$\verb|\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\| localizer$

SIEMENS: gre

PAT: Off Voxel size: 1.0×1.0×5.0 mm Rel. SNR: 1.00

TA: 0:13

		Base resolution	256
Properties		Phase resolution	100 %
Prio Recon	Off		
Before measurement		Phase partial Fourier	Off
After measurement		Interpolation	On
Load to viewer	On	PAT mode	None
Inline movie	Off		
Auto store images	On	Image Filter	Off
_	Off	Distortion Corr.	On
Load to stamp segments	Off	Mode	2D
Load images to graphic	Oli	Unfiltered images	Off
segments	0.44	Prescan Normalize	Off
Auto open inline display	Off	Normalize	Off
Start measurement without	On	B1 filter	Off
further preparation		Raw filter	Off
Wait for user to start	Off	Elliptical filter	On
Start measurements	single		
Routine		Mode	Inplane
Slice group 1		Geometry	
Slices	3	Multi-slice mode	Sequential
Dist. factor	20 %	Series	Interleaved
		0-4	04
Position	Isocenter	Saturation mode	Standard
Orientation	Sagittal	Special sat.	None
Phase enc. dir.	A >> P		
Rotation	0.00 deg	Table position	Н
Slice group 2		Table position	0 mm
Slices	1	Inline Composing	Off
Dist. factor	20 %		
Position	Isocenter	Tim CT mode	Off
Orientation	Coronal	Custom	
Phase enc. dir.	R >> L	System	
Rotation	0.00 deg	C15	On
	0.00 deg	C16	On
Slice group 3	4	C17	On
Slices	1	C18	On
Dist. factor	20 %	C19	On
Position	Isocenter	C20	On
Orientation	Transversal	C21	On
Phase enc. dir.	A >> P	C22	On
Rotation	0.00 deg	Ch1	On
Phase oversampling	0 %	Ch2	On
FoV read	250 mm		
FoV phase	100.0 %	Ch3	On
Slice thickness	5.0 mm	Ch4	On
TR	8.6 ms	Ch5	On
		Ch6	On
TE	3.69 ms	Ch7	On
Averages	1	Ch8	On
Concatenations	5	Ch9	On
Filter	Distortion Corr.(2D), Elliptical	C10	On
	filter	C11	On
Coil elements	C10-22;Ch1-9	C12	On
Contract		C13	On
Contrast	0 ms	C14	On
TD	0 ms		JII
MTC	Off	Positioning mode	FIX
Magn. preparation	None	MSMA	S - C - T
Flip angle	20 deg	Sagittal	R >> L
Fat suppr.	None	Coronal	A >> P
Water suppr.	None	Transversal	F >> H
SWI	Off	Save uncombined	Off
A	Olt t	Coil Combine Mode	Sum of Squares
Averaging mode	Short term	AutoAlign	
Reconstruction	Magnitude		
Measurements	1	Auto Coil Select	Off
Multiple series	Each measurement	Shim mode	Tune up
Resolution		Adjust with body coil	Off
Nesolution		Confirm freq. adjustment	Off
		1/+	

Assume Silicone ? Ref. amplitude 1H Adjustment Tolerance Adjust volume Position	Off 0.000 V Auto
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Physio	
1st Signal/Mode	None
Segments	1
	· · · · · · · · · · · · · · · · · · ·
Tagging	None
Dark blood	Off
Resp. control	Off
·	Oli
Inline	
Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1
Sequence	
Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Bandwidth	320 Hz/Px
Flow comp.	No
	Normal
RF pulse type	Normal
Gradient mode Excitation	Normal Slice-sel.
EXUITATION	Silue-sel.

On

RF spoiling

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\localizer_cor TA: 0:15 PAT: Off Voxel size: 1.0×1.0×5.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties		Elliptical filter Mode	On Inplane
Prio Recon	Off		in plants
Before measurement		Geometry	
After measurement		Multi-slice mode	Sequential
Load to viewer	On	Series	Interleaved
Inline movie	Off	0-66	04
Auto store images	On	Saturation mode	Standard
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Off		
segments	5	Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
	Oli		
further preparation	0"	Tim CT mode	Off
Wait for user to start	Off	System	
Start measurements	single	C15	On
Routine		C16	On
Slice group 1			_
Slices	7	C17	On
Dist. factor	, 10 %	C18	On
		C19	On
Position	R7.8 A12.7 H6.6	C20	On
Orientation	C > T-6.8	C21	On
Phase enc. dir.	R >> L	C22	On
Rotation	0.00 deg	Ch1	On
Phase oversampling	0 %	Ch2	On
FoV read	320 mm	Ch3	On
FoV phase	100.0 %	Ch4	On
Slice thickness	5.0 mm	Ch5	On
TR	7.8 ms	Ch6	On
TE	3.12 ms	Ch7	On
Averages	1		_
Concatenations	7	Ch8	On
Filter		Ch9	On
Filler	Distortion Corr.(2D), Elliptical	C10	On
	filter	C11	On
Coil elements	C10-22;Ch1-9	C12	On
Contrast		C13	On
TD	0 ms	- C14	On
MTC	Off	Davidania a sa da	FIV
Magn. preparation	None	Positioning mode	FIX
		MSMA	S - C - T
Flip angle	20 deg	Sagittal	R >> L
Fat suppr.	None	Coronal	A >> P
Water suppr.	None	Transversal	F >> H
SWI	Off	Save uncombined	Off
Averaging mode	Short term	Coil Combine Mode	Adaptive Combine
Reconstruction		AutoAlign	
Measurements	Magnitude 1	Auto Coil Select	Off
	-		
Multiple series	Each measurement	Shim mode	Tune up
Resolution		Adjust with body coil	Off
Base resolution	320	Confirm freq. adjustment	Off
Phase resolution	100 %	Assume Silicone	Off
Phase partial Fourier	6/8	? Ref. amplitude 1H	0.000 V
Interpolation	Off	Adjustment Tolerance	Auto
		Adjust volume	
PAT mode	None	! Position	Isocenter
		! Orientation	Transversal
Image Filter	Off	! Rotation	0.00 deg
Distortion Corr.	On	! R >> L	350 mm
Mode	2D	! A >> P	263 mm
Unfiltered images	Off		
Prescan Normalize	Off	! F >> H	350 mm
Normalize	Off	Physio	
B1 filter	Off	1st Signal/Mode	None
Raw filter	Off	Segments	1
I			
		3/+	

