\\USER\UserProtocols\Renzo\190907\_JESSTI\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			
Start measurements	single		ш	
1	9	Table position	H 0 mm	
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			
Phase enc. dir.	A >> P	Positioning mode	REF	
Rotation	0.00 deg	MSMA	S - C - T	
Slice group 2		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		Shim mode	Tune up	
Slices	7	Adjust with body coil	Off	
Dist. factor	50 %	Confirm freq. adjustment	Off	
Position	R2.4 P21.6 F0.6	Assume Silicone	Off	
Orientation	Coronal	! Ref. amplitude 1H	270.000 V	
Phase enc. dir.	R >> L	Adjustment Tolerance	Auto	
Rotation	0.00 deg	Adjustment Tolerance Adjust volume	Auto	
Phase oversampling	0 %	Position	Isocenter	
FoV read	200 mm	Orientation	Transversal	
FoV phase	100.0 %	Rotation		
Slice thickness	3.0 mm	R >> L	0.00 deg 350 mm	
TR	3000 ms	A >> P	263 mm	
TE	3.22 ms	F >> H		
Averages	1	r>>n	350 mm	
Concatenations	21	Physio		
Filter	None	1st Signal/Mode	None	
Coil elements	A32	Dark blood	Off	
Contrast TD	0 ms	Resp. control	Off	
Magn. preparation	Slice-sel. IR	Inline		
TI	1100 ms		Off	
Flip angle	6 deg	Subtract		
Fat suppr.	None	Std-Dev-Sag	Off Off	
Water suppr.	None	Std-Dev-Cor	Off Off	
•••αισι συρρι.		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	
•		MIP-Time	Off	
Resolution Resolution	102	Save original images	On	
Base resolution	192	1		
Phase resolution	100 %	Sequence		

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\Us	erProtocols\Renzo\19090		CSSSI_setup
	AT: 3 Voxel size: 0.8×0.8		SER: VASO_139
Properties		PAT mode	GRAPPA
Prio Recon	Off	Accel. factor PE	3
Before measurement	Oli	Ref. lines PE	45
After measurement		Accel. factor 3D	1
Load to viewer	On	Ref. lines 3D	24
Inline movie	Off	Reference scan mode	Separate
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		
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
Routine		Gap	25.0 mm
		Thickness	100 mm
Slab group 1 Slabs	1		
Dist. factor	50 %	Table position	Н
Position	R2.7 A8.4 H14.5	Table position	0 mm
Orientation	T > C-12.3	Inline Composing	Off
Phase enc. dir.	A >> P	System	
Rotation	0.00 deg	V32	Off
Phase oversampling	0 %	A32	On
Slice oversampling	8.3 %		
Slices per slab	96	Positioning mode	FIX
FoV read	133.0 mm	MSMA	S-C-T
FoV phase	133.3 %	Sagittal	R >> L
Slice thickness	0.80 mm	Coronal	A >> P
TR	8324.60 ms	Transversal	F >> H
TE TE	24 ms	Save uncombined	Off
Averages	1	Coil Combine Mode	Sum of Squares
Concatenations	1	AutoAlign Auto Coil Select	 Default
Filter	None	Auto Coil Select	Delauli
Coil elements	A32	Shim mode	Standard
		Adjust with body coil	Off
Contrast	00.011/4.00	Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	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	4 deg Fat sat.	! Position	R5.2 A8.9 H14.4
Fat suppr. Fat sat. mode		! Orientation	T > C-13.5 > S0.8
rai sai. IIIUUE	Strong	! Rotation	90.05 deg
Averaging mode	Long term	! A >> P	190 mm
Reconstruction	Magnitude	! R >> L	140 mm
Measurements	121	! F >> H	77 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Dorfusion made	DICODE OST	1	110110
Perfusion mode Inversion time 1	PICORE Q2T 50 ms	BOLD	
Saturation stop time	50 ms	Motion correction	Off
Inversion time 2	650.0 ms	Spatial filter	Off
Flow limit	100 cm/s	Sequence	
ı	100 011/3	Introduction	On
Resolution		Dimension	3D
Base resolution	162	Reordering	Linear
Phase resolution	100 %	Contrasts	1
Slice resolution	100 %	Bandwidth	1144 Hz/Px
Phase partial Fourier	6/8	Free echo spacing	Off
Slice partial Fourier	Off	Echo spacing	0.98 ms
Interpolation	Off	I	

