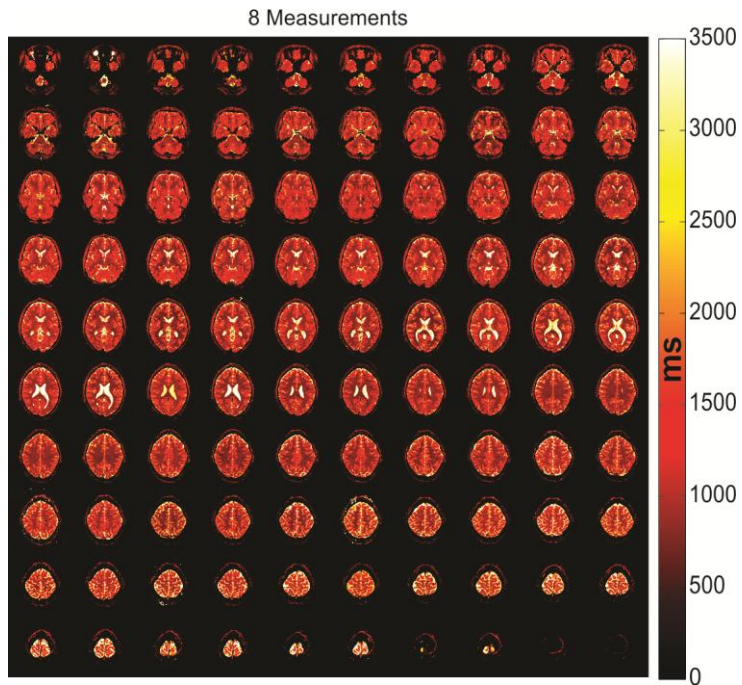# Supporting Figures

Supporting Fig. S1. Reconstructed T_1 maps for a representative slice for all measurements for the 100, 50 and 25 slices case.
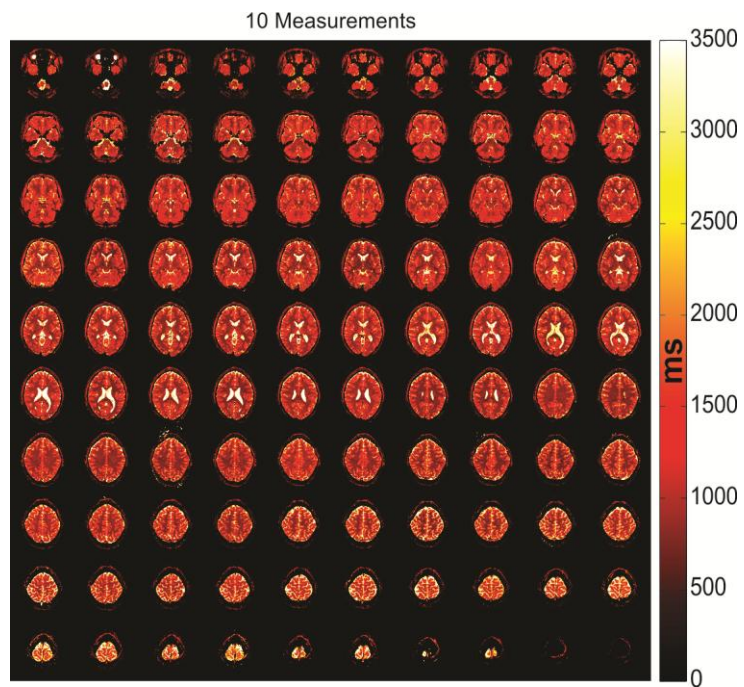

Supporting Fig. S2. Reconstructed T_1 maps of 100 slices acquired with the optimized 4-measurement protocol.
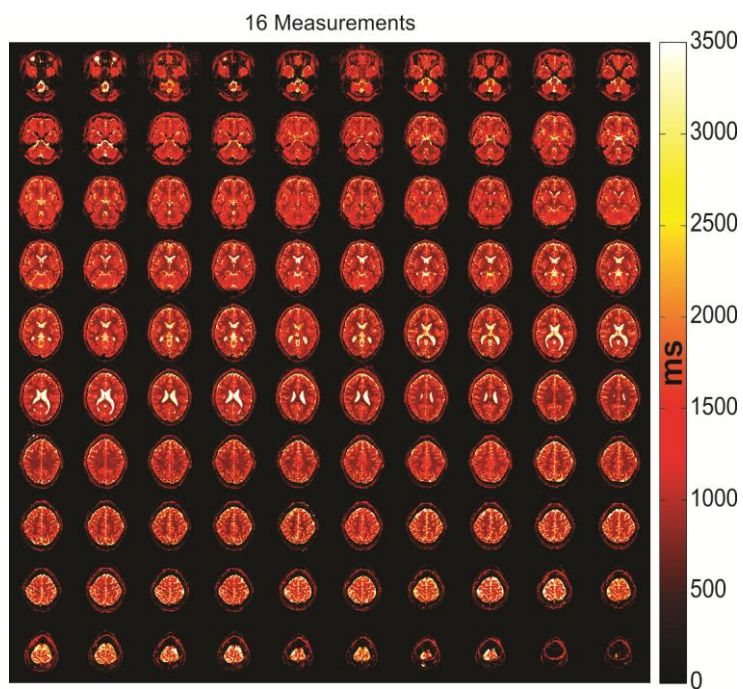
Supporting Fig. S3. Reconstructed T_1 maps of 100 slices acquired with the optimized 5-measurement protocol.

