\\USER\UserProtocols\Yuhui\PM\_IPS\aVAPER\_0.8i0.9sl\_Pat3\_pf78\_22sls

TA: 32:35 PAT: 3 Voxel size: 0.8×0.8×0.9 mm Rel. SNR: 1.00 UNKNOWN:			
Properties		Accel. factor PE	3 48
Prio Recon	Off	Accel. factor 3D	1
Before measurement		Ref. lines 3D	24
After measurement		Reference scan mode	Separate
Load to viewer	On		
Inline movie	Off	Prescan Normalize	Off
Auto store images	On	Raw filter	Off
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic	Off	Hamming	Off
segments		Coometry	
Auto open inline display	Off	Geometry  Multi-slice mode	Interleaved
Start measurement without	On		
further preparation		Series	Ascending
Wait for user to start	Off	Special sat.	Parallel R
Start measurements	single	Gap	25.0 mm
Douting		Thickness	100 mm
Routine			
Slab group 1	1	Table position	Н
Slabs Dist factor	1	Table position	0 mm
Dist. factor	50 %	Inline Composing	Off
Position	L44.1 A4.6 H15.0	System	
Orientation	S > C-11.5	V32	Off
Phase enc. dir.	A >> P	A32	On
Rotation	0.00 deg	A02	
Phase oversampling	9 %	Positioning mode	FIX
Slice oversampling	9.1 %	MSMA	S - C - T
Slices per slab	22	Sagittal	R >> L
FoV read	130.0 mm	Coronal	A >> P
FoV phase	100.0 %	Transversal	F >> H
Slice thickness	0.90 mm	Save uncombined	Off
TR	2874.7 ms	Coil Combine Mode	Sum of Squares
TE	28 ms	AutoAlign	
Averages	1	Auto Coil Select	Default
Concatenations	1		
Filter	None	Shim mode	Standard
Coil elements	A32	Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode	Picore Q2TIPS	. Assume Silicone	Off
TI2	1100 ms	! Ref. amplitude 1H	316.000 V
TI1	50 ms	Adjustment Tolerance	Auto
TI1s	50 ms	Adjust volume	
Flip angle	30.0 deg	! Position	L0.4 A16.5 F13.1
		! Orientation	S > T-0.4 > C-0.1
Fat suppr.	None	! Rotation	0.00 deg
Averaging mode	Long term	! F >> H	159 mm
Reconstruction	Magnitude	! A >> P	168 mm
Measurements	680	! R >> L	161 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Darkinian made	DICODE COT	1	140110
Perfusion mode	PICORE Q2T	BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	1100.0 ms	Saguence	
Flow limit	100 cm/s	Sequence	On
Resolution		Introduction Dimension	On 3D
Base resolution	162		
Phase resolution	100 %	Reordering	Linear
Slice resolution	100 %	Contrasts	1
Phase partial Fourier	7/8	Bandwidth	1102 Hz/Px
Slice partial Fourier	Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	1.03 ms
interpolation		EPI factor	162
PAT mode	GRAPPA	RF pulse type	Normal
-	_	1 5	

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Gradient mode Excitation RF spoiling	Normal Slab-sel. On
Read Diff Amp	21.5 mT/m
Phase Diff Amp	0.0 mT/m
Slice Diff Amp	21.5 mT/m
Dante puls # in 1st par	300
Dante puls # in 2nd par	40
Pulses FA in DANTE	10.5 degree
TAU in DANTE	1100 us
Vari readFA	0
Blank bef/aft DANTE-RF	50 us
Grad # bef DANTE	0
DANTE-RF dur	100 us
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	2.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	1900 us
RF BWTP	25.0
EFFECTIVE TR	105 ms
PatPartitions	24
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	162
FlashRef BW	100 Hz/px
FlashRef TE	10000 us
FlashRef FA	5 deg
use CAIPI	Off

