

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\localizer

TA: 0:30 PAT: 2 Voxel size: 1.1x1.0x5.0 mm Rel. SNR: 1.00 SIEMENS: gre

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	3
Dist. factor	0 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	20 %
Position	L0.0 P0.0 H30.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	13
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
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Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Triple
Reference scan mode	Integrated

Image Filter	Off
Distortion Corr. Mode	On
Mode	2D
Unfiltered images	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Multi-slice mode	Sequential
Series	Interleaved

Saturation mode	Standard
Special sat.	None

Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	ISO
Table position	H
Table position	0 mm
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm

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A >> P	263 mm
F >> H	350 mm

Physio

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

Inline

Subtract	Off
Liver registration	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
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

Sequence

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

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\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Rest_Pre

TA: 5:00 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	233
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
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BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

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Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

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\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Run1

TA: 11:11 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	530
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
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BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

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Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

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\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Run2

TA: 11:11 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	530
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
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BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

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Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

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\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Run3

TA: 11:11 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	530
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
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BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

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Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Run4

TA: 11:11 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	530
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
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BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

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Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\MB4_TE26_2mm_1250TR_Rest_Post

TA: 5:00 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	233
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
-----------------	------

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

SIEMENS MAGNETOM TrioTim syngo MR B17

Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\FMInv_MB4_TE26_2mm_1250TR

TA: 0:16 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	On
Start measurements	single

Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	6
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
-----------------	------

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

SIEMENS MAGNETOM TrioTim syngo MR B17

Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\FM_MB4_TE26_2mm_1250TR
 TA: 0:16 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_bold

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	64
Dist. factor	0 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1250 ms
TE	26.0 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	71 deg
Fat suppr.	Fat sat.

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	6
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

PAT mode	None
Matrix Coil Mode	Auto (CP)

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default

Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	128 mm

Physio

1st Signal/Mode	None
-----------------	------

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active

SIEMENS MAGNETOM TrioTim syngo MR B17

Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	1578 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.76 ms

EPI factor	96
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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	1.00
Physio recording	Off
Triggering scheme	Standard

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\gre_field_mapping_3iso

TA: 0:54

Voxel size: 3.0x3.0x3.0 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	36
Dist. factor	25 %
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	400 ms
TE 1	4.92 ms
TE 2	7.38 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast

MTC	Off
Flip angle	60 deg
Fat suppr.	None

Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Matrix Coil Mode	Auto (CP)

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

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	FIX
Table position	H
Table position	0 mm
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L1.8 A13.7 H25.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	135 mm

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	260 Hz/Px
Flow comp.	Yes

RF pulse type	Normal
Gradient mode	Normal
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\t1_mpr_ns_sag_p2_iso

TA: 4:26 PAT: 2 Voxel size: 1.0x1.0x1.0 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	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L2.4 A19.3 H0.6
Orientation	S > T-3.1 > C-2.1
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	16.7 %
Slices per slab	192
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	1900 ms
TE	2.52 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Image Filter
Coil elements	HEA;HEP

Contrast

Magn. preparation	Non-sel. IR
TI	900 ms
Flip angle	9 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
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
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	On

Intensity	Medium
Edge Enhancement	3
Smoothing	3
Unfiltered images	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Single shot
Series	Ascending

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
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	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 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

SIEMENS MAGNETOM TrioTim syngo MR B17

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	Off
Asymmetric echo	Allowed
Bandwidth	170 Hz/Px
Flow comp.	No
Echo spacing	7.5 ms

RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\NeuroCode\Wittkuhn\HighSpeed\FLAIR_tra_FC_1x1x3mm

TA: 3:42 PAT: 2 Voxel size: 1.0x1.0x3.0 mm Rel. SNR: 1.00 SIEMENS: tse

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	On
Start measurements	single

Routine

Slice group 1	
Slices	46
Dist. factor	0 %
Position	R1.9 A6.2 H31.2
Orientation	T > C-0.8 > S0.1
Phase enc. dir.	R >> L
Rotation	90.40 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	92.2 %
Slice thickness	3.0 mm
TR	10000 ms
TE	97 ms
Averages	2
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize, Image Filter
Coil elements	HEA;HEP

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	2601.3 ms
Freeze suppressed tissue	On
Flip angle	125 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Self-calibration

Image Filter	On
Intensity	Medium
Edge Enhancement	3
Smoothing	3
Unfiltered images	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None

Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On

Positioning mode	ISO
Table position	H
Table position	31 mm
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	R1.9 A6.2 H31.2
Orientation	T > C-0.8 > S0.1
Rotation	90.40 deg
A >> P	256 mm
R >> L	236 mm
F >> H	138 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

SIEMENS MAGNETOM TrioTim syngo MR B17

MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Bandwidth	287 Hz/Px
Flow comp.	Slice
Allowed delay	60 s
Echo spacing	10.8 ms

Define	Turbo factor
Turbo factor	24
Echo trains per slice	5
RF pulse type	Low SAR
Gradient mode	Fast