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Feinberg TerraTest 20200921 localizer b1map_tra_p2_267V gre_field_mapping_tra cmrr_mbep2d_bold_0.5mm_ipat3mb4_wholebrain_noSM cmrr_mbep2d_bold_0.5x0.5x1.0_ipat3mb4_wholebrain_noSM cmrr_mbep2d_bold_0.4x0.4x0.8_ipat4mb2_wholebrain_noSM cmrr_mbep2d_bold_0.4x0.4x0.4_ipat4mb2_noSM RENZLAY11_08_M1 RENZLAY11_06_M1 RENZLAY11_06_V1

\\USER\Feinberg\TerraTest\20200921\localizer

TA: 0:15 PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

Properties

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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

Routine	
Slice group	1
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	8.6 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Elliptical filter
Coil elements	AC

Contrast - Common

TR	8.6 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Contrast - Dynamic

Multiple series

Resolution - Common		
FoV read	250 mm	
FoV phase	100.0 %	
Slice thickness	5.0 mm	
Base resolution	256	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	On	

Each measurement

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group 1 Slices 1 Dist. factor 20 % Position Isocenter Orientation Sagittal	
Dist. factor 20 % Position Isocenter	
Position Isocenter	
Orientation Sagittal	
Phase enc. dir. A >> P	
Slice group 2	
Slices 1	
Dist. factor 20 %	
Position Isocenter	
Orientation Transversal	
Phase enc. dir. A >> P	
Slice group 3	
Slices 1	
Dist. factor 20 %	
Position Isocenter	
Orientation Coronal	
Phase enc. dir. R >> L	
FoV read 250 mm	
FoV phase 100.0 %	
Slice thickness 5.0 mm	
TR 8.6 ms	
Multi-slice mode Sequential	
Series Interleaved	
Concatenations 3	

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	Isocenter
Orientation	Transversal

Geometry - AutoAlign

Phase enc. dir.	A >> P
Slice group	3
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slices	1
Slice thickness	5.0 mm
Dist. factor	20 %
FoV read	250 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm	
Excitation	Slice-sel.	

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8.6 ms
Concatenations	3
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	3

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	8.6 ms

Inline - MapIt

TE	3.69 ms

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	Active
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

Mode	Off	

\\USER\Feinberg\TerraTest\20200921\b1map_tra_p2_267V

TA: 9.0 s PM: REF Voxel size: 4.0×4.0×4.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slice group	1
Slices	20
Dist. factor	100 %
Position	L1.2 P4.2 F1.2 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4000.0 ms
TE	1.73 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	4000.0 ms
TE	1.73 ms
Magn. preparation	None
Flip angle	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	16

Resolution - iPAT

Reference scan mode	integrated
Resolution - Filter Image	
Image Filter	Off

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	20
Dist. factor	100 %
Position	L1.2 P4.2 F1.2 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

occinion, hunteringn	
Slice group	1
Position	L1.2 P4.2 F1.2 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L1.2 P4.2 F1.2
L	1.2 mm
P	4.2 mm
F	1.2 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator

Geometry - Tim Planning Suite

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

Cyclom imocomunicous	
Positioning mode	REF
Table position	Н
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

AutoAlign	
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Sequence - Part 1

Introduction	Off
Dimension	2D
Reordering	Centric
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	3.8 ms
Bandwidth	440 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Whisper
Excitation	Slice-sel.

Sequence - Part 2

RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	64

Sequence - pTX Pulses

Sequence - Special

Tx scale diag mag	0.0
Tx scale diag phs	0 deg
Tx scale offdiag mag	1.0
Tx scale offdiag phs	0 deg
Rel. B1 mapping	Off
Ref. scan	On
Use B1 map recon	On
Dummy RF pulses	1000

Mode	Off	

\\USER\Feinberg\TerraTest\20200921\gre_field_mapping_tra

TA: 0:29 PM: REF Voxel size: 4.0×4.0×4.0 mmRel. SNR: 1.00 : fm_r

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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

01	4
Slice group	1
Slices	40
Dist. factor	0 %
Position	L2.4 P3.6 H0.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	225.0 ms
TE 1	3.06 ms
TE 2	4.08 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	225.0 ms
TE 1	3.06 ms
TE 2	4.08 ms
MTC	Off
Flip angle	25 deg
Flip angle Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - Filter Image

