

WU/UMN Connectome Coordination Facility
Siemens Prisma protocol package

Version 2016.07.14

This package contains electronic protocols for import into a Siemens 3T Prisma representing a “Connectomic/HCP style” set of acquisitions – i.e., 0.8 mm T1w/T2w structurals, 2.0 mm fMRI, and 1.5 mm dMRI. It is substantially similar to the parameters used for scanning of the “Phase 1b Lifespan Pilot” on the Prisma at the Center for Magnetic Resonance Research (CMRR) at the University of Minnesota, but does differ in some regards (see “**Version Changes**”).

This package contains protocols exported under both VD13D and VE11B:

CCF_Prisma_VD13D_2016.07.14.edx

and

CCF_Prisma_VE11B_2016.07.14.exar1

The VD13D and VE11B versions are identical in their imaging parameters. However, it is recommended that VE11 users import the VE11 specific version, because of a couple quirks during the import/conversion process from VD13.

The multi-band accelerated EPI sequences developed at CMRR that are necessary to run this protocol are available at:

<https://www.cmrr.umn.edu/multiband/>

Questions about this protocol can be posted to the HCP-Users List:

<http://humanconnectome.org/contact/#subscribe>

Happy scanning!

M.P. Harms, E. Yacoub, K. Jamison
July 14, 2016

Version Changes

Release 2016.07.14

- “LeakBlock” (i.e., Split-slice GRAPPA reconstruction; ref. Cauley et al., *MRM*, 2014; 72:93-102) turned On for BOLD and dMRI scans to reduce interslice correlations/cross-talk.

Release 2016.04.13

- Replaces VE11 version of exar1 file with one that will actually import. (VE11 version in the 2016.03.07 release package was corrupted).
- Updated the parameter listing on the following pages so that the “Geometry – AutoAlign” sections now reflect what was actually occurring at run time under VE11.
N.B. The parameter printout is from a VE11 system, while the “Screenshots” in this package were captured under a VD13 system.

Release 2016.03.07 (VD13D and VE11B versions, created under multi-band release “R013”)

- Changed the SpinEchoFieldMaps (SEFM) so that the Echo Spacing of the SEFM is matched to that of the BOLD scans (0.58 ms) via the “Free echo spacing” option on the Sequence tab.
(Previously, the matching of ES between the SEFM and BOLD scans was achieved by setting a hidden parameter called “Fake MB factor for SB” in the SEFM scans. However, exposing that hidden parameter required creation of a custom configuration file. Also, that “Fake MB” parameter is considered deprecated and unsupported. Therefore, use “Free echo spacing” instead as the mechanism to match the ES).
- Changed TE of SEFM from 66.6 to 66.0 ms.
- Added diffusion vector tables to the package.

Release 2015.11.30 (VD13D, created under multi-band release “R012c”)

- First version of a package under VD13D that included an EDX.
- Relative to the parameters used in the “Phase 1b Lifespan Pilot” the main changes of interest are:
 - “Phase Partial Fourier” (PPF) in the fMRI scans changed from 7/8 to Off. From this then followed:
 - TR increased from 720 to 800 ms.¹
(Note: Number of Measurements left at 420 frames, which results in each fMRI run being 34 sec longer. Can set Measurements to 380 to return each run to 5 min of data).
 - PPF set to Off in the “SpinEchoFieldMap” scans as well to match.

¹ Minimum achievable TR for the fMRI in the current protocol (with PPF=Off) is ~770 ms.

- TI (inversion time) for the T1w structural changed from 1060 to 1000 ms (achieved by changing the “Gradient mode” from ‘Fast’ to ‘Performance’).

“Phase 1b Lifespan Pilot” parameters, circa 2014.08.15

- These were only available as a PDF listing of parameters.²
- This “LSCMRR_3T_printout_2014.08.15.pdf” should only be considered an “approximation” for what was run for the Phase 1b Lifespan piloting on the 3T Prisma at CMRR.

(Some low-level changes/bug fixes were implemented early in the Phase 1b Pilot scanning, but a revised PDF listing of parameters was not generated)

² <http://lifespan.humanconnectome.org/data/phase1b-pilot-parameters.html>
http://lifespan.humanconnectome.org/data/LSCMRR_3T_printout_2014.08.15.pdf

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\\USER\head\Harms\CCF_Prisma\Localizer

TA: 9.2 s PM: REF Voxel size: 1.2×1.2×5.0 mmPAT: Off Rel. SNR: 1.00 : fl

Properties

Prio recon	On
Load images to viewer	Off
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A45.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	40.0 ms
TE	3.00 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast - Common

TR	40.0 ms
TE	3.00 ms
MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution - Common

FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A45.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	40.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Slice group	2
Slice group	3
AutoAlign	---
Position	L0.0 A50.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm

Geometry - AutoAlign

P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

System - Miscellaneous

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
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	40.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	300 mm
FoV phase	100.0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	260 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER\\head\\Harms\\CCF_Prisma\\AAHScout

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A45.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
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 - Common

TR	3.15 ms
TE	1.37 ms
Flip angle	8 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1

Resolution - iPAT

Reference scan mode	Integrated
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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A45.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
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
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A45.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

System - Miscellaneous

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
Save uncombined	Off
Matrix Optimization	Off
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off

System - Adjustments

Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Sequence - Part 2

RF spoiling	On
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Sequence - Assistant

Mode	Off
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System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	8 deg
Measurements	1
Time to center	6.2 s

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.

