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\\EntwPsych

Test_Sequences

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SNORE DAY

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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \AAhead_scout

TA: 14 sec Coil Selection: Auto Voxel Size: 1.6×1.6×1.6 mm³ Acc:: 3 Rel. SNR: 1.00**Properties**

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

Resolution - Acceleration

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

Resolution - Filter

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

Routine

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	260 mm
FoV Phase	100.0 %
Slice Thickness	1.6 mm
TR	3.2 ms
Multi-Slice Mode	Sequential
Series	Ascending
Concatenations	1

Contrast - Common

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

Geometry - AutoAlign

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

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Time to Center	6.2 s

Resolution - Common

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

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

Resolution - Acceleration

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Dynamic

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

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Save Original Images	On
Contrasts	1
TE	1.37 ms
TR	3.2 ms

Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Bandwidth	540 Hz/Px
Asymmetric Echo	Weak

Sequence - Part 2

Introduction	On
RF Spoiling	On
Breast Application	Off

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \t1_mprage_tra_p2_0.8mm_iso

TA: 5:27 min Coil Selection: Auto Voxel Size: 0.8×0.8×0.8 mm³ Acc.: 2 Rel. SNR: 1.00**Properties**

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

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	7.7 %
FoV Read	230 mm
FoV Phase	100.0 %
Slice Thickness	0.8 mm
TR	2100.0 ms
TE	2.97 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	2100.0 ms
TE	2.97 ms
Magn. Preparation	Non-sel. IR
TI	900 ms
Flip Angle	9 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FoV Read	230 mm
FoV Phase	100.0 %
Slice Thickness	0.8 mm
Base Resolution	288
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
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Resolution - Acceleration

Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	208
Phase Oversampling	0 %
Slice Oversampling	7.7 %
FoV Read	230 mm
FoV Phase	100.0 %
Slice Thickness	0.8 mm
TR	2100.0 ms
Multi-Slice Mode	Single Shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

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

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

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

System - Miscellaneous

Coil Selection	Auto Coil Select
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	2100.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI	900 ms
Dark Blood	Off
FoV Read	230 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	Non-sel. IR
Save Original Images	On
TE	2.97 ms

Inline - Cardiac

TR	2100.0 ms
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Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	tfl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear
Bandwidth	180 Hz/Px
Echo Spacing	7.32 ms
Asymmetric Echo	Allowed
Turbo Factor	224

Sequence - Part 2

Introduction	On
RF Spoiling	On
Incr. Gradient Spoiling	Off

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \gre3d_MTC_TR45_fast_snore

TA: 6:28 min Coil Selection: Auto Voxel Size: 0.8×0.8×1.0 mm³ Acc.: None Rel. SNR: 1.00

Properties

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

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off
Phase Partial Fourier	7/8
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

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

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	200 mm
FoV Phase	68.8 %
Slice Thickness	1.0 mm
TR	45.0 ms
TE	5.97 ms
Averages	1
Concatenations	1
AutoAlign	---

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	200 mm
FoV Phase	68.8 %
Slice Thickness	1.0 mm
TR	45.0 ms
Multi-Slice Mode	Sequential
Series	Ascending
Concatenations	1

Contrast - Common

TR	45.0 ms
TE	5.97 ms
MTC	On
Magn. Preparation	None
Flip Angle	23 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Geometry - AutoAlign

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

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	Tracking F
Gap	11.00 mm
Thickness	60.00 mm

Resolution - Common

FoV Read	200 mm
FoV Phase	68.8 %
Slice Thickness	1.0 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Auto Coil Select
MSMA	S - C - T

System - Miscellaneous

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	138 mm
A >> P	200 mm
F >> H	64 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	45.0 ms
Segments	1
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	200 mm
FoV Phase	68.8 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1

Inline - Subtraction

StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	5.97 ms
TR	45.0 ms

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	130 Hz/Px
Asymmetric Echo	Off
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \3dt2_rundmc

TA: 5:44 min Coil Selection: Auto Voxel Size: 0.9×0.9×0.9 mm³ Acc.: 2 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
TR	3200.0 ms
TE	564.00 ms
Averages	1.0
Concatenations	1
AutoAlign	Head > Basis

