\\USER\Feinberglab\Suhyung\SMVMS\gre_PC_SH_goldstandard

TA: 8:40   PAT: Off   Voxel size: 1.1×1.1×5.0 mm   Rel. SNR: 1.00   USER: gre_PC_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

Slice group 1	
Slices	1
Dist. factor	800 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	800 %
Position	L0.0 P0.0 H45.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	800 %
Position	L0.0 P0.0 H90.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR 1	14.0 ms
TR 2	10.0 ms
TE	5.20 ms
Averages	1
Concatenations	3
Filter	None
Coil elements	B4;M2,3;T1

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Saturation mode	Standard
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	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	150.000 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	Pulse/Trigger
Average cycle	No Signal ms
Captured cycle	-not set-
Acquisition window	900 ms
Trigger pulse	1
Trigger delay	0 ms
Segments	1
Phases	16
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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	2000 us
Slice Distance	45 mm
VENC	80 cm/s
FOV Shift: FOV/	1
Random Undersampling	Off
Calibration Mode	Off

\\USER\Feinberglab\Suhyung\SMVMS\localizer_100V_newcoil

TA: 0:27   PAT: Off   Voxel size: 1.2×1.1×3.0 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	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	10.0 ms
TE	3.00 ms
Averages	1
Concatenations	15
Filter	None
Coil elements	L1-8;R1-8;T1-8

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	10 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	6/8
Interpolation	On
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

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

T1	On
T2	On
T3	On
T4	On
T5	On
T6	On
T7	On
T8	On
L1	On
L2	On
L3	On
L4	On
L5	On
L6	On
L7	On
L8	On
R1	On
R2	On
R3	On
R4	On
R5	On
R6	On
R7	On
R8	On
Positioning mode	FIX
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	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	50.000 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
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	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Feinberglab\Suhyung\SMVMS\localizer_100V_newcoil_Calibration

TA: 9.2 s   PAT: Off   Voxel size: 1.1×1.1×5.0 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	1
Dist. factor	700 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	700 %
Position	L0.0 P0.0 H40.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	700 %
Position	L0.0 P0.0 H80.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 4	
Slices	1
Dist. factor	700 %
Position	L0.0 P0.0 H120.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	10.0 ms
TE	3.03 ms
Averages	1
Concatenations	4
Filter	None
Coil elements	L1-8;R1-8;T1-8

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
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	Off

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

T1	On
T2	On
T3	On
T4	On
T5	On
T6	On
T7	On
T8	On
L1	On
L2	On
L3	On
L4	On
L5	On
L6	On
L7	On
L8	On
R1	On
R2	On
R3	On
R4	On
R5	On
R6	On
R7	On
R8	On
Positioning mode	FIX
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	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	50.000 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
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	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS

TA: 2:54   PAT: Off   Voxel size: 1.1×1.1×5.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR 1	13.5 ms
TR 2	4.5 ms
TE	4.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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	Pulse/Trigger
Average cycle	No Signal ms
Captured cycle	-not set-
Acquisition window	900 ms
Trigger pulse	1
Trigger delay	0 ms
Segments	1
Phases	16
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

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	Off
Bandwidth	260 Hz/Px
Flow comp.	No

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

SMS Pulse	On
SMS Factor	4 Bands
RF Duration	2048 us
Slice Distance	40 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_IPAT2

TA: 1:28   PAT: 2   Voxel size: 1.1×1.1×5.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS

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

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR 1	13.5 ms
TR 2	4.5 ms
TE	4.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Separate
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

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	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	Pulse/Trigger
Average cycle	No Signal ms
Captured cycle	-not set-
Acquisition window	900 ms
Trigger pulse	1
Trigger delay	0 ms
Segments	1
Phases	16
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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	4 Bands
RF Duration	2048 us
Slice Distance	40 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On

\\USER\Feinberglab\Suhyung\SMVMS\gre_PC_SH_goldstandard

TA: 2:54   PAT: Off   Voxel size: 1.1×1.1×5.0 mm   Rel. SNR: 1.00   USER: gre_PC_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

Slice group 1	
Slices	1
Dist. factor	700 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR 1	14.0 ms
TR 2	10.0 ms
TE	5.20 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential

