\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\localizer_sag+cor+tra *

TA: 25 sec Coil Selection: Auto Voxel Size: 0.5×0.5×6.0 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	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %
FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
TE	3.57 ms
Averages	1
Concatenations	15
AutoAlign	---

Contrast - Common

TR	8.3 ms
TE	3.57 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	Off
Asymmetric Echo	Allowed

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %

Geometry - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	15

Geometry - AutoAlign

Slice Group	1
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Position	L86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	L86.0 A30.0 H0.0
L	86.0 mm
A	30.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	-180.00 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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8.3 ms
Segments	1
Concatenations	15

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	250 mm
FoV Phase	100.0 %
Phase Resolution	75 %

Physio - PACE

Resp. Control	Off
Concatenations	15

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	250 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t2_tse_tra-AAT-DRB *

TA: 48 sec Coil Selection: Auto Voxel Size: 0.2×0.2×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	6620.0 ms
TE	84.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	6620.0 ms
TE	84.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 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	160 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	384
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	30
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	6620.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L68.9 A7.7 F31.1
L	68.9 mm
A	7.7 mm
F	31.1 mm
Initial Orientation	T > C
T > C	-3.40
> S	0.80

Geometry - AutoAlign

Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	31 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	6620.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	148 Hz/Px
Echo Spacing	10.5 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	6

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_cor-AAT-DRB *

TA: 53 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	L75.3 A5.4 F23.8 mm
Orientation	C > S5.6 > T-4.0
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3950.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	272
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	29
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	10 %
Position	L75.3 A5.4 F23.8 mm
Orientation	C > S5.6 > T-4.0
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L75.3 A5.4 F23.8 mm
Orientation	C > S5.6 > T-4.0
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L75.3 A5.4 F23.8
L	75.3 mm
A	5.4 mm
F	23.8 mm
Initial Orientation	C > S
C > S	5.60

Geometry - AutoAlign

> T	-4.00
Initial Rotation	-0.82 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	24 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L75.3 A5.4 F23.8 mm
Orientation	C > S5.6 > T-4.0
Rotation	-0.82 deg
R >> L	180 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3950.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	151 Hz/Px
Echo Spacing	9.74 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	11

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_sag-AAT-DRB *

TA: 59 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
TE	31.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3570.0 ms
TE	31.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	150 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	L71.2 A7.2 F27.8
L	71.2 mm
A	7.2 mm
F	27.8 mm
Initial Orientation	S > C
S > C	-2.20

Geometry - AutoAlign

> T	-1.20
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	28 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3570.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	181 Hz/Px
Echo Spacing	10.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	14

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t1_tse_sag-AAT-DRB *

TA: 41 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
TE	8.30 ms
Averages	1
Concatenations	3
AutoAlign	Knee > Standard

Contrast - Common

TR	441.0 ms
TE	8.30 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
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	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	304
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	L71.2 A7.2 F27.8
L	71.2 mm
A	7.2 mm
F	27.8 mm
Initial Orientation	S > C
S > C	-2.20

Geometry - AutoAlign

> T	-1.20
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	28 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	441.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 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
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	201 Hz/Px
Echo Spacing	8.28 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	29

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	800.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_tra-AAT-DRB *

TA: 54 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	4390.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L68.9 A7.7 F31.1
L	68.9 mm
A	7.7 mm
F	31.1 mm
Initial Orientation	T > C
T > C	-3.40

Geometry - AutoAlign

> S	0.80
Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	31 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L68.9 A7.7 F31.1 mm
Orientation	T > C-3.4 > S0.8
Rotation	86.20 deg
R >> L	160 mm
A >> P	160 mm
F >> H	132 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4390.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	150 Hz/Px
Echo Spacing	9.68 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	10

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_space_fs_sag-AAT-CS *

TA: 3:32 min Coil Selection: Auto Voxel Size: 0.4×0.4×0.8 mm³ Acc:: 4.0 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	1
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	A >> P
Slices per Slab	160
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	160 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
TR	900.0 ms
TE	33.00 ms
Averages	1.0
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	900.0 ms
TE	33.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	PD Var
Fat-Water Contrast	SPAIR
Fat Saturation	Strong
Dark Blood	Off
Blood Suppression	Off
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Radial

