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\\CRC\protocols\studies\v5motion\localizer

TA: 0:15 PM: FIX 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

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	A32

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	Each measurement

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

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
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
P	0.0 mm
H	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 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	FIX
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 - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000

System - Tx/Rx

Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

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

Physio - Cardiac

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
MIP - time	Off
Measurements	1

Inline - Composing

Distortion Corr.	Off

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

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

\\CRC\protocols\studies\v5motion\AAHead_Scout_32ch-head-coil

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 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	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

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
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off

System - Adjustments

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	297.162474 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 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

Distortion Corr.	Off

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

Sequence - Nuclei

TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\b1map_sag_p2

TA: 9.2 s PM: FIX 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	25
Dist. factor	100 %
Position	Isocenter
Orientation	Sagittal
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	1.72 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4000.0 ms
TE	1.72 ms
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
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
Reference scan mode	Integrated

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

Slice group	1
Slices	25
Dist. factor	100 %
Position	Isocenter
Orientation	Sagittal
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

Slice group	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

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	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	297.162474 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Inline - Common

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

Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	3.9 ms
Bandwidth	490 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	64

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\gre_field_mapping_2mm_AAbrain

TA: 1:38 PM: FIX Voxel size: 2.0×2.0×2.0 mmRel. SNR: 1.00 : fm

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	96
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	5.2 ms
TE 1	2.26 ms
TE 2	3.28 ms
Averages	1
Concatenations	96
Filter	None
Coil elements	A32

Contrast - Common

TR	5.2 ms
TE 1	2.26 ms
TE 2	3.28 ms
MTC	Off
Flip angle	15 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
Base resolution	128
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	96
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	5.2 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	96

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

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	Head > Brain
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

System - Adjustments

Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	192 mm
A >> P	256 mm
F >> H	192 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	737 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_AABrain

TA: 10:19 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	330
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	-0.01 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
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	Isocenter
Orientation	Transversal
Rotation	89.99 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 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
Measurements	330
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_reversePE_AABrain

TA: 0:34 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	-0.01 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Isocenter
Orientation	Transversal
Rotation	89.99 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 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
Measurements	5
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
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

\\CRC\protocols\studies\v5motion\t1_mp2rage_sag_p3_0.75mm_AAbasis

TA: 8:50 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	8.3 %
Slices per slab	192
FoV read	240 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
TR	4300.0 ms
TE	2.27 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4300.0 ms
TE	2.27 ms
Magn. preparation	Non-sel. IR
TI 1	1000 ms
TI 2	3200 ms
Flip angle 1	4.0 deg
Flip angle 2	4.0 deg
Fat suppr.	Water excit. fast
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Reference scan mode	Integrated

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
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	8.3 %
Slices per slab	192
FoV read	240 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
TR	4300.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

System - Miscellaneous

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
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	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	225 mm
F >> H	240 mm
R >> L	144 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	4300.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	1000 ms
TI 2	3200 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	240 mm
FoV phase	93.8 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

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

Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.2 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	156

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

\\CRC\protocols\studies\v5motion\mp2rage_siemens_ipat3_0.69mm_AAbasis

TA: 9:05 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 3 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R1.8 A29.6 F44.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	242 mm
FoV phase	100.0 %
Slice thickness	0.69 mm
TR	5000.0 ms
TE	2.58 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR	5000.0 ms
TE	2.58 ms
Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	Water excit. normal
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	242 mm
FoV phase	100.0 %
Slice thickness	0.69 mm
Base resolution	352
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	32
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R1.8 A29.6 F44.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.1 %
Slices per slab	224
FoV read	242 mm
FoV phase	100.0 %
Slice thickness	0.69 mm
TR	5000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R1.8 A29.6 F44.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R1.8 A29.6 F44.8
R	1.8 mm
A	29.6 mm
F	44.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T

System - Miscellaneous

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
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	R1.8 A29.6 F44.8 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	242 mm
F >> H	242 mm
R >> L	155 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	5000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Fat suppr.	Water excit. normal
Dark blood	Off
FoV read	242 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

Inline - MIP

MIP-Time	Off
Save original images	On

Inline - Composing

Distortion Corr.	On
Mode	3D
Unfiltered images	On

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	6.1 ms
Bandwidth	490 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	180

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

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_Neuro3D_Visual_AABrain

TA: 15:25 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L1.3 A5.2 H4.5
L	1.3 mm
A	5.2 mm
H	4.5 mm
Initial Rotation	-0.25 deg
Initial Orientation	T > C
T > C	-8.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Rotation	89.75 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 ms
Multi-band accel. factor	2

BOLD

GLM Statistics	On
Dynamic t-maps	On
Ignore meas. at start	5
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	1.00
Paradigm size	192
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]	Baseline
Meas[12]	Baseline
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Meas[21]	Active
Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Baseline
Meas[26]	Baseline
Meas[27]	Baseline
Meas[28]	Baseline
Meas[29]	Baseline
Meas[30]	Baseline

BOLD

Meas[31]	Baseline
Meas[32]	Baseline
Meas[33]	Baseline
Meas[34]	Baseline
Meas[35]	Baseline
Meas[36]	Baseline
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Meas[41]	Active
Meas[42]	Active
Meas[43]	Active
Meas[44]	Active
Meas[45]	Active
Meas[46]	Active
Meas[47]	Active
Meas[48]	Active
Meas[49]	Baseline
Meas[50]	Baseline
Meas[51]	Baseline
Meas[52]	Baseline
Meas[53]	Baseline
Meas[54]	Baseline
Meas[55]	Baseline
Meas[56]	Baseline
Meas[57]	Baseline
Meas[58]	Baseline
Meas[59]	Baseline
Meas[60]	Baseline
Meas[61]	Active
Meas[62]	Active
Meas[63]	Active
Meas[64]	Active
Meas[65]	Active
Meas[66]	Active
Meas[67]	Active
Meas[68]	Active
Meas[69]	Active
Meas[70]	Active
Meas[71]	Active
Meas[72]	Active
Meas[73]	Baseline
Meas[74]	Baseline
Meas[75]	Baseline
Meas[76]	Baseline
Meas[77]	Baseline
Meas[78]	Baseline
Meas[79]	Baseline
Meas[80]	Baseline
Meas[81]	Baseline
Meas[82]	Baseline
Meas[83]	Baseline
Meas[84]	Baseline
Meas[85]	Active
Meas[86]	Active
Meas[87]	Active
Meas[88]	Active
Meas[89]	Active
Meas[90]	Active
Meas[91]	Active
Meas[92]	Active
Meas[93]	Active
Meas[94]	Active
Meas[95]	Active