Series	Ascending
Saturation mode	Standard
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	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	150.000 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	Pulse/Trigger
Average cycle	No Signal ms
Captured cycle	-not set-
Acquisition window	900 ms
Trigger pulse	1
Trigger delay	0 ms
Segments	1
Phases	16
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

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	Off
Bandwidth	260 Hz/Px
Flow comp.	No

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

SMS Pulse	On
SMS Factor	1 Bands
RF Duration	2000 us
Slice Distance	45 mm
VENC	80 cm/s
FOV Shift: FOV/	1
Random Undersampling	Off
Calibration Mode	Off

\\USER\Feinberglab\Suhyung\SMVMS\ep2d_bold_SliceAcc_770B

TA: 0:29   PAT: 3   Voxel size: 3.9×3.9×5.0 mm   Rel. SNR: 1.00   USER: ep2d_bold_SliceAcc_770B

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

Routine

Slice group 1	
Slices	5
Dist. factor	800 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	500 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	1200 ms
TE	98 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
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
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	REF
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	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	185 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	On
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	20
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]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active

Meas[20]	Active
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	752 Hz/Px
Free echo spacing	Off
Echo spacing	1.4 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
Slice acc. factor	5
RF clip	0
VERSE factor	1.00
PE shift factor	1
Fat sat. flip angle	110 deg
FFT factor	1.00

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res35_000

TA: 5.1 s   PAT: Off   Voxel size: 3.4×3.4×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

---

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	Off
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res35_100

TA: 5.1 s   PAT: Off   Voxel size: 3.4×3.4×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res35_110				
TA: 5.1 s	PAT: Off	Voxel size: 3.4×3.4×3.0 mm	Rel. SNR: 1.00	USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No

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

SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	On
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res23_000

TA: 6.9 s   PAT: Off   Voxel size: 2.3×2.3×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	Off
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res23_100

TA: 6.9 s   PAT: Off   Voxel size: 2.3×2.3×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res23_110

TA: 6.9 s   PAT: Off   Voxel size: 2.3×2.3×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

---

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

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	96
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	On
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res17_000	
TA: 8.7 s PAT: Off Voxel size: 1.7×1.7×3.0 mm Rel. SNR: 1.00 USER: gre_SMVMS_NonPhCy	

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 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.	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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	Off
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res17_100

TA: 8.7 s   PAT: Off   Voxel size: 1.7×1.7×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 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.	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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	Off
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res17_110				
TA: 8.7 s	PAT: Off	Voxel size: 1.7×1.7×3.0 mm	Rel. SNR: 1.00	USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 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.	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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No

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

SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	On
Phase Enc. off	Off

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res17_001

TA: 8.7 s   PAT: Off   Voxel size: 1.7×1.7×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 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.	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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	Off
VarFA	Off
Phase Enc. off	On

\\USER\Feinberglab\Suhyung\SMVMS\gre_SMVMS_NonPhCy_res17_101

TA: 8.7 s   PAT: Off   Voxel size: 1.7×1.7×3.0 mm   Rel. SNR: 1.00   USER: gre_SMVMS_NonPhCy

---

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	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR 1	14.0 ms
TR 2	3.5 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	14 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.	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

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	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
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	Off
Bandwidth	260 Hz/Px
Flow comp.	No
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
SMS Pulse	On
SMS Factor	1 Bands
RF Duration	1600 us
Slice Distance	30 mm
High VENC	80 cm/s
Low VENC	40 cm/s
Random UnderSampling	Off
Phs Diff. Bet. Sls.	90 deg
Blips	On
RF Spoil	On
VarFA	Off
Phase Enc. off	On

