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\\USER\Test\Renzo\templates\renzo_IR_localizer_visual

TA: 1:05 PM: REF Voxel size: 1.3×1.3×3.0 mmPAT: Off Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slice group	1
Slices	7
Dist. factor	50 %
Position	R2.2 P81.4 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	7
Dist. factor	150 %
Position	R0.2 P2.0 F12.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	7
Dist. factor	120 %
Position	L0.0 P2.6 F10.2 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	3000.0 ms
TE	2.34 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	R96

Contrast - Common

TR	3000.0 ms
TE	2.34 ms
Magn. preparation	Slice-sel. IR
TI	1100 ms
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	7
Dist. factor	50 %
Position	R2.2 P81.4 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	7
Dist. factor	150 %
Position	R0.2 P2.0 F12.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	7
Dist. factor	120 %
Position	L0.0 P2.6 F10.2 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	3000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.2 P81.4 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R0.2 P2.0 F12.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 P2.6 F10.2 mm

Geometry - AutoAlign

Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.2 P81.4 H0.0
R	2.2 mm
P	81.4 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Coronal

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None

Physio - Signal1

TR	3000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	1100 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	1
TR	3000.0 ms
TE	2.34 ms

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	6.2 ms
Bandwidth	240 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	192

Sequence - Assistant

Mode	Off

this is version maas4f
compiled Aug 16th 2021

\\USER\Test\Renzo\templates\rslh_G1_S6_0.45mm

TA: 12:59 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : d238999c

Properties

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

Routine

Slab group	1
Slabs	1
Position	L0.0 P48.5 H23.4 mm
Orientation	C > T-40.9
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	187 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	60.0 ms
TR 2	6315 ms
TE 1	20.90 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	60.0 ms
TR 2	6315 ms
TE 1	20.90 ms
Multi-echo spacing	55.77 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1200 ms
TI 2	2280 ms
Flip angle	40 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	122
Pause after meas.	0.0 s

Resolution - Common

FoV read	187 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	416
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 P48.5 H23.4 mm
Orientation	C > T-40.9
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	187 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	60.0 ms
TR 2	6315 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P48.5 H23.4 mm
Orientation	C > T-40.9
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P48.5 H23.4
L	0.0 mm
P	48.5 mm
H	23.4 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-40.9
> S	0.0

Geometry - Saturation

Saturation mode	Standard

Geometry - Saturation

Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 P48.0 H21.9 mm
! Orientation	C > T-36.7
! Rotation	-90.00 deg
! F >> H	209 mm
! R >> L	350 mm
! A >> P	40 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.200
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.06 ms
Bandwidth	1002 Hz/Px

Sequence - Part 2

EPI factor	52

Sequence - Part 2

Segmentation	6
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off

this is version maas4f
compiled Aug 16th 2021

\\USER\Test\Renzo\templates\rslh_Gz3_S6_C1_0p39_PCshot

TA: 14:55 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : d238999c

Properties

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

Routine

Slab group	1
Slabs	1
Position	L0.0 P53.3 H21.0 mm
Orientation	C > T-37.4
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	182 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	71.4 ms
TR 2	7136 ms
TE 1	26.80 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	71.4 ms
TR 2	7136 ms
TE 1	26.80 ms
Multi-echo spacing	63.37 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1302.6 ms
TI 2	2587.8 ms
Flip angle	40 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	124
Pause after meas.	0.0 s

Resolution - Common

FoV read	182 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	462
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 P53.3 H21.0 mm
Orientation	C > T-37.4
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	182 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	71.4 ms
TR 2	7136 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P53.3 H21.0 mm
Orientation	C > T-37.4
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P53.3 H21.0
L	0.0 mm
P	53.3 mm
H	21.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-37.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard

Geometry - Saturation

Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 P48.1 H17.8 mm
! Orientation	C > T-36.7
! Rotation	-90.00 deg
! F >> H	180 mm
! R >> L	350 mm
! A >> P	40 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.200
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.08 ms
Bandwidth	984 Hz/Px

Sequence - Part 2

EPI factor	58

Sequence - Part 2

Segmentation	6
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off

this is the standard MP2RAGE
with a slab-excitation pulse
BWTP 25.4 (for thin slab)

\\USER\Test\Renzo\templates\mp2rage_tfl_renzo

TA: 4:39 PM: FIX Voxel size: 0.3×0.3×0.3 mmPAT: 2 Rel. SNR: 1.00 : renzo

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	72
FoV read	180 mm
FoV phase	98.5 %
Slice thickness	0.35 mm
TR	5140.0 ms
TE	3.97 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	R96

