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\\USER

Brain

Epilepsy

Brain TLE XA60

HASTE_Loc					*
T2	tse_p3_drb	Tran_2.0mm			*
T2	tse_p3_drb	Cor_2.0mm			*
T2	tse_p3_drb	Sag_1.8mm			*
3D	MPRAGE	Sag	0.8mm		*
3D	CS	FLAIR	SPACE	0.8mm	*
SMS	RESOLVE	DWI			*
3D	SWI	Hi-res			*

\\USER\Brain\Epilepsy\Brain TLE XA60\HASTE_Loc *

TA: 44 sec Coil Selection: Auto Voxel Size: 0.8x0.8x4.0 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	3
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	2
Slices	3
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	3
Slices	3
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	2000.0 ms
TE	89.00 ms
Averages	1
Concatenations	3
AutoAlign	---

Contrast - Common

TR	2000.0 ms
TE	89.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant

Contrast - Common

Flip Angle	150 deg
Fat-Water Contrast	Standard
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	260 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	320
Phase Resolution	80 %
Interpolation	1.00

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Deep Resolve	Off
Phase Partial Fourier	5/8

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	3
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	2
Slices	3
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	3
Slices	3

Geometry - Common

Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	2000.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	2
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slice Group	3
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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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
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off

System - Miscellaneous

Coil Focus	Flat
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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 - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	2000.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	260 mm
FOV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	3

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
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Inline - MIP

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
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	401 Hz/Px
Echo Spacing	5.26 ms
Turbo Factor	256

Sequence - Part 2

Introduction	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\USER\Brain\Epilepsy\Brain TLE XA60\T2 tse_p3_drb_Tran_2.0mm *

TA: 3:15 min Coil Selection: Auto Voxel Size: 0.3×0.3×2.0 mm³ Acc:: 3 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
Base Resolution	400
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	28
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	62
Distance Factor	10 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
TR	4300.0 ms
TE	93.00 ms
Averages	1
Concatenations	3
AutoAlign	---

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	62
Distance Factor	10 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
TR	4300.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Contrast - Common

TR	4300.0 ms
TE	93.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle	150 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - Navigator**Geometry - Saturation**

Special Saturation	Parallel F
Gap	10.00 mm
Thickness	50.00 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
Radial Sorting	Off
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	90.00 deg
R >> L	175 mm
A >> P	200 mm
F >> H	137 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4300.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FOV Read	200 mm
FOV Phase	87.5 %
Phase Resolution	75 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	3

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

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
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	305 Hz/Px
Echo Spacing	10.4 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	17
Echo Trains per Slice	14

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Fast Mode	Off

Sequence - Part 2

WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

\\USER\Brain\Epilepsy\Brain TLE XA60\T2 tse_p3_drb_Cor_2.0mm *

TA: 2:33 min Coil Selection: Auto Voxel Size: 0.3×0.3×2.0 mm³ Acc:: 3 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
Base Resolution	384
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	45
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	66
Distance Factor	5 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	75 %
FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
TR	4200.0 ms
TE	92.00 ms
Averages	1
Concatenations	3
AutoAlign	---

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	66
Distance Factor	5 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	75 %
FOV Read	200 mm
FOV Phase	87.5 %
Slice Thickness	2.0 mm
TR	4200.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Contrast - Common

TR	4200.0 ms
TE	92.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle	150 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Geometry - AutoAlign

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

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - Navigator**Geometry - Saturation**

Special Saturation	Parallel P
Gap	10.00 mm
Thickness	50.00 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
Radial Sorting	Off
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	Coronal
Rotation	0.00 deg
R >> L	175 mm
F >> H	200 mm
A >> P	139 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4200.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	200 mm
FOV Phase	87.5 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	3

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

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
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	303 Hz/Px
Echo Spacing	10.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	17
Echo Trains per Slice	11

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Fast Mode	Off

Sequence - Part 2

WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

\\USER\Brain\Epilepsy\Brain TLE XA60\T2 tse_p3_drb_Sag_1.8mm *

TA: 2:43 min Coil Selection: Auto Voxel Size: 0.3×0.3×1.8 mm³ Acc:: 3 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	200 mm
FOV Phase	93.8 %
Slice Thickness	1.8 mm
Base Resolution	384
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	46
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	45
Distance Factor	5 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	93.8 %
Slice Thickness	1.8 mm
TR	4750.0 ms
TE	92.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	45
Distance Factor	5 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	93.8 %
Slice Thickness	1.8 mm
TR	4750.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	4750.0 ms
TE	92.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle	150 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

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

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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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
Radial Sorting	Off
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	Sagittal
Rotation	0.00 deg
A >> P	188 mm
F >> H	200 mm
R >> L	85 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4750.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None

