e-Table 1: Measures of Inter-site and Intra-site Variability Associated with Quantitative MRI Techniques/Metrics

MRI technique/metric	Intra-site variability metric	Intra-site variability	Inter-site variability metric	Inter-site variability	Interpretation
T2 lesion volume (manual)	Standard deviation of mean difference between scans at each site	0.79 mL	Proportion of variation explained by site	92%	excellent intra-site, relatively poorer inter-site reliability
Total brain volume (automated – MaCRUISE)	Standard deviation of mean difference between scans at each site	10.1 mL	Proportion of variation explained by site	89%	excellent intra-site, relatively poorer inter-site reliability
MTR (NAWM)	r	0.99	ICC	0.91	excellent intra- and inter-site reliability
R1 (NAWM)	r	0.96	ICC	0.97	excellent intra- and inter-site reliability
DWI (FA of NAWM)	r	0.99	ICC	0.91	excellent intra- and inter-site reliability
rsfMRI -intraregional connectivity -intrahemispheric connectivity	r	0.80	ICC	0.40	adequate intra-site reliability, suboptimal inter-site reliability
UCCA	Average test-retest COV of UCCA	0.018	COV	0.043	significant intra- and inter-site variability

*MaCRUISE = Multi-atlas Segmentation with Brain Surface Estimation; MTR = magnetization-transfer ratio; NAWM = normal appearing white matter; ICC = intra-class correlation coefficient; DWI = diffusion-weighted imaging; FA = fractional anisotropy; r = Pearson's correlation coefficient; rsfMRI = resting-state functional MRI; UCCA = upper cervical cord area; COV = coefficient of variation

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\localizer

TA: 0:19 PAT: Off Voxel size: 1.9×1.5×8.0 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	On
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	3
Dist. factor	20 %
Position	L0.0 P0.0 F30.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	R1.6 A22.5 F56.2
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	2
Dist. factor	100 %
Position	R1.6 A12.9 F30.5
Orientation	T > C-9.2
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	8.0 mm
TR	20.0 ms
TE	5.00 ms
Averages	1
Concatenations	6
Filter	Raw filter
Coil elements	HEA;HEP

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
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

Multi-slice mode	Sequential
Series	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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
A >> P	263 mm
F >> H	350 mm

Physio

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

Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\AAHScout_32ch
TA:0:14 PAT:3 Voxel size:1.6×1.6×1.6 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
TE	1.37 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP
AutoAlign	Head

Contrast

Flip angle	8 deg
Averaging mode	Short term
Measurements	1
Reconstruction	Magnitude

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\localizer

TA: 0:13 PAT: Off Voxel size: 1.1×1.0×7.0 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	Off
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
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	7.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	3
Filter	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
Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	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
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	L >> R
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
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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
MapIt	None
Contrasts	1

Sequence

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

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\MPRAGE Axial

TA: 5:25 PAT: 2 Voxel size: 1.0×1.0×1.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L7.8 A43.1 H23.3
Orientation	T > C3.5 > S3.4
Phase enc. dir.	R >> L
Rotation	88.30 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2200 ms
TE	3.44 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

Magn. preparation	Slice-sel. IR
TI	900 ms
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

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	40
Accel. factor 3D	1
Matrix Coil Mode	Triple
Reference scan mode	Integrated
Image Filter	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	Interleaved
Table position	H
Table position	0 mm
Inline Composing	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	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	H >> F
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	L7.8 A43.1 H23.3
Orientation	T > C3.5 > S3.4
Rotation	88.30 deg
A >> P	256 mm
R >> L	256 mm
F >> H	176 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	Off
Asymmetric echo	Allowed
Bandwidth	130 Hz/Px
Flow comp.	No
Echo spacing	8.7 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\DTI 30dir (0 1000) a-p

TA: 7:59 PAT: 2 Voxel size: 1.7×1.7×2.0 mm Rel. SNR: 1.00 SIEMENS: ep2d_diff

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	75
Dist. factor	0 %
Position	L3.0 A9.5 H28.1
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	267 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	14100 ms
TE	101 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	160
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Separate
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Intensity	Weak
Slope	25
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

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
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	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	L3.0 A9.5 H28.1
Orientation	Transversal
Rotation	0.00 deg
R >> L	267 mm
A >> P	267 mm
F >> H	150 mm

Physio

1st Signal/Mode	None
Resp. control	Off

Diff

Diffusion mode	MDDW
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	1000 s/mm²
Diff. weighted images	On
Trace weighted images	On
Average ADC maps	On
Individual ADC maps	Off
FA maps	On
Mosaic	Off
Tensor	Off
Noise level	40
Diff. directions	30

