\\USER\RenzoHuber\Lonike\20210713\_tests\Checklist\_ok

TA: 1:11 F	PAT: Off Voxel size: 1.0	×1.0×5.0 mm Rel. SNR: 1.00	SIEMENS: tfl
Properties		PAT mode	None
Prio Recon	Off	Image Filter	Off
Before measurement		Distortion Corr.	Off
After measurement	0.5	Prescan Normalize	Off
Load to viewer	On O#	Normalize	Off
Inline movie	Off	B1 filter	Off
Auto store images	On Off	Raw filter	Off
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic segments	Oii	1 .	
Auto open inline display	Off	Geometry	Oire also short
Start measurement without	Off	Multi-slice mode	Single shot
further preparation	Oli	Series	Interleaved
Wait for user to start	Off	<del></del>	
Start measurements	single	Table position	Н
Start measurements	Single	Table position	0 mm
Routine		Inline Composing	Off
Slice group 1		System	
Slices	11	V32	Off
Dist. factor	150 %	A32	On
Position	R1.8 A19.9 F14.3		
Orientation	Sagittal	Positioning mode	REF
Phase enc. dir.	A >> P	MSMA	S-C-T
Rotation	0.00 deg	Sagittal	R >> L
Slice group 2		Coronal	A >> P
Slices	5	Transversal	F >> H
Dist. factor	100 %	Save uncombined	Off
Position	R2.3 A15.9 H1.4	Coil Combine Mode	Adaptive Combine
Orientation	Transversal	AutoAlign	 
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg	Shim mode	Tune up
Slice group 3	_	Adjust with body coil	Off
Slices	7	Confirm freq. adjustment	Off
Dist. factor	200 %	Assume Silicone	Off
Position	R1.5 A21.4 F6.6	! Ref. amplitude 1H	220.000 V
Orientation	Coronal	Adjustment Tolerance	Auto
Phase enc. dir.	R >> L	Adjust volume	
Rotation	0.00 deg	! Position	L0.0 A23.4 F1.3
Phase oversampling	0 %	! Orientation	Transversal
FoV read	200 mm	! Rotation	0.00 deg
FoV phase	100.0 %	! R >> L	350 mm
Slice thickness	5.0 mm	! A >> P	213 mm
TR TE	3000 ms	! F >> H	189 mm
	2.24 ms	Physio	
Averages Concatenations	1	1st Signal/Mode	None
Filter	None	ist Signal/Wode	INOTIC
Coil elements	A32	Dark blood	Off
ı	A32	Resp. control	Off
Contrast	Clina and ID	' ·	<b></b>
Magn. preparation	Slice-sel. IR	Inline	
TI Flip angle	1100 ms	Subtract	Off
Flip angle	6 deg	Std-Dev-Sag	Off
Fat suppr.	None None	Std-Dev-Cor	Off
Water suppr.	INUTIE	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	102	Save original images	On
Base resolution	192	1	
Phase resolution	100 %	Sequence	
Phase partial Fourier	Off	Introduction	On
Interpolation	Off	1/∔	

ed z/Px s
sel.

\\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_153\_2D

TA: 0:48 PA	T: 3 Voxel size: 0.9×0.9×	k0.9 mm Rel. SNR: 1.00 US	ER: VASO_153
<b>-</b>		l Prescan Normalize	Off
Properties		— Raw filter	Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Hamming	Off
After measurement			
Load to viewer	On O"	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On O"	Series	Ascending
Load to stamp segments	Off	Special sat.	Parallel F
Load images to graphic	Off	Gap	25.0 mm
segments	0"	Thickness	100 mm
Auto open inline display	Off		
Start measurement without	On	Table position	H
further preparation	Off	Table position	0 mm
Wait for user to start Start measurements		Inline Composing	Off
Start measurements	single	System	
Routine		V32	Off
Slice group 1		A32	On
Slices	12		
Dist. factor	0 %	Positioning mode	REF
Position	L0.5 A21.9 H0.0	MSMA	S-C-T
Orientation	Transversal	Sagittal	R >> L
Phase enc. dir.	A >> P	Coronal	A >> P
Rotation	0.00 deg	Transversal	F >> H
Phase oversampling	0 %	Save uncombined	Off
FoV read	160.0 mm	Coil Combine Mode	Sum of Squares
FoV phase	100.0 %	AutoAlign	 D ( )
Slice thickness	0.9 mm	Auto Coil Select	Default
TR	1833.5 ms	Shim mode	Standard
TE	21 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	! Ref. amplitude 1H	220.000 V
Coil elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	! Position	Isocenter
TI2	1075 ms	! Orientation	Transversal
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	500 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	16 mm
Fat sat, mode	Strong	I :	
		Physio	- N
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	23		
Delay in TR	0 ms	Sequence	0.5
Multiple series	Off	Introduction	On
Perfusion mode	PICORE Q2T	Contrasts	1
Inversion time 1	50 ms	Bandwidth	1124 Hz/Px
Saturation stop time	50 ms	Free echo spacing	Off
Inversion time 2	1075 ms	Echo spacing	1.01 ms
Flow limit	1075 ms 100.0 cm/s	EPI factor	178
<u>I</u>	100.0 011/3	RF pulse type	Normal
Resolution		Gradient mode	Normal
Base resolution	178		
Phase resolution	100 %	Ampl	100
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
PAT mode	GRAPPA	Phase skip	0
Accel. factor PE	3	Opt. TI2	1235
Ref. lines PE	3 27	Volumes per TI	1
Reference scan mode	Separate	FatSat flip angle	110 deg
		SMS factor	1
		2/.	

log physio files altern z-shim 0 uT/m fixed z-shim 0 uT/m
EPI phase correction local PAT refscan mode single-shot RF pulse duration 2560 us FFT scale 1.0

