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\\USER

FMRIF

[XT-ID:93-M-0170]Renzo

20250424_SRA_0p39

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\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\scout_sag

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 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	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	A32

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	L0.0 A30.0 H0.0
L	0.0 mm
A	30.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

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

System - Miscellaneous

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 - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	6.3 s

Inline - Inline

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	16.0 deg
Measurements	1
Contrasts	1
TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\scout_trans

TA: 0:20 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 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	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	A32

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	L0.0 A30.0 H0.0
L	0.0 mm
A	30.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

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

System - Miscellaneous

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 - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	8.3 s

Inline - Inline

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	16.0 deg
Measurements	1
Contrasts	1
TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\scout_sag

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 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	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	A32

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	L0.0 A30.0 H0.0
L	0.0 mm
A	30.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

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

System - Miscellaneous

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 - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	6.3 s

Inline - Inline

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	16.0 deg
Measurements	1
Contrasts	1
TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\scout_trans

TA: 0:20 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 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	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	A32

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	L0.0 A30.0 H0.0
L	0.0 mm
A	30.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

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

System - Miscellaneous

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 - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	8.3 s

Inline - Inline

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	16.0 deg
Measurements	1
Contrasts	1
TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run1_8x8_0p39_RO
TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

SIEMENS MAGNETOM Investigational_Device_7T_Plus

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run2_8x8_0p39_OR
TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run3_8x8_0p39_RO

TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run4_8x8_0p39_OR

TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run5_8x8_0p39_RO

TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\Run6_8x8_0p39_OR

TA: 11:36 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5o

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Averages	1
Filter	None
Coil elements	A32

Contrast - Common

TR 1	49.0 ms
TR 2	4183 ms
TE 1	17.20 ms
Multi-echo spacing	41.7 ms
Magn. preparation	None
Flip angle	36 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	356
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	18
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	49.0 ms
TR 2	4183 ms

Geometry - AutoAlign

Slab group	1
Position	R3.9 P41.0 H7.2 mm
Orientation	C > T-23.0 > S-0.7
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R3.9 P41.0 H7.2
R	3.9 mm
P	41.0 mm
H	7.2 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-23.0
> S	-0.7

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

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

System - Adjust Volume

! Position	R4.6 P39.2 H6.6 mm
! Orientation	C > T-18.5
! Rotation	90.00 deg
! F >> H	97 mm
! R >> L	120 mm
! A >> P	34 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.72 ms
Bandwidth	668 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	5 deg
RF duration	2500 us
RF BWT product	11
Ernst T1	1200 ms
PATRef prep. shots	100
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1

Sequence - Special

Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	Off
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.14
Mosaic DICOMs	On
Modify Ice Config	Off
Var. FA /MAGEC	1
MAGEC FA ratio	100

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\dzne_ep3d_MEGRElike_RO

TA: 6:56 PM: REF Voxel size: 0.3×0.3×0.3 mmPAT: 6 Rel. SNR: 1.00 : ep 668155d

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	R0.5 A10.9 H6.9 mm
Orientation	T > C-21.6
Phase enc. dir.	A >> P
AutoAlign	---
Slice oversampling	0.0 %
Slices per slab	380
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	53.1 ms
Vol. TR	408.87 s
TE 1	9.94 ms
TE 2	25.14 ms
TE 3	40.34 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	53.1 ms
Vol. TR	408.87 s
TE 1	9.94 ms
TE 2	25.14 ms
TE 3	40.34 ms
Multi-echo spacing	15.20 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	1

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
Base resolution	572
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	36
Reordering Shift 3D	0
Reference scan mode	GRE/separate
CAIPI Trajectory	Skipped-CAIPI

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	R0.5 A10.9 H6.9 mm
Orientation	T > C-21.6
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	380
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	53.1 ms
Vol. TR	408.87 s
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	R0.5 A10.9 H6.9 mm
Orientation	T > C-21.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.5 A10.9 H6.9
R	0.5 mm
A	10.9 mm
H	6.9 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-21.6
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off

Geometry - Tim Planning Suite

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

System - Adjust Volume

! Position	R1.5 A8.4 H11.1 mm
! Orientation	Sagittal
! Rotation	7.74 deg
! A >> P	169 mm
! F >> H	102 mm
! R >> L	124 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.204352 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.300
Reset	Off
! Ref. amplitude 1H	200.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	3
Echo spacing	2.52 ms
Bandwidth	546 Hz/Px

Sequence - Part 2

EPI factor	5
Segmentation	40
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PAT ref. FA	6 deg
RF duration	1020 us
RF BWT product	30

Sequence - Special

Ernst T1	1200 ms
PATRef prep. shots	30
Volume dummy shots	100
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Invert RO	Off
Water Exc.	-none-
Phase Correction	per Series
EPI rise time factor	1.10
Modify Ice Config	On
G-factor map	Off
Disable freq. adj.	Off
GRAPPA Regularization	10 /10^6
Slab Scale	0 %

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]Renzo\20250424_SRA_0p39\dzne_ep3d_MEGRElike_OR

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Auto close inline display	Off
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AutoAlign	---
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FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.35 mm
TR	53.1 ms
Vol. TR	408.87 s
TE 1	9.94 ms
TE 2	25.14 ms
TE 3	40.34 ms
Averages	1
Multi-echo Shots	1
Filter	None
Coil elements	A32

Contrast - Common

TR	53.1 ms
Vol. TR	408.87 s
TE 1	9.94 ms
TE 2	25.14 ms
TE 3	40.34 ms
Multi-echo spacing	15.20 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
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Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
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Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

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FoV phase	100.0 %
Slice thickness	0.35 mm
TR	53.1 ms
Vol. TR	408.87 s
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	R0.5 A10.9 H6.9 mm
Orientation	T > C-21.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.5 A10.9 H6.9
R	0.5 mm
A	10.9 mm
H	6.9 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-21.6
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off

Geometry - Tim Planning Suite

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
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Coil Combine Mode	Sum of Squares
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Reset	Off

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Correction factor	1
Gain	High
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Reset	Off
! Ref. amplitude 1H	200.000 V

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Segmentation	40
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Special

PAT ref. FA	6 deg
RF duration	1020 us
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Ernst T1	1200 ms
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Volume dummy shots	100
Noise dummy shots	-1
Integrated PC	Off
Invert PE	Off
Invert RO	On
Water Exc.	-none-
Phase Correction	per Series
EPI rise time factor	1.10
Modify Ice Config	On
G-factor map	Off
Disable freq. adj.	Off
GRAPPA Regularization	10 /10^6
Slab Scale	0 %

Sequence - Assistant

Mode	Off