

\\USER\Nils\Develop\Renzo_pdf\RENZLAY_11_M!S1_like_NILS

TA: 2:56 PM: REF Voxel size: 0.8×0.8×1.2 mmPAT: 3 Rel. SNR: 1.00 : RenzLa8

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	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	P >> A
AutoAlign	---
Slice oversampling	0.0 %
Slices per slab	16
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR 1	85.12 ms
TR 2	3397.000 ms
TE 1	43.0 ms
Averages	1
TE segmentation	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	85.12 ms
TR 2	3397.000 ms
TE 1	43.0 ms
Multi-echo dTE	60.0 ms
MTC	Off
Magn. preparation	Non-sel. IR
Flip angle	8 deg
Fat suppr.	None
Number of TIs	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s

Contrast - Dynamic

Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Resolution - Common

FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
Base resolution	192
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	1
Ref. lines 3D	16
CAIPI 3D Shift	0
Reference scan mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	P >> A
Slice oversampling	0.0 %
Slices per slab	16
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR 1	85.12 ms
TR 2	3397.000 ms
Multi-slice mode	Interleaved
Series	Ascending
TE segmentation	1

Geometry - AutoAlign

Slab group	1
Position	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	P >> A
AutoAlign	---
Initial Position	R36.1 P4.8 H46.1
R	36.1 mm
P	4.8 mm
H	46.1 mm
Initial Rotation	-180.00 deg
Initial Orientation	T > S
T > S	40.8
> C	-8.3

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

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

System - Miscellaneous

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	R31.9 P0.0 H36.1 mm
! Orientation	T > S0.1
! Rotation	0.00 deg
! A >> P	144 mm
! R >> L	88 mm
! F >> H	83 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.139685 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	50

Sequence - Part 1

Introduction	On
--------------	----

Sequence - Part 1

Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.22 ms
Bandwidth	898 Hz/Px

Sequence - Part 2

EPI factor	64
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	16

Sequence - Special

PATRef FA	3 deg
RF duration	2540 us
RF BWT product	15
Slab Scale	90 %
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Invert 3D	Off
Echo Time Shift	On
Water Exc.	-none-
External PC	per Series
varflip option	0
Inversion Delay	650000 us
Relaxation Delay	0 us

Sequence - Assistant

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

\\USER\Nils\Develop\Renzo_pdf\ug_vaso3d_ipat3

TA: 2:51 PM: FIX Voxel size: 0.8×0.8×1.2 mmPAT: 3 Rel. SNR: 1.00 : ep3d

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	16
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	86 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	86 ms
TE	43.0 ms
MTC	Off
Flip angle 1	8 deg
Flip angle 2	20 deg
Flip angle 3	20 deg
Flip angle 4	20 deg
Flip angle 5	20 deg
Flip angle 6	20 deg
Flip angle 7	20 deg
Flip angle 8	20 deg
Flip angle 9	20 deg
Flip angle 10	20 deg
Flip angle 11	20 deg
Flip angle 12	20 deg
Flip angle 13	20 deg
Flip angle 14	20 deg
Flip angle 15	20 deg
Flip angle 16	20 deg
Flip angle 17	20 deg
Flip angle 18	20 deg
Flip angle 19	20 deg
Flip angle 20	20 deg
Flip angle 21	20 deg
Flip angle 22	20 deg
Flip angle 23	20 deg

Contrast - Common

Flip angle 24	20 deg
Flip angle 25	20 deg
Flip angle 26	20 deg
Flip angle 27	20 deg
Flip angle 28	20 deg
Flip angle 29	20 deg
Flip angle 30	20 deg
Flip angle 31	20 deg
Flip angle 32	20 deg
Fat suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
Base resolution	192
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Ref. lines 3D	10
Reference scan mode	GRE/separate

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	16
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	86 ms

Geometry - Common

Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R36.1 P4.8 H46.1 mm
Orientation	T > S40.8 > C-8.3
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	R36.1 P4.8 H46.1
R	36.1 mm
P	4.8 mm
H	46.1 mm
Initial Rotation	90.00 deg
Initial Orientation	T > S
T > S	40.8
> C	-8.3

Geometry - Saturation

Fat suppr.	None
Special sat.	None

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
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	R31.9 P0.0 H36.1 mm
! Orientation	T > S0.1
! Rotation	0.00 deg
! A >> P	144 mm
! R >> L	88 mm
! F >> H	83 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.139685 MHz
Correction factor	1
Gain	High

System - Tx/Rx

Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	86 ms
Concatenations	1
Segments	1

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	100
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Dimension	3D
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.22 ms
Bandwidth	898 Hz/Px

Sequence - Part 2

EPI factor	192
Segments	1
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Special

Use Const. FA	On
FatSat Each Shot	Off
Nr Segments	1

Sequence - Special

TR 1	2036 ms
TR 2	1376 ms
Sequence	VASO
Run as PSF scan	Off
PSF Sugg. Repetitions	32
SliceGrad Scale	0.80
Exc Pulse	1
T1 delay	650 ms
Phase Skip	0 deg
T1 GM	2100 ms
Clipped Partitions	6
Inv.TX Volt	400 V
Recovery Time	0 ms