Sequence

Introduction	Off
Bandwidth	1562 Hz/Px

Free echo spacing	Off
Echo spacing	0.95 ms
EPI factor	160
RF pulse type	Normal
Gradient mode	Fast*

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\3D_Ax_T2_spc

TA: 9:03 PAT: Off Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00 SIEMENS: tse_vfl

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	R5.0 P5.5 F21.9
Orientation	T > S2.0 > C-0.2
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	10.0 %
Slices per slab	160
FoV read	200 mm
FoV phase	80.2 %
Slice thickness	1.00 mm
TR	1100 ms
TE	132 ms
Averages	1.4
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	On
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Slice resolution	50 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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

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
MSMA	S - C - T
Sagittal	L >> R
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
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	3D
Bandwidth	286 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	5.88 ms
Adiabatic-mode	Off
Define	Echo trains
Turbo factor	39
Slice turbo factor	1
Echo trains per slice	4
Echo train duration	241
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
Flip angle mode	Constant

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\Pd_T2_tse_tra

TA: 3:45 PAT: Off Voxel size: 0.7×0.7×3.0 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	Off
Start measurements	single

Routine

Slice group 1	
Slices	35
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	3440 ms
TE 1	18.0 ms
TE 2	82 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	320
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	On
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

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

System

Body	Off
NE2	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
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	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
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
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	2
Bandwidth	252 Hz/Px
Flow comp.	No
Allowed delay	60 s
Echo spacing	9.06 ms
Define	Turbo factor
Turbo factor	5
Echo trains per slice	64
RF pulse type	Normal
Gradient mode	Fast

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\AX T2 SWI fl3d

TA: 7:50 PAT: 2 Voxel size: 0.9×0.9×0.9 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

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	L0.3 P1.6 H34.7
Orientation	T > C-15.6
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	230 mm
FoV phase	78.1 %
Slice thickness	0.90 mm
TR	24 ms
TE	20.00 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP;NE1,2

Contrast

MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	On
Averaging mode	Short 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	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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	FIX
MSMA	S - C - T
Sagittal	L >> R
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	L0.3 P1.6 H34.7
Orientation	T > C-15.6
Rotation	90.00 deg
A >> P	230 mm
R >> L	180 mm
F >> H	130 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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
MapIt	None
Contrasts	1

Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	330 Hz/Px
Flow comp.	Yes
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\gre_field_mapping

TA: 1:30 Voxel size: 3.0×3.0×3.0 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	54
Dist. factor	0 %
Position	R5.5 P2.4 F17.2
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	573 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	Phase
Measurements	1
Multiple series	Off

Resolution

Base resolution	76
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
Table position	H
Table position	0 mm
Inline Composing	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	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
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	R5.5 P2.4 F17.2
Orientation	Transversal
Rotation	0.00 deg
R >> L	230 mm
A >> P	230 mm
F >> H	162 mm

Composing

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 Verio syngo MR B17

\\USER\DAVIS_RESEARCH\Sicotte\MS\Ax_fMRI_18s_5rep_RESTING

TA: 8:12 PAT: 3 Voxel size: 2.5×2.5×3.0 mm Rel. SNR: 1.00 SIEMENS: ep2d_pace

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	36
Dist. factor	20 %
Position	R5.5 P2.4 F17.2
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	2000 ms
TE	27 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	240
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	92
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Matrix Coil Mode	Triple
Reference scan mode	Separate
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
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

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
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
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	R5.5 P2.4 F17.2
Orientation	Transversal
Rotation	0.00 deg
R >> L	230 mm
A >> P	230 mm
F >> H	129 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	On
Dynamic t-maps	On
Starting ignore meas	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	10
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Active
Meas[8]	Active
Meas[9]	Active
Meas[10]	Active
Motion correction	On
Interpolation	3D-K-space

Spatial filter	Off

Sequence

Introduction	On
Bandwidth	2264 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
EPI factor	92
RF pulse type	Normal
Gradient mode	Fast*

SIEMENS MAGNETOM Verio syngo MR B17

Table of contents

Resolution

Base resolution	160
Phase resolution	100 %
Phase partial Fourier	6/8
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
Slice resolution	69 %
Slice partial Fourier	6/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
Multi-slice mode	Sequential
Series	Ascending
Nr. of sat. regions	0
Position mode	L-P-H
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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
Coil Select Mode	Off - AutoCoilSelect
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	63.704 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

Inline

Distortion correction	Off

Sequence	
Introduction	On
Dimension	3D
Averaging mode	Short term
Multi-slice mode	Sequential
Asymmetric echo	Weak
Contrasts	1
Bandwidth	540 Hz/Px
RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD	
Time to center	6.2 s
Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\MPRAGE SAG TFL
TA:4:17 PAT:2 Voxel size:1.0×1.0×1.0 mm Rel. SNR:1.00 :tfl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	50 %
Position	L0.7 A14.2 F37.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	1900.0 ms
TE	2.52 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP;SP1

