Table of contents

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\scout_axial_princes

TA: 17 sec Coil Selection: Manual 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	On
Graphic segment	3rd Segment
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A16.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	160
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
TR	3.6 ms
TE	1.56 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	3.6 ms
TE	1.56 ms
MTC	Off
Magn. Preparation	None
Flip Angle	16 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
Base Resolution	160
Phase Resolution	100 %
Slice Resolution	69 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Phase Partial Fourier	6/8
Slice Partial Fourier	6/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A16.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	160
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
TR	3.6 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 A16.0 H0.0 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---

Geometry - AutoAlign

Initial Position	L0.0 A16.0 H0.0
L	0.0 mm
A	16.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A36.7 F31.6 mm
! 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	297.118356 MHz
! Ref. Amplitude 1H	250.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3.6 ms
Segments	1
Concatenations	1

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	260 mm
FOV Phase	100.0 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline - MapIt

MapIt	None
Flip Angle	16 deg
Measurements	1
Contrasts	1

Inline - MapIt

TE	1.56 ms
TR	3.6 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	540 Hz/Px
Asymmetric Echo	Off
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	AC

Sequence - Special

Readout polarity	Positive
Image processing	Standard
Apply echo spacing	Off
Echo spacing	0 us
Delta echo spacing	0 us
Dummy scans	0 ms
RF pulse duration	100 us
Gradient spoiling	Siemens
Gradient moment factor	1.00
Receiver gain mode	Siemens
Number of segments	1
Current segment	0
Lines before/after seg	0

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\scout_sag_princes

TA: 13 sec Coil Selection: Manual 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A16.0 H0.0 mm
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	1.600 mm
TR	3.5 ms
TE	1.51 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	3.5 ms
TE	1.51 ms
MTC	Off
Magn. Preparation	None
Flip Angle	16 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
Base Resolution	160
Phase Resolution	100 %
Slice Resolution	69 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Phase Partial Fourier	6/8
Slice Partial Fourier	6/8
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A16.0 H0.0 mm
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	1.600 mm
TR	3.5 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 A16.0 H0.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---

Geometry - AutoAlign

Initial Position	L0.0 A16.0 H0.0
L	0.0 mm
A	16.0 mm
H	0.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A36.7 F31.6 mm
! 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	297.118356 MHz
! Ref. Amplitude 1H	250.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3.5 ms
Segments	1
Concatenations	1

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	260 mm
FOV Phase	100.0 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline - MapIt

MapIt	None
Flip Angle	16 deg
Measurements	1
Contrasts	1

Inline - MapIt

TE	1.51 ms
TR	3.5 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	540 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	AC

Sequence - Special

Readout polarity	Positive
Image processing	Standard
Apply echo spacing	Off
Echo spacing	0 us
Delta echo spacing	0 us
Dummy scans	0 ms
RF pulse duration	100 us
Gradient spoiling	Siemens
Gradient moment factor	1.00
Receiver gain mode	Siemens
Number of segments	1
Current segment	0
Lines before/after seg	0

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\scout_cor_princes

TA: 13 sec Coil Selection: Manual 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A21.6 F1.2 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
TR	3.5 ms
TE	1.51 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	3.5 ms
TE	1.51 ms
MTC	Off
Magn. Preparation	None
Flip Angle	16 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
Base Resolution	160
Phase Resolution	100 %
Slice Resolution	69 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Phase Partial Fourier	6/8
Slice Partial Fourier	6/8
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L0.0 A21.6 F1.2 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	128
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	260 mm
FOV Phase	100.0 %
Slice Thickness	1.600 mm
TR	3.5 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 A21.6 F1.2 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---

Geometry - AutoAlign

Initial Position	L0.0 A21.6 F1.2
L	0.0 mm
A	21.6 mm
F	1.2 mm
Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A36.7 F31.6 mm
! 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	297.118356 MHz
! Ref. Amplitude 1H	250.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3.5 ms
Segments	1
Concatenations	1