\\USER\UserProtocols\Yuhui\PM\_IPS\aVAPER\_0.8i0.9sl\_Pat3\_pf78\_24sls

TA: 30:57 PAT: 3 Voxel size: 0.8×0.8×0.9 mm Rel. SNR: 1.00 UNKNOWN:			
Properties	0"	Accel. factor PE Ref. lines PE	3 48
Prio Recon	Off	Accel. factor 3D	1
Before measurement		Ref. lines 3D	24
After measurement	0.5	Reference scan mode	Separate
Load to viewer	On O#		•
Inline movie	Off	Prescan Normalize	Off Off
Auto store images	On O#	Raw filter	Off
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic	Off	Hamming	Off
segments	0"	Geometry	
Auto open inline display	Off	Multi-slice mode	Interleaved
Start measurement without	On	Series	Ascending
further preparation	0"		
Wait for user to start	Off	Special sat.	Parallel F
Start measurements	single	Gap	25.0 mm
Routine		Thickness	100 mm
Slab group 1		Table position	Н
Slabs	1	Table position	0 mm
Dist. factor	50 %	Inline Composing	Off
Position	L0.5 A11.8 H54.4		Oli
Orientation	T > C-14.0	System	
Phase enc. dir.	P >> A	V32	Off
Rotation	180.00 deg	A32	On
Phase oversampling	9 %	Positioning mode	FIX
Slice oversampling	8.3 %	Positioning mode MSMA	S - C - T
Slices per slab	24		
FoV read	130.0 mm	Sagittal	R >> L
FoV phase	100.0 %	Coronal	A >> P
Slice thickness	0.90 mm	Transversal	F >> H
TR	3019.7 ms	Save uncombined	Off
TE	28 ms	Coil Combine Mode	Sum of Squares
· =	1	AutoAlign	
Averages Concatenations	1	Auto Coil Select	Default
Filter	None	Shim mode	Standard
		Adjust with body coil	Off
Coil elements	A32	Confirm freq. adjustment	Off
Contrast		Assume Silicone	Off
Perfusion mode	Picore Q2TIPS	! Ref. amplitude 1H	263.000 V
TI2	1100 ms	Adjustment Tolerance	Auto
TI1	50 ms	Adjust volume	Auto
TI1s	50 ms		105 044 01154 4
Flip angle	30.0 deg	! Position	L0.5 A11.8 H54.4
Fat suppr.	None	! Orientation	T > C-14.0
		! Rotation	180.00 deg
Averaging mode	Long term	! R >> L	130 mm
Reconstruction	Magnitude	! A >> P	138 mm
Measurements	615	! F >> H	36 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	1100.0 ms	Sequence	
Flow limit	100 cm/s	Introduction	On
Resolution			On 3D
Base resolution	162	Dimension	
Phase resolution	100 %	Reordering	Linear
Slice resolution	100 %	Contrasts	1
Phase partial Fourier	7/8	Bandwidth	1102 Hz/Px
Slice partial Fourier	Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	1.03 ms
		EPI factor	162
PAT mode	GRAPPA	RF pulse type	Normal
-		201/:	

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Gradient mode Excitation RF spoiling	Normal Slab-sel. On
Read Diff Amp Phase Diff Amp Slice Diff Amp Dante puls # in 1st par Dante puls # in 2nd par Pulses FA in DANTE TAU in DANTE Vari readFA Blank bef/aft DANTE-RF Grad # bef DANTE DANTE-RF dur use Ernst angle Maxwell Correction log physio files FFT scale dummy prepscan time z shim RF duration RF BWTP EFFECTIVE TR PatPartitions EPI phase correction PAT refscan mode FlashRef BaseRes FlashRef FA use CAIPI	0.0 mT/m 21.5 mT/m 21.5 mT/m 280 38 8.3 degree 1100 us 0 50 us 0 90 us Off Off Off Off 2.00 3 s 0.00 mT/m*ms 2370 us 25.0 103 ms 26 local Flash 162 100 Hz/px 10000 us 5 deg Off

