

SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\TA\_VB17\ChrisG\TRT\_7\AAHScout\_24ch

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	On
Load images to graphic segments	On
Auto open inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	Isocenter
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	A24

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

V24	Off
A24	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
Auto Coil Select	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	220.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

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\TA\_VB17\ChrisG\TRT\_7T\localizer

TA: 0:13 PAT: Off Voxel size: 1.1x1.0x7.0 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	Elliptical filter
Coil elements	V24

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
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
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

V24	On
A24	Off
-----	
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	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

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

SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

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

SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\TA\_VB17\ChrisG\TRT\_7T\MP2RAGE\_5\_3\_TR5000\_iPAT=2

TA: 10:57 PAT: 2 Voxel size: 0.7x0.7x0.7 mm Rel. SNR: 1.00 USER: mp2rage\_wip602B

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	L1.0 A43.2 F7.9
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	240
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	5000 ms
TE	2.45 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A24

Contrast

Magn. preparation	Non-sel. IR
TI 1	900 ms
TI 2	2750 ms
Flip angle 1	5 deg
Flip angle 2	3 deg
Fat suppr.	Water excit. normal
Water suppr.	None
2nd Inversion-Contrast	On
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
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

V24	Off
A24	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	Head > Brain
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	L1.0 A43.2 F7.9
Orientation	Sagittal
Rotation	0.00 deg
F >> H	224 mm
A >> P	224 mm
R >> L	168 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

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Asymmetric echo	Allowed
Contrasts	1
Bandwidth	250 Hz/Px
Flow comp.	No
Echo spacing	6.8 ms
-----	
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
-----	
FFT Scale Factor	100 %
Line/Partition Swap	Off
Homodyne Phase Filter	Off
Flat Image	On
T1 Map	On
Division Image	Off
ExtInvPulseOn	On
OffResFreqInv	0
Invflipangle	1700

SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\TA\_VB17\ChrisG\TRT\_7T\fieldmap\_DeltaTE1p02ms\_3p0\_35sl\_axial

TA: 3:17      Voxel size: 3.0x3.0x3.0 mm      Rel. SNR: 1.00      SIEMENS: gre\_field\_mapping

Properties

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

Routine

Slice group 1	
Slices	35
Dist. factor	0 %
Position	L0.9 A29.2 H38.2
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	1500 ms
TE 1	6.00 ms
TE 2	7.02 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A24

Contrast

MTC	Off
Flip angle	72 deg
Fat suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution

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

Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	None
Table position	H

Table position      0 mm  
 Inline Composing      Off

System

V24	Off
A24	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	Head > Brain
Auto Coil Select	Off
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	280.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.9 A29.2 H38.2
Orientation	Transversal
Rotation	0.00 deg
R >> L	192 mm
A >> P	192 mm
F >> H	105 mm

Composing

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	256 Hz/Px
Flow comp.	Yes
RF pulse type	Normal
Gradient mode	Whisper
RF spoiling	On

SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\TA\_VB17\ChrisG\TRT\_7T\1p5\_TR3s\_TE17ms\_p3\_6/8\_axial\_676b

TA: 15:15 PAT: 3 Voxel size: 1.5x1.5x1.5 mm Rel. SNR: 1.00 USER: ep2d\_bold\_sine\_676b

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	70
Dist. factor	0 %
Position	L2.3 A38.5 H6.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	1.5 mm
TR	3000 ms
TE	17 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	A24

Contrast

MTC	Off
Flip angle	70 deg
Fat suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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

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

System

V24	Off
A24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
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	L2.3 A38.5 H6.0
! Orientation	Transversal
! Rotation	0.00 deg
! R >> L	192 mm
! A >> P	192 mm
! F >> H	60 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	16
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Active
Meas[10]	Active
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

Sequence

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Introduction	Off
Bandwidth	1116 Hz/Px
Echo spacing	1 ms
-----	
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
-----	
iPAT reference mode	Multi Shot
iPAT ref. averages	1
Readout type	Trapezoidal
Phase correction	Local
FatSat flip angle	110 deg
RF pulse type	Sinc
Excitation length	3072 us
BW-Time product	5.22
FFT factor	1.00



SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\TA\_VB17\ChrisG\TRT\_7T\6/8\_40sli\_TE26\_0p75\_axial

TA: 10:06 PAT: Off Voxel size: 0.8x0.8x0.8 mm Rel. SNR: 1.00 USER: ep2d\_bold\_492

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	40
Dist. factor	0 %
Position	R0.1 A51.6 H38.3
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	150 mm
FoV phase	30.0 %
Slice thickness	0.75 mm
TR	4000 ms
TE	26 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A24

Contrast

MTC	Off
Flip angle	70 deg
Fat suppr.	None
Saturation Mode	skewed
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	200
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Descending
Sat. region 1	
Thickness	144 mm

Position	L2.0 P42.1 H9.4
Orientation	C > T1.3 > S-1.2
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V24	Off
A24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
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	L0.9 A29.2 H38.2
! Orientation	T > C-13.3
! Rotation	0.00 deg
! R >> L	192 mm
! A >> P	192 mm
! F >> H	105 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	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	6
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Active
Meas[6]	Active
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

Sequence

Introduction	On
Bandwidth	1042 Hz/Px
Free echo spacing	Off
Echo spacing	1.1 ms
EPI factor	60
RF pulse type	Normal
Gradient mode	Fast*
Exc. pulse scale factor	152 %

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

FFT scale factor	100 %
PMU Recording	Off