Resolution - Common

FoV Read	160 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
Base Resolution	224
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	CS
Total Factor	4.0
Reference Scans	Integrated
Reference Lines PE	24
Reference Lines 3D	24
Phase Partial Fourier	Off
Slice Partial Fourier	Off
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
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	A >> P
Slices per Slab	160
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	160 mm
FoV Phase	93.8 %
Slice Thickness	0.80 mm
TR	900.0 ms
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Phase Encoding Dir.	A >> P
AutoAlign	Knee > Standard
Initial Position	L0.0 P0.0 F20.0
L	0.0 mm
P	0.0 mm
F	20.0 mm

Geometry - AutoAlign

Initial Orientation	Sagittal
Initial Rotation	-0.01 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	28 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Performance
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L71.2 A7.2 F27.8 mm
Orientation	S > C-2.2 > T-1.2
Rotation	-1.82 deg
A >> P	150 mm
F >> H	160 mm
R >> L	128 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	3.000

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	900.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	SPAIR
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	93.8 %
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

Sequence - Part 1

Sequence Name	spcR
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Reordering	Radial
Bandwidth	399 Hz/Px
Echo Spacing	4.70 ms
Turbo Factor	40
Echo Train Duration	193 ms

Sequence - Part 2

Introduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\localizer_sag+cor+tra *

TA: 25 sec Coil Selection: Auto Voxel Size: 0.5×0.5×6.0 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	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %
FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
TE	3.57 ms
Averages	1
Concatenations	15
AutoAlign	---

Contrast - Common

TR	8.3 ms
TE	3.57 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	Off
Asymmetric Echo	Allowed

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %

Geometry - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	15

Geometry - AutoAlign

Slice Group	1
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	R86.0 A30.0 H0.0
R	86.0 mm
A	30.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	-180.00 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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8.3 ms
Segments	1
Concatenations	15

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	250 mm
FoV Phase	100.0 %
Phase Resolution	75 %

Physio - PACE

Resp. Control	Off
Concatenations	15

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	250 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t2_tse_tra-AAT-DRB *

TA: 48 sec Coil Selection: Auto Voxel Size: 0.2×0.2×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	6620.0 ms
TE	84.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	6620.0 ms
TE	84.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 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	160 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	384
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	30
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	6620.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R82.9 A7.6 F26.4
R	82.9 mm
A	7.6 mm
F	26.4 mm
Initial Orientation	T > C
T > C	2.30
> S	0.80

Geometry - AutoAlign

Initial Rotation	93.63 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	26 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	6620.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	148 Hz/Px
Echo Spacing	10.5 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	6

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_cor-AAT-DRB *

TA: 53 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R81.3 A12.4 F17.8 mm
Orientation	C > S-6.9 > T-0.9
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3950.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	272
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	29
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R81.3 A12.4 F17.8 mm
Orientation	C > S-6.9 > T-0.9
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R81.3 A12.4 F17.8 mm
Orientation	C > S-6.9 > T-0.9
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R81.3 A12.4 F17.8
R	81.3 mm
A	12.4 mm
F	17.8 mm
Initial Orientation	C > S
C > S	-6.90

Geometry - AutoAlign

> T	-0.90
Initial Rotation	-0.82 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R81.3 A12.4 F17.8 mm
Orientation	C > S-6.9 > T-0.9
Rotation	-0.82 deg
R >> L	180 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3950.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	151 Hz/Px
Echo Spacing	9.74 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	11

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_sag-AAT-DRB *

TA: 59 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
TE	31.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3570.0 ms
TE	31.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	150 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	R87.1 A10.3 F22.9
R	87.1 mm
A	10.3 mm
F	22.9 mm
Initial Orientation	S > C
S > C	6.80

Geometry - AutoAlign

> T	2.10
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3570.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	181 Hz/Px
Echo Spacing	10.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	14

