	\\USER\UserProtocols\	Emily\171208\Localizer DLPF0	<u> </u>
TA: 1:05 F	PAT: Off Voxel size: 1.0:	•	SIEMENS: tfl
1A. 1.00 I	THE VOXED SIZE. 1.0.	A 1.0.0.0 Hilli 11GI. OIVI I. 1.00	CILIVILIAO. (II
Properties		Interpolation	Off
Prio Recon	Off	PAT mode	None
Before measurement	011		
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	Table position	Н
ı	3	Table position Table position	0 mm
Routine		Inline Composing	Off
Slice group 1		I mine Composing	Oii
Slices	9	System	
Dist. factor	200 %	V32	Off
Position	R7.2 A19.0 F6.3	A32	On
Orientation	Sagittal	Desitioning	DEE
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	R8.2 A20.7 H10.1	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	200 %	Confirm freq. adjustment	Off
Position	R8.2 A46.4 F8.3	Assume Silicone	Off
Orientation	Coronal	! Ref. amplitude 1H	220.000 V
Phase enc. dir.	R >> L	Adjustment Tolerance	Auto
Rotation	0.00 deg	Adjust volume	Auto
Phase oversampling	0 %	Position	Isocenter
FoV read	200 mm	Orientation	Transversal
FoV phase	100.0 %	Rotation	0.00 deg
Slice thickness	5.0 mm	Rotation R >> L	350 mm
TR	3000 ms	A >> P	263 mm
TE	3.17 ms	F >> H	350 mm
Averages	1		JJU IIIIII
Concatenations	21	Physio	
Filter	None	1st Signal/Mode	None
Coil elements	A32		O#
Contrast		Dark blood	Off
TD	0 ms	Resp. control	Off
Magn. preparation	Slice-sel. IR	Inline	
TI	1100 ms		Off
Flip angle	6 deg	Subtract	Off Off
Fat suppr.	None	Std-Dev-Sag	Off
Water suppr.	None	Std-Dev-Cor	Off Off
••atei suppi.		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	100	Save original images	On
Base resolution	192	_	

Sequence

Phase resolution

Phase partial Fourier

100 %

Off

Introduction Dimension Asymmetric echo Bandwidth Flow comp. Echo spacing	On 2D Off 240 Hz/Px No 6.4 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

\\USER\UserProtocols\Emily\171208\epi_sms3_ip2_2mm_10_20GLM

TA: 6:18 PAT: 2 Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 USER: ep2d_bold_sms_mgh_v22

Properties		Special sat.	None
Prio Recon	Off	Table position	Н
Before measurement		Table position	0 mm
After measurement		Inline Composing	Off
Load to viewer	On		
Inline movie	Off	System	
Auto store images	On	V32	Off
Load to stamp segments	Off	A32	On
Load images to graphic	Off	Positioning mode	FIX
segments		MSMA	S-C-T
Auto open inline display	Off	Sagittal	R>> L
Start measurement without	On	Coronal	A >> P
further preparation		Transversal	F>> H
Wait for user to start	Off	Coil Combine Mode	Sum of Squares
Start measurements	single	AutoAlign	Sulli of Squares
1	Sirigio	Auto Coil Select	Default
Routine Slice group 1			
Slice group 1 Slices	57	Shim mode	Standard
	57 0 %	Adjust with body coil	Off
Dist. factor		Confirm freq. adjustment	Off
Position	L0.0 A19.0 H6.2	Assume Silicone	Off
Orientation	Transversal	! Ref. amplitude 1H	220.000 V
Phase enc. dir.	A >> P	Adjustment Tolerance	Auto
Rotation	0.00 deg	Adjust volume	
Phase oversampling	0 %	! Position	R6.3 A21.1 H26.4
FoV read	195 mm	! Orientation	T > C3.0
FoV phase	100.0 %	! Rotation	0.00 deg
Slice thickness	2.0 mm	!R>>L	120 mm
TR	1000 ms	! A >> P	162 mm
TE	23 ms	!F>>H	50 mm
Averages	1	Physio	
Concatenations	1	1st Signal/Mode	None
Filter	None	TSt Signal/Mode	None
Coil elements	A32	BOLD	
Contrast		GLM Statistics	On
MTC	Off	Dynamic t-maps	Off
Flip angle	65 deg	Starting ignore meas	0
Fat suppr.	Fat sat.	Ignore after transition	1
A		Model transition states	Off
Averaging mode	Long term	Temp. highpass filter	On
Reconstruction	Magnitude	Threshold	4.00
Measurements	360	Paradigm size	20
Delay in TR	0 ms	Meas[1]	Baseline
Multiple series	Off	Meas[2]	Baseline
Resolution		Meas[3]	Baseline
Base resolution	98	Meas[4]	Baseline
Phase resolution	100 %	Meas[5]	Baseline
Phase partial Fourier	Off	Meas[6]	Baseline
Interpolation	Off	Meas[7]	Baseline
		Meas[8]	Baseline
PAT mode	GRAPPA	Meas[9]	Baseline
Accel. factor PE	2	Meas[10]	Active
Ref. lines PE	24	Meas[11]	Active
Reference scan mode	Separate	Meas[12]	Active
Distortion Corr.	Off	Meas[13]	Active
Prescan Normalize	Off	Meas[14]	Active
Raw filter		Meas[15]	Active
	On Off	Meas[16]	Active
Elliptical filter Hamming	Off	Meas[17]	Active
т панници			
9	Off	Meas[18]	Active
Geometry	Oli	Meas[18] Meas[19]	Active Active
	Interleaved		
Geometry		Meas[19]	Active