Physio - Cardiac

Dark Blood	Off
FOV Read	200 mm
FOV Phase	93.8 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

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
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	303 Hz/Px
Echo Spacing	11.5 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	17
Echo Trains per Slice	16

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off

Sequence - Part 2

Acoustic noise reduction	Off
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	130 deg
Allowed Delay	30 s

\\USER\Brain\Epilepsy\Brain TLE XA60\3D MPRAGE Sag 0.8mm *TA: 3:55 min Coil Selection: Auto Voxel Size: 0.4×0.4×0.4 mm³ Acc:: 3 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
Disable auto transfer to PACS	Off
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	R0.1 A13.2 H18.1 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	352
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FOV Read	255 mm
FOV Phase	100.0 %
Slice Thickness	0.40 mm
TR	1900.0 ms
TE	2.32 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	1900.0 ms
TE	2.32 ms
Magn. Preparation	Non-sel. IR
TI	900 ms
Flip Angle	9 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FOV Read	255 mm
FOV Phase	100.0 %
Slice Thickness	0.40 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	51 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
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	R0.1 A13.2 H18.1 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	352
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FOV Read	255 mm
FOV Phase	100.0 %
Slice Thickness	0.40 mm
TR	1900.0 ms
Multi-Slice Mode	Single Shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R0.1 A13.2 H18.1 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---

Geometry - AutoAlign

Initial Position	R0.1 A13.2 H18.1
R	0.1 mm
A	13.2 mm
H	18.1 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

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

Set-n-Go Protocol	Off
Table Position	18 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
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	R0.1 A13.2 H18.1 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	255 mm
F >> H	255 mm
R >> L	141 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1900.0 ms

Physio - Signal

Concatenations	1
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Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI	900 ms
Dark Blood	Off
FOV Read	255 mm
FOV Phase	100.0 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

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
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Inline - MapIt

MapIt	None
Flip Angle	9 deg
Measurements	1
Contrasts	1
TE	2.32 ms
TR	1900.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	tfl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None

Sequence - Part 1

Reordering	Linear
Bandwidth	200 Hz/Px
Echo Spacing	8.30 ms
Asymmetric Echo	Allowed
Turbo Factor	196

Sequence - Part 2

Introduction	On
RF Spoiling	On
Incr. Gradient Spoiling	On
BM Motion Correction	Off

Sequence - Assistant

SAR Assistant	Off
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\\USER\Brain\Epilepsy\Brain TLE XA60\3D CS FLAIR SPACE 0.8mm *TA: 5:08 min Coil Selection: Auto Voxel Size: 0.4×0.4×0.4 mm³ Acc:: 5.0 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
Disable auto transfer to PACS	Off
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	L0.1 A11.5 H11.8 mm
Orientation	S > C-1.0 > T-0.1
Phase Encoding Dir.	A >> P
Slices per Slab	384
Phase Oversampling	25 %
Slice Oversampling	8.3 %
FOV Read	245 mm
FOV Phase	87.5 %
Slice Thickness	0.40 mm
TR	6000.0 ms
TE	446.00 ms
Averages	1.0
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6000.0 ms
TE	446.00 ms
MTC	On
Magn. Preparation	Non-sel. T2 prep. IR
TI	1850 ms
T2 Prep. Duration	125 ms
Flip Angle Mode	T2 Var
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Dark Blood	Off
Blood Suppression	Off
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Contrast - Dynamic

Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FOV Read	245 mm
FOV Phase	87.5 %
Slice Thickness	0.40 mm
Base Resolution	288
Phase Resolution	100 %
Slice Resolution	50 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	CS
Total Factor	5.0
Reference Scans	Integrated
Reference Lines PE	28
Reference Lines 3D	24
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.1 A11.5 H11.8 mm
Orientation	S > C-1.0 > T-0.1
Phase Encoding Dir.	A >> P
Slices per Slab	384
Phase Oversampling	25 %
Slice Oversampling	8.3 %
FOV Read	245 mm
FOV Phase	87.5 %
Slice Thickness	0.40 mm
TR	6000.0 ms
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L0.1 A11.5 H11.8 mm
Orientation	S > C-1.0 > T-0.1
Phase Encoding Dir.	A >> P
AutoAlign	---

Geometry - AutoAlign

Initial Position	L0.1 A11.5 H11.8
L	0.1 mm
A	11.5 mm
H	11.8 mm
Initial Orientation	S > C
S > C	-1.00
> T	-0.10
Initial Rotation	0.21 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	12 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Performance
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	L0.1 A11.5 H11.8 mm
Orientation	S > C-1.0 > T-0.1
Rotation	0.21 deg
A >> P	215 mm
F >> H	245 mm
R >> L	154 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off

