\\USER\UserProtocols\Renzo\anatomy_slab_highres\highres_gre_768x576_2echo_a30_0.3x0.3x0.7

TA: 5:59 PAT: 2 Voxel size: 0.4x0.4x0.7 mm Rel. SNR: 1.00 SIEMENS: gre

.		Distortion Corr.	Off
Properties		— Prescan Normalize	Off
Prio Recon	Off	Normalize	Off
Before measurement		B1 filter	Off
After measurement	_	Raw filter	Off
Load to viewer	On	Elliptical filter	Off
Inline movie	Off		.
Auto store images	On	Geometry	
Load to stamp segments	Off	Multi-slice mode	Interleaved
Load images to graphic	Off	Series	Interleaved
segments		Saturation mode	Standard
Auto open inline display	Off	Special sat.	None
Start measurement without	On	Special sat.	
further preparation		T-11.	
Wait for user to start	Off	Table position	H
Start measurements	single	Table position	0 mm
Routine		Inline Composing	Off
Slab group 1		Tim CT mode	Off
Slabs	1	System	
Dist. factor	20 %	V32	Off
Position	R3.3 A13.5 H34.9	A32	On
Orientation	T > C-4.3 > S0.7		OII
Phase enc. dir.	R >> L	Positioning mode	FIX
Rotation	90.00 deg	MSMA	S - C - T
Phase oversampling	0 %	Sagittal	R >> L
Slice oversampling	0.0 %	Coronal	A >> P
Slices per slab	60	Transversal	F >> H
FoV read	140 mm	Save uncombined	Off
FoV phase	100.0 %	Coil Combine Mode	Adaptive Combine
Slice thickness	0.70 mm	AutoAlign	'
TR	35 ms	Auto Coil Select	Default
TE 1	8.50 ms	Ol-:	04
TE 2	23.20 ms	Shim mode	Standard
Averages	1	Adjust with body coil	Off
Concatenations	1	Confirm freq. adjustment	Off
Filter	None	Assume Silicone	Off
Coil elements	A32	? Ref. amplitude 1H	0.000 V
1		Adjustment Tolerance	Auto
Contrast	~	Adjust volume	D4 4 440 4 HG2 4
MTC	Off	! Position	R4.4 A16.4 H30.4
Magn. preparation	None	! Orientation	S > T0.5
Flip angle	10 deg	! Rotation	-0.26 deg
Fat suppr.	None	!F>> H	69 mm
Water suppr.	None	! A >> P	131 mm
SWI	Off	! R >> L	151 mm
Averaging mode	Short term	Physio	
Reconstruction	Magn./Phase	1st Signal/Mode	None
Measurements	1	Segments	1
Multiple series	Each measurement		N.
•		Tagging	None
Resolution		Dark blood	Off
Base resolution	320	Resp. control	Off
Phase resolution	100 %	'	•
Slice resolution	100 %	Inline	
Phase partial Fourier	Off	Subtract	Off
Slice partial Fourier	Off	Liver registration	Off
Interpolation	Off	Std-Dev-Sag	Off
PAT mode	GRAPPA	Std-Dev-Cor	Off
Accel. factor PE	2	Std-Dev-Tra	Off
Ref. lines PE	24	Std-Dev-Time	Off
Accel. factor 3D	2 4 1	MIP-Sag	Off
Reference scan mode	·	MIP-Cor	Off
Reference scan mode	Integrated	MIP-Tra	Off
Image Filter	Off	MIP-Time	Off
•			

Save original images	On
Wash - In Wash - Out TTP PEI	Off Off Off Off
MIP - time	Off
MapIt Contrasts	None 2
Sequence	
Introduction Dimension Elliptical scanning Phase stabilisation Asymmetric echo Bandwidth 1 Bandwidth 2 Flow comp. 1 Flow comp. 2 Readout mode	Off 3D Off Off Off 80 Hz/Px 60 Hz/Px No No Bipolar
RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On

