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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\Scout

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	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

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A20.0 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 A20.0 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 A20.0 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 - 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 - Tx/Rx

Frequency 1H	123.262622 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

Inline Composing	Off
Distortion Corr.	Off

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.
RF spoiling	On

\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\dzne-bn_B1

TA: 5.4 s PM: FIX Voxel size: 4.0×4.0×4.0 mmPAT: 4 Rel. SNR: 1.00 : 47a0b0a

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	20 %
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Slice oversampling	0.0 %
Slices per slab	48
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	4.00 mm
TR	2100 ms
TE 1	1.12 ms
TE 2	2.03 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	HEA;HEP

Contrast - Common

TR	2100 ms
TE 1	1.12 ms
TE 2	2.03 ms
Flip angle 1	60 deg
Flip angle 2	6 deg

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	4.00 mm
Base resolution	54
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	24
Reordering Shift 3D	1
Reference scan mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	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	20 %
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	48
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	4.00 mm
TR	2100 ms
Multi-slice mode	Interleaved
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-6.0
> S	0.0

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

Sequence - Assistant

Mode	Off
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System - Adjustments

B0 Shim mode	Brain
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 P0.0 H4.0 mm
Orientation	T > C-6.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	192 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Asymmetric echo	Off
Contrasts	2
Multi-slice mode	Interleaved
Bandwidth	1170 Hz/Px

Sequence - Part 2

Echo train duration	2048 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Turbo factor	648

Sequence - Special

Preparation scans	1
Preparation loops	0
Sample T1	1500 ms
Shots	1
RF-Duration	150 us
Prep RF-Duration	300 us
Timing Schme	STE*
Mixing Time	910 us
Ref Scan Delay	2000 ms
FFT Scale	20
Calculate FlipMap	On
Scale risetime	1.20

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TA: 0:32 PM: REF Voxel size: 2.4×2.4×2.4 mmPAT: Off Rel. SNR: 1.00 : fm

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	20 %
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	60
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6.0 ms
TE 1	1.29 ms
TE 2	3.09 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	6.0 ms
TE 1	1.29 ms
TE 2	3.09 ms
MTC	Off
Magn. preparation	None
Flip angle	6 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
Base resolution	90
Phase resolution	100 %
Slice resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Slice 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	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 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	60
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	6.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-6.0
> S	0.0

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

System - Miscellaneous

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	Brain
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 P0.0 H4.0 mm
Orientation	T > C-6.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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	6.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	216 mm
FoV phase	100.0 %
Phase resolution	100 %

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
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Inline - MIP

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

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	2
Flow comp. 1	No
Readout mode	Monopolar
Multi-slice mode	Interleaved
Bandwidth 1	990 Hz/Px
Bandwidth 2	990 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
Allowed delay	0 s

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TA: 1.3 s PM: REF Voxel size: 2.3×2.3×5.0 mmRel. SNR: 1.00 : fl

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	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	10.00 ms
TE	5.00 ms
Filter	None
Coil elements	HEA;HEP

Contrast - Common

TR	10.00 ms
TE	5.00 ms
Flip angle	15 deg

Resolution - Common

FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %

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

Slice group	1
Slices	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm

Geometry - Common

TR	10.00 ms
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Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
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
AutoAlign	---
Coil Select Mode	Default

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 - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Bandwidth	800 Hz/Px
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Sequence - Special

Log external	Off
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Sequence - Special

Log external 2	Off
Log respiration	On
Log pulse	On
Log ekg	Off

Sequence - Assistant

Mode	Off
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\dzne-bn_RestingState

TA: 10:20 PM: FIX Voxel size: 2.4×2.4×2.4 mmPAT: 6 Rel. SNR: 1.00 : ep 51e7889

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
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Slice oversampling	0.0 %
Slices per slab	60
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	570 ms
TE 1	30.00 ms
Averages	1
Multi-echo Shots	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	570 ms
TE 1	30.00 ms
Multi-echo spacing	48.9 ms
MTC	Off
Magn. preparation	Non-sel. IR
TI	297 ms
Flip angle	16 deg
Fat suppr.	SPAIR

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1070
Pause after meas.	0.0 s

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
Base resolution	90
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	6
Ref. lines 3D	36
Reordering Shift 3D	2
Reference scan mode	EPI/separate
CAIPI Trajectory	Skipped-CAIPI

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
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	60
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	570 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-6.0
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	SPAIR

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
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 P0.0 H4.0 mm
! Orientation	T > C-6.0
! Rotation	0.00 deg
! A >> P	216 mm
! R >> L	216 mm
! F >> H	141 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Contrasts	1
Echo spacing	0.61 ms
Bandwidth	2136 Hz/Px