Contrast

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

Resolution

Base resolution	256
Phase resolution	96 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Slice resolution	100 %
Slice partial Fourier	Off

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	50 %
Position	L0.7 A14.2 F37.7 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
Multi-slice mode	Single shot
Series	Ascending
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	On
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	L0.7 A14.2 F37.7 mm
Rotation	0.00 deg
F >> H	256 mm
A >> P	256 mm
R >> L	176 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SLoopIRns1 1H	621.738 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	Non-sel. IR
TI	900 ms
Dark blood	Off
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	3D
Elliptical scanning	Off
Averaging mode	Long term
Multi-slice mode	Single shot
Reordering	Linear
Asymmetric echo	Allowed
Bandwidth	170 Hz/Px
Flow comp.	No
Echo spacing	7.5 ms
Turbo factor	176
RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP;SP1
Acquisition duration	0 ms
Mode	Off

BOLD	
Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Save original images	On

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\T2 SAG TSE
TA:4:45 PAT:2 Voxel size:1.0×1.0×1.0 mm Rel. SNR:1.00 :spcR

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Position	L0.7 A14.2 F37.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	411.0 ms
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP;SP1

Contrast

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

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Allowed
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Slice resolution	100 %
Slice partial Fourier	Off

Geometry

Nr. of slab groups	1
Slabs	1
Position	L0.7 A14.2 F37.7 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Special sat.	None
Special sat.	None
Table position	P
Restore magn.	On

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	On
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	L0.7 A14.2 F37.7 mm
Rotation	0.00 deg
F >> H	256 mm
A >> P	256 mm
R >> L	176 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	358.333 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Trigger delay	0 ms
Magn. preparation	None
Dark blood	Off
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Bandwidth	751 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	3.57 ms
Adiabatic-mode	Off
Turbo factor	282
Echo train duration	917
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP;SP1
Acquisition duration	0 ms
Organ under exam.	Standard
Tissue T1	940 ms
Tissue T2	100 ms

BOLD	
Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\FLAIR SAG VFL
TA:7:02 PAT:2 Voxel size:0.5×0.5×1.0 mm Rel. SNR:1.00 :spcir

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Position	L0.7 A14.2 F37.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	4800 ms
TE	353.0 ms
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP;SP1

Contrast

MTC	Off
Magn. preparation	Non-sel. T2-IR
TI 1	1800 ms
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Restore magn.	Off
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Allowed
Interpolation	On
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Slice resolution	100 %
Slice partial Fourier	Off

Geometry

Nr. of slab groups	1
Slabs	1
Position	L0.7 A14.2 F37.7 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Fat sat. mode	Strong
Special sat.	None
Table position	P
Restore magn.	Off

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	On
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	On - AutoCoilSelect
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	L0.7 A14.2 F37.7 mm
Rotation	0.00 deg
F >> H	256 mm
A >> P	256 mm
R >> L	176 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SLoopFCSatNS 1H	106.000 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

1st Signal/Mode	None
Trigger delay	0 ms
Magn. preparation	Non-sel. T2-IR
TI 1	1800 ms
Dark blood	Off
Resp. control	Off

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Bandwidth	781 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	3.53 ms
Adiabatic-mode	Off
Turbo factor	298
Echo train duration	875
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP;SP1
Acquisition duration	0 ms
Organ under exam.	Standard
Tissue T1	940 ms
Tissue T2	100 ms

BOLD

Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\PDT2 AX TSE
TA:2:15 PAT:3 Voxel size:0.9×0.9×3.0 mm Rel. SNR:1.00 :tse

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	54
Dist. factor	0 %
Position	R0.5 A9.3 F6.3 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	240 mm
FoV phase	90.6 %
Slice thickness	3.0 mm
TR	3000.0 ms
TE 1	11.0 ms
Averages	1
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Off

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
TD	0.0 ms
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Nr. of slice groups	1
Slices	54
Dist. factor	0 %
Position	R0.5 A9.3 F6.3 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P
Restore magn.	Off

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A9.3 F6.3 mm
Rotation	90.70 deg
A >> P	240 mm
R >> L	218 mm
F >> H	162 mm
Frequency 1H	123.135762 MHz
Correction factor	1
VExcit 1H	193.005 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

1st Signal/Mode	None
Magn. preparation	None
Dark blood	Off
Trajectory	Cartesian
Resp. control	Off

