

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabriel\Frida\_32Ch\localizer\_BC

TA: 0:13    PAT: Off    Voxel size: 1.1x1.0x7.0 mm    Rel. SNR: 1.00    SIEMENS: gre

## Properties

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

Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	3
Filter	Normalize, Elliptical filter
Coil elements	BC

## Geometry

Multi-slice mode	Sequential
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None

## System

Body	On
HEP	Off
HEA	Off
-----	
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 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

## Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Physio

1st Signal/Mode	None
Segments	1
-----	
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off

## Resolution

Base resolution	256
-----------------	-----

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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

## Sequence

---

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s

---

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

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\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\localizer\_32

TA: 0:13    PAT: Off    Voxel size: 1.1x1.0x7.0 mm    Rel. SNR: 1.00    SIEMENS: gre

## Properties

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

Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

## Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	3
Filter	Normalize, Elliptical filter
Coil elements	HEA;HEP

## Geometry

Multi-slice mode	Sequential
Series	Interleaved
-----	
Saturation mode	Standard
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 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

## Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Physio

1st Signal/Mode	None
Segments	1
-----	
Dark blood	Off
-----	
Resp. control	Off

## Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off

## Resolution

Base resolution	256
-----------------	-----

# SIEMENS MAGNETOM TrioTim syngo MR B15

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

## Sequence

---

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s

---

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

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\AAScout

+ TA: 0:46

Voxel size: 3.3x2.5x2.5 mm

Rel. SNR: 1.00

SIEMENS: AAScout

## Properties

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

## Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	320 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
TR	2.4 ms
TE	1.13 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

## Contrast

Fat suppr.	None
Fat sat. mode	Strong
Water suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	2
Pause after meas. 1	0.0 s
Multiple series	Off

## Resolution

Base resolution	128
Phase resolution	75 %
Slice resolution	75 %
Phase partial Fourier	Off
Slice partial Fourier	Off
-----	
Matrix Coil Mode	Auto (CP)
-----	
Prescan Normalize	Off
Normalize	Off

## Geometry

Multi-slice mode	Sequential
Series	Ascending
-----	
Special sat.	None

## System

Body	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default

Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

## Inline

## Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	1090 Hz/Px
-----	
Segments	1
RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\T1\_MPRAGE\_1iso\_5min53sec

TA: 5:53    PAT: 2    Voxel size: 1.0x1.0x1.0 mm    Rel. SNR: 1.00    USER: Andre\tfl\_mgh\_multiecho

## 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
AutoAlign Spine	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	R3.0 A3.0 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	12.50 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2530 ms
TE	3.39 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Magn. preparation	Non-sel. IR
TI	900 ms
Flip angle	9.0 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off

Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Single shot
Series	Interleaved

## System

Body	Off
HEP	On
HEA	On
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R3.0 A3.0 H0.0
Orientation	Sagittal
Rotation	12.50 deg
F >> H	256 mm
A >> P	256 mm
R >> L	176 mm

## Physio

1st Signal/Mode	None
Dark blood	Off

## Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

## Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	190 Hz/Px
Flow comp.	No
Echo spacing	7.6 ms

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RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
-----	
Readout polarity	Positive
Readout trajectory	Bipolar
Add. scale factor	8.0
Gradient spoiling	Integral
Gradient moment factor	2.0
Siemens reconstruction	On
Save raw k-space data	Off
Averaging	None

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\ge\_functionals\_128\_PACE\_ACPC-30

TA: 0:35    PAT: Off    Voxel size: 1.7x1.7x4.5 mm    Rel. SNR: 1.00    USER: ep2d\_pace\_MGH

## 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
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	single

## Routine

Slice group 1	
Slices	27
Dist. factor	10 %
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Phase enc. dir.	H >> F
Rotation	-90.46 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.5 mm
TR	2500 ms
TE	30 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Rotation	-90.46 deg
R >> L	220 mm
F >> H	220 mm
A >> P	134 mm

## Physio

1st Signal/Mode	None
-----------------	------

## BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	1
Meas	Baseline
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

## Sequence

Introduction	Off
Bandwidth	1502 Hz/Px
Free echo spacing	Off
Echo spacing	0.73 ms
-----	
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
-----	
Dummy Scans	4



# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabriel\Frida\_32Ch\ge\_func\_3.1x3.1x4\_PACE

TA: 0:28    PAT: Off    Voxel size: 3.1x3.1x4.0 mm    Rel. SNR: 1.00    USER: ep2d\_pace\_MGH