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t1_tse_sag-AAT-DRB *

TA: 41 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
TE	8.30 ms
Averages	1
Concatenations	3
AutoAlign	Knee > Standard

Contrast - Common

TR	441.0 ms
TE	8.30 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
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	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	304
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
Phase Oversampling	60 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	R87.1 A10.3 F22.9
R	87.1 mm
A	10.3 mm
F	22.9 mm
Initial Orientation	S > C
S > C	6.80

Geometry - AutoAlign

> T	2.10
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R87.1 A10.3 F22.9 mm
Orientation	S > C6.8 > T2.1
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	441.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 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
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	201 Hz/Px
Echo Spacing	8.28 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	29

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	800.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_tra-AAT-DRB *

TA: 54 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	4390.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R82.9 A7.6 F26.4
R	82.9 mm
A	7.6 mm
F	26.4 mm
Initial Orientation	T > C
T > C	2.30

Geometry - AutoAlign

> S	0.80
Initial Rotation	93.63 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	26 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R82.9 A7.6 F26.4 mm
Orientation	T > C2.3 > S0.8
Rotation	93.62 deg
R >> L	160 mm
A >> P	160 mm
F >> H	132 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4390.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	150 Hz/Px
Echo Spacing	9.68 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	10

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\localizer_sag+cor+tra *

TA: 18 sec Coil Selection: Auto Voxel Size: 0.6×0.6×6.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

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

Routine

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
TE	3.03 ms
Averages	1
Concatenations	11
AutoAlign	---

Contrast - Common

TR	7.0 ms
TE	3.03 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L112.0 P25.8 H0.0 mm

Geometry - Common

Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	11

Geometry - AutoAlign

Slice Group	1
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
Slice Group	3
Position	L112.0 P25.8 H0.0 mm
Orientation	S > C-2.7
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L112.0 P25.8 H0.0
L	112.0 mm
P	25.8 mm
F	0.0 mm
Initial Orientation	S > C
S > C	-2.70
> T	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.0 ms
Segments	1
Concatenations	11

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	300 mm
FoV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	11

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

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 - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	290 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t2_tse_tra-AAT-DRB *

TA: 1:45 min Coil Selection: Auto Voxel Size: 0.2×0.2×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	7410.0 ms
TE	82.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	7410.0 ms
TE	82.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 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	160 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	384
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	36
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	7410.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L108.6 P16.7 H23.3
L	108.6 mm
P	16.7 mm
H	23.3 mm
Initial Orientation	T > S
T > S	3.80
> C	1.40

Geometry - AutoAlign

Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7410.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	148 Hz/Px
Echo Spacing	11.8 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	13

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_cor-AAT-DRB *

TA: 1:36 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	L110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3950.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	272
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	24
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	10 %
Position	L110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L110.4 P11.7 H23.0
L	110.4 mm
P	11.7 mm
H	23.0 mm
Initial Orientation	C > S
C > S	4.00

Geometry - AutoAlign

> T	-3.60
Initial Rotation	-0.82 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Rotation	-0.82 deg
R >> L	180 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3950.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	151 Hz/Px
Echo Spacing	9.74 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	22

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_sag-AAT-DRB *

TA: 1:09 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
TE	31.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3570.0 ms
TE	31.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	150 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	28
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	L108.3 P22.6 H16.8
L	108.3 mm
P	22.6 mm
H	16.8 mm
Initial Orientation	S > T
S > T	-4.10

Geometry - AutoAlign

> C	-2.70
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	17 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3570.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	181 Hz/Px
Echo Spacing	10.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	17

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t1_tse_sag-AAT-DRB *

TA: 49 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
TE	8.30 ms
Averages	1
Concatenations	3
AutoAlign	Knee > Standard

Contrast - Common

TR	441.0 ms
TE	8.30 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
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	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	304
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	L108.3 P22.6 H16.8
L	108.3 mm
P	22.6 mm
H	16.8 mm
Initial Orientation	S > T
S > T	-4.10

Geometry - AutoAlign

> C	-2.70
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	17 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	441.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 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
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	201 Hz/Px
Echo Spacing	8.28 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	35

