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\\Peter	\\Peter S. Allen MR Research Centre			
	Camicioli			
		CCNA		
			COMPASS_UofA	
			AAHead_Scout 3DT1 PD_T2 2D_FLAIR_FS T2-star DTI-EDM RS-fMRI	

\\Peter S. Allen MR Research Centre\Camicioli\CCNA\COMPASS_UofA\AAHead_Scout

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 Rel. 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	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 A10.0 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	HE1-4

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
December 511	
Resolution - Filter Ima	ige
Image Filter	Off
Distortion Corr.	Off

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 A10.0 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 A10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

Positioning mode	REF
Table position	Н
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	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 - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.240025 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

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1

Inline - MapIt

Contrasts	1
TR	3.15 ms
TE	1.37 ms

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

Mode	Off

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TA: 5:21 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	On
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R2.8 A28.1 F23.7 mm
Orientation	S > C1.4 > T0.4
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	192
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2300.0 ms
TE	2.98 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan
	Normalize
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	2300.0 ms
TE	2.98 ms
Magn. preparation	Non-sel. IR
TI	900 ms
Flip angle	9 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	Off
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.	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
Dist. factor	50 %
Position	R2.8 A28.1 F23.7 mm
Orientation	S > C1.4 > T0.4
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	192
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	2300.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	
Position	R2.8 A28.1 F23.7 mm
Orientation	S > C1.4 > T0.4
Phase enc. dir.	A >> P
Initial Position	R2.8 A28.1 F23.7
R	2.8 mm
Α	28.1 mm
F	23.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.4
> T	0.4

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
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	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	R2.8 A28.1 F23.7 mm
Orientation	S > C1.4 > T0.4
Rotation	0.00 deg
A >> P	256 mm
A >> P F >> H R >> L	256 mm
R >> L	192 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.240025 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	2300.0 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

Inline - Common

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

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	9 deg
Measurements	1
TR	2300.0 ms
TE	2.98 ms

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	7.1 ms
Bandwidth	240 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	192

Mode	Off
IVIOGE	Oli

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TA: 3:11 PM: REF Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : tse

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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	3000.0 ms
TE 1	10 ms
TE 2	93 ms
Averages	1
Concatenations	3
Filter	Prescan Normalize,
	Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR	3000.0 ms
TE 1	10 ms
TE 2	93 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	165 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	256
Phase resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

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

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	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	3000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice group	1
AutoAlign	·
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
Initial Position	R2.6 A9.7 H5.0
R	2.6 mm
Α	9.7 mm
Н	5.0 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	-16.3
> S	-0.8

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	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	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Rotation	90.00 deg
R >> L	240 mm
A >> P	240 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode

System - Tx/Rx	
Frequency 1H	123.240025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off

TrueForm

0.000 V

Physio - Signal1

? Ref. amplitude 1H

1st Signal/Mode	None
TR	3000.0 ms
Concatenations	3

Physio - Cardiac

Magn. preparation	None	
Fat suppr.	Fat sat.	
Dark blood	Off	
FoV read	240 mm	
FoV phase	100.0 %	
Phase resolution	100 %	
Traiectory	Cartesian	

Physio - PACE

Resp. control	Off
Concatenations	3

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag MIP-Cor MIP-Tra MIP-Time	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	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	10.3 ms
Bandwidth	181 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	20
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	7

Mode	Min flip angle
Min flip angle	130 deg
Allowed delay	60 s

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TA: 2:44 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : tir

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	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	9000.0 ms
TE	120.0 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize,
	Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR 9000.0 ms TE 120.0 ms TD 0.0 ms MTC Off Magn. preparation Slice-sel. IR TI 2500 ms Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None Restore magn. Off		
TD 0.0 ms MTC Off Magn. preparation Slice-sel. IR TI 2500 ms Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	TR	9000.0 ms
MTC Off Magn. preparation Slice-sel. IR TI 2500 ms Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	TE	120.0 ms
Magn. preparation Slice-sel. IR TI 2500 ms Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	TD	0.0 ms
TI 2500 ms Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	MTC	Off
Flip angle 165 deg Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	Magn. preparation	Slice-sel. IR
Fat suppr. Fat sat. Fat sat. mode Strong Water suppr. None	TI	2500 ms
Fat sat. mode Strong Water suppr. None	Flip angle	165 deg
Water suppr. None	Fat suppr.	Fat sat.
	Fat sat. mode	Strong
Restore magn. Off	Water suppr.	None
	Restore magn.	Off
Freeze suppressed tissue Off	Freeze suppressed tissue	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	256
Phase resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	47
Reference scan mode	Integrated