#### \\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_157\_3D

TA: 6.4 s PAT: 3 Voxel size: 0.9×0.9×0.9 mm Rel. SNR: 1.00 USER: VASO\_157

Properties		PAT mode Accel. factor PE	GRAPPA 3
Prio Recon	Off	Ref. lines PE	33
Before measurement		Accel. factor 3D	1
After measurement	0.5	Ref. lines 3D	12
Load to viewer	On Off	Reference scan mode	Separate
Inline movie	On	Prescan Normalize	Off
Auto store images Load to stamp segments	Off	Raw filter	Off
Load images to graphic	Off	Elliptical filter	Off
segments	Oli	Hamming	Off
Auto open inline display	Off	Папппп	Oli
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
Start measurements	Sirigie	•	25.0 mm
Routine Slab group 1		Gap Thickness	100 mm
Slabs	1	Table position	11
Dist. factor	50 %	Table position Table position	H 0 mm
Position	Isocenter		0 mm Off
Orientation	Transversal	Inline Composing	Oli
Phase enc. dir.	A >> P	System	
Rotation	0.00 deg	V32	Off
Phase oversampling	0.00 deg 0 %	A32	On
Slice oversampling	0.0 %		
Slices per slab	12	Positioning mode	REF
FoV read	120.0 mm	MSMA	S-C-T
FoV phase	134.3 %	Sagittal	R >> L
Slice thickness	0.90 mm	Coronal	A >> P
TR	1596.00 ms	Transversal	F >> H
TE TE	22 ms	Save uncombined	Off
Averages	1	Coil Combine Mode	Sum of Squares
Concatenations	1	AutoAlign	<del></del>
Filter	None	Auto Coil Select	Default
Coil elements	A32	Shim mode	Standard
ı	702	Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	Assume Silicone	Off
TI2	900 ms	! Ref. amplitude 1H	220.000 V
TI1	50 ms	Adjustment Tolerance	Auto
TI1s	50 ms	Adjust volume	
Flip angle	4 deg	! Position	Isocenter
Fat suppr.	Fat sat.	! Orientation	Transversal
Fat sat. mode	Weak	! Rotation	90.00 deg
Averaging mode			<u> </u>
5 5	Long term	! A >> P	200 mm
Reconstruction	Long term Magnitude	! A >> P ! R >> L	200 mm 150 mm
Reconstruction Measurements	Magnitude		
Measurements	Magnitude 4	! R >> L ! F >> H	150 mm
Measurements Delay in TR	Magnitude	! R >> L ! F >> H Physio	150 mm 11 mm
Measurements Delay in TR Multiple series	Magnitude 4 0 ms Off	! R >> L ! F >> H	150 mm
Measurements Delay in TR Multiple series Perfusion mode	Magnitude 4 0 ms Off PICORE Q2T	! R >> L ! F >> H Physio	150 mm 11 mm
Measurements Delay in TR Multiple series Perfusion mode Inversion time 1	Magnitude 4 0 ms Off  PICORE Q2T 50 ms	! R >> L ! F >> H Physio 1st Signal/Mode	150 mm 11 mm
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms	! R >> L ! F >> H Physio 1st Signal/Mode BOLD	150 mm 11 mm None
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter	150 mm 11 mm  None
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence	150 mm 11 mm  None  Off Off
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction	150 mm 11 mm  None  Off Off Off
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension	150 mm 11 mm  None  Off Off Off 3D
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution  Base resolution	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension Reordering	150 mm 11 mm  None  Off Off Off Linear
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution Base resolution Phase resolution	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension Reordering Contrasts	150 mm 11 mm  None  Off Off Off Linear 1
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution Base resolution Phase resolution Slice resolution	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension Reordering Contrasts Bandwidth	150 mm 11 mm  None  Off Off Off Indian India
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution Base resolution Phase resolution Slice resolution Phase partial Fourier	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension Reordering Contrasts Bandwidth Free echo spacing	150 mm 11 mm  None  Off Off Off  On 3D Linear 1 1098 Hz/Px Off
Measurements Delay in TR Multiple series  Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit  Resolution Base resolution Phase resolution Slice resolution	Magnitude 4 0 ms Off  PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	! R >> L ! F >> H  Physio  1st Signal/Mode  BOLD  Motion correction Spatial filter  Sequence Introduction Dimension Reordering Contrasts Bandwidth	150 mm 11 mm  None  Off Off Off Indian India

RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle NORDIC 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	120 150 3.1kHz 1 Off On Off 1.00 3 s 0.00 mT/m*ms 2560 us 25.0 57 ms 19152 ms 12 local Flash 134 100 Hz/px 6500 us 5 deg Off

\\USER\RenzoHuber\Lonike\20210713\_tests\Checklist\_ok

Voxel size: 1.0×1.0×5.0 mm Rel. SNR: 1.00

SIEMENS: tfl

TA: 1:11

PAT: Off

1A. 1.11 r	VOXELSIZE. 1.0.	x1.0x5.0 IIIII Kel. SNK. 1.00	SIEWENS. (II
Properties		PAT mode	None
Prio Recon	Off		
Before measurement		Image Filter	Off
After measurement		Distortion Corr.	Off
Load to viewer	On	Prescan Normalize	Off
Inline movie	Off	Normalize	Off
		B1 filter	Off
Auto store images	On O"	Raw filter	Off
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic	Off		<b></b>
segments		Geometry	
Auto open inline display	Off	Multi-slice mode	Single shot
Start measurement without	Off	Series	Interleaved
further preparation			
Wait for user to start	Off	Table position	Н
Start measurements	single	Table position	
Otal mododiomonto	onigio	Table position	0 mm
Routine		Inline Composing	Off
Slice group 1		System	
Slices	11		O#
Dist. factor	150 %	V32	Off
Position	R1.8 A19.9 F14.3	A32	On
		Positioning mode	REF
Orientation	Sagittal	MSMA	S-C-T
Phase enc. dir.	A >> P		
Rotation	0.00 deg	Sagittal	R >> L
Slice group 2		Coronal	A >> P
Slices	5	Transversal	F >> H
Dist. factor	100 %	Save uncombined	Off
Position	R2.3 A15.9 H1.4	Coil Combine Mode	Adaptive Combine
Orientation	Transversal	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg		
	0.00 deg	Shim mode	Tune up
Slice group 3	7	Adjust with body coil	Off
Slices	7	Confirm freq. adjustment	Off
Dist. factor	200 %	Assume Silicone	Off
Position	R1.5 A21.4 F6.6	! Ref. amplitude 1H	220.000 V
Orientation	Coronal	Adjustment Tolerance	Auto
Phase enc. dir.	R >> L	Adjust volume	Auto
Rotation	0.00 deg		10000004540
Phase oversampling	0 %	! Position	L0.0 A23.4 F1.3
FoV read	200 mm	! Orientation	Transversal
FoV phase	100.0 %	! Rotation	0.00 deg
Slice thickness	5.0 mm	! R >> L	350 mm
TR	3000 ms	! A >> P	213 mm
		! F >> H	189 mm
ŢE	2.24 ms	Discosis	
Averages	1	Physio	
Concatenations	1	1st Signal/Mode	None
Filter	None	Dark blood	Off
Coil elements	A32	Dark blood	Off
Contract		Resp. control	Off
Contrast	Olisa sal ID	' · ·	<del></del>
Magn. preparation	Slice-sel. IR	Inline	
TI	1100 ms	Subtract	Off
Flip angle	6 deg	Std-Dev-Sag	Off
Fat suppr.	None	Std-Dev-Cor	Off
Water suppr.	None	Std-Dev-Tra	Off
		Std-Dev-Time	Off
Averaging mode	Long term		
Reconstruction	Magnitude	MIP-Sag	Off
Measurements	1	MIP-Cor	Off
Multiple series	Each measurement	MIP-Tra	Off
1		MIP-Time	Off
Resolution		Save original images	On
Base resolution	192	—	
Phase resolution	100 %	Sequence	
Phase partial Fourier	Off	Introduction	On
Interpolation	Off	Introduction	OII
Interpolation	Oli	7/+	