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	260 mm
FOV Phase	100.0 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline - MapIt

MapIt	None
Flip Angle	16 deg
Measurements	1
Contrasts	1

Inline - MapIt

TE	1.51 ms
TR	3.5 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	540 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	AC

Sequence - Special

Readout polarity	Positive
Image processing	Standard
Apply echo spacing	Off
Echo spacing	0 us
Delta echo spacing	0 us
Dummy scans	0 ms
RF pulse duration	100 us
Gradient spoiling	Siemens
Gradient moment factor	1.00
Receiver gain mode	Siemens
Number of segments	1
Current segment	0
Lines before/after seg	0

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\rslh_ep3d_vaso_WB_FRISGO

TA: 41 sec Coil Selection: Manual Voxel Size: 0.9×0.9×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	58.7 ms
Vol. TR	2582.8 ms
TE 1	19.10 ms
Averages	4
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	58.7 ms
Vol. TR	2582.8 ms
TE 1	19.10 ms
Multi-echo spacing	37.90 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Fast Fat Saturation
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Reordering	Linear

Resolution - Common

FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	238
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	36
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	58.7 ms
Vol. TR	2582.8 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P6.5 F3.5
L	0.0 mm

Geometry - AutoAlign

P	6.5 mm
F	3.5 mm
Initial Orientation	T > C
T > C	-31.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Quick

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	Volume-selective
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A1.2 F2.3 mm
! Orientation	T > C-31.0
! Rotation	90.00 deg
! R >> L	127 mm
! A >> P	161 mm
! F >> H	124 mm
Reset	Off

System - pTx

B1 Shim	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - pTx

pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.118356 MHz
! Ref. Amplitude 1H	370.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1400 Hz/Px
Echo Spacing	0.82 ms
Turbo Factor	44
Segmentation	1
EPI Factor	45

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	460 us
RF time x BW	10
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.00

Sequence - Special

G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\rslh_ep3d_vaso_WB_FRISGO_with_short_TRS

TA: 36 sec Coil Selection: Manual Voxel Size: 0.9×0.9×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	43.8 ms
Vol. TR	1927.2 ms
TE 1	13.60 ms
Averages	4
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	43.8 ms
Vol. TR	1927.2 ms
TE 1	13.60 ms
Multi-echo spacing	37.90 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Fast Fat Saturation
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard

Contrast - Dynamic

Measurements	2
Reordering	Linear

Resolution - Common

FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	238
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	36
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	210 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	43.8 ms
Vol. TR	1927.2 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 P6.5 F3.5 mm

Geometry - AutoAlign

Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P6.5 F3.5
L	0.0 mm
P	6.5 mm
F	3.5 mm
Initial Orientation	T > C
T > C	-31.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Quick

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	Volume-selective
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A1.2 F2.3 mm
! Orientation	T > C-31.0
! Rotation	90.00 deg
! R >> L	127 mm
! A >> P	161 mm
! F >> H	124 mm
Reset	Off

System - pTx

B1 Shim	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5

System - pTx

Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.118356 MHz
! Ref. Amplitude 1H	370.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1400 Hz/Px
Echo Spacing	0.82 ms
Turbo Factor	44
Segmentation	1
EPI Factor	45

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	460 us
RF time x BW	10
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz

Sequence - Special

MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\pope_FRISGO

TA: 22 sec Coil Selection: Manual Voxel Size: 1.0×1.0×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	213 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Multi-echo spacing	33.90 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	213 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	212
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	213 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P6.5 F3.5
L	0.0 mm

Geometry - AutoAlign

P	6.5 mm
F	3.5 mm
Initial Orientation	T > C
T > C	-31.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	Volume-selective
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A1.2 F2.3 mm
! Orientation	T > C-31.0
! Rotation	90.00 deg
! R >> L	127 mm
! A >> P	161 mm
! F >> H	124 mm
Reset	Off

System - pTx

B1 Shim	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - pTx

pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1572 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	44
Segmentation	1
EPI Factor	40

