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\\USER\HBCD\v2.2\HBCD_v2.2_32ch\Localizer_quiet

TA: 42 sec Coil Selection: Manual Voxel Size: 1.0×1.0×7.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	On
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	Off
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	All Segments
Inline Movie	Off

Routine

Slice Group	1
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	7.0 mm
TR	30.0 ms
TE	5.00 ms
Averages	2
Concatenations	3
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	30.0 ms
TE	5.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	15 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Contrast - Dynamic

Multiple Series	Off

Resolution - Common

FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	7.0 mm
Base Resolution	256
Phase Resolution	91 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	Off
Asymmetric Echo	Allowed

Resolution - Filter

Raw Filter	Off
Elliptical Filter	On
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	1
Distance Factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	7.0 mm
TR	30.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P

Geometry - AutoAlign

Slice Group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

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

B1 Shim	TrueForm
Excitation	Slice-sel.
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None

Physio - Signal

TR	30.0 ms
Segments	1
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	256 mm
FoV Phase	100.0 %
Phase Resolution	91 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	3

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	5.00 ms
TR	30.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	qfl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Whisper
Flow Compensation	None

Sequence - Part 1

Bandwidth	320 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Acoustic noise reduction	On

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\anat-t2w

TA: 4:17 min Coil Selection: Manual Voxel Size: 0.8×0.8×0.8 mm³ Acc:: 4.0 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
TR	4500.0 ms
TE	564.00 ms
Averages	1.0
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	4500.0 ms
TE	564.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	T2 Var
Fat-Water Contrast	Standard
Dark Blood	Off
Blood Suppression	Off
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	CS
Total Factor	4.0
Reference Scans	Integrated
Reference Lines PE	24
Reference Lines 3D	24
Phase Partial Fourier	Allowed
Slice Partial Fourier	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan
Image Filter	On

Geometry - Common

Slab Group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
TR	4500.0 ms
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator

Navigator	1
Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
Base Size Phase	256 mm
Base Size Read	256 mm
Thickness	256 mm

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H

Geometry - Tim Planning Suite

Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Performance

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	240 mm
F >> H	256 mm
R >> L	167 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	4500.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	256 mm
FoV Phase	93.8 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off

Inline - Subtraction

Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
TE	564.00 ms
TR	4500.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	spcvNav
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear
Bandwidth	446 Hz/Px
Echo Spacing	4.62 ms
Turbo Factor	314
Echo Train Duration	1284 ms

Sequence - Part 2

Introduction	Off

Sequence - Special

Navigator	After Readout
Nav BW	4596 Hz/Px

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\fmap-epi_dir-AP

TA: 25 sec Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
TE	66.00 ms
Averages	1
Multi-band accel. factor	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	8400.0 ms
TE	66.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	90 deg
Refocus flip angle	180 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Disabled
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off

Resolution - Acceleration

Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm

System - Adjustments

Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8400.0 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0
Model Transition States	Off
Temp. Highpass Filter	Off
Threshold	4.00
Paradigm Size	3
Meas[1]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	2
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	On
EPI Factor	112

Sequence - Part 2

Introduction	Off

Sequence - Special

Min. prep scans	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\fmap-epi_dir-PA

TA: 25 sec Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
TE	66.00 ms
Averages	1
Multi-band accel. factor	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	8400.0 ms
TE	66.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	90 deg
Refocus flip angle	180 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Disabled
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off

Resolution - Acceleration

Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm

System - Adjustments

Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8400.0 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0
Model Transition States	Off
Temp. Highpass Filter	Off
Threshold	4.00
Paradigm Size	3
Meas[1]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	2
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	On
EPI Factor	112

Sequence - Part 2

Introduction	Off

Sequence - Special

Min. prep scans	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\func_task-rest_dir-PA

TA: 7:41 min Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1725.0 ms
TE	37.00 ms
Averages	1
Multi-band accel. factor	4
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	1725.0 ms
TE	37.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	62 deg
Fat-Water Contrast	Fat Saturation
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	261
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1725.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never

System - Adjustments

Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1725.0 ms
Multi-band accel. factor	4

BOLD

GLM Statistics	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]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	261
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epfid
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Flow Compensation	None
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	Off
EPI Factor	112

Sequence - Part 2

Introduction	Off
RF Spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Min. prep scans	0
Min. prep scans SB	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Sinc exc. pulse BWTP	5.20
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\fmap-epi_dir-AP

TA: 25 sec Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
TE	66.00 ms
Averages	1
Multi-band accel. factor	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	8400.0 ms
TE	66.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	90 deg
Refocus flip angle	180 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Disabled
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off

