\\USER\UserProtocols\Renzo\190903_SAMOWU\Quin_pilot_250_V1

TA: 1:05 PAT: Off Voxel size: 1.0×1.0×3.0 mm Rel. SNR: 1.00 SIEMENS: tfl			
Properties		Interpolation	Off
Prio Recon	Off	PAT mode	None
Before measurement			
After measurement		Image Filter	Off
Load to viewer	On	Distortion Corr.	Off
Inline movie	Off	Prescan Normalize	Off
Auto store images	On	Normalize	Off
Load to stamp segments	Off	B1 filter	Off
Load images to graphic	Off	Raw filter	Off
segments		Elliptical filter	Off
Auto open inline display	Off	Geometry	
Start measurement without	Off	Multi-slice mode	Sequential
further preparation	.	Series	Ascending
Wait for user to start	Off		Ascending
Start measurements	single	T. 1.1. 20	
1	Sirigio	Table position	H
Routine		Table position	0 mm
Slice group 1		Inline Composing	Off
Slices	9	System	
Dist. factor	20 %	V32	Off
Position	R4.0 A23.3 F1.6	A32	On
Orientation	S > C-3.6		U
Phase enc. dir.	A >> P	Positioning mode	REF
Rotation	0.00 deg	MSMA	S - C - T
Slice group 2	G	Sagittal	R >> L
Slices	5	Coronal	A >> P
Dist. factor	80 %	Transversal	F >> H
Position	L0.0 A31.9 F4.8	Save uncombined	Off
Orientation	Transversal	Coil Combine Mode	Adaptive Combine
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Slice group 3	0.00 deg		
Slices	7	Shim mode	Tune up
Dist. factor	50 %	Adjust with body coil	Off
Position	R2.4 P21.6 F0.6	Confirm freq. adjustment	Off
Orientation	Coronal	Assume Silicone	Off
Phase enc. dir.	R >> L	! Ref. amplitude 1H	270.000 V
Rotation		Adjustment Tolerance	Auto
	0.00 deg	Adjust volume	
Phase oversampling	0 %	Position	Isocenter
FoV read	200 mm	Orientation	Transversal
FoV phase	100.0 %	Rotation	0.00 deg
Slice thickness	3.0 mm	R >> L	350 mm
TR	3000 ms	A >> P	263 mm
TE	3.22 ms	F >> H	350 mm
Averages	1	ı	
Concatenations	21	Physio	
Filter	None	1st Signal/Mode	None
Coil elements Contrast	A32	Dark blood	Off
TD	0 ms	Resp. control	Off
Magn. preparation	Slice-sel. IR	lulin e	
TI	1100 ms	Inline	0"
Flip angle		Subtract	Off
	6 deg None	Std-Dev-Sag	Off
Fat suppr		Std-Dev-Cor	Off
Water suppr.	None	Std-Dev-Tra	Off
Averaging mode	Long term	Std-Dev-Time	Off
Reconstruction	Magnitude	MIP-Sag	Off
Measurements	1	MIP-Cor	Off
Multiple series	Each measurement	MIP-Tra	Off
•	Lacii ilicasalcilicili	MIP-Time	Off
Resolution		Save original images	On
Base resolution	192		
Phase resolution	100 %	Sequence	
Phace partial Fourier	Off	· ·	

Phase partial Fourier

Off

Introduction Dimension Asymmetric echo Bandwidth Flow comp. Echo spacing	On 2D Off 240 Hz/Px No 6.5 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

\\USER\UserProtocols\Renzo\190903_SAMOWU\26_slices_assym_Version_129_DNM_TR2412
TA: 17:50 PAT: 3 Voxel size: 0.8×0.8×0.8 mm Rel. SNR: 1.00 USER: VASO_124