Table of contents

```
\\USER
    Feinberglab
        Suhyung
            SMVMS
                    gre_PC_SH_goldstandard
                    localizer_100V_newcoil
                    localizer_100V_newcoil_Calibration
                    gre_SMVMS
                    gre_SMVMS_IPAT2
                    gre_PC_SH_goldstandard
                    ep2d_bold_SliceAcc_770B
                    gre_SMVMS_NonPhCy_res35_000
                    gre_SMVMS_NonPhCy_res35_100
                    gre_SMVMS_NonPhCy_res35_110
                    gre_SMVMS_NonPhCy_res23_000
                    gre_SMVMS_NonPhCy_res23_100
                    gre_SMVMS_NonPhCy_res23_110
                    gre_SMVMS_NonPhCy_res17_000
                    gre_SMVMS_NonPhCy_res17_100
                    gre_SMVMS_NonPhCy_res17_110
                    gre_SMVMS_NonPhCy_res17_001
                    gre_SMVMS_NonPhCy_res17_101
                    gre_SMVMS_NonPhCy_res17_111
            b-SMS
                    gre_PC_SH_calibration
                    gre_PC_SH_mb5_fov3
                    gre_PC_SH_mb5_fov3_pi3_rand
                    gre_PC_SH_mb5_fov3_pi4_rand
                    ep2d_bold_SliceAcc_770B
            SMS_EPI
                    localizer_50V_newcoil
                    AV_ep2d_bold_sd1ipat3mb4_pt75mm_tSNR_shimWholeVol
                    AV_ep2d_bold_sd1ipat3mb5_pt75mm_tSNR_shimWholeVol
                    AV_ep2d_bold_sd1ipat3mb6_pt75mm_tSNR_shimWholeVol
            GRASE
                    localizer_50V_newcoil
                    grase3d_reference
                    grase3d_cs_SH
                    grase3d_cspf_SH
                    grase3d_cs_ms_SH
                    grase3d_cspf_ms_SH
                    grase3d_reference_res15
                    grase3d_cspf_ms_res15_SH
            GRASE_IV
                    localizer_200V_nova
                    b1map_200V_TR1000_nova
                    Visual Cortex
                    measure point spread functions
                    BP_grase_clean_IV_Regular_PSF_Par8_SH
                    BP_grase_clean_IV_Regular_PSF_Par20_SH
                    BP_grase_clean_IV_VFL_PSF_SH
                    BP_grase_clean_IV_CS1D_Par20_NonSFL_PSF_SH
                    BP_grase_clean_IV_CS2D_Par20_NonSFL_PSF_SH
                    resolution: iso-0.8mm3
                    BP_grase_clean_IV_TE37_Regular_SH
                    BP_grase_clean_IV_TE37_VFL_SH
                    BP_grase_clean_IV_TE37_Par20_STE_SH
                    BP_grase_clean_IV_TE27_Par20_STE_SH
                    2D MultiContrast GRASE for T2 Map
                    BP_grase_clean_IV_Regular_MC_CGR_FA180
                    BP_grase_clean_IV_Regular_MC_VGR_FA180
                    BP_grase_clean_IV_Regular_MC_CGR_FA140
                    BP_grase_clean_IV_Regular_MC_VGR_FA140
                    Comparisons: STE vs. nSTE
```

```
\\USER
   Feinberglab
      Suhyung
         GRASE_IV
                  BP_grase_clean_IV_TE41_FA180_Regular_CGR
                  BP_grase_clean_IV_TE41_FA180_Regular_VGR
                  BP_grase_clean_IV_FA_TE32_FA180_CS_CGR
                  BP_grase_clean_IV_FA_TE32_FA180_CS_VGR
                  Pause
                  BP_grase_clean_IV_TE41_FA140_Regular_CGR
                  BP_grase_clean_IV_TE41_FA180_Regular_VGR
                  BP_grase_clean_IV_TE41_FA140_Regular_VGR
                  for tSNR Test
                  BP_grase_clean_IV_TE32_FA180_CS_CGR
                  BP_grase_clean_IV_TE32_FA180_CS_CGR
                  BP_grase_clean_IV_FA_TE32_FA180_CS_CGR
                  etc..................
                  AV_ep2d_bold_sd1ipat2mb1_1mm_tSNR_32
                  AV_ep2d_bold_sd1ipat2mb1_p8mm_tSNR_32
                  cmrr_mbep2d_se
