

Table of contents

\\ROUTINE BJH

NEURO

A06A ARIA

ARIA_WO

AAHead_Scout	
t2_tse_tra_dark-fluid	ARIA
t2_fl2d_tra_hemo	ARIA
ep2d_diff_3scan_trace_p2	ARIA
TRA	SWI

ARIA_WWO

AAHead_Scout		*
SAG	T1	SE
TRA	T2	TSE
t2_tse_tra_dark-fluid		ARIA
t2_fl2d_tra_hemo		ARIA
ep2d_diff_3scan_trace_p2		ARIA
TRA	SWI	
t1_mprage_sag_p2_iso		ARIA
COR	T1FS	SE
		17_130

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WO\AAHead_Scout

TA: 0:19 PM: ISO 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	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P20.0 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	4.52 ms
TE	2.38 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	4.52 ms
TE	2.38 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

Resolution - iPAT

Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P20.0 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	4.52 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	8.2 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.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1

Sequence - Part 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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WO\t2_tse_tra_dark-fluid ARIA

TA: 3:02 PM: REF Voxel size: 0.5×0.5×4.0 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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	10000.0 ms
TE	117 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR	10000.0 ms
TE	117 ms
TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	2600 ms
Flip angle	150 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off
Freeze suppressed tissue	On

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	85 %

Resolution - Common

Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	On

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	38
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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	10000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
AutoAlign	---
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	90.00 deg
R >> L	240 mm
A >> P	240 mm
F >> H	155 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	10000.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	2600 ms
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	85 %
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	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.	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	10.7 ms
Bandwidth	130 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
WARP	Off
Red. EC sensitivity	Off
Turbo factor	16

Sequence - Assistant

Mode	Off
Allowed delay	30 s

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WO\2_fl2d_tra_hemo ARIA

TA: 2:53 PM: REF Voxel size: 0.5×0.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : fl_r

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

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

Routine

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	613.0 ms
TE	35.00 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	613.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	613.0 ms
TE	35.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Geometry - AutoAlign

Slice group	1
AutoAlign	---
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Contrast - Dynamic

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

Geometry - Saturation

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H

System - Miscellaneous

Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	613.0 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
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	130 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WO\ep2d_diff_3scan_trace_p2 ARIA

TA: 0:49 PM: REF Voxel size: 1.9×1.9×4.0 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	6800 ms
TE	84.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	6800 ms
TE	84.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	32
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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	6800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

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

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	240 mm
R >> L	240 mm
F >> H	155 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	6800 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Bipolar
Diff. weightings	2

Diff - Body

b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.94 ms
Bandwidth	1220 Hz/Px

Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Fast

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WO\TRA SWI

TA: 2:52 PM: ISO Voxel size: 0.9×0.9×2.4 mmPAT: 3 Rel. SNR: 1.00 : swi_r

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	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	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	64
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	49.0 ms
TE	40.00 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	49.0 ms
TE	40.00 ms
MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	On

Contrast - Dynamic

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

Resolution - Common

FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
Base resolution	256
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

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

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	64
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	49.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	90.00 deg
R >> L	230 mm
A >> P	230 mm
F >> H	154 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	49.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	230 mm
FoV phase	100.0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	80 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\AAHead_Scout *

TA: 0:19 PM: ISO 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	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P20.0 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	4.52 ms
TE	2.38 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	4.52 ms
TE	2.38 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

Resolution - iPAT

Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P20.0 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	4.52 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	8.2 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.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1

Sequence - Part 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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\SAG T1 SE *

TA: 1:20 PM: ISO Voxel size: 0.9×0.9×5.0 mmPAT: 2 Rel. SNR: 1.00 : se_rs

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	On
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	25
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	10 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	633.0 ms
TE	13.0 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR	633.0 ms
TE	13.0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	80 %
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.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	25
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	633.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	633.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	80 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	Slice
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0 ms
Bandwidth	150 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	125
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
WARP	Off
Red. EC sensitivity	Off
Turbo factor	1

Sequence - Assistant

Mode	Off
Allowed delay	30 s

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\TRA T2 TSE *

TA: 0:56 PM: ISO Voxel size: 0.9×0.9×5.0 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	On
Load images to graphic segments	On
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	28
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
TR	4700.0 ms
TE	106 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR	4700.0 ms
TE	106 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	180 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	98 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	39
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	28
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	5.0 mm
TR	4700.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	90.00 deg
R >> L	210 mm
A >> P	240 mm
F >> H	167 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	4700.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	98 %
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	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	11.8 ms
Bandwidth	190 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	5
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Normal
WARP	Off
Red. EC sensitivity	Off
Turbo factor	26