		I PAT mode	GRAPPA
Properties		Accel. factor PE	3
Prio Recon	Off	Ref. lines PE	45
Before measurement		Accel, factor 3D	1
After measurement		Ref. lines 3D	22
Load to viewer	On O"	Reference scan mode	Separate
Inline movie	Off		·
Auto store images	On O#	Prescan Normalize	Off
Load to stamp segments	Off	Raw filter	Off
Load images to graphic	Off	Elliptical filter	Off
segments Auto open inline display	Off	Hamming	Off
Start measurement without	On	Geometry	
further preparation	Oli	Multi-slice mode	Interleaved
Wait for user to start	Off	Series	Ascending
Start measurements	single	Special sat.	Parallel F
ı	onigio	Gap	25.0 mm
Routine		Thickness	100 mm
Slab group 1			
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	R4.1 A21.5 H40.7	Inline Composing	Off
Orientation Phase enc. dir.	T > C-4.1 > S0.3 P >> A	System	
Rotation	180.00 deg	V32	Off
Phase oversampling	0 %	A32	On
Slice oversampling	7.7 %		
Slice oversampling Slices per slab	26	Positioning mode	REF
FoV read	133.0 mm	MSMA	S-C-T
FoV phase	133.3 %	Sagittal	R >> L
Slice thickness	0.82 mm	Coronal	A >> P
TR	2736.60 ms	Transversal	F >> H
TE	24 ms	Save uncombined	Off
Averages	1	Coil Combine Mode	Sum of Squares
Concatenations	1	AutoAlign Auto Coil Select	 Default
Filter	None	Auto Coli Select	Delault
Coil elements	A32	Shim mode	Standard
Contrast		Adjust with body coil	Off
	SS-SI VASO	Confirm freq. adjustment	Off
Perfusion mode TI2	650 ms	Assume Silicone	Off
TI1	50 ms	! Ref. amplitude 1H	220.000 V
TI1s	50 ms	Adjustment Tolerance	Auto
Flip angle	26 deg	Adjust volume	
Fat suppr.	Fat sat.	! Position	R6.4 A21.3 H40.7
Fat sat. mode	Strong	! Orientation	T > C-2.9 > S0.2
		! Rotation	90.00 deg
Averaging mode	Long term	! A >> P	178 mm
Reconstruction	Magnitude	! R >> L	133 mm
Measurements	391	! F >> H	39 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Perfusion mode	PICORE Q2T	BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	650.0 ms	· ·	JII
Flow limit	100 cm/s	Sequence	
Posolution		Introduction	On
Resolution	162	Dimension	3D
Base resolution	162 100 %	Reordering	Linear
Phase resolution Slice resolution	100 %	Contrasts	1
Phase partial Fourier	6/8	Bandwidth	1188 Hz/Px
Slice partial Fourier	Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	0.97 ms
	····	EPI factor	216
•			v

RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle Maxwell Correction log physio files FFT scale dummy prepscan time z shim RF duration RF BWTP Renzo: Delta TI EFFECTIVE TR PatPartitions EPI phase correction PAT refscan mode FlashRef BaseRes FlashRef BW FlashRef TE FlashRef FA use CAIPI	150 150 3.1kHz 1 Off Off Off Off 3.00 3 s 0.00 mT/m*ms 2000 us 25.0 72 ms 76624 ms 28 local Flash 162 100 Hz/px 6500 us 5 deg Off

\\USER\UserProtocols\Renzo\190903_SAMOWU\RENZO_GRE7_setup_GRAPPA_2
TA: 8:04 PAT: 2 Voxel size: 0.2×0.2×1.0 mm Rel. SNR: 1.00 USER: RENZO_GRE7

