SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_grase_IV_Regular_VASO_SH

TA: 10:00 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_grase_IV_CS_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	84.0 mm
FoV phase	25.0 %
Slice thickness	1.50 mm
TR	3000 ms
TE	37.7 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	160 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Pause after meas.	0.0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	5/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	12 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Echo spacing	1 ms
Turbo factor	5
EPI factor	28
RF pulse type	Normal
Gradient mode	Fast
refocussing type	sinc 2560
BIR4: 2nd segm phase	338
BIR4: duration	5120
excite duration	2560
refoc duration	2560
excite BWTP	12.0
refoc BWTP	8.0
actual ETL	5
phase encoding	ON
Maxwell compensation	Off
ICE program	single

Time Delay [us]	1280
Regular or CS	Regular
Variable Flip Angle 01	180
Variable Flip Angle 02	180
Variable Flip Angle 03	180
Variable Flip Angle 04	180
Variable Flip Angle 05	180
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Crusher Gr	40000

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_GRASE_VASO_Short

TA: 10:00 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_GRASE_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	36
FoV read	84.0 mm
FoV phase	25.0 %
Slice thickness	1.50 mm
TR	1500 ms
TE	24.02 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	None
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	400
Pause after meas.	0.0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	Off
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	22 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	54 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1144 Hz/Px
Echo spacing	1.2 ms
Turbo factor	36
EPI factor	12
RF pulse type	Normal
Gradient mode	Fast
refocussing type	variable sinc
flip angle excit	90
phase encoding	ON
Maxwell compensation	Off
ICE program	single
excite duration	2560
refoc duration	3840
excite BWTP	12.0
refoc BWTP	8.0
Variable Flip Angle 01	180
Variable Flip Angle 02	180
Variable Flip Angle 03	180

Variable Flip Angle 04	180
Variable Flip Angle 05	180
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Variable Flip Angle 15	180
Variable Flip Angle 16	180
Variable Flip Angle 17	180
Variable Flip Angle 18	180
Variable Flip Angle 19	180
Variable Flip Angle 20	180
Regular or CS	CS
actual ETL	14
Which areas?	Motor Cortex
Blood Supp.	On
DANTE FA	9
DANTE TRAINS1	200
DANTE TRAINS2	0
DANTE GRAD	20
DANTE ESP	1.0

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_GRASE_VASO_Long

TA: 10:00 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_GRASE_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	36
FoV read	84.0 mm
FoV phase	25.0 %
Slice thickness	1.50 mm
TR	1500 ms
TE	24.02 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	None
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	400
Pause after meas.	0.0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	Off
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	22 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	54 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1144 Hz/Px
Echo spacing	1.2 ms
Turbo factor	36
EPI factor	12
RF pulse type	Normal
Gradient mode	Fast
refocussing type	variable sinc
flip angle excit	90
phase encoding	ON
Maxwell compensation	Off
ICE program	single
excite duration	2560
refoc duration	3840
excite BWTP	12.0
refoc BWTP	8.0
Variable Flip Angle 01	180
Variable Flip Angle 02	180
Variable Flip Angle 03	180

Variable Flip Angle 04	180
Variable Flip Angle 05	180
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Variable Flip Angle 15	180
Variable Flip Angle 16	180
Variable Flip Angle 17	180
Variable Flip Angle 18	180
Variable Flip Angle 19	180
Variable Flip Angle 20	180
Regular or CS	CS
actual ETL	14
Which areas?	Motor Cortex
Blood Supp.	On
DANTE FA	9
DANTE TRAINS1	200
DANTE TRAINS2	500
DANTE GRAD	20
DANTE ESP	1.0

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_GRASE_VASO_BloodNull_IR100ms

TA: 0:00 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_GRASE_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	84 mm
FoV phase	25.0 %
Slice thickness	1.5 mm
TR	3000 ms
TE	37.66 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	100 ms
Flip angle	160 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Pause after meas.	0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	5/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	12 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Turbo factor	5
EPI factor	28
RF pulse type	Normal
Gradient mode	Fast
refocussing type	sinc 2560
flip angle excit	12
phase encoding	
Maxwell compensation	Off
ICE program	Mosaic
excite duration	2560
refoc duration	6
excite BWTP	8
refoc BWTP	0
Variable Flip Angle 01	0
Variable Flip Angle 02	1
Variable Flip Angle 03	1

Variable Flip Angle 04	2300
Variable Flip Angle 05	0
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Variable Flip Angle 15	180
Variable Flip Angle 16	180
Variable Flip Angle 17	180
Variable Flip Angle 18	180
Variable Flip Angle 19	180
Variable Flip Angle 20	40000
Regular or CS	Regular
actual ETL	0
Which areas?	Visual Cortex
Blood Supp.	Off
DANTE FA	0
DANTE TRAINS1	0
DANTE TRAINS2	0
DANTE GRAD	0
DANTE ESP	0

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_GRASE_VASO_BloodNull_IR200ms