BOLD

Meas[96]	Active
Meas[97]	Baseline
Meas[98]	Baseline
Meas[99]	Baseline
Meas[100]	Baseline
Meas[101]	Baseline
Meas[102]	Baseline
Meas[103]	Baseline
Meas[104]	Baseline
Meas[105]	Baseline
Meas[106]	Baseline
Meas[107]	Baseline
Meas[108]	Baseline
Meas[109]	Active
Meas[110]	Active
Meas[111]	Active
Meas[112]	Active
Meas[113]	Active
Meas[114]	Active
Meas[115]	Active
Meas[116]	Active
Meas[117]	Active
Meas[118]	Active
Meas[119]	Active
Meas[120]	Active
Meas[121]	Baseline
Meas[122]	Baseline
Meas[123]	Baseline
Meas[124]	Baseline
Meas[125]	Baseline
Meas[126]	Baseline
Meas[127]	Baseline
Meas[128]	Baseline
Meas[129]	Baseline
Meas[130]	Baseline
Meas[131]	Baseline
Meas[132]	Baseline
Meas[133]	Active
Meas[134]	Active
Meas[135]	Active
Meas[136]	Active
Meas[137]	Active
Meas[138]	Active
Meas[139]	Active
Meas[140]	Active
Meas[141]	Active
Meas[142]	Active
Meas[143]	Active
Meas[144]	Active
Meas[145]	Baseline
Meas[146]	Baseline
Meas[147]	Baseline
Meas[148]	Baseline
Meas[149]	Baseline
Meas[150]	Baseline
Meas[151]	Baseline
Meas[152]	Baseline
Meas[153]	Baseline
Meas[154]	Baseline
Meas[155]	Baseline
Meas[156]	Baseline
Meas[157]	Active
Meas[158]	Active
Meas[159]	Active
Meas[160]	Active

BOLD

Meas[161]	Active
Meas[162]	Active
Meas[163]	Active
Meas[164]	Active
Meas[165]	Active
Meas[166]	Active
Meas[167]	Active
Meas[168]	Active
Meas[169]	Baseline
Meas[170]	Baseline
Meas[171]	Baseline
Meas[172]	Baseline
Meas[173]	Baseline
Meas[174]	Baseline
Meas[175]	Baseline
Meas[176]	Baseline
Meas[177]	Baseline
Meas[178]	Baseline
Meas[179]	Baseline
Meas[180]	Baseline
Meas[181]	Active
Meas[182]	Active
Meas[183]	Active
Meas[184]	Active
Meas[185]	Active
Meas[186]	Active
Meas[187]	Active
Meas[188]	Active
Meas[189]	Active
Meas[190]	Active
Meas[191]	Active
Meas[192]	Active
Motion correction	On
Spatial filter	Off
Measurements	500
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00

Sequence - Special

Fat saturation FA	110.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_Neuro3D_Audio_AABrain

TA: 15:25 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L1.3 A5.2 H4.5
L	1.3 mm
A	5.2 mm
H	4.5 mm
Initial Rotation	-0.25 deg
Initial Orientation	T > C
T > C	-8.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Rotation	89.75 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 ms
Multi-band accel. factor	2

BOLD

GLM Statistics	On
Dynamic t-maps	On
Ignore meas. at start	5
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	1.00
Paradigm size	336
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]	Baseline
Meas[12]	Baseline
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Meas[21]	Active
Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Baseline
Meas[26]	Baseline
Meas[27]	Baseline
Meas[28]	Baseline
Meas[29]	Baseline
Meas[30]	Baseline

BOLD

Meas[31]	Baseline
Meas[32]	Baseline
Meas[33]	Baseline
Meas[34]	Baseline
Meas[35]	Baseline
Meas[36]	Baseline
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Meas[41]	Active
Meas[42]	Active
Meas[43]	Active
Meas[44]	Active
Meas[45]	Active
Meas[46]	Active
Meas[47]	Active
Meas[48]	Active
Meas[49]	Baseline
Meas[50]	Baseline
Meas[51]	Baseline
Meas[52]	Baseline
Meas[53]	Baseline
Meas[54]	Baseline
Meas[55]	Baseline
Meas[56]	Baseline
Meas[57]	Baseline
Meas[58]	Baseline
Meas[59]	Baseline
Meas[60]	Baseline
Meas[61]	Active
Meas[62]	Active
Meas[63]	Active
Meas[64]	Active
Meas[65]	Active
Meas[66]	Active
Meas[67]	Active
Meas[68]	Active
Meas[69]	Active
Meas[70]	Active
Meas[71]	Active
Meas[72]	Active
Meas[73]	Baseline
Meas[74]	Baseline
Meas[75]	Baseline
Meas[76]	Baseline
Meas[77]	Baseline
Meas[78]	Baseline
Meas[79]	Baseline
Meas[80]	Baseline
Meas[81]	Baseline
Meas[82]	Baseline
Meas[83]	Baseline
Meas[84]	Baseline
Meas[85]	Active
Meas[86]	Active
Meas[87]	Active
Meas[88]	Active
Meas[89]	Active
Meas[90]	Active
Meas[91]	Active
Meas[92]	Active
Meas[93]	Active
Meas[94]	Active
Meas[95]	Active

BOLD

Meas[96]	Active
Meas[97]	Baseline
Meas[98]	Baseline
Meas[99]	Baseline
Meas[100]	Baseline
Meas[101]	Baseline
Meas[102]	Baseline
Meas[103]	Baseline
Meas[104]	Baseline
Meas[105]	Baseline
Meas[106]	Baseline
Meas[107]	Baseline
Meas[108]	Baseline
Meas[109]	Active
Meas[110]	Active
Meas[111]	Active
Meas[112]	Active
Meas[113]	Active
Meas[114]	Active
Meas[115]	Active
Meas[116]	Active
Meas[117]	Active
Meas[118]	Active
Meas[119]	Active
Meas[120]	Active
Meas[121]	Baseline
Meas[122]	Baseline
Meas[123]	Baseline
Meas[124]	Baseline
Meas[125]	Baseline
Meas[126]	Baseline
Meas[127]	Baseline
Meas[128]	Baseline
Meas[129]	Baseline
Meas[130]	Baseline
Meas[131]	Baseline
Meas[132]	Baseline
Meas[133]	Active
Meas[134]	Active
Meas[135]	Active
Meas[136]	Active
Meas[137]	Active
Meas[138]	Active
Meas[139]	Active
Meas[140]	Active
Meas[141]	Active
Meas[142]	Active
Meas[143]	Active
Meas[144]	Active
Meas[145]	Baseline
Meas[146]	Baseline
Meas[147]	Baseline
Meas[148]	Baseline
Meas[149]	Baseline
Meas[150]	Baseline
Meas[151]	Baseline
Meas[152]	Baseline
Meas[153]	Baseline
Meas[154]	Baseline
Meas[155]	Baseline
Meas[156]	Baseline
Meas[157]	Active
Meas[158]	Active
Meas[159]	Active
Meas[160]	Active

