

Titre: Multi-center benchmarking of cervical spinal cord RF coils for 7 T MRI: A traveling spines study. Supplément

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Date: 2025

Type: Article de revue / Article

Référence: Alonso Ortiz, E., Papp, D. S., Barry, R., Poëti, K., Seifert, A. C., Gilbert, K. M., Lopez Rios, N., Paska, J., Eippert, F., Weiskopf, N., Beghini, L., Graedel, N. N., Trampel, R., Callaghan, M. F., Stefan Aigner, C., Freund, P., Seif, M., Destruel, A., Callot, V., ... Cohen-Adad, J. (2025). Multi-center benchmarking of cervical spinal cord RF coils for 7 T MRI: A traveling spines study. *Magnetic Resonance in Medicine*, 94(3), 1339-1355. <https://doi.org/10.1002/mrm.30551>

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URL de PolyPublie: <https://publications.polymtl.ca/65913/>

Version: Matériel supplémentaire / Supplementary material
Révisé par les pairs / Refereed

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Document publié chez l'éditeur officiel

Titre de la revue: *Magnetic Resonance in Medicine* (vol. 94, no. 3)

Maison d'édition: Wiley

URL officiel: <https://doi.org/10.1002/mrm.30551>

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Supplementary Materials

Sequence	Resolution (mm ³)	FOV (mm ²)	Slices	TR (ms)	TE (ms)	FA	Voltage	TA
Sagittal TFL	2.4x2.4x2.5	340x208	- 2 slice groups of 28 slices - 2.5 mm slice thickness and 2.5 mm slice gap	34420	2.31	- pre-sat FA= 90° (80° for Magnetom sites) - excitation FA= 10°	reference voltage calibrated by the scanner	1m10s
Sagittal TFL	2.4x2.4x2.5						V_{opt}	1m10s
Sagittal DREAM	4.1x4.1x2.5	384x178	11 slices of 2.5 mm slice thickness	6000	TE1/TE2 = 2.04/3.18	FA1/FA2 = 50/6°		1m08s
Sagittal DREAM	2.5x2.5x2.5	200x200						1m08s
Sagittal DREAM	2.5x2.5x2.5						$(2/3) * V_{opt}$	1m08s
Sagittal DREAM	2.5x2.5x2.5						$1.5 * V_{opt}$ or $V_{HW,limit}$ (whichever was lower)	1m08s

Table S1: Acquired B₁⁺ mapping sequences and their parameters. “||” indicates that the field is identical to that of the above-row, V_{opt} is the optimal reference voltage, and $V_{HW,limit}$ is the hardware limit voltage for a given coil.

Sequence	Resolution (mm ³)	FOV (mm ²)	Slices	TR (ms)	TE (ms)	FA	Phase Encode	Voltage	TA
Sagittal coilQA	1.5x1.5x2.0	384x384	13 slices of 2.0 mm slice thickness with 20% slice gap	30	6	12°	H>F	V_{opt}	3m20s
Sagittal coilQA	1.5x1.5x2.0	192x192							1m40s
Axial coilQA	0.5x0.5x5.0		7 slices of 5.0 mm slice thickness with 300% slice gap				R>L		2m41s
Sagittal 3D GRE	2.0x2.0x2.0	384x288	44 slices of 2.0 mm slice thickness without slice gap	550	3.8	30°	R>L		1m21s

Table S2: Acquired B₁⁺ mapping sequences and their parameters. “||” indicates that the field is identical to that of the above-row, and V_{opt} is the optimal reference voltage.

