

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\Quin_pilot_250V

TA: 0:59 PAT: Off Voxel size: 1.1x1.1x5.0 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	11
Dist. factor	80 %
Position	L0.0 A18.9 F0.7
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	3
Dist. factor	100 %
Position	L0.0 A16.2 H45.9
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	100 %
Position	L0.0 A8.1 H1.7
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	3000 ms
TE	3.12 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

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

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\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\MAFI_6mm

TA: 2:17

Voxel size: 6.0x6.0x6.0 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	R2.7 A23.8 F15.1
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	R1.4 A23.2 H27.6
! Orientation	Sagittal
! Rotation	0.00 deg
! F >> H	86 mm
! A >> P	152 mm
! R >> L	157 mm

Physio

1st Signal/Mode	None
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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

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N dummy TRs	20
Sample T1	1800 ms
Diffusion damping d= bD	0.6000
Diffusion coefficient D	2.2000 $\mu\text{m}^2/\text{ms}$
RF spoil phase increment	129.3 deg
Number of pulse shapes	1
<hr/>	
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

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\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\MP2RAGE_0.70iso_800_2700_from_Kanny

TA: 10:08 PAT: 3 Voxel size: 0.7x0.7x0.7 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

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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	Off
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off

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\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\VASO_T1_39_slices_SMS3_GMRAPPA3

TA: 13:54 PAT: 3 Voxel size: 1.2x1.2x1.6 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

Slice group 1	
Slices	39
Dist. factor	40 %
Position	R1.0 A17.7 H20.2
Orientation	T > C-15.3
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	1716.3 ms
TE	24 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perf / VASO mode	SS-SI VASO
TI2	950 ms
TI1	50 ms
TI1s	50 ms
Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	483
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 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	160
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	90
Reference scan mode	Separate

Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Descending
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	R1.4 A21.6 H19.4
! Orientation	Sagittal
! Rotation	14.27 deg
! F >> H	85 mm
! A >> P	191 mm
! R >> L	157 mm

Physio

1st Signal/Mode	None
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BOLD

Sequence

Introduction	On
Contrasts	1
Bandwidth	1420 Hz/Px
Free echo spacing	Off
Echo spacing	0.81 ms
EPI factor	160
RF pulse type	Normal
Gradient mode	Normal
Ampl	90
BWDTH	300 3.1kHz
thickness	100
Phase skip	1
Opt. TI2	1235
Volumes per TI	1
FatSat flip angle	70 deg
SMS factor	3

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CAIPI shift	2
SMS online recon	On
SMS-RF phase optim.	On
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	15
RF pulse duration	5120 us
FFT scale	0.8

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\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\3DVASO_2x3_flash_CAIPF_PF_low_res

TA: 12:16 PAT: 6 Voxel size: 3.0x3.0x3.0 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	L0.0 A23.4 H16.2
Orientation	T > C-9.1
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	180.0 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR	1524.0 ms
TE	12 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perfusion mode	Picore Q2TIPS
TI2	1050 ms
TI1	50 ms
TI1s	50 ms
Flip angle	17 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	483
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	1050.0 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	60
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	2
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	R1.4 A21.6 H19.4
! Orientation	Sagittal
! Rotation	14.27 deg
! F >> H	85 mm
! A >> P	191 mm
! R >> L	157 mm

Physio

1st Signal/Mode	None
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BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1852 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
EPI factor	60

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RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
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Ampl	95
BWDTH	150 3.1kHz
thickness	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	0.50
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	5120 us
RF BWTP	25.0
EFFECTIVE TR	21336 ms
PatPartitions	14
EPI phase correction	local
PAT refscan mode	segm LIN->PAR
use CAIPI	On
CAIPI shift kz	0
CAIPI shift ky	1

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\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\VASO_79_SMSfor_3DEPIcomparison1.3x1.3x1.3

TA: 12:09 PAT: 3 Voxel size: 2.8x2.8x3.0 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

Slice group 1	
Slices	33
Dist. factor	0 %
Position	L0.0 A23.4 H16.2
Orientation	T > C-9.1
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	1500.0 ms
TE	14 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Perf / VASO mode	SS-SI VASO
TI2	1100 ms
TI1	50 ms
TI1s	50 ms
Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	483
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	1100 ms
Flow limit	100.0 cm/s

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	R1.4 A21.6 H19.4
! Orientation	Sagittal
! Rotation	14.27 deg
! F >> H	85 mm
! A >> P	191 mm
! R >> L	157 mm

Physio

1st Signal/Mode	None
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BOLD

Sequence

Introduction	On
Contrasts	1
Bandwidth	1860 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Normal
Ampl	90
BWDTH	300 3.1kHz
thickness	100
Phase skip	30
Opt. TI2	1106
Volumes per TI	1
FatSat flip angle	110 deg
SMS factor	3

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CAIPI shift	2
SMS online recon	On
SMS-RF phase optim.	On
log physio files	Off
altern z-shim	0 uT/m
fixed z-shim	0 uT/m
EPI phase correction	normal
PAT refscan mode	FLEET
FLEET dummies	15
FLEET flip angle	15
RF pulse duration	7680 us
FFT scale	0.8

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\MP2RAGE_Recon_FAIL

TA: 2:44 PAT: 3 Voxel size: 0.7x0.7x0.7 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	L2.2 A23.6 H41.1
Orientation	T > S-7.2
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	20.0 %
Slices per slab	30
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	6000 ms
TE	3.47 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 A22.3 H35.8
! 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	7.2 ms
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
FFT Scale Factor	150 %
Morphometry Analysis	Off

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

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Renzo\T1_3D_EPI_setup\MP2RAGE_slab_0.70iso_800_2700_slab

TA: 23:02 PAT: 2 Voxel size: 0.7x0.7x0.7 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	L2.2 A23.6 H41.1
Orientation	T > S-7.2
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	30
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	6000 ms
TE 1	3.44 ms
TE 2	7.75 ms
Averages	1
Concatenations	1
Filter	None
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	10
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Multiple series	Each measurement

Resolution

Base resolution	276
Phase resolution	100 %
Slice resolution	100 %

Phase partial Fourier	6/8
Slice partial Fourier	6/8
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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 A22.3 H35.8
! 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	2
Bandwidth 1	240 Hz/Px
Bandwidth 2	240 Hz/Px
Flow comp.	No

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Readout mode	Bipolar
Echo spacing	11.4 ms
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
FFT Scale Factor	150 %
Morphometry Analysis	On
FID MoCo Logging	Off
FID Coil Phase Corr.	Off
LIN/PAR Swap	On
Ext. INV Pulse	On
Flip Angle	1400
Phase Filter	0 px
Uniform Image	On
Head Mask on UNI	On
T1 Map	On
Complex Div. Image	On
Denoise Weighting	150
FLAWS	Off
Echo Averaging	Off