SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\Quin_pilot_250V

TA: 0:59 PAT: Off Voxel size: 1.0×1.0×5.0 mm Rel. SNR: 1.00 SIEMENS: tfl

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	9
Dist. factor	120 %
Position	L0.0 A18.9 F0.7
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	140 %
Position	L0.0 A16.7 H31.9
Orientation	T > C-8.8
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	300 %
Position	L0.0 A8.1 H1.7
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	3000 ms
TE	3.17 ms
Averages	1
Concatenations	19
Filter	None
Coil elements	A32

Contrast

TD	0 ms
Magn. preparation	Slice-sel. IR
TI	1100 ms
Flip angle	6 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

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

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\3DVASO_reducemonsterfat_2x1_flash_CAIPI_10_slice

TA: 1:00 PAT: 2 Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 USER: VASO_109

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R1.0 A30.7 H12.9
Orientation	T > C-10.5
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	10
FoV read	192.0 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1474.00 ms
TE	22 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perfusion mode	Picore Q2TIPS
TI2	950 ms
TI1	50 ms
TI1s	50 ms
Flip angle	20 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	41
Delay in TR	0 ms
Multiple series	Off
Perfusion mode	PICORE Q2T
Inversion time 1	50 ms
Saturation stop time	50 ms
Inversion time 2	950.0 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	96
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	Parallel F
Gap	25.0 mm
Thickness	100 mm
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R2.4 A30.8 H12.9
! Orientation	S > T0.7
! Rotation	-0.26 deg
! F >> H	54 mm
! A >> P	192 mm
! R >> L	163 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	2084 Hz/Px
Free echo spacing	Off
Echo spacing	0.57 ms
EPI factor	96

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Ampl	95
BWDTH	150 3.1kHz
thickness	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	4.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	5120 us
RF BWTP	25.0
EFFECTIVE TR	14740 ms
PatPartitions	10
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	96
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\MP2RAGE_0.70iso_800_2700_from_Kanny

TA: 10:08 PAT: 3 Voxel size: 0.7×0.7×0.7 mm Rel. SNR: 1.00 USER: tfl_wip900b17a

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L0.3 A41.3 F37.9
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	6000 ms
TE	3.02 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast

Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Flip angle 1	4 deg
Flip angle 2	5 deg
Fat suppr.	None
Water suppr.	None
2nd Inversion Contrast	On
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Single shot
Series	Interleaved
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	277.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R1.3 A35.6 H4.8
! Orientation	T > C-2.0
! Rotation	0.00 deg
! R >> L	160 mm
! A >> P	196 mm
! F >> H	49 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Composing

Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	240 Hz/Px
Flow comp.	No
Echo spacing	7.1 ms
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
FFT Scale Factor	150 %
Morphometry Analysis	Off

FID MoCo Logging	Off
FID Coil Phase Corr.	Off
LIN/PAR Swap	Off
Ext. INV Pulse	On
Flip Angle	700
Phase Filter	0 px
Uniform Image	On
Head Mask on UNI	On
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\MAFI_6mm

TA: 2:17 Voxel size: 6.0×6.0×6.0 mm Rel. SNR: 1.00 USER: Renzo\MAFI

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	0 %
Position	R1.4 A37.3 F30.9
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	28
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	6.00 mm
TR	150 ms
TE 1	1.080 ms
TE 2	1.080 ms
TE 3	2.09 ms
TE 4	3.100 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution

Base resolution	32
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	270.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R1.3 A35.6 H4.8
! Orientation	T > C-2.0
! Rotation	0.00 deg
! R >> L	160 mm
! A >> P	196 mm
! F >> H	49 mm

Physio

1st Signal/Mode	None

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Dimension	3D
Contrasts	4
Bandwidth	1560 Hz/Px
Gradient mode	Fast
RF spoiling	On
Online ICE	Off
RF pulse type	square
Pulse duration	500 us
Spoil me!	On
TR2/TR1	5

N dummy TRs	20
Sample T1	1800 ms
Diffusion damping d= bD	0.6000
Diffusion coefficient D	2.2000 µm2/ms
RF spoil phase increment	129.3 deg
Number of pulse shapes	1
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\BOLD_matched_to_VASO_3DEPI

TA: 9.7 s PAT: 2 Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 UNKNOWN:

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R1.0 A21.0 H2.8
Orientation	T > C-7.2
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	10
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	50 ms
TE	22 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

MTC	Off
Flip angle	13 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	11
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R2.4 A20.2 H0.3
! Orientation	S > T0.7
! Rotation	-0.26 deg
! F >> H	54 mm
! A >> P	192 mm
! R >> L	163 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	2604 Hz/Px
Free echo spacing	Off
Echo spacing	0.58 ms
EPI factor	96
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	4.00
z shim	0.00 mT/m*ms
RF duration	5120 us

RF BWTP	25.0
EFFECTIVE TR	500 ms
PatPartitions	10
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	96
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off
dummy prepscan time	3 s

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\Valsalva_3DVASO_3x1_flash_CAIPI_PF_1.2x1.2x1.7_

TA: 9:44 PAT: 3 Voxel size: 1.1×1.1×1.7 mm Rel. SNR: 1.00 USER: VASO_109

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L0.0 A11.4 H37.4
Orientation	T > C-10.0
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	170.0 mm
FoV phase	100.0 %
Slice thickness	1.70 mm
TR	1502.00 ms
TE	26 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perfusion mode	Picore Q2TIPS
TI2	750 ms
TI1	50 ms
TI1s	50 ms
Flip angle	21 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	389
Delay in TR	0 ms
Multiple series	Off
Perfusion mode	PICORE Q2T
Inversion time 1	50 ms
Saturation stop time	50 ms
Inversion time 2	750.0 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	148
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Ref. lines 3D	12
Reference scan mode	Separate
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	Parallel F
Gap	25.0 mm
Thickness	100 mm
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.0 A11.4 H37.4
! Orientation	T > C-8.7
! Rotation	-180.00 deg
! R >> L	177 mm
! A >> P	177 mm
! F >> H	54 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1608 Hz/Px
Free echo spacing	Off
Echo spacing	0.79 ms
EPI factor	148