Properties		Geometry	
Prio Recon	Off	Multi-slice mode	Interleaved
Before measurement	Oli	Series	Interleaved
After measurement	0	Saturation mode	Standard
Load to viewer	On	Special sat.	None
Inline movie	Off		
Auto store images	On Off	Table position	Н
Load to stamp segments	Off	Table position	0 mm
Load images to graphic	Off	Inline Composing	Off
segments	. "		
Auto open inline display	Off	Tim CT mode	Off
Start measurement without	On	Outstand	
further preparation		System	0"
Wait for user to start	Off	V32	Off
Start measurements	single	A32	On
Routine		Positioning mode	FIX
Slice group 1		MSMA	S - C - T
Slices	24	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	R4.1 A21.5 H40.7	Transversal	F >> H
Orientation	T > C-4.1 > S0.3	Save uncombined	Off
Phase enc. dir.	R >> L	Coil Combine Mode	Adaptive Combine
Rotation	90.00 deg	AutoAlign	[']
Phase oversampling	0 %	Auto Coil Select	Default
FoV read	192 mm		
FoV phase	75.0 %	Shim mode	Standard
Slice thickness	1.0 mm	Adjust with body coil	Off
TR	631 ms	Confirm freq. adjustment	Off
TE	15.0 ms	Assume Silicone	Off
Averages	2	! Ref. amplitude 1H	220.000 V
Concatenations	1	Adjustment Tolerance	Auto
Filter	None	Adjust volume	
		! Position	R6.4 A21.3 H40.7
Coil elements	A32	! Orientation	T > C-2.9 > S0.2
Contrast		! Rotation	90.00 deg
MTC	Off	! A >> P	178 mm
Magn. preparation	None	! R >> L	133 mm
Flip angle	40 deg	! F >> H	39 mm
Fat suppr.	None	Dhysia	
Water suppr.	None	Physio	N
SWI	Off	1st Signal/Mode	None
	01	Segments	1
Averaging mode	Short term	Tagging	None
Reconstruction	Magn./Phase	Dark blood	Off
Measurements	1		
Multiple series	Each measurement	Resp. control	Off
Resolution		Inline	
Base resolution	960	Subtract	Off
Phase resolution	100 %	Liver registration	Off
Phase partial Fourier	Off	Std-Dev-Sag	Off
Interpolation	Off	Std-Dev-Cor	Off
PAT mode	GRAPPA	Std-Dev-Tra	Off
Accel. factor PE	2	Std-Dev-Time	Off
Ref. lines PE	45	MIP-Sag	Off
Reference scan mode	Integrated	MIP-Cor	Off
		MIP-Tra	Off
Image Filter	Off	MIP-Time	Off
Distortion Corr.	Off	Save original images	On
Prescan Normalize	Off		O#
Normalize	Off	Wash - In	Off
-		Wash - Out	Off
B1 filter	Off	TTD	O#
B1 filter Raw filter	Off Off	TTP	Off
	Off Off Off	TTP PEI MIP - time	Off Off Off

Maplt	None
Contrasts	1
Sequence	
Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	70 Hz/Px
Flow comp.	Slice
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

\\USER\UserProtocols\Renzo\190903_SAMOWU\RENZO_GRE7_setup_noGRAPPA
TA: 7:36 PAT: Off Voxel size: 0.2×0.2×1.0 mm Rel. SNR: 1.00 USER: RENZO_GRE7

Properties		Saturation made	Standard
Properties Prio Recon	Off	Saturation mode Special sat.	Standard None
	Oli	Special sat.	None
Before measurement			
After measurement Load to viewer	On	Table position	Н
	Off	Table position	0 mm
Inline movie		Inline Composing	Off
Auto store images	On Off	Tim CT mode	Off
Load to stamp segments	Off	I	Oli
Load images to graphic	Off	System	
segments	0"	V32	Off
Auto open inline display	Off	A32	On
Start measurement without	On	Desiries and de	FIV
further preparation	~"	Positioning mode	FIX
Wait for user to start	Off	MSMA	S-C-T
Start measurements	single	Sagittal	R >> L
Routine		Coronal	A >> P
Slice group 1		Transversal	F >> H
Slices	24	Save uncombined	Off
Dist. factor	0 %	Coil Combine Mode	Adaptive Combine
Position	R4.1 A21.5 H40.7	AutoAlign	 D ()
Orientation	T > C-4.1 > S0.3	Auto Coil Select	Default
Phase enc. dir.	R >> L	Shim mode	Standard
Rotation		Adjust with body coil	Off
Phase oversampling	90.00 deg 0 %	Confirm freq. adjustment	Off
		Assume Silicone	Off
FoV read	192 mm		220.000 V
FoV phase	75.0 %	! Ref. amplitude 1H	
Slice thickness	1.0 mm	Adjustment Tolerance	Auto
TR	631 ms	Adjust volume	DC 4 A04 0 LI40 7
TE	15.0 ms	! Position	R6.4 A21.3 H40.7
Averages	1	! Orientation	T > C-2.9 > S0.2
Concatenations	1	! Rotation	90.00 deg
Filter	None	! A >> P	178 mm
Coil elements	A32	! R >> L	133 mm
Contrast		!F>> H	39 mm
MTC	Off	Physio	
Magn. preparation	None	1st Signal/Mode	None
Flip angle	40 deg	Segments	1
Fat suppr.	None	Togging	None
Water suppr.	None	Tagging	None Off
SWI	Off	Dark blood	Off
	01 44	Resp. control	Off
Averaging mode	Short term	•	
Reconstruction	Magn./Phase	Inline	
Measurements	1	Subtract	Off
Multiple series	Each measurement	Liver registration	Off
Resolution		Std-Dev-Sag	Off
Base resolution	960	Std-Dev-Cor	Off
Phase resolution	100 %	Std-Dev-Tra	Off
Phase partial Fourier	Off	Std-Dev-Time	Off
Interpolation	Off	MIP-Sag	Off
	OII	MIP-Cor	Off
PAT mode	None	MIP-Tra	Off
Land and Eth	O#	····· MIP-Time	Off
Image Filter	Off	Save original images	On
Distortion Corr.	Off		
Prescan Normalize	Off	Wash - In	Off
Normalize	Off	Wash - Out	Off
B1 filter	Off	TTP	Off
Raw filter	Off	PEI	Off
Elliptical filter	Off	MIP - time	Off
Geometry			
Multi-slice mode	Interleaved	— MapIt	None
Series	Interleaved	Contrasts	1
1	· - · · · · · · · · · · · · · · · · · ·		