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	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	9000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
Initial Position	R2.6 A9.7 H5.0
R	2.6 mm
A	9.7 mm
Н	5.0 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	-16.3
> S	-0.8

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off	
Table position	Н	
Table position	0 mm	
Inline Composing	Off	

System - Miscellaneous

Positioning mode	FIX
Table position	Н
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	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	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Rotation	90.00 deg
R >> L	240 mm
A >> P	240 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123.240025 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	9000.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	2500 ms
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag MIP-Cor MIP-Tra MIP-Time	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	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9.26 ms
Bandwidth	222 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	19

Mode	Off
Allowed delay	60 s

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TA: 3:04 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. 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	Off
Wait for user to start	Off
Start measurements	•
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	650.0 ms
TE	20.00 ms
Averages	1
Concatenations	2
Filter	None
Coil elements	HE1-4

Contrast - Common

TR	650.0 ms
TE	20.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 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	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

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

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	48
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	650.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	R >> L
Initial Position	R2.6 A9.7 H5.0
R	2.6 mm
Α	9.7 mm
Н	5.0 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	-16.3
> S	-0.8

Geometry - Saturation

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

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

Positioning mode	FIY	
n ositionina mode	1 1/2	

Table position	Н
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	Default

System - Adjustments

B0 Shim mode		Standard
B1 Shim mode		TrueForm
Adjust with body	coil	Off
Confirm freq. adj	ustment	Off
Assume Dominar	nt Fat	Off
Assume Silicone		Off
Adjustment Toler	ance	Auto

System - Adjust Volume

Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Rotation	90.00 deg
R >> L	240 mm
A >> P	240 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123.240025 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	650.0 ms
Concatenations	2
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract Off

Inline - Common

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 MIP - time	Off	
MIP - time	Off	
Measurements	1	

Inline - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	650.0 ms
TE	20.00 ms

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	200 Hz/Px

Sequence - Part 2

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

Mode	Off
Allowed delay	0 s

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TA: 4:10 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 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	70
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6900 ms
TE	64.0 ms
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	6900 ms
TE	64.0 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	256 mm	
FoV phase	100.0 %	
Slice thickness	2.0 mm	
Base resolution	128	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36

Resolution - iPAT

Reference scan mode	EPI/separate
Resolution - Filter Image	

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	70
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6900 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
Initial Position	R2.6 A9.7 H5.0
R	2.6 mm
Α	9.7 mm
Н	5.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-16.3
> S	-0.8

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
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	
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	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Rotation	0.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	140 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.240025 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	6900 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode MDDW Diff. directions 30 Diffusion Scheme Monopolar Diff. weightings 2 b-value 1 0 s/mm²	
Diffusion Scheme Monopolar Diff. weightings 2	
Diff. weightings 2	
h value 4	
p-value i 0 s/mm²	
b-value 2 1000 s/mm	_] 2
b-value 1 3	
b-value 2	
Diff. weighted images On	
Trace weighted images Off	
ADC maps Off	
FA maps Off	
Mosaic On	
Tensor On	
Noise level 40	

Diff - Body

Diffusion mode	MDDW
Diff. directions	30
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	1000 s/mm²
b-value 1	3
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/mm²
Noise level	40

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2056 Hz/Px

Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

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TA: 9:00 PM: FIX Voxel size: 3.5×3.5×3.5 mmPAT: 2 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	40
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	2130 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan
	Normalize
Coil elements	HE1-4

Contrast - Common

TR	2130 ms
TE	30.0 ms
мтс	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	250
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	224 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	24
Reference scan mode	EPI/separate

Resolution - Filter Image

Distortion Corr.	Off	
Prescan Normalize	On	

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	40
Dist. factor	0 %
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	2130 ms
Multi-slice mode	Interleaved
Series	Ascending
Concatenations	1

Geometry - AutoAlign

occinion y manoring.	
Slice group	1
AutoAlign	
Position	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Phase enc. dir.	A >> P
Initial Position	R2.6 A9.7 H5.0
R	2.6 mm
Α	9.7 mm
Н	5.0 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-16.3
> S	-0.8

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	0 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
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	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	R2.6 A9.7 H5.0 mm
Orientation	T > C-16.3 > S-0.8
Rotation	0.00 deg
A >> P R >> L F >> H	224 mm
R >> L	224 mm
F >> H	140 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.240025 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	2130 ms
Concatenations	1

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	250
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms

Sequence - Part 1

Bandwidth	2442 Hz/Px
Sequence - Part 2	
EPI factor	64
RF pulse type	Normal
RF pulse type Gradient mode	Fast
Excitation	Standard

Sequence - pTX Pulses