Tagging Dark blood	None Off
Resp. control	Off
Inline	
Subtract	Off
Liver registration	Off Off
Std-Dev-Sag Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off Off
MIP-Tra MIP-Time	Off
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1
Sequence	
Introduction	On
Dimension	2D
Phase stabilisation	Off Allowed
Asymmetric echo Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\localizer_sag
TA: 0:11 PAT: Off Voxel size: 1.0×1.0×5.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties		Elliptical filter	On
Prio Recon	Off	Mode	Inplane
Before measurement		Geometry	
After measurement		Multi-slice mode	Sequential
Load to viewer	On	Series	Interleaved
Inline movie	Off		
Auto store images	On	Saturation mode	Standard
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Off		
segments		Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
further preparation		Tim CT mode	Off
Wait for user to start	Off	ı	0.11
Start measurements	single	System	
Desides -	C	C15	On
Routine		_ C16	On
Slice group 1	_	C17	On
Slices	5	C18	On
Dist. factor	100 %	C19	On
Position	R6.5 A16.5 H16.2	C20	On
Orientation	S > T1.7	C21	On
Phase enc. dir.	A >> P	C22	On
Rotation	0.00 deg	Ch1	On
Phase oversampling	0 %	Ch2	On
FoV read	320 mm	Ch3	On
FoV phase	100.0 %	Ch4	On
Slice thickness	5.0 mm	Ch5	On
TR	7.8 ms	Ch6	On
TE	3.12 ms	Ch7	On
Averages	1	Ch8	On
Concatenations	5	Ch9	On
Filter	Distortion Corr.(2D), Elliptical	C10	On
	filter	C11	On
Coil elements	C10-22;Ch1-9	C12	On
Contrast		C13	On
TD	0 ms	C14	On
MTC	Off		
Magn. preparation	None	Positioning mode	FIX
		MSMA	S - C - T
Flip angle	20 deg None	Sagittal	R >> L
Fat suppr.		Coronal	A >> P
Water suppr.	None	Transversal	F >> H
SWI	Off	Save uncombined	Off
Averaging mode	Short term	Coil Combine Mode	Adaptive Combine
Reconstruction	Magnitude	AutoAlign	
Measurements	1	Auto Coil Select	Off
Multiple series	Each measurement	Shim mode	Tune up
· · ·		Adjust with body coil	Off
Resolution		Confirm freq. adjustment	Off
Base resolution	320	Assume Silicone	Off
Phase resolution	100 %	? Ref. amplitude 1H	0.000 V
Phase partial Fourier	6/8	Adjustment Tolerance	Auto
Interpolation	Off	Adjust volume	, idio
PAT mode	None	! Position	Isocenter
		! Orientation	Transversal
Image Filter	Off	! Rotation	0.00 deg
	On	! Rotation ! R >> L	350 mm
Distortion Corr.		! N >> L	330 IIIII
Distortion Corr. Mode	2D	1 A >> D	262 mm
	2D Off	! A >> P	263 mm
Mode		! A >> P ! F >> H	263 mm 350 mm
Mode Unfiltered images	Off		
Mode Unfiltered images Prescan Normalize	Off Off	! F >> H Physio	350 mm
Mode Unfiltered images Prescan Normalize Normalize	Off Off Off	! F >> H	

	Tagging Dark blood	None Off
	Resp. control	Off
I	nline	
	Subtract	Off
	Liver registration	Off
	Std-Dev-Sag	Off
	Std-Dev-Cor	Off
	Std-Dev-Tra	Off
	Std-Dev-Time	Off
	MIP-Sag	Off
	MIP-Cor	Off
	MIP-Tra	Off
	MIP-Time	Off
	Save original images	On
	Wash - In	Off
	Wash - Out	Off
	TTP	Off
	PEI	Off
	MIP - time	Off
-		
	MapIt	None
	Contrasts	1
5	Sequence	
	Introduction	On
	Dimension	2D
	Phase stabilisation	Off
	Asymmetric echo	Allowed
	Bandwidth	260 Hz/Px
	Flow comp.	No
	RF pulse type	Normal
	Gradient mode	Whisper
	Excitation	Slice-sel.
	RF spoiling	On
•		

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\preSatTFL_sag_2p5mm_FOV320_RefV300V_sa