Sequence

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	70 Hz/Px
Flow comp.	Slice
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

\\USER\UserProtocols\Renzo\190903_SAMOWU\26_slices_assym_Version_129_DNM_TR2412
TA: 17:50 PAT: 3 Voxel size: 0.8×0.8×0.8 mm Rel. SNR: 1.00 USER: VASO_124

TA. 17.50 PA	AT. 5 VOXel Size. U.oxu.oxu.	6 IIIII Rei. SNR. 1.00 U	SER. VASO_124
		I DAT made	CRARRA
Properties		PAT mode - Accel, factor PE	GRAPPA 3
Prio Recon	Off	Ref. lines PE	45
Before measurement		Accel. factor 3D	1
After measurement		Ref. lines 3D	22
Load to viewer	On	Reference scan mode	Separate Separate
Inline movie	Off		
Auto store images	On	Prescan Normalize	Off
Load to stamp segments	Off	Raw filter	Off
Load images to graphic	Off	Elliptical filter	Off
segments		Hamming	Off
Auto open inline display	Off	Coometry	
Start measurement without	On	Geometry	
further preparation		Multi-slice mode	Interleaved
Wait for user to start	Off	Series	Ascending
Start measurements	single	Special sat.	Parallel F
	G	Gap	25.0 mm
Routine		- Thickness	100 mm
Slab group 1			
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	R4.1 A21.5 H40.7	Inline Composing	Off
Orientation	T > C-4.1 > S0.3	System	
Phase enc. dir.	P >> A	System	Off
Rotation	180.00 deg	V32 A32	On
Phase oversampling	0 %	A32	On
Slice oversampling	7.7 %	Positioning mode	REF
Slices per slab	26	MSMA	S - C - T
FoV read	133.0 mm	Sagittal	R >> L
FoV phase	133.3 %	Coronal	A >> P
Slice thickness	0.82 mm	Transversal	F >> H
TR	2736.60 ms	Save uncombined	Off
TE	24 ms	Coil Combine Mode	Sum of Squares
Averages	1	AutoAlign	
Concatenations	1	Auto Coil Select	Default
Filter	None		
Coil elements	A32	Shim mode	Standard
Contrast		Adjust with body coil	Off
	SS-SI VASO	 Confirm freq. adjustment 	Off
Perfusion mode		Assume Silicone	Off
TI2	650 ms	! Ref. amplitude 1H	220.000 V
TI1	50 ms	Adjustment Tolerance	Auto
TI1s	50 ms	Adjust volume	
Flip angle	26 deg	! Position	R6.4 A21.3 H40.7
Fat suppr.	Fat sat.	! Orientation	T > C-2.9 > S0.2
Fat sat. mode	Strong	! Rotation	90.00 deg
Averaging mode	Long term	! A >> P	178 mm
Reconstruction	Magnitude	! R >> L	133 mm
Measurements	391	! F >> H	39 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	•	None
		1st Signal/Mode	None
Perfusion mode	PICORE Q2T	BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	650.0 ms	1 .	
Flow limit	100 cm/s	Sequence	
Resolution		Introduction	On
Base resolution	162	Dimension	3D
	_	Reordering	Linear
Phase resolution	100 %	Contrasts	1
Slice resolution	100 %	Bandwidth	1188 Hz/Px
Phase partial Fourier	6/8	Free echo spacing	Off
Slice partial Fourier	Off Off	Echo spacing	0.97 ms
Interpolation	Off	EPI factor	216
•		Li i lactoi	Z10

RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle Maxwell Correction log physio files FFT scale dummy prepscan time z shim RF duration RF BWTP Renzo: Delta TI EFFECTIVE TR PatPartitions EPI phase correction PAT refscan mode FlashRef BaseRes FlashRef BW FlashRef TE FlashRef FA use CAIPI	150 150 3.1kHz 1 Off Off Off Off 3.00 3 s 0.00 mT/m*ms 2000 us 25.0 72 ms 76624 ms 28 local Flash 162 100 Hz/px 6500 us 5 deg Off

\\USER\UserProtocols\Renzo\190903_SAMOWU\MP2RAGE_slab_0.5x05x0.5_T1_POCS8

		Image Filter	Off
operties		—— Distortion Corr.	Off
Prio Recon	Off	Prescan Normalize	Off
Before measurement		Raw filter	Off
After measurement	_	Elliptical filter	Off
Load to viewer	On	1 .	
Inline movie	Off	Geometry	
Auto store images	On	Multi-slice mode	Single shot
Load to stamp segments	Off	Series	Interleaved
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		Custom	
Wait for user to start	Off	System	0"
Start measurements	single	V32	Off
outine		A32	On
Slab group 1		Positioning mode	FIX
Slabs	1	MSMA	S - C - T
Dist. factor	50 %	Sagittal	R >> L
Position	80 % R4.1 A21.5 H40.7	Coronal	A >> P
		Transversal	F >> H
Orientation	T > C-4.1 > S0.3	Save uncombined	Off
Phase enc. dir.	R >> L	Coil Combine Mode	Adaptive Combine
Rotation	90.00 deg	AutoAlign	
Phase oversampling	0 %	Auto Coil Select	Default
Slice oversampling	0.0 %	Auto Coli Select	
Slices per slab	48	Shim mode	Standard
FoV read	191 mm	Adjust with body coil	Off
FoV phase	100.0 %	Confirm freq. adjustment	Off
Slice thickness	0.50 mm	Assume Silicone	Off
TR	6000 ms	! Ref. amplitude 1H	277.000 V
TE	4.66 ms	Adjustment Tolerance	Auto
Averages	1	Adjust volume	
Concatenations	1	! Position	R6.4 A21.3 H40.7
Filter	None	! Orientation	T > C-2.9 > S0.2
Coil elements	A32	! Rotation	90.00 deg
contract		! A >> P	178 mm
ontrast	Non sel ID	— !R >> L	133 mm
Magn. preparation	Non-sel. IR	! F >> H	39 mm
TI 1	961 ms	:1 >>11	33 11111
TI 2	2900 ms	Physio	
Flip angle 1	6 deg	1st Signal/Mode	None
Flip angle 2	7 deg	David Manual	O#
Fat suppr.	None	Dark blood	Off
Water suppr.	None	Resp. control	Off
2nd Inversion Contrast	On	1 Roop. dentilo	O
Averaging mode	Long torm	Composing	
Averaging mode Reconstruction	Long term Magn./Phase	Sequence	
	-		02
Measurements	2	Introduction	On 2D
Pause after meas. 1	0.0 s	Dimension	3D
Multiple series	Each measurement	Elliptical scanning	Off
esolution		Asymmetric echo	Off
Base resolution	380	Contrasts	1
Phase resolution	100 %	Bandwidth	190 Hz/Px
Slice resolution	100 %	Flow comp.	No
Phase partial Fourier	Off	Echo spacing	9.5 ms
Slice partial Fourier	6/8	RF pulse type	Normal
······		Gradient mode	Fast
PAT mode	GRAPPA		
Accel. factor PE	2	Excitation RE speiling	Slab-sel.
Ref. lines PE	24	RF spoiling	On
Rei. III les FE			
	1	FFT Scale Factor	150 %
Accel. factor 3D Reference scan mode		FFT Scale Factor Morphometry Analysis	150 % 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\190903_SAMOWU\26_slices_assym_Version_129_DNM_TR2412

