

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\Localizer_CP_quick

TA: 7.6 s PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

Properties

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
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	8.0 ms
TE	3.00 ms
Averages	1
Concatenations	3
Filter	Elliptical filter
Coil elements	AC

Contrast - Common

TR	8.0 ms
TE	3.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Contrast - Dynamic

Multiple series	Each measurement
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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
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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	8.0 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
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

Geometry - Tim CT

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	80.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8.0 ms
Concatenations	3
Segments	1

Physio - Cardiac

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

Physio - PACE

Resp. control	Off
Concatenations	3

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	30 deg
Measurements	1
Contrasts	1
TR	8.0 ms

Inline - MapIt

TE	3.00 ms
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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 - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\Bolero_scout_pTx

TA: 0:15 PM: REF Voxel size: 3.0x3.0x3.0 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	95.0 ms
TE 1	2.32 ms
TE 2	2.32 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	95.0 ms
TE 1	2.32 ms
TE 2	2.32 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	95.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	Patient-specific
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	216 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
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System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\tfl_rfmap_spokes

TA: 0:15 PM: REF Voxel size: 1.5×1.5×3.0 mmPAT: Off 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6400.0 ms
TE	1.74 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	6400.0 ms
TE	1.74 ms
Magn. preparation	None
Flip angle	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

PAT mode	None
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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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6400.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	Patient-specific
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	216 mm
! F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6400.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	216 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Sequence - Part 1

Introduction	On
Dimension	2D
Reordering	Centric
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	4 ms
Bandwidth	450 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	72

Sequence - pTX Pulses

pTX Pulse	1
Pulse type	Saturation
Trajectory	Spokes

Sequence - Special

Tx scale diag mag	0.3
Tx scale diag phs	0 deg
Tx scale offdiag mag	1.0
Tx scale offdiag phs	0 deg
Rel. B1 mapping	Off
Ref. scan	On
Use B1 map recon	On
Dummy RF pulses	1000

Sequence - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\WBBoleroSlc21Fov216_thk3mm_tra

TA: 1:15 PM: FIX Voxel size: 3.0×3.0×3.0 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	200.0 ms
TE 1	3.00 ms
TE 2	3.50 ms
TE 3	4.00 ms
TE 4	5.00 ms
TE 5	7.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	200.0 ms
TE 1	3.00 ms
TE 2	3.50 ms
TE 3	4.00 ms
TE 4	5.00 ms
TE 5	7.00 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Interpolation	Off

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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	200.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
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	216 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
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System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	5
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\la_tfl_rfmap_ini_b1homo

TA: 0:13 PM: FIX Voxel size: 1.5×1.5×3.0 mmPAT: Off 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6110.0 ms
TE	1.68 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	6110.0 ms
TE	1.68 ms
Magn. preparation	None
Flip angle	12.0 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	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

PAT mode	None
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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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6110.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	359.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6110.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	216 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Sequence - Part 1

Introduction	Off
Dimension	2D
Reordering	Centric
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	3.8 ms
Bandwidth	500 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	72

Sequence - pTX Pulses**Sequence - Special**

Tx scale diag mag	0.0
Tx scale diag phs	0 deg
Tx scale offdiag mag	1.0
Tx scale offdiag phs	0 deg
Rel. B1 mapping	Off
Ref. scan	On
Use B1 map recon	On
Dummy RF pulses	1000
User-def B1+ Scale Only	On
Static B1+ Shim	Homo B1+
ScaleFactorTransRefVolt	1.00
HP1ms180TransmitterReferVolt	359 V
RFPulseTransmitterVolt	508 V
RFPulseMaxTransmitterVolt	508 V

Sequence - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\la_tfl_rfmap_ini_b1ring

TA: 0:13 PM: FIX Voxel size: 1.5×1.5×3.0 mmPAT: Off 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6110.0 ms
TE	1.68 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	6110.0 ms
TE	1.68 ms
Magn. preparation	None
Flip angle	12.0 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	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

PAT mode	None
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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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	6110.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	287.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6110.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	216 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Sequence - Part 1

Introduction	Off
Dimension	2D
Reordering	Centric
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	3.8 ms
Bandwidth	500 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	72