\\USER\\head\\Harms\\CCF_Prisma\\Localizer_aligned

TA: 0:21 PM: REF Voxel size: 1.2×1.2×5.0 mmPAT: Off Rel. SNR: 1.00 : fl

Properties

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	7
Dist. factor	200 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	104.0 ms
TE	3.00 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP

Contrast - Common

TR	104.0 ms
TE	3.00 ms
MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution - Common

FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	7
Dist. factor	200 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	104.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Slice group	2
Slice group	3
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm

Geometry - AutoAlign

P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

System - Miscellaneous

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
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	104.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	300 mm
FoV phase	100.0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	260 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER\\head\\Harms\\CCF_Prisma\\BIAS_BC

TA: 0:26 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : tfi

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	18.2 %
Slices per slab	88
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	250.0 ms
TE	1.03 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BC

Contrast - Common

TR	250.0 ms
TE	1.03 ms
Magn. preparation	None
Flip angle	3 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	18.2 %
Slices per slab	88
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	250.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**System - Miscellaneous**

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
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	250.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.1 ms
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	78

Sequence - Assistant

Mode	Off
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\\USER\head\Harms\CCF_Prisma\BIAS_32CH

TA: 0:26 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : tfI

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	18.2 %
Slices per slab	88
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	250.0 ms
TE	1.03 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	250.0 ms
TE	1.03 ms
Magn. preparation	None
Flip angle	3 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	18.2 %
Slices per slab	88
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	250.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**System - Miscellaneous**

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
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	250.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Distortion Corr.	Off
------------------	-----

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.1 ms
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	78

Sequence - Assistant

Mode	Off
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\\USER\head\Harms\CCF_Prisma\SpinEchoFieldMap_AP

TA: 0:32 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	66.00 ms
Multi-band accel. factor	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	8000 ms
TE	66.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off

System - Adjustments

Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Normal
Gradient mode	Performance

Sequence - Special

Fake MB factor for SB	1
-----------------------	---

Sequence - Special

SENSE1 coil combine	Off
Invert RO/PE polarity	Off
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\SpinEchoFieldMap_PA

TA: 0:32 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	66.00 ms
Multi-band accel. factor	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	8000 ms
TE	66.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off

System - Adjustments

Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Normal
Gradient mode	Performance

Sequence - Special

Fake MB factor for SB	1
-----------------------	---

Sequence - Special

SENSE1 coil combine	Off
Invert RO/PE polarity	On
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\rfMRI_REST_AP

TA: 5:46 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epfid

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
TE	37.00 ms
Multi-band accel. factor	8
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	800 ms
TE	37.00 ms
MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
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Resolution - Filter Image

Prescan Normalize	Off
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Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	800 ms
Multi-band accel. factor	8

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	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
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Single-band images	On

Sequence - Special

MB LeakBlock kernel	On
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\rfMRI_REST_PA

TA: 5:46 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epfid

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
TE	37.00 ms
Multi-band accel. factor	8
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	800 ms
TE	37.00 ms
MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
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Resolution - Filter Image

Prescan Normalize	Off
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Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	800 ms
Multi-band accel. factor	8

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	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
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Single-band images	On

Sequence - Special

MB LeakBlock kernel	On
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\T1w_MPR

TA: 6:38 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	23.1 %
Slices per slab	208
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	2400.0 ms
TE	2.22 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	2400.0 ms
TE	2.22 ms
Magn. preparation	Non-sel. IR
T1	1000 ms
Flip angle	8 deg
Fat suppr.	Water excit. fast
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	23.1 %
Slices per slab	208
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	2400.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**System - Miscellaneous**

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
Save uncombined	Off

System - Miscellaneous

Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 P3.0 H6.0 mm
! Orientation	T > C-20.0
! Rotation	0.00 deg
! A >> P	208 mm
! R >> L	208 mm
! F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2400.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1000 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	256 mm
FoV phase	93.8 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

Inline - MIP

Save original images	On
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Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.5 ms
Bandwidth	220 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Performance
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	256

Sequence - Assistant

Mode	Off
------	-----

\\USER\\head\\Harms\\CCF_Prisma\\T2w_SPC

TA: 5:57 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : spc

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	208
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	3200 ms
TE	563 ms
Averages	1.0
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	3200 ms
TE	563 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	On
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	208
FoV read	256 mm
FoV phase	93.8 %
Slice thickness	0.80 mm
TR	3200 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Restore magn.	Off
Special sat.	None

Geometry - Navigator**System - Miscellaneous**

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

System - Miscellaneous

Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 P3.0 H6.0 mm
! Orientation	T > C-20.0
! Rotation	0.00 deg
! A >> P	208 mm
! R >> L	208 mm
! F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	5.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	93.8 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
---------	-----