BOLD

Meas[161]	Active
Meas[162]	Active
Meas[163]	Active
Meas[164]	Active
Meas[165]	Active
Meas[166]	Active
Meas[167]	Active
Meas[168]	Active
Meas[169]	Baseline
Meas[170]	Baseline
Meas[171]	Baseline
Meas[172]	Baseline
Meas[173]	Baseline
Meas[174]	Baseline
Meas[175]	Baseline
Meas[176]	Baseline
Meas[177]	Baseline
Meas[178]	Baseline
Meas[179]	Baseline
Meas[180]	Baseline
Meas[181]	Active
Meas[182]	Active
Meas[183]	Active
Meas[184]	Active
Meas[185]	Active
Meas[186]	Active
Meas[187]	Active
Meas[188]	Active
Meas[189]	Active
Meas[190]	Active
Meas[191]	Active
Meas[192]	Active
Meas[193]	Baseline
Meas[194]	Baseline
Meas[195]	Baseline
Meas[196]	Baseline
Meas[197]	Baseline
Meas[198]	Baseline
Meas[199]	Baseline
Meas[200]	Baseline
Meas[201]	Baseline
Meas[202]	Baseline
Meas[203]	Baseline
Meas[204]	Baseline
Meas[205]	Active
Meas[206]	Active
Meas[207]	Active
Meas[208]	Active
Meas[209]	Active
Meas[210]	Active
Meas[211]	Active
Meas[212]	Active
Meas[213]	Active
Meas[214]	Active
Meas[215]	Active
Meas[216]	Active
Meas[217]	Baseline
Meas[218]	Baseline
Meas[219]	Baseline
Meas[220]	Baseline
Meas[221]	Baseline
Meas[222]	Baseline
Meas[223]	Baseline
Meas[224]	Baseline
Meas[225]	Baseline

BOLD

Meas[226]	Baseline
Meas[227]	Baseline
Meas[228]	Baseline
Meas[229]	Active
Meas[230]	Active
Meas[231]	Active
Meas[232]	Active
Meas[233]	Active
Meas[234]	Active
Meas[235]	Active
Meas[236]	Active
Meas[237]	Active
Meas[238]	Active
Meas[239]	Active
Meas[240]	Active
Meas[241]	Baseline
Meas[242]	Baseline
Meas[243]	Baseline
Meas[244]	Baseline
Meas[245]	Baseline
Meas[246]	Baseline
Meas[247]	Baseline
Meas[248]	Baseline
Meas[249]	Baseline
Meas[250]	Baseline
Meas[251]	Baseline
Meas[252]	Baseline
Meas[253]	Active
Meas[254]	Active
Meas[255]	Active
Meas[256]	Active
Meas[257]	Active
Meas[258]	Active
Meas[259]	Active
Meas[260]	Active
Meas[261]	Active
Meas[262]	Active
Meas[263]	Active
Meas[264]	Active
Meas[265]	Baseline
Meas[266]	Baseline
Meas[267]	Baseline
Meas[268]	Baseline
Meas[269]	Baseline
Meas[270]	Baseline
Meas[271]	Baseline
Meas[272]	Baseline
Meas[273]	Baseline
Meas[274]	Baseline
Meas[275]	Baseline
Meas[276]	Baseline
Meas[277]	Active
Meas[278]	Active
Meas[279]	Active
Meas[280]	Active
Meas[281]	Active
Meas[282]	Active
Meas[283]	Active
Meas[284]	Active
Meas[285]	Active
Meas[286]	Active
Meas[287]	Active
Meas[288]	Active
Meas[289]	Baseline
Meas[290]	Baseline

BOLD

Meas[291]	Baseline
Meas[292]	Baseline
Meas[293]	Baseline
Meas[294]	Baseline
Meas[295]	Baseline
Meas[296]	Baseline
Meas[297]	Baseline
Meas[298]	Baseline
Meas[299]	Baseline
Meas[300]	Baseline
Meas[301]	Active
Meas[302]	Active
Meas[303]	Active
Meas[304]	Active
Meas[305]	Active
Meas[306]	Active
Meas[307]	Active
Meas[308]	Active
Meas[309]	Active
Meas[310]	Active
Meas[311]	Active
Meas[312]	Active
Meas[313]	Baseline
Meas[314]	Baseline
Meas[315]	Baseline
Meas[316]	Baseline
Meas[317]	Baseline
Meas[318]	Baseline
Meas[319]	Baseline
Meas[320]	Baseline
Meas[321]	Baseline
Meas[322]	Baseline
Meas[323]	Baseline
Meas[324]	Baseline
Meas[325]	Active
Meas[326]	Active
Meas[327]	Active
Meas[328]	Active
Meas[329]	Active
Meas[330]	Active
Meas[331]	Active
Meas[332]	Active
Meas[333]	Active
Meas[334]	Active
Meas[335]	Active
Meas[336]	Active
Motion correction	On
Spatial filter	Off
Measurements	500
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast

Sequence - Part 2

RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_Neuro3D_Visual_v2_AABrain

TA: 15:25 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L1.3 A5.2 H4.5
L	1.3 mm
A	5.2 mm
H	4.5 mm
Initial Rotation	-0.25 deg
Initial Orientation	T > C
T > C	-8.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Rotation	89.75 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 ms
Multi-band accel. factor	2