Sequence - pTX Pulses**Sequence - Special**

Tx scale diag mag	0.0
Tx scale diag phs	0 deg
Tx scale offdiag mag	1.0
Tx scale offdiag phs	0 deg
Rel. B1 mapping	Off
Ref. scan	On
Use B1 map recon	On
Dummy RF pulses	1000
User-def B1+ Scale Only	On
Static B1+ Shim	Ring B1+
ScaleFactorTransRefVolt	0.80
HP1ms180TransmitterReferVolt	287 V
RFPulseTransmitterVolt	431 V
RFPulseMaxTransmitterVolt	431 V

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\t1_mp2rage_axl_p3_0.7mm

TA: 9:56 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	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	15.4 %
Slices per slab	208
FoV read	210 mm
FoV phase	87.5 %
Slice thickness	0.69 mm
TR	6000.0 ms
TE	3.04 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	AC

Contrast - Common

TR	6000.0 ms
TE	3.04 ms
Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	210 mm
FoV phase	87.5 %
Slice thickness	0.69 mm
Base resolution	304
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8

Resolution - Common

Slice partial Fourier	Off
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	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	15.4 %
Slices per slab	208
FoV read	210 mm
FoV phase	87.5 %
Slice thickness	0.69 mm
TR	6000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	184 mm
A >> P	210 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	320.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Fat suppr.	None
Dark blood	Off
FoV read	210 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
----------	-----

Inline - Common

Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	On

Inline - MapIt

Save original images	On
MapIt	None
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Measurements	1
TR	6000.0 ms
TE	3.04 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	6.3 ms
Bandwidth	300 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	240

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\la_tfl_mTI_MTprep_fermi_uT_spiral

TA: 5:04 PM: FIX Voxel size: 0.9×0.9×2.0 mmPAT: Off 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	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	25.0 %
Slices per slab	32
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	720.0 ms
TE	1.76 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	720.0 ms
TE	1.76 ms
MTC	On
Magn. preparation	None
Flip angle	8 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	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off

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	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	25.0 %
Slices per slab	32
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	720.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares

System - Miscellaneous

Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	186 mm
A >> P	220 mm
F >> H	64 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	720.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	84.4 %
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

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	720.0 ms
TE	1.76 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	4.3 ms
Bandwidth	500 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	16

Sequence - Special

MTprep 1	On
MTSubPulseDur	10000 [us]
MTSubPulseOffset 1	6.72 [ppm]
MTSubPulseB1pk	3.37 [uT]
MTSubPulsesNum 1	20 [#]
[D]MTSubPulsesGap	0 [us]
MTModulePreDelay	1000 [us]
MTModulePostDelay	0 [us]
MT Spoil Gradient	On
MT RF Type	Gauss
KSOrder1(Lin/CntU/CntD)	0 [0,2]
Slice/Phase Enc. DC Lag	0 [#]
SpoilGradAmp	10 [mT/m]
SpoilGradDur	500 [us]
SpoilGradAxis	1 [0-3]
NumberIdleScans	0 [0-5]
NoPEgradIdleScan	1 [0/1]
[D]MT Total Duration 1	226.88 [ms]
[D]MT RF FA 1	3.5 [kdeg]
[D]MT Total Energy 1	146.02 [Ws]

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\m0_a_tfl_mTI_MTprep_fermi_uT_cartesian

TA: 1:02 PM: FIX Voxel size: 0.9×0.9×2.0 mmPAT: Off 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	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	25.0 %
Slices per slab	64
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	320.0 ms
TE	1.76 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	320.0 ms
TE	1.76 ms
MTC	Off
Magn. preparation	None
Flip angle	8 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	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off

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	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	25.0 %
Slices per slab	64
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	320.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares

System - Miscellaneous

Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	186 mm
A >> P	220 mm
F >> H	128 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	320.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	84.4 %
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

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	320.0 ms
TE	1.76 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	4.3 ms
Bandwidth	500 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	70