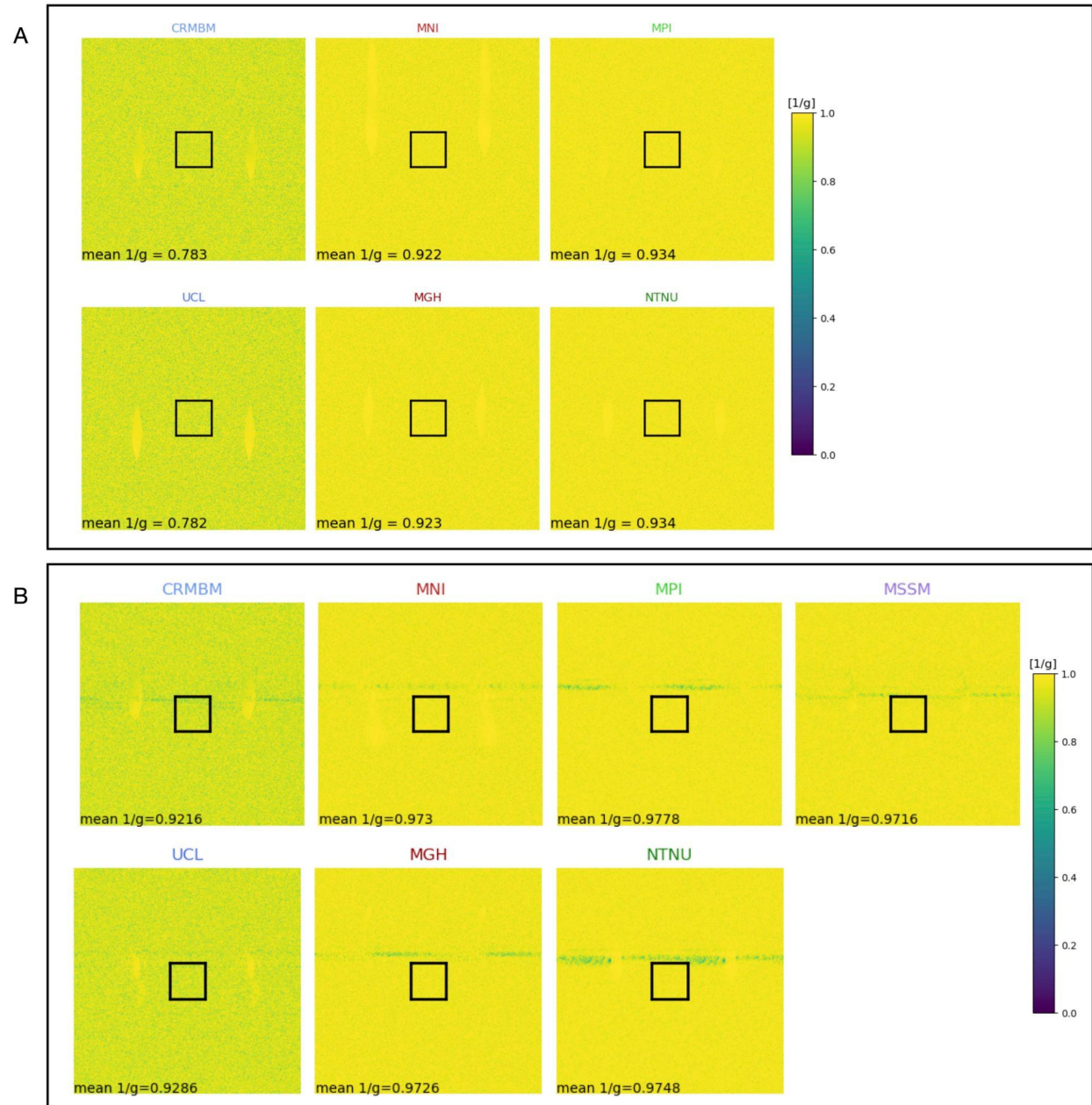


Figure S1: (A) $1/g$ maps with $R_{L/R} = 2$ of Spinoza at each site, except for MSSM. (B) $1/g$ factor maps with $R_{L/R} = 2$ for a single representative subject across all sites (Subject 2).