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Reduce Motion Sens.	Off
Contrasts	2
Bandwidth	186 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	11.2 ms
Define	Echo trains
Turbo factor	7
Echo trains per slice	14
RF pulse type	Low SAR
Gradient mode	Normal
Hyperecho	Off
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	2
Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\PSIR AX TSE
TA:4:37 PAT:Off Voxel size:0.6×0.6×2.0 mm Rel. SNR:1.00 :tir_rs

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	45
Dist. factor	0 %
Position	R0.5 A3.7 H15.1 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	78.1 %
Slice thickness	2.0 mm
TR	3300.0 ms
TE	13.0 ms
Averages	1
Concatenations	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	499 ms
Freeze suppressed tissue	Off
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Real
Multiple series	Off

Resolution

Base resolution	384
Phase resolution	81 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
TD	0.0 ms
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Medium
Slope	48
Elliptical filter	Off

Geometry

Nr. of slice groups	1
Slices	45
Dist. factor	0 %
Position	R0.5 A3.7 H15.1 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P
Restore magn.	Off

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 H15.1 mm
Rotation	90.70 deg
A >> P	220 mm
R >> L	172 mm
F >> H	90 mm
Frequency 1H	123.135762 MHz
Correction factor	1
Excit 1H	284.932 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	Slice-sel. IR
TI	499 ms
Dark blood	Off
Trajectory	Cartesian
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Reduce Motion Sens.	On
Contrasts	1
Bandwidth	228 Hz/Px
Flow comp.	Slice
Allowed delay	60 s
Echo spacing	13.5 ms
Define	Turbo factor
Turbo factor	6
Echo trains per slice	41
RF pulse type	Low SAR
Gradient mode	Normal
Hyperecho	Off
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\MTC4k AX WIP805
TA:2:44 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	43.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	On
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Measurements	1
Reconstruction	Magn./Phase
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
Slice resolution	75 %
Slice partial Fourier	Off

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
greMSMSatNS 1H	197.352 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

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

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Short term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RO Grad Ampl.	43.0 mT/m
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Optimised MT	On
MT Flip Angle	600 deg
MT Duration	15000 us
MT Offset	4000 Hz
Spoil Moment RO	0 us*mT/m
Spoil Moment PE & SS	25000 us*mT/m
MOSAIC Mode	None
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\MTC100k AX WIP805
TA:2:44 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	43.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	On
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Measurements	1
Reconstruction	Magn./Phase
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
Slice resolution	75 %
Slice partial Fourier	Off

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
greMSMSatNS 1H	197.352 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Segments	1
Tagging	None
Magn. preparation	None
Dark blood	Off
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Short term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RO Grad Ampl.	43.0 mT/m
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Optimised MT	On
MT Flip Angle	600 deg
MT Duration	15000 us
MT Offset	100000 Hz
Spoil Moment RO	0 us*mT/m
Spoil Moment PE & SS	25000 us*mT/m
MOSAIC Mode	None
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\T1FA03 AX GRE TA:1:19 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.36 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	3 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
Slice resolution	100 %
Slice partial Fourier	7/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	36.654 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

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

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\T1FA06 AX GRE TA:1:19 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.36 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	6 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
Slice resolution	100 %
Slice partial Fourier	7/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	73.307 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

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

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\T1FA10 AX GRE TA:1:19 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.36 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
Slice resolution	100 %
Slice partial Fourier	7/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	122.178 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Segments	1
Tagging	None
Magn. preparation	None
Dark blood	Off
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\T1FA20 AX GRE TA:1:19 PAT:2 Voxel size:1.0×1.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.36 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
Slice resolution	100 %
Slice partial Fourier	7/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	244.357 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Segments	1
Tagging	None
Magn. preparation	None
Dark blood	Off
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\B0 AX GRE
TA:0:47 PAT:2 Voxel size:2.0×2.0×3.0 mm Rel. SNR:1.00 :fl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE 1	2.00 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Long term
Measurements	1
Reconstruction	Magn./Phase
Multiple series	Each measurement

Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
Slice resolution	100 %
Slice partial Fourier	7/8

Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.7 F6.0 mm
Rotation	90.70 deg
A >> P	256 mm
R >> L	192 mm
F >> H	144 mm
Frequency 1H	123.135762 MHz
Correction factor	1
SRFExcit 1H	122.178 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

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

Inline

Distortion correction	Off

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	2
Bandwidth 1	910 Hz/Px
Flow comp. 1	No
Readout mode	Monopolar
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	2
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\B1 AX TFL_B1MAP
TA:0:21 PAT:Off Voxel size:4.0×4.0×3.0 mm Rel. SNR:1.00 :tfl

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	40
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	10200.0 ms
TE	2.02 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast

Magn. preparation	None
Flip angle	8 deg
Fat suppr.	None
Water suppr.	None
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