Inline - MIP

MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Distortion Corr.	Off
------------------	-----

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Flow comp.	No
Echo spacing	3.52 ms
Adiabatic-mode	Off
Bandwidth	744 Hz/Px

Sequence - Part 2

Echo train duration	1102 ms
RF pulse type	Fast
Gradient mode	Performance
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	314

Sequence - Assistant

Allowed delay	0 s
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\\USER\head\Harms\CCF_Prisma\MRI_dir98_AP

TA: 5:37 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
TE	89.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	3230 ms
TE	89.20 ms
MTC	Off
Magn. preparation	None
Flip angle	78 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**System - Miscellaneous**

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
--------------	----------

System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	138 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3230 ms
Multi-band accel. factor	4

Physio - PACE

Resp. control	Off
Multi-band accel. factor	4

Diff - Neuro

Diffusion mode	Free
Diff. directions	98
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	98
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On

Diff - Body

Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

Sequence - Part 2

EPI factor	140
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	On
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\USER\head\Harms\CCF_Prisma\MRI_dir98_PA

TA: 5:37 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
TE	89.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	3230 ms
TE	89.20 ms
MTC	Off
Magn. preparation	None
Flip angle	78 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**System - Miscellaneous**

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
--------------	----------

System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	138 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3230 ms
Multi-band accel. factor	4

Physio - PACE

Resp. control	Off
Multi-band accel. factor	4

Diff - Neuro

Diffusion mode	Free
Diff. directions	98
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	98
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On

Diff - Body

Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

Sequence - Part 2

EPI factor	140
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	On
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\USER\head\Harms\CCF_Prisma\SpinEchoFieldMap_AP

TA: 0:32 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	66.00 ms
Multi-band accel. factor	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	8000 ms
TE	66.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off

System - Adjustments

Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Normal
Gradient mode	Performance

Sequence - Special

Fake MB factor for SB	1
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Sequence - Special

SENSE1 coil combine	Off
Invert RO/PE polarity	Off
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\SpinEchoFieldMap_PA

TA: 0:32 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	66.00 ms
Multi-band accel. factor	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	8000 ms
TE	66.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off

System - Adjustments

Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Normal
Gradient mode	Performance

Sequence - Special

Fake MB factor for SB	1
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Sequence - Special

SENSE1 coil combine	Off
Invert RO/PE polarity	On
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\rfMRI_REST_AP

TA: 5:46 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epfid

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
TE	37.00 ms
Multi-band accel. factor	8
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	800 ms
TE	37.00 ms
MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
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Resolution - Filter Image

Prescan Normalize	Off
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Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	800 ms
Multi-band accel. factor	8

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	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
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Single-band images	On

Sequence - Special

MB LeakBlock kernel	On
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\rfMRI_REST_PA

TA: 5:46 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : epfid

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
TE	37.00 ms
Multi-band accel. factor	8
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	800 ms
TE	37.00 ms
MTC	Off
Magn. preparation	None
Flip angle	52 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
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Resolution - Filter Image

Prescan Normalize	Off
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Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	72
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	800 ms
Multi-band accel. factor	8

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	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
Measurements	420
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2290 Hz/Px

Sequence - Part 2

EPI factor	104
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Single-band images	On

Sequence - Special

MB LeakBlock kernel	On
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\head\Harms\CCF_Prisma\MRI_dir99_AP

TA: 5:41 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
TE	89.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	3230 ms
TE	89.20 ms
MTC	Off
Magn. preparation	None
Flip angle	78 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**System - Miscellaneous**

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
--------------	----------

System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	138 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3230 ms
Multi-band accel. factor	4

Physio - PACE

Resp. control	Off
Multi-band accel. factor	4

Diff - Neuro

Diffusion mode	Free
Diff. directions	99
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	99
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On

Diff - Body

Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Distortion Corr.	Off
------------------	-----

Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

Sequence - Part 2

EPI factor	140
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	On
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\USER\head\Harms\CCF_Prisma\MRI_dir99_PA

TA: 5:41 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: Off Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
TE	89.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	3230 ms
TE	89.20 ms
MTC	Off
Magn. preparation	None
Flip angle	78 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	140
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	92
Dist. factor	0 %
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3230 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Initial Position	L0.0 P3.0 H6.0
L	0.0 mm
P	3.0 mm
H	6.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-20.0
> S	0.0

Geometry - Saturation

Fat suppr.	None
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**System - Miscellaneous**

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
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System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P3.0 H6.0 mm
Orientation	T > C-20.0
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	138 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

System - Tx/Rx

Frequency 1H	123.247210 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3230 ms
Multi-band accel. factor	4

Physio - PACE

Resp. control	Off
Multi-band accel. factor	4

Diff - Neuro

Diffusion mode	Free
Diff. directions	99
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	99
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	3000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On

Diff - Body

Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.69 ms
Bandwidth	1700 Hz/Px

Sequence - Part 2

EPI factor	140
Gradient mode	Performance
RF spoiling	Off

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	On
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off