                  --M1 STE--
                  BP_grase_clean_IV_TE37_STE_Regular_SH
                  BP_grase_clean_IV_TE37_nSTE_Regular_SH
                  BP_grase_clean_IV_TE27_Par20_STE_SH
                  BP_grase_clean_IV_TE27_Par20_nSTE_SH
                  --- for nSTE Test
                  BP_grase_clean_IV_FA180_Regular_SH
                  BP_grase_clean_IV_FA180_nSTE_CurrentPT_SH
                  BP_grase_clean_IV_FA140_Regular_SH
                  BP_grase_clean_IV_FA140_nSTE_CurrentPT_SH
                  BP_grase_clean_IV_FA160_Regular_SH
                  BP_grase_clean_IV_FA160_nSTE_CurrentPT_SH
                  Pause
                  Motor Cortex
                  BP_grase_clean_IV_Reg_ForComparison
                  BP_grase_clean_IV_Reg_nSTE_T2Map
                  BP_grase_clean_IV_Reg
                  BP_grase_clean_IV_Reg_nSTE
                  BP_grase_clean_IV_Reg_VFA
                  BP_grase_clean_IV_Reg_nSTE_VFA
                  BP_grase_clean_IV_CSv1
                  BP_grase_clean_IV_CSv1_nSTE
                  Motor Cortex for PSF
                  BP_grase_clean_IV_Reg_PSF_20slc
                  BP_grase_clean_IV_Reg_PSF
                  BP_grase_clean_IV_Reg_VFA_PSF
                  BP_grase_clean_IV_CSv1_PSF
                  BP_grase_clean_IV_Rand_SH
         GRASE_IV_TSNR
                  resolution: iso-0.8mm3
                  BP_grase_clean_IV_TE41_PF6/8_Res08_SH
                  BP_grase_clean_IV_TE41_PF6/8_Res08_VFA_SH
                  BP_grase_clean_IV_TE41_PF6/8_Res08_VFA_SH
                  BP_grase_clean_IV_CS_TE41_PF6/8_Res08_SH
                  BP_grase_clean_IV_CS_TE35_PF6/8_Res08_SH
                  BP_grase_clean_IV_CS_TE38_PF6/8_Res08_fov48_SH
                  pgrs3d_ey_20180816_p8mm
         CS-M1
                  BP_grase_clean_IV_Regular_SH_ob
                  BP_grase_clean_IV_CS2D_Par20_NonSFL_SH_Ob
                  --time permitting--
                  BP_grase_clean_VASO_V10t_noClip
                  BP_grase_clean_IV_Regular_TE43_SH_TR3000
                  --02/18--
```

```
\\USER
    Feinberglab
        Suhyung
            CS-M1
                    BP_grase_clean_IV_Regular_SH_dblOb
                    BP_grase_clean_IV_CS2D_Par20_NonSFL_SH_dblOb
            GRASE_IV_CS_GRASE
                    localizer_200V_nova
                    t1_mpr_sag_p9mm_iso
                    b1map_200V_TR1000_nova
                    mp2rage_0.8mmiso_TR4500
                    ------------- For STE vs nSTE
                    BP_grase_IV_Regular
                    BP_grase_IV_Regular_nSTE
                    BP_grase_IV_Regular
                    BP_grase_IV_Regular_nSTE
                    BP_grase_IV_Regular_nSTE_T2map_ICEoff
                    se_mc
                    ---------- For Point Spread Functions ----------
                    BP_grase_IV_Regular
                    BP_grase_IV_VFA
                    BP_grase_IV_CS_CFA_SL18_ETL06
                    BP_grase_IV_CS_VFA_SL24_ETL10
                    BP_grase_IV_CS_VFA_SL36_ETL14
                    ---------- For Visual Cortex ----------
                    BP_grase_IV_Regular
                    BP_grase_IV_VFA
                    BP_grase_IV_CS_CFA_SL18_ETL06
                    BP_grase_IV_CS_VFA_SL24_ETL10
                    BP_grase_IV_CS_VFA_SL36_ETL14
                    BP_grase_IV_CS_VFA_SL48_ETL14
                    ----------For Motor Cortex ---------
                    BP_grase_IV_Regular
                    BP_grase_IV_VFA
                    BP_grase_IV_CS_CFA_SL18_ETL06
                    BP_grase_IV_CS_VFA_SL24_ETL10
                    BP_grase_IV_CS_VFA_SL36_ETL14
                    --------- For STG ----------