TA: 1:20 PAT: Off Voxel size: 2.5×2.5×2.5 mm Rel. SNR: 1.00 USER: tfl_WIP543_B1map B1 filter Off Properties Raw filter Off Prio Recon Off Elliptical filter Off Before measurement After measurement Geometry Multi-slice mode Load to viewer On Interleaved Inline movie Off Series Interleaved Auto store images On Load to stamp segments Off Table position Load images to graphic Off Table position 0 mm segments Inline Composing Off Off Auto open inline display System Start measurement without On C15 On further preparation C16 On Off Wait for user to start C17 On Start measurements single C18 On Routine C19 On Slice group 1 C20 On Slices 28 C21 On Dist. factor 100 % C22 On Position R6.5 A16.5 H16.2 Ch1 On Orientation S > T1.7Ch2 On Phase enc. dir. A >> P Ch3 On Rotation 0.00 deg Ch4 On Slice group 2 Ch₅ On Slices 28 Ch6 On Dist. factor 100 % Ch7 On Position R4.0 A16.5 H16.2 Ch8 On Sagittal Orientation Ch9 On A >> P Phase enc. dir. C10 On Rotation 0.00 deg C11 On Phase oversampling 0 % C12 On FoV read 320 mm C13 On FoV phase 68.8 % C14 On Slice thickness 2.5 mm Positioning mode FIX TR 20000 ms **MSMA** S-C-T TE 2.84 ms Sagittal R >> L **Averages** Coronal A >> P Concatenations 2 Transversal F >> H Filter None Save uncombined Off Coil elements C10-22;Ch1-9 Coil Combine Mode Sum of Squares Contrast AutoAlign TD 0 ms Auto Coil Select Default Magn. preparation None Shim mode Standard Flip angle 10 deg Adjust with body coil Off Fat suppr. None Confirm freq. adjustment Off Water suppr. None Assume Silicone Off Averaging mode Long term ! Ref. amplitude 1H 300.000 V Reconstruction Magnitude Adjustment Tolerance Auto Measurements Adjust volume Multiple series Each measurement ! Position R6.6 A15.7 H4.2 ! Orientation Sagittal Resolution ! Rotation -5.61 deg Base resolution 128 !F>>H 142 mm Phase resolution 100 % ! A >> P 51 mm Phase partial Fourier Off !R >> L 45 mm Interpolation Off Physio PAT mode None 1st Signal/Mode None Image Filter Off Off Dark blood Distortion Corr. Off Off Prescan Normalize Off Resp. control Off Normalize Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

_	oquence	
	Introduction	Off
	Dimension	2D
	Reordering	Centric
	Asymmetric echo	Allowed
	Bandwidth	400 Hz/Px
	Flow comp.	No
	Echo spacing	5.7 ms
	EPI factor	1
	RF pulse type	Low SAR
	Gradient mode	Normal
	Excitation	Slice-sel.
	RF spoiling	On
	Prep Pulse	SINC
	Sat Flip Angle	90 deg
	Sat Thick	5.0 mm
	RF Duration	2000 us
	no ref scans	1 #
	TX array B1 mapping	Off
1	=apping	•

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\preSatTFL_sag_2p5mm_FOV320_RefV450V_sa TA: 1:20 PAT: Off Voxel size: 2.5×2.5×2.5 mm Rel. SNR: 1.00 USER: tfl_WIP543_B1map B1 filter Off Properties Raw filter Off Prio Recon Off Elliptical filter Off Before measurement After measurement Geometry Multi-slice mode Load to viewer On Interleaved Inline movie Off Series Interleaved Auto store images On Load to stamp segments Off Table position Load images to graphic Off Table position 0 mm segments Inline Composing Off Off Auto open inline display System Start measurement without On C15 On further preparation C16 On Off Wait for user to start C17 On Start measurements single C18 On Routine C19 On Slice group 1 C20 On Slices 28 C21 On Dist. factor 100 % C22 On Position R6.5 A16.5 H16.2 Ch1 On Orientation S > T1.7Ch2 On Phase enc. dir. A >> P Ch3 On Rotation 0.00 deg Ch4 On Slice group 2 Ch5 On Slices 28 Ch6 On Dist. factor 100 % Ch7 On Position R4.0 A16.5 H16.2 Ch8 On S > T1.7 Orientation Ch9 On A >> P Phase enc. dir. C10 On Rotation 0.00 deg C11 On Phase oversampling 0 % C12 On FoV read 320 mm C13 On FoV phase 68.8 % C14 On Slice thickness 2.5 mm Positioning mode FIX TR 20000 ms **MSMA** S-C-T TE 2.84 ms Sagittal R >> L **Averages** Coronal A >> P Concatenations 2 Transversal F >> H Filter None Save uncombined Off Coil elements C10-22;Ch1-9 Coil Combine Mode Sum of Squares Contrast AutoAlign TD 0 ms Auto Coil Select Default Magn. preparation None Shim mode Standard Flip angle 10 deg Adjust with body coil Off Fat suppr. None Confirm freq. adjustment Off Water suppr. None Assume Silicone Off Averaging mode Long term ! Ref. amplitude 1H 450.000 V Reconstruction Magnitude Auto Adjustment Tolerance Measurements Adjust volume Multiple series Each measurement ! Position R6.6 A15.7 H4.2 ! Orientation Sagittal Resolution ! Rotation -5.61 deg Base resolution 128 !F>>H 142 mm Phase resolution 100 % ! A >> P 51 mm Phase partial Fourier Off !R >> L 45 mm Interpolation Off Physio PAT mode None 1st Signal/Mode None Image Filter Off Off Dark blood Distortion Corr. Off

Inline

Resp. control

Off

Off

Off

Prescan Normalize

Normalize

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

•	ocquence	
	Introduction	Off
	Dimension	2D
	Reordering	Centric
	Asymmetric echo	Allowed
	Bandwidth	400 Hz/Px
	Flow comp.	No
	Echo spacing	5.7 ms
-	EPI factor	1
	RF pulse type	Low SAR
	Gradient mode	Normal
	Excitation	Slice-sel.
	RF spoiling	On
-	Prep Pulse	SINC
	Sat Flip Angle	60 deg
	Sat Thick	5.0 mm
	RF Duration	2000 us
	no ref scans	1 #
	TX array B1 mapping	Off
1	in and brinapping	U