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	1540 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.00

Sequence - Special

G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
are you Renzo?	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\pope_FRISGO_runs

TA: 22 sec Coil Selection: Manual Voxel Size: 1.0×1.0×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Multi-echo spacing	35.00 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	214
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P6.5 F3.5
L	0.0 mm

Geometry - AutoAlign

P	6.5 mm
F	3.5 mm
Initial Orientation	T > C
T > C	-31.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	Volume-selective
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A1.2 F2.3 mm
! Orientation	T > C-31.0
! Rotation	90.00 deg
! R >> L	127 mm
! A >> P	161 mm
! F >> H	124 mm
Reset	Off

System - pTx

B1 Shim	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - pTx

pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1558 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	44
Segmentation	1
EPI Factor	41

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	1540 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.03

Sequence - Special

G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
are you Renzo?	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\pope_FRISGO_runs_no_GRAPPA

TA: 22 sec Coil Selection: Manual Voxel Size: 1.0×1.0×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	40.0 ms
Vol. TR	1760 ms
TE 1	15.00 ms
Multi-echo spacing	35.00 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	214
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	40.0 ms
Vol. TR	1760 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.0 P6.5 F3.5 mm
Orientation	T > C-31.0
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P6.5 F3.5
L	0.0 mm

Geometry - AutoAlign

P	6.5 mm
F	3.5 mm
Initial Orientation	T > C
T > C	-31.00
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	Volume-selective
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.0 A1.2 F2.3 mm
! Orientation	T > C-31.0
! Rotation	90.00 deg
! R >> L	127 mm
! A >> P	161 mm
! F >> H	124 mm
Reset	Off

System - pTx

B1 Shim	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - pTx

pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	L0.0 P62.2 F15.5 mm
Orientation	T > C-0.5
Rotation	90.00 deg
R >> L	127 mm
A >> P	76 mm
F >> H	79 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1558 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	44
Segmentation	1
EPI Factor	41

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	1540 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.03

Sequence - Special

G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
are you Renzo?	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\rslh_ep3d_vaso_WB_FRISGO_princes

TA: 19 sec Coil Selection: Manual Voxel Size: 1.0×1.0×0.9 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	38.2 ms
Vol. TR	1719 ms
TE 1	13.20 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	38.2 ms
Vol. TR	1719 ms
TE 1	13.20 ms
Multi-echo spacing	35.10 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard

Contrast - Dynamic

Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
Base Resolution	222
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	0.88 mm
TR	38.2 ms
Vol. TR	1719 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.9 A21.5 F5.9 mm

Geometry - AutoAlign

Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.9 A21.5 F5.9
L	0.9 mm
A	21.5 mm
F	5.9 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L0.9 A21.5 F5.9 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	155 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00

System - Tx/Rx

Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1408 Hz/Px
Echo Spacing	0.82 ms
Turbo Factor	45
Segmentation	1
EPI Factor	42

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	1000 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\pope_FRISGO_on_the_other_side_mm

TA: 29 sec Coil Selection: Manual Voxel Size: 1.0×1.0×1.0 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	42.9 ms
Vol. TR	1926.74 ms
TE 1	14.50 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	42.9 ms
Vol. TR	1926.74 ms
TE 1	14.50 ms
Multi-echo spacing	35.00 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Fast Fat Saturation
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard

Contrast - Dynamic

Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
Base Resolution	214
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	36
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	0.0 %
FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	42.9 ms
Vol. TR	1926.74 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.9 A21.5 F5.9 mm

Geometry - AutoAlign

Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.9 A21.5 F5.9
L	0.9 mm
A	21.5 mm
F	5.9 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Quick

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.9 A21.5 F5.9 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	220 mm
! R >> L	220 mm
! F >> H	155 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00

System - Tx/Rx

Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1558 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	44
Segmentation	1
EPI Factor	41

