

SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\AAHead\_Scout

TA: 0:17 PAT: 2 Voxel size: 1.6x1.6x1.6 mm Rel. SNR: 1.00 SIEMENS: AALScout

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	On
Auto open inline display	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 deg
AutoAlign	Head
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
TE	1.37 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast

Flip angle	8 deg
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution

Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
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	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off

Elliptical filter Off

Geometry

Multi-slice mode	Sequential
Series	Ascending

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	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

Inline

Time to center	7.5 s
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Sequence

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Bandwidth	550 Hz/Px
RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\AC-PC\_setup

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	None
Coil elements	HEA;HEP

### Contrast

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

### Resolution

Base resolution	86
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Advanced
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	206 mm
A >> P	206 mm
F >> H	144 mm

### Physio

1st Signal/Mode	None
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### BOLD

GLM Statistics	Off
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	15
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
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On

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Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField1\_AP

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 mm

## Physio

1st Signal/Mode	None
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## BOLD

GLM Statistics	Off
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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme

Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST1\_AP

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 mm

### Physio

1st Signal/Mode	None
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### BOLD

GLM Statistics	Off
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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off

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Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField1\_PA

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 mm

## Physio

1st Signal/Mode	None
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## BOLD

GLM Statistics	Off
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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off



# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme

Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST1\_PA

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 mm

## Physio

1st Signal/Mode	None
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## BOLD

GLM Statistics	Off
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	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
-----	
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
-----	
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617T1\_MPR

TA: 5:22    PAT: 2    Voxel size: 0.8x0.8x0.8 mm    Rel. SNR: 1.00    SIEMENS: tfl

## Properties

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

## Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	2500 ms
TE	2.18 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Magn. preparation	Non-sel. IR
TI	1000 ms
Flip angle	8 deg
Fat suppr.	Water excit. fast
Water suppr.	None
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off

Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Multi-slice mode	Single shot
Series	Interleaved

## 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	Adaptive Combine
AutoAlign	Head > Brain
Auto Coil Select	Off
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
F >> H	256 mm
A >> P	240 mm
R >> L	180 mm

## Physio

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

## Inline

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

## Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Allowed
Bandwidth	210 Hz/Px
Flow comp.	No

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Echo spacing	7.8 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\T2\_SPC

TA: 6:26    PAT: 2    Voxel size: 0.8x0.8x0.8 mm    Rel. SNR: 1.00    SIEMENS: tse\_vfl

## 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
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	3200 ms
TE	562 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

## Resolution

Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On

Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Special sat.	None
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## 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	Adaptive Combine
AutoAlign	Head > Brain
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	Sagittal
Rotation	0.00 deg
F >> H	256 mm
A >> P	240 mm
R >> L	180 mm

## Physio

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

## Inline

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

## Sequence

Introduction	On
Dimension	3D
Bandwidth	781 Hz/Px
Flow comp.	No
Allowed delay	0 s
Echo spacing	3.48 ms
Adiabatic-mode	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

Define	Echo trains
Turbo factor	167
Slice turbo factor	2
Echo trains per slice	1
Echo train duration	1138
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
Flip angle mode	T2 var

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\DWI\_AP

TA: 4:50    PAT: 2    Voxel size: 1.7x1.7x1.7 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_diff

## 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	84
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	204 mm
FoV phase	100.0 %
Slice thickness	1.70 mm
TR	3600 ms
TE	94.0 ms
Multi-band accel. factor	3
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	120
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
Matrix Coil Mode	Auto (Triple)
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
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	204 mm
A >> P	204 mm
F >> H	143 mm

## Physio

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

## Diff

Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	2000 s/mm <sup>2</sup>
Diff. weighted images	On
Trace weighted images	Off
Average ADC maps	Off
Individual ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40
Diff. directions	67

## Sequence

Introduction	Off
Bandwidth	1736 Hz/Px
Free echo spacing	Off
Echo spacing	0.7 ms
EPI factor	120
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Refocus pulse duration	10240 us
Diffusion Scheme	Monopolar
Single-band images	On
MB LeakBlock kernel	On



# SIEMENS MAGNETOM TrioTim syngo MR B19

MB dual kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\DWI\_PA

TA: 4:54    PAT: 2    Voxel size: 1.7x1.7x1.7 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_diff

## 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	84
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	204 mm
FoV phase	100.0 %
Slice thickness	1.70 mm
TR	3600 ms
TE	94.0 ms
Multi-band accel. factor	3
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	120
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
Matrix Coil Mode	Auto (Triple)
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
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	204 mm
A >> P	204 mm
F >> H	143 mm

## Physio

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

## Diff

Diffusion mode	Free
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	2000 s/mm <sup>2</sup>
Diff. weighted images	On
Trace weighted images	Off
Average ADC maps	Off
Individual ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40
Diff. directions	68

## Sequence

Introduction	Off
Bandwidth	1736 Hz/Px
Free echo spacing	Off
Echo spacing	0.7 ms
EPI factor	120
Gradient mode	Fast
RF spoiling	Off

Excite pulse duration	5120 us
Refocus pulse duration	10240 us
Diffusion Scheme	Monopolar
Single-band images	On
MB LeakBlock kernel	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

MB dual kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField2\_AP

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme      Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST2\_AP

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField2\_PA

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off



# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme      Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST2\_PA

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField3\_AP

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme      Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST3\_AP

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
-----	
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
-----	
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField3\_PA

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off



# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme      Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_REST3\_PA

TA: 5:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	375
Delay in TR	0 ms
Multiple series	Off

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
-----	
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
-----	
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField4\_AP

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme

Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField4\_PA

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme      Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_EMOTION\_PA

TA: 4:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
-----	
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
-----	
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On



# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField5\_AP

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

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

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme

Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\SEField5\_PA

TA: 6.1 s    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_se

### 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6100 ms
TE	60.0 ms
Multi-band accel. factor	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

### Contrast

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

### Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off

Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

### Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Free echo spacing	On
Echo spacing	0.57 ms
EPI factor	86
RF pulse type	Normal
Gradient mode	Fast
Fake MB factor for SB	1
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off

# SIEMENS MAGNETOM TrioTim syngo MR B19

| Triggering scheme

Standard

# SIEMENS MAGNETOM TrioTim syngo MR B19

\\USER\Brain\HARP\_Trio\_VB19A\HARP\_20190617\BOLD\_CARIT\_PA

TA: 4:08    PAT: Off    Voxel size: 2.4x2.4x2.4 mm    Rel. SNR: 1.00    USER: cmrr\_mbep2d\_bold

## 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	206 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	800 ms
TE	34.4 ms
Multi-band accel. factor	6
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.
-----	
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

## Resolution

Base resolution	86
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
-----	
PAT mode	None
Matrix Coil Mode	Auto (CP)
-----	
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
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
AutoAlign	Head > Brain
Auto Coil Select	Off
-----	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	206 mm
A >> P	206 mm
F >> H	144 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	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off

## Sequence

Introduction	Off
Contrasts	1
Bandwidth	2326 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.57 ms
-----	
EPI factor	86
Gradient mode	Fast
RF spoiling	Off
-----	
Excite pulse duration	6600 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On

# SIEMENS MAGNETOM TrioTim syngo MR B19

Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

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