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	800.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_tra-AAT-DRB *

TA: 1:42 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	4390.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	L108.6 P16.7 H23.3
L	108.6 mm
P	16.7 mm
H	23.3 mm
Initial Orientation	T > S
T > S	3.80

Geometry - AutoAlign

> C	1.40
Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	L108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Rotation	86.20 deg
R >> L	160 mm
A >> P	160 mm
F >> H	132 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4390.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	150 Hz/Px
Echo Spacing	9.68 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	21

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\localizer_sag+cor+tra *

TA: 25 sec Coil Selection: Auto Voxel Size: 0.5×0.5×6.0 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	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %
FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
TE	3.57 ms
Averages	1
Concatenations	15
AutoAlign	---

Contrast - Common

TR	8.3 ms
TE	3.57 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	None
Phase Partial Fourier	Off
Asymmetric Echo	Allowed

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Slices	5
Distance Factor	100 %
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Phase Oversampling	0 %

Geometry - Common

FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	8.3 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	15

Geometry - AutoAlign

Slice Group	1
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	2
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
Slice Group	3
Position	R86.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	R86.0 A30.0 H0.0
R	86.0 mm
A	30.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	-180.00 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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8.3 ms
Segments	1
Concatenations	15

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	250 mm
FoV Phase	100.0 %
Phase Resolution	75 %

Physio - PACE

Resp. Control	Off
Concatenations	15

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	250 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t2_tse_tra-AAT-DRB *

TA: 1:45 min Coil Selection: Auto Voxel Size: 0.2×0.2×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	7410.0 ms
TE	82.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	7410.0 ms
TE	82.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 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	160 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	384
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	36
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	7410.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R108.6 P16.7 H23.3
R	108.6 mm
P	16.7 mm
H	23.3 mm
Initial Orientation	T > S
T > S	3.80
> C	1.40

Geometry - AutoAlign

Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7410.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	148 Hz/Px
Echo Spacing	11.8 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	13

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_cor-AAT-DRB *

TA: 1:36 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3950.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	272
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	24
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3950.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R110.4 P11.7 H23.0
R	110.4 mm
P	11.7 mm
H	23.0 mm
Initial Orientation	C > S
C > S	4.00

Geometry - AutoAlign

> T	-3.60
Initial Rotation	-0.82 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R110.4 P11.7 H23.0 mm
Orientation	C > S4.0 > T-3.6
Rotation	-0.82 deg
R >> L	180 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3950.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	151 Hz/Px
Echo Spacing	9.74 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	22

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_sag-AAT-DRB *

TA: 1:09 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
TE	31.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	3570.0 ms
TE	31.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	150 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	28
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3570.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	R108.3 P22.6 H16.8
R	108.3 mm
P	22.6 mm
H	16.8 mm
Initial Orientation	S > T
S > T	-4.10

Geometry - AutoAlign

> C	-2.70
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	17 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3570.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	181 Hz/Px
Echo Spacing	10.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	17

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\t1_tse_sag-AAT-DRB *

TA: 49 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
TE	8.30 ms
Averages	1
Concatenations	3
AutoAlign	Knee > Standard

Contrast - Common

TR	441.0 ms
TE	8.30 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
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	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	304
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	33
Distance Factor	10 %
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	441.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Geometry - AutoAlign

Slice Group	1
Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Phase Encoding Dir.	H >> F
AutoAlign	Knee > Standard
Initial Position	R108.3 P22.6 H16.8
R	108.3 mm
P	22.6 mm
H	16.8 mm
Initial Orientation	S > T
S > T	-4.10

Geometry - AutoAlign

> C	-2.70
Initial Rotation	88.18 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	17 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R108.3 P22.6 H16.8 mm
Orientation	S > T-4.1 > C-2.7
Rotation	88.18 deg
F >> H	180 mm
A >> P	180 mm
R >> L	109 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	441.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 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
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	201 Hz/Px
Echo Spacing	8.28 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	35

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	800.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Knee\AAT options\pd_tse_fs_tra-AAT-DRB *