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	2000 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	in dummy
Saturation RF	per Shot
EPI rise time factor	1.00
G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
are you Renzo?	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\rslh_ep3d_vaso_WB_FRISGO_on_the_other_side

TA: 22 sec Coil Selection: Manual Voxel Size: 1.0×1.0×1.0 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	50.0 ms
Vol. TR	2250 ms
TE 1	14.50 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	50.0 ms
Vol. TR	2250 ms
TE 1	14.50 ms
Multi-echo spacing	34.90 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard

Contrast - Dynamic

Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
Base Resolution	214
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	214 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	50.0 ms
Vol. TR	2250 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.9 A21.5 F5.9 mm

Geometry - AutoAlign

Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.9 A21.5 F5.9
L	0.9 mm
A	21.5 mm
F	5.9 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.9 A21.5 F5.9 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	220 mm
! R >> L	220 mm
! F >> H	155 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00

System - Tx/Rx

Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1374 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	45
Segmentation	1
EPI Factor	41

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	2000 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.42
G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off

\\MARTINOS DEVELOPER\HUBER\HelloFromTheOtherSide\FRISGO_WB\rslh_ep3d_vaso_WB_FRISGO_submm

TA: 22 sec Coil Selection: Manual Voxel Size: 1.0×1.0×1.0 mm³ Acc:: 16 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
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	212 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	50.0 ms
Vol. TR	2250 ms
TE 1	14.50 ms
Averages	1
Multi-echo Shots	1
AutoAlign	---
Coil Elements	AC

Contrast - Common

TR	50.0 ms
Vol. TR	2250 ms
TE 1	14.50 ms
Multi-echo spacing	34.90 ms
MTC	Off
Flip Angle	15 deg
Fat-Water Contrast	Standard
Magn. Prep. Shots	1
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard

Contrast - Dynamic

Measurements	4
Reordering	Linear

Resolution - Common

FOV Read	212 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
Base Resolution	214
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
Reference Scans	GRE/Separate
Acceleration Factor PE	4
Reference Lines PE	80
Acceleration Factor 3D	4
Reference Lines 3D	20
Reordering Shift 3D	2
Phase Partial Fourier	6/8
Slice Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L0.9 A21.5 F5.9 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	176
Phase Oversampling	0.0 %
Slice Oversampling	2.3 %
FOV Read	212 mm
FOV Phase	100.0 %
Slice Thickness	0.99 mm
TR	50.0 ms
Vol. TR	2250 ms
Multi-echo Shots	1

Geometry - AutoAlign

Slab Group	1
Position	L0.9 A21.5 F5.9 mm

Geometry - AutoAlign

Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.9 A21.5 F5.9
L	0.9 mm
A	21.5 mm
F	5.9 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Brain
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L0.9 A21.5 F5.9 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	220 mm
! R >> L	220 mm
! F >> H	155 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.118356 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00

System - Tx/Rx

Image Scaling	1.000

Sequence - Part 1

Sequence Name	vaso a2d6453
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1374 Hz/Px
Echo Spacing	0.83 ms
Turbo Factor	45
Segmentation	1
EPI Factor	41

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Special

RF duration	2000 us
RF time x BW	8
PAT ref. FA	3 deg
Fat sat. FA	110 deg
T1 (Ernst FA)	1200 ms
Invert PE	Off
Min. TE w/ PF	On
Ramp Sampling	On
Trigger per shot	Off
Noise image	Off
Relax spoilers	Off
Round up Vol. TR	Off
MT flip angle	500 deg
MT off-res.	2000 Hz
MT RF duration	10240 us
Custom Water Exc.	-none-
Phase Correction	per Series
Saturation RF	per Shot
EPI rise time factor	1.41
G. spoil dephasing[1]	0.0 pi
G. spoil dephasing[2]	4.0 pi
G. spoil dephasing[3]	2.0 pi
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	5000 /10^6
Slab Scale	-10 %
RF spoil scheme	Conventional
Read polarity	Dual-polarity

Sequence - Assistant

SAR Assistant	Off