

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\h\preStudy_Falk07012015\AAHScout_32ch

TA: 0:17

PAT: 3

Voxel size: 1.6x1.6x1.6 mm

Rel. SNR: 1.00

SIEMENS: AALScout

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	L0.0 A31.7 F34.4
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0 deg
AutoAlign	Head
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	4.00 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	A32

Contrast

Flip angle	16.0 deg
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution

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

Elliptical filter

Off

Geometry

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

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Off
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	L0.0 A31.7 F34.4
Orientation	Sagittal
Rotation	0.00 deg
F >> H	260 mm
A >> P	260 mm
R >> L	205 mm

Inline

Time to center	7.4 s
MapIt	None
Contrasts	1

Sequence

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Bandwidth	550 Hz/Px
RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\DZNE\preStudy_Falk07012015\gre_scout

TA: 0:14 PAT: Off Voxel size: 2.2x2.2x5.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	5
Dist. factor	300 %
Position	L0.0 A24.4 F20.7
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	L0.0 A24.4 F20.7
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	L0.0 A24.4 F20.7
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	100.0 ms
TE	4.00 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	25 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off

Interpolation Off

PAT mode None

Image Filter Off

Distortion Corr. On

Mode 2D

Unfiltered images Off

Prescan Normalize Off

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

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	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
<hr/>	
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
<hr/>	
MapIt	None
Contrasts	1

Sequence

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	260 Hz/Px
Flow comp.	No
<hr/>	
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\hpattern\hDZNE\preStudy_Falk07012015\b1map_658

TA: 0:57

Voxel size: 3.9x3.9x5.0 mm

Rel. SNR: 1.00

USER: b1map_658

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

AutoAlign	Head > Brain
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

Routine

Slice group 1	
Slices	3
Dist. factor	150 %
Position	R2.0 A18.2 F13.5
Orientation	T > C-14.1
Phase enc. dir.	A >> P
Rotation	0.00 deg
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5 mm
TR	800 ms
TE 1	14 ms
TE 2	14 ms
Averages	1
Filter	None
Coil elements	A32

Composing

Sequence

Contrasts	2
Bandwidth	260.416667 Hz/Px
T1 Compensation	Mean T1
Mean T1	500.0 ms
Angles	1
Amplitude Weighting	Linear
Scale Bar	Enabled
Raw Data	Disabled

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 %
Raw filter	Off

Geometry

Series	Interleaved
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\DZNE\preStudy_Falk07012015\Head_shim_3D_64slc_dTE2.04ms

TA: 1:23 PAT: Off Voxel size: 2.0x2.0x2.0 mm Rel. SNR: 1.00 USER: CV_shim_452B

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	L2.3 A22.1 F17.2
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	89.77 deg
Auto	Off
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	96
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.00 mm
TR	850.00 ms
TE 1	2.04 ms
TE 2	4.12 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	A32

Contrast

Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Restore magn.	Off
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry

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

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	Head > Brain
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	L2.3 A22.1 F17.2
Orientation	Transversal
Rotation	89.77 deg
A >> P	256 mm
R >> L	192 mm
F >> H	192 mm

Physio

1st Signal/Mode	None
Segments	96
Tagging	None
Dark blood	Off
Cine	Off
Inline ventricular function	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

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	2
Bandwidth 1	781 Hz/Px
Bandwidth 2	781 Hz/Px
Flow comp. 1	No
Flow comp. 2	No
Readout mode	Monopolar
Optimization	None
Allowed delay	0 s
Echo spacing	6.3 ms
Sequence type	Gre
<hr/>	
Define	Shots
Shots per slice	1
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
Flip angle mode	Constant
RF spoiling	On
Phase Enc. Rewinder	On

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\DZNE\preStudy_Falk07012015\T1_0.45iso_ON

TA: 12:11

PAT: 2

Voxel size: 0.5x0.5x0.4 mm

Rel. SNR: 1.00

USER: ps_tfl_xpace

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L2.0 A32.4 F31.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	416
FoV read	225 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR	2820 ms
TE	2.82 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Magn. preparation	Non-sel. IR
TI	1050 ms
Flip angle	5 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	496
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off

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

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	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

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
Elliptical scanning	Off
Asymmetric echo	Allowed
Bandwidth	170 Hz/Px
Flow comp.	No
Echo spacing	8.5 ms
RF pulse type	Fast

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
<hr/>	
Disable Reco with ICE	Off
Required HD Space	20553 MByte
XPACE MoCo	per Line
Position Locking	Create New
Fast Wake Up Time	2000 us
Slow Wake Up Time	200000 us
Xpace Trace Level	1
Reject Mode	Off
Max Offset	5.00 mm
Max Rotation	5.0 deg
Max rescan number	16
Trans. comp. mode	Off
Pace Source	MPT

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\DZNE\preStudy_Falk07012015\T2_0.45iso_ON

TA: 22:53 PAT: 3 Voxel size: 0.4x0.4x0.5 mm Rel. SNR: 1.00 USER: herbstm_tse_vfl_x2pace

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	L3.4 A26.3 F28.3
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	352
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR	5200 ms
TE	175 ms
Averages	1.0
Concatenations	1
Filter	None
Coil elements	A32

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	448
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	33
Accel. factor 3D	1
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Raw filter	Off
Elliptical filter	Off

Geometry

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

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	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

Inline

Sequence

Introduction	Off
Dimension	3D
Bandwidth	531 Hz/Px
Flow comp.	No
Allowed delay	0 s
Echo spacing	4.48 ms
Adiabatic-mode	Off
Define	Echo trains
Turbo factor	173
Slice turbo factor	1
Echo trains per slice	1
Echo train duration	556
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Fast Wake Up Time	2000 us
Slow Wake Up Time	200000 us
Xpace Trace Level	1
CorrectionLevel	1

Position Locking
Pace Source

Use/Create
MPT

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\hmatter\DZNE\preStudy_Falk07012015\SWI_0.33x0.33x1.25_On

TA: 7:28

PAT: 2

Voxel size: 0.3x0.3x1.3 mm

Rel. SNR: 1.00

USER: mz_gre_xpace

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	R0.7 A21.0 F34.0
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	25.0 %
Slices per slab	96
FoV read	200 mm
FoV phase	82.9 %
Slice thickness	1.25 mm
TR	18 ms
TE	9.09 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

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

Resolution

Base resolution	608
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	32
Accel. factor 3D	1
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off

Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	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

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	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

Composing

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	120 Hz/Px
Flow comp.	Yes
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

RF spoiling	On
Pace Source	MPT
XPACE MoCo	per Line
Position Locking	Use/Create
Fast Wake Up Time	2500 us
Slow Wake Up Time	200000 us
Xpace Trace Level	0
Tracking Filter	No Filter