Sequence - Part 2

EPI factor	79
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PAT ref. FA	11 deg
RF duration	780 us
RF BWT product	25
Ernst T1	1500 ms
PATRef prep. shots	200
Volume dummy shots	0
Dummy Measurements	3
Integrated PC	Off
Invert PE	Off
Min. TE w/ PF	Off
Water Exc.	Binomial-11
Phase Correction	per Volume

Sequence - Special

EPI rise time factor	1.28
Mosaic DICOMs	On
Modify Ice Config	Off
Slab Scale	-7 %
Silent gap	0 #shots

Sequence - Assistant

Mode	Off
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TA: 6:52 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : 1d7e965

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	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	224
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	2560.0 ms
TE 1	1.85 ms
TE 2	3.75 ms
TE 3	5.65 ms
TE 4	7.55 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D), Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	2560.0 ms
TE 1	1.85 ms
TE 2	3.75 ms
TE 3	5.65 ms
TE 4	7.55 ms
Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	7 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 %

Resolution - Common

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	CAIPIRINHA
Accel. factor PE	1
Accel. factor 3D	2
Ref. lines 3D	34
Reordering Shift 3D	1
Reference scan mode	Integrated
CAIPIRINHA mode	Free

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	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	224
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	2560.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A10.0 F20.0
L	0.0 mm
A	10.0 mm
F	20.0 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
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	Brain
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	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Rotation	-5.73 deg
A >> P	256 mm
F >> H	256 mm
R >> L	180 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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	2560.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1100 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

Inline - Common

Save original images	On
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Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Free 0
Asymmetric echo	Off
Contrasts	4
Flow comp.	No
Readout mode	Bipolar
Multi-slice mode	Sequential
Echo spacing	10.4 ms
Bandwidth 1	680 Hz/Px
Bandwidth 2	680 Hz/Px
Bandwidth 3	680 Hz/Px
Bandwidth 4	680 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	180

Sequence - Special**Sequence - Assistant**

Mode	Off
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\dzne-bn_T2w

TA: 4:45 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : 4c8e8d7

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
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	224
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	2800 ms
TE	405 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Distortion Corr.(3D), Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	2800 ms
TE	405 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	On

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
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	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	32
Accel. factor 3D	2
Ref. lines 3D	24
Reordering Shift 3D	1
Reference scan mode	GRE/separate

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	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	224
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	2800 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A10.0 F20.0
L	0.0 mm
A	10.0 mm
F	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator**System - Miscellaneous**

Positioning mode	FIX
Table position	H

System - Miscellaneous

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	Head > Brain
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Brain
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	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Rotation	-5.73 deg
A >> P	256 mm
F >> H	256 mm
R >> L	180 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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
Trigger delay	0 ms
TR	2800 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
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Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	3.86 ms
Adiabatic-mode	Off
Bandwidth	679 Hz/Px

Sequence - Part 2

Echo train duration	953 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	282

Sequence - Special

Use Phaselog	On
Perform FIDNAV	On

Sequence - Assistant

Allowed delay	30 s
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\FLAIR

TA: 4:37 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : spcir

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
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
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	5000 ms
TE	393 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Distortion Corr.(3D), Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	5000 ms
TE	393 ms
MTC	Off
Magn. preparation	Non-sel. T2-IR
T1 1	1800 ms
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	100.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	6/8
Interpolation	Off

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	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
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	5000 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A10.0 F20.0
L	0.0 mm
A	10.0 mm
F	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator**System - Miscellaneous**

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

System - Miscellaneous

Sagittal	R >> L
Coronal	A >> P
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	R1.5 P6.0 F21.6 mm
Orientation	S > C1.1 > T-0.1
Rotation	-5.73 deg
A >> P	256 mm
F >> H	256 mm
R >> L	176 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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
Trigger delay	0 ms
TR	5000 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. T2-IR
TI 1	1800 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

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	3.42 ms
Adiabatic-mode	Off
Bandwidth	781 Hz/Px

Sequence - Part 2

Echo train duration	876 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	284

Sequence - Assistant

Allowed delay	30 s
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\DiffusionDSI_r

TA: 0:38 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	69
Dist. factor	0 %
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	5500 ms
TE	105.0 ms
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	5500 ms
TE	105.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

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	2.0 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32
Accel. factor slice	3

Resolution - iPAT

Reference scan mode	EPI/separate
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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	69
Dist. factor	0 %
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	P >> A
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
A	0.0 mm
H	4.0 mm
Initial Rotation	180.00 deg
Initial Orientation	T > C
T > C	-6.0
> 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
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Default