Resolution

Base resolution	64
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

Nr. of slice groups	1
Slices	40
Dist. factor	20 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Frequency 1H	123.135762 MHz
Correction factor	1
Prep_SINC 1H	621.738 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio		
	Magn. preparation	None
Inline		
	Distortion correction	Off
Sequence		
	Introduction	Off
	Dimension	2D
	Multi-slice mode	Interleaved
	Asymmetric echo	Allowed
	Bandwidth	750 Hz/Px
	Flow comp.	No
	Echo spacing	3.9 ms
	Turbo factor	64
	RF pulse type	Low SAR
	Gradient mode	Normal
	Excitation	Slice-sel.
	RF spoiling	On
	TX/RX delta frequency	0 Hz
	TX Nucleus	None
	TX delta frequency	0 Hz
	Coil elements	HEA;HEP
	Acquisition duration	0 ms
	Mode	Off
BOLD		
	Subtract	Off
	StdDev	Off
	MIP-Sag	Off
	MIP-Cor	Off
	MIP-Tra	Off
	MIP-Time	Off
	Save original images	On
	Distortion Corr.	Off
	Save original images	On

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\B1 AX RF_MAP
TA:1:09 Voxel size:4.0×4.0×5.0 mm Rel. SNR:1.00 :

Properties	
Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine	
Nr. of slice groups	1
Slices	24
Dist. factor	120 %
Position	R0.5 A3.7 F6.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5 mm
TR	1000 ms
TE 1	14 ms
Averages	1
Filter	None
Coil elements	HEA;HEP

Contrast	
Flip angle 1	90 deg
Measurements	1

Resolution	
Base resolution	64
Phase resolution	100 %
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Nr. of slice groups	1
Slices	24
Dist. factor	120 %
Position	R0.5 A3.7 F6.0 mm
Phase enc. dir.	A >> P
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Adaptive Combine
AutoAlign	Head > Brain
Coil Select Mode	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Frequency 1H	123.135762 MHz
Correction factor	1
sTX01 1H	220.504 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

Physio

Inline

Distortion correction	Off

Sequence

Contrasts	2
Bandwidth	260.416667 Hz/Px
T1 Compensation	0.0 ms
Angles	1
BC Excitation Mode	Auto
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

BOLD

Distortion Corr.	Off
Contrasts	2

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\fMRI AX CMRRMBEPI TA:6:00 PAT:2 Voxel size:2.0×2.0×2.0 mm Rel. SNR:1.00 :epfid

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	60
Dist. factor	0 %
Position	R0.5 A3.8 H5.5 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1000 ms
TE	30.00 ms
Multi-band accel. factor	4
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	55 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Measurements	340
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

Resolution

Base resolution	110
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Single-shot
Distortion Corr.	Off
Hamming	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Nr. of slice groups	1
Slices	60
Dist. factor	0 %
Position	R0.5 A3.8 H5.5 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.8 H5.5 mm
Rotation	0.70 deg
R >> L	220 mm
A >> P	220 mm
F >> H	120 mm
Frequency 1H	123.135762 MHz
Correction factor	1
MBExc 1H	544.084 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	None

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1748 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.68 ms
EPI factor	110
Gradient mode	Fast
RF spoiling	Off
Online multi-band recon.	Online
Triggering scheme	Standard
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

BOLD	
GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\fMRI XPhase CMRRMBEPI TA:0:30 PAT:2 Voxel size:2.0×2.0×2.0 mm Rel. SNR:1.00 :epfid

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	60
Dist. factor	0 %
Position	R0.5 A3.8 H5.5 mm
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1000 ms
TE	30.00 ms
Multi-band accel. factor	4
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	55 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Measurements	10
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

Resolution

Base resolution	110
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Single-shot
Distortion Corr.	Off
Hamming	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Nr. of slice groups	1
Slices	60
Dist. factor	0 %
Position	R0.5 A3.8 H5.5 mm
Phase enc. dir.	P >> A
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	Head > Brain
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R0.5 A3.8 H5.5 mm
Rotation	-179.30 deg
R >> L	220 mm
A >> P	220 mm
F >> H	120 mm
Frequency 1H	123.135762 MHz
Correction factor	1
MBExc 1H	544.084 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	None

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1748 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.68 ms
EPI factor	110
Gradient mode	Fast
RF spoiling	Off
Online multi-band recon.	Online
Triggering scheme	Standard
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

BOLD	
GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\DTI AX CMRRMBEPI TA:4:52 PAT:2 Voxel size:2.2×2.2×2.2 mm Rel. SNR:1.00 :epse

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	66
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.20 mm
TR	4300 ms
TE	96.00 ms
Multi-band accel. factor	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Averaging mode	Long term
Measurements	1
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Reference scan mode	Single-shot
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Dynamic Field Corr.	Off