Properties	0"	Table position Inline Composing	0 mm Off
Prio Recon	Off	System	
Before measurement		C15	On
After measurement	On		
Load to viewer	On Off	C16	On
Inline movie	Off	C17	On
Auto store images	On	C18	On
Load to stamp segments	Off	C19	On
Load images to graphic	Off	C20	On
segments		C21	On
Auto open inline display	Off	C22	On
Start measurement without	On	Ch1	On
further preparation		Ch2	On
Wait for user to start	Off	Ch3	On
Start measurements	single	Ch4	On
	J	Ch5	On
outine		Ch6	On
Slice group 1		Ch7	On
Slices	7	Ch8	On
Dist. factor	10 %	Ch9	On
Position	R6.5 A16.5 H16.2	C10	On
Orientation	S > T1.7		_
Phase enc. dir.	A >> P	C11	On
Rotation	0.00 deg	C12	On
Phase oversampling	0 %	C13	On
FoV read	192 mm	C14	On
		Positioning mode	
FoV phase	100.0 %	Positioning mode	FIX
Slice thickness	2.0 mm	MSMA	S - C - T
TR	200.0 ms	Sagittal	R >> L
TE 1	3.06 ms	Coronal	A >> P
TE 2	4.08 ms	Transversal	F >> H
Averages	1	Save uncombined	Off
Concatenations	1	Coil Combine Mode	Adaptive Combine
Filter	None	AutoAlign	·
Coil elements	C10-22;Ch1-9	Auto Coil Select	Default
	,		
Contrast		Shim mode	Standard
MTC	Off	Adjust with body coil	Off
Flip angle	32 deg	Confirm freq. adjustment	Off
Fat suppr.	None	Assume Silicone	Off
Averaging mode	Short term	····· ! Ref. amplitude 1H	450.000 V
5 5		Adjustment Tolerance	Auto
Reconstruction	Magn./Phase	Adjust volume	
Measurements	1	! Position	R6.6 A15.7 H4.2
Multiple series	Off	! Orientation	Sagittal
esolution		! Rotation	-5.61 deg
Base resolution	192		142 mm
		! A >> P	51 mm
Phase resolution	100 %	!R>>L	45 mm
Phase partial Fourier	Off Off	: N >> L	40 111111
Interpolation	Off	Composing	
Image Filter	Off	0	
Distortion Corr.	Off	Sequence	0.5
Prescan Normalize	Off	Introduction	On
Normalize	Off	Dimension	2D
B1 filter	Off	Asymmetric echo	Off
		Contrasts	2
Raw filter	Off	Bandwidth	965 Hz/Px
Elliptical filter	Off	Flow comp.	No
seometry			Name
Multi-slice mode	Interleaved	RF pulse type	Normal
Series	Interleaved	Gradient mode	Normal
		RF spoiling	On
Special sat.	None		
Opcolar sat.			

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\t2_tse_sag_2D_5sl_p2_trig
TA: 2:20 PAT: 2 Voxel size: 0.6×0.6×2.2 mm Rel. SNR: 1.00 SIEMENS: tse

		Normalize	Off
Properties		B1 filter	On
Prio Recon	Off	Intensity	Medium
Before measurement		Unfiltered images	Off
After measurement		Raw filter	Off
Load to viewer	On	Elliptical filter	Off
Inline movie	Off	Limption inter	Oli
Auto store images	On	Geometry	
Load to stamp segments	Off	Multi-slice mode	Interleaved
Load images to graphic	Off	Series	Interleaved
segments		0	NI
Auto open inline display	Off	Special sat.	None
Start measurement without	On		
further preparation		Table position	Н
Wait for user to start	Off	Table position	0 mm
Start measurements	single	Inline Composing	Off
I	39.0	Tim CT mode	Off
Routine			O.I.
Slice group 1		System	
Slices	3	C15	On
Dist. factor	40 %	C16	On
Position	R6.5 A16.5 H16.2	C17	On
Orientation	S > T1.7	C18	On
Phase enc. dir.	H >> F	C19	On
Rotation	90.00 deg	C20	On
Phase oversampling	60 %	C21	On
FoV read	192 mm	C22	On
FoV phase	100.0 %	Ch1	On
Slice thickness	2.2 mm	Ch2	On
TR	4000 ms	Ch3	On
TE	34 ms	Ch4	On
Averages	1	Ch5	On
Concatenations	1	Ch6	On
Filter	Distortion Corr.(2D), B1 filter		_
Coil elements	C10-22;Ch1-9	Ch7	On
Con cicinents	010 22,0111 0	Ch8	On
Contrast		Ch9	On
MTC	Off	C10	On
Magn. preparation	None	C11	On
Flip angle	120 deg	C12	On
Fat suppr.	Fat sat.	C13	On
Fat sat. mode	Strong	C14	On
Water suppr.	None	Positioning mode	FIX
Restore magn.	Off	MSMA	S - C - T
		Sagittal	R >> L
Averaging mode	Short term		A >> P
Reconstruction	Magnitude	Coronal	
Measurements	1	Transversal	F >> H
Multiple series	Each measurement	Save uncombined	Off
Resolution		Coil Combine Mode	Adaptive Combine
Base resolution	320	AutoAlign	Default
		Auto Coil Select	Default
Phase resolution	98 %	Shim mode	Standard
Phase partial Fourier	Off	Adjust with body coil	Off
Trajectory	Cartesian	Confirm freq. adjustment	Off
Interpolation	Off	Assume Silicone	Off
PAT mode	GRAPPA		
Accel. factor PE	2	! Ref. amplitude 1H	450.000 V
		Adjustment Tolerance	Auto
Ref. lines PE	24	Adjust volume	D0.0.445.7114.0
Reference scan mode	Integrated	! Position	R6.6 A15.7 H4.2
Image Filter	Off	! Orientation	Sagittal
Distortion Corr.	On	! Rotation	-5.61 deg
Mode	2D	! F >> H	142 mm
Unfiltered images	Off	! A >> P	51 mm
Prescan Normalize	Off	! R >> L	45 mm
1 1000all Normalize	OII	•	

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off
nline	
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Off
2D
Off
On
1
579 Hz/Px
No
0 s
11.2 ms
Turbo factor
8
33
Normal
Normal