	Dimension Asymmetric echo Bandwidth Flow comp. Echo spacing	2D Allowed 240 Hz/Px No 5.5 ms
-	RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slice-sel. On

		0713_tests\VASO_153_2D_NOF	
TA: 0:15 PA	T: 3 Voxel size: 0.9×0.	9x0.9 mm Rel. SNR: 1.00 US	SER: VASO_153
Properties		Prescan Normalize	Off
Prio Recon	Off	Raw filter	Off
Before measurement	011	Elliptical filter	Off
After measurement		Hamming	Off
Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On	Series	Ascending
Load to stamp segments	Off		
Load images to graphic	Off	Special sat.	Parallel F
segments		Gap	25.0 mm
Auto open inline display	Off	Thickness	100 mm
Start measurement without	On	Table position	Н
further preparation		Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single	' "	
Pouting	-	System	0"
Routine		V32	Off
Slice group 1	10	A32	On
Slices Dist. factor	12 0 %	Positioning mode	REF
Position	0 % L0.5 A33.9 F17.9	MSMA	S - C - T
	T > C6.2	Sagittal	R >> L
Orientation Phase enc. dir.	1 > C6.2 A >> P	Coronal	A >> P
Rotation		Transversal	F >> H
	0.00 deg 0 %	Save uncombined	Off
Phase oversampling FoV read	160.0 mm	Coil Combine Mode	Sum of Squares
FoV read FoV phase	100.0 %	AutoAlign	
Slice thickness	0.9 mm	Auto Coil Select	Default
TR	1833.5 ms		
TE	21 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	220.000 V
Con elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	D0 0 400 0 E40 E
Perf / VASO mode	SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	225 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	29 mm
Fat sat. mode	Strong	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	i -	
Measurements	5	BOLD	
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	On
		Contrasts	1
Perfusion mode	PICORE Q2T	Bandwidth	1124 Hz/Px
Inversion time 1	50 ms	Free echo spacing	Off
Saturation stop time	50 ms	Echo spacing	1.01 ms
Inversion time 2	1075 ms		
Flow limit	100.0 cm/s	EPI factor	178
Resolution		RF pulse type	Normal
Base resolution	178	Gradient mode	Normal
Phase resolution	100 %	Ampl	100
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
		Phase skip	0
PAT mode	GRAPPA	Opt. TI2	1235
Accel. factor PE	3	Volumes per TI	1
Ref. lines PE	27	FatSat flip angle	110 deg
Reference scan mode	Separate	SMS factor	1

SMS factor

Reference scan mode

log physio filesOffaltern z-shim0 uT/mfixed z-shim0 uT/mEPI phase correctionlocalPAT refscan modesegmentedRF pulse duration2560 usFFT scale1.0

\\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_153\_2D\_NOR\_SS\_LOW

TA: 3:09 PA	T: 3 Voxel size: 0.9×0.9	×0.9 mm Rel. SNR: 1.00 US	ER: VASO_153
<b>-</b>		l Prescan Normalize	Off
Properties	0"	Raw filter	Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Hamming	Off
After measurement Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On	Series	Ascending
Load to stamp segments	Off		Ascertaing
Load images to graphic	Off	Special sat.	Parallel F
segments	OII	Gap	25.0 mm
Auto open inline display	Off	Thickness	100 mm
Start measurement without	On	Table position	Н
further preparation	0.11	Table position  Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single		Oli
1	S.i.igis	System	
Routine		V32	Off
Slice group 1	40	A32	On
Slices	12	Positioning mode	REF
Dist. factor	0 %	MSMA	S-C-T
Position	L0.5 A33.9 F17.9	Sagittal	R >> L
Orientation	T > C6.2	Coronal	A >> P
Phase enc. dir.	A >> P	Transversal	F >> H
Rotation	0.00 deg	Save uncombined	Off
Phase oversampling	0 %	Coil Combine Mode	Sum of Squares
FoV read	160.0 mm	AutoAlign	
FoV phase	100.0 %	Auto Coil Select	Default
Slice thickness	0.9 mm		
TR	1833.5 ms	Shim mode	Standard
TE	21 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	! Ref. amplitude 1H	220.000 V
Coil elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	225 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	29 mm
Fat sat. mode	Strong	Physio	
Averaging mode	Long torm	1st Signal/Mode	None
Averaging mode Reconstruction	Long term Magnitude		
Measurements	100	BOLD	
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	On
	<b>∵</b>	····· Contrasts	1
Perfusion mode	PICORE Q2T	Bandwidth	1124 Hz/Px
Inversion time 1	50 ms	Free echo spacing	Off
Saturation stop time	50 ms	Echo spacing	1.01 ms
Inversion time 2	1075 ms		
Flow limit	100.0 cm/s	EPI factor	178
Resolution		RF pulse type	Normal
Base resolution	178	Gradient mode	Normal
Phase resolution	100 %	Ampl	100
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
		Phase skip	0
PAT mode	GRAPPA	Opt. TI2	1235
Accel. factor PE	3	Volumes per TI	1
Ref. lines PE	27	FatSat flip angle	110 deg
Reference scan mode	Separate	SMS factor	1
		11/1	

log physio filesOffaltern z-shim0 uT/mfixed z-shim0 uT/mEPI phase correctionlocalPAT refscan modesingle-shotRF pulse duration2560 usFFT scale1.0