Geometry

Nr. of slice groups	1
Slices	66
Dist. factor	0 %
Position	Isocenter
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
Positioning mode	REF
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	---
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	146 mm
Frequency 1H	123.135762 MHz
Correction factor	1
AddCSaCSatNS 1H	106.000 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	None
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.63 ms
EPI factor	100
Gradient mode	Fast*
RF spoiling	Off
Online multi-band recon.	Online
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

BOLD	
Delay in TR	0 ms
Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm²
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Distortion Corr.	Off
b-Value >=	0 s/mm²
Exponential ADC Maps	Off
Invert Gray Scale	Off
Calculated Image	Off

SIEMENS MAGNETOM Skyra syngo MR D13

\\USER\NIB\TNU_Clinical\NAIIMS_VD13A_15MAY2015\DTI XPhase CMRRMBEPI TA:4:52 PAT:2 Voxel size:2.2×2.2×2.2 mm Rel. SNR:1.00 :epse

Properties

Prio Recon	Off
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
Wait for user to start	Off
Start measurements	single

Routine

Nr. of slice groups	1
Slices	66
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.20 mm
TR	4300 ms
TE	96.00 ms
Multi-band accel. factor	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Averaging mode	Long term
Measurements	1
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Reference scan mode	Single-shot
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Dynamic Field Corr.	Off

Geometry

Nr. of slice groups	1
Slices	66
Dist. factor	0 %
Position	Isocenter
Phase enc. dir.	P >> A
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None
Table position	P

System

Body	Off
HEP	On
HEA	On
SP5	Off
SP6	Off
SP7	Off
SP8	Off
SP1	Off
SP2	Off
SP3	Off
SP4	Off
Position mode	L-P-H
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	---
Coil Select Mode	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	180.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	146 mm
Frequency 1H	123.135762 MHz
Correction factor	1
AddCSaCSatNS 1H	106.000 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

Physio	
1st Signal/Mode	None
Magn. preparation	None
Resp. control	Off

Inline	
Distortion correction	Off

Sequence	
Introduction	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.63 ms
EPI factor	100
Gradient mode	Fast*
RF spoiling	Off
Online multi-band recon.	Online
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

BOLD	
Delay in TR	0 ms
Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm²
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Distortion Corr.	Off
b-Value >=	0 s/mm²
Exponential ADC Maps	Off
Invert Gray Scale	Off
Calculated Image	Off

SIEMENS MAGNETOM Skyra syngo MR D13

Table of contents

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	Off
Contrasts	1
Bandwidth	180 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\t2_haste_Triplanar_loc

TA: 0:21 PAT: Off Voxel size: 1.2×0.9×5.0 mm Rel. SNR: 1.00 SIEMENS: haste

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	5
Dist. factor	300 %
Position	R3.7 A27.7 H10.7
Orientation	T > C-12.7
Phase enc. dir.	R >> L
Rotation	90.00 deg
Slice group 2	
Slices	5
Dist. factor	100 %
Position	R4.1 A5.1 H13.1
Orientation	C > T8.7
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	3
Dist. factor	300 %
Position	L0.3 A39.5 H14.4
Orientation	S > T0.6
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	1500 ms
TE	78 ms
Averages	1
Concatenations	1
Filter	Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	80 %
Phase partial Fourier	5/8
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Multi-slice mode	Single shot
Series	Interleaved
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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
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
Contrasts	1
Bandwidth	592 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	4.58 ms
Turbo factor	205
RF pulse type	Fast
Gradient mode	Fast

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\T1_MPRAGE_sag_p2_TI900 (OHSU 2)

TA: 4:18 PAT: 2 Voxel size: 1.0×1.0×1.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R1.0 A34.1 H11.2
Orientation	S > T-1.9 > C-0.3
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	1900 ms
TE	2.52 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
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	96 %
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	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Multi-slice mode	Single shot
Series	Ascending

System

Body	Off
HEP	On
HEA	On
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	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R1.0 A34.1 H11.2
Orientation	S > T-1.9 > C-0.3
Rotation	0.00 deg
F >> H	250 mm
A >> P	250 mm
R >> L	176 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	Off
Asymmetric echo	Allowed

Bandwidth	170 Hz/Px
Flow comp.	No
Echo spacing	7.6 ms
RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\T2_3D_sag_p2_iso

TA: 4:43 PAT: 2 Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00 SIEMENS: tse_vfl

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	R1.0 A34.1 H11.2
Orientation	S > T-1.9 > C-0.3
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3200 ms
TE	408 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

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	101 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	On
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	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 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
Bandwidth	751 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	3.36 ms