BOLD

GLM Statistics	On
Dynamic t-maps	On
Ignore meas. at start	5
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	1.00
Paradigm size	270
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]	Active
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]	Baseline
Meas[20]	Baseline
Meas[21]	Baseline
Meas[22]	Baseline
Meas[23]	Baseline
Meas[24]	Baseline
Meas[25]	Baseline
Meas[26]	Baseline
Meas[27]	Baseline
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active

BOLD

Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Baseline
Meas[38]	Baseline
Meas[39]	Baseline
Meas[40]	Baseline
Meas[41]	Baseline
Meas[42]	Baseline
Meas[43]	Baseline
Meas[44]	Baseline
Meas[45]	Baseline
Meas[46]	Active
Meas[47]	Active
Meas[48]	Active
Meas[49]	Active
Meas[50]	Active
Meas[51]	Active
Meas[52]	Active
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Meas[54]	Active
Meas[55]	Baseline
Meas[56]	Baseline
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Meas[59]	Baseline
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Meas[61]	Baseline
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Meas[63]	Baseline
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Meas[65]	Active
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Meas[67]	Active
Meas[68]	Active
Meas[69]	Active
Meas[70]	Active
Meas[71]	Active
Meas[72]	Active
Meas[73]	Baseline
Meas[74]	Baseline
Meas[75]	Baseline
Meas[76]	Baseline
Meas[77]	Baseline
Meas[78]	Baseline
Meas[79]	Baseline
Meas[80]	Baseline
Meas[81]	Baseline
Meas[82]	Active
Meas[83]	Active
Meas[84]	Active
Meas[85]	Active
Meas[86]	Active
Meas[87]	Active
Meas[88]	Active
Meas[89]	Active
Meas[90]	Active
Meas[91]	Baseline
Meas[92]	Baseline
Meas[93]	Baseline
Meas[94]	Baseline
Meas[95]	Baseline

BOLD

Meas[96]	Baseline
Meas[97]	Baseline
Meas[98]	Baseline
Meas[99]	Baseline
Meas[100]	Active
Meas[101]	Active
Meas[102]	Active
Meas[103]	Active
Meas[104]	Active
Meas[105]	Active
Meas[106]	Active
Meas[107]	Active
Meas[108]	Active
Meas[109]	Baseline
Meas[110]	Baseline
Meas[111]	Baseline
Meas[112]	Baseline
Meas[113]	Baseline
Meas[114]	Baseline
Meas[115]	Baseline
Meas[116]	Baseline
Meas[117]	Baseline
Meas[118]	Active
Meas[119]	Active
Meas[120]	Active
Meas[121]	Active
Meas[122]	Active
Meas[123]	Active
Meas[124]	Active
Meas[125]	Active
Meas[126]	Active
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Meas[129]	Baseline
Meas[130]	Baseline
Meas[131]	Baseline
Meas[132]	Baseline
Meas[133]	Baseline
Meas[134]	Baseline
Meas[135]	Baseline
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Meas[137]	Active
Meas[138]	Active
Meas[139]	Active
Meas[140]	Active
Meas[141]	Active
Meas[142]	Active
Meas[143]	Active
Meas[144]	Active
Meas[145]	Baseline
Meas[146]	Baseline
Meas[147]	Baseline
Meas[148]	Baseline
Meas[149]	Baseline
Meas[150]	Baseline
Meas[151]	Baseline
Meas[152]	Baseline
Meas[153]	Baseline
Meas[154]	Active
Meas[155]	Active
Meas[156]	Active
Meas[157]	Active
Meas[158]	Active
Meas[159]	Active
Meas[160]	Active

BOLD

Meas[161]	Active
Meas[162]	Active
Meas[163]	Baseline
Meas[164]	Baseline
Meas[165]	Baseline
Meas[166]	Baseline
Meas[167]	Baseline
Meas[168]	Baseline
Meas[169]	Baseline
Meas[170]	Baseline
Meas[171]	Baseline
Meas[172]	Active
Meas[173]	Active
Meas[174]	Active
Meas[175]	Active
Meas[176]	Active
Meas[177]	Active
Meas[178]	Active
Meas[179]	Active
Meas[180]	Active
Meas[181]	Baseline
Meas[182]	Baseline
Meas[183]	Baseline
Meas[184]	Baseline
Meas[185]	Baseline
Meas[186]	Baseline
Meas[187]	Baseline
Meas[188]	Baseline
Meas[189]	Baseline
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Meas[191]	Active
Meas[192]	Active
Meas[193]	Active
Meas[194]	Active
Meas[195]	Active
Meas[196]	Active
Meas[197]	Active
Meas[198]	Active
Meas[199]	Baseline
Meas[200]	Baseline
Meas[201]	Baseline
Meas[202]	Baseline
Meas[203]	Baseline
Meas[204]	Baseline
Meas[205]	Baseline
Meas[206]	Baseline
Meas[207]	Baseline
Meas[208]	Active
Meas[209]	Active
Meas[210]	Active
Meas[211]	Active
Meas[212]	Active
Meas[213]	Active
Meas[214]	Active
Meas[215]	Active
Meas[216]	Active
Meas[217]	Baseline
Meas[218]	Baseline
Meas[219]	Baseline
Meas[220]	Baseline
Meas[221]	Baseline
Meas[222]	Baseline
Meas[223]	Baseline
Meas[224]	Baseline
Meas[225]	Baseline

BOLD

Meas[226]	Active
Meas[227]	Active
Meas[228]	Active
Meas[229]	Active
Meas[230]	Active
Meas[231]	Active
Meas[232]	Active
Meas[233]	Active
Meas[234]	Active
Meas[235]	Baseline
Meas[236]	Baseline
Meas[237]	Baseline
Meas[238]	Baseline
Meas[239]	Baseline
Meas[240]	Baseline
Meas[241]	Baseline
Meas[242]	Baseline
Meas[243]	Baseline
Meas[244]	Active
Meas[245]	Active
Meas[246]	Active
Meas[247]	Active
Meas[248]	Active
Meas[249]	Active
Meas[250]	Active
Meas[251]	Active
Meas[252]	Active
Meas[253]	Baseline
Meas[254]	Baseline
Meas[255]	Baseline
Meas[256]	Baseline
Meas[257]	Baseline
Meas[258]	Baseline
Meas[259]	Baseline
Meas[260]	Baseline
Meas[261]	Baseline
Meas[262]	Active
Meas[263]	Active
Meas[264]	Active
Meas[265]	Active
Meas[266]	Active
Meas[267]	Active
Meas[268]	Active
Meas[269]	Active
Meas[270]	Active
Motion correction	On
Spatial filter	Off
Measurements	500
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_Neuro3D_Audio_v2_AABrain