Image Filter	Off	
Distortion Corr.	Off	

Resolution - Filter Image

Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	40
Dist. factor	0 %
Position	L2.4 P3.6 H0.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	225.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L2.4 P3.6 H0.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L2.4 P3.6 H0.6
L	2.4 mm
Р	3.6 mm
Н	0.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

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

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	L2.4 P3.6 H0.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	160 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Di Olimii modo	11401 01111

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	908 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

Mode	Off	

TA: 2:59 PM: FIX Voxel size: 0.5×0.5×0.5 mmPAT: 3 Rel. SNR: 1.00 : epfid

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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	100
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR	3510 ms
TE	34.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	AC

Contrast - Common

TR	3510 ms
TE	34.20 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	25
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
Base resolution	400
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	66
Reference scan mode	Segmented

Resolution - Filter Image

Distortion Corr.	Off	
Prescan Normalize	Off	

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	100
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR	3510 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.6 A3.0 F10.8
L	0.6 mm
Α	3.0 mm
F	10.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
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	Head > Brain
Coil Select Mode	Default

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

System - Adjust Volume

Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
A >> P R >> L F >> H	100 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal	Mode	None	
TR		3510 ms	
Multi-band	accel. factor	4	

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

BOLD

Measurements	25
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.38 ms
Bandwidth	834 Hz/Px

Sequence - Part 2

EPI factor	400
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

•	
Excite pulse duration	5820 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
MB kernel size	1
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Feinberg\TerraTest\20200921\cmrr_mbep2d_bold_0.5x0.5x1.0_ipat3mb4_wholebrain_noSM

TA: 2:59 PM: FIX Voxel size: 0.5×0.5×1.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

Properties

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

Routine

Slice group	1
Slices	100
Dist. factor	0 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3510 ms
TE	34.20 ms
Multi-band accel. factor	4
Filter	None
Coil elements	AC

Contrast - Common

3510 ms
34.20 ms
Off
None
80 deg
Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	25
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
Base resolution	400
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	66
Reference scan mode	Segmented

Resolution - Filter Image

Distortion Corr.	Off	
Prescan Normalize	Off	

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	100
Dist. factor	0 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	3510 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	4

Geometry - AutoAlign

Slice group	1
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.6 A3.0 F10.8
L	0.6 mm
Α	3.0 mm
F	10.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
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	Head > Brain
Coil Select Mode	Default

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

System - Adjust Volume

Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	200 mm
A >> P R >> L F >> H	200 mm
F >> H	100 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3510 ms
Multi-band accel. factor	4

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

BOLD

Measurements	25
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.38 ms
Bandwidth	834 Hz/Px

Sequence - Part 2

EPI factor	400
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

•	
Excite pulse duration	5820 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
MB kernel size	1
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Feinberg\TerraTest\20200921\cmrr_mbep2d_bold_0.4x0.4x0.8_ipat4mb2_wholebrain_noSM

TA: 2:48 PM: FIX Voxel size: 0.4×0.4×0.8 mmPAT: 4 Rel. SNR: 1.00 : epfid

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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.84 mm
TR	4660 ms
TE	36.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	AC

Contrast - Common

TR	4660 ms
TE	36.80 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	25
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.84 mm
Base resolution	476
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	88
Reference scan mode	FLEET

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.84 mm
TR	4660 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.6 A3.0 F10.8
L	0.6 mm
A	3.0 mm
F	10.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
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	Head > Brain
Coil Select Mode	Default

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

System - Adjust Volume

Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	100 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4660 ms
Multi-band accel. factor	2

BOLD

5025	
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

BOLD

Measurements	25
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.74 ms
Bandwidth	750 Hz/Px

Sequence - Part 2

EPI factor	476
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

ooquonico opoolui	
Excite pulse duration	5820 us
FLEET ref. prep. scans	0
FLEET ref. min. TR	0 ms
Slice multiplier	1
Multi-band PE shift	0 1/FoV
MB kernel size	1
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Feinberg\TerraTest\20200921\cmrr_mbep2d_bold_0.4x0.4x0.4_ipat4mb2_noSM

TA: 2:51 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 4 Rel. SNR: 1.00 : epfid

Properties

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

Routine

Slice group	1
Slices	60
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.42 mm
TR	4740 ms
TE	39.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	AC