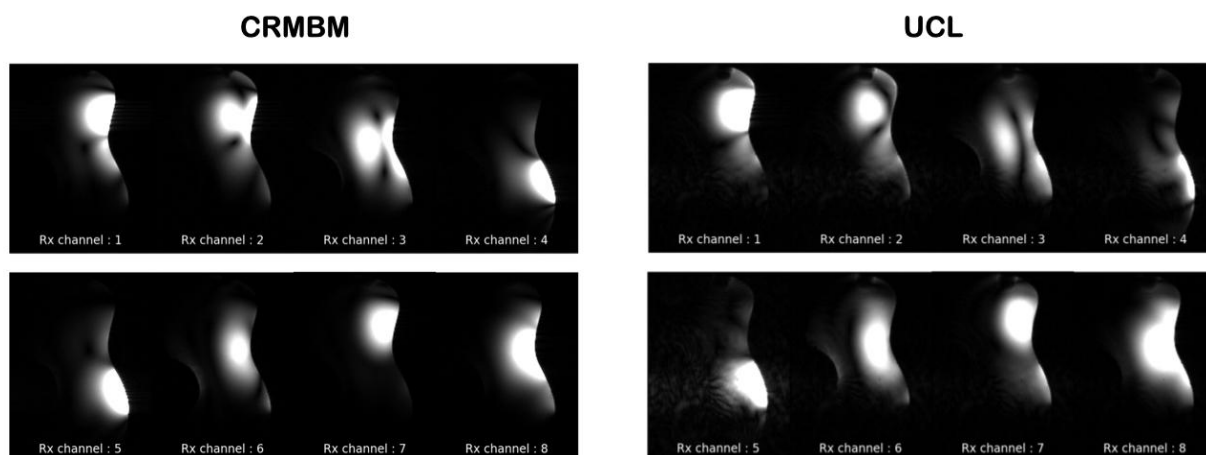


Figure S2: Individual channel GRE phantom sagittal images for CRMBM and UCL (Subject 2).

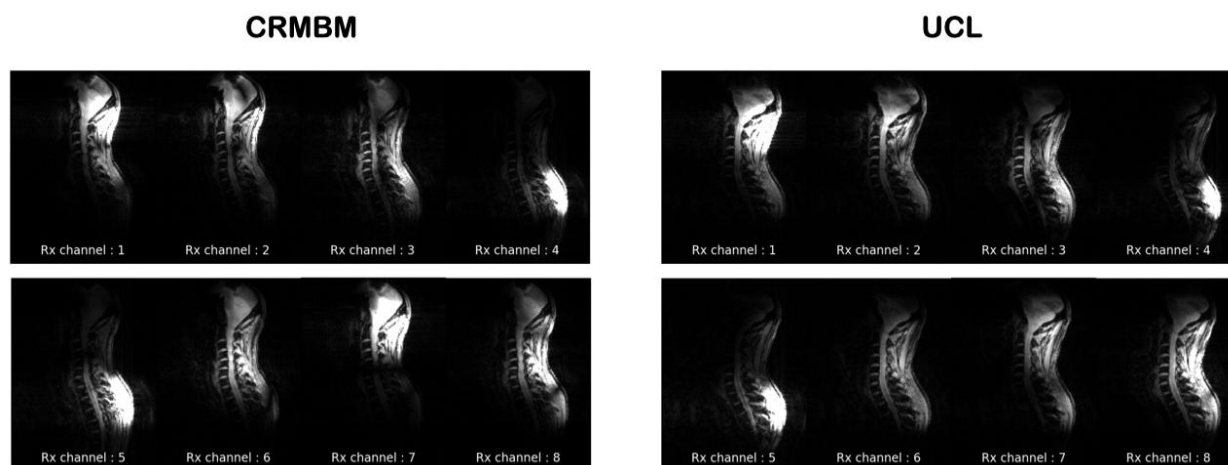


Figure S3: Individual channel GRE in-vivo sagittal images for CRMBM and UCL (Subject 2).