TA: 1:42 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	Knee > Standard

Contrast - Common

TR	4390.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
Phase Oversampling	150 %
FoV Read	160 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4390.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Phase Encoding Dir.	R >> L
AutoAlign	Knee > Standard
Initial Position	R108.6 P16.7 H23.3
R	108.6 mm
P	16.7 mm
H	23.3 mm
Initial Orientation	T > S
T > S	3.80

Geometry - AutoAlign

> C	1.40
Initial Rotation	86.20 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	23 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R108.6 P16.7 H23.3 mm
Orientation	T > S3.8 > C1.4
Rotation	86.20 deg
R >> L	160 mm
A >> P	160 mm
F >> H	132 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4390.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FoV Read	160 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	150 Hz/Px
Echo Spacing	9.68 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	7
Echo Trains per Slice	21

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\localizer_tra *

TA: 6 sec Coil Selection: Auto Voxel Size: 0.8×0.8×6.0 mm³ Acc:: 2 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

Slice Group	1
Slices	5
Distance Factor	100 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
TE	3.03 ms
Averages	1
Concatenations	5
AutoAlign	---

Contrast - Common

TR	7.0 ms
TE	3.03 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	5
Distance Factor	100 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	5

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

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	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.0 ms
Segments	1
Concatenations	5

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None

Physio - Cardiac

Dark Blood	Off
FoV Read	400 mm
FoV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	5

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

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	290 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On

Sequence - Part 2

RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\localizer_sag+cor+tra *

TA: 10 sec Coil Selection: Auto Voxel Size: 0.6×0.6×6.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

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

Routine

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
TE	3.03 ms
Averages	1
Concatenations	11
AutoAlign	---

Contrast - Common

TR	7.0 ms
TE	3.03 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L30.4 P2.2 H0.0 mm

Geometry - Common

Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	11

Geometry - AutoAlign

Slice Group	1
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
Slice Group	3
Position	L30.4 P2.2 H0.0 mm
Orientation	S > C-17.2
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L30.4 P2.2 H0.0
L	30.4 mm
P	2.2 mm
H	0.0 mm
Initial Orientation	S > C
S > C	-17.20
> T	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	Med >> Lat
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.0 ms
Segments	1
Concatenations	11

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	300 mm
FoV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	11

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

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 - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	290 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\t1_tse_sag-AAT-DRB *

TA: 39 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	24
Distance Factor	10 %
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	434.0 ms
TE	9.60 ms
Averages	1
Concatenations	2
AutoAlign	---

Contrast - Common

TR	434.0 ms
TE	9.60 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
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	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	304
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	24
Distance Factor	10 %
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	434.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R47.1 P4.1 F4.7
R	47.1 mm
P	4.1 mm
F	4.7 mm
Initial Orientation	S > C
S > C	18.70

Geometry - AutoAlign

> T	-6.70
Initial Rotation	-1.59 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Rotation	-1.59 deg
A >> P	180 mm
F >> H	180 mm
R >> L	79 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	434.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	70 %
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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	201 Hz/Px
Echo Spacing	9.56 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	3
Echo Trains per Slice	42

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	800.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\t2_tse_stir_sag-AAT-DRB *

TA: 1:09 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	24
Distance Factor	10 %
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3200.0 ms
TE	39.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	3200.0 ms
TE	39.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	160 ms
Freeze Suppr. Tissue	Off
Flip Angle	148 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	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	352
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	24
Distance Factor	10 %
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FoV Read	180 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3200.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R47.1 P4.1 F4.7
R	47.1 mm
P	4.1 mm
F	4.7 mm
Initial Orientation	S > C
S > C	18.70

Geometry - AutoAlign

> T	-6.70
Initial Rotation	-1.59 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Foot/Ankle
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R47.1 P4.1 F4.7 mm
Orientation	S > C18.7 > T-6.7
Rotation	-1.59 deg
A >> P	180 mm
F >> H	180 mm
R >> L	79 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3200.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	160 ms
Dark Blood	Off
FoV Read	180 mm
FoV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tir
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	200 Hz/Px
Echo Spacing	9.82 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	20

