

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\3DEPI_piloting\BP_ep3D_bold_multiecho_new_SH

TA: 0:42 PAT: 8 Voxel size: 1.0x1.0x0.9 mm Rel. SNR: 1.00 USER: BP_ep3D_bold_multiecho_SH

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	112
FoV read	215 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	44 ms
TE	20 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	T1

Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	8
Ref. lines PE	96
Accel. factor 3D	1
Ref. lines 3D	24
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

T1	On
M2	Off
B4	Off
M3	Off
V32	Off
Positioning mode	REF
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	200.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	215 mm
A >> P	215 mm
F >> H	101 mm

Physio

1st Signal/Mode	None
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BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1062 Hz/Px
Free echo spacing	Off
Echo spacing	1.09 ms
EPI factor	224
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

FFT scale	1.00
z shim	0.00 mT/m*ms
RF duration	2560 us
RF BWTP	5.2
EFFECTIVE TR	4928 ms
PatPartitions	112
EPI phase correction	local
PAT refscan mode	segm LIN->PAR
use CAIPI	On
CAIPI shift kz	0
CAIPI shift ky	4
dummy prepscan time	3 s
silent gap	0.000 s

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\3DEPI_piloting\BP_ep3D_bold_multiecho_original_SH

TA: 7.6 s PAT: Off Voxel size: 7.8x7.8x1.0 mm Rel. SNR: 1.00 USER: BP_ep3D_bold_multiecho_SH

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	32
FoV read	500 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	100 ms
TE	52 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	T1

Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	64
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
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	Interleaved

Special sat. None

Table position H
Table position 0 mm
Inline Composing Off

System

T1 On
M2 Off
B4 Off
M3 Off
V32 Off

Positioning mode REF
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 Isocenter
Orientation Transversal
Rotation 0.00 deg
R >> L 500 mm
A >> P 500 mm
F >> H 32 mm

Physio

1st Signal/Mode None

BOLD

Motion correction Off
Spatial filter Off

Sequence

Introduction Off
Dimension 3D
Reordering Linear
Contrasts 1
Bandwidth 752 Hz/Px
Free echo spacing Off
Echo spacing 1.4 ms
EPI factor 64
RF pulse type Normal
Gradient mode Fast
Excitation Slab-sel.
RF spoiling On
use Ernst angle Off
Maxwell Correction Off
log physio files Off
FFT scale 1.00
z shim 0.00 mT/m*ms
RF duration 2560 us
RF BWTP 5.2
EFFECTIVE TR 3200 ms
PatPartitions 32

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

EPI phase correction	local
dummy prepscan time	3 s
silent gap	0.000 s

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\3DEPI_piloting\BP_ep3D_bold_ME_modv1_SH_FOV215_grappa8_tr44_te20_p96_pf

TA: 0:23 PAT: 8 Voxel size: 1.0x1.0x0.9 mm Rel. SNR: 1.00 USER: BP_ep3D_bold_multiecho_SH

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	R1.4 A27.6 F12.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	112
FoV read	215 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	44 ms
TE	20 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Flip angle	13 deg
Fat suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	8
Ref. lines PE	96
Accel. factor 3D	1
Ref. lines 3D	24
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

T1	On
M2	On
B4	On
M3	On
V32	Off
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R1.4 A27.6 F12.8
Orientation	Transversal
Rotation	0.00 deg
R >> L	215 mm
A >> P	215 mm
F >> H	101 mm

Physio

1st Signal/Mode	None
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BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1062 Hz/Px
Free echo spacing	Off
Echo spacing	1.09 ms
EPI factor	224
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

FFT scale	1.00
z shim	0.00 mT/m*ms
RF duration	2560 us
RF BWTP	5.2
EFFECTIVE TR	4928 ms
PatPartitions	112
EPI phase correction	local
PAT refscan mode	segm LIN->PAR
use CAIPI	Off
dummy prepscan time	3 s
silent gap	0.000 s

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\3DEPI_piloting\BP_ep3D_bold_ME_SH_p8mmiso_grappa8_tr44_tr1584_te20_p96_t\$				
TA: 1:02	PAT: 8	Voxel size: 0.8x0.8x0.8 mm	Rel. SNR: 1.00	USER: BP_ep3D_bold_multiecho_SH

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	R1.4 A27.6 F12.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	36
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	44 ms
TE	20 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Flip angle	13 deg
Fat suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	8
Ref. lines PE	96
Accel. factor 3D	1
Ref. lines 3D	24
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

T1	On
M2	On
B4	On
M3	On
V32	Off
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	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R1.4 A27.6 F12.8
Orientation	Transversal
Rotation	0.00 deg
R >> L	180 mm
A >> P	180 mm
F >> H	29 mm

Physio

1st Signal/Mode	None
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BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Linear
Contrasts	1
Bandwidth	1062 Hz/Px
Free echo spacing	Off
Echo spacing	1.11 ms
EPI factor	224
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

FFT scale	1.00
z shim	0.00 mT/m*ms
RF duration	2560 us
RF BWTP	5.2
EFFECTIVE TR	1584 ms
PatPartitions	36
EPI phase correction	local
PAT refscan mode	segm LIN->PAR
use CAIPI	Off
dummy prepsan time	3 s
silent gap	0.000 s

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\3DEPI_piloting\VASO_116- Joseph modified for STG

TA: 4.5 s PAT: 3 Voxel size: 0.8x0.8x0.8 mm Rel. SNR: 1.00 USER: VASO_116

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	10.0 %
Slices per slab	20
FoV read	210.0 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	2258.10 ms
TE	26 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Perfusion mode	Picore Q2TIPS
T12	700 ms
T11	50 ms
T11s	50 ms
Flip angle	4 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	2
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	700.0 ms
Flow limit	100 cm/s

Resolution

Base resolution	262
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	7/8
Interpolation	Off

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	96
Accel. factor 3D	1
Ref. lines 3D	8
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

T1	On
M2	On
B4	On
M3	On
V32	Off
Positioning mode	REF
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	210 mm
A >> P	210 mm
F >> H	16 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	1192 Hz/Px
Free echo spacing	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Echo spacing	0.94 ms
EPI factor	262
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Ampl	100
BWDTH	150 3.1kHz
ph.skip 4 Robert (the one)	30
use Ernst angle	Off
Maxwell Correction	Off
log physio files	Off
FFT scale	1.00
dummy prepscan time	3 s
z shim	0.00 mT/m*ms
RF duration	2000 us
RF BWTP	25.0
Renzo: Delta TI	79 ms
EFFECTIVE TR	42903 ms
PatPartitions	19
EPI phase correction	local
PAT refscan mode	Flash
FlashRef BaseRes	262
FlashRef BW	1000 Hz/px
FlashRef TE	4800 us
FlashRef FA	5 deg
use CAIPI	Off

Table of contents

\\USER

Feinberglab
Jen

3DEPI_piloting

BP_ep3D_bold_multiecho_new_SH

BP_ep3D_bold_multiecho_original_SH

BP_ep3D_bold_ME_modv1_SH_FOV215_grappa8_tr44_te20_p96_pf68

BP_ep3D_bold_ME_SH_p8mmiso_grappa8_tr44_tr1584_te20_p96_tSNR

VASO_116- Joseph modified for STG