

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\RenzoHuber\Aneurin\_Playground\S1\hcp\_v2\_mbep2d\_diff\_AP\_76\_b1800

TA: 1:42 PAT: 3 Voxel size: 2.9x2.9x3.1 mm Rel. SNR: 1.00 UNKNOWN:

## 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	7
Dist. factor	0 %
Position	R2.7 A27.7 H5.1
Orientation	T > C-15.5
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	3.10 mm
TR	1000 ms
TE	60.0 ms
Averages	1
Multi-band accel. factor	1
Filter	None
Coil elements	A32

## Contrast

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

## Resolution

Base resolution	68
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	42
Reference scan mode	GRE
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

V32 Off  
A32 On

Positioning mode FIX  
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 220.000 V  
Adjustment Tolerance Auto  
Adjust volume  
! Position L0.0 A25.5 H13.0  
! Orientation Transversal  
! Rotation 0.00 deg  
! R >> L 200 mm  
! A >> P 200 mm  
! F >> H 87 mm

## Physio

1st Signal/Mode None

## Diff

Diffusion mode Free  
Diff. weightings 1  
b-value 1800 s/mm<sup>2</sup>  
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 92

## Sequence

Introduction On  
Bandwidth 1794 Hz/Px  
Free echo spacing Off  
Echo spacing 0.66 ms

SIR accel. factor 1  
EPI factor 68  
Gradient mode Fast  
RF spoiling Off

Excite pulse duration 5120 us  
Refocus pulse duration 10240 us  
Slice multiplier 2  
Fake MB factor for SB 1

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Diffusion Scheme	Monopolar
SENSE1 coil combine	On
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
User defined diff. delta	Off
FFT scale factor	1.00
Diff. spoil factor	3.0
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\RenzoHuber\Aneurin\_Playground\S1\hcp\_v2\_mbep2d\_diff\_AP\_76\_b5

TA: 1:42 PAT: 3 Voxel size: 2.9x2.9x3.1 mm Rel. SNR: 1.00 UNKNOWN:

## 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	7
Dist. factor	0 %
Position	R2.7 A27.7 H5.1
Orientation	T > C-15.5
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	3.10 mm
TR	1000 ms
TE	60.0 ms
Averages	1
Multi-band accel. factor	1
Filter	None
Coil elements	A32

## Contrast

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

## Resolution

Base resolution	68
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	42
Reference scan mode	GRE
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

V32 Off  
A32 On  
Positioning mode FIX  
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 220.000 V  
Adjustment Tolerance Auto  
Adjust volume  
! Position L0.0 A25.5 H13.0  
! Orientation Transversal  
! Rotation 0.00 deg  
! R >> L 200 mm  
! A >> P 200 mm  
! F >> H 87 mm

## Physio

1st Signal/Mode None

## Diff

Diffusion mode Free  
Diff. weightings 1  
b-value 5 s/mm<sup>2</sup>  
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 92

## Sequence

Introduction On  
Bandwidth 1794 Hz/Px  
Free echo spacing Off  
Echo spacing 0.66 ms  
SIR accel. factor 1  
EPI factor 68  
Gradient mode Fast  
RF spoiling Off  
Excite pulse duration 5120 us  
Refocus pulse duration 10240 us  
Slice multiplier 2  
Fake MB factor for SB 1

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Diffusion Scheme	Monopolar
SENSE1 coil combine	On
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
User defined diff. delta	Off
FFT scale factor	1.00
Diff. spoil factor	3.0
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\RenzoHuber\Aneurin\_Playground\S1\t1\_mprage\_iso0.7\_angulated

TA: 7:47 PAT: 3 Voxel size: 0.7x0.7x0.7 mm Rel. SNR: 1.00 SIEMENS: tfl

## Properties

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

## Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	R2.7 A27.7 H5.1
Orientation	T > C-15.5
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	256
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	3100 ms
TE	2.42 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

## Contrast

Magn. preparation	Non-sel. IR
TI	1500 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	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	64
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	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
AutoAlign	---
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 A25.5 H13.0
! Orientation	Transversal
! Rotation	0.00 deg
! R >> L	200 mm
! A >> P	200 mm
! F >> H	87 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	180 Hz/Px
Flow comp.	No

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

Echo spacing	7.2 ms
RF pulse type	Normal
Gradient mode	Normal*
Excitation	Non-sel.
RF spoiling	On

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

\\USER\RenzoHuber\Aneurin\_Playground\S1\VASO\_thick\_slices\_BA3b\_rest

TA: 22:49 PAT: 3 Voxel size: 0.8x0.8x0.9 mm Rel. SNR: 1.00 UNKNOWN:

## 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	R30.6 A19.5 H34.0
Orientation	T > S26.1 > C-3.3
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	9.1 %
Slices per slab	22
FoV read	122.0 mm
FoV phase	133.3 %
Slice thickness	0.90 mm
TR	2269.70 ms
TE	25 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

## Contrast

Perfusion mode	SS-SI VASO
TI2	650 ms
TI1	50 ms
TI1s	50 ms
Flip angle	4 deg
Fat suppr.	Fat sat.
Fat sat. mode	Weak
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	603
Delay in TR	0 ms
Multiple series	Off
Perfusion mode	PICORE Q2T
Inversion time 1	50 ms
Saturation stop time	50 ms
Inversion time 2	650.0 ms
Flow limit	100 cm/s

## Resolution

Base resolution	162
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	45
Accel. factor 3D	1
Ref. lines 3D	24
Reference scan mode	Separate

Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off
Hamming	Off

## Geometry

Multi-slice mode	Interleaved
Series	Ascending
Special sat.	Parallel F
Gap	25.0 mm
Thickness	100 mm
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	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	250.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	R27.6 A22.2 H30.4
! Orientation	T > C-1.5
! Rotation	90.00 deg
! A >> P	185 mm
! R >> L	112 mm
! F >> H	56 mm

## Physio

1st Signal/Mode	None
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## BOLD

Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1064 Hz/Px
Free echo spacing	Off
Echo spacing	1.04 ms
EPI factor	216

# SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
<hr/>	
Ampl	150
BWDTH	150 3.1kHz
ph.skip 4 Robert (the one)	1
are you Renzo?	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	3.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	1900 us
RF BWTP	25.0
Renzo: Delta TI	67 ms
EFFECTIVE TR	54472 ms
PatPartitions	24
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	162
FlashRef BW	100 Hz/px
FlashRef TE	6400 us
FlashRef FA	5 deg
use CAIPI	Off