

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\\Everling\\NHP\\RestingState\\mp2rage_cor_500iso_p2_944
 TA: 12:03 PAT: 2 Voxel size: 0.5x0.5x0.5 mm Rel. SNR: 1.00 USER: tfl_wip944_b17uhf

Properties		Distortion Corr.	Off
Prio Recon	Off	Prescan Normalize	Off
Before measurement		Normalize	Off
After measurement		B1 filter	Off
Load to viewer	On	Raw filter	On
Inline movie	Off	Intensity	Weak
Auto store images	On	Slope	25
Load to stamp segments	Off	Elliptical filter	Off
Load images to graphic segments	Off		
Auto open inline display	Off	Geometry	
Start measurement without further preparation	On	Multi-slice mode	Single shot
Wait for user to start	Off	Series	Interleaved
Start measurements	single		
Routine		Table position	H
Slab group 1		Table position	0 mm
Slabs	1	Inline Composing	Off
Dist. factor	50 %		
Position	L0.0 P6.5 H13.1	System	
Orientation	Coronal	E1	On
Phase enc. dir.	R >> L	E2	On
Rotation	0.00 deg	Positioning mode	REF
Phase oversampling	0 %	MSMA	S - C - T
Slice oversampling	25.0 %	Sagittal	R >> L
Slices per slab	128	Coronal	A >> P
FoV read	128 mm	Transversal	F >> H
FoV phase	78.1 %	Save uncombined	Off
Slice thickness	0.50 mm	Coil Combine Mode	Adaptive Combine
TR	6500 ms	AutoAlign	---
TE	3.88 ms	Auto Coil Select	Default
Averages	1		
Concatenations	1	Shim mode	Tune up
Filter	Raw filter	Adjust with body coil	Off
Coil elements	E1,2	Confirm freq. adjustment	Off
Contrast		Assume Silicone	Off
Magn. preparation	Non-sel. IR	? Ref. amplitude 1H	0.000 V
TI 1	800 ms	Adjustment Tolerance	Auto
TI 2	2700 ms	Adjust volume	
Flip angle 1	4 deg	Position	Isocenter
Flip angle 2	5 deg	Orientation	Transversal
Fat suppr.	None	Rotation	0.00 deg
Water suppr.	None	R >> L	350 mm
2nd Inversion Contrast	On	A >> P	263 mm
		F >> H	350 mm
Averaging mode	Long term		
Reconstruction	Magnitude	Physio	
Measurements	1	1st Signal/Mode	None
Multiple series	Each measurement	Dark blood	Off
Resolution		Resp. control	Off
Base resolution	256		
Phase resolution	100 %	Composing	
Slice resolution	100 %		
Phase partial Fourier	Off	Sequence	
Slice partial Fourier	Off	Introduction	On
		Dimension	3D
PAT mode	GRAPPA	Elliptical scanning	Off
Accel. factor PE	2	Asymmetric echo	Allowed
Ref. lines PE	24	Contrasts	1
Accel. factor 3D	1	Bandwidth	150 Hz/Px
Reference scan mode	Integrated	Flow comp.	No
		Echo spacing	9.4 ms
Image Filter	Off	RF pulse type	Normal
		Gradient mode	Fast
		Excitation	Slab-sel.
		RF spoiling	On

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FFT Scale Factor	100 %
LIN/PAR Swap	Off
Ext. INV Pulse	On
Flip Angle	500
Uniform Image	On
Head Mask on UNI	Off
T1 Map	On
Complex Div. Image	Off
Denoise Weighting	80
FLAWS	Off

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\USER\Everling\NHP\RestingState\spc_T2_cor_500iso_p2

TA: 7:34 PAT: 2 Voxel size: 0.5x0.5x0.5 mm Rel. SNR: 1.00 USER: tse_vfl_WIP692

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
Position	R0.5 A36.9 F30.2
Orientation	C > T-25.6
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	12.5 %
Slices per slab	128
FoV read	128 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR	4000 ms
TE	303 ms
Averages	2.0
Concatenations	1
Filter	Raw filter
Coil elements	E1,2

Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off
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
Normalize	Off
B1 filter	Off

Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

E1	On
E2	On
Positioning mode	FIX
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R0.5 A36.9 F30.2
Orientation	C > T-25.6
Rotation	0.00 deg
F >> H	128 mm
R >> L	128 mm
A >> P	64 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	3D
Elliptical scanning	On
Contrasts	1
Bandwidth	501 Hz/Px
Flow comp.	No
Allowed delay	0 s