Contrast - Common

TR	3200.0 ms
TE	564.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	T2 Var
Fat-Water Contrast	Standard
Dark Blood	Off
Blood Suppression	Off
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Resolution - Common

FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Total Factor	2
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Phase Partial Fourier	Allowed
Slice Partial Fourier	Off
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
TR	3200.0 ms
Concatenations	1

Geometry - AutoAlign

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

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Auto Coil Select
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	272 mm
F >> H	272 mm
R >> L	164 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	3200.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	272 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On

Inline - Cardiac

TE	564.00 ms
TR	3200.0 ms

Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	spcR
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Performance
Flow Compensation	None
Reordering	Linear
Bandwidth	744 Hz/Px
Echo Spacing	3.48 ms
Turbo Factor	314
Echo Train Duration	1096 ms

Sequence - Part 2

Introduction	On
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Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \3dfair_RunDMC

TA: 7:07 min Coil Selection: Auto Voxel Size: 0.9×0.9×0.9 mm³ Acc.: 3 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
TR	5000.0 ms
TE	394.00 ms
Averages	1.0
Concatenations	1
AutoAlign	Head > Basis

Contrast - Common

TR	5000.0 ms
TE	394.00 ms
MTC	Off
Magn. Preparation	Non-sel. T2-IR
T1 1	1800 ms
Flip Angle Mode	T2 Var
Fat-Water Contrast	Fat Saturation
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	Linear

Resolution - Common

FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Total Factor	3
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	48
Acceleration Factor 3D	1
Phase Partial Fourier	Allowed
Slice Partial Fourier	7/8
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	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	272 mm
FoV Phase	100.0 %
Slice Thickness	0.85 mm
TR	5000.0 ms
Concatenations	1

Geometry - AutoAlign

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

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Auto Coil Select
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	272 mm
F >> H	272 mm
R >> L	164 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	5000.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	Non-sel. T2-IR
TI 1	1800 ms
Dark Blood	Off
FoV Read	272 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	Non-sel. T2-IR
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Inline - Cardiac

Save Original Images	On
TE	394.00 ms
TR	5000.0 ms

Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	spcirR
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear
Bandwidth	781 Hz/Px
Echo Spacing	3.72 ms
Turbo Factor	280
Echo Train Duration	919 ms

Sequence - Part 2

Introduction	On
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Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \vessel_scout_head

TA: 22 sec Coil Selection: Auto Voxel Size: 1.2×1.2×5.0 mm³ Acc:: 3 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	24
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	300 mm
FoV Phase	68.8 %
Slice Thickness	5.0 mm
TR	32.3 ms
TE	5.89 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	32.3 ms
TE	5.89 ms
Flip Angle	10 deg
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	300 mm
FoV Phase	68.8 %
Slice Thickness	5.0 mm
Base Resolution	256
Phase Resolution	70 %
Slice Resolution	50 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1

Resolution - Acceleration

Phase Partial Fourier	Off
Asymmetric Echo	Weak
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	24
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	300 mm
FoV Phase	68.8 %
Slice Thickness	5.0 mm
TR	32.3 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx

B1 Shim	TrueForm
---------	----------

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	32.3 ms
Segments	1
Concatenations	1

Angio - Common

Flow Mode	Free
Encodings	2
Velocity Enc. 1	30 cm/s
Velocity Enc. 2	30 cm/s
Direction 1	F >> H
Direction 2	Through Plane
Rephased Images	On
Magnitude Images	Off
Magnitude Sum	On
Phase Images	Off

Angio - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Angio - Cardiac

Save Original Images	On
Contrasts	1
TE	5.89 ms
TR	32.3 ms

Angio - MIP

MIP Sag	On
MIP Cor	On
MIP Tra	Off
MIP Time	Off
Radial MIP	Off

Angio - MIP

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

Angio - Composing

Inline Composing	Off
------------------	-----

Sequence - Part 1

Sequence Name	pc
Dimension	3D
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	349 Hz/Px
Asymmetric Echo	Weak
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \tof_f13d_tra