\\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_153\_2D\_NOR\_FLEET\_LOW

TA: 3:10 PA	AT: 3 Voxel size: 0.9×0.	9×0.9 mm Rel. SNR: 1.00 US	ER: VASO_153
Properties	0"	Prescan Normalize Raw filter	Off Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Hamming	Off
After measurement			-
Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On	Series	Ascending
Load to stamp segments	Off	Special sat.	Parallel F
Load images to graphic	Off	Gap	25.0 mm
segments		Thickness	100 mm
Auto open inline display	Off		
Start measurement without	On	Table position	Н
further preparation		Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single		
Routine		System	
Slice group 1		V32	Off
Slice group 1	12	A32	On
Dist. factor	0 %	Positioning mode	REF
Position	L0.5 A33.9 F17.9	MSMA	S - C - T
Orientation		Sagittal	R >> L
	T > C6.2	Coronal	A >> P
Phase enc. dir.	A >> P	Transversal	F >> H
Rotation	0.00 deg	Save uncombined	Off
Phase oversampling	0 %	Coil Combine Mode	Sum of Squares
FoV read	160.0 mm	AutoAlign	
FoV phase	100.0 %	Auto Coil Select	Default
Slice thickness	0.9 mm	Auto Coli Gelect	Delault
TR	1833.5 ms	Shim mode	Standard
TE	21 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	! Ref. amplitude 1H	220.000 V
Coil elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	225 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	29 mm
Fat sat. mode	Strong	Dhysis	
		Physio Physio	None
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	100	Comunica	
Delay in TR	0 ms	Sequence	On
Multiple series	Off	Introduction	On
Perfusion mode	PICORE Q2T	Contrasts	1 4424 H=/Dv
Inversion time 1	50 ms	Bandwidth	1124 Hz/Px
Saturation stop time	50 ms	Free echo spacing	Off
Inversion time 2	1075 ms	Echo spacing	1.01 ms
Flow limit	100.0 cm/s	EPI factor	178
į.	100.0 011//3	RF pulse type	Normal
Resolution		Gradient mode	Normal
Base resolution	178		
Phase resolution	100 %	Ampl	120
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
DAT mode	CDADDA	Phase skip	0
PAT mode	GRAPPA	Opt. TI2	1235
Accel. factor PE	3	Volumes per TI	1
Ref. lines PE	27	FatSat flip angle	110 deg
Reference scan mode	Separate	SMS factor	1

SMS factor

1

log physio files	Off
altern z-shim	0 uT/m
fixed z-shim	0 uT/m
EPI phase correction	local
PAT refscan mode	FLEET
FLEET dummies	15
FLEET flip angle	30
RF pulse duration	2560 us
FFT scale	1.0

\\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_153\_2D\_NOR\_FLEET60\_LOW

	_	9 mm Rel. SNR: 1.00 US	SER: VASO_153
		Prescan Normalize	Off
Properties		Raw filter	Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Hamming	Off
After measurement		1	
Load to viewer	On O"	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On O"	Series	Ascending
Load to stamp segments	Off	Special sat.	Parallel F
Load images to graphic	Off	Gap	25.0 mm
segments	2"	Thickness	100 mm
Auto open inline display	Off		
Start measurement without	On	Table position	Н
further preparation	0"	Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single	System	
Routine		V32	Off
Slice group 1		-   V32 A32	On
Slices	12		
Dist. factor	0 %	Positioning mode	REF
Position	L0.5 A33.9 F17.9	MSMA	S - C - T
Orientation	T > C6.2	Sagittal	R >> L
Phase enc. dir.	A >> P	Coronal	A >> P
Rotation	0.00 deg	Transversal	F >> H
Phase oversampling	0 %	Save uncombined	Off
FoV read	160.0 mm	Coil Combine Mode	Sum of Squares
FoV phase	100.0 %	AutoAlign	·
Slice thickness	0.9 mm	Auto Coil Select	Default
TR	1833.5 ms		
TE	21 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	220.000 V
Con elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	- ! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	225 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	29 mm
Fat sat. mode	Strong	Physio	
A		1st Signal/Mode	None
Averaging mode Reconstruction	Long term	•	
Measurements	Magnitude 100	BOLD	
		Sequence	
Delay in TR	0 ms Off	Introduction	On
Multiple series		- Contrasts	1
Perfusion mode	PICORE Q2T	Bandwidth	1124 Hz/Px
Inversion time 1	50 ms	Free echo spacing	Off
Saturation stop time	50 ms	Echo spacing	1.01 ms
Inversion time 2	1075 ms	Lond Spacing	1.01 1113
Flow limit	100.0 cm/s	EPI factor	178
		RF pulse type	Normal
Resolution	470	Gradient mode	Normal
Base resolution	178	Ampl	120
Phase resolution	100 %	Ampl	120
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
PAT mode	GRAPPA	Phase skip	0
Accel. factor PE	3	Opt. TI2	1235
Ref. lines PE	3 27	Volumes per TI	1
Reference scan mode	Separate	FatSat flip angle	110 deg
Notorotto Statt Hitte	Ceparate	SMS factor	1

log physio files	Off
altern z-shim	0 uT/m
fixed z-shim	0 uT/m
EPI phase correction	local
PAT refscan mode	FLEET
FLEET dummies	15
FLEET flip angle	60
RF pulse duration	2560 us
FFT scale	1.0

_			
	ber\Lonike\20210713_tests\\		•
TA: 3:10 PA	T: 3 Voxel size: 0.9×0.9×0.9	mm Rel. SNR: 1.00 US	ER: VASO_153
Properties Prio Recon	Off	Prescan Normalize Raw filter	Off Off
Before measurement After measurement	Oil	Elliptical filter Hamming	Off Off
Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On	Series	Ascending
Load to stamp segments	Off	Special sat.	Parallel F
Load images to graphic segments	Off	Gap	25.0 mm
Auto open inline display	Off	Thickness	100 mm
Start measurement without	On	Table position	Н
further preparation		Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single	System	<b>.</b>
Routine		V32	Off
Slice group 1		A32	On
Slices	12		
Dist. factor	0 %	Positioning mode	REF
Position	L0.5 A33.9 F17.9	MSMA Societal	S - C - T R >> L
Orientation	T > C6.2	Sagittal Coronal	A >> P
Phase enc. dir.	A >> P	Transversal	F >> H
Rotation	0.00 deg 0 %	Save uncombined	Off
Phase oversampling FoV read	160.0 mm	Coil Combine Mode	Sum of Squares
FoV phase	100.0 %	AutoAlign	
Slice thickness	0.9 mm	Auto Coil Select	Default
TR	1833.5 ms	Shim mode	Standard
TE	21 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	! Ref. amplitude 1H	220.000 V
Coil elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P ! R >> L	225 mm 200 mm
Flip angle	70 deg	! K >> L ! F >> H	200 mm 29 mm
Fat suppr.	Fat sat.	ı	29 111111
Fat sat. mode	Strong	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	100	Sequence	
Delay in TR	0 ms	Introduction	On
Multiple series	Off	Contrasts	1
Perfusion mode	PICORE Q2T	Bandwidth	1124 Hz/Px
Inversion time 1	50 ms	Free echo spacing	Off
Saturation stop time	50 ms	Echo spacing	1.01 ms
Inversion time 2	1075 ms	EPI factor	178
Flow limit	100.0 cm/s	RF pulse type	Normal
Resolution		Gradient mode	Normal