TA: 8:37 PAT: 2		7 mm Rel. SNR: 1.00 USER	t: tfl_wip944_b17stx
Drapartica		Distortion Corr.	On
Properties		Mode	3D
Prio Recon	Off	Unfiltered images	Off
Before measurement		Prescan Normalize	Off
After measurement	_	Normalize	Off
Load to viewer	On	B1 filter	Off
Inline movie	Off	Raw filter	Off
Auto store images	On	Elliptical filter	Off
Load to stamp segments	Off	Liliptical litter	Oli
Load images to graphic	Off	Geometry	
segments		Multi-slice mode	Single shot
Auto open inline display	Off	Series	Ascending
Start measurement without	On		
further preparation		Table position	Н
Wait for user to start	Off	Table position	0 mm
Start measurements	single	Inline Composing	Off
	Single	mine composing	Oli
Routine		System	
Slab group 1		C15	On
Slabs	1	C16	On
Dist. factor	50 %	C17	On
Position	R8.4 A16.4 H13.9	C18	On
Orientation	C > T-6.7	C19	On
Phase enc. dir.	R >> L	C20	On
Rotation	0.00 deg	C21	On
Phase oversampling	0 %	C22	On
Slice oversampling	0.0 %	Ch1	On
Slices per slab	192		_
FoV read	260 mm	Ch2	On
		Ch3	On
FoV phase	65.2 %	Ch4	On
Slice thickness	0.70 mm	Ch5	On
TR	5000 ms	Ch6	On
TE	2.12 ms	Ch7	On
Averages	1	Ch8	On
Concatenations	1	Ch9	On
Filter	Distortion Corr.(3D)	C10	On
Coil elements	C10-22;Ch1-9	C11	On
Contract		C12	On
Contrast	N. J.D.	C13	On
Magn. preparation	Non-sel. IR	C14	On
TI 1	700 ms		
TI 2	2400 ms	Positioning mode	FIX
Flip angle 1	4 deg	MSMA	S - C - T
Flip angle 2	5 deg	Sagittal	R >> L
Fat suppr.	None	Coronal	A >> P
Water suppr.	None	Transversal	F >> H
2nd Inversion Contrast	On	Save uncombined	Off
A		Coil Combine Mode	Adaptive Combine
Averaging mode	Long term	AutoAlign	
Reconstruction	Magnitude	Auto Coil Select	Default
Measurements	1		
Multiple series	Each measurement	Shim mode	Standard
Resolution		Adjust with body coil	Off
Base resolution	368	Confirm freq. adjustment	Off
Phase resolution	100 %	Assume Silicone	Off
Slice resolution	100 %	! Ref. amplitude 1H	450.000 V
		Adjustment Tolerance	Auto
Phase partial Fourier	6/8	Adjust volume	
Slice partial Fourier	Off	! Position	R6.6 A15.7 H4.2
PAT mode	GRAPPA	! Orientation	Sagittal
Accel. factor PE	2	! Rotation	-5.61 deg
Ref. lines PE	28	! F >> H	142 mm
Accel. factor 3D	20 1	! F >> F ! A >> P	51 mm
	=	! A >> P ! R >> L	_
Reference scan mode	Integrated	! K >> L	45 mm
Image Filter	Off	Physio	

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off
Composing	
Sequence	
Introduction Dimension Elliptical scanning Asymmetric echo Contrasts Bandwidth Flow comp. Echo spacing	On 3D Off Allowed 1 220 Hz/Px No 6.3 ms
RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Non-sel. On
FFT Scale Factor LIN/PAR Swap Ext. INV Pulse Flip Angle Uniform Image Head Mask on UNI T1 Map Complex Div. Image Denoise Weighting FLAWS	100 % Off On 360 On Off On Off On Off

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\dti_ep2d511F_5s_LR_rev_b0 TA: 0:20 PAT: 2 Voxel size: 0.8×0.8×3.0 mm Rel. SNR: 1.00 USER: ep2d_advdiff_511F

Properties		MTC Magn propagation	Off None
Prio Recon	Off	Magn. preparation Fat suppr.	None
Before measurement		Extra Fat Suppr.	
After measurement		Saturation Mode	on skewed
Load to viewer	On	Saturation Mode	Skewed
Inline movie	Off	Averaging mode	Long term
Auto store images	On	Reconstruction	Magnitude
Load to stamp segments	Off	Delay in TR	0 ms
Load images to graphic	Off	1	
segments		Resolution	
Auto open inline display	Off	Base resolution	128
Start measurement without	On	Phase resolution	100 %
further preparation	911	Phase partial Fourier	5/8
Wait for user to start	Off	Interpolation	Off
Start measurements		DAT d-	OD 4 DD 4
Start measurements	single	PAT mode	GRAPPA
Routine		Accel. factor PE	2
Slice group 1		Ref. lines PE	24
Slices	1	Reference Scan Mode	multi-shot EPI
Dist. factor	10 %	Distortion Corr.	Off
Position	R0.8 A16.7 H60.5	Prescan Normalize	Off
Orientation	T > C-5.7 > S-1.7	Raw filter	Off
Phase enc. dir.	L >> R		
		Elliptical filter	Off
Rotation	-90.00 deg	Hamming	Off
Slice group 2	4	Geometry	
Slices	1	Multi-slice mode	Interleaved
Dist. factor	10 %	Series	Descending
Position	R2.5 A17.2 H41.7		
Orientation	T > C-3.6 > S-1.7	Special sat.	None
Phase enc. dir.	L >> R		
Rotation	-90.00 deg	Table position	Н
Slice group 3		Table position	0 mm
Slices	1	Inline Composing	Off
Dist. factor	10 %	1	.
Position	R5.5 A16.8 H23.2	System	
Orientation	T > C2.8 > S-1.7	C15	On
Phase enc. dir.	L >> R	C16	On
Rotation	-90.00 deg	C17	On
Slice group 4	9	C18	On
Slices	1	C19	On
Dist. factor	10 %	C20	On
Position	R6.8 A14.9 H5.5	C21	On
Orientation			
Chematen	T > C5 0 > S-1 7		On
Phase enc. dir	T > C5.0 > S-1.7	C22	On
Phase enc. dir.	L >> R	C22 Ch1	On On
Rotation		C22 Ch1 Ch2	On On On
Rotation Slice group 5	L >> R -90.00 deg	C22 Ch1 Ch2 Ch3	On On On On
Rotation Slice group 5 Slices	L >> R -90.00 deg	C22 Ch1 Ch2 Ch3 Ch4	On On On On On
Rotation Slice group 5 Slices Dist. factor	L >> R -90.00 deg 1 10 %	C22 Ch1 Ch2 Ch3 Ch4 Ch5	On On On On On On
Rotation Slice group 5 Slices Dist. factor Position	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1	C22 Ch1 Ch2 Ch3 Ch4 Ch5	On On On On On On On On On
Rotation Slice group 5 Slices Dist. factor Position Orientation	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6	On
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir.	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8	On
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9	On
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 %	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 %	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms 57.2 ms	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode MSMA	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE Averages	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms 57.2 ms 3	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode MSMA Sagittal	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE Averages Concatenations	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms 57.2 ms 3	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode MSMA Sagittal Coronal	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE Averages Concatenations Filter Coil elements	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms 57.2 ms 3 3 None	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode MSMA Sagittal Coronal Transversal	On O
Rotation Slice group 5 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TE Averages Concatenations Filter	L >> R -90.00 deg 1 10 % R7.4 A11.5 F14.1 T > C6.7 > S-1.7 L >> R -90.00 deg 0 % 105 mm 100.0 % 3.0 mm 650 ms 57.2 ms 3 3 None	C22 Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 C10 C11 C12 C13 C14 Positioning mode MSMA Sagittal Coronal	On O

Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	450.000 V
Adjustment Tolerance	Auto
Adjust volume	Adio
! Position	R3.7 A8.9 H23.3
! Orientation	S > T2.4 > C0.1
! Rotation	-6.13 deg
! F >> H	111 mm
! A >> P	45 mm
!R>>L	42 mm
	42 111111
Physio	
1st Signal/Mode	Pulse/Trigger
Average cycle	731 ± 4 ms
Acquisition window	650 ms
Trigger pulse	1
Trigger delay	0 ms
Phases	1
PMU Recording	off
Resp. control	Off
Diff	
Diffusion mode	3-Scan Trace
Diff. weightings	1
b-value	0 s/mm²
Diff. weighted images	Off
Trace weighted images	On
Average ADC maps	Off
Individual ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40
Diff. directions	3
· · · · · · · · · · · · · · · · · · ·	
Sequence	0#
Introduction	Off
Bandwidth	1116 Hz/Px
Optimization	None
Free echo spacing	Off
Echo spacing	1.02 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast*
Add. FFT Scale Factor	1.0

Properties	0"	MTC Magn. preparation	Off None
Prio Recon	Off	Fat suppr.	None
Before measurement		Extra Fat Suppr.	on
After measurement	0	Saturation Mode	skewed
Load to viewer	On Off	A	1 4
Inline movie	Off	Averaging mode	Long term
Auto store images	On Off	Reconstruction	Magnitude
Load to stamp segments	Off	Delay in TR	0 ms
Load images to graphic	Off	Multiple series	Off
segments	0#	Resolution	
Auto open inline display	Off	Base resolution	128
Start measurement without	On	Phase resolution	100 %
further preparation	0#	Phase partial Fourier	5/8
Wait for user to start	Off	Interpolation	Off
Start measurements	single		00,400,4
Routine		PAT mode	GRAPPA
Slice group 1		- Accel. factor PE	2
Slices	1	Ref. lines PE	24
Dist. factor	10 %	Reference Scan Mode	multi-shot EPI
Position	R0.8 A16.7 H60.5	Distortion Corr.	Off
Orientation	T > C-5.7 > S-1.7	Prescan Normalize	Off
Phase enc. dir.	R >> L	Raw filter	Off
Rotation	90.00 deg	Elliptical filter	Off
Slice group 2	ŭ	Hamming	Off
Slices	1		.
Dist. factor	10 %	Geometry	
Position	R2.5 A17.2 H41.7	Multi-slice mode	Interleaved
Orientation	T > C-3.6 > S-1.7	Series	Descending
Phase enc. dir.	R >> L	Special sat.	None
Rotation	90.00 deg	·····	
Slice group 3	ŭ	Table position	Н
Slices	1	Table position	0 mm
Dist. factor	10 %	Inline Composing	Off
Position	R5.5 A16.8 H23.2	miline Composing	Oli
Orientation	T > C2.8 > S-1.7	System	
Phase enc. dir.	R >> L	C15	On
Rotation	90.00 deg	C16	On
Slice group 4	•	C17	On
Slices	1	C18	On
Dist. factor	10 %	C19	On
Position	R6.8 A14.9 H5.5	C20	On
Orientation	T > C5.0 > S-1.7	C21	On
Phase enc. dir.	R >> L	C22	On
Rotation	90.00 deg	Ch1	On
Slice group 5	-	Ch2	On
Slices	1	Ch3	On
Dist. factor	10 %	Ch4	On
Position	R7.4 A11.5 F14.1	Ch5	On
Orientation	T > C6.7 > S-1.7	Ch6	On
Phase enc. dir.	R >> L	Ch7	On
Rotation	90.00 deg	Ch8	On
Phase oversampling	0 %	Ch9	On
FoV read	105 mm	C10	On
FoV phase	100.0 %	C11	On
Slice thickness	3.0 mm	C12	On
TR	650 ms	C13	On
TE	57.2 ms	C14	On
Averages	3	Positioning mode	FIX
Concatenations	3	MSMA	S-C-T
Filter	None	Sagittal	R >> L
Coil elements	C10-22;Ch1-9	Coronal	A >> P
Contrast		Transversal	F >> H
Contrast		Coil Combine Mode	Sum of Squares
		Tour combine Mode	Jun or Oquaros