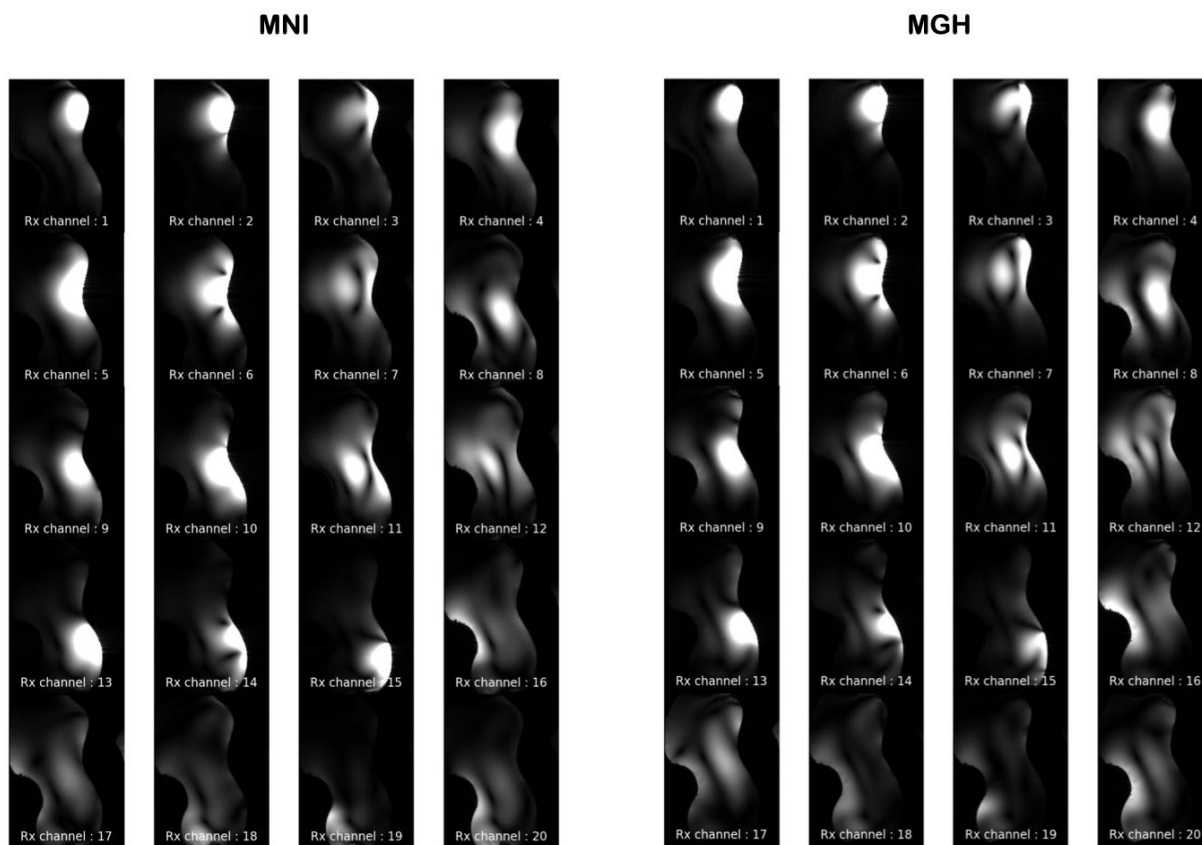


Figure S4: Individual channel GRE phantom sagittal images for MNI and MGH (Subject 2).