TA: 8:22 min Coil Selection: Auto Voxel Size: 0.3×0.3×0.3 mm³ Acc.: 2 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	6
Distance Factor	-20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	40
Phase Oversampling	0 %
Slice Oversampling	20.0 %
FoV Read	200 mm
FoV Phase	90.6 %
Slice Thickness	0.3 mm
TR	21.2 ms
TE	3.67 ms
Averages	1
Concatenations	6
AutoAlign	---

Contrast - Common

TR	21.2 ms
TE	3.67 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle	20 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
Reordering	Linear

Resolution - Common

FoV Read	200 mm
FoV Phase	90.6 %
Slice Thickness	0.3 mm
Base Resolution	384
Phase Resolution	95 %
Slice Resolution	50 %

Resolution - Common

Trajectory	Cartesian
Interpolation	2.00

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Advanced Reconstruction	Off
Phase Partial Fourier	Off
Slice Partial Fourier	7/8
Asymmetric Echo	Weak
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	6
Distance Factor	-20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	40
Phase Oversampling	0 %
Slice Oversampling	20.0 %
FoV Read	200 mm
FoV Phase	90.6 %
Slice Thickness	0.3 mm
TR	21.2 ms
Multi-Slice Mode	Sequential
Series	Descending
Concatenations	6

Geometry - AutoAlign

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

Geometry - Navigator**Geometry - Saturation**

Special Saturation	Tracking H
Gap	10.00 mm
Thickness	40.00 mm

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx

B1 Shim	TrueForm
Excitation	TONE

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	21.2 ms
Segments	1
Concatenations	6

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	200 mm
FoV Phase	90.6 %
Phase Resolution	95 %
Cine	Off
Trajectory	Cartesian
Dynamic Mode	Standard
Dummy Heartbeats	1

Physio - PACE

Resp. Control	Off
Concatenations	6

Inline - Dynamic

Dynamic Mode	Standard
MTC	Off
Flow Direction	F >> H
TONE Ramp	70 %
Flip Angle	20 deg
Measurements	1
Multiple Series	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Inline Evaluation	Off
Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	3.67 ms
TR	21.2 ms

Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	fl_r
Dimension	3D
Sequence Type	Gre
Excitation	TONE
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	Slice/Read
Reordering	Linear
Bandwidth	186 Hz/Px
Echo Spacing	9.64 ms
Asymmetric Echo	Weak
Optimization	None
Define	Segments
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Phase Enc. Rewinder	On

Sequence - Assistant

SAR Assistant	Flip Angle
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Sequence - Assistant

Min Flip Angle	16 deg
Allowed Delay	0 s
Optimization	None

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \ep2d_diff_qspace_p2_s2

TA: 8:17 min Coil Selection: Auto Voxel Size: 2.2×2.2×2.2 mm³ Acc:: 4 Rel. SNR: 1.00**Properties**

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

Routine

Slice Group	1
Slices	60
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	220 mm
FoV Phase	100.0 %
Slice Thickness	2.2 mm
TR	3700.0 ms
TE	81.00 ms
Concatenations	1
AutoAlign	---

Contrast - Common

TR	3700.0 ms
TE	81.00 ms
MTC	Off
Magn. Preparation	None
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Multiple Series	Off
Delay in TR	0.00 ms

Resolution - Common

FoV Read	220 mm
FoV Phase	100.0 %
Slice Thickness	2.2 mm
Base Resolution	100
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	SMS
Reference Scans	EPI/Separate
Acceleration Factor PE	2
Reference Lines PE	36
SMS Factor	2
Advanced Reconstruction	Off
Phase Partial Fourier	7/8

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	60
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	220 mm
FoV Phase	100.0 %
Slice Thickness	2.2 mm
TR	3700.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm

System - Adjustments

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

Sequence - Part 2

Introduction	On
Phase Correction	Internal

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	132 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3700.0 ms
Concatenations	1