Sequence - Assistant

Mode	Off
Allowed delay	30 s

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\t2_tse_tra_dark-fluid ARIA *

TA: 3:02 PM: REF Voxel size: 0.5×0.5×4.0 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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	10000.0 ms
TE	117 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Contrast - Common

TR	10000.0 ms
TE	117 ms
TD	0.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	2600 ms
Flip angle	150 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None
Restore magn.	Off
Freeze suppressed tissue	On

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	85 %

Resolution - Common

Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	On

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	38
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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	10000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
AutoAlign	---
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	90.00 deg
R >> L	240 mm
A >> P	240 mm
F >> H	155 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	10000.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	2600 ms
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	85 %
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	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.	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	10.7 ms
Bandwidth	130 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Fast
WARP	Off
Red. EC sensitivity	Off
Turbo factor	16

Sequence - Assistant

Mode	Off
Allowed delay	30 s

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\t2_fl2d_tra_hemo ARIA *

TA: 2:53 PM: REF Voxel size: 0.5×0.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : fl_r

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

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

Routine

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	613.0 ms
TE	35.00 ms
Averages	1
Concatenations	2
Filter	Prescan Normalize, Elliptical filter
Coil elements	HE1-4

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	613.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	613.0 ms
TE	35.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Geometry - AutoAlign

Slice group	1
AutoAlign	---
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Contrast - Dynamic

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

Geometry - Saturation

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H

System - Miscellaneous

Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	613.0 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
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	130 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\ep2d_diff_3scan_trace_p2 ARIA *

TA: 0:49 PM: REF Voxel size: 1.9×1.9×4.0 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	6800 ms
TE	84.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	6800 ms
TE	84.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	32
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	30
Dist. factor	30 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	6800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

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

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	240 mm
R >> L	240 mm
F >> H	155 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	6800 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Bipolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Bipolar
Diff. weightings	2

Diff - Body

b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.94 ms
Bandwidth	1220 Hz/Px

Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Fast

\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\TRA SWI *

TA: 2:52 PM: ISO Voxel size: 0.9×0.9×2.4 mmPAT: 3 Rel. SNR: 1.00 : swi_r

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	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	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	64
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	49.0 ms
TE	40.00 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE1-4

Contrast - Common

TR	49.0 ms
TE	40.00 ms
MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	On

Contrast - Dynamic

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

Resolution - Common

FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
Base resolution	256
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

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

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	64
FoV read	230 mm
FoV phase	100.0 %
Slice thickness	2.40 mm
TR	49.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

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	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	90.00 deg
R >> L	230 mm
A >> P	230 mm
F >> H	154 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	49.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	230 mm
FoV phase	100.0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	80 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\t1_mprage_sag_p2_iso ARIA *

TA: 4:18 PM: REF Voxel size: 1.3×1.3×1.3 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.25 mm
TR	2400.0 ms
TE	2.49 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter, Image Filter
Coil elements	HE1-4

Contrast - Common

TR	2400.0 ms
TE	2.49 ms
Magn. preparation	Non-sel. IR
TI	1000 ms
Flip angle	8 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.25 mm
Base resolution	192
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	On
! Intensity	Medium
Edge Enhancement	3
Smoothing	2
Unfiltered images	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

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	1.25 mm
TR	2400.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	---
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H

Geometry - Tim Planning Suite

Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	2400.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1000 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1

Inline - Common

StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.4 ms
Bandwidth	190 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	224

Sequence - Assistant

Mode	Off
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\\ROUTINE BJH\NEURO\A06A ARIA\ARIA_WWO\COR T1FS SE 17_130 *

TA: 3:09 PM: ISO Voxel size: 0.9×0.9×6.0 mmRel. SNR: 1.00 : se_r

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	On
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	26
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	230 mm
FoV phase	81.3 %
Slice thickness	6.0 mm
TR	414 ms
TE	17 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	414 ms
TE	17 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	230 mm
FoV phase	81.3 %
Slice thickness	6.0 mm
Base resolution	256
Phase resolution	70 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	26
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	230 mm
FoV phase	81.3 %
Slice thickness	6.0 mm
TR	414 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice group	1
AutoAlign	Head > Brain
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0.0 mm
A	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Coronal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A

System - Miscellaneous

Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Default

Sequence - Assistant

Mode	Off
Allowed delay	0 s

System - Adjustments

B0 Shim mode	Standard
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	Coronal
Rotation	0.00 deg
R >> L	187 mm
F >> H	230 mm
A >> P	186 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.671547 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	414 ms
Concatenations	3

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	130 Hz/Px