Perfusion mode PICORE Q2T Inversion time 1 50 ms Saturation stop time 50 ms Inversion time 2 1075 ms	Contrasts  Bandwidth  Free echo spacing  Echo spacing	1 1124 Hz/Px Off 1.01 ms
Flow limit 100.0 cm/s Resolution	EPI factor RF pulse type Gradient mode	178 Normal Normal
Base resolution 178 Phase resolution 100 % Phase partial Fourier 6/8 Interpolation Off	Ampl BWDTH thickness	120 300 3.1kHz 1000
PAT mode GRAPPA Accel. factor PE 3 Ref. lines PE 27 Reference scan mode Separate	Phase skip Opt. TI2 Volumes per TI FatSat flip angle SMS factor	0 1235 1 110 deg 1

log physio files	Off
altern z-shim	0 uT/m
fixed z-shim	0 uT/m
EPI phase correction	local
PAT refscan mode	FLEET
FLEET dummies	15
FLEET flip angle	30
RF pulse duration	2560 us
FFT scale	1.0

\\USER\Rer	nzoHuber <sup>,</sup>	\Lonike\20210713_tests\VAS	SO_153_2D_NOF	R_SEG_LOW_NOISE	
TA: 9.5 s	PAT: 3	Voxel size: 0.9×0.9×0.9 mm	Rel. SNR: 1.00	USER: VASO 153	

