\\XA30\Cheng\test\XA_validation\AAHead_Scout

TA: 14 sec Coil Selection: Auto Voxel Size: 1.6×1.6×1.6 mm³ Acc:: 3 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	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A10.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	260 mm
FoV Phase	100.0 %
Slice Thickness	1.6 mm
TR	3.2 ms
TE	1.37 ms
Averages	1
Concatenations	1
AutoAlign	Head

Contrast - Common

TR	3.2 ms
TE	1.37 ms
Flip Angle	8 deg
Fat-Water Contrast	Standard
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Time to Center	6.2 s

Resolution - Common

FoV Read	260 mm
FoV Phase	100.0 %
Slice Thickness	1.6 mm
Base Resolution	160
Phase Resolution	100 %
Slice Resolution	69 %
Trajectory	Cartesian

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24

Resolution - Acceleration

Acceleration Factor 3D	1
Phase Partial Fourier	6/8
Slice Partial Fourier	6/8
Asymmetric Echo	Weak

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A10.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	260 mm
FoV Phase	100.0 %
Slice Thickness	1.6 mm
TR	3.2 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 Encoding Dir.	A >> P
AutoAlign	Head
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
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	ACS All but spine
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
CoilShim	Off
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Dynamic

Dynamic Mode	Standard
Flip Angle	8 deg
Measurements	1
Time to Center	6.2 s

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Save Original Images	On
Contrasts	1
TE	1.37 ms
TR	3.2 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	fl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Bandwidth	540 Hz/Px
Asymmetric Echo	Weak

Sequence - Part 2

Introduction	On
RF Spoiling	On
Breast Application	Off

Sequence - Assistant

SAR Assistant	Off

\\XA30\Cheng\test\XA_validation\anat-T1w_acq-tfl

TA: 2:53 min Coil Selection: Auto Voxel Size: 2.0×2.0×2.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	On
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	R5.4 A28.1 F14.8 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	96
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1800.0 ms
TE	2.41 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	1800.0 ms
TE	2.41 ms
Magn. Preparation	Non-sel. IR
TI	900 ms
Flip Angle	9 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	100.0 %
Slice Thickness	2.0 mm
Base Resolution	128
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA

Resolution - Acceleration

Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	64
Acceleration Factor 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	R5.4 A28.1 F14.8 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	96
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	1800.0 ms
Multi-Slice Mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R5.4 A28.1 F14.8 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R5.4 A28.1 F14.8
R	5.4 mm
A	28.1 mm
F	14.8 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	15 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

System - Miscellaneous

Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	On
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1800.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI	900 ms
Dark Blood	Off
FoV Read	256 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	2.41 ms

Inline - Cardiac

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	tfl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Fast*
Flow Compensation	None
Reordering	Linear
Bandwidth	150 Hz/Px
Echo Spacing	6.98 ms
Asymmetric Echo	Allowed
Turbo Factor	96

Sequence - Part 2

Introduction	On
RF Spoiling	On
Incr. Gradient Spoiling	Off

Sequence - Assistant

SAR Assistant	Off

\\XA30\Cheng\test\XA_validation\func-bold_task-fa_run-1

TA: 27 sec Coil Selection: Auto Voxel Size: 3.4×3.4×3.4 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	On
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	36
Distance Factor	0 %
Position	L0.0 A2.7 H20.3 mm
Orientation	T > C-17.8
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
TR	1000.0 ms
TE	30.00 ms
Averages	1
Multi-band accel. factor	3
AutoAlign	Head > Brain

Contrast - Common

TR	1000.0 ms
TE	30.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	60 deg
Fat-Water Contrast	Fat Saturation
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	20
Delay in TR	0.00 ms

Resolution - Common

FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
Base Resolution	64
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	7/8

Resolution - Filter

Raw Filter	Off

Resolution - Filter

Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Normalize	Off

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	0 %
Position	L0.0 A2.7 H20.3 mm
Orientation	T > C-17.8
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
TR	1000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice Group	1
Position	L0.0 A2.7 H20.3 mm
Orientation	T > C-17.8
Phase Encoding Dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A2.7 H20.3
R	0.0 mm
A	2.7 mm
H	20.3 mm
Initial Orientation	T > C
T > C	-17.80
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	20 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off

System - Adjustments

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

System - Adjust Volume

Position	L0.0 A2.7 H20.3 mm
Orientation	T > C-17.8
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	123 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1000.0 ms
Multi-band accel. factor	3

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	20
Meas[1]	Active
Meas[2]	Active
Meas[3]	Active
Meas[4]	Active
Meas[5]	Active
Meas[6]	Active
Meas[7]	Active
Meas[8]	Active
Meas[9]	Active
Meas[10]	Active
Meas[11]	Ignore
Meas[12]	Ignore
Meas[13]	Ignore
Meas[14]	Ignore
Meas[15]	Ignore
Meas[16]	Ignore
Meas[17]	Ignore
Meas[18]	Ignore
Meas[19]	Ignore
Meas[20]	Ignore
Motion Correction	Off
Spatial Filter	Off
Measurements	20
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epfid

Sequence - Part 1

Dimension	2D
Excitation	Standard
Gradient Mode	Performance*
Flow Compensation	None
Bandwidth	2298 Hz/Px
Echo Spacing	0.54 ms
Free Echo Spacing	Off
EPI Factor	64