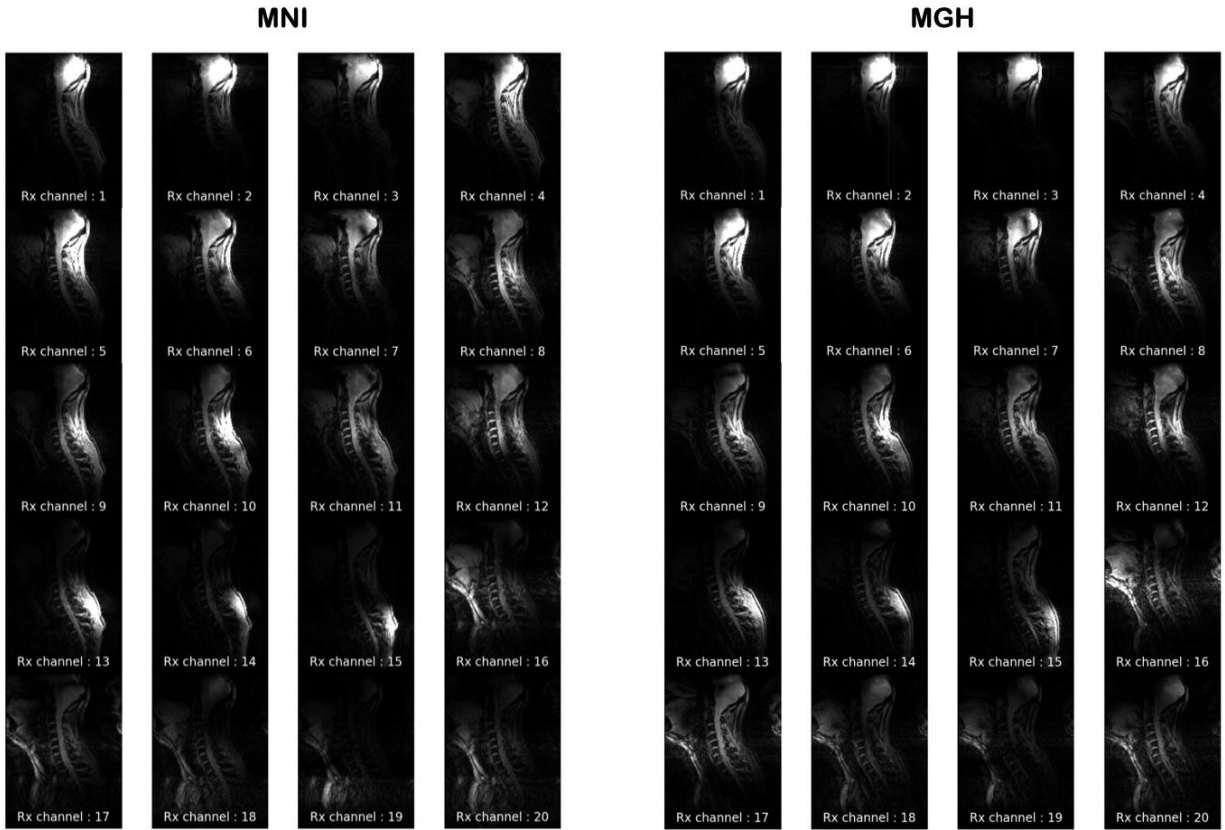


Figure S5: Individual channel GRE in-vivo sagittal images for MNI and MGH (Subject 2).