Adiabatic-mode	Off
Define	Echo trains
Turbo factor	141
Slice turbo factor	2
Echo trains per slice	1
Echo train duration	877
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\T2 3D FLAIR sag_p2_iso

TA: 7:02 PAT: 2 Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00 SIEMENS: tse_vfl

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

Slab group 1	
Slabs	1
Position	R1.0 A34.1 H11.2
Orientation	S > T-1.9 > C-0.3
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	4800 ms
TE	355 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	Non-sel. IR
TI	1800 ms
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	101 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	On
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	Adaptive Combine
AutoAlign	---
Auto Coil Select	On
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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 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	Off
Dimension	3D
Bandwidth	781 Hz/Px
Flow comp.	No

Allowed delay	30 s
Echo spacing	3.3 ms
Adiabatic-mode	Off
Define	Echo trains
Turbo factor	149
Slice turbo factor	2
Echo trains per slice	1
Echo train duration	842
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\PD,T2 2D TSE tra

TA: 2:15 PAT: 3 Voxel size: 0.9×0.9×3.0 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	54
Dist. factor	0 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
FoV read	240 mm
FoV phase	90.6 %
Slice thickness	3.0 mm
TR	3000 ms
TE 1	11 ms
TE 2	101 ms
Averages	1
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	32
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 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	Off

Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	2
Bandwidth	186 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	11.2 ms
Define	Turbo factor
Turbo factor	7
Echo trains per slice	14
RF pulse type	Low SAR
Gradient mode	Normal

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\2D PSIR

TA: 7:00 PAT: Off Voxel size: 0.7×0.6×2.0 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	Off
Start measurements	single

Routine

Slice group 1	
Slices	45
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	78.1 %
Slice thickness	2.0 mm
TR	5000 ms
TE	13 ms
Averages	1
Concatenations	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	499 ms
Freeze suppressed tissue	Off
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Real
Measurements	1
Multiple series	Off

Resolution

Base resolution	384
Phase resolution	81 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Medium
Slope	48
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	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	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	Isocenter
Orientation	Transversal
Rotation	90.00 deg
A >> P	220 mm
R >> L	172 mm
F >> H	90 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	Off
Dimension	2D
Compensate T2 decay	Off

Reduce Motion Sens.	On
Contrasts	1
Bandwidth	228 Hz/Px
Flow comp.	Slice
Allowed delay	60 s
Echo spacing	12.7 ms
Define	Turbo factor
Turbo factor	6
Echo trains per slice	41
RF pulse type	Low SAR
Gradient mode	Fast

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\gre_wip805_MT_32ch_FA600_d4kHz

TA: 2:45 PAT: 2 Voxel size: 1.0×1.0×3.0 mm Rel. SNR: 1.00 USER: gre_wip805

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

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	43 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	On
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Slice resolution	75 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Optimised MT	On
MT Flip Angle	600 deg
MT Duration	15000 us
MT Offset	4000 Hz
Spoil Moment RO	0 us*mT/m
Spoil Moment PE & SS	25000 us*mT/m
MOSAIC Mode	None

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\gre_wip805_MT_32ch_FA600_d100kHz

TA: 2:45 PAT: 2 Voxel size: 1.0×1.0×3.0 mm Rel. SNR: 1.00 USER: gre_wip805

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

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	43 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	On
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	100 %
Slice resolution	75 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Optimised MT	On
MT Flip Angle	600 deg
MT Duration	15000 us
MT Offset	100000 Hz
Spoil Moment RO	0 us*mT/m
Spoil Moment PE & SS	25000 us*mT/m
MOSAIC Mode	None

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE VFA03deg R1

TA: 1:20 PAT: 2 Voxel size: 1.0×1.0×3.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	3 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	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE VFA06deg R1

TA: 1:20 PAT: 2 Voxel size: 1.0×1.0×3.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
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	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE VFA10deg R1

TA: 1:20 PAT: 2 Voxel size: 1.0×1.0×3.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	10 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	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE VFA20deg R1

TA: 1:20 PAT: 2 Voxel size: 1.0×1.0×3.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	20 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	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE VFA30deg R1

TA: 1:20 PAT: 2 Voxel size: 1.0×1.0×3.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.1 A25.6 H28.5
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	3.00 mm
TR	20.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	30 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	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.0 A34.1 H11.2
! Orientation	S > T-1.9 > C-0.3
! Rotation	0.00 deg
! F >> H	250 mm
! A >> P	250 mm
! R >> L	176 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	650 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\3D GRE dB0