AutoAlign	
Auto Coil Select	Default
Shim mode Adjust with body coil Confirm freq. adjustment Assume Silicone	Standard Off Off Off
! Ref. amplitude 1H Adjustment Tolerance Adjust volume	450.000 V Auto
! Position	R3.7 A8.9 H23.3
! Orientation	S > T2.4 > C0.1
! Rotation	-6.13 deg
!F >> H	111 mm
!A >> P	45 mm
!R >> L	42 mm
Physio	

1st Signal/Mode	Pulse/Trigger
Average cycle	$739 \pm 5 \text{ ms}$
Acquisition window	650 ms
Trigger pulse	1
Trigger delay	0 ms
Phases	1
PMU Recording	off
Resp. control	Off

Diff

Diffusion mode	MDDW
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	800 s/mm ²
Diff. weighted images	On
Trace weighted images	Off
Average ADC maps	Off
Individual ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40
Diff. directions	30

Sequence

	Introduction	Off
	Bandwidth	1116 Hz/Px
	Optimization	None
	Free echo spacing	Off
	Echo spacing	1.02 ms
	EPI factor	128
	RF pulse type	Normal
	Gradient mode	Fast*
	Add. FFT Scale Factor	1.0
ı		***

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\b0map_gre_field_sag_1x1x2_7sl TA: 1:19 Voxel size: 1.0×1.0×2.0 mm Rel. SNR: 1.00 SIEMENS: gre_field_mapping

Properties		Table position Inline Composing	0 mm Off
Prio Recon Before measurement	Off	1	
After measurement		System C15	On
Load to viewer	On	C16	On
Inline movie	Off	C17	On
Auto store images	On	C18	On
Load to stamp segments	Off	C19	On
Load images to graphic	Off	C20	On
segments	0.11	C21	On
Auto open inline display	Off	C22	On
Start measurement without	On	Ch1	On
further preparation		Ch2	On
Wait for user to start	Off	Ch3	On
Start measurements	single	Ch4	On
	5.1.g.5	Ch5	On
Routine		Ch6	On
Slice group 1		Ch7	On
Slices	7	Ch8	On
Dist. factor	10 %	Ch9	On
Position	R6.5 A16.5 H16.2	C10	On
Orientation	S > T1.7	C11	On
Phase enc. dir.	A >> P	C12	On
Rotation	0.00 deg	C13	On
Phase oversampling	0 %	C14	On
FoV read	192 mm		
FoV phase	100.0 %	Positioning mode	FIX
Slice thickness	2.0 mm	MSMA	S - C - T
TR	200.0 ms	Sagittal	R >> L
TE 1	3.06 ms	Coronal	A >> P
TE 2	4.08 ms	Transversal	F >> H
Averages	1	Save uncombined	Off
Concatenations	1	Coil Combine Mode	Adaptive Combine
Filter	None	AutoAlign	
Coil elements	C10-22;Ch1-9	Auto Coil Select	Default
Contrast		Shim mode	Standard
MTC	Off	Adjust with body coil	Off
Flip angle	32 deg	Confirm freq. adjustment	Off
Fat suppr.	None	Assume Silicone	Off
	01	·· ? Ref. amplitude 1H	0.000 V
Averaging mode	Short term	Adjustment Tolerance	Auto
Reconstruction	Magn./Phase	Adjust volume	
Measurements	1	! Position	R3.7 A8.9 H23.3
Multiple series	Off	! Orientation	S > T2.4 > C0.1
Resolution		! Rotation	-6.13 deg
Base resolution	192	! F >> H	111 mm
Phase resolution	100 %	! A >> P	45 mm
Phase partial Fourier	Off	! R >> L	42 mm
Interpolation	Off	Composing	
Imaga Filtor	O#	Composing	
Image Filter Distortion Corr.	Off Off	Sequence	
Prescan Normalize	Off	Introduction	On
Normalize	Off	Dimension	2D
Normalize B1 filter	Off	Asymmetric echo	Off
Raw filter	Off	Contrasts	2
Elliptical filter		Bandwidth	965 Hz/Px
CHIVICAL HIICH	()††	L Flow some	No
•	Off	Flow comp.	110
Geometry			
Geometry Multi-slice mode	Interleaved	RF pulse type	Normal
Geometry	Interleaved Interleaved	RF pulse type Gradient mode	Normal Normal
Geometry Multi-slice mode Series	Interleaved Interleaved	RF pulse type	Normal
Geometry Multi-slice mode	Interleaved Interleaved	RF pulse type Gradient mode	Normal Normal