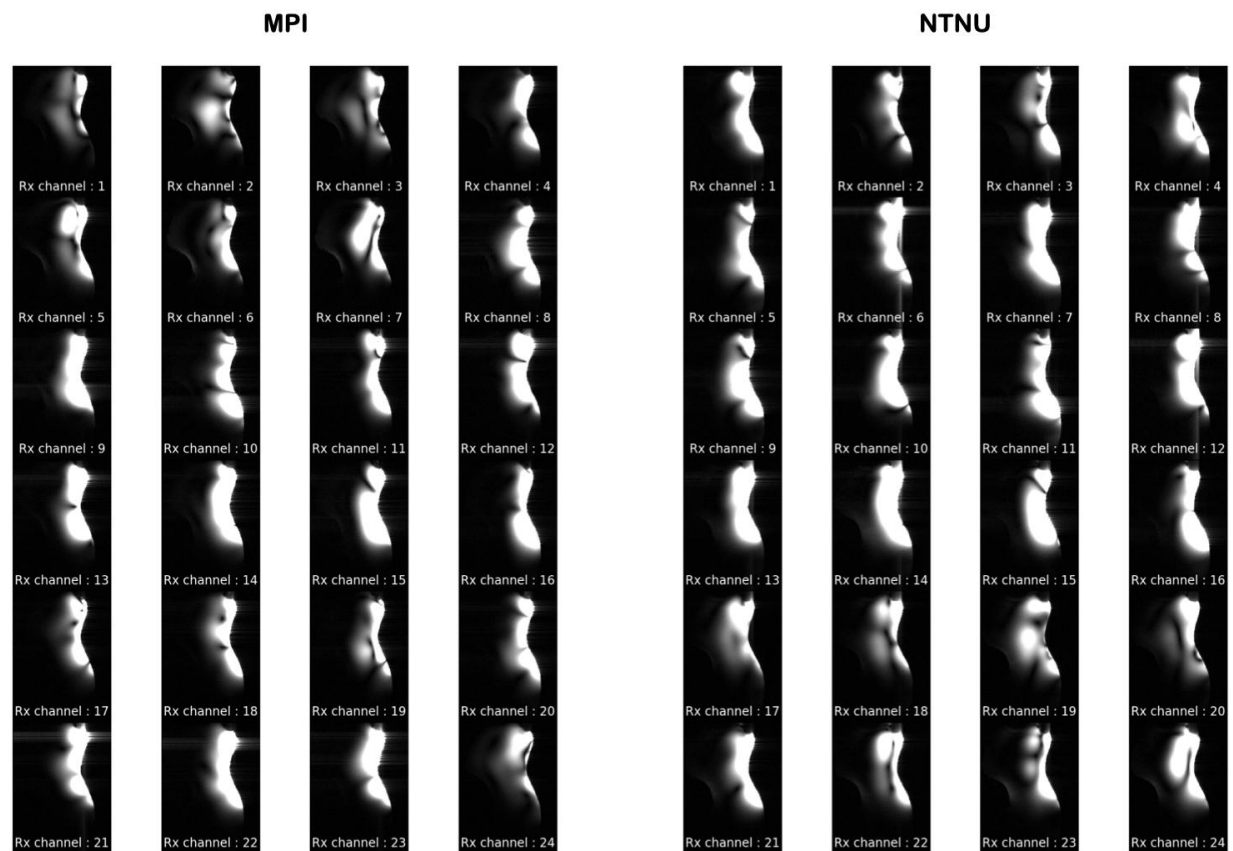


Figure S6: Individual channel GRE phantom sagittal images for MPI and NTNU (Subject 2).