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	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Rotation	-178.87 deg
A >> P	208 mm
R >> L	208 mm
F >> H	138 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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	5500 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	119
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm ²
b-value	4
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	Free
Diff. directions	119
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm ²
b-value	4
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 ²

Diff - Body

Noise level	40
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Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.71 ms
Bandwidth	1658 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Low SAR
Gradient mode	Fast

\\DZNE\IAG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\DiffusionDSI

TA: 11:17 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	69
Dist. factor	0 %
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	5500 ms
TE	105.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	5500 ms
TE	105.0 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.
Accel. factor PE	1

Resolution - iPAT

Ref. lines PE	32
Accel. factor slice	3
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	69
Dist. factor	0 %
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-6.0
> 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
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off

System - Miscellaneous

AutoAlign	Head > Brain
Coil Select Mode	Default

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	R1.4 P13.6 H3.3 mm
Orientation	T > C-0.3 > S0.1
Rotation	1.13 deg
A >> P	208 mm
R >> L	208 mm
F >> H	138 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 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	5500 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	119
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	7350 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	119
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	7350 s/mm ²
b-value 1	1

Diff - Body

b-value 2	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 ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.71 ms
Bandwidth	1658 Hz/Px

Sequence - Part 2

EPI factor	104
RF pulse type	Low SAR
Gradient mode	Fast

\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\ldzne-bn_QSMEPI_PA

TA: 4:33 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 8b90903

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
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Slice oversampling	0.0 %
Slices per slab	176
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	53.3 ms
Vol. TR	65.6656 s
TE 1	6.90 ms
TE 2	17.1 ms
TE 3	27.3 ms
TE 4	12 ms
TE 5	22.2 ms
TE 6	32.4 ms
Averages	1
Multi-echo Shots	2
Filter	Distortion Corr.(3D), Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	53.3 ms
Vol. TR	65.6656 s
TE 1	6.90 ms
TE 2	17.1 ms
TE 3	27.3 ms
TE 4	12 ms
TE 5	22.2 ms
TE 6	32.4 ms
Multi-echo spacing	10.20 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	2
Pause after meas. 1	0.0 s

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
Base resolution	270
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	36
Reordering Shift 3D	1
Reference scan mode	GRE/separate
CAIPI Trajectory	Skipped-CAIPI

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	Off

Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	53.3 ms
Vol. TR	65.6656 s
Multi-echo Shots	2

Geometry - AutoAlign

Slab group	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg

Geometry - AutoAlign

Initial Orientation	T > C
T > C	-6.0
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Sat. region	1
Thickness	150 mm
Position	L0.0 P0.0 F161.0 mm
Orientation	T > C-6.0

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	Default

System - Adjustments

B0 Shim mode	Brain
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 P0.0 H4.0 mm
Orientation	T > C-6.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	141 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Contrasts	6
Echo spacing	1.65 ms
Bandwidth	806 Hz/Px

Sequence - Part 2

EPI factor	5
Segmentation	14
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PAT ref. FA	5 deg
RF duration	1000 us
RF BWT product	32
Ernst T1	1000 ms
PATRef prep. shots	100
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	On
Min. TE w/ PF	On
Alternate RO	On
Disable freq. adj.	Off
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.50
Mosaic DICOMs	On
Modify Ice Config	Off
Slab Scale	-10 %

Sequence - Assistant

Mode	Off
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\ldzne-bn_QSMEPI_AP

TA: 4:31 PM: FIX Voxel size: 0.8x0.8x0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 8b90903

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
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Slice oversampling	0.0 %
Slices per slab	176
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	53.3 ms
Vol. TR	65.6656 s
TE 1	6.90 ms
TE 2	17.1 ms
TE 3	27.3 ms
TE 4	12 ms
TE 5	22.2 ms
TE 6	32.4 ms
Averages	1
Multi-echo Shots	2
Filter	Distortion Corr.(3D), Prescan Normalize
Coil elements	HEA;HEP

Contrast - Common

TR	53.3 ms
Vol. TR	65.6656 s
TE 1	6.90 ms
TE 2	17.1 ms
TE 3	27.3 ms
TE 4	12 ms
TE 5	22.2 ms
TE 6	32.4 ms
Multi-echo spacing	10.20 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	2
Pause after meas. 1	0.0 s

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
Base resolution	270
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	36
Reordering Shift 3D	1
Reference scan mode	GRE/separate
CAIPI Trajectory	Skipped-CAIPI

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	Off

Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	176
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	0.80 mm
TR	53.3 ms
Vol. TR	65.6656 s
Multi-echo Shots	2