## 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
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	single

## Routine

Slice group 1	
Slices	32
Dist. factor	10 %
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Phase enc. dir.	H >> F
Rotation	-90.46 deg
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	2000 ms
TE	30 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Rotation	-90.46 deg
R >> L	200 mm
F >> H	200 mm
A >> P	141 mm

## Physio

1st Signal/Mode	None
-----------------	------

## BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	1
Meas	Baseline
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

## Sequence

Introduction	Off
Bandwidth	2298 Hz/Px
Free echo spacing	Off
Echo spacing	0.5 ms
-----	
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast
-----	
Dummy Scans	4

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\field\_mapping\_Resting

TA: 2:14      Voxel size: 2.0x2.0x2.0 mm      Rel. SNR: 1.00      SIEMENS: gre\_field\_mapping

## Properties

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

## Routine

Slice group 1	
Slices	67
Dist. factor	0 %
Position	R5.1 A5.2 H21.7
Orientation	T > C-38.6 > S0.1
Phase enc. dir.	A >> P
Rotation	-0.78 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	520.0 ms
TE 1	3.41 ms
TE 2	5.87 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	55 deg
Fat suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 A5.2 H21.7
Orientation	T > C-38.6 > S0.1
Rotation	-0.78 deg
R >> L	256 mm
A >> P	256 mm
F >> H	134 mm

## Sequence

Introduction	Off
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	1502 Hz/Px
Flow comp.	Yes
-----	
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabriel\Frida\_32Ch\ge\_func\_2x2x2\_Resting

TA: 6:24    PAT: Off    Voxel size: 2.0x2.0x2.0 mm    Rel. SNR: 1.00    USER: ep2d\_pace\_MGH

### 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
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	single

### Routine

Slice group 1	
Slices	67
Dist. factor	0 %
Position	R5.1 A5.2 H21.7
Orientation	T > C-38.6 > S0.1
Phase enc. dir.	A >> P
Rotation	-0.77 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	30 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast

MTC	Off
Flip angle	90 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	62
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

### Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None

### System

Body	Off
HEP	On
HEA	On
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 A5.2 H21.7
Orientation	T > C-38.6 > S0.1
Rotation	-0.77 deg
R >> L	256 mm
A >> P	256 mm
F >> H	134 mm

### Physio

1st Signal/Mode	None
-----------------	------

### BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	1
Meas	Baseline
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

### Sequence

Introduction	Off
Bandwidth	1562 Hz/Px
Free echo spacing	Off
Echo spacing	0.7 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
Dummy Scans	2

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabriel\Frida\_32Ch\DIFFUSION\_HighRes

TA: 9:44    PAT: 2    Voxel size: 2.0x2.0x2.0 mm    Rel. SNR: 1.00    USER: ep2d\_diff\_MGH

## Properties

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

## Routine

Slice group 1	
Slices	64
Dist. factor	0 %
Position	R3.0 A3.0 H0.0
Orientation	T > C-12.5
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	7980 ms
TE	84 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
-----	
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Separate
-----	
Distortion Corr.	Off
Prescan Normalize	On
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off
Hamming	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R3.0 A3.0 H0.0
Orientation	T > C-12.5
Rotation	0.00 deg
R >> L	256 mm
A >> P	256 mm
F >> H	128 mm

## Physio

1st Signal/Mode	None
-----	
Resp. control	Off

## Diff

Diffusion mode	MDDW
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	700 s/mm <sup>2</sup>
Mosaic	On
Noise level	40
Diff. directions	60

## Sequence

Introduction	On
Bandwidth	1396 Hz/Px
Free echo spacing	Off
Echo spacing	0.8 ms
-----	
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast*
-----	
Sequence Mode	Product
Diff Grad Table	Single
Direction Scheme	Single
Dummy Scans	3
T2 Weighted Images	10

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\ep2d\_pasl\_FairQuipssII

TA: 5:08    PAT: Off    Voxel size: 4.0x4.0x6.0 mm    Rel. SNR: 1.00    USER: ep2d\_pasl\_414A

### 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
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

### Routine

Slice group 1	
Slices	16
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	6.0 mm
TR	3000 ms
TE	21 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

### Contrast

Perfusion mode	Picore Q2TIPS
T12	1600 ms
T11	700 ms
T11s	1400 ms
Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	101
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
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