Physio - PACE

Resp. Control	Off
Concatenations	1

Diff

Diffusion Mode	q-Space
Diffusion Scheme	Bipolar
q-Space Weightings	4
q-Space max. b-value	3000 s/mm ²
q-Space Coverage	Half
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	On
Tensor	On
FA Maps	On
ADC Maps	On
Exponential ADC Maps	Off
ADC Noise Threshold	30
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	2084 Hz/Px
Echo Spacing	0.56 ms
Free Echo Spacing	Off
Optimization	None
EPI Factor	100

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \t2_swi_tra_p3_1.6mm

TA: 3:00 min Coil Selection: Auto Voxel Size: 0.6×0.6×1.6 mm³ Acc:: 3 Rel. SNR: 1.00

Properties

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

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	88
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FoV Read	220 mm
FoV Phase	87.5 %
Slice Thickness	1.6 mm
TR	28.0 ms
TE	20.00 ms
Averages	1
Concatenations	1
AutoAlign	Head > Brain

Contrast - Common

TR	28.0 ms
TE	20.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	15 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	On
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FoV Read	220 mm
FoV Phase	87.5 %
Slice Thickness	1.6 mm
Base Resolution	384
Phase Resolution	70 %
Slice Resolution	90 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Advanced Reconstruction	Off
Phase Partial Fourier	7/8
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	88
Phase Oversampling	0 %
Slice Oversampling	9.1 %
FoV Read	220 mm
FoV Phase	87.5 %
Slice Thickness	1.6 mm
TR	28.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	193 mm
A >> P	220 mm
F >> H	141 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	28.0 ms
Segments	1
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	220 mm
FoV Phase	87.5 %
Phase Resolution	70 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	20.00 ms
TR	28.0 ms

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

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

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \t2_tse_cor_448_2mm_hippocampus

TA: 8:10 min Coil Selection: Auto Voxel Size: 0.4×0.4×2.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

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

Routine

Slice Group	1
Slices	24
Distance Factor	0 %
Position	L0.0 A20.0 F20.0 mm
Orientation	C > T-25.0
Phase Encoding Dir.	R >> L
Phase Oversampling	100 %
FoV Read	175 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8000.0 ms
TE	52.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	8000.0 ms
TE	52.00 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	Each Measurement

Resolution - Common

FoV Read	175 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
Base Resolution	448
Phase Resolution	100 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration mode	None
Advanced Reconstruction	Off

Resolution - Acceleration

Phase Partial Fourier	Off
-----------------------	-----

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	24
Distance Factor	0 %
Position	L0.0 A20.0 F20.0 mm
Orientation	C > T-25.0
Phase Encoding Dir.	R >> L
Phase Oversampling	100 %
FoV Read	175 mm
FoV Phase	100.0 %
Slice Thickness	2.0 mm
TR	8000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L0.0 A20.0 F20.0 mm
Orientation	C > T-25.0
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 F20.0
L	0.0 mm
A	20.0 mm
F	20.0 mm
Initial Orientation	C > T
C > T	-25.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	L0.0 A20.0 F20.0 mm
Orientation	C > T-25.0
Rotation	0.00 deg
R >> L	175 mm
F >> H	175 mm
A >> P	48 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	8000.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	175 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Trajectory	Cartesian
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	52.00 ms
TR	8000.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off

Inline - MIP

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

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	tse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	101 Hz/Px
Echo Spacing	17.3 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	60

Sequence - Part 2

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

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	130 deg
Allowed Delay	180 s

\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \asl_3d_tra_p2_iso_3mm_highres

TA: 4:47 min Coil Selection: Auto Voxel Size: 1.5×1.5×3.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

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

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
Slices per Slab	40
Phase Oversampling	15 %
Slice Oversampling	25.0 %
FoV Read	192 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	5600.0 ms
TE	20.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	5600.0 ms
TE	20.00 ms
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	5
Multiple Series	Off
Delay in TR	0.00 ms
Reordering	Centric

Contrast - ASL

Perfusion Mode	PCASL
Suppression	Gray-White
Labeling Duration	1800 ms
Postlabeling Delay	1800 ms
Delay Array Size	1