Off

Interpolation

EPI factor

216

Ampl       100         MAGEC FA       12 in deg         ph.skip 4 Robert (the one)       1         MAGEC SS-SI?       On         Maxwell Correction       Off         log physio files       Off         FFT scale       2.50         dummy prepscan time       3 s         z shim       0.00 mT/m*ms         RF duration       2000 us         RF BWTP       25.0         Renzo: Delta TI       71 ms         EFFECTIVE TR       842504 ms         PatPartitions       104         EPI phase correction       local         PAT refscan mode       Flash         FlashRef BaseRes       162         FlashRef BW       100 Hz/px         FlashRef TE       7000 us         FlashRef FA       5 deg         use CAIPI       Off	RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Slab-sel. On
	MAGEC FA ph.skip 4 Robert (the one) MAGEC SS-SI? 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	12 in deg 1 On Off Off Off 2.50 3 s 0.00 mT/m*ms 2000 us 25.0 71 ms 842504 ms 104 local Flash 162 100 Hz/px 7000 us 5 deg

 $\verb|\USER\USer|| Protocols\Renzo|| 190907\_JESSTI| VASO\_139MAGECSSSI\_accel\_witout\_CAIPI\_noMOSAIC|| All the protocols is a supersymmetric formula of the protocols in the protocols is a supersymmetric formula of the protocols in the protocols is a supersymmetric formula of the protocols in the protocols is a supersymmetric formula of the protocols in the protocols is a supersymmetric formula of the protocols in th$ 

TA: 8:18	PAT: 6	Voxel size: 0.8×0.8×0.8 mm	Rel. SNR: 1.00	USER: VASO 139
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Properties		PAT mode	GRAPPA
Properties Prio Recon	Off	- Accel. factor PE	3
Before measurement	Oli	Ref. lines PE	45
After measurement		Accel. factor 3D	2
Load to viewer	On	Ref. lines 3D	24
Inline movie	Off	Reference scan mode	Separate
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	1	
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
Routine	-	Gap	25.0 mm
****		- Thickness	100 mm
Slab group 1 Slabs	1		
Dist. factor	1 50 %	Table position	H
Position	R1.7 A23.6 H29.9	Table position	0 mm
Orientation	T > C-8.2 > S-0.3	Inline Composing	Off
Phase enc. dir.	A >> P	System	
Rotation	0.00 deg	V32	Off
Phase oversampling	0.00 deg 0 %	A32	On
Slice oversampling	8.3 %	B *** : 1	FIV
Slices per slab	96	Positioning mode	FIX
FoV read	133.0 mm	MSMA	S-C-T
FoV phase	133.3 %	Sagittal	R >> L
Slice thickness	0.80 mm	Coronal	A >> P
TR	4489.60 ms	Transversal	F >> H
TE	24 ms	Save uncombined	Off
Averages	1	Coil Combine Mode	Sum of Squares
Concatenations	1	AutoAlign	
Filter	None	Auto Coil Select	Default
Coil elements	A32	Shim mode	Standard
1	7.02	Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	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	4 deg	! Position	R4.8 A15.2 H25.2
Fat suppr.	Fat sat.	! Orientation	T > C-9.8 > S0.6
Fat sat. mode	Strong	! Rotation	90.00 deg
Averaging mode	Long term	! A >> P	190 mm
Reconstruction	Magnitude	! R >> L	140 mm
Measurements	111	! F >> H	77 mm
Delay in TR	0 ms	ı	
Multiple series	Off	Physio	Nana
		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
Phase resolution	100 %	Reordering	Linear
Slice resolution	100 %	Contrasts	1
Phase partial Fourier	6/8	Bandwidth	1144 Hz/Px
Slice partial Fourier	Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	0.98 ms
······	<u> </u>	EPI factor	216
		Į.	

RF pulse type Gradient mode Excitation RF spoiling	Normal Normal Slab-sel. On
Ampl MAGEC FA ph.skip 4 Robert (the one) MAGEC SS-SI? 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	100 12 in deg 1 On Off Off Off 2.50 3 s 0.00 mT/m*ms 2000 us 25.0 71 ms 233459 ms 52 local Flash 162 100 Hz/px 7000 us 5 deg Off