Prio Recon Before measurement After measurement Load to viewer On Inline movie Off Auto store images On Load to stamp segments Off Load images to graphic segments Auto open inline display Start measurement without further preparation Wait for user to start Start measurements Slice group 1 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR TR 1833.5 ms TE Averages 1 On Off Ger A B B B B B B B B B B B B B B B B B B	Raw filter Elliptical filter Hamming ometry Multi-slice mode Series Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Off Off Off Off Off Interleaved Ascending Parallel F 25.0 mm 100 mm Off Off Off On REF
Before measurement After measurement Load to viewer On Inline movie Off Auto store images On Load to stamp segments Off Load images to graphic segments Auto open inline display Off Start measurement without further preparation Wait for user to start Start measurements Slice group 1 Slices Dist. factor Position Orientation Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TE Averages Son  On  On  On  Gee  On  Gee  On  Gee  To  Gee	Hamming ometry Multi-slice mode Series Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Off Interleaved Ascending Parallel F 25.0 mm 100 mm H 0 mm Off Off On REF
Anter measurement Load to viewer On On Ger Inline movie Off Auto store images On Load to stamp segments Off Load images to graphic Off segments Auto open inline display Off Start measurement without On further preparation Wait for user to start Off Start measurements single  Routine  Slice group 1 Slices 12 Dist. factor 0 % Position L0.5 A33.9 F17.9 Orientation T > C6.2 Phase enc. dir. A >> P Rotation O.00 deg Phase oversampling 0 % FoV read 160.0 mm FoV phase 100.0 % Slice thickness 0.9 mm TR 1833.5 ms TE 21 ms Averages 1	ometry Multi-slice mode Series Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Interleaved Ascending  Parallel F 25.0 mm 100 mm  H 0 mm Off
Inline movie Auto store images Load to stamp segments Load images to graphic segments Auto open inline display Start measurement without further preparation Wait for user to start Start measurements Slice group 1 Slices Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness 100.0 mm TR 1833.5 ms TE 21 ms Averages 100.0 mm Slices 12 Dist. factor Dist. f	Multi-slice mode Series Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Ascending Parallel F 25.0 mm 100 mm  H 0 mm Off  Off On
Auto store images Load to stamp segments Load images to graphic segments Auto open inline display Start measurement without further preparation Wait for user to start Start measurements Slice group 1 Slices Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TE Averages  On Off Signature Off Signature Off System Supplies System System Supplies System Supplies System Supplies System Supplies System Supplies System System Supplies System	Series Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Ascending Parallel F 25.0 mm 100 mm  H 0 mm Off  Off On
Load to stamp segments Load images to graphic segments Auto open inline display Start measurement without further preparation Wait for user to start Start measurements Slice group 1 Slices Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR 1833.5 ms TE Averages  Off Sf  Off Start measurement without On further preparation Off Single System  Off So  Off Single System  Off Single System  Off Single System  Off Single System System Single System Single System Single System System Single System Single System	Special sat. Gap Thickness Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Parallel F 25.0 mm 100 mm  H 0 mm Off  Off On
Load images to graphic Off segments Auto open inline display Off Start measurement without On further preparation Wait for user to start Off Start measurements single  Suctine  Slice group 1 Slices 12 Dist. factor 0 % Position L0.5 A33.9 F17.9 Orientation T > C6.2 Phase enc. dir. A >> P Rotation 0.00 deg Phase oversampling 0 % FoV read 160.0 mm FoV phase 100.0 % Slice thickness 0.9 mm TR 1833.5 ms TE 21 ms Averages 1	Gap Thickness Table position Table position Inline Composing Stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	25.0 mm 100 mm H 0 mm Off Off
segments Auto open inline display Off Start measurement without further preparation Wait for user to start Start measurements Single  Routine  Slice group 1 Slices 12 Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness T T Slice group T Slices 12 Dist. factor Position Slice dir. Rotation Slice thickness Slice thickness Slice thickness Slice thickness Slice thickness Slice director Slice direct	Gap Thickness Table position Table position Inline Composing Stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	25.0 mm 100 mm H 0 mm Off Off
Auto open inline display Auto open inline display Start measurement without further preparation Wait for user to start Start measurements Single  System Slice group 1 Slices Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR 1833.5 ms TE Averages 1  Off Start measurement without On  In I	Thickness Table position Table position Inline Composing Stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	100 mm  H 0 mm Off Off REF
Start measurement without On further preparation Wait for user to start Off Start measurements single  Routine  Slice group 1 Slices 12 Dist. factor 0 % Position L0.5 A33.9 F17.9 Orientation T > C6.2 Phase enc. dir. A >> P Rotation 0.00 deg Phase oversampling 0 % FoV read 160.0 mm FoV phase 100.0 % Slice thickness 0.9 mm TR 1833.5 ms TE 21 ms Averages 1	Table position Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	H 0 mm Off Off On REF
further preparation Wait for user to start Start measurements  Solice group 1 Slices Dist. factor Position Orientation T > C6.2 Phase enc. dir. Rotation Phase oversampling FoV read FoV phase Slice thickness TR 1833.5 ms TE Averages 1 Sys  Sys  Sys  Sys  Sys  Sys  Sys  S	Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Off Off On REF
further preparation         Wait for user to start         Off           Start measurements         single           Routine           Slice group 1           Slices         12           Dist. factor         0 %           Position         L0.5 A33.9 F17.9           Orientation         T > C6.2           Phase enc. dir.         A >> P           Rotation         0.00 deg           Phase oversampling         0 %           FoV read         160.0 mm           FoV phase         100.0 %           Slice thickness         0.9 mm           TR         1833.5 ms           TE         21 ms           Averages         1	Table position Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Off Off On REF
Wait for user to start Start measurements         Off Single           Routine         System           Slice group 1         12           Dist. factor         0 %           Position         L0.5 A33.9 F17.9           Orientation         T > C6.2           Phase enc. dir.         A >> P           Rotation         0.00 deg           Phase oversampling         0 %           FoV read         160.0 mm           FoV phase         100.0 %           Slice thickness         0.9 mm           TR         1833.5 ms           TE         21 ms           Averages         1	Inline Composing stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	Off On REF
Start measurements   Single	stem V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	On REF
Solice group 1	V32 A32 Positioning mode MSMA Sagittal Coronal Transversal	On REF
Slice group 1         12           Dist. factor         0 %           Position         L0.5 A33.9 F17.9           Orientation         T > C6.2           Phase enc. dir.         A >> P           Rotation         0.00 deg           Phase oversampling         0 %           FoV read         160.0 mm           FoV phase         100.0 %           Slice thickness         0.9 mm           TR         1833.5 ms           TE         21 ms           Averages         1	A32 Positioning mode MSMA Sagittal Coronal Transversal	On REF
Slices       12         Dist. factor       0 %         Position       L0.5 A33.9 F17.9         Orientation       T > C6.2         Phase enc. dir.       A >> P         Rotation       0.00 deg         Phase oversampling       0 %         FoV read       160.0 mm         FoV phase       100.0 %         Slice thickness       0.9 mm         TR       1833.5 ms         TE       21 ms         Averages       1	Positioning mode MSMA Sagittal Coronal Transversal	REF
Dist. factor         0 %           Position         L0.5 A33.9 F17.9           Orientation         T > C6.2           Phase enc. dir.         A >> P           Rotation         0.00 deg           Phase oversampling         0 %           FoV read         160.0 mm           FoV phase         100.0 %           Slice thickness         0.9 mm           TR         1833.5 ms           TE         21 ms           Averages         1	MSMA Sagittal Coronal Transversal	
Position	MSMA Sagittal Coronal Transversal	
Orientation T > C6.2  Phase enc. dir. A >> P  Rotation 0.00 deg  Phase oversampling 0 %  FoV read 160.0 mm  FoV phase 100.0 %  Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1	Sagittal Coronal Transversal	S - C - T
Phase enc. dir.       A >> P         Rotation       0.00 deg         Phase oversampling       0 %         FoV read       160.0 mm         FoV phase       100.0 %         Slice thickness       0.9 mm         TR       1833.5 ms         TE       21 ms         Averages       1	Coronal Transversal	R >> L
Rotation 0.00 deg  Phase oversampling 0 %  FoV read 160.0 mm  FoV phase 100.0 %  Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1	Transversal	A >> P
Phase oversampling 0 %  FoV read 160.0 mm  FoV phase 100.0 %  Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1		F >> H
FoV read 160.0 mm  FoV phase 100.0 %  Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1	Save uncombined	Off
FoV phase 100.0 %  Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1	Coil Combine Mode	Sum of Squares
Slice thickness 0.9 mm  TR 1833.5 ms  TE 21 ms  Averages 1	AutoAlign	
TR 1833.5 ms TE 21 ms Averages 1	Auto Coil Select	Default
TE 21 ms Averages 1		·····
Averages 1	Shim mode	Standard
Concetenations	Adjust with body coil	Off
	Confirm freq. adjustment	Off
	Assume Silicone	Off
	! Ref. amplitude 1H	220.000 V
	Adjustment Tolerance	Auto
Contrast	Adjust volume	
Perf / VASO mode SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2 1075 ms	! Orientation	T > C5.2
TI1 50 ms	! Rotation	90.00 deg
TI1s 50 ms	! A >> P	225 mm
Flip angle 70 deg	! R >> L	200 mm
Fat suppr. Fat sat.	! F >> H	29 mm
Ctures of	ysio	
	1st Signal/Mode	None
7 Voluging mode Long term	-	110110
Reconstruction Magnitude BO Measurements 2	DLD	
	quence	
5	Introduction	On
Maniple series	Contrasts	1
Dente de la constant DICODE COT	Bandwidth	1 1124 Hz/Px
	Free echo spacing	Off
	Echo spacing	1.01 ms
Inversion time 2 1075 ms	spacing	
Flow limit 100.0 cm/s	EPI factor	178
Parallelia (	RF pulse type	Normal
Resolution (	Gradient mode	Normal
Base resolution 178	Λ mpl	120
	Ampl	120
That partial Tourist	BWDTH	300 3.1kHz
interpolation	thickness	1000
	Phase skip	0
l	Ont TIO	1235
D ( P DE )	Opt. TI2	1
1 5	Volumes per TI	110 dog
- San		110 deg 1

log physio filesOffaltern z-shim0 uT/mfixed z-shim0 uT/mEPI phase correctionlocalPAT refscan modesegmentedRF pulse duration2560 usFFT scale1.0