\\USER\Alan\History\20230622_1000_Traveling_Spine_qMRI\t2s_gre_7lvl7sl_0p4_4te_2mm_notrig_Pstab_Re TA: 5:10 PAT: Off Voxel size: 0.3×0.3×3.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties		Phase enc. dir. Rotation	A >> P 0.00 deg
Prio Recon	Off	Rotation Phase oversampling	0.00 deg 0 %
Before measurement		FoV read	128 mm
After measurement			100.0 %
Load to viewer	On	FoV phase Slice thickness	
Inline movie	Off		3.0 mm
Auto store images	On	TR	400 ms
Load to stamp segments	Off	TE 1	4.68 ms
Load images to graphic	Off	TE 2	9.08 ms
segments		TE 3	13.48 ms
Auto open inline display	Off	TE 4	17.88 ms
Start measurement without	On	TE 5	22.28 ms
	OII	Averages	1
further preparation	Off	Concatenations	1
Wait for user to start		Filter	None
Start measurements	single	Coil elements	C10-22;Ch1-9
Routine		Contrast	
Slice group 1		MTC	Off
Slices	2	Magn. preparation	None
Dist. factor	100 %	Flip angle	53 deg
Position	R0.8 A16.7 H60.5	Fat suppr.	None
Orientation	T > C-5.7 > S-1.7	Water suppr.	None
Phase enc. dir.	A >> P	SWI	Off
Rotation	0.00 deg		·····
Slice group 2		Averaging mode	Short term
Slices	2	Reconstruction	Magnitude
Dist. factor	100 %	Measurements	2
Position	R2.5 A17.2 H41.7	Pause after meas. 1	0.0 s
Orientation	T > C-3.6 > S-1.7	Multiple series	Each measurement
Phase enc. dir.	A >> P	•	
Rotation	0.00 deg	Resolution	
Slice group 3	0.00 009	Base resolution	512
Slices	2	Phase resolution	100 %
Dist. factor	100 %	Phase partial Fourier	6/8
		Interpolation	Off
Position	R5.5 A16.8 H23.2		
Orientation	T > C2.8 > S-1.7	PAT mode	None
Phase enc. dir.	A >> P	Image Filter	Off
Rotation	0.00 deg	Distortion Corr.	Off
Slice group 4	_	Prescan Normalize	Off
Slices	2	Normalize	Off
Dist. factor	100 %	B1 filter	Off
Position	R6.8 A14.9 H5.5	Raw filter	Off
Orientation	T > C5.0 > S-1.7		
Phase enc. dir.	A >> P	Elliptical filter	Off
Rotation	0.00 deg	Geometry	
Slice group 5		Multi-slice mode	Interleaved
Slices	2	Series	Interleaved
Dist. factor	100 %		
Position	R7.4 A11.5 F14.1	Saturation mode	Standard
Orientation	T > C6.7 > S-1.7	Special sat.	None
Phase enc. dir.	A >> P		
Rotation	0.00 deg	Table position	H
Slice group 6	3.55 459	Table position	0 mm
Slices	1	Inline Composing	Off
Dist. factor	100 %		
Position		Tim CT mode	Off
	R8.0 A10.7 F32.9	System	
Orientation	T > C8.9 > S-1.7 A >> P	System	0.5
	^ ~ D	C15	On
Phase enc. dir.		040	
Phase enc. dir. Rotation	0.00 deg	C16	On
Phase enc. dir. Rotation Slice group 7		C17	On
Phase enc. dir. Rotation Slice group 7 Slices	0.00 deg 1	C17 C18	On On
Phase enc. dir. Rotation Slice group 7	0.00 deg 1 100 %	C17 C18 C19	On
Phase enc. dir. Rotation Slice group 7 Slices	0.00 deg 1	C17 C18	On On

On 2D

On Off

No

No

No

No

No

Fast

On

Slice-sel.

Bipolar Normal

250 Hz/Px 250 Hz/Px

250 Hz/Px

250 Hz/Px

250 Hz/Px

	C22	On	Comunica
	Ch1	On	Sequence Introduction
	Ch2	On	Dimension
	Ch3	On	Phase stabilisation
	Ch4	On	Asymmetric echo
	Ch5	On	Bandwidth 1
	Ch6	On	Bandwidth 2
	Ch7	On On	Bandwidth 3
	Ch8 Ch9	On	Bandwidth 4
	C10	On	Bandwidth 5
	C11	On	Flow comp. 1
	C12	On	Flow comp. 2
	C13	On	Flow comp. 3
	C14	On	Flow comp. 4
	Positioning mode	FIX	Flow comp. 5 Readout mode
	Positioning mode MSMA	S - C - T	
	Sagittal	R >> L	RF pulse type
	Coronal	A >> P	Gradient mode
	Transversal	F >> H	Excitation
	Save uncombined	Off	RF spoiling
	Coil Combine Mode	Adaptive Combine	
	AutoAlign		
	Auto Coil Select	Default	
	Shim mode	Standard	
	Adjust with body coil	Off	
	Confirm freq. adjustment	Off	
	Assume Silicone	Off	
	! Ref. amplitude 1H	450.000 V	
	Adjustment Tolerance	Auto	
	Adjust volume		
	! Position	R4.1 A7.5 H9.9	
	! Orientation	S > T2.4 > C0.1	
	! Rotation	-6.13 deg	
	!F>> H	138 mm	
	! A >> P ! R >> L	45 mm 42 mm	
l		42 11111	
	Physio		
	1st Signal/Mode	None	
	Segments	1	
	Tagging	None	
	Dark blood	Off	
	Posp control	Off	
l	Resp. control	Oli	
_	Inline		
	Subtract	Off	
	Liver registration	Off	
	Std-Dev-Sag	Off	
	Std-Dev-Cor Std-Dev-Tra	Off Off	
	Std-Dev-Time	Off	
	MIP-Sag	Off	
	MIP-Cor	Off	
	MIP-Tra	Off	
	MIP-Time	Off	
	Save original images	On	
	Wash - In	Off	
	wasn - in Wash - Out	Off Off	
	TTP	Off	
	PEI	Off	
	MIP - time	Off	
	MapIt	None	
	Contrasts	5	

Table of contents

\\USER

A	lan		
		History	
		-	20230622_1000_Traveling_Spine_qMRI
			localizer
			localizer_cor
			localizer_sag
			preSatTFL_sag_2p5mm_FOV320_RefV300V_satFA90
			preSatTFL_sag_2p5mm_FOV320_RefV450V_satFA60
			b0map_gre_field_sag_1x1x2_7sl
			t2_tse_sag_2D_5sl_p2_trig
			t1_mp2rage_cor_nonSelHS1_0p7iso
			dti_ep2d511F_5s_LR_rev_b0
			dti_ep2d511F_5s_RL_fwd
			b0map_gre_field_sag_1x1x2_7sl
			t2s_gre_7lvl7sl_0p4_4te_2mm_notrig_Pstab_RefV450V_FA53