### System

Body    Off  
HEP    On  
HEA    On

Positioning mode    REF  
Table position    H  
Table position    0 mm  
MSMA    S - C - T  
Sagittal    R >> L  
Coronal    A >> P  
Transversal    F >> H  
Save uncombined    Off  
Coil Combine Mode    Sum of Squares  
Auto Coil Select    Default

Shim mode    Standard  
Adjust with body coil    Off  
Confirm freq. adjustment    Off  
Assume Silicone    Off  
Ref. amplitude 1H    309.546 V  
Adjustment Tolerance    Auto  
Adjust volume  
Position    Isocenter  
Orientation    Transversal  
Rotation    0.00 deg  
R >> L    256 mm  
A >> P    192 mm  
F >> H    114 mm

### Physio

1st Signal/Mode    None

### BOLD

GLM Statistics    Off  
Dynamic t-maps    Off  
Starting ignore meas    1  
Ignore after transition    0  
Model transition states    Off  
Temp. highpass filter    On  
Threshold    4.00  
Paradigm size    4  
Meas[1]    Baseline  
Meas[2]    Active  
Meas[3]    Baseline  
Meas[4]    Active  
Motion correction    On  
Interpolation    3D-K-space  
Spatial filter    On  
Filter setting    2.0

### Sequence

Introduction    On  
Bandwidth    2298 Hz/Px  
Free echo spacing    Off  
Echo spacing    0.5 ms  
EPI factor    48  
RF pulse type    Normal  
Gradient mode    Fast

# SIEMENS MAGNETOM TrioTim syngo MR B15

Flow Limit	100.0 [cm/s]
Prep scan	4000 [ms]
FFT scale factor	100 %
PMU Recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\field\_mapping\_128

TA: 1:39      Voxel size: 1.7x1.7x4.5 mm      Rel. SNR: 1.00      SIEMENS: gre\_field\_mapping

## Properties

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

## Routine

Slice group 1	
Slices	27
Dist. factor	10 %
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Phase enc. dir.	H >> F
Rotation	-90.46 deg
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.5 mm
TR	500.0 ms
TE 1	3.03 ms
TE 2	5.49 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	55 deg
Fat suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

## Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
-----	
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Rotation	-90.46 deg
R >> L	220 mm
F >> H	220 mm
A >> P	134 mm

## Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	1502 Hz/Px
Flow comp.	Yes
-----	
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\field\_mapping\_3.1x3.1x4

TA: 1:07      Voxel size: 3.1x3.1x4.0 mm      Rel. SNR: 1.00      USER: gre\_field\_mapping\_ct

## 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
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

## Routine

Slice group 1	
Slices	32
Dist. factor	10 %
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Phase enc. dir.	H >> F
Rotation	-90.46 deg
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	4.00 mm
TR	500.0 ms
TE 1	2.83 ms
TE 2	5.29 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	55 deg
Fat suppr.	None
-----	
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
Matrix Coil Mode	Auto (CP)
-----	
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Interleaved
Series	Interleaved
-----	
Special sat.	None

## System

Body	Off
HEP	On
HEA	On
-----	
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 P9.0 H5.3
Orientation	C > T-42.7 > S0.3
Rotation	-90.46 deg
R >> L	200 mm
F >> H	200 mm
A >> P	141 mm

## Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	1532 Hz/Px
Flow comp.	Yes
-----	
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On



# SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\INVESTIGATORS\Gabrieli\Frida\_32Ch\T1\_MPRAGE

TA: 8:07    PAT: Off    Voxel size: 1.3x1.0x1.3 mm    Rel. SNR: 1.00    USER: Andre\lfl\_mgh\_multiecho

## 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
AutoAlign Spine	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	R3.0 A3.0 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	12.50 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.33 mm
TR	2530 ms
TE	3.39 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	7.0 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	256
Phase resolution	75 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	On
Prescan Normalize	On
Normalize	Off

Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Single shot
Series	Interleaved

## System

Body	Off
HEP	On
HEA	On

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	309.546 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R3.0 A3.0 H0.0
Orientation	Sagittal
Rotation	12.50 deg
F >> H	256 mm
A >> P	256 mm
R >> L	171 mm

## Physio

1st Signal/Mode	None
Dark blood	Off

## Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

## Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	190 Hz/Px
Flow comp.	No
Echo spacing	7.8 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B15

Readout polarity	Positive
Readout trajectory	Bipolar
Add. scale factor	8.0
Gradient spoiling	Siemens
Gradient moment factor	1
Siemens reconstruction	On
Save raw k-space data	Off
Averaging	None