\\USER\UserProtocols\Renzo\anatomy_slab_highres\MP2RAGE_slab_0.37iso_T1

Voxel size: 0.4x0.4x0.7 mm Rel. SNR: 1.00 USER: tfl_wip900b17a

TA: 4:32

PAT: 2

1A. 4.32 PAT	. Z VOXEI SIZE. U.4XU.4XI	0.7 IIIII Kei. SNR. 1.00 USE	R. III_WIP900D17a
		Distortion Corr.	Off
Properties			_
Prio Recon	Off	Prescan Normalize	Off
Before measurement		Raw filter	Off
After measurement		Elliptical filter	Off
Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Single shot
Auto store images	On	Series	Interleaved
Load to stamp segments	Off		
Load images to graphic	Off	Table position	Н
segments		Table position	0 mm
Auto open inline display	Off	Inline Composing	Off
Start measurement without	On		311
further preparation		System	
Wait for user to start	Off	V32	Off
Start measurements	single	A32	On
1	g	Desitioning made	FIX
Routine		Positioning mode MSMA	S - C - T
Slab group 1			S - C - 1 R >> L
Slabs	1	Sagittal	· · · · · =
Dist. factor	50 %	Coronal	A >> P
Position	R3.3 A13.5 H34.9	Transversal	F >> H Off
Orientation	T > C-4.3 > S0.7	Save uncombined	_
Phase enc. dir.	R >> L	Coil Combine Mode	Adaptive Combine
Rotation	90.00 deg	AutoAlign	 D ()
Phase oversampling	0 %	Auto Coil Select	Default
Slice oversampling	0.0 %	Shim mode	Standard
Slices per slab	60	Adjust with body coil	Off
FoV read	140 mm	Confirm freq. adjustment	Off
FoV phase	100.0 %	Assume Silicone	Off
Slice thickness	0.70 mm	! Ref. amplitude 1H	277.000 V
TR	6000 ms	Adjustment Tolerance	Auto
TE	4.23 ms	Adjust volume	Adio
Averages	1	! Position	R4.4 A16.4 H30.4
Concatenations	1	! Orientation	S > T0.5
Filter	None	! Rotation	-0.26 deg
Coil elements	A32	! F >> H	69 mm
Contract		! A >> P	131 mm
Contrast	N LID		151 mm
Magn. preparation	Non-sel. IR	Ī	131 11111
TI 1	900 ms	Physio	
TI 2	2900 ms	1st Signal/Mode	None
Flip angle 1	6 deg	Dark blood	O#
Flip angle 2	7 deg	Dark blood	Off
Fat suppr.	None	Resp. control	Off
Water suppr.	None	· '	
2nd Inversion Contrast	On	Composing	
Averaging mode	Long term	Sequence	
Reconstruction	Magn./Phase	Introduction	On
Measurements	1	Dimension	3D
Multiple series	Each measurement	Elliptical scanning	Off
•	, , , , , , , , , , , , , , , ,	Asymmetric echo	Off
Resolution		— Contrasts	1
Base resolution	320	Bandwidth	190 Hz/Px
Phase resolution	100 %	Flow comp.	No
Slice resolution	100 %	Echo spacing	8.6 ms
Phase partial Fourier	Off		
Slice partial Fourier	6/8	RF pulse type	Fast
PAT mode	GRAPPA	Gradient mode	Fast
Accel. factor PE		Excitation	Slab-sel.
Ref. lines PE	2 24	RF spoiling	On
	۷ 11 1	EET Cools Forter	150 0/
Accel. factor 3D	I Intograted	FFT Scale Factor	150 %
Reference scan mode	Integrated	Morphometry Analysis	Off Off
Image Filter	Off	FID MoCo Logging	Off
		FID Coil Phase Corr.	Off

LIN/PAR Swap	On
Ext. INV Pulse	On
Flip Angle	1400
Phase Filter	0 px
Uniform Image	On
Head Mask on UNI	Off
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off

\\USER\UserProtocols\Renzo\anatomy_slab_highres\MP2RAGE_slab_0.50iso_aligned TA: 16:08 PAT: Off Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: tfl_wip900b17a

Properties	0"	Image Filter	Off
Prio Recon	Off	Distortion Corr.	Off
Before measurement		Prescan Normalize	Off
After measurement	00	Raw filter	Off
Load to viewer Inline movie	On Off	Elliptical filter	Off
Auto store images	On	Geometry	
Load to stamp segments	Off	Multi-slice mode	Single shot
Load images to graphic	Off	Series	Interleaved
segments	5 11		
Auto open inline display	Off	Table position	Н
Start measurement without	On	Table position	0 mm
further preparation		Inline Composing	Off
Wait for user to start	Off	System	
Start measurements	single	V32	Off
Routine		A32	On
Slab group 1		_	
Slabs	1	Positioning mode	FIX
Dist. factor	50 %	MSMA Societal	S-C-T
Position	R28.0 A12.1 H40.9	Sagittal Coronal	R >> L A >> P
Orientation	T > S38.1	Transversal	A >> P F >> H
Phase enc. dir.	R >> L	Save uncombined	F >> FI Off
Rotation	70.00 deg	Coil Combine Mode	Adaptive Combine
Phase oversampling	0 %	AutoAlign	
Slice oversampling	0.0 %	Auto Coil Select	Default
Slices per slab	30		
FoV read	144 mm	Shim mode	Standard
FoV phase	100.0 %	Adjust with body coil	Off
Slice thickness	0.50 mm	Confirm freq. adjustment	Off
TR	6000 ms	Assume Silicone	Off
TE .	3.53 ms	! Ref. amplitude 1H	277.000 V
Averages	1	Adjustment Tolerance	Auto
Concatenations	1 None	Adjust volume ! Position	R22.8 A16.1 H36.2
Filter Coil elements	None A32	! Orientation	S > T0.5
Con elements	A32	! Rotation	-0.26 deg
Contrast		_	60 mm
Magn. preparation	Non-sel. IR	! A >> P	72 mm
TI 1	800 ms	! R >> L	90 mm
TI 2	2700 ms	Dhysia	
Flip angle 1	5 deg	Physio 1/Mada	None
Flip angle 2	6 deg	1st Signal/Mode	None
Fat suppr.	None	Dark blood	Off
Water suppr. 2nd Inversion Contrast	None On	Posp control	Off
	OII	Resp. control	Oli
Averaging mode	Long term	Composing	
Reconstruction	Magn./Phase	Sequence	
Measurements	7	Introduction	On
Pause after meas. 1	0.0 s	Dimension	3D
Pause after meas. 2 Pause after meas. 3	0.0 s 0.0 s	Elliptical scanning	Off
Pause after meas. 3 Pause after meas. 4	0.0 s 0.0 s	Asymmetric echo	Off
Pause after meas. 5	0.0 s	Contrasts	1
Pause after meas. 6	0.0 s	Bandwidth	260 Hz/Px
Multiple series	Each measurement	Flow comp.	No
•		Echo spacing	7.2 ms
Resolution	000	RF pulse type	Fast
Base resolution	290	Gradient mode	Fast*
Phase resolution Slice resolution	100 %	Excitation	Slab-sel.
	100 % 7/8	RF spoiling	On
Phase partial Fourier			
Slice partial Fourier	6/8	FFT Cools Footen	4EO 0/
Slice partial Fourier PAT mode	6/8	FFT Scale Factor Morphometry Analysis	150 % On