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Echo spacing	4.08 ms
Adiabatic-mode	Off
Turbo factor	300
Echo train duration	898
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
Flip angle mode	T2 var
Reordering Mode	LINEAR
Free Discarded Echoes	Off
Simulate T1	1500
Simulate T2	55
Which Evolution Sheme	2
Inline MPR	Off
RF-Dur. LowSAR-Mode	800

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TA: 2:32 PAT: 2 Voxel size: 0.5x0.5x1.0 mm Rel. SNR: 1.00 USER: tse_UHF_WIP729E

Properties		Raw filter	Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Geometry	
After measurement		Multi-slice mode	Interleaved
Load to viewer	On	Series	Interleaved
Inline movie	Off	Special sat.	None
Auto store images	On	Table position	H
Load to stamp segments	Off	Table position	0 mm
Load images to graphic segments	Off	Inline Composing	Off
Auto open inline display	Off	System	
Start measurement without further preparation	On	E1	On
Wait for user to start	Off	E2	On
Start measurements	single	Positioning mode	FIX
Routine		MSMA	S - C - T
Slice group 1		Sagittal	R >> L
Slices	42	Coronal	A >> P
Dist. factor	10 %	Transversal	F >> H
Position	L0.0 P0.0 F18.2	Save uncombined	Off
Orientation	Coronal	Coil Combine Mode	Adaptive Combine
Phase enc. dir.	R >> L	AutoAlign	---
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0 %	Shim mode	Standard
FoV read	128 mm	Adjust with body coil	Off
FoV phase	100.0 %	Confirm freq. adjustment	Off
Slice thickness	1.0 mm	Assume Silicone	Off
TR	7500 ms	? Ref. amplitude 1H	0.000 V
TE	90 ms	Adjustment Tolerance	Auto
Averages	1	Adjust volume	
Concatenations	1	Position	L0.0 P0.0 F18.2
Filter	None	Orientation	Coronal
Coil elements	E1,2	Rotation	0.00 deg
Contrast		F >> H	128 mm
MTC	Off	R >> L	128 mm
Magn. preparation	None	A >> P	47 mm
Flip angle	120 deg	Physio	
Fat suppr.	Fat sat.	1st Signal/Mode	None
Fat sat. mode	Strong	Dark blood	Off
Water suppr.	None	Inline	
Restore magn.	Off	Subtract	Off
Averaging mode	Long term	Std-Dev-Sag	Off
Reconstruction	Magnitude	Std-Dev-Cor	Off
Measurements	1	Std-Dev-Tra	Off
Multiple series	Each measurement	Std-Dev-Time	Off
Resolution		MIP-Sag	Off
Base resolution	256	MIP-Cor	Off
Phase resolution	100 %	MIP-Tra	Off
Phase partial Fourier	Off	MIP-Time	Off
Trajectory	Cartesian	Save original images	On
Interpolation	Off	Sequence	
PAT mode	GRAPPA	Introduction	On
Accel. factor PE	2	Dimension	2D
Ref. lines PE	31	Compensate T2 decay	Off
Reference scan mode	Integrated	Reduce Motion Sens.	Off
Image Filter	Off	Contrasts	1
Distortion Corr.	Off	Bandwidth	219 Hz/Px
Prescan Normalize	Off	Flow comp.	No
Normalize	Off	Allowed delay	0 s
B1 filter	Off	Echo spacing	12.9 ms

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Define	Turbo factor
Turbo factor	8
Echo trains per slice	18
RF pulse type	Low SAR
Gradient mode	Fast
Equal Dur. Excit.+Refoc.	Off
Advanced Options	On
VERSE	Off
Duration Excit. RF	5000 [us]
Duration Refoc. RF	6000 [us]
Grad Reversal	Off
FFT scale factor	0.60
Fat/Water CSD	2.6 [mm]
Refocussed Fat	49 [%]

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\USER\Everling\NHP\RestingState\gre_field_mapping

TA: 1:07

Voxel size: 2.0x2.0x5.0 mm

Rel. SNR: 1.00

SIEMENS: gre_field_mapping

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	13
Dist. factor	10 %
Position	R0.5 A45.6 F10.2
Orientation	Coronal
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	128 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	500.0 ms
TE 1	4.08 ms
TE 2	5.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	

Contrast

MTC	Off
Flip angle	30 deg
Fat suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution

Base resolution	64
Phase 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	Interleaved
Series	Interleaved
Special sat.	None
Table position	H

Table position
Inline Composing

0 mm
Off

System

Positioning mode	FIX
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R0.5 A45.6 F10.2
Orientation	Coronal
Rotation	90.00 deg
R >> L	128 mm
F >> H	128 mm
A >> P	71 mm

Composing

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	250 Hz/Px
Flow comp.	Yes
RF pulse type	Normal
Gradient mode	Normal
RF spoiling	On

Sequence

Introduction
Dimension

Asymmetric echo
Contrasts

Bandwidth
Flow comp.