Resolution - Acceleration

Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm

System - Adjustments

Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8400.0 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0
Model Transition States	Off
Temp. Highpass Filter	Off
Threshold	4.00
Paradigm Size	3
Meas[1]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	2
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	On
EPI Factor	112

Sequence - Part 2

Introduction	Off

Sequence - Special

Min. prep scans	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\fmap-epi_dir-PA

TA: 25 sec Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
TE	66.00 ms
Averages	1
Multi-band accel. factor	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	8400.0 ms
TE	66.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	90 deg
Refocus flip angle	180 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Disabled
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off

Resolution - Acceleration

Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8400.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm

System - Adjustments

Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8400.0 ms
Multi-band accel. factor	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0
Model Transition States	Off
Temp. Highpass Filter	Off
Threshold	4.00
Paradigm Size	3
Meas[1]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	2
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	On
EPI Factor	112

Sequence - Part 2

Introduction	Off

Sequence - Special

Min. prep scans	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\func_task-rest_dir-PA

TA: 7:41 min Coil Selection: Manual Voxel Size: 2.0×2.0×2.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1725.0 ms
TE	37.00 ms
Averages	1
Multi-band accel. factor	4
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	1725.0 ms
TE	37.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	62 deg
Fat-Water Contrast	Fat Saturation
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	261
Delay in TR	0.00 ms

Resolution - Common

FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	112
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	76
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	224 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1725.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	6 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never

System - Adjustments

Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	224 mm
R >> L	224 mm
F >> H	152 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1725.0 ms
Multi-band accel. factor	4

BOLD

GLM Statistics	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]	Active
Meas[2]	Active
Meas[3]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	261
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epfid
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Flow Compensation	None
Bandwidth	2350 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	Off
EPI Factor	112

Sequence - Part 2

Introduction	Off
RF Spoiling	Off

Sequence - Special

Excite pulse duration	6600 us
Min. prep scans	0
Min. prep scans SB	0
Slice multiplier	1

Sequence - Special

Exc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Suppress 16-bit DICOM	On
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Sinc exc. pulse BWTP	5.20
Physio recording	Off
Triggering scheme	Standard

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\dwi_dir-AP

TA: 6:38 min Coil Selection: Manual Voxel Size: 1.7×1.7×1.7 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	87
Distance Factor	0 %
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
TR	4800.0 ms
TE	88.00 ms
Multi-band accel. factor	3
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	4800.0 ms
TE	88.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	78 deg
Refocus flip angle	160 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Enabled
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Multiple Series	Off
Delay in TR	0.00 ms

Resolution - Common

FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
Base Resolution	140
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	6/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan
Noise Masking	Off

Geometry - Common

Slice Group	1
Slices	87
Distance Factor	0 %
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
TR	4800.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice Group	1
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Performance

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	238 mm
R >> L	238 mm
F >> H	148 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4800.0 ms
Multi-band accel. factor	3

Physio - PACE

Resp. Control	Off
Multi-band accel. factor	3

Diff

Diffusion Mode	Free
Diff. Directions	75
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm²
b-value 2	3000 s/mm²
Averages 1	1
Averages 2	1
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	Off
Tensor	Off
FA Maps	On
ADC Maps	Off
Exponential ADC Maps	Off
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Bandwidth	1786 Hz/Px
Echo Spacing	0.66 ms
Free Echo Spacing	Off
EPI Factor	140

Sequence - Part 2

Introduction	Off
RF Spoiling	Off
Phase Correction	Internal

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Min. prep scans	0
Min. prep scans SB	1
Slice multiplier	1
Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Opt. MB RF pulse BW	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
Suppress 16-bit DICOM	On
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\dwi_dir-PA

TA: 6:38 min Coil Selection: Manual Voxel Size: 1.7×1.7×1.7 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	87
Distance Factor	0 %
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
TR	4800.0 ms
TE	88.00 ms
Multi-band accel. factor	3
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	4800.0 ms
TE	88.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	78 deg
Refocus flip angle	160 deg
Fat-Water Contrast	Fat Saturation
Grad. rev. fat suppr.	Enabled
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Multiple Series	Off
Delay in TR	0.00 ms

Resolution - Common

FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
Base Resolution	140
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	6/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan
Noise Masking	Off

Geometry - Common

Slice Group	1
Slices	87
Distance Factor	0 %
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	238 mm
FoV Phase	100.0 %
Slice Thickness	1.7 mm
TR	4800.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice Group	1
Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H6.0
L	0.0 mm
P	0.0 mm
H	6.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Performance

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L0.0 P0.0 H6.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	238 mm
R >> L	238 mm
F >> H	148 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4800.0 ms
Multi-band accel. factor	3