Sequence - Special

MTprep 1	Off
MTSubPulseDur	10000 [us]
MTSubPulseOffset 1	6.72 [ppm]
MTSubPulseB1pk	3.37 [uT]
MTSubPulsesNum 1	20 [#]
[D]MTSubPulsesGap	0 [us]
MTModulePreDelay	1000 [us]
MTModulePostDelay	0 [us]
MT Spoil Gradient	On
MT RF Type	Gauss
KSOrder1(Lin/CntU/CntD)	0 [0,2]
Slice/Phase Enc. DC Lag	0 [#]
SpoilGradAmp	10 [mT/m]
SpoilGradDur	500 [us]
SpoilGradAxis	1 [0-3]
NumberIdleScans	0 [0-5]
NoPEgradIdleScan	1 [0/1]
[D]MT Total Duration 1	0.00 [ms]
[D]MT RF FA 1	0.0 [kdeg]
[D]MT Total Energy 1	0.00 [Ws]

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\m0_a_tfl_mTI_MTprep_fermi_uT_spiral

TA: 1:08 PM: FIX Voxel size: 0.9×0.9×2.0 mmPAT: Off 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	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	25.0 %
Slices per slab	64
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	80.0 ms
TE	1.76 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	80.0 ms
TE	1.76 ms
MTC	Off
Magn. preparation	None
Flip angle	8 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	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	7/8
Slice partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	None
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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	Transversal
Phase enc. dir.	R >> L
Slice oversampling	25.0 %
Slices per slab	64
FoV read	220 mm
FoV phase	84.4 %
Slice thickness	2.00 mm
TR	80.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares

System - Miscellaneous

Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	186 mm
A >> P	220 mm
F >> H	128 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	80.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	84.4 %
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

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	80.0 ms
TE	1.76 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	4.3 ms
Bandwidth	500 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	16

Sequence - Special

MTprep 1	Off
MSubPulseDur	10000 [us]
MSubPulseOffset 1	6.72 [ppm]
MSubPulseB1pk	3.37 [uT]
MSubPulsesNum 1	20 [#]
[D]MSubPulsesGap	0 [us]
MTModulePreDelay	1000 [us]
MTModulePostDelay	0 [us]
MT Spoil Gradient	On
MT RF Type	Gauss
KOrder1(Lin/CntU/CntD)	0 [0,2]
Slice/Phase Enc. DC Lag	0 [#]
SpoilGradAmp	10 [mT/m]
SpoilGradDur	500 [us]
SpoilGradAxis	1 [0-3]
NumberIdleScans	0 [0-5]
NoPEgradIdleScan	1 [0/1]
[D]MT Total Duration 1	0.00 [ms]
[D]MT RF FA 1	0.0 [kdeg]
[D]MT Total Energy 1	0.00 [Ws]

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\BoleroSlc15Fov216_thk3mm_tra

TA: 0:50 PM: REF Voxel size: 3.0×3.0×3.0 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	15
Dist. factor	0 %
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	220.0 ms
TE 1	3.00 ms
TE 2	5.00 ms
TE 3	12.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	220.0 ms
TE 1	3.00 ms
TE 2	5.00 ms
TE 3	12.00 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

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	15
Dist. factor	0 %
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	220.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.4 P9.2 F4.1
Phase	10.0 mm
Read	0.0 mm
Shift	1.2 mm
Initial Rotation	2.68 deg
Initial Orientation	T > C
T > C	-31.3
> S	4.4

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Rotation	2.68 deg
A >> P	216 mm
R >> L	216 mm
F >> H	45 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
--------------	------------------

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	3
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\BoleroSlc15Fov216_thk3mm_tra

TA: 0:50 PM: FIX Voxel size: 3.0×3.0×3.0 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	15
Dist. factor	0 %
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	220.0 ms
TE 1	3.00 ms
TE 2	5.00 ms
TE 3	12.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	220.0 ms
TE 1	3.00 ms
TE 2	5.00 ms
TE 3	12.00 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

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	15
Dist. factor	0 %
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	220.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.4 P9.2 F4.1
Phase	10.0 mm
Read	0.0 mm
Shift	1.2 mm
Initial Rotation	2.68 deg
Initial Orientation	T > C
T > C	-31.3
> S	4.4

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Rotation	2.68 deg
A >> P	216 mm
R >> L	216 mm
F >> H	45 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
--------------	------------------

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	3
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\UPMC_RSI_TE17_CSI