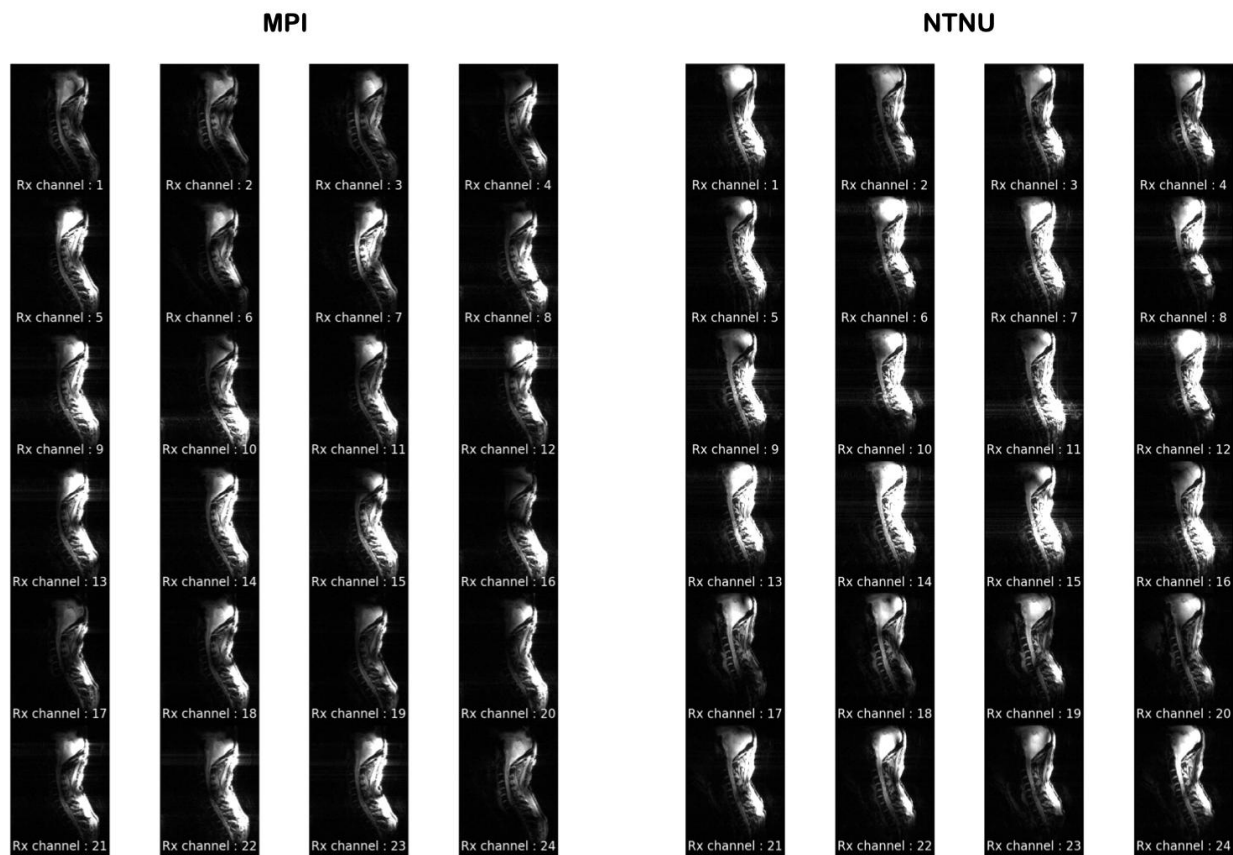


Figure S7: Individual channel GRE in-vivo sagittal images for MPI and NTNU (Subject 2).

MSSM

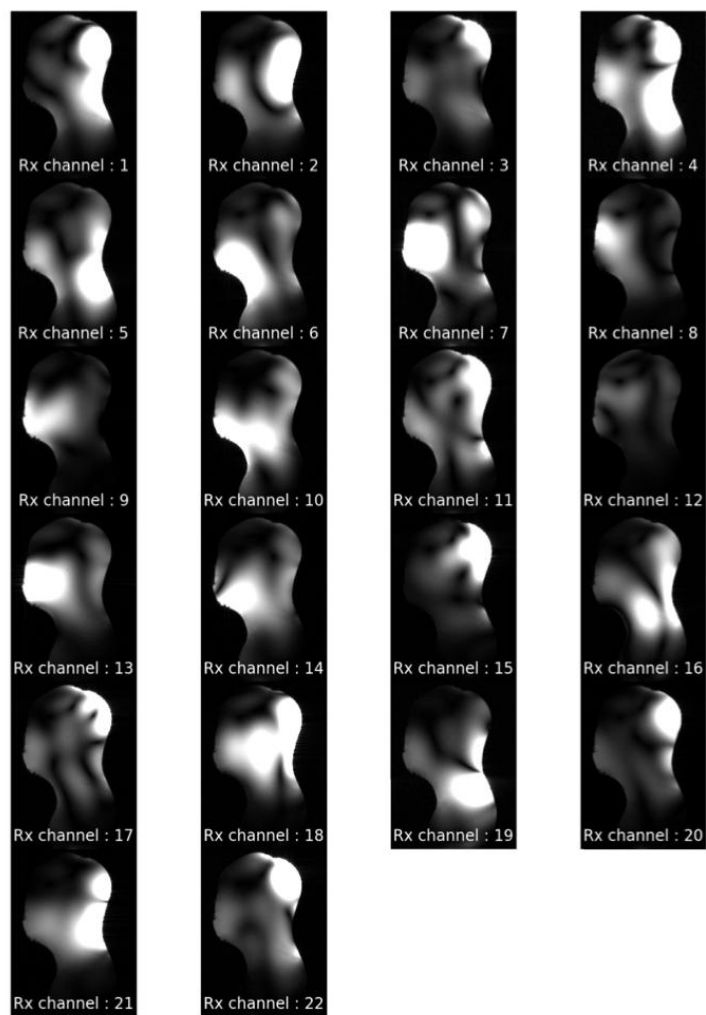


Figure S8: Individual channel GRE phantom sagittal images for MSSM (Subject 2).