

**Table of contents**

\\Prisma User

Brain

Clinical2020

Clinical-HDFT-SiemensVsCMRR

localizer  
MPRAGE\_SAG\_ISO1mm\_PRE  
dMRI\_dir258\_1\_HDFT  
dMRI\_dir258\_2\_HDFT  
dMRI\_dir258\_1\_HDFT\_Siemens\_noGR  
dMRI\_dir258\_2\_HDFT\_Siemens\_noGR

\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\localizer

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 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	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Each measurement
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**Resolution - Common**

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

**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 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

**Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**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	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**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	123.254536 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	7.5 ms
Concatenations	3
Segments	1

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**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	Sequential
Bandwidth	320 Hz/Px

**Sequence - Part 2**

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

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\MPRAGE\_SAG\_ISO1mm\_PRE

TA: 4:08 PM: FIX Voxel size: 1.0×1.0×1.0 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	R1.1 A11.9 F27.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2000.0 ms
TE	3.17 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D), Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	2000.0 ms
TE	3.17 ms
Magn. preparation	Non-sel. IR
TI	900 ms
Flip angle	8 deg
Fat suppr.	None
Water suppr.	None

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	Off

**Resolution - Common**

Interpolation	Off
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**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R1.1 A11.9 F27.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	R1.1 A11.9 F27.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.1 A11.9 F27.5
R	1.1 mm
A	11.9 mm
F	27.5 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

**Geometry - Navigator****System - Miscellaneous**

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	P >> A
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

**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	R1.1 A11.9 F27.5 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

**System - pTx Volumes**

B1 Shim mode	TrueForm
Excitation	Non-sel.

**System - Tx/Rx**

Frequency 1H	123.254536 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	2000.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Non-sel. IR
TI	900 ms
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.	On
Mode	3D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.4 ms
Bandwidth	210 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	176

**Sequence - Assistant**

Mode	Off
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\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\dMRI\_dir258\_1\_HDFT

TA: 11:01 PM: FIX Voxel size: 2.0x2.0x2.0 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	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	2490 ms
TE	99.20 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	2490 ms
TE	99.20 ms
MTC	Off
Magn. preparation	None
Flip angle	90 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	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
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	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	2490 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

**Geometry - AutoAlign**

Slice group	1
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.2 A14.1 H8.2
R	3.2 mm
A	14.1 mm
H	8.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-13.7
> S	0.0

**Geometry - Saturation**

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

**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
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
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**System - Adjustments**

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

**System - Adjust Volume**

Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
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	Standard

**System - Tx/Rx**

Frequency 1H	123.254536 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	2490 ms
Multi-band accel. factor	4

**Physio - PACE**

Resp. control	Off
Multi-band accel. factor	4

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	258
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	4000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	On
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	258
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	4000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1

**Diff - Body**

Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
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	1718 Hz/Px

**Sequence - Part 2**

EPI factor	104
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

**Sequence - Special**

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	Off
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
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\dMRI\_dir258\_2\_HDFT

TA: 0:19 PM: FIX Voxel size: 2.0x2.0x2.0 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	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	2490 ms
TE	99.20 ms
Multi-band accel. factor	4
Filter	Prescan Normalize
Coil elements	HC1-7;NC1,2

**Contrast - Common**

TR	2490 ms
TE	99.20 ms
MTC	Off
Magn. preparation	None
Flip angle	90 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	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	104
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	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	2490 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

**Geometry - AutoAlign**

Slice group	1
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.2 A14.1 H8.2
R	3.2 mm
A	14.1 mm
H	8.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-13.7
> S	0.0

**Geometry - Saturation**

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

**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
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

**System - Adjustments**

B0 Shim mode	Advanced
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**System - Adjustments**

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

**System - Adjust Volume**

Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
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	Standard

**System - Tx/Rx**

Frequency 1H	123.254536 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	2490 ms
Multi-band accel. factor	4

**Physio - PACE**

Resp. control	Off
Multi-band accel. factor	4

**Diff - Neuro**

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Bipolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Bipolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off

**Diff - Body**

FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
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	1718 Hz/Px

**Sequence - Part 2**

EPI factor	104
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

**Sequence - Special**

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Single-band images	On
MB LeakBlock kernel	Off
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
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\dMRI\_dir258\_1\_HDFT\_Siemens\_n  
oGR

TA: 12:21 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 4 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	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	64
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2800 ms
TE	101.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC1,2

### Contrast - Common

TR	2800 ms
TE	101.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

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

### Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
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### Resolution - iPAT

Accel. factor PE	1
Ref. lines PE	20
Accel. factor slice	4
Reference scan mode	EPI/separate

### Resolution - Filter Image

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

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	64
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.2 A14.1 H8.2
R	3.2 mm
A	14.1 mm
H	8.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-13.7
> S	0.0

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### System - Miscellaneous

Positioning mode	FIX
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
Matrix Optimization	Performance
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

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

**System - Adjust Volume**

! Position	R3.2 A20.7 F6.9 mm
! Orientation	T > C-13.7
! 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	Standard

**System - Tx/Rx**

Frequency 1H	123.254536 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2800 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	Free
Diff. directions	258
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	4000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	On
Mosaic	On
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	Free
Diff. directions	258
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm <sup>2</sup>
b-value 2	4000 s/mm <sup>2</sup>
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm <sup>2</sup>
Noise level	40

**Diff - Composing**

Distortion Corr.	Off
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**Sequence - Part 1**

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.6 ms
Bandwidth	2090 Hz/Px

**Sequence - Part 2**

EPI factor	104
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses**

\\Prisma User\Brain\Clinical2020\Clinical-HDFT-SiemensVsCMRR\dMRI\_dir258\_2\_HDFT\_Siemens\_n  
oGR

TA: 0:17 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 4 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	Off
Start measurements	Single measurement

### Routine

Slice group	1
Slices	64
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2800 ms
TE	101.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC1,2

### Contrast - Common

TR	2800 ms
TE	101.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

### Contrast - Dynamic

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

### Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

### Resolution - iPAT

Accel. mode	Slice accel.
-------------	--------------

### Resolution - iPAT

Accel. factor PE	1
Ref. lines PE	20
Accel. factor slice	4
Reference scan mode	EPI/separate

### Resolution - Filter Image

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

### Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

### Geometry - Common

Slice group	1
Slices	64
Dist. factor	0 %
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	R3.2 A14.1 H8.2 mm
Orientation	T > C-13.7
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.2 A14.1 H8.2
R	3.2 mm
A	14.1 mm
H	8.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-13.7
> S	0.0

### Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

### Geometry - Navigator

### System - Miscellaneous

Positioning mode	FIX
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
Matrix Optimization	Performance
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

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

**System - Adjust Volume**

! Position	R3.2 A20.7 F6.9 mm
! Orientation	T > C-13.7
! 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	Standard

**System - Tx/Rx**

Frequency 1H	123.254536 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	2800 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Bipolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

**Diff - Body**

Diffusion mode	MDDW
Diff. directions	6

**Diff - Body**

Diffusion Scheme	Bipolar
Diff. weightings	1
b-value	0 s/mm <sup>2</sup>
b-value	1
Diff. weighted images	On
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 <sup>2</sup>
Noise level	40

**Diff - Composing**

Distortion Corr.	Off
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**Sequence - Part 1**

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.6 ms
Bandwidth	2090 Hz/Px

**Sequence - Part 2**

EPI factor	104
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

**Sequence - pTX Pulses**