Resolution - Common

FoV Read	192 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	64
Phase Resolution	96 %

Resolution - Common

Interpolation	On
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Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	1
Reference Lines 3D	8
Advanced Reconstruction	Off
Phase Partial Fourier	7/8
Slice Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
Slices per Slab	40
Phase Oversampling	15 %
Slice Oversampling	25.0 %
FoV Read	192 mm
FoV Phase	100.0 %
Slice Thickness	3.0 mm
TR	5600.0 ms
Multi-Slice Mode	Interleaved
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	P >> A
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	-180.00 deg

Geometry - Saturation

Special Saturation	Parallel F
Gap	35.00 mm

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	192 mm
R >> L	192 mm
F >> H	120 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	5600.0 ms
Segments	5
Concatenations	1

Sequence - Part 1

Sequence Name	tgse
Dimension	3D
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Centric
Bandwidth	2232 Hz/Px
Echo Spacing	0.53 ms
Turbo Factor	10
Segments	5
EPI Factor	31

Sequence - Part 2

Introduction	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \fme_gammastar_Had4

TA: 1:55 min Coil Selection: Auto Voxel Size: 2.5×2.5×5.0 mm³ Acc:: 4 Rel. SNR: 1.00**Properties**

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

Routine

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	4500.0 ms
TE 1	13.80 ms
TE 2	41.40 ms
TE 3	69.00 ms
TE 4	96.60 ms
TE 5	124.20 ms
TE 6	151.80 ms
TE 7	179.40 ms
TE 8	207.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms
TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms

Routine

TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms
TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms

Routine

TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Averages	1
AutoAlign	---

Contrast - Common

TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms
TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms

Contrast - Common

TR	4500.0 ms
TE 1	13.80 ms
TE 2	41.40 ms
TE 3	69.00 ms
TE 4	96.60 ms
TE 5	124.20 ms
TE 6	151.80 ms
TE 7	179.40 ms
TE 8	207.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms

Contrast - Common

TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms
TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Flip Angle	15 deg
Fat-Water Contrast	Standard
Contrasts	8
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
Base Resolution	64
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	2
Reference Lines 3D	32

Resolution - Acceleration

Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Readout Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	4500.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved

Geometry - AutoAlign

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

Geometry - Saturation

Saturation Region	1
Thickness	17.00 mm
Position	L0.0 P0.0 F120.0 mm
Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	160 mm
A >> P	320 mm
F >> H	160 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4500.0 ms

Sequence - Part 1

Sequence Name	
Dimension	3D
Bandwidth	2440 Hz/Px

Sequence - Part 2**Sequence - Special**

Buffer	On
Buffer Time	300000 usec
Max Grad Amp Factor	100 %
Change Seq/Prot	Off
Sequence / Protocol	pCASL_GRASE/Had4_debbie
Ice Selection	IcePAT
pCASLLabelingPos	120 mm

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \fme_gammastar_Had8

TA: 2:15 min Coil Selection: Auto Voxel Size: 2.5×2.5×5.0 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	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	4000.0 ms
TE 1	13.20 ms
TE 2	41.40 ms
TE 3	69.00 ms
TE 4	96.60 ms
TE 5	124.20 ms
TE 6	151.80 ms
TE 7	179.40 ms
TE 8	207.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms
TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms

Routine

TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms
TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms

Routine

TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Averages	2
AutoAlign	---

Contrast - Common

TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms
TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms

Contrast - Common

TR	4000.0 ms
TE 1	13.20 ms
TE 2	41.40 ms
TE 3	69.00 ms
TE 4	96.60 ms
TE 5	124.20 ms
TE 6	151.80 ms
TE 7	179.40 ms
TE 8	207.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms

Contrast - Common

TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms
TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Flip Angle	15 deg
Fat-Water Contrast	Standard
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
Base Resolution	64
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	2
Reference Lines 3D	32

Resolution - Acceleration

Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Readout Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	4000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved

Geometry - AutoAlign

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

Geometry - Saturation

Saturation Region	1
Thickness	17.00 mm
Position	L0.0 P0.0 F120.0 mm
Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	160 mm
A >> P	320 mm
F >> H	160 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4000.0 ms

Sequence - Part 1

Sequence Name	
Dimension	3D
Bandwidth	2440 Hz/Px

Sequence - Part 2**Sequence - Special**

Buffer	On
Buffer Time	300000 usec
Max Grad Amp Factor	100 %
Change Seq/Prot	Off
Sequence / Protocol	pCASL_GRASE/Had8_debbie
Ice Selection	IcePAT
pCASLLabelingPos	120 mm

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \fme_gammastar_M0_RL

TA: 20 sec Coil Selection: Auto Voxel Size: 2.5×2.5×5.0 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	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	5000.0 ms
TE 1	13.20 ms
TE 2	10.00 ms
TE 3	10.00 ms
TE 4	10.00 ms
TE 5	10.00 ms
TE 6	10.00 ms
TE 7	10.00 ms
TE 8	10.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms
TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms

Routine

TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms
TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms

Routine

TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Averages	1
AutoAlign	---

Contrast - Common

TR	5000.0 ms
TE 1	13.20 ms
TE 2	10.00 ms
TE 3	10.00 ms
TE 4	10.00 ms
TE 5	10.00 ms
TE 6	10.00 ms
TE 7	10.00 ms
TE 8	10.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms

Contrast - Common

TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms
TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms

Contrast - Common

TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms
TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Flip Angle	15 deg
Fat-Water Contrast	Standard
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
Base Resolution	64
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	2
Reference Lines 3D	32

Resolution - Acceleration

Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Readout Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	5000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved

Geometry - AutoAlign

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

Geometry - Saturation

Saturation Region	1
Thickness	17.00 mm
Position	L0.0 P0.0 F120.0 mm
Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	160 mm
A >> P	320 mm
F >> H	160 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	5000.0 ms

Sequence - Part 1

Sequence Name	
Dimension	3D
Bandwidth	2440 Hz/Px

Sequence - Part 2**Sequence - Special**

Buffer	On
Buffer Time	300000 usec
Max Grad Amp Factor	100 %
Change Seq/Prot	Off
Sequence / Protocol	pCASL_GRASE/M0_debbie
Ice Selection	IcePAT
pCASLLabelingPos	120 mm

Sequence - Assistant

SAR Assistant	Off
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\\EntwPsych\Test_Sequences\Epi Tests\SNORE DAY \fme_gammastar_M0_LR

TA: 20 sec Coil Selection: Auto Voxel Size: 2.5×2.5×5.0 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	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	L >> R
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	5000.0 ms
TE 1	13.20 ms
TE 2	10.00 ms
TE 3	10.00 ms
TE 4	10.00 ms
TE 5	10.00 ms
TE 6	10.00 ms
TE 7	10.00 ms
TE 8	10.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms
TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms

Routine

TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms
TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms

Routine

TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Averages	1
AutoAlign	---

Contrast - Common

TE 26	10.00 ms
TE 27	10.00 ms
TE 28	10.00 ms
TE 29	10.00 ms
TE 30	10.00 ms
TE 31	10.00 ms
TE 32	10.00 ms
TE 33	10.00 ms
TE 34	10.00 ms
TE 35	10.00 ms
TE 36	10.00 ms
TE 37	10.00 ms
TE 38	10.00 ms
TE 39	10.00 ms
TE 40	10.00 ms
TE 41	10.00 ms
TE 42	10.00 ms
TE 43	10.00 ms
TE 44	10.00 ms
TE 45	10.00 ms
TE 46	10.00 ms
TE 47	10.00 ms
TE 48	10.00 ms
TE 49	10.00 ms
TE 50	10.00 ms
TE 51	10.00 ms
TE 52	10.00 ms
TE 53	10.00 ms
TE 54	10.00 ms
TE 55	10.00 ms
TE 56	10.00 ms
TE 57	10.00 ms
TE 58	10.00 ms
TE 59	10.00 ms
TE 60	10.00 ms
TE 61	10.00 ms
TE 62	10.00 ms
TE 63	10.00 ms
TE 64	10.00 ms
TE 65	10.00 ms
TE 66	10.00 ms
TE 67	10.00 ms
TE 68	10.00 ms
TE 69	10.00 ms
TE 70	10.00 ms
TE 71	10.00 ms
TE 72	10.00 ms
TE 73	10.00 ms
TE 74	10.00 ms
TE 75	10.00 ms
TE 76	10.00 ms
TE 77	10.00 ms
TE 78	10.00 ms
TE 79	10.00 ms
TE 80	10.00 ms
TE 81	10.00 ms
TE 82	10.00 ms
TE 83	10.00 ms
TE 84	10.00 ms
TE 85	10.00 ms
TE 86	10.00 ms
TE 87	10.00 ms
TE 88	10.00 ms
TE 89	10.00 ms
TE 90	10.00 ms