Contrast - Common

TR	4740 ms
TE	39.00 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	25
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.42 mm
Base resolution	476
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	88
Reference scan mode	FLEET

Resolution - Filter Image

Distortion Corr.	Off	
Prescan Normalize	Off	

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	100 %
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.42 mm
TR	4740 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.6 A3.0 F10.8
L	0.6 mm
Α	3.0 mm
F	10.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
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	Head > Brain
Coil Select Mode	Default

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

System - Adjust Volume

Position	L0.6 A3.0 F10.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	200 mm
A >> P R >> L F >> H	200 mm
F >> H	50 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4740 ms
Multi-band accel. factor	2

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

BOLD

Measurements	25
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.74 ms
Bandwidth	750 Hz/Px

Sequence - Part 2

EPI factor	476
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	6920 us
FLEET ref. prep. scans	0
FLEET ref. min. TR	0 ms
Slice multiplier	1
Multi-band PE shift	0 1/FoV
MB kernel size	1
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Feinberg\TerraTest\20200921\RENZLAY11_08_M1

TA: 12:23 PM: REF Voxel size: 0.8×0.8×0.9 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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Position	R43.6 A2.0 H21.6 mm
Orientation	T > S39.7 > C-9.5
Phase enc. dir.	P >> A
AutoAlign	
Slice oversampling	0.0 %
Slices per slab	24
FoV read	150 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR 1	54.59 ms
TR 2	3511.000 ms
TE 1	19.0 ms
Averages	1
TE segmentation	1
Filter	Distortion Corr.(3D)
Coil elements	AC

Contrast - Common

TR 1	54.59 ms
TR 2	3511.000 ms
TE 1	19.0 ms
Multi-echo dTE	60.0 ms
MTC	Off
Magn. preparation	Non-sel. IR
Flip angle	60 deg
Fat suppr.	Fat sat.
Number of TIs	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	210
Pause after meas.	0.0 s

Resolution - Common

FoV read	150 mm	
FoV phase	100.0 %	
Slice thickness	0.90 mm	
Base resolution	188	
Phase resolution	100 %	
Slice resolution	100 %	
Phase partial Fourier	6/8	
Slice partial Fourier	Off	

Resolution - Common

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

Coomony Common	
Slab group	1
Slabs	1
Position	R43.6 A2.0 H21.6 mm
Orientation	T > S39.7 > C-9.5
Phase enc. dir.	P >> A
Slice oversampling	0.0 %
Slices per slab	24
FoV read	150 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR 1	54.59 ms
TR 2	3511.000 ms
Multi-slice mode	Interleaved
Series	Ascending
TE segmentation	1

Geometry - AutoAlian

Joonion's Autoringin	
Slab group	1
Position	R43.6 A2.0 H21.6 mm
Orientation	T > S39.7 > C-9.5
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	R43.6 A2.0 H21.6
R	43.6 mm
Α	2.0 mm
Н	21.6 mm
Initial Rotation	-180.00 deg
Initial Orientation	T > S
T > S	39.7
> C	-9.5

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	R40.1 P5.8 H15.4 mm
! Orientation	T > C-9.5
! Rotation ! A >> P ! R >> L ! F >> H Reset	180.00 deg
! A >> P	144 mm
! R >> L	88 mm
! F >> H	75 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

BOLD

5025		
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	

BOLD

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	210

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.01 ms
Bandwidth	1108 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	24

Sequence - Special

ooquonioo opoolui	
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
Min. TE if PF	On
Are you Renzo?	On
Echo Time Shift	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
varflip option	4
Inversion Delay	650000 us
Relaxation Delay	0 us

Mode	Off
IVIOGE	Oli

\\USER\Feinberg\TerraTest\20200921\RENZLAY11_06_M1

TA: 11:08 PM: REF Voxel size: 0.6×0.6×0.6 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	R46.1 P5.4 H32.1 mm
Orientation	T > S41.4 > C-11.9
Phase enc. dir.	A >> P
AutoAlign	
Slice oversampling	0.0 %
Slices per slab	22
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.60 mm
TR 1	52.92 ms
TR 2	6003.000 ms
TE 1	18.0 ms
Averages	1
TE segmentation	1
Filter	Distortion Corr.(3D)
Coil elements	AC