TA: 15:25 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L1.3 A5.2 H4.5
L	1.3 mm
A	5.2 mm
H	4.5 mm
Initial Rotation	-0.25 deg
Initial Orientation	T > C
T > C	-8.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.3 A5.2 H4.5 mm
Orientation	T > C-8.0
Rotation	89.75 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 ms
Multi-band accel. factor	2

BOLD

GLM Statistics	On
Dynamic t-maps	On
Ignore meas. at start	5
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	1.00
Paradigm size	400
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]	Active
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]	Baseline
Meas[20]	Baseline
Meas[21]	Baseline
Meas[22]	Baseline
Meas[23]	Baseline
Meas[24]	Baseline
Meas[25]	Baseline
Meas[26]	Baseline
Meas[27]	Baseline
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active

BOLD

Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Baseline
Meas[38]	Baseline
Meas[39]	Baseline
Meas[40]	Baseline
Meas[41]	Baseline
Meas[42]	Baseline
Meas[43]	Baseline
Meas[44]	Baseline
Meas[45]	Baseline
Meas[46]	Active
Meas[47]	Active
Meas[48]	Active
Meas[49]	Active
Meas[50]	Active
Meas[51]	Active
Meas[52]	Active
Meas[53]	Active
Meas[54]	Active
Meas[55]	Baseline
Meas[56]	Baseline
Meas[57]	Baseline
Meas[58]	Baseline
Meas[59]	Baseline
Meas[60]	Baseline
Meas[61]	Baseline
Meas[62]	Baseline
Meas[63]	Baseline
Meas[64]	Active
Meas[65]	Active
Meas[66]	Active
Meas[67]	Active
Meas[68]	Active
Meas[69]	Active
Meas[70]	Active
Meas[71]	Active
Meas[72]	Active
Meas[73]	Baseline
Meas[74]	Baseline
Meas[75]	Baseline
Meas[76]	Baseline
Meas[77]	Baseline
Meas[78]	Baseline
Meas[79]	Baseline
Meas[80]	Baseline
Meas[81]	Baseline
Meas[82]	Active
Meas[83]	Active
Meas[84]	Active
Meas[85]	Active
Meas[86]	Active
Meas[87]	Active
Meas[88]	Active
Meas[89]	Active
Meas[90]	Active
Meas[91]	Baseline
Meas[92]	Baseline
Meas[93]	Baseline
Meas[94]	Baseline
Meas[95]	Baseline

BOLD

Meas[96]	Baseline
Meas[97]	Baseline
Meas[98]	Baseline
Meas[99]	Baseline
Meas[100]	Active
Meas[101]	Active
Meas[102]	Active
Meas[103]	Active
Meas[104]	Active
Meas[105]	Active
Meas[106]	Active
Meas[107]	Active
Meas[108]	Active
Meas[109]	Baseline
Meas[110]	Baseline
Meas[111]	Baseline
Meas[112]	Baseline
Meas[113]	Baseline
Meas[114]	Baseline
Meas[115]	Baseline
Meas[116]	Baseline
Meas[117]	Baseline
Meas[118]	Active
Meas[119]	Active
Meas[120]	Active
Meas[121]	Active
Meas[122]	Active
Meas[123]	Active
Meas[124]	Active
Meas[125]	Active
Meas[126]	Active
Meas[127]	Baseline
Meas[128]	Baseline
Meas[129]	Baseline
Meas[130]	Baseline
Meas[131]	Baseline
Meas[132]	Baseline
Meas[133]	Baseline
Meas[134]	Baseline
Meas[135]	Baseline
Meas[136]	Active
Meas[137]	Active
Meas[138]	Active
Meas[139]	Active
Meas[140]	Active
Meas[141]	Active
Meas[142]	Active
Meas[143]	Active
Meas[144]	Active
Meas[145]	Baseline
Meas[146]	Baseline
Meas[147]	Baseline
Meas[148]	Baseline
Meas[149]	Baseline
Meas[150]	Baseline
Meas[151]	Baseline
Meas[152]	Baseline
Meas[153]	Baseline
Meas[154]	Active
Meas[155]	Active
Meas[156]	Active
Meas[157]	Active
Meas[158]	Active
Meas[159]	Active
Meas[160]	Active

BOLD

Meas[161]	Active
Meas[162]	Active
Meas[163]	Baseline
Meas[164]	Baseline
Meas[165]	Baseline
Meas[166]	Baseline
Meas[167]	Baseline
Meas[168]	Baseline
Meas[169]	Baseline
Meas[170]	Baseline
Meas[171]	Baseline
Meas[172]	Active
Meas[173]	Active
Meas[174]	Active
Meas[175]	Active
Meas[176]	Active
Meas[177]	Active
Meas[178]	Active
Meas[179]	Active
Meas[180]	Active
Meas[181]	Baseline
Meas[182]	Baseline
Meas[183]	Baseline
Meas[184]	Baseline
Meas[185]	Baseline
Meas[186]	Baseline
Meas[187]	Baseline
Meas[188]	Baseline
Meas[189]	Baseline
Meas[190]	Active
Meas[191]	Active
Meas[192]	Active
Meas[193]	Active
Meas[194]	Active
Meas[195]	Active
Meas[196]	Active
Meas[197]	Active
Meas[198]	Active
Meas[199]	Baseline
Meas[200]	Baseline
Meas[201]	Baseline
Meas[202]	Baseline
Meas[203]	Baseline
Meas[204]	Baseline
Meas[205]	Baseline
Meas[206]	Baseline
Meas[207]	Baseline
Meas[208]	Active
Meas[209]	Active
Meas[210]	Active
Meas[211]	Active
Meas[212]	Active
Meas[213]	Active
Meas[214]	Active
Meas[215]	Active
Meas[216]	Active
Meas[217]	Baseline
Meas[218]	Baseline
Meas[219]	Baseline
Meas[220]	Baseline
Meas[221]	Baseline
Meas[222]	Baseline
Meas[223]	Baseline
Meas[224]	Baseline
Meas[225]	Baseline