Contrast - Common

TR	5140.0 ms
TE	3.97 ms
Magn. preparation	Non-sel. IR
TI 1	1290 ms
TI 2	3860 ms
Flip angle 1	9.0 deg
Flip angle 2	7.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	180 mm
FoV phase	98.5 %
Slice thickness	0.35 mm
Base resolution	520
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	72
FoV read	180 mm
FoV phase	98.5 %
Slice thickness	0.35 mm
TR	5140.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	178 mm
R >> L	180 mm
F >> H	26 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	5140.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	1290 ms
TI 2	3860 ms
Fat suppr.	None
Dark blood	Off
FoV read	180 mm
FoV phase	98.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off

Inline - Common

Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle 1	9.0 deg
Flip angle 2	7.0 deg
Measurements	1
TR	5140.0 ms
TE	3.97 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear rot.
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	9.5 ms
Bandwidth	250 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	511

Sequence - Assistant

Mode	Off

\\USER\Test\Renzo\templates\GRE_FL_slab_60sl_vetted

TA: 7:28 PM: FIX Voxel size: 0.3×0.3×0.3 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	60
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	31.0 ms
TE 1	5.72 ms
TE 2	14.98 ms
TE 3	24.24 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	R96

Contrast - Common

TR	31.0 ms
TE 1	5.72 ms
TE 2	14.98 ms
TE 3	24.24 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
Base resolution	576

Resolution - Common

Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
Slice oversampling	0.0 %
Slices per slab	60
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	31.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	L0.6 P52.0 H24.7
L	0.6 mm
P	52.0 mm
H	24.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-39.5
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None

Geometry - Saturation

Special sat.	None

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	60
Slice thickness	0.35 mm
Dist. factor	20 %
FoV read	200 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.6 P51.4 H24.7 mm
! Orientation	C > T-39.8
! Rotation	0.00 deg
! R >> L	200 mm
! F >> H	200 mm
! A >> P	31 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	270.000 V

Physio - Signal1

1st Signal/Mode	None

Physio - Signal1

TR	31.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	200 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	12 deg
Measurements	1
Contrasts	3
TR	31.0 ms
TE 1	5.72 ms
TE 2	14.98 ms
TE 3	24.24 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	3
Flow comp. 1	No
Readout mode	Monopolar

Sequence - Part 1

Multi-slice mode	Interleaved
Bandwidth 1	120 Hz/Px
Bandwidth 2	120 Hz/Px
Bandwidth 3	120 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off

this is the standard GRE
with a slab-excitation pulse
BWTP 25.4 (for thin slab)

\\USER\Test\Renzo\templates\GRE_RENZO_0p35_25BWTP

TA: 6:59 PM: FIX Voxel size: 0.3×0.3×0.3 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	60
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	29.0 ms
TE 1	5.82 ms
TE 2	14.17 ms
TE 3	22.52 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	R96

Contrast - Common

TR	29.0 ms
TE 1	5.82 ms
TE 2	14.17 ms
TE 3	22.52 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
Base resolution	576

Resolution - Common

Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
Slice oversampling	0.0 %
Slices per slab	60
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	29.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 P52.0 H24.7 mm
Orientation	C > T-39.5
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	L0.6 P52.0 H24.7
L	0.6 mm
P	52.0 mm
H	24.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-39.5
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None

Geometry - Saturation

Special sat.	None

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	60
Slice thickness	0.35 mm
Dist. factor	20 %
FoV read	200 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	FIX
Table position	F
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.6 P51.4 H24.7 mm
! Orientation	C > T-39.8
! Rotation	0.00 deg
! R >> L	200 mm
! F >> H	200 mm
! A >> P	31 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.210591 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None

Physio - Signal1

TR	29.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	200 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	12 deg
Measurements	1
Contrasts	3
TR	29.0 ms
TE 1	5.82 ms
TE 2	14.17 ms
TE 3	22.52 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	3
Flow comp. 1	No
Readout mode	Bipolar

Sequence - Part 1

Multi-slice mode	Interleaved
Bandwidth 1	120 Hz/Px
Bandwidth 2	120 Hz/Px
Bandwidth 3	120 Hz/Px

Sequence - Part 2

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

Sequence - Assistant

Mode	Off