RF pulse type
Gradient mode

RF spoiling

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TA: 3:02 PAT: 2 Voxel size: 0.4x0.4x1.0 mm Rel. SNR: 1.00 USER: tse_UHF_WIP729E

Properties		Raw filter	Off
Prio Recon	Off	Elliptical filter	Off
Before measurement		Geometry	
After measurement		Multi-slice mode	Interleaved
Load to viewer	On	Series	Interleaved
Inline movie	Off	Special sat.	None
Auto store images	On	Table position	H
Load to stamp segments	Off	Table position	0 mm
Load images to graphic segments	Off	Inline Composing	Off
Auto open inline display	Off	System	
Start measurement without further preparation	On	E1	On
Wait for user to start	Off	E2	On
Start measurements	single	Positioning mode	FIX
Routine		MSMA	S - C - T
Slice group 1		Sagittal	R >> L
Slices	52	Coronal	A >> P
Dist. factor	10 %	Transversal	F >> H
Position	L0.0 P0.0 F18.2	Save uncombined	Off
Orientation	Coronal	Coil Combine Mode	Adaptive Combine
Phase enc. dir.	R >> L	AutoAlign	---
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0 %	Shim mode	Standard
FoV read	128 mm	Adjust with body coil	Off
FoV phase	100.0 %	Confirm freq. adjustment	Off
Slice thickness	1.0 mm	Assume Silicone	Off
TR	7500 ms	! Ref. amplitude 1H	120.000 V
TE	80 ms	Adjustment Tolerance	Auto
Averages	1	Adjust volume	
Concatenations	1	Position	L0.0 P0.0 F18.2
Filter	None	Orientation	Coronal
Coil elements	E1,2	Rotation	0.00 deg
Contrast		F >> H	128 mm
MTC	Off	R >> L	128 mm
Magn. preparation	None	A >> P	58 mm
Flip angle	120 deg	Physio	
Fat suppr.	Fat sat.	1st Signal/Mode	None
Fat sat. mode	Strong	Dark blood	Off
Water suppr.	None	Inline	
Restore magn.	Off	Subtract	Off
Averaging mode	Long term	Std-Dev-Sag	Off
Reconstruction	Magnitude	Std-Dev-Cor	Off
Measurements	1	Std-Dev-Tra	Off
Multiple series	Each measurement	Std-Dev-Time	Off
Resolution		MIP-Sag	Off
Base resolution	320	MIP-Cor	Off
Phase resolution	100 %	MIP-Tra	Off
Phase partial Fourier	Off	MIP-Time	Off
Trajectory	Cartesian	Save original images	On
Interpolation	Off	Sequence	
PAT mode	GRAPPA	Introduction	On
Accel. factor PE	2	Dimension	2D
Ref. lines PE	31	Compensate T2 decay	Off
Reference scan mode	Integrated	Reduce Motion Sens.	Off
Image Filter	Off	Contrasts	1
Distortion Corr.	Off	Bandwidth	220 Hz/Px
Prescan Normalize	Off	Flow comp.	No
Normalize	Off	Allowed delay	0 s
B1 filter	Off	Echo spacing	13.3 ms

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Define	Turbo factor
Turbo factor	8
Echo trains per slice	22
RF pulse type	Low SAR
Gradient mode	Fast
Equal Dur. Excit.+Refoc.	Off
Advanced Options	On
VERSE	Off
Duration Excit. RF	5000 [us]
Duration Refoc. RF	6000 [us]
Grad Reversal	Off
FFT scale factor	0.60
Fat/Water CSD	2.6 [mm]
Refocussed Fat	49 [%]

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\USER\Everling\NHP\RestingState\mbep2d_bold_mb2_p2_rs

TA: 10:27 PAT: 2 Voxel size: 1.0x1.0x1.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