BOLD

Meas[226]	Active
Meas[227]	Active
Meas[228]	Active
Meas[229]	Active
Meas[230]	Active
Meas[231]	Active
Meas[232]	Active
Meas[233]	Active
Meas[234]	Active
Meas[235]	Baseline
Meas[236]	Baseline
Meas[237]	Baseline
Meas[238]	Baseline
Meas[239]	Baseline
Meas[240]	Baseline
Meas[241]	Baseline
Meas[242]	Baseline
Meas[243]	Baseline
Meas[244]	Active
Meas[245]	Active
Meas[246]	Active
Meas[247]	Active
Meas[248]	Active
Meas[249]	Active
Meas[250]	Active
Meas[251]	Active
Meas[252]	Active
Meas[253]	Baseline
Meas[254]	Baseline
Meas[255]	Baseline
Meas[256]	Baseline
Meas[257]	Baseline
Meas[258]	Baseline
Meas[259]	Baseline
Meas[260]	Baseline
Meas[261]	Baseline
Meas[262]	Active
Meas[263]	Active
Meas[264]	Active
Meas[265]	Active
Meas[266]	Active
Meas[267]	Active
Meas[268]	Active
Meas[269]	Active
Meas[270]	Active
Meas[271]	Baseline
Meas[272]	Baseline
Meas[273]	Baseline
Meas[274]	Baseline
Meas[275]	Baseline
Meas[276]	Baseline
Meas[277]	Baseline
Meas[278]	Baseline
Meas[279]	Baseline
Meas[280]	Active
Meas[281]	Active
Meas[282]	Active
Meas[283]	Active
Meas[284]	Active
Meas[285]	Active
Meas[286]	Active
Meas[287]	Active
Meas[288]	Active
Meas[289]	Baseline
Meas[290]	Baseline

BOLD

Meas[291]	Baseline
Meas[292]	Baseline
Meas[293]	Baseline
Meas[294]	Baseline
Meas[295]	Baseline
Meas[296]	Baseline
Meas[297]	Baseline
Meas[298]	Active
Meas[299]	Active
Meas[300]	Active
Meas[301]	Active
Meas[302]	Active
Meas[303]	Active
Meas[304]	Active
Meas[305]	Active
Meas[306]	Active
Meas[307]	Baseline
Meas[308]	Baseline
Meas[309]	Baseline
Meas[310]	Baseline
Meas[311]	Baseline
Meas[312]	Baseline
Meas[313]	Baseline
Meas[314]	Baseline
Meas[315]	Baseline
Meas[316]	Active
Meas[317]	Active
Meas[318]	Active
Meas[319]	Active
Meas[320]	Active
Meas[321]	Active
Meas[322]	Active
Meas[323]	Active
Meas[324]	Active
Meas[325]	Baseline
Meas[326]	Baseline
Meas[327]	Baseline
Meas[328]	Baseline
Meas[329]	Baseline
Meas[330]	Baseline
Meas[331]	Baseline
Meas[332]	Baseline
Meas[333]	Baseline
Meas[334]	Active
Meas[335]	Active
Meas[336]	Active
Meas[337]	Active
Meas[338]	Active
Meas[339]	Active
Meas[340]	Active
Meas[341]	Active
Meas[342]	Active
Meas[343]	Baseline
Meas[344]	Baseline
Meas[345]	Baseline
Meas[346]	Baseline
Meas[347]	Baseline
Meas[348]	Baseline
Meas[349]	Baseline
Meas[350]	Baseline
Meas[351]	Baseline
Meas[352]	Active
Meas[353]	Active
Meas[354]	Active
Meas[355]	Active

BOLD

Meas[356]	Active
Meas[357]	Active
Meas[358]	Active
Meas[359]	Active
Meas[360]	Active
Meas[361]	Active
Meas[362]	Active
Meas[363]	Active
Meas[364]	Active
Meas[365]	Active
Meas[366]	Active
Meas[367]	Active
Meas[368]	Active
Meas[369]	Active
Meas[370]	Active
Meas[371]	Active
Meas[372]	Active
Meas[373]	Active
Meas[374]	Active
Meas[375]	Active
Meas[376]	Active
Meas[377]	Active
Meas[378]	Active
Meas[379]	Baseline
Meas[380]	Baseline
Meas[381]	Baseline
Meas[382]	Baseline
Meas[383]	Baseline
Meas[384]	Baseline
Meas[385]	Baseline
Meas[386]	Baseline
Meas[387]	Baseline
Meas[388]	Active
Meas[389]	Active
Meas[390]	Active
Meas[391]	Active
Meas[392]	Active
Meas[393]	Active
Meas[394]	Active
Meas[395]	Active
Meas[396]	Active
Meas[397]	Baseline
Meas[398]	Baseline
Meas[399]	Baseline
Meas[400]	Baseline
Motion correction	On
Spatial filter	Off
Measurements	500
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	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1iso_AAbrain

TA: 10:42 PM: REF Voxel size: 1.0×1.0×1.0 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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	98.2 %
Slice thickness	1.00 mm
TR	2220 ms
TE	30.20 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	2220 ms
TE	30.20 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	98.2 %
Slice thickness	1.00 mm
Base resolution	220
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	98.2 %
Slice thickness	1.00 mm
TR	2220 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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
Matrix Optimization	Off
AutoAlign	Head > Brain
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	216 mm
R >> L	220 mm
F >> H	60 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2220 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
Measurements	275
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	0.81 ms
Bandwidth	1420 Hz/Px

Sequence - Part 2

EPI factor	216
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
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

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_AAbrain

TA: 10:35 PM: REF Voxel size: 0.7×0.7×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.80 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
Base resolution	294
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
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	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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
Matrix Optimization	Off
AutoAlign	Head > Brain
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	198 mm
R >> L	220 mm
F >> H	45 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	275
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	1.01 ms
Bandwidth	1214 Hz/Px

Sequence - Part 2

EPI factor	264
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_AABrain

TA: 10:19 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	330
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P2.2 H7.1
R	0.0 mm
P	2.2 mm
H	7.1 mm
Initial Rotation	0.31 deg
Initial Orientation	T > C
T > C	-21.4
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Rotation	88.70 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 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
Measurements	330
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p3_mb2_1.6iso_reversePE_AABrain

TA: 0:34 PM: FIX Voxel size: 1.6×1.6×1.6 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	72
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
TE	22.00 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	1800 ms
TE	22.00 ms
MTC	Off
Magn. preparation	None
Flip angle	70 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
Base resolution	134
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
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	72
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	101.5 %
Slice thickness	1.60 mm
TR	1800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P2.2 H7.1
R	0.0 mm
P	2.2 mm
H	7.1 mm
Initial Rotation	0.31 deg
Initial Orientation	T > C
T > C	-21.4
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Rotation	88.70 deg
R >> L	216 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	1800 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
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.59 ms
Bandwidth	2072 Hz/Px