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
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 > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\t2_tse_tra-AAT-DRB *

TA: 1:03 min Coil Selection: Auto Voxel Size: 0.2×0.2×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	45
Distance Factor	10 %
Position	R40.4 P5.2 F11.8 mm
Orientation	T > S3.9 > C-1.5
Phase Encoding Dir.	L >> R
Phase Oversampling	30 %
FoV Read	140 mm
FoV Phase	83.3 %
Slice Thickness	3.0 mm
TR	7660.0 ms
TE	95.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	7660.0 ms
TE	95.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	148 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	Off

Resolution - Common

FoV Read	140 mm
FoV Phase	83.3 %
Slice Thickness	3.0 mm
Base Resolution	336
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	43
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	45
Distance Factor	10 %
Position	R40.4 P5.2 F11.8 mm
Orientation	T > S3.9 > C-1.5
Phase Encoding Dir.	L >> R
Phase Oversampling	30 %
FoV Read	140 mm
FoV Phase	83.3 %
Slice Thickness	3.0 mm
TR	7660.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R40.4 P5.2 F11.8 mm
Orientation	T > S3.9 > C-1.5
Phase Encoding Dir.	L >> R
AutoAlign	---
Initial Position	R40.4 P5.2 F11.8
R	40.4 mm
P	5.2 mm
F	11.8 mm
Initial Orientation	T > S
T > S	3.90
> C	-1.50

Geometry - AutoAlign

Initial Rotation	-78.15 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R40.4 P5.2 F11.8 mm
Orientation	T > S3.9 > C-1.5
Rotation	-78.15 deg
R >> L	117 mm
A >> P	140 mm
F >> H	149 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7660.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	140 mm
FoV Phase	83.3 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	207 Hz/Px
Echo Spacing	10.5 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	7

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\t2_tse_stir_cor-AAT-DRB *

TA: 1:01 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	180 mm
FoV Phase	73.6 %
Slice Thickness	3.0 mm
TR	4590.0 ms
TE	38.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	4590.0 ms
TE	38.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	160 ms
Freeze Suppr. Tissue	Off
Flip Angle	148 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	180 mm
FoV Phase	73.6 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	180 mm
FoV Phase	73.6 %
Slice Thickness	3.0 mm
TR	4590.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R44.1 P6.1 F3.1
R	44.1 mm
P	6.1 mm
F	3.1 mm
Initial Orientation	C > S
C > S	-17.20

Geometry - AutoAlign

> T	-2.50
Initial Rotation	3.55 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	3 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Foot/Ankle
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Rotation	3.55 deg
R >> L	133 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4590.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	160 ms
Dark Blood	Off
FoV Read	180 mm
FoV Phase	73.6 %
Phase Resolution	75 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tir
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	200 Hz/Px
Echo Spacing	9.50 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	12

Sequence - Part 2

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

Sequence - Part 2

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

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	120 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Ankle\AAT options\pd_tse_cor-AAT-DRB *

TA: 32 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	36
Distance Factor	10 %
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	62.5 %
Slice Thickness	3.0 mm
TR	3370.0 ms
TE	29.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	3370.0 ms
TE	29.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	150 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm

Resolution - Common

FoV Phase	62.5 %
Slice Thickness	3.0 mm
Base Resolution	336
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	4
Reference Lines PE	29
Deep Resolve	On
Phase Partial Fourier	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	10 %
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	180 mm
FoV Phase	62.5 %
Slice Thickness	3.0 mm
TR	3370.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R44.1 P6.1 F3.1
R	44.1 mm
P	6.1 mm
F	3.1 mm
Initial Orientation	C > S
C > S	-17.20
> T	-2.50

Geometry - AutoAlign

Initial Rotation	3.55 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	3 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	R44.1 P6.1 F3.1 mm
Orientation	C > S-17.2 > T-2.5
Rotation	3.55 deg
R >> L	113 mm
F >> H	180 mm
A >> P	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3370.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	180 mm
FoV Phase	62.5 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	210 Hz/Px
Echo Spacing	9.78 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	8