Physio - PACE

Resp. Control	Off
Multi-band accel. factor	3

Diff

Diffusion Mode	Free
Diff. Directions	75
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm²
b-value 2	3000 s/mm²
Averages 1	1
Averages 2	1
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	Off
Tensor	Off
FA Maps	On
ADC Maps	Off
Exponential ADC Maps	Off
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Bandwidth	1786 Hz/Px
Echo Spacing	0.66 ms
Free Echo Spacing	Off
EPI Factor	140

Sequence - Part 2

Introduction	Off
RF Spoiling	Off
Phase Correction	Internal

Sequence - Special

Excite pulse duration	3840 us
Refocus pulse duration	7680 us
Min. prep scans	0
Min. prep scans SB	1
Slice multiplier	1
Exc. RF pulse shape	1
Refoc. RF pulse shape	1
Delay before PC scans	0 us
EPI noise scans	0
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Opt. MB RF pulse BW	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
Suppress 16-bit DICOM	On
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Physio recording	Off

Sequence - Assistant

SAR Assistant	Off

\\USER\HBCD\v2.2\HBCD_v2.2_32ch\anat_desc-qalas

TA: 5:13 min Coil Selection: Manual Voxel Size: 1.3×1.3×1.3 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	228 mm
FoV Phase	100.0 %
Slice Thickness	1.3 mm
TR	4500.0 ms
TE	2.30 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	4500.0 ms
TE	2.30 ms
Magn. Preparation	Non-sel. IR
TI 1	110 ms
TI 2	1010 ms
TI 3	1910 ms
TI 4	2810 ms
TI 5	3710 ms
Flip Angle 1	4 deg
Flip Angle 2	4 deg
Flip Angle 3	4 deg
Flip Angle 4	4 deg
Flip Angle 5	4 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Radial

Resolution - Common

FoV Read	228 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	1.3 mm
Base Resolution	176
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Reference Lines 3D	24
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Off
Elliptical Scanning	On

Resolution - Filter

Raw Filter	On
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	228 mm
FoV Phase	100.0 %
Slice Thickness	1.3 mm
TR	4500.0 ms
Multi-Slice Mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	228 mm
F >> H	228 mm
R >> L	167 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	3.000

Physio - Signal

1st Signal/Mode	None
TR	4500.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI 1	110 ms
TI 2	1010 ms
TI 3	1910 ms
TI 4	2810 ms
TI 5	3710 ms
Dark Blood	Off
FoV Read	228 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	Non-sel. IR
Save Original Images	On
TE	2.30 ms
TR	4500.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	qalas3d
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Performance
Flow Compensation	None
Reordering	Radial
Bandwidth	320 Hz/Px
Echo Spacing	5.74 ms
Asymmetric Echo	Off
Turbo Factor	128

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off

Sequence - Assistant

SAR Assistant	Off

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TA: 32 sec Coil Selection: Manual Voxel Size: 3.6×3.6×3.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	46
Distance Factor	21 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	228 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	15000.0 ms
TE	2.66 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	15000.0 ms
TE	2.66 ms
Magn. Preparation	None
Flip Angle	8 deg
Fat-Water Contrast	Standard
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	228 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	64
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	3D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	46
Distance Factor	21 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	228 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	15000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	228 mm
F >> H	228 mm
R >> L	167 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
TE	2.66 ms
TR	15000.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tfl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Low SAR
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	490 Hz/Px
Echo Spacing	4.96 ms
Asymmetric Echo	Off
Turbo Factor	64

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Assistant

SAR Assistant	Off

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TA: 30 sec Coil Selection: Manual Voxel Size: 1.6×1.6×4.0 mm³ Acc:: 4 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	Off
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	3rd Segment
Inline Movie	Off

Routine

Slice Group	1
Slices	30
Distance Factor	0 %
Position	R2.6 A15.5 H14.4 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
TR	4700.0 ms
TE	135.00 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	4700.0 ms
TE	135.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
Base Resolution	160
Phase Resolution	100 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration mode	SMS
Reference Scans	TSE/Separate
Acceleration Factor PE	2
Reference Lines PE	64
SMS Factor	2
FOV Shift Factor	3
Advanced Reconstruction	Off
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	30
Distance Factor	0 %
Position	R2.6 A15.5 H14.4 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
TR	4700.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R2.6 A15.5 H14.4 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R2.6 A15.5 H14.4
R	2.6 mm
A	15.5 mm
H	14.4 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	14 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R2.6 A15.5 H14.4 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	231 mm
A >> P	256 mm
F >> H	120 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4700.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	256 mm
FoV Phase	90.0 %
Phase Resolution	100 %
Trajectory	Cartesian
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1