Geometry - AutoAlign

Slab group	1
Position	L0.0 P0.0 H4.0 mm
Orientation	T > C-6.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 H4.0
L	0.0 mm
P	0.0 mm
H	4.0 mm
Initial Rotation	0.00 deg

Geometry - AutoAlign

Initial Orientation	T > C
T > C	-6.0
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Sat. region	1
Thickness	150 mm
Position	L0.0 P0.0 F161.0 mm
Orientation	T > C-6.0

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	Default

System - Adjustments

B0 Shim mode	Brain
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 P0.0 H4.0 mm
Orientation	T > C-6.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	141 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	Off
Dimension	3D
Contrasts	6
Echo spacing	1.65 ms
Bandwidth	806 Hz/Px

Sequence - Part 2

EPI factor	5
Segmentation	14
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PAT ref. FA	5 deg
RF duration	1000 us
RF BWT product	32
Ernst T1	1000 ms
PATRef prep. shots	100
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE w/ PF	On
Alternate RO	Off
Disable freq. adj.	On
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.50
Mosaic DICOMs	On
Modify Ice Config	Off
Slab Scale	-10 %

Sequence - Assistant

Mode	Off
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\BodyScout

TA: 0:15 PM: ISO Voxel size: 5.0×5.0×5.0 mmRel. SNR: 1.00 : flct

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	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	100 %
Position	L0.0 A25.0 F103.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
FoV read	480 mm
FoV phase	87.5 %
Slice thickness	5 mm
TR	2.56 ms
TE	1.44 ms
Filter	Distortion Corr.(2D)
Coil elements	BC

Contrast - Common

TR	2.56 ms
TE	1.44 ms

Resolution - Common

FoV read	480 mm
FoV phase	87.5 %
Slice thickness	5 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	6/8

Geometry - Common

Slice group	1
Slices	1
Dist. factor	100 %
Position	L0.0 A25.0 F103.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	480 mm
FoV phase	87.5 %
Slice thickness	5 mm
TR	2.56 ms

Geometry - AutoAlign

Slice group	1
Position	L0.0 A25.0 F103.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A25.0 F103.0

Geometry - AutoAlign

L	0.0 mm
A	25.0 mm
F	103.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim CT

Tim CT mode	On
Range start	F
Range start	100 mm
Total FoV	H >> F
Total FoV	700 mm
Slices	1
Slice thickness	5 mm
Dist. factor	100 %
FoV read	480 mm
FoV phase	87.5 %
Perform CTM adjustments	Off
Table Speed	46 mm/s

System - Miscellaneous

Positioning mode	ISO
Table position	F
Table position	103 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adj. water suppr.	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Perform CTM adjustments	Off
Adjustment Tolerance	Maximum

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Img. Scale Cor.	1.000

Sequence - Part 1

Dimension	2D
Bandwidth	801.282051 Hz/Px

Sequence - Assistant

Mode	Off
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\\DZNE\AG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\FatImaging

TA: 0:12 PM: ISO Voxel size: 2.0×2.0×5.0 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	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	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	72
FoV read	500 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
TR	4.12 ms
TE 1	1.23 ms
TE 2	2.46 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	BC

Contrast - Common

TR	4.12 ms
TE 1	1.23 ms
TE 2	2.46 ms
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

Contrast - Dynamic

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

Resolution - Common

FoV read	500 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	75 %
Slice resolution	50 %
Phase partial Fourier	6/8
Slice partial Fourier	5/8

Resolution - Common

Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	72
FoV read	500 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
TR	4.12 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 F640.0
L	0.0 mm
P	0.0 mm
F	640.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

System - Miscellaneous

Positioning mode	ISO
Table position	F

System - Miscellaneous

Table position	640 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	---
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	438 mm
R >> L	500 mm
F >> H	360 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Breath-hold
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	6.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	On
Time to center	0.5 s

Inline - Inline

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

Inline Composing	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	750 Hz/Px
Bandwidth 2	750 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	30 s

\\DZNE\IAG-Stoecker\RLS_Extern\RLS_extern_Skyra_2023\logstop

TA: 1.3 s PM: REF Voxel size: 2.3×2.3×5.0 mmRel. SNR: 1.00 : fl

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	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	10.00 ms
TE	5.00 ms
Filter	None
Coil elements	BC

Contrast - Common

TR	10.00 ms
TE	5.00 ms
Flip angle	15 deg

Resolution - Common

FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %

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

Slice group	1
Slices	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm

Geometry - Common

TR	10.00 ms
----	----------

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
F	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

System - Miscellaneous

Positioning mode	REF
Table position	F
Table position	640 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	Default

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 - Tx/Rx

Frequency 1H	123.262622 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Bandwidth	800 Hz/Px
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Sequence - Assistant

Mode	Off
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