Sequence - Part 2

EPI factor	136
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	7200 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
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

\\CRC\protocols\studies\v5motion\gre_field_mapping_2mm_eufind

TA: 1:38 PM: FIX Voxel size: 2.0×2.0×2.0 mmRel. SNR: 1.00 : fm

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	96
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	5.2 ms
TE 1	2.26 ms
TE 2	3.28 ms
Averages	1
Concatenations	96
Filter	None
Coil elements	A32

Contrast - Common

TR	5.2 ms
TE 1	2.26 ms
TE 2	3.28 ms
MTC	Off
Flip angle	15 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
Base resolution	128
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	96
Dist. factor	0 %
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	5.2 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	96

Geometry - AutoAlign

Slice group	1
Position	L0.5 P2.1 F1.0 mm
Orientation	T > C-32.2 > S-0.6
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	L0.0 P2.2 H7.1
R	0.0 mm
P	2.2 mm
H	7.1 mm
Initial Rotation	90.31 deg
Initial Orientation	T > C
T > C	-21.4
> S	0.0

Geometry - Saturation

Fat suppr.	None
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off

System - Adjustments

Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.5 P2.1 F1.0 mm
! Orientation	T > C-32.2 > S-0.6
! Rotation	88.70 deg
! R >> L	216 mm
! A >> P	220 mm
! F >> H	116 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	737 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_AAbrain

TA: 10:35 PM: REF Voxel size: 0.7×0.7×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.80 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
Base resolution	294
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
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	60
Dist. factor	0 %
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A3.3 F3.8
R	0.0 mm
A	3.3 mm
F	3.8 mm
Initial Rotation	0.28 deg
Initial Orientation	T > C
T > C	-17.1
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Rotation	-1.29 deg
A >> P	198 mm
R >> L	220 mm
F >> H	45 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.01 ms
Bandwidth	1214 Hz/Px

Sequence - Part 2

EPI factor	264
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_reversePE_AAbrain

TA: 0:46 PM: FIX Voxel size: 0.7×0.7×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.80 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
Base resolution	294
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
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	60
Dist. factor	0 %
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 A3.3 F3.8
R	0.0 mm
A	3.3 mm
F	3.8 mm
Initial Rotation	0.28 deg
Initial Orientation	T > C
T > C	-17.1
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.4 A5.3 F10.7 mm
Orientation	T > C-27.9 > S-0.7
Rotation	-1.29 deg
A >> P	198 mm
R >> L	220 mm
F >> H	45 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.01 ms
Bandwidth	1214 Hz/Px

Sequence - Part 2

EPI factor	264
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
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

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA-GRE_FA75

TA: 1:07 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L0.0 A12.1 F4.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	3000 ms
TE	25.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	3000 ms
TE	25.00 ms
MTC	Off
Magn. preparation	None
Flip angle	75 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L0.0 A12.1 F4.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	3000 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.0 A12.1 F4.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A12.1 F4.8
L	0.0 mm
A	12.1 mm
F	4.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	L0.0 A12.1 F4.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	176 mm
R >> L	186 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	3000 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
Measurements	10
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.04 ms
Bandwidth	1120 Hz/Px

Sequence - Part 2

EPI factor	234
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_AAbrain

TA: 10:35 PM: REF Voxel size: 0.7×0.7×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.80 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
Base resolution	294
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
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	60
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	89.8 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Rotation	2.74 deg
A >> P	198 mm
R >> L	220 mm
F >> H	45 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	275
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.01 ms
Bandwidth	1214 Hz/Px

Sequence - Part 2

EPI factor	264
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA_GRE_FA90_B1148

TA: 15:37 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
TR	3000 ms
TE	25.80 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	3000 ms
TE	25.80 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	192 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	93.8 %
Slice thickness	0.75 mm
TR	3000 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Rotation	2.74 deg
A >> P	180 mm
R >> L	192 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	3000 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
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.02 ms
Bandwidth	1148 Hz/Px

Sequence - Part 2

EPI factor	240
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA-GRE_FA75_Band

TA: 15:37 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	3000 ms
TE	25.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	3000 ms
TE	25.00 ms
MTC	Off
Magn. preparation	None
Flip angle	75 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48
Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	3000 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off

System - Adjustments

Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Rotation	2.74 deg
A >> P	176 mm
R >> L	186 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	3000 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
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No

Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.03 ms
Bandwidth	1260 Hz/Px

Sequence - Part 2

EPI factor	234
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA-GRE_FA75_Band_TR2181

TA: 18:45 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.00 ms
MTC	Off
Magn. preparation	None
Flip angle	75 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48

Resolution - iPAT

Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Rotation	2.74 deg
A >> P	176 mm
R >> L	186 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.03 ms
Bandwidth	1260 Hz/Px

Sequence - Part 2

EPI factor	234
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA-GRE_FA75_Band_TR2181_renzo

TA: 18:45 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L0.0 P7.8 H14.2 mm
Orientation	T > C-24.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.00 ms
MTC	Off
Magn. preparation	None
Flip angle	75 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48

Resolution - iPAT

Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L0.0 P7.8 H14.2 mm
Orientation	T > C-24.0
Phase enc. dir.	A >> P
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L0.0 P7.8 H14.2 mm
Orientation	T > C-24.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
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	L0.0 P7.8 H14.2 mm
Orientation	T > C-24.0
Rotation	0.35 deg
A >> P	176 mm
R >> L	186 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.03 ms
Bandwidth	1260 Hz/Px

Sequence - Part 2

EPI factor	234
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\cmrr_mbep2d_p4_mb2_750um_GRAPPA-GRE_FA75_Band_TR2181_reference

TA: 18:45 PM: FIX Voxel size: 0.8×0.8×0.8 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
TE	25.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	A32

Contrast - Common

TR	2181 ms
TE	25.00 ms
MTC	Off
Magn. preparation	None
Flip angle	75 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	48

