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\UIUC

Chal

Test

VAPER_VASO

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\\UIUC\Chal\Test\VAPER_VASO\mt_faramp_excfa_20_17deg_2.3x2z1_pcSer_es1p09

TA: 3:26 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 377f4e7

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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
TE 1	12.40 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	35.5 ms
TE 1	12.40 ms
Multi-echo spacing	31.38 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	42
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s

Contrast - Dynamic

Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Water excit. normal

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

System - Adjust Volume

! Position	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
! Ref. amplitude 1H	235.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.09 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PATRef FA	4 deg
RF duration	340 us
RF BWT product	17
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE if PF	On
Alternate RO	Off
Phase Correction	per Series
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	Off
Prep Mode	1
Dante Mode	4
Dante Rf FA	11.5 deg
Dante Rf Dur	130 us
Dante Pls1 #	40
Dante Pls2 #	40
Dante Tau	200 us
Dante Gradx	0.0 mT/m
Dante Grady	0.0 mT/m
Dante Gradz	0.0 mT/m
Ramp time	0
Ramp mintime	0
Prep FA Diff	-3.0 deg

Sequence - Assistant

Mode	Off
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\\UIUC\Chal\Test\VAPER_VASO\vaper_origD_faramp_excfa_20_17deg_2.3x2z1_pcSer_es1p09_reg5
e4

TA: 19:53 PM: FIX Voxel size: 0.8x0.8x0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 377f4e7

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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
TE 1	12.40 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	35.5 ms
TE 1	12.40 ms
Multi-echo spacing	31.38 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	198
Pause after meas.	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Water excit. normal

System - Miscellaneous

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

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	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	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.09 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PATRef FA	4 deg
RF duration	340 us
RF BWT product	17
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE if PF	On
Alternate RO	Off

Sequence - Special

Phase Correction	per Series
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	50000 10^-6
Prep Mode	1
Dante Mode	4
Dante Rf FA	9.5 deg
Dante Rf Dur	70 us
Dante Pls1 #	120
Dante Pls2 #	20
Dante Tau	1000 us
Dante Gradx	26.0 mT/m
Dante Grady	0.0 mT/m
Dante Gradz	26.0 mT/m
Ramp time	130
Ramp mintime	130
Prep FA Diff	-3.0 deg

Sequence - Assistant

Mode	Off
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\\UIUC\Chal\Test\VAPER_VASO\mt_faramp_excfa_20_17deg_2.3x2z1_pcSer_es1p09

TA: 3:26 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 377f4e7

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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
TE 1	12.40 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	35.5 ms
TE 1	12.40 ms
Multi-echo spacing	31.38 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	42
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s

Contrast - Dynamic

Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Water excit. normal

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

System - Adjust Volume

! Position	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
! Ref. amplitude 1H	235.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.09 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PATRef FA	4 deg
RF duration	340 us
RF BWT product	17
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE if PF	On
Alternate RO	Off
Phase Correction	per Series
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	Off
Prep Mode	1
Dante Mode	4
Dante Rf FA	11.5 deg
Dante Rf Dur	130 us
Dante Pls1 #	40
Dante Pls2 #	40
Dante Tau	200 us
Dante Gradx	0.0 mT/m
Dante Grady	0.0 mT/m
Dante Gradz	0.0 mT/m
Ramp time	0
Ramp mintime	0
Prep FA Diff	-3.0 deg

Sequence - Assistant

Mode	Off
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\\UIUC\Chal\Test\VAPER_VASO\vaper_doubD_gradpn_excfa_20_17deg_2.3x2z1_pcSer_es1p09_reg
5e4

TA: 19:53 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 377f4e7

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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
TE 1	12.40 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	35.5 ms
TE 1	12.40 ms
Multi-echo spacing	31.38 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	198
Pause after meas.	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Water excit. normal

System - Miscellaneous

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

System - Miscellaneous

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	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	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.09 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PATRef FA	4 deg
RF duration	340 us
RF BWT product	17
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE if PF	On
Alternate RO	Off

Sequence - Special

Phase Correction	per Series
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	50000 10^-6
Prep Mode	1
Dante Mode	5
Dante Rf FA	9.5 deg
Dante Rf Dur	70 us
Dante Pls1 #	120
Dante Pls2 #	20
Dante Tau	1000 us
Dante Gradx	-26.0 mT/m
Dante Grady	0.0 mT/m
Dante Gradz	-26.0 mT/m
Ramp time	130
Ramp mintime	130
Prep FA Diff	-3.0 deg

Sequence - Assistant

Mode	Off
------	-----

\\UIUC\Chal\Test\VAPER_VASO\mt_faramp_excfa_20_17deg_2.3x2z1_pcSer_es1p09

TA: 3:26 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : ep 377f4e7

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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
TE 1	12.40 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	35.5 ms
TE 1	12.40 ms
Multi-echo spacing	31.38 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	Water excit. normal

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	42
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s

Contrast - Dynamic

Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR	35.5 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Water excit. normal

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

System - Adjust Volume

! Position	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
! Ref. amplitude 1H	235.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.09 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PATRef FA	4 deg
RF duration	340 us
RF BWT product	17
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Min. TE if PF	On
Alternate RO	Off
Phase Correction	per Series
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	Off
Prep Mode	1
Dante Mode	4
Dante Rf FA	11.5 deg
Dante Rf Dur	130 us
Dante Pls1 #	40
Dante Pls2 #	40
Dante Tau	200 us
Dante Gradx	0.0 mT/m
Dante Grady	0.0 mT/m
Dante Gradz	0.0 mT/m
Ramp time	0
Ramp mintime	0
Prep FA Diff	-3.0 deg

Sequence - Assistant

Mode	Off
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\\UIUC\Chal\Test\VAPER_VASO\vaso_2.3x2z1_pcSer_es1p18_reg5e4

TA: 20:00 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 6 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	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR 1	38.8 ms
TR 2	10763 ms
TE 1	13.90 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	38.8 ms
TR 2	10763 ms
TE 1	13.90 ms
Multi-echo spacing	33.9 ms
Magn. preparation	Non-sel. IR
TI 1	1164.4 ms
TI 2	2173.2 ms
Flip angle	33 deg
Fat suppr.	None
Magn. Prep. Shots	4

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	111
Pause after meas.	0.0 s

Resolution - Common

FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	224
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	3
Ref. lines PE	45
Acc. factor 3D	2
Ref. lines 3D	24
CAIPI 3D Shift	1
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

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
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	104
FoV read	180 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR 1	38.8 ms
TR 2	10763 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.6 A13.3 H18.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.6 A13.3 H18.8
L	0.6 mm
A	13.3 mm
H	18.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

System - Miscellaneous

Positioning mode	FIX
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System - Miscellaneous

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

System - Adjust Volume

! Position	L1.8 A12.1 F3.0 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	167 mm
! F >> H	159 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.183611 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	0.500
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.18 ms
Bandwidth	970 Hz/Px

Sequence - Part 2

EPI factor	28
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	26

Sequence - Special

PATRef FA	4 deg
RF duration	1000 us
RF BWT product	30
Ernst T1	2000 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0

Sequence - Special

CHECK FLIP ANGLE!	On
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	Long bino-11
External PC	per Series
EPI rise time factor	1.10
Mosaic DICOMs	Off
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off
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