\\USER\UserProtocols\Yuhui\PM\_IPS\aVAPER\_0.8i0.9sl\_Pat3\_pf78\_24sls

TA: 30:55 PAT: 3 Voxel size: 0.8×0.8×0.9 mm Rel. SNR: 1.00 UNKNOWN:			
Properties		Accel. factor PE Ref. lines PE	3 48
Prio Recon	Off	Accel. factor 3D	1
Before measurement		Ref. lines 3D	24
After measurement		Reference scan mode	Separate
Load to viewer	On O"		
Inline movie	Off	Prescan Normalize	Off
Auto store images	On O#	Raw filter	Off
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic	Off	Hamming	Off
segments	O#	Geometry	
Auto open inline display	Off	Multi-slice mode	Interleaved
Start measurement without	On	Series	Ascending
further preparation	Off	0 11 /	
Wait for user to start		Special sat.	Parallel F
Start measurements	single	Gap	25.0 mm
Routine		Thickness	100 mm
Slab group 1		Table position	Н
Slabs	1	Table position	0 mm
Dist. factor	50 %	Inline Composing	Off
Position	R2.9 A4.5 H44.7		<del></del>
Orientation	T > C-17.0	System	
Phase enc. dir.	A >> P	V32	Off
Rotation	0.00 deg	A32	On
Phase oversampling	9 %	Positioning mode	FIX
Slice oversampling	8.3 %	MSMA	S - C - T
Slices per slab	24	Sagittal	R >> L
FoV read	130.0 mm	Coronal	A >> P
FoV phase	100.0 %	Transversal	F >> H
Slice thickness	0.90 mm	Save uncombined	Off
TR	3021.00 ms	Coil Combine Mode	Sum of Squares
TE	28 ms	AutoAlign	
Averages	1	Auto Coil Select	Default
Concatenations	1		
Filter	None	Shim mode	Standard
Coil elements	A32	Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
	Picore Q2TIPS	Assume Silicone	Off
Perfusion mode TI2		! Ref. amplitude 1H	251.000 V
TI12	1100 ms	Adjustment Tolerance	Auto
TI1s	50 ms	Adjust volume	
Flip angle	50 ms	! Position	R2.9 A5.5 H42.8
	30.0 deg None	! Orientation	T > C-16.7
Fat suppr.		! Rotation	-180.00 deg
Averaging mode	Long term	! R >> L	130 mm
Reconstruction	Magnitude	! A >> P	140 mm
Measurements	614	! F >> H	37 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
			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	1100.0 ms	Sequence	
Flow limit	100 cm/s	Introduction	On
Resolution		Dimension	3D
Base resolution	162	Reordering	Linear
Phase resolution	100 %	Contrasts	Linear 1
Slice resolution	100 %	Bandwidth	1 1102 Hz/Px
Phase partial Fourier	7/8		Off
Slice partial Fourier	Off	Free echo spacing	Oπ 1.03 ms
Interpolation	Off	Echo spacing	1.US IIIS
		EPI factor	162
PAT mode	GRAPPA	RF pulse type	Normal
		205/:	

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Gradient mode Excitation RF spoiling	Normal Slab-sel. On
Read Diff Amp Phase Diff Amp Slice Diff Amp Dante puls # in 1st par Dante puls # in 2nd par Pulses FA in DANTE TAU in DANTE Vari readFA Blank bef/aft DANTE-RF Grad # bef DANTE DANTE-RF dur use Ernst angle Maxwell Correction log physio files FFT scale dummy prepscan time z shim RF duration RF BWTP EFFECTIVE TR PatPartitions EPI phase correction PAT refscan mode FlashRef BaseRes FlashRef FA use CAIPI	21.5 mT/m 0.0 mT/m 21.5 mT/m 280 38 8.5 degree 1100 us 0 50 us 0 80 us Off Off Off Off 2.00 3 s 0.00 mT/m*ms 2430 us 25.0 103 ms 26 local Flash 162 100 Hz/px 10000 us 5 deg Off