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off

Sequence - Part 2

Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\localizer_tra *

TA: 6 sec Coil Selection: Auto Voxel Size: 0.8×0.8×6.0 mm³ Acc:: 2 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

Slice Group	1
Slices	5
Distance Factor	100 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
TE	3.03 ms
Averages	1
Concatenations	5
AutoAlign	---

Contrast - Common

TR	7.0 ms
TE	3.03 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	5
Distance Factor	100 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	400 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	5

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

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	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.0 ms
Segments	1
Concatenations	5

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None

Physio - Cardiac

Dark Blood	Off
FoV Read	400 mm
FoV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	5

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

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	290 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On

Sequence - Part 2

RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\localizer_sag+cor+tra *

TA: 10 sec Coil Selection: Auto Voxel Size: 0.6×0.6×6.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

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

Routine

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
TE	3.03 ms
Averages	1
Concatenations	11
AutoAlign	---

Contrast - Common

TR	7.0 ms
TE	3.03 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard

Contrast - Common

Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L32.5 A68.7 H0.0 mm

Geometry - Common

Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	300 mm
FoV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	11

Geometry - AutoAlign

Slice Group	1
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	3
Position	L32.5 A68.7 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L32.5 A68.7 H0.0
L	32.5 mm
A	68.7 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	ACS All but spine
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.0 ms
Segments	1
Concatenations	11

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	300 mm
FoV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	11

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

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 - Soft Tissue

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

Inline - Composing

Inline Composing	Off

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	290 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\t2_tse_stir_cor-AAT-DRB *

TA: 1:18 min Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	30
Distance Factor	10 %
Position	L45.8 A86.3 F64.6 mm
Orientation	T > C21.4 > S-13.8
Phase Encoding Dir.	A >> P
Phase Oversampling	50 %
FoV Read	180 mm
FoV Phase	122.1 %
Slice Thickness	3.0 mm
TR	4500.0 ms
TE	24.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	4500.0 ms
TE	24.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	160 ms
Freeze Suppr. Tissue	Off
Flip Angle	148 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	180 mm
FoV Phase	122.1 %
Slice Thickness	3.0 mm
Base Resolution	272
Phase Resolution	65 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	29
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	30
Distance Factor	10 %
Position	L45.8 A86.3 F64.6 mm
Orientation	T > C21.4 > S-13.8
Phase Encoding Dir.	A >> P
Phase Oversampling	50 %
FoV Read	180 mm
FoV Phase	122.1 %
Slice Thickness	3.0 mm
TR	4500.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L45.8 A86.3 F64.6 mm
Orientation	T > C21.4 > S-13.8
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L45.8 A86.3 F64.6
L	45.8 mm
A	86.3 mm
F	64.6 mm
Initial Orientation	T > C
T > C	21.40

Geometry - AutoAlign

> S	-13.80
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	65 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Foot/Ankle
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L45.8 A86.3 F64.6 mm
Orientation	T > C21.4 > S-13.8
Rotation	90.00 deg
R >> L	180 mm
A >> P	220 mm
F >> H	99 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4500.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	160 ms
Dark Blood	Off
FoV Read	180 mm
FoV Phase	122.1 %
Phase Resolution	65 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tirR
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	198 Hz/Px
Echo Spacing	8.16 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
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 > TR
Min Flip Angle	130 deg
Max. TR	6000.0 ms
Allowed Delay	0 s

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\t2_tse_stir_tra-AAT-DRB *

TA: 1:04 min Coil Selection: Auto Voxel Size: 0.3×0.3×4.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	25 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	4830.0 ms
TE	24.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	4830.0 ms
TE	24.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	160 ms
Freeze Suppr. Tissue	Off
Flip Angle	130 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	Off

Resolution - Common

FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	32
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	25 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	4830.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	L43.7 A100.6 F73.7
L	43.7 mm
A	100.6 mm
F	73.7 mm
Initial Orientation	C > T
C > T	-24.50