TA: 4:36 PM: FIX Voxel size: 9.0x9.0x10.0 mmRel. SNR: 1.00 : rsi_FreqSel_Jref

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

Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Rotation	3 deg
Slices	1
Vol A >> P	216 mm
Vol R >> L	216 mm
FoV A >> P	216 mm
FoV R >> L	216 mm
Thickness F >> H	10 mm
TR	1500 ms
TE	17.0 ms
Averages	1
Filter	None
Coil elements	AC

Contrast

TR	1500 ms
TE	17.0 ms
[0]Rotations	88 OK
[1]ADC DwellTime	10 us
[2]MaxGradient	16.0 mT/m
[3]MaxSlewRate	120 mT/m/ms
[4]TotADCLength	320 ms
[5]TotADCsSamples	32080 #
[6]NumberOfADC	2 #
[7]PrimaryADCsSamples	16384 #
[8]ResidualADCsSamples	15696 #
Averages	1
Averaging mode	Short term
Flip angle	90 deg
Water suppr.	None
Measurements	2
Pause after meas. 1	0.0 s

Resolution - Common

FoV R >> L	216 mm
FoV A >> P	216 mm
Thickness F >> H	10 mm
Scan res. R >> L	24
Scan res. A >> P	24
Interpol. res. R >> L	32
Interpol. res. A >> P	32
Hamming	Off
Prescan Normalize	Off
Vector size	512

Geometry - Common

Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Rotation	3 deg
FoV R >> L	216 mm
FoV A >> P	216 mm
Thickness F >> H	10 mm
Vol R >> L	216 mm
Vol A >> P	216 mm

Geometry - AutoAlign

Slice group	1
Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.4 P9.2 F4.1
Phase	10.0 mm
Read	0.0 mm
Shift	1.2 mm
Initial Rotation	3.00 deg
Initial Orientation	T > C
T > C	-31.3
> S	4.4

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
Save uncombined	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	Patient-specific
Adj. water suppr.	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.4 P9.2 F4.1 mm
Orientation	T > C-31.3 > S4.4
Rotation	3.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	10 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
--------------	------------------

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1

System - Tx/Rx

Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	320.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1500 ms

Sequence - Common

Preparation scans	4
Dimension	2D
Delta frequency	-2.3 ppm
Phase encoding	Full
Acquisition delay	2.3 ms
Bandwidth	2500 Hz
Acquisition duration	204 ms
Remove oversampling	On

Sequence - Special

Inv Pulse2	Enabled
T12	240 ms
PulseDuration	8.4 ms
PulseAmplitude	550 Hz
Inv Water	Enabled
TIW	420 ms
PulseDuration	40.0 ms
PulseAmplitude	100 Hz
NumberOfWaterInvRFs	0 #
TIW Short	120 ms
TIW Long	1080 ms
WaterPPM	0 ppm
Inv Pulse1	Enabled
T11	780 ms
PulseDuration	8.4 ms
PulseAmplitude	550 Hz
Drift. -1x	1 [Hz/Hr]
RefocusMode	FreqSel1
RefocusPulse	0-180-180-0-0-180[750Hz]
ExcRFPulse	LocalRfPulseProfile7THad90_750Hz
FSInv StaticB1+Shim	Ring B1+
SysStatB1+Shim/RFPulse	0 dummy
HP1ms180TransmitterReferVolt	320 V
RFPulseTransmitterVolt	265 V
RFPulseMaxTransmitterVolt	430 V
SequenceMode	CSI
[0]SliceNum	1 numb
[1]SliceGap	25 mm
[MaxAllow]MbOrHadamam	1 1/2/3/4
[2]PhaseOf2nd90	90 deg
[3]ExcPulseLen	2670 us
[4]RefocusPulseFA	18 deg
[5]RFmodeForMB	1 1seq/2sim
[6]SpoilGradDur	3 ms
[7]MB_reorder	2 1/2
FSInv B1+RingShim	1
AutoRFRefVoltage	0
InterleavMode	0

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\Localizer_CP_quick

TA: 7.6 s PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

Properties

Prio recon	On
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
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	8.0 ms
TE	3.00 ms
Averages	1
Concatenations	3
Filter	Elliptical filter
Coil elements	AC

Contrast - Common

TR	8.0 ms
TE	3.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
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	8.0 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
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

Geometry - Tim CT

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	80.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8.0 ms
Concatenations	3
Segments	1