Supporting Fig. S4. Reconstructed T_1 maps of 100 slices acquired with the optimized 8-measurement protocol.

Supporting Fig. S5. Reconstructed T_1 maps of 100 slices acquired with the optimized 10-measurement protocol.

Supporting Fig. S6. Reconstructed T_1 maps of 100 slices acquired with the optimized 16-measurement protocol.
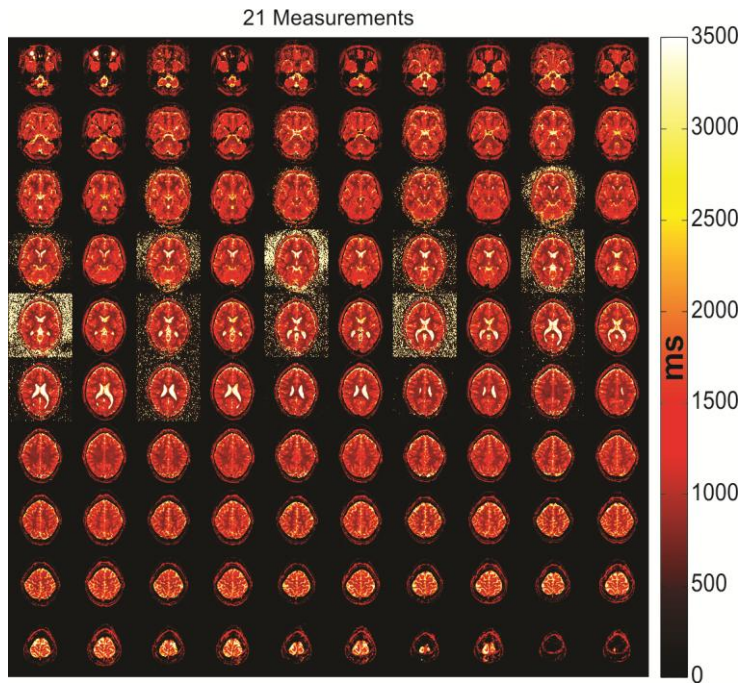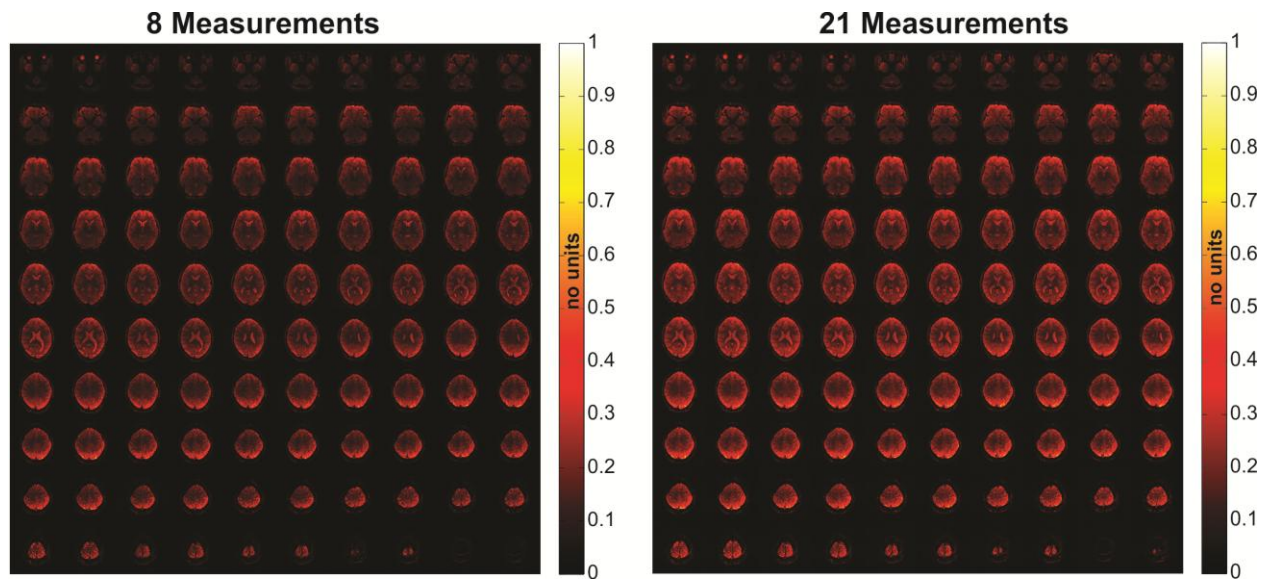
Supporting Fig. S7. Reconstructed T1 maps of 100 slices acquired with the unoptimized 21-measurement protocol.

Supporting Fig. S8. S_0 maps for the 8 measurements and 21 measurement protocols. Note the similarity between the maps obtained with the two measurements.

Supporting Table 1

Number of Measurements	Mean Range (ms)	Std Range (ms)
4	3676	1305
5	4392	1119
8	5250	874
10	5482	700
16	5875	512
21	5499	1219

Supporting Table 1: Summary of the TI values sampled as a function of the number of measurements for the 100-slice protocol. The range (max−min) of TI values was computed for each individual slice, the values reported here represent the mean and standard deviation of the range across all slices for each protocol.