Geometry - AutoAlign

> S	0.10
Initial Rotation	-0.63 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	74 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Foot/Ankle
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Rotation	-0.63 deg
R >> L	130 mm
F >> H	130 mm
A >> P	176 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4830.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	160 ms
Dark Blood	Off
FoV Read	130 mm
FoV Phase	100.0 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tir
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	197 Hz/Px
Echo Spacing	8.10 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	8
Echo Trains per Slice	12

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
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 > TR
Min Flip Angle	130 deg
Max. TR	6000.0 ms
Allowed Delay	0 s

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\t2_tse_tra-AAT-DRB *

TA: 48 sec Coil Selection: Auto Voxel Size: 0.2×0.2×4.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	5870.0 ms
TE	79.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	5870.0 ms
TE	79.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	135 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	130 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	288
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

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	5870.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	L43.7 A100.6 F73.7
L	43.7 mm
A	100.6 mm
F	73.7 mm
Initial Orientation	C > T
C > T	-24.50
> S	0.10

Geometry - AutoAlign

Initial Rotation	-0.63 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	74 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	5870.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	130 mm
FoV Phase	100.0 %
Phase Resolution	75 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tseR
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	220 Hz/Px
Echo Spacing	9.82 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	13
Echo Trains per Slice	7

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	135 deg
Max. TR	6000.0 ms
Allowed Delay	0 s

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\t1_tse_tra-AAT-DRB *

TA: 52 sec Coil Selection: Auto Voxel Size: 0.2×0.2×4.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	762.0 ms
TE	9.90 ms
Averages	1
Concatenations	2
AutoAlign	---

Contrast - Common

TR	762.0 ms
TE	9.90 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	140 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	Off

Resolution - Common

FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	320
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	10 %
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FoV Read	130 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	762.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	L43.7 A100.6 F73.7 mm
Orientation	C > T-24.5 > S0.1
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	L43.7 A100.6 F73.7
L	43.7 mm
A	100.6 mm
F	73.7 mm
Initial Orientation	C > T
C > T	-24.50

Geometry - AutoAlign

> S	0.10
Initial Rotation	-0.63 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	74 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	762.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	130 mm
FoV Phase	100.0 %
Phase Resolution	75 %
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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	230 Hz/Px
Echo Spacing	9.88 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	3
Echo Trains per Slice	32

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	140 deg
Max. TR	800.0 ms
Allowed Delay	0 s

\\MR Physics 2 - AAT\Lower Limb\Foot\AAT options\t2_tse_sag-AAT-DRB *

TA: 49 sec Coil Selection: Auto Voxel Size: 0.3×0.3×3.0 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
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	30
Distance Factor	10 %
Position	R54.7 A79.2 F67.4 mm
Orientation	S > T-12.0 > C5.5
Phase Encoding Dir.	P >> A
Phase Oversampling	25 %
FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3680.0 ms
TE	80.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	3680.0 ms
TE	80.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	130 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	Off

Resolution - Common

FoV Read	250 mm

Resolution - Common

FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	416
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	39
Deep Resolve	On
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	30
Distance Factor	10 %
Position	R54.7 A79.2 F67.4 mm
Orientation	S > T-12.0 > C5.5
Phase Encoding Dir.	P >> A
Phase Oversampling	25 %
FoV Read	250 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3680.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R54.7 A79.2 F67.4 mm
Orientation	S > T-12.0 > C5.5
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	R54.7 A79.2 F67.4
R	54.7 mm
A	79.2 mm
F	67.4 mm
Initial Orientation	S > T
S > T	-12.00
> C	5.50

Geometry - AutoAlign

Initial Rotation	179.02 deg

Geometry - Navigator

Geometry - Saturation

Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	67 mm
Table Position	F
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	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
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	63.679699 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3680.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	250 mm
FoV Phase	100.0 %
Phase Resolution	75 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

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

Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	223 Hz/Px
Echo Spacing	8.86 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	13
Echo Trains per Slice	12

Sequence - Part 2

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

Sequence - Part 2

Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	130 deg
Max. TR	6000.0 ms
Allowed Delay	0 s