FID MoCo Logging	Off
FID Coil Phase Corr.	Off
LIN/PAR Swap	On
Ext. INV Pulse	On
Flip Angle	1400
Phase Filter	0 px
Uniform Image	On
Head Mask on UNI	Off
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off

\\USER\UserProtocols\Renzo\anatomy_slab_highres\MP2RAGE_slab_0.4x04x1.2_T1

TA: 2:26 PAT: 2 Voxel size: 0.4×0.4×1.2 mm Rel. SNR: 1.00 USER: tfl_wip900b17a				
.		Distortion Corr.	Off	
Properties		Prescan Normalize	Off	
Prio Recon	Off	Raw filter	Off	
Before measurement		Elliptical filter	Off	
After measurement Load to viewer	On	Geometry		
Inline movie	Off	Multi-slice mode	Single shot	
Auto store images	On	Series	Interleaved	
Load to stamp segments	Off		·····	
Load images to graphic	Off	Table position	Н	
segments		Table position	0 mm	
Auto open inline display	Off	Inline Composing	Off	
Start measurement without	On			
further preparation		System	0"	
Wait for user to start	Off	V32 A32	Off On	
Start measurements	single	A32	On	
Routine		Positioning mode	FIX	
Slab group 1		MSMA	S - C - T	
Slabs	1	Sagittal	R >> L	
Dist. factor	50 %	Coronal	A >> P	
Position	R30.1 P0.3 H28.1	Transversal Save uncombined	F >> H	
Orientation	T > S30.8 > C-11.5		Off	
Phase enc. dir.	R >> L	Coil Combine Mode AutoAlign	Adaptive Combine	
Rotation	60.00 deg	Auto Coil Select	Default	
Phase oversampling	0 %		Delauit	
Slice oversampling	0.0 % 32	Shim mode	Standard	
Slices per slab FoV read	140 mm	Adjust with body coil	Off	
FoV phase	100.0 %	Confirm freq. adjustment	Off	
Slice thickness	1.20 mm	Assume Silicone	Off	
TR	6000 ms	! Ref. amplitude 1H	277.000 V	
TE	4.23 ms	Adjustment Tolerance Adjust volume	Auto	
Averages	1	! Position	R26.7 A7.7 H20.0	
Concatenations	1	! Orientation	Transversal	
Filter	None	! Rotation	0.00 deg	
Coil elements	A32	! R >> L	89 mm	
Contrast		! A >> P	64 mm	
Magn. preparation	Non-sel, IR	! F >> H	58 mm	
TI 1	900 ms	Physio		
TI 2	2900 ms	1st Signal/Mode	None	
Flip angle 1	6 deg			
Flip angle 2	7 deg	Dark blood	Off	
Fat suppr.	None	Resp. control	Off	
Water suppr.	None	ı ·	3	
2nd Inversion Contrast	On	Composing		
Averaging mode	Long term	Sequence		
Reconstruction	Magn./Phase	Introduction	On	
Measurements	1	Dimension	3D	
Multiple series	Each measurement	Elliptical scanning	Off	
Resolution		Asymmetric echo	Off	
Base resolution	320	Contrasts	1 100 H=/Dy	
Phase resolution	100 %	Bandwidth	190 Hz/Px No	
Slice resolution	100 %	Flow comp. Echo spacing	8.6 ms	
Phase partial Fourier	Off		0.U III 0	
Slice partial Fourier	6/8	RF pulse type	Fast	
PAT mode	GRAPPA	Gradient mode	Fast	
Accel. factor PE	2	Excitation	Slab-sel.	
Ref. lines PE	24	RF spoiling	On	
Accel. factor 3D	1	FFT Scale Factor	150 %	
Reference scan mode	Integrated	Morphometry Analysis	Off	
Imaga Filter		FID MoCo Logging	Off	
Image Filter	Off	FID Coil Phase Corr.	Off	

LIN/PAR Swap	On
Ext. INV Pulse	On
Flip Angle	1400
Phase Filter	0 px
Uniform Image	On
Head Mask on UNI	Off
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off