TA: 0:00 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_GRASE_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	84 mm
FoV phase	25.0 %
Slice thickness	1.5 mm
TR	3000 ms
TE	37.66 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	200 ms
Flip angle	160 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	200
Pause after meas.	0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	5/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	12 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Turbo factor	5
EPI factor	28
RF pulse type	Normal
Gradient mode	Fast
refocussing type	sinc 2560
flip angle excit	12
phase encoding	
Maxwell compensation	Off
ICE program	Mosaic
excite duration	2560
refoc duration	6
excite BWTP	8
refoc BWTP	0
Variable Flip Angle 01	0
Variable Flip Angle 02	1
Variable Flip Angle 03	1

Variable Flip Angle 04	2200
Variable Flip Angle 05	0
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Variable Flip Angle 15	180
Variable Flip Angle 16	180
Variable Flip Angle 17	180
Variable Flip Angle 18	180
Variable Flip Angle 19	180
Variable Flip Angle 20	40000
Regular or CS	Regular
actual ETL	0
Which areas?	Visual Cortex
Blood Supp.	Off
DANTE FA	0
DANTE TRAINS1	0
DANTE TRAINS2	0
DANTE GRAD	0
DANTE ESP	0

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_grase_IV_VFA_VASO_SH

TA: 12:03 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_grase_IV_CS_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	84.0 mm
FoV phase	25.0 %
Slice thickness	1.50 mm
TR	3000 ms
TE	37.7 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	160 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	241
Pause after meas.	0.0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	5/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	12 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Echo spacing	1 ms
Turbo factor	5
EPI factor	28
RF pulse type	Normal
Gradient mode	Fast
refocussing type	variable sinc
BIR4: 2nd segm phase	338
BIR4: duration	5120
excite duration	2560
refoc duration	2560
excite BWTP	12.0
refoc BWTP	8.0
actual ETL	5
phase encoding	ON
Maxwell compensation	Off
ICE program	single

Time Delay [us]	1280
Regular or CS	Regular
Variable Flip Angle 01	119
Variable Flip Angle 02	72
Variable Flip Angle 03	71
Variable Flip Angle 04	86
Variable Flip Angle 05	119
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Crusher Gr	40000

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_grase_IV_CS_VASO_SH_24SL

TA: 12:03 PAT: Off Voxel size: 0.8×0.8×1.5 mm Rel. SNR: 1.00 USER: BP_grase_IV_CS_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	24
FoV read	84.0 mm
FoV phase	25.0 %
Slice thickness	1.50 mm
TR	3000 ms
TE	27.5 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	241
Pause after meas.	0.0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	Off
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	84 mm
A >> P	21 mm
F >> H	36 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Echo spacing	1.2 ms
Turbo factor	24
EPI factor	16
RF pulse type	Normal
Gradient mode	Fast
refocussing type	variable sinc
BIR4: 2nd segm phase	338
BIR4: duration	5120
excite duration	2560
refoc duration	2560
excite BWTP	12.0
refoc BWTP	8.0
actual ETL	10
phase encoding	ON
Maxwell compensation	Off
ICE program	single

Time Delay [us]	1200
Regular or CS	CS
Variable Flip Angle 01	82
Variable Flip Angle 02	47
Variable Flip Angle 03	43
Variable Flip Angle 04	42
Variable Flip Angle 05	45
Variable Flip Angle 06	49
Variable Flip Angle 07	57
Variable Flip Angle 08	66
Variable Flip Angle 09	82
Variable Flip Angle 10	130
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Crusher Gr	40000

\\USER\Feinberglab\Suhyung\GRASE VASO w/ CS\BP_grase_IV_CS_VFA_VASO_GMS_SH

TA: 0:00 PAT: Off Voxel size: 0.8×0.8×0.8 mm Rel. SNR: 1.00 USER: BP_grase_IV_CS_VASO_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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	24
FoV read	89.6 mm
FoV phase	25.0 %
Slice thickness	0.8 mm
TR	3000 ms
TE	27 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	Non-sel. IR
TI	380 ms
Flip angle	160 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	240
Pause after meas.	0 s
Multiple series	Off

Resolution

Base resolution	112
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	20 mm
Position	Isocenter
Orientation	Coronal
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	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	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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	90 mm
A >> P	23 mm
F >> H	20 mm

Physio

1st Signal/Mode	None

Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	2
Bandwidth	1144 Hz/Px
Turbo factor	18
EPI factor	16
RF pulse type	Normal
Gradient mode	Fast
refocussing type	variable sinc
BIR4: 2nd segm phase	338
BIR4: duration	5120
excite duration	2560
refoc duration	2560
excite BWTP	12
refoc BWTP	8
actual ETL	10
phase encoding	ON
Maxwell compensation	Off
ICE program	single
Time Delay [us]	1280

Regular or CS	CS
Variable Flip Angle 01	82
Variable Flip Angle 02	47
Variable Flip Angle 03	43
Variable Flip Angle 04	42
Variable Flip Angle 05	45
Variable Flip Angle 06	49
Variable Flip Angle 07	57
Variable Flip Angle 08	66
Variable Flip Angle 09	82
Variable Flip Angle 10	130
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
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