Sequence - Part 2

Introduction	Off
RF Spoiling	Off

Sequence - Special

Excite pulse duration	5660 us
Min. prep scans	0
Min. prep scans SB	0
Single-band images	Off
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	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.00 deg
Fat sat. offset	0.00 Hz
Sinc exc. pulse BWTP	5.20
Physio recording	Off
Triggering scheme	Standard

\\XA30\Cheng\test\XA_validation\gre_field_mapping

TA: 1:20 min Coil Selection: Auto Voxel Size: 3.4×3.4×3.4 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

Slice Group	1
Slices	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
TR	600.0 ms
TE 1	10.00 ms
TE 2	12.46 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	600.0 ms
TE 1	10.00 ms
TE 2	12.46 ms
MTC	Off
Flip Angle	90 deg
Fat-Water Contrast	Standard
Contrasts	2
Reconstruction	Phase

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
Base Resolution	64
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.4 mm
TR	600.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
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 - 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	Auto Coil Select
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	123 mm
Reset	Off

System - pTx

B1 Shim	TrueForm

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Sequence - Part 1

Sequence Name	fm_r
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	On
Bandwidth	260 Hz/Px
Asymmetric Echo	Off

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Assistant

SAR Assistant	Off

\\XA30\Cheng\test\XA_validation\DWI_dir80_PA

TA: 1:28 min Coil Selection: Auto Voxel Size: 3.0×3.0×3.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	On
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	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3516.0 ms
TE	68.00 ms
Multi-band accel. factor	3
AutoAlign	---

Contrast - Common

TR	3516.0 ms
TE	68.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	78 deg
Refocus flip angle	180 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	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	72
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	6/8

Resolution - Filter

Raw Filter	Off

Resolution - Filter

Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3516.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	-180.00 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	ACS All but spine
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	108 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3516.0 ms
Multi-band accel. factor	3

Physio - PACE

Resp. Control	Off
Multi-band accel. factor	3

Diff

Diffusion Mode	MDDW
Diff. Directions	20
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm²
b-value 2	2500 s/mm²
Averages 1	1
Averages 2	1
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	On
Tensor	On
FA Maps	On
ADC Maps	On
Exponential ADC Maps	Off
ADC Noise Threshold	40
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Bandwidth	1780 Hz/Px
Echo Spacing	0.67 ms
Free Echo Spacing	Off
EPI Factor	72

Sequence - Part 2

Introduction	Off
RF Spoiling	Off
Phase Correction	Internal

Sequence - Special

Excite pulse duration	5760 us
Refocus pulse duration	8960 us
Min. prep scans	0
Min. prep scans SB	0
Single-band images	Off
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
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

\\XA30\Cheng\test\XA_validation\DWI_dir80_PA

TA: 1:28 min Coil Selection: Auto Voxel Size: 3.0×3.0×3.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	On
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	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3516.0 ms
TE	68.00 ms
Multi-band accel. factor	3
AutoAlign	---

Contrast - Common

TR	3516.0 ms
TE	68.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	78 deg
Refocus flip angle	180 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	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	72
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	6/8

Resolution - Filter

Raw Filter	Off

Resolution - Filter

Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	216 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3516.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
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

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	ACS All but spine
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	108 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3516.0 ms
Multi-band accel. factor	3

Physio - PACE

Resp. Control	Off
Multi-band accel. factor	3

Diff

Diffusion Mode	MDDW
Diff. Directions	20
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm²
b-value 2	2500 s/mm²
Averages 1	1
Averages 2	1
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	On
Tensor	On
FA Maps	On
ADC Maps	On
Exponential ADC Maps	Off
ADC Noise Threshold	40
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Dimension	2D
Excitation	Standard
Gradient Mode	Performance
Bandwidth	1780 Hz/Px
Echo Spacing	0.67 ms
Free Echo Spacing	Off
EPI Factor	72

Sequence - Part 2

Introduction	Off
RF Spoiling	Off
Phase Correction	Internal

Sequence - Special

Excite pulse duration	5760 us
Refocus pulse duration	8960 us
Min. prep scans	0
Min. prep scans SB	0
Single-band images	Off
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
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

\\XA30\Cheng\test\XA_validation\asl_2d_tra

TA: 35 sec Coil Selection: Auto Voxel Size: 4.0×4.0×6.0 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	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	12
Distance Factor	25 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	4800.0 ms
TE	11.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	4800.0 ms
TE	11.00 ms
Flip Angle	90 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	7
Multiple Series	Off
Delay in TR	0.00 ms

Contrast - ASL

Perfusion Mode	PCASL
Quality check	On
Labeling Duration	1800 ms
Postlabeling Delay	1800 ms
Flow Limit	100.00 cm/s

Resolution - Common

FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	64
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
Hamming	Off
Distortion Correction	2D
Normalize	Prescan

Geometry - Common

Slice Group	1
Slices	12
Distance Factor	25 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	256 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	4800.0 ms
Multi-Slice Mode	Interleaved
Series	Ascending
Concatenations	1

Geometry - AutoAlign

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

Geometry - Saturation

Special Saturation	Parallel F
Gap	35.00 mm

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
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	256 mm
R >> L	256 mm
F >> H	89 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.262479 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4800.0 ms
Concatenations	1

Perf

Measurements	7
Motion Correction	Off
Spatial Filter	Off

Sequence - Part 1

Sequence Name	epfid
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Fast
Bandwidth	3004 Hz/Px
Echo Spacing	0.40 ms
Free Echo Spacing	Off
EPI Factor	64

Sequence - Part 2

Introduction	On