Contrast - Common

TR 1	52.92 ms
TR 2	6003.000 ms
TE 1	18.0 ms
Multi-echo dTE	60.0 ms
MTC	Off
Magn. preparation	Non-sel. IR
Flip angle	60 deg
Fat suppr.	Fat sat.
Number of TIs	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	110
Pause after meas.	0.0 s

Resolution - Common

FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.60 mm
Base resolution	294
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off

Resolution - Common

Interpolation Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	1
Ref. lines 3D	22
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	R46.1 P5.4 H32.1 mm
Orientation	T > S41.4 > C-11.9
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	22
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.60 mm
TR 1	52.92 ms
TR 2	6003.000 ms
Multi-slice mode	Interleaved
Series	Ascending
TE segmentation	1

Geometry - AutoAlign

occinion y matering.	
Slab group	1
Position	R46.1 P5.4 H32.1 mm
Orientation	T > S41.4 > C-11.9
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R46.1 P5.4 H32.1
R	46.1 mm
Р	5.4 mm
Н	32.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > S
T > S	41.4
> C	-11.9

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	R25.7 A0.5 H30.8 mm
! Orientation	T > S0.1
! Rotation	0.00 deg
! A >> P	111 mm
! R >> L	88 mm
! F >> H	83 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 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

BOLD

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	110

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.22 ms
Bandwidth	944 Hz/Px

Sequence - Part 2

EPI factor	37
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	22

Sequence - Special

ocquerioe opeoidi	
PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Slab Scale	90 %
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
CHECK FLIP ANGLE!	On
Invert PE	Off
Invert 3D	Off
Min. TE if PF	On
Are you Renzo?	On
Echo Time Shift	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
varflip option	4
Inversion Delay	450000 us
Relaxation Delay	0 us

Mode	Off
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\\USER\Feinberg\TerraTest\20200921\RENZLAY11_06_V1

TA: 0:14 PM: REF Voxel size: 0.6×0.6×0.6 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	L0.0 P18.5 H15.3 mm
Orientation	T > C-35.1
Phase enc. dir.	A >> P
AutoAlign	
Slice oversampling	0.0 %
Slices per slab	26
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.60 mm
TR 1	52.74 ms
TR 2	6904.000 ms
TE 1	18.0 ms
Averages	1
TE segmentation	1
Filter	Distortion Corr.(3D)
Coil elements	AC

Contrast - Common

TR 1	52.74 ms
TR 2	6904.000 ms
TE 1	18.0 ms
Multi-echo dTE	60.0 ms
MTC	Off
Magn. preparation	Non-sel. IR
Flip angle	60 deg
Fat suppr.	Fat sat.
Number of TIs	2

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	177 mm	
FoV phase	100.0 %	
Slice thickness	0.60 mm	
Base resolution	294	
Phase resolution	100 %	
Slice resolution	100 %	
Phase partial Fourier	6/8	
Slice partial Fourier	Off	
Interpolation	Off	

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	1
Ref. lines 3D	22
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	L0.0 P18.5 H15.3 mm
Orientation	T > C-35.1
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	26
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.60 mm
TR 1	52.74 ms
TR 2	6904.000 ms
Multi-slice mode	Interleaved
Series	Ascending
TE segmentation	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P18.5 H15.3 mm
Orientation	T > C-35.1
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L0.0 P18.5 H15.3
L	0.0 mm
Р	18.5 mm
Н	15.3 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-35.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
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Geometry - Tim Planning Suite

Table position	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	R1.8 P18.3 H15.3 mm
! Orientation	T > S0.1
! Rotation	0.00 deg
! A >> P	177 mm
! R >> L	177 mm
! F >> H	49 mm
Reset	Off

System - pTx Volumes

B1 Sh	im mode	TrueForm
Excita	tion	Slab-sel.

System - Tx/Rx

Frequency 1H	297.180122 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 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

BOLD

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	1

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.22 ms
Bandwidth	944 Hz/Px

Sequence - Part 2

EPI factor	37	
Segmentation	2	
RF pulse type	Normal	
Gradient mode	Fast	
Excitation	Slab-sel.	
RF spoiling	On	
Turbo factor	26	

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Slab Scale	90 %
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
CHECK FLIP ANGLE!	On
Invert PE	Off
Invert 3D	Off
Min. TE if PF	On
Are you Renzo?	On
Echo Time Shift	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
varflip option	4
Inversion Delay	450000 us
Relaxation Delay	0 us

Mode	Off