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Ampl	95
BWDTH	150 3.1kHz
thickness	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	3.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	5120 us
RF BWTP	25.0
EFFECTIVE TR	18024 ms
PatPartitions	12
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	148
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\BOLD_matched_to_VASO_3DEPI

TA: 9:44 PAT: 3 Voxel size: 1.1×1.1×1.7 mm Rel. SNR: 1.00 UNKNOWN:

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L0.0 A11.4 H37.4
Orientation	T > C-10.0
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	1.70 mm
TR	62 ms
TE	26 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

MTC	Off
Flip angle	14 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	779
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	148
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.0 A11.4 H37.4
! Orientation	T > C-8.7
! Rotation	-180.00 deg
! R >> L	177 mm
! A >> P	177 mm
! F >> H	54 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1608 Hz/Px
Free echo spacing	Off
Echo spacing	0.79 ms
EPI factor	148
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	4.00
z shim	0.00 mT/m*ms
RF duration	5120 us

RF BWTP	25.0
EFFECTIVE TR	744 ms
PatPartitions	12
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	148
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off
dummy prepscan time	3 s

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\3DVASO_no_inv_fast_TR_used_in_pilots

TA: 3:21 PAT: 2 Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 USER: VASO_109

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R1.0 A24.1 H18.5
Orientation	T > C-10.5
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	10
FoV read	192.0 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	517.10 ms
TE	22 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perfusion mode	Picore Q2TIPS
TI2	100 ms
TI1	50 ms
TI1s	50 ms
Flip angle	12 deg
Fat suppr.	Fat sat.
Fat sat. mode	Weak
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	389
Delay in TR	0 ms
Multiple series	Off
Perfusion mode	PICORE Q2T
Inversion time 1	50 ms
Saturation stop time	50 ms
Inversion time 2	100.0 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	96
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	Parallel F
Gap	25.0 mm
Thickness	100 mm
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R2.4 A21.2 H18.4
! Orientation	S > T0.7 > C0.1
! Rotation	9.92 deg
! F >> H	42 mm
! A >> P	192 mm
! R >> L	163 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	2084 Hz/Px
Free echo spacing	Off
Echo spacing	0.57 ms
EPI factor	96

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Ampl	0
BWDTH	150 3.1kHz
thickness	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	4.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	5120 us
RF BWTP	25.0
EFFECTIVE TR	5171 ms
PatPartitions	10
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	96
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\3DVASO_GRAPPA2_PF68_two_hemispheres_10Slice

TA: 9:47 PAT: 2 Voxel size: 0.8×0.8×1.8 mm Rel. SNR: 1.00 USER: VASO_109

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L35.8 A12.8 H29.8
Orientation	T > S-28.6 > C0.3
Phase enc. dir.	R >> L
Rotation	120.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	10
FoV read	34.4 mm
FoV phase	300.0 %
Slice thickness	1.80 mm
TR	1510.00 ms
TE	24 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perfusion mode	Picore Q2TIPS
TI2	750 ms
TI1	50 ms
TI1s	50 ms
Flip angle	27 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	389
Delay in TR	0 ms
Multiple series	Off
Perfusion mode	PICORE Q2T
Inversion time 1	50 ms
Saturation stop time	50 ms
Inversion time 2	750.0 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	44
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	Parallel F
Gap	25.0 mm
Thickness	100 mm
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.0 A16.2 H23.9
! Orientation	T > C-8.7
! Rotation	-180.00 deg
! R >> L	177 mm
! A >> P	177 mm
! F >> H	54 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1042 Hz/Px
Free echo spacing	Off
Echo spacing	1.08 ms
EPI factor	132

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Ampl	115
BWDTH	150 3.1kHz
thickness	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	1.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	2560 us
RF BWTP	25.0
EFFECTIVE TR	15100 ms
PatPartitions	10
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	44
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off

\\USER\UserProtocols\Handwerker\VASO_VALSALVA\BOLD_matched_to_VASO_3DEPI

TA: 1:05 PAT: 3 Voxel size: 1.7×1.7×1.7 mm Rel. SNR: 1.00 UNKNOWN:

Properties

Prio Recon	Off
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	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R5.1 A18.3 H36.0
Orientation	Transversal
Phase enc. dir.	P >> A
Rotation	180.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	1.70 mm
TR	100 ms
TE 1	19 ms
TE 2	46 ms
TE 3	73 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

MTC	Off
Flip angle	14 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	50
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Ref. lines 3D	8
Reference scan mode	Separate
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R24.3 A10.1 H20.1
! Orientation	S > T0.5
! Rotation	-0.26 deg
! F >> H	68 mm
! A >> P	64 mm
! R >> L	84 mm

Physio

1st Signal/Mode	None

BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	3
Bandwidth	1666 Hz/Px
Free echo spacing	Off
Echo spacing	0.76 ms
EPI factor	100
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
delay 1st & 2nd echo	0 ms
delay later echoes	0 ms
echo combination	none (separate)
use Ernst angle	Off

Maxwell Correction	Off
log physio files	Off
FFT scale	4.00
z shim	0.00 mT/m*ms
RF duration	5120 us
RF BWTP	25.0
EFFECTIVE TR	1200 ms
PatPartitions	12
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	100
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off
dummy prepscan time	3 s