Physio - Cardiac

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

Physio - PACE

Resp. control	Off
Concatenations	3

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	30 deg
Measurements	1
Contrasts	1
TR	8.0 ms

Inline - MapIt

TE	3.00 ms
----	---------

Sequence - Part 1

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

Sequence - Part 2

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

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\WBBoleroSlc21Fov216_thk3mm_tra

TA: 1:15 PM: FIX Voxel size: 3.0×3.0×3.0 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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	200.0 ms
TE 1	3.00 ms
TE 2	3.50 ms
TE 3	4.00 ms
TE 4	5.00 ms
TE 5	7.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	200.0 ms
TE 1	3.00 ms
TE 2	3.50 ms
TE 3	4.00 ms
TE 4	5.00 ms
TE 5	7.00 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
Phase resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Interpolation	Off

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	21
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	200.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
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	216 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
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System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	5
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

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

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_se_AP_R1x3_PxI2mm

TA: 0:30 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

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	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	40.00 ms
Averages	1
Multi-band accel. factor	1
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	8000 ms
TE	40.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	120 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	2
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	48
Reference scan mode	FLEET

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

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

BOLD

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	2
Delay in TR	0 ms

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
iPAT ref. prep scans	0
FLEET ref. min. TR	0 ms
Delay before PC scans	0 us
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_se_PA_R1x3_PxI2mm

TA: 0:30 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

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	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
TE	40.00 ms
Averages	1
Multi-band accel. factor	1
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	8000 ms
TE	40.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	120 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	2
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	48
Reference scan mode	FLEET

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	8000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8000 ms
Multi-band accel. factor	1

BOLD

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

BOLD

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	2
Delay in TR	0 ms

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
iPAT ref. prep scans	0
FLEET ref. min. TR	0 ms
Delay before PC scans	0 us
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_bold_R2x3_Px12_TR1300_NOSHIMERR
_Green

TA: 2:30 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 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	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
TE	20.00 ms
Averages	1
Multi-band accel. factor	3
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	1300 ms
TE	20.00 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	40
Reference scan mode	Single-shot

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	280.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1300 ms
Multi-band accel. factor	3

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

BOLD

Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	100
Delay in TR	0 ms

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	On
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Sinc exc. pulse BWTP	5.2
Physio recording	DICOM
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_bold_R2x3_Px12_TR1300_NOSHIMERR_Red

TA: 2:43 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 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	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
TE	20.00 ms
Averages	1
Multi-band accel. factor	3
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	1300 ms
TE	20.00 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	110
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	40
Reference scan mode	Single-shot

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	280.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1300 ms
Multi-band accel. factor	3

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

BOLD

Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	110
Delay in TR	0 ms

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	On
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Sinc exc. pulse BWTP	5.2
Physio recording	DICOM
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_bold_R2x3_Px12_TR1300_NOSHIMERR
_LongMixed1

TA: 7:29 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 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	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
TE	20.00 ms
Averages	1
Multi-band accel. factor	3
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	1300 ms
TE	20.00 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	330
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	40
Reference scan mode	Single-shot

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	280.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1300 ms
Multi-band accel. factor	3

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

BOLD

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

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	On
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Sinc exc. pulse BWTP	5.2
Physio recording	DICOM
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_bold_R2x3_Px12_TR1300_NOSHIMERR
_LongMixed2

TA: 7:29 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 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	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
TE	20.00 ms
Averages	1
Multi-band accel. factor	3
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	1300 ms
TE	20.00 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	330
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	40
Reference scan mode	Single-shot

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	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	280.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1300 ms
Multi-band accel. factor	3

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

BOLD

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

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	On
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Sinc exc. pulse BWTP	5.2
Physio recording	DICOM
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_bold_R2x3_Px12_TR1300_NOSHIMERR
_rest

TA: 8:01 PM: FIX Voxel size: 2.0x2.0x2.0 mmPAT: 2 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	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
TE	20.00 ms
Averages	1
Multi-band accel. factor	3
Filter	Raw filter, Distortion Corr.(2D)
Coil elements	AC

Contrast - Common

TR	1300 ms
TE	20.00 ms
MTC	Off
Magn. preparation	None
Flip angle	40 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	355
Delay in TR	0 ms