Properties		Series	Interleaved
Prio Recon	Off	Special sat.	None
Before measurement		Table position	H
After measurement		Table position	0 mm
Load to viewer	On	Inline Composing	Off
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		System	
Slice group 1		E1	On
Slices	42	E2	On
Dist. factor	10 %	Positioning mode	FIX
Position	R0.5 A45.6 F10.2	MSMA	S - C - T
Orientation	Coronal	Sagittal	R >> L
Phase enc. dir.	F >> H	Coronal	A >> P
Rotation	90.00 deg	Transversal	F >> H
Phase oversampling	0 %	Coil Combine Mode	Sum of Squares
FoV read	96 mm	AutoAlign	---
FoV phase	100.0 %	Auto Coil Select	Default
Slice thickness	1.00 mm	Shim mode	Standard
TR	1000 ms	Adjust with body coil	Off
TE	18.0 ms	Confirm freq. adjustment	Off
Multi-band accel. factor	2	Assume Silicone	Off
Filter	Raw filter	? Ref. amplitude 1H	0.000 V
Coil elements	E1,2	Adjustment Tolerance	Auto
		Adjust volume	
		Position	R0.5 A45.6 F10.2
		Orientation	Coronal
		Rotation	90.00 deg
		R >> L	96 mm
		F >> H	96 mm
		A >> P	47 mm
Contrast		Physio	
MTC	Off	1st Signal/Mode	None
Magn. preparation	None		
Flip angle	40 deg	BOLD	
Fat suppr.	Fat sat.	GLM Statistics	Off
		Dynamic t-maps	Off
Averaging mode	Long term	Starting ignore meas	0
Reconstruction	Magnitude	Ignore after transition	0
Measurements	600	Model transition states	On
Delay in TR	0 ms	Temp. highpass filter	On
Multiple series	Off	Threshold	4.00
Resolution		Paradigm size	3
Base resolution	96	Meas[1]	Baseline
Phase resolution	100 %	Meas[2]	Baseline
Phase partial Fourier	6/8	Meas[3]	Active
Interpolation	Off	Motion correction	Off
		Spatial filter	Off
PAT mode	GRAPPA		
Accel. factor PE	2	Sequence	
Ref. lines PE	56	Introduction	Off
Reference scan mode	GRE	Contrasts	1
		Bandwidth	1860 Hz/Px
Distortion Corr.	Off	Flow comp.	No
Prescan Normalize	Off	Free echo spacing	Off
Raw filter	On	Echo spacing	0.65 ms
Intensity	Weak		
Slope	25	EPI factor	96
Elliptical filter	Off	Gradient mode	Fast
Hamming	Off	RF spoiling	Off
Geometry		Excite pulse duration	6000 us
Multi-slice mode	Interleaved	Single-band images	On
		MB LeakBlock kernel	Off
		MB dual kernel	Off

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MB RF phase scramble	On
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Physio recording	Legacy
Triggering scheme	Standard

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\USER\Everling\NHP\RestingState\ep2d_advdif cor_iso_64dirs_F>>H

TA: 8:53 PAT: 2 Voxel size: 1.0x1.0x1.0 mm Rel. SNR: 1.00 USER: ep2d_advdif_940

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	46
Dist. factor	10 %
Position	R0.5 A36.9 F30.2
Orientation	C > T-25.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	104 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	7500 ms
TE	50.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	E1,2

Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Extra Fat Suppr.	off
Saturation Mode	standard
Averaging mode	Long term
Reconstruction	Magnitude
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	104
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference Scan Mode	multi-shot EPI

Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry	
Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off
System	
E1	On
E2	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R0.5 A36.9 F30.2
Orientation	C > T-25.6
Rotation	90.00 deg
R >> L	104 mm
F >> H	104 mm
A >> P	51 mm
Physio	
1st Signal/Mode	None
PMU Recording	off
Resp. control	Off
Diff	
Diffusion mode	MDDW
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
Diff. weighted images	On
Trace weighted images	On
Average ADC maps	On
Individual ADC maps	Off
FA maps	On
Mosaic	On
Tensor	On
Noise level	40
Diff. directions	64
Sequence	
Introduction	Off
Bandwidth	1924 Hz/Px
Optimization	None
Free echo spacing	Off
Echo spacing	0.61 ms
EPI factor	104
RF pulse type	Low SAR
Gradient mode	Fast
Add. FFT Scale Factor	1.0