Sequence

•	
Introduction Bandwidth Free echo spacing	Off 1890 Hz/Px Off
Echo spacing	0.63 ms
EPI factor RF pulse type Gradient mode	98 Normal Fast
Dummy Scans Dummy Scans SMS Factor RF Clip VERSE Factor SMS Shift Kernel Size Compression Factor	3 4 3 0 1.00 2 5x5 1.00

\\USER\UserProtocols\Emily\171208\FA4_VASO_122_130mmFOV		nmFOV		
TA: 11:04	PAT: 3 Voxel size: 0.9×0.	9×1.1 mm Rel. SNR: 1.00		
Properties		PAT mode	GRAPPA	
Prio Recon	Off	Accel. factor PE	3	
Before measurement	5	Ref. lines PE	48	
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	late de se d	
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	
Slab group 1		Thickness	100 mm	
Slabs	1	Table section		
Dist. factor	50 %	Table position	H	
Position	R6.3 A42.8 H29.1	Table position	0 mm	
Orientation	T > C24.1	Inline Composing	Off	
Phase enc. dir.	P >> A	System		
Rotation	180.00 deg	V32	Off	
Phase oversampling	0 %	A32	On	
Slice oversampling	9.1 %	Decitioning mode	FIV	
Slices per slab	22	Positioning mode	FIX	
FoV read	150.0 mm	MSMA Societal	S-C-T R>>L	
FoV phase	100.0 %	Sagittal Coronal	A >> P	
Slice thickness	1.10 mm	Transversal	F >> H	
TR	2006.00 ms	Save uncombined	Off	
TE	20 ms	Coil Combine Mode	Sum of Squares	
Averages	1	AutoAlign		
Concatenations	1	Auto Coil Select	Default	
Filter	None	Auto Con Gelect		
Coil elements	A32	Shim mode	Standard	
Contrast		Adjust with body coil	Off	
Perfusion mode	SS-SI VASO	Confirm freq. adjustment	Off	
TI2	700 ms	Assume Silicone	Off	
TI1	50 ms	! Ref. amplitude 1H	220.000 V	
TI1s	50 ms	Adjustment Tolerance	Auto	
Flip angle	4 deg	Adjust volume	100400011000	
Fat suppr.	Fat sat.	! Position	L0.0 A28.9 H28.3	
Fat sat. mode	Weak	! Orientation	T > C6.9	
		! Rotation	0.00 deg	
Averaging mode	Long term	! R >> L ! A >> P	120 mm	
Reconstruction	Magnitude		162 mm	
Measurements	331	!F>>H	54 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	700.0 ms	Opalial lillel	Oii	
Flow limit	100 cm/s	Sequence		
Possiution		Introduction	On	
Resolution	160	Dimension	3D	
Base resolution	162	Reordering	Linear	
Phase resolution Slice resolution	100 % 100 %	Contrasts	1	
Phase partial Fourier	100 % 6/8	Bandwidth	1144 Hz/Px	

Phase partial Fourier

Slice partial Fourier

Interpolation

6/8

Off

Off

EPI factor

Echo spacing

Free echo spacing

Off

162

 $0.98 \; \text{ms}$

Ampl BWDTH BWDTH Dh.skip 4 Robert (the one) Use Ernst angle Use Ernst angle Off Maxwell Correction Off Og physio files FFT scale Dummy prepscan time Subject shim	RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On
	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	150 3.1kHz 30 Off Off Off Off 1.00 3 s 0.00 mT/m*ms 2000 us 25.0 51 ms 48144 ms 24 local Flash 162 141 Hz/px 4800 us 5 deg

Table of contents	

\\USER