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
Base resolution	110
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	40
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.00 mm
TR	1300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	3

Geometry - AutoAlign

Slice group	1
Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R1.9 A4.3 H14.9
Phase	-6.5 mm
Read	1.9 mm
Shift	14.1 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-8.6
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 A4.3 H14.9 mm
Orientation	T > C-8.6
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	120 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	280.000 V

Physio - Signal1

1st Signal/Mode	None
TR	1300 ms
Multi-band accel. factor	3

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

BOLD

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	355
Delay in TR	0 ms

Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.61 ms
Bandwidth	1894 Hz/Px

Sequence - Part 2

EPI factor	110
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	On
Opt. MB RF pulse BW	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Sinc exc. pulse BWTP	5.2
Physio recording	DICOM
Triggering scheme	Standard

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\Scout_for_sTx_coreg_to_pTx_images

TA: 0:16 PM: FIX Voxel size: 3.0×3.0×3.0 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	25
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	110.0 ms
TE 1	2.32 ms
TE 2	2.32 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	110.0 ms
TE 1	2.32 ms
TE 2	2.32 ms
MTC	Off
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	72
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	25
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	110.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	Patient-specific
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	216 mm
F >> H	147 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
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System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	300.000 V

Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	1006 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Sequence - Assistant

Mode	Off
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\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_diff_AP_R2x2_Px11p5mm_TR5500_b0

TA: 2:51 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	9000 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	126 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	9000 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	50 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	50 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_diff_PA_R2x2_Px11p5mm_TR5500_b0

TA: 2:51 PM: FIX Voxel size: 1.5×1.5×1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	9000 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator**Geometry - Tim Planning Suite**

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

System - Miscellaneous

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

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	126 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	9000 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	50 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	50 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\cmrr_mbep2d_diff_AP_R2x2_Px11p5mm_TR5500_b70
0

TA: 2:51 PM: FIX Voxel size: 1.5×1.5×1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	9000 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	84
Dist. factor	0 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	9000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	126 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	9000 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	700 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	700 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\grp1_cmrr_mbep2d_diff_PA_R2x2_Px1p5mm_TR500
0_b2000

TA: 8:29 PM: FIX Voxel size: 1.5x1.5x1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	3800 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3800 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	Off
Mosaic	On
Tensor	On
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\grp2_cmrr_mbep2d_diff_PA_R2x2_Px1p5mm_TR500
0_b2000

TA: 8:29 PM: FIX Voxel size: 1.5x1.5x1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	3800 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3800 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	Off
Mosaic	On
Tensor	On
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM

\\USER\Brain\WPC-8992\WPC-8992-SPA_new\grp3_cmrr_mbep2d_diff_PA_R2x2_Px1p5mm_TR500
0_b2000

TA: 8:29 PM: FIX Voxel size: 1.5x1.5x1.5 mmPAT: 2 Rel. SNR: 1.00 : epse

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	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
TE	75.00 ms
Multi-band accel. factor	2
Filter	Raw filter
Coil elements	AC

Contrast - Common

TR	3800 ms
TE	75.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	148
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
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Resolution - iPAT

Accel. factor PE	2
Ref. lines PE	46
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	200 %
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	3800 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R4.2 A8.4 F7.6
Phase	-8.4 mm
Read	4.2 mm
Shift	-7.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Enabled
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm

System - Miscellaneous

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	Patient-specific
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.2 A8.4 F7.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	123 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Patient-specific
Excitation	Standard

System - Tx/Rx

Frequency 1H	297.214489 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3800 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	Off
Mosaic	On
Tensor	On
Noise level	40

Diff - Body

Diffusion mode	Free
Diff. directions	121
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	3
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.82 ms
Bandwidth	1876 Hz/Px

Sequence - Part 2

EPI factor	148
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	2560 us
Refocus pulse duration	5120 us
Min. prep scans	0
Min. prep scans SB	0
Delay before PC scans	0 us
Single-band images	On
MB LeakBlock kernel	On
MB dual kernel	Off
Opt. MB RF pulse BW	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable B1 control loop	Off
Disable freq. update	Off
Suppress 16-bit DICOM	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Fat sat. offset	0.0 Hz
Physio recording	DICOM