Inline - Cardiac

TE	135.00 ms
TR	4700.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse_rr
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Whisper
Flow Compensation	Read
Bandwidth	194 Hz/Px
Echo Spacing	11.2 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	24
Echo Trains per Slice	3

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Hyperecho	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

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TA: 12 sec Coil Selection: Manual Voxel Size: 1.6×1.6×4.0 mm³ Acc:: 4 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	Off
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	3rd Segment
Inline Movie	Off

Routine

Slice Group	1
Slices	12
Distance Factor	0 %
Position	R2.6 A15.5 H14.4 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
TR	1800.0 ms
TE	135.00 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	1800.0 ms
TE	135.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
Base Resolution	160
Phase Resolution	100 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration mode	SMS
Reference Scans	TSE/Separate
Acceleration Factor PE	2
Reference Lines PE	64
SMS Factor	2
FOV Shift Factor	3
Advanced Reconstruction	Off
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	12
Distance Factor	0 %
Position	R2.6 A15.5 H14.4 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	90.0 %
Slice Thickness	4.0 mm
TR	1800.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R2.6 A15.5 H14.4 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R2.6 A15.5 H14.4
R	2.6 mm
A	15.5 mm
H	14.4 mm
Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	14 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R2.6 A15.5 H14.4 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	231 mm
F >> H	256 mm
A >> P	48 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1800.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	256 mm
FoV Phase	90.0 %
Phase Resolution	100 %
Trajectory	Cartesian
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1

Inline - Cardiac

TE	135.00 ms
TR	1800.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse_rr
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Whisper
Flow Compensation	Read
Bandwidth	194 Hz/Px
Echo Spacing	11.2 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	24
Echo Trains per Slice	3

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Hyperecho	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

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TA: 8:56 min Coil Selection: Manual Vol: 23×30×23 mm³ Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
Vol R >> L	30 mm
Vol A >> P	23 mm
Vol F >> H	23 mm
TR	2000.0 ms
TE	80.00 ms
Averages	264
Coil Elements	HEA;HEP

Contrast - Common

TR	2000.0 ms
TE	80.00 ms
Flip Angle	90 deg
Preparation Scans	4
Averages	264
Fat-Water Contrast	Water Saturation
Water Suppr. BW	50 Hz
Spectral Suppr.	None

Resolution - Common

Vector Size	2048
Normalize	Off

Geometry - Common

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
Vol A >> P	23 mm
Vol R >> L	30 mm
Vol F >> H	23 mm

Geometry - AutoAlign

AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Navigator

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off
Adj. Water Suppr.	On

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	23 mm
R >> L	30 mm
F >> H	23 mm
Reset	Off

System - pTx

B1 Shim	TrueForm

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	2000.0 ms

Physio - PACE

Resp. Control	Off

Sequence - Common

Sequence Name	svs_hyper
Preparation Scans	4
Delta Frequency	-1.70 ppm
Ref. Scan Mode	Off
Measurements	1
Phase Cycling	Auto
Save Uncombined	On
Bandwidth	2000 Hz
Acquisition Duration	1024 ms
Remove Oversampling	Off
Freq. Corr. Accumulation	Off

Sequence - Special

Spoiler duration	2150 us
No. of water transients	8
No. of PRESS averages	32
Short TE for PRESS	35000 us

Sequence - Special

Editing Sequence:	HERCULES
Edit Pulse Frequency 1	4.58 ppm
Edit Pulse Frequency 2	1.90 ppm
Edit Off Frequency	4.18 ppm

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TA: 4:18 min Coil Selection: Manual Voxel Size: 0.8×0.8×0.8 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.8 mm
TR	2400.0 ms
TE	2.24 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HEA;HEP

Contrast - Common

TR	2400.0 ms
TE	2.24 ms
Magn. Preparation	Non-sel. IR
TI	1060 ms
Flip Angle	8 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.8 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	93.8 %
Slice Thickness	0.8 mm
TR	2400.0 ms
Multi-Slice Mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator

Navigator	1
Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
Base Size Phase	256 mm
Base Size Read	256 mm
Thickness	256 mm

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	240 mm
F >> H	256 mm
R >> L	167 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.253831 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	2400.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI	1060 ms
Dark Blood	Off
FoV Read	256 mm
FoV Phase	93.8 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	Non-sel. IR
Save Original Images	On
TE	2.24 ms
TR	2400.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tflvNav
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear
Bandwidth	210 Hz/Px
Echo Spacing	6.84 ms
Asymmetric Echo	Allowed
Turbo Factor	208

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off

Sequence - Special

Navigator	After Readout
Nav BW	4596 Hz/Px
HBCD Accel.	On

Sequence - Assistant

SAR Assistant	Off