Resolution - iPAT

Reference scan mode	GRE

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	48
Dist. factor	0 %
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
FoV read	186 mm
FoV phase	94.4 %
Slice thickness	0.75 mm
TR	2181 ms
Multi-slice mode	Interleaved
Series	Descending
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P7.8 H14.2
L	0.0 mm
P	7.8 mm
H	14.2 mm
Initial Rotation	0.35 deg
Initial Orientation	T > C
T > C	-24.0
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L1.7 P11.0 H4.6 mm
Orientation	T > C-38.4 > S-0.7
Rotation	2.74 deg
A >> P	176 mm
R >> L	186 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	2181 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
Measurements	500
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.03 ms
Bandwidth	1260 Hz/Px

Sequence - Part 2

EPI factor	234
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	6000 us
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	On
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
GRE iPAT ref. FA	12.0 deg
Physio recording	DICOM
Triggering scheme	Standard

\\CRC\protocols\studies\v5motion\rslh_ep3d_vaso_4e_axial

TA: 7:46 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : 684e6dda

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	71.3 ms
TR 2	4529 ms
TE 1	24.70 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	71.3 ms
TR 2	4529 ms
TE 1	24.70 ms
Multi-echo spacing	66.03 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1515.6 ms
TI 2	3226.8 ms
Flip angle	60 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Pause after meas.	0.0 s

Resolution - Common

FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	75
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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	71.3 ms
TR 2	4529 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	186 mm
R >> L	186 mm
F >> H	18 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.05 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	62
Segmentation	1
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	24

Sequence - Special

PATRef FA	3 deg
RF duration	3500 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0

Sequence - Special

Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	On
HSN RF power scale	3.00
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\rslh_ep3d_bold_4e_axial

TA: 3:33 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : 684e6dda

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	74.4 ms
TR 2	2004 ms
TE 1	25.70 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	74.4 ms
TR 2	2004 ms
TE 1	25.70 ms
Multi-echo spacing	69.13 ms
Magn. preparation	None
Flip angle	17 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Pause after meas.	0.0 s

Resolution - Common

FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	248
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	75
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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	74.4 ms
TR 2	2004 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm

System - Miscellaneous

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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	186 mm
R >> L	186 mm
F >> H	18 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.1 ms
Bandwidth	1008 Hz/Px

Sequence - Part 2

EPI factor	62
Segmentation	1
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	24

Sequence - Special

PATRef FA	3 deg
RF duration	3500 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On

Sequence - Special

Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	On
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\rslh_ep3d_vaso_4e_sagital

TA: 7:46 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : 684e6dda

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	71.3 ms
TR 2	4529 ms
TE 1	24.70 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	71.3 ms
TR 2	4529 ms
TE 1	24.70 ms
Multi-echo spacing	66.03 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1515.6 ms
TI 2	3226.8 ms
Flip angle	60 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Pause after meas.	0.0 s

Resolution - Common

FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	248
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	75
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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	71.3 ms
TR 2	4529 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	186 mm
R >> L	186 mm
F >> H	18 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.05 ms
Bandwidth	1062 Hz/Px

Sequence - Part 2

EPI factor	62
Segmentation	1
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	24

Sequence - Special

PATRef FA	3 deg
RF duration	3500 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0

Sequence - Special

Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	On
HSN RF power scale	3.00
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\rslh_ep3d_bold_4e_sagital

TA: 2:43 PM: REF Voxel size: 0.7×0.7×0.8 mmPAT: 3 Rel. SNR: 1.00 : 684e6dda

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	R46.6 A11.5 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	24
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	53.6 ms
TR 2	1504 ms
TE 1	19.20 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	53.6 ms
TR 2	1504 ms
TE 1	19.20 ms
Multi-echo spacing	48.51 ms
Magn. preparation	None
Flip angle	17 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Pause after meas.	0.0 s

Resolution - Common

FoV read	130 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	174
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	75
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	R46.6 A11.5 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	24
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR 1	53.6 ms
TR 2	1504 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	R46.6 A11.5 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R46.6 A11.5 H0.0
R	46.6 mm
A	11.5 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm

System - Miscellaneous

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	R46.6 A11.5 H0.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	130 mm
F >> H	130 mm
R >> L	18 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.1 ms
Bandwidth	1026 Hz/Px

Sequence - Part 2

EPI factor	43
Segmentation	1
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	24

Sequence - Special

PATRef FA	3 deg
RF duration	3500 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On

Sequence - Special

Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	On
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\CRC\protocols\studies\v5motion\t1_mp2rage_ax_p2_0.5mm_slab

TA: 5:26 PM: FIX Voxel size: 0.5×0.5×0.5 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 preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A10.3 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	72
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR	6000.0 ms
TE	2.45 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	2.45 ms
Magn. preparation	Non-sel. IR
TI 1	900 ms
TI 2	2900 ms
Flip angle 1	6.0 deg
Flip angle 2	7.0 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	160 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
Accel. factor 3D	1
Reference scan mode	Integrated

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
Dist. factor	50 %
Position	L0.0 A10.3 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	72
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR	6000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A10.3 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A10.3 H0.0
L	0.0 mm
A	10.3 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator

System - Miscellaneous

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

System - Miscellaneous

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	L0.0 A10.3 H0.0 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	160 mm
R >> L	160 mm
F >> H	36 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 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	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	900 ms
TI 2	2900 ms
Fat suppr.	None
Dark blood	Off
FoV read	160 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

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

Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear rot.
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.4 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	319

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

\\CRC\protocols\studies\v5motion\rslh_ep3d_vaso_4e_axial_p05

TA: 14:14 PM: REF Voxel size: 0.5×0.5×0.5 mmPAT: 3 Rel. SNR: 1.00 : 684e6dda

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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR 1	78.1 ms
TR 2	8391 ms
TE 1	27.60 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	A32

Contrast - Common

TR 1	78.1 ms
TR 2	8391 ms
TE 1	27.60 ms
Multi-echo spacing	71.74 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1884.4 ms
TI 2	5633.2 ms
Flip angle	40 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Pause after meas.	0.0 s

Resolution - Common

FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
Base resolution	374
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	75
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	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	24
FoV read	186 mm
FoV phase	100.0 %
Slice thickness	0.50 mm
TR 1	78.1 ms
TR 2	8391 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	186 mm
R >> L	186 mm
F >> H	12 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.162474 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.49 ms
Bandwidth	742 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	2
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	48

Sequence - Special

PATRef FA	3 deg
RF duration	3500 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0

Sequence - Special

Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	On
HSN RF power scale	3.00
Inversion Delay	0 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off