System - Tx/Rx

Image Scaling	1.000
Gain	High

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	Non-sel. T2 prep. IR
TI	1850 ms
T2 Prep. Duration	125 ms
Dark Blood	Off
FOV Read	245 mm
FOV Phase	87.5 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

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
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	spcir
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear

Sequence - Part 1

Bandwidth	723 Hz/Px
Echo Spacing	3.78 ms
Turbo Factor	294
Echo Train Duration	1108 ms

Sequence - Part 2

Introduction	On
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Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\USER\Brain\Epilepsy\Brain TLE XA60\SMS RESOLVE DWI *

TA: 3:39 min Coil Selection: Auto Voxel Size: 0.5×0.5×3.0 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	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	42
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4950.0 ms
TE 1	73 ms
TE 2	125 ms
Concatenations	1
AutoAlign	Head > Brain

Contrast - Common

TR	4950.0 ms
TE 1	73 ms
TE 2	125 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FOV Read	220 mm
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Resolution - Common

FOV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	224
Phase Resolution	100 %
Interpolation	On

Resolution - Acceleration

Accel. Mode	SMS
Reference Scans	EPI/Separate
Acceleration Factor PE	2
Reference Lines PE	112
SMS Factor	2
FOV Shift Factor	3
Phase Partial Fourier	Off
Readout Partial Fourier	7/8
Readout Segments	7

Resolution - Filter

Raw Filter	On
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off

Geometry - Common

Slice Group	1
Slices	42
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4950.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	Head > Brain
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal

Geometry - AutoAlign

Initial Rotation	0.00 deg
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Geometry - Saturation

Special Saturation	None
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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
Radial Sorting	Off
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	220 mm
R >> L	220 mm
F >> H	151 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4950.0 ms
Concatenations	1

Diff

Diffusion Mode	4-Scan Trace
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Diff

Diff. Directions	4
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm ²
b-value 2	1000 s/mm ²
Averages 1	1
Averages 2	1
Invert Gray Scale	Off
Diff. Weighted Images	Off
Trace Weighted Images	On
Tensor	Off
FA Maps	Off
ADC Maps	On
Exponential ADC Maps	Off
b-value >=	0 s/mm ²
ADC Noise Threshold	40
Noise Masking	Off
Calculated Image	Off

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	resolve
Dimension	2D
RF Pulse Type	Low SAR
Gradient Mode	Fast
Bandwidth	657 Hz/Px
Echo Spacing	0.36 ms
Optimization	Min. TE
EPI Factor	112

Sequence - Part 2

Introduction	On
Reacquisition Mode	On

Sequence - Assistant

SAR Assistant	Off
Optimization	Min. TE

\\USER\Brain\Epilepsy\Brain TLE XA60\3D SWI Hi-res *

TA: 3:06 min Coil Selection: Auto Voxel Size: 0.3×0.3×1.8 mm³ Acc:: 3 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
Disable auto transfer to PACS	Off
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	20 %
Position	R0.1 A24.9 F9.4 mm
Orientation	T > C13.9 > S0.5
Phase Encoding Dir.	R >> L
Slices per Slab	88
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	1.75 mm
TR	27.0 ms
TE	19.70 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	27.0 ms
TE	19.70 ms
MTC	Off
Magn. Preparation	None
Flip Angle	15 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	On
Reconstruction	Magn./Phase

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	1.75 mm
Base Resolution	320
Phase Resolution	70 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Deep Resolve	Off
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R0.1 A24.9 F9.4 mm
Orientation	T > C13.9 > S0.5
Phase Encoding Dir.	R >> L
Slices per Slab	88
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	1.75 mm
TR	27.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R0.1 A24.9 F9.4 mm
Orientation	T > C13.9 > S0.5

Geometry - AutoAlign

Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R0.1 A24.9 F9.4
R	0.1 mm
A	24.9 mm
F	9.4 mm
Initial Orientation	T > C
T > C	13.90
> S	0.50
Initial Rotation	90.00 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	Auto Coil Select
Radial Sorting	Off
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	R0.1 A24.9 F9.4 mm
Orientation	T > C13.9 > S0.5
Rotation	90.00 deg
R >> L	158 mm
A >> P	210 mm
F >> H	154 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V

System - Tx/Rx

Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	27.0 ms
Segments	1
Concatenations	1

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	210 mm
FOV Phase	75.0 %
Phase Resolution	70 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

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
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Inline - MapIt

MapIt	None
Flip Angle	15 deg
Measurements	1
Contrasts	1
TE	19.70 ms
TR	27.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	swi_r
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	On
Bandwidth	120 Hz/Px
Asymmetric Echo	Off
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s