                    BP_grase_IV_CS_VFA_SL36_TE22
                    BP_grase_IV_CS_VFA_SL36_TE27
                    For 3D EPI
                    BP_ep3D_bold_CAIPI_ICEoff_ChannelM2
                    BP_ep3D_bold_multiecho_new_SH_CAIPI_noICE
                    - For Motor Cortex: turn off phase encode
                    ------Point Spread Function for Alex- turn off phase encode
                    BP_grase_clean_VASO_V10t_noClip
                    VASO_116_phantom
                    Enhance Tissue Contrast For Sam
                    BP_grase_IV_CS_VFA_SL36_ETL14_TE22_TR12
                    BP_grase_IV_CS_VFA_SL36_ETL14_TE22_TR20
                    ------3DEPI CAIPI: turn on phase encode, ice off for last
                    GE_p8mm_MB1IPAT3_pf6_te23_tr1505_sat_PlFrSn_391i
                    BP_ep3D_bold_multiecho_new_SH_noCAIPI
            GRASE VASO w/ CS
                    BP_grase_IV_Regular_VASO_SH
                    BP_GRASE_VASO_Short
                    BP_GRASE_VASO_Long
                    Pause
                    BP_GRASE_VASO_BloodNull_IR100ms
                    BP_GRASE_VASO_BloodNull_IR200ms
                    BP_grase_IV_VFA_VASO_SH
                    BP_grase_IV_CS_VASO_SH_24SL
                    BP_grase_IV_CS_VFA_VASO_GMS_SH
                    BP_grase_IV_CS_VASO_SH
```

```
\\USER
    Feinberglab
        Suhyung
            GRASE w/ CS
                    localizer_200V_nova
                    For Effect of VFA Schemes
                    BP_grase_IV_CS_VFA_24SL
                    BP_grase_IV_CS_VFA_24SL
                    BP_grase_IV_CS_VFA_24SL
                    BP_grase_IV_CS_CFA_24SL
                    BP_grase_IV_CS_VFA_36SL
                    BP_grase_IV_CS_VFA_36SL
                    BP_grase_IV_CS_VFA_36SL
                    BP_grase_IV_CS_CFA_36SL
                    For Comparisons with Current Techinques in M1
                    For_SetupFOV_36Slices
                    BP_grase_IV_Regular
                    BP_grase_IV_VFA
                    BP_GRASE_CS_VFA_24SL
                    BP_GRASE_CS_VFA_36SL
                    BP_GRASE_CS_CFA_18SL
                    BP_GRASE_Regular
                    For STG Functional Data
                    BP_grase_IV_Regular
                    BP_GRASE_CS_CFA_22SL_0.8mm
                    BP_GRASE_CS_CFA_22SL_1.0mm
                    BP_GRASE_CS_CFA_22SL_1.2mm
                    BP_GRASE_CS_VFA_36SL_1.2mm
                    --flipped PE dir--
                    BP_grase_IV_Regular_PA
                    BP_grase_IV_VFA_PA
                    BP_GRASE_CS_CFA_18SL_PA
                    BP_GRASE_CS_VFA_24SL_PA
                    BP_GRASE_CS_VFA_36SL_PA
                    BP_GRASE_CS_VFA_36SL
                    BP_GRASE_CS_VFA_36SL
                    BP_GRASE_CS_VFA_36SL
            GRASE w/ CS for STG
                    BP_RGRASE_24SL_1.0mm
                    BP_AccVGRASE_CFA_24SL_1.0mm_EPI20
                    BP_AccVGRASE_CFA_24SL_1.0mm_EPI16
                    BP_AccVGRASE_24SL_1.0mm_EPI20
                    BP_AccVGRASE_24SL_1.0mm_EPI16
                    BP_AccVGRASE_24SL_1.0mm_EPI20_RefDuration2560
                    BP_AccVGRASE_36SL_1.0mm_EPI20
                    BP_AccVGRASE_36SL_0.8mm
                    Functional Acquisitions
                    BP_AccCGRASE_24SL_1.0mm_TE23ms
                    BP_AccVGRASE_24SL_1.0mm_TE23ms
                    BP_AccVGRASE_24SL_1.0mm_TE21ms
                    BP_AccVGRASE_36SL_1.0mm_TE23ms
                    Outer Volume Suppressions
                    ep2d_M1P2f1_iso150
                    ep2d_venc_ms_sbmb_SAT_flashref
                    ep2d_venc_ms_sbmb_SAT_flashref_SH
```