\\USER\R	enzoHuber\Lonike\202		5000_FA26
TA: 2:47 PA	AT: 3 Voxel size: 0.9x0	.9×0.9 mm Rel. SNR: 1.00 US	SER: VASO_157
Properties		PAT mode	GRAPPA
Prio Recon	Off	Accel. factor PE	3
	Oli	Ref. lines PE	33
Before measurement After measurement		Accel. factor 3D	1
Load to viewer	On	Ref. lines 3D	12
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	Oli	Hamming	Off
Auto open inline display	Off		Oli
Start measurement without	On	Geometry	
further preparation	<b>3</b>	Multi-slice mode	Interleaved
Wait for user to start	Off	Series	Ascending
Start measurements	single	Special sat.	Parallel F
1	5g.5	Gap	25.0 mm
Routine		Thickness	100 mm
Slab group 1			
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	L0.5 A33.9 F17.9	Inline Composing	Off
Orientation	T > C6.2	System	
Phase enc. dir.	A >> P	System	Off
Rotation	0.00 deg	V32 A32	On
Phase oversampling	0 %	A32	On
Slice oversampling	0.0 %	Positioning mode	FIX
Slices per slab	12	MSMA	S - C - T
FoV read	130.0 mm	Sagittal	R >> L
FoV phase	134.7 %	Coronal	A >> P
Slice thickness	0.90 mm	Transversal	F >> H
TR	1672.70 ms	Save uncombined	Off
TE	24 ms	Coil Combine Mode	Sum of Squares
Averages	1	AutoAlign	
Concatenations	1 Name	Auto Coil Select	Default
Filter	None	Shim mode	Standard
Coil elements	A32	Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	Assume Silicone	Off
TI2	900 ms	! Ref. amplitude 1H	220.000 V
TI1	50 ms	Adjustment Tolerance	Auto
TI1s	50 ms	Adjust volume	Auto
Flip angle	26 deg	! Position	R3.3 A29.8 F12.7
Fat suppr.	Fat sat.	! Orientation	T > C5.2
Fat sat. mode	Weak	! Rotation	90.00 deg
Avoraging mode	Long torm	! A >> P	225 mm
Averaging mode Reconstruction	Long term	! R >> L	200 mm
Measurements	Magnitude 100	! F >> H	29 mm
		1	20 111111
Delay in TR	0 ms Off	Physio	
Multiple series	OII	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	900.0 ms	· ·	<b>-</b>
Flow limit	100.0 cm/s	Sequence	
Posalution		Introduction	On
Resolution Resolution	1.1.1	Dimension	3D
Base resolution	144	Reordering	Linear
Phase resolution	100 %	Contrasts	1
Slice resolution	100 %	Bandwidth	1052 Hz/Px
Phase partial Fourier Slice partial Fourier	6/8 Off	Free echo spacing	Off
Interpolation	Off	Echo spacing	1.06 ms

Off

Interpolation

EPI factor

194

RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle NORDIC 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	120 150 3.1kHz 1 Off On Off 1.00 3 s 0.00 mT/m*ms 2560 us 25.0 64 ms 20072 ms 12 local Flash 144 100 Hz/px 6500 us 5 deg Off

		10713_tests\VASO_157_3D_re	
TA: 2:47 PA	T: 3 Voxel size: 0.9×0.	9×0.9 mm Rel. SNR: 1.00 US	SER: VASO_157
D		PAT mode	GRAPPA
Properties	0"	Accel. factor PE	3
Prio Recon	Off	Ref. lines PE	33
Before measurement After measurement		Accel. factor 3D	1
	0.5	Ref. lines 3D	12
Load to viewer	On Off	Reference scan mode	Separate
Inline movie	On	Prescan Normalize	O#
Auto store images Load to stamp segments	Off	Raw filter	Off Off
Load images to graphic	Off	Elliptical filter	Off
segments	Oil	Hamming	Off
Auto open inline display	Off	Папппп	Oli
Start measurement without	On	Geometry	
further preparation	OII	Multi-slice mode	Interleaved
Wait for user to start	Off	Series	Ascending
Start measurements	single	Chariel ant	Parallel F
Start measurements	Sirigle	Special sat.	
Routine		Gap	25.0 mm
Slab group 1		Thickness	100 mm
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	L0.5 A33.9 F17.9	Inline Composing	Off
Orientation	T > C6.2	1	
Phase enc. dir.	A >> P	System	0"
Rotation	0.00 deg	V32	Off
Phase oversampling	0 %	A32	On
Slice oversampling	0.0 %	Positioning mode	FIX
Slices per slab	12	MSMA	S - C - T
FoV read	130.0 mm	Sagittal	R >> L
FoV phase	134.7 %	Coronal	A >> P
Slice thickness	0.90 mm	Transversal	F >> H
TR	1672.70 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
Perfusion mode	SS-SI VASO	Confirm freq. adjustment	Off
TI2	900 ms	Assume Silicone	Off
T11	50 ms	! Ref. amplitude 1H	220.000 V
Ti1s	50 ms	Adjustment Tolerance	Auto
Flip angle	4 deg	Adjust volume	
Fat suppr.	Fat sat.	! Position	R3.3 A29.8 F12.7
Fat sat. mode	Weak	! Orientation	T > C5.2
	·····	! Rotation	90.00 deg
Averaging mode	Long term	! A >> P	225 mm
Reconstruction	Magnitude	! R >> L	200 mm
Measurements	100	! F >> H	29 mm
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
	DICORE OCT		. 10.10
Perfusion mode	PICORE Q2T	BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	900.0 ms		

TI2 TI1 TI1s Flip angle Fat suppr. Fat sat. mode	900 ms 50 ms 50 ms 4 deg Fat sat. Weak	Assume Silicone ! Ref. amplitude 1H Adjustment Tolerance Adjust volume ! Position ! Orientation ! Rotation	Off 220.000 V Auto R3.3 A29.8 F12.7 T > C5.2 90.00 deg
Averaging mode Reconstruction Measurements Delay in TR Multiple series	Long term Magnitude 100 0 ms Off	! A >> P ! R >> L ! F >> H Physio 1st Signal/Mode	225 mm 200 mm 29 mm
Perfusion mode Inversion time 1 Saturation stop time Inversion time 2 Flow limit	PICORE Q2T 50 ms 50 ms 900.0 ms 100.0 cm/s	BOLD  Motion correction Spatial filter  Sequence	Off Off
Resolution  Base resolution Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation	144 100 % 100 % 6/8 Off Off	Introduction Dimension Reordering Contrasts Bandwidth Free echo spacing Echo spacing	On 3D Linear 1 1052 Hz/Px Off 1.06 ms
Interpolation	OII	EPI factor	194

RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle NORDIC 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	120 150 3.1kHz 1 Off On Off 1.00 3 s 0.00 mT/m*ms 2560 us 25.0 64 ms 20072 ms 12 local Flash 144 100 Hz/px 6500 us 5 deg Off