TA: 17:50 PA	T: 3 Voxel siz	ze: 0.8×0.8×0.8 mm	Rel. SNR: 1.00	USER: VASO_124
--------------	----------------	--------------------	----------------	----------------

Properties Prio Recon	Off	PAT mode Accel. factor PE	GRAPPA 3
Before measurement		Ref. lines PE	45
After measurement		Accel. factor 3D Ref. lines 3D	1 22
Load to viewer	On	Reference scan mode	Separate
Inline movie	Off		
Auto store images	On	Prescan Normalize	Off
Load to stamp segments	Off	Raw filter	Off
Load images to graphic	Off	Elliptical filter	Off
segments		Hamming	Off
Auto open inline display	Off	Geometry	
Start measurement without	On	Multi-slice mode	Interleaved
further preparation	0#	Series	Ascending
Wait for user to start	Off		
Start measurements	single	Special sat.	Parallel F
Routine		Gap	25.0 mm
Slab group 1		Thickness	100 mm
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	R4.1 A21.5 H40.7	Inline Composing	Off
Orientation	T > C-4.1 > S0.3	System	
Phase enc. dir.	P >> A	V32	Off
Rotation	180.00 deg	A32	On
Phase oversampling	0 %		
Slice oversampling	7.7 %	Positioning mode	REF
Slices per slab FoV read	26	MSMA	S - C - T
FoV read FoV phase	133.0 mm 133.3 %	Sagittal	R >> L
Slice thickness	0.82 mm	Coronal	A >> P
TR	2736.60 ms	Transversal	F >> H
TE TE	24 ms	Save uncombined	Off
Averages	1	Coil Combine Mode	Sum of Squares
Concatenations	1	AutoAlign	D-fIt
Filter	None	Auto Coil Select	Default
Coil elements	A32	Shim mode	Standard
ı		Adjust with body coil	Off
Contrast	00.01.74.00	Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	Assume Silicone	Off
TI2 TI1	650 ms	! Ref. amplitude 1H	220.000 V
TI1s	50 ms	Adjustment Tolerance	Auto
Flip angle	50 ms 26 deg	Adjust volume	
Fat suppr.	Fat sat.	! Position	R6.4 A21.3 H40.7
Fat sat. mode	Strong	! Orientation	T > C-2.9 > S0.2
		! Rotation	90.00 deg
Averaging mode	Long term	! A >> P	178 mm
Reconstruction	Magnitude	! R >> L ! F >> H	133 mm
Measurements	391	!F>> H	39 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Perfusion mode	PICORE Q2T	BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	650.0 ms		011
Flow limit	100 cm/s	Sequence	
Resolution		Introduction	On
Base resolution	162	Dimension	3D
Phase resolution	100 %	Reordering	Linear
Slice resolution	100 %	Contrasts	1
Phase partial Fourier	6/8	Bandwidth	1188 Hz/Px
Slice partial Fourier	Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	0.97 ms
		EPI factor	216
		1 13/±	

RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle Maxwell Correction log physio files FFT scale dummy prepscan time z shim RF duration RF BWTP Renzo: Delta TI EFFECTIVE TR PatPartitions EPI phase correction PAT refscan mode FlashRef BaseRes FlashRef BW FlashRef TE FlashRef FA use CAIPI	150 150 3.1kHz 1 Off Off Off Off 3.00 3 s 0.00 mT/m*ms 2000 us 25.0 72 ms 76624 ms 28 local Flash 162 100 Hz/px 6500 us 5 deg Off