Contrast - Common

TR	5000.0 ms
TE 1	13.20 ms
TE 2	10.00 ms
TE 3	10.00 ms
TE 4	10.00 ms
TE 5	10.00 ms
TE 6	10.00 ms
TE 7	10.00 ms
TE 8	10.00 ms
TE 9	10.00 ms
TE 10	10.00 ms
TE 11	10.00 ms
TE 12	10.00 ms
TE 13	10.00 ms
TE 14	10.00 ms
TE 15	10.00 ms
TE 16	10.00 ms
TE 17	10.00 ms
TE 18	10.00 ms
TE 19	10.00 ms
TE 20	10.00 ms
TE 21	10.00 ms
TE 22	10.00 ms
TE 23	10.00 ms
TE 24	10.00 ms
TE 25	10.00 ms

Contrast - Common

TE 91	10.00 ms
TE 92	10.00 ms
TE 93	10.00 ms
TE 94	10.00 ms
TE 95	10.00 ms
TE 96	10.00 ms
TE 97	10.00 ms
TE 98	10.00 ms
TE 99	10.00 ms
TE 100	10.00 ms
TE 101	10.00 ms
TE 102	10.00 ms
TE 103	10.00 ms
TE 104	10.00 ms
TE 105	10.00 ms
TE 106	10.00 ms
TE 107	10.00 ms
TE 108	10.00 ms
TE 109	10.00 ms
TE 110	10.00 ms
TE 111	10.00 ms
TE 112	10.00 ms
TE 113	10.00 ms
TE 114	10.00 ms
TE 115	10.00 ms
TE 116	10.00 ms
TE 117	10.00 ms
TE 118	10.00 ms
TE 119	10.00 ms
TE 120	10.00 ms
TE 121	10.00 ms
TE 122	10.00 ms
TE 123	10.00 ms
TE 124	10.00 ms
TE 125	10.00 ms
TE 126	10.00 ms
TE 127	10.00 ms
TE 128	10.00 ms
Flip Angle	15 deg
Fat-Water Contrast	Standard
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
Base Resolution	64
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	2
Reference Lines 3D	32

Resolution - Acceleration

Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Readout Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Prescan

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	L >> R
Slices per Slab	32
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FoV Read	320 mm
FoV Phase	50.0 %
Slice Thickness	5.0 mm
TR	5000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved

Geometry - AutoAlign

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

Geometry - Saturation

Saturation Region	1
Thickness	17.00 mm
Position	L0.0 P0.0 F120.0 mm
Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	-90.00 deg
R >> L	160 mm
A >> P	320 mm
F >> H	160 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
---------	----------

System - Tx/Rx

Frequency 1H	123.259678 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	5000.0 ms

Sequence - Part 1

Sequence Name	
Dimension	3D
Bandwidth	2440 Hz/Px

Sequence - Part 2**Sequence - Special**

Buffer	On
Buffer Time	300000 usec
Max Grad Amp Factor	100 %
Change Seq/Prot	Off
Sequence / Protocol	pCASL_GRASE/M0_debbie
Ice Selection	IcePAT
pCASLLabelingPos	120 mm

Sequence - Assistant

SAR Assistant	Off
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