\\USER\Rer	nzoHuber\Lonike\20210713_	tests\VASO_157_3D_reg5	5000_FA4_run
TA: 15:05 PA	AT: 3 Voxel size: 0.9×0.9×0.9	9 mm Rel. SNR: 1.00 U	SER: VASO_157
Properties		PAT mode	GRAPPA
Prio Recon	Off	Accel. factor PE	3
Before measurement		Ref. lines PE Accel. factor 3D	33
After measurement		Ref. lines 3D	1 12
Load to viewer	On	Reference scan mode	
Inline movie	Off		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	Geometry	
Start measurement without	On	Multi-slice mode	Interleaved
further preparation		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	L0.5 A33.9 F17.9	Inline Composing	Off
Orientation	T > C6.2		OII
Phase enc. dir.	A >> P	System	
Rotation	0.00 deg	V32	Off
Phase oversampling	0 %	A32	On
Slice oversampling	0.0 %	Positioning mode	FIX
Slices per slab	12	MSMA	S - C - T
FoV read	130.0 mm	Sagittal	R >> L
FoV phase	134.7 %	Coronal	A >> P
Slice thickness	0.90 mm	Transversal	F >> H
TR	1672.70 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
Perfusion mode	SS-SI VASO	Confirm freq. adjustment	Off
TI2	900 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 ! Position	D2 2 A20 0 E42 7
Fat suppr.	Fat sat.	! Orientation	R3.3 A29.8 F12.7 T > C5.2
Fat sat. mode	Weak	! Rotation	
		! Rotation ! A >> P	90.00 deg 225 mm
Averaging mode	Long term	! A >> P ! R >> L	225 mm 200 mm
Reconstruction	Magnitude	!F>>H	29 mm
Measurements	541	1	43 IIIII
Delay in TR	0 ms	Physio	<u></u>
Multiple series	Off	1st Signal/Mode	None
		rot orginal/mode	110110

Slices per slab FoV read FoV phase Slice thickness TR TE Averages Concatenations Filter	12 130.0 mm 134.7 % 0.90 mm 1672.70 ms 24 ms 1 1	MSMA Sagittal Coronal Transversal Save uncombined Coil Combine Mode AutoAlign Auto Coil Select	S - C - T R >> L A >> P F >> H Off Sum of Squares  Default
Coil elements	A32	Shim mode Adjust with body coil	Standard Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode TI2 TI1 TI1s Flip angle Fat suppr. Fat sat. mode	SS-SI VASO 900 ms 50 ms 50 ms 4 deg Fat sat. Weak	Assume Silicone ! Ref. amplitude 1H Adjustment Tolerance Adjust volume ! Position ! Orientation ! Rotation	Off 220.000 V Auto R3.3 A29.8 F12.7 T > C5.2 90.00 deg
Averaging mode Reconstruction Measurements Delay in TR Multiple series	Long term Magnitude 541 0 ms Off	! A >> P ! R >> L ! F >> H Physio 1st Signal/Mode	225 mm 200 mm 29 mm
Perfusion mode	PICORE Q2T	BOLD	110110
Inversion time 1 Saturation stop time Inversion time 2	50 ms 50 ms 900.0 ms	Motion correction Spatial filter	Off Off
Flow limit	100.0 cm/s	Sequence	
Resolution		Introduction Dimension	On 3D
Base resolution Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation	144 100 % 100 % 6/8 Off Off	Reordering Contrasts Bandwidth Free echo spacing Echo spacing	Linear 1 1052 Hz/Px Off 1.06 ms
<u> </u>		EPI factor 25/+	194
		20/1	

RF pulse type Gradient mode Excitation RF spoiling	Normal Fast Slab-sel. On
Ampl BWDTH ph.skip 4 Robert (the one) use Ernst angle NORDIC 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	120 150 3.1kHz 1 Off On Off 1.00 3 s 0.00 mT/m*ms 2560 us 25.0 64 ms 20072 ms 12 local Flash 144 100 Hz/px 6500 us 5 deg Off

\\USER\RenzoHuber\Lonike\20210713\_tests\VASO\_153\_2D\_NOR\_SEG\_LOW\_run

	AT: 3 Voxel size: 0.9×0.9	0x0.9 mm Rel. SNR: 1.00 US	SER: VASO_153
Description		Prescan Normalize	Off
Properties	Off	Raw filter	Off
Prio Recon Before measurement	Off	Elliptical filter	Off
After measurement		Hamming	Off
Load to viewer	On	Geometry	
Inline movie	Off	Multi-slice mode	Interleaved
Auto store images	On	Series	Ascending
Load to stamp segments	Off		
Load images to graphic	Off	Special sat.	Parallel F
segments		Gap Thickness	25.0 mm
Auto open inline display	Off		100 mm
Start measurement without	On	Table position	Н
further preparation		Table position	0 mm
Wait for user to start	Off	Inline Composing	Off
Start measurements	single	System	
Routine		V32	Off
Slice group 1		A32	On
Slices	12		DEE
Dist. factor	0 %	Positioning mode MSMA	REF S - C - T
Position	L0.5 A33.9 F17.9	Sagittal	S-C-1 R >> L
Orientation	T > C6.2	Coronal	A >> P
Phase enc. dir.	A >> P	Transversal	F >> H
Rotation Phase oversampling	0.00 deg 0 %	Save uncombined	Off
Fov read	160.0 mm	Coil Combine Mode	Sum of Squares
FoV phase	100.0 %	AutoAlign	· 
Slice thickness	0.9 mm	Auto Coil Select	Default
TR	1833.5 ms	Shim mode	Standard
TE	21 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	! Ref. amplitude 1H	220.000 V
Coil elements	A32	Adjustment Tolerance	Auto
Contrast		Adjust volume	
Perf / VASO mode	SS-SI VASO	! Position	R3.3 A29.8 F12.7
TI2	1075 ms	! Orientation	T > C5.2
TI1	50 ms	! Rotation	90.00 deg
TI1s	50 ms	! A >> P	225 mm
Flip angle	70 deg	! R >> L	200 mm
Fat suppr.	Fat sat.	! F >> H	29 mm
Fat sat. mode	Strong	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	489		
Delay in TR	0 ms	Sequence	<b></b>
Multiple series	Off	Introduction	On 1
Perfusion mode	PICORE Q2T	Contrasts  Bandwidth	1 1124 H <del>z</del> /Dy
Inversion time 1	50 ms	Free echo spacing	1124 Hz/Px Off
Saturation stop time	50 ms	Echo spacing	1.01 ms
Inversion time 2	1075 ms		1.01 1110
Flow limit	100.0 cm/s	EPI factor	178
Resolution		RF pulse type	Normal
Base resolution	178	Gradient mode	Normal
Phase resolution	100 %	Ampl	120
Phase partial Fourier	6/8	BWDTH	300 3.1kHz
Interpolation	Off	thickness	1000
		Phase skip	0
PAT mode Accel, factor PE	GRAPPA	Opt. TI2	1235
Ref. lines PE	3 27	Volumes per TI	1
Reference scan mode	Separate	FatSat flip angle	110 deg
		SMS factor	1
		27/+	

log physio files Off
altern z-shim 0 uT/m
fixed z-shim 0 uT/m
EPI phase correction local
PAT refscan mode segmented
RF pulse duration 2560 us
FFT scale 1.0