TA: 0:49 PAT: 2 Voxel size: 2.0×2.0×2.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	R >> L
Rotation	88.90 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	48
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.00 mm
TR	20.0 ms
TE 1	2.20 ms
TE 2	4.58 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	40
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	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	Ascending
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Rotation	88.90 deg
A >> P	256 mm
R >> L	192 mm
F >> H	96 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
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	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	2
Bandwidth 1	910 Hz/Px
Bandwidth 2	910 Hz/Px
Flow comp. 1	No
Flow comp. 2	No
Readout mode	Monopolar
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\B1Map(rf_map)

TA: 1:09 Voxel size: 4.0×4.0×5.0 mm Rel. SNR: 1.00 SERVICE: rf_map

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	24
Dist. factor	120 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5 mm
TR	1000 ms
TE 1	14 ms
TE 2	14 ms
Averages	1
Filter	None
Coil elements	BC

Contrast

Flip angle 1	90 deg
Flip angle 2	120 deg
Flip angle 3	60 deg
Flip angle 4	135 deg
Flip angle 5	45 deg
Measurements	1

Resolution

Base resolution	64
Phase resolution	100 %
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

Series	Interleaved

System

Body	On
HEP	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	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
A >> P	263 mm
F >> H	350 mm

Sequence

Contrasts	2
Bandwidth	260.416667 Hz/Px
T1 Compensation	1000.0 ms
Angles	1

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\MB_bold_2mm_1TR_MB4iPAT2_Run1

TA: 4:32 PAT: 2 Voxel size: 2.0×2.0×2.0 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	60
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	A >> P
Rotation	-1.10 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1000 ms
TE	30.0 ms
Multi-band accel. factor	4
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	55 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	260
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	110
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1748 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	110
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	5020 us
Single-band images	Off
MB LeakBlock kernel	Off

MB RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\MB_bold_2mm_1TR_MB4iPAT2_Run2

TA: 4:32 PAT: 2 Voxel size: 2.0×2.0×2.0 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	60
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	A >> P
Rotation	-1.10 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1000 ms
TE	30.0 ms
Multi-band accel. factor	4
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	55 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	260
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	110
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1748 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	110
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	5020 us
Single-band images	Off
MB LeakBlock kernel	Off

MB RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\MB_bold_2mm_1TR_MB4iPAT2_PtoA

TA: 0:22 PAT: 2 Voxel size: 2.0×2.0×2.0 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	60
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	P >> A
Rotation	178.90 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1000 ms
TE	30.0 ms
Multi-band accel. factor	4
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	55 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	110
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1748 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	110
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	5020 us
Single-band images	Off
MB LeakBlock kernel	Off

MB RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\cmrr_mbep2d_diff

TA: 5:35 PAT: 2 Voxel size: 2.2×2.2×2.2 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_diff

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	66
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	A >> P
Rotation	-1.10 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.20 mm
TR	4300 ms
TE	96.0 ms
Multi-band accel. factor	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 mm

Physio

1st Signal/Mode	None

Diff

Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm²
Diff. weighted images	On
Trace weighted images	On
Average ADC maps	On
Individual ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	40
Diff. directions	72

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	100
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Diffusion Scheme	Monopolar

Single-band images	Off
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\cmrr_mbep2d_diff_PtoA

TA: 5:35 PAT: 2 Voxel size: 2.2×2.2×2.2 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_diff

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	66
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	P >> A
Rotation	178.90 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.20 mm
TR	4300 ms
TE	96.0 ms
Multi-band accel. factor	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 mm

Physio

1st Signal/Mode	None

Diff

Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm²
Diff. weighted images	On
Trace weighted images	On
Average ADC maps	On
Individual ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	40
Diff. directions	72

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	100
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Diffusion Scheme	Monopolar

Single-band images	Off
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00

SIEMENS MAGNETOM TrioTim syngo MR B17

\\USER\Rooney\NAIMS\V17_20150527\cmrr_mbep2d_diff_6b0_1b2k_PtoA

TA: 0:56 PAT: 2 Voxel size: 2.2×2.2×2.2 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_diff

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	66
Dist. factor	0 %
Position	R1.5 A24.2 H40.0
Orientation	T > C-9.3 > S1.0
Phase enc. dir.	P >> A
Rotation	178.90 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.20 mm
TR	4300 ms
TE	96.0 ms
Multi-band accel. factor	2
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	100
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Single-shot
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
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	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	R1.5 A24.2 H40.0
! Orientation	T > C-9.3 > S1.0
! Rotation	88.90 deg
! A >> P	256 mm
! R >> L	192 mm
! F >> H	96 mm

Physio

1st Signal/Mode	None

Diff

Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm²
Diff. weighted images	On
Trace weighted images	Off
Average ADC maps	Off
Individual ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40
Diff. directions	7

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.69 ms
EPI factor	100
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Diffusion Scheme	Monopolar

Single-band images	Off
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00