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\\BIC FUNCTIONAL

Functional

Dr. Jacquemont

pathways_higher-res_15sep2017

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\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\AAHead_Scout_64
ch-head-coil

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
TE	1.37 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7

Contrast - Common

TR	3.15 ms
TE	1.37 ms
Flip angle	8 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

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

Resolution - iPAT

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

Resolution - iPAT

Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 P10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
Phase	0.0 mm
Read	0.0 mm
Shift	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up
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System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	8 deg
Measurements	1
Time to center	6.2 s

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
Contrasts	1
TR	3.15 ms
TE	1.37 ms

Sequence - Part 1

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

Sequence - Part 2

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

Sequence - Assistant

Mode	Off
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\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\SAG TRUFISP

TA: 0:23 PM: REF Voxel size: 1.0×1.0×4.0 mmPAT: Off Rel. SNR: 1.00 : tfi

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	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	23
Dist. factor	20 %
Position	R1.9 A13.2 F9.7 mm
Orientation	S > T-1.8 > C0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4.70 ms
TE	2.35 ms
Averages	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4.70 ms
TE	2.35 ms
TD	0 ms
Magn. preparation	None
Flip angle	37 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
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Resolution - Filter Image

Image Filter	Off
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Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	23
Dist. factor	20 %
Position	R1.9 A13.2 F9.7 mm
Orientation	S > T-1.8 > C0.1
Phase enc. dir.	A >> P
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4.70 ms
Multi-slice mode	Sequential
Series	Interleaved

Geometry - AutoAlign

Slice group	1
Position	R1.9 A13.2 F9.7 mm
Orientation	S > T-1.8 > C0.1
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L0.9 P8.7 H24.0
Phase	8.7 mm
Read	24.0 mm
Shift	1.5 mm
Initial Rotation	-0.01 deg
Initial Orientation	S > T
S > T	-1.5
> C	0.0

Geometry - Navigator**System - Miscellaneous**

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off

System - Adjustments

Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Sequence - Assistant

Mode	Off
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System - Adjust Volume

Position	R1.9 A13.2 F9.7 mm
Orientation	S > T-1.8 > C0.1
Rotation	-0.36 deg
A >> P	250 mm
F >> H	250 mm
R >> L	110 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4.70 ms
Segments	1

Physio - PACE

Resp. control	Off
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Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	2D
Reordering	Linear
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	558 Hz/Px

Sequence - Part 2

Segments	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_bold_s6

TA: 6:33 PM: REF Voxel size: 2.4×2.4×2.4 mmPAT: 6 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 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	800 ms
TE	30.0 ms
MTC	Off
Flip angle	52 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	480
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	22

Resolution - iPAT

Accel. factor slice	6
Reference scan mode	EPI/separate

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	On

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	800 ms
Multi-slice mode	Interleaved
Series	Descending
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.7 P8.2 H3.5
Phase	4.9 mm
Read	-0.7 mm
Shift	7.5 mm
Initial Rotation	-0.28 deg
Initial Orientation	T > C
T > C	-33.6
> S	-0.2

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	800 ms
Concatenations	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	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

BOLD

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	480
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.52 ms
Bandwidth	2778 Hz/Px

Sequence - Part 2

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

Sequence - pTX Pulses

\\BIC FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\DistortionMap_AP

TA: 7.0 s PM: FIX Voxel size: 2.4x2.4x2.4 mmPAT: Off 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 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	None
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Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Descending
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.7 P8.2 H3.5
Phase	4.9 mm
Read	-0.7 mm
Shift	7.5 mm
Initial Rotation	-0.28 deg
Initial Orientation	T > C
T > C	-33.6
> S	-0.2

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
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System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Rotation	0.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2778 Hz/Px

Sequence - Part 2

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance*

\\BIC FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\DistortionMap_PA

TA: 7.0 s PM: FIX Voxel size: 2.4x2.4x2.4 mmPAT: Off 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 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	7030 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

Contrast - Dynamic

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

Resolution - Common

FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
Base resolution	90
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	None
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Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	P >> A
FoV read	216 mm
FoV phase	100.0 %
Slice thickness	2.4 mm
TR	7030 ms
Multi-slice mode	Interleaved
Series	Descending
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	L0.7 P8.2 H3.5
Phase	-4.9 mm
Read	0.7 mm
Shift	7.5 mm
Initial Rotation	179.72 deg
Initial Orientation	T > C
T > C	-33.6
> S	-0.2

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Special sat.	None

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
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System - Adjustments

B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.9 P0.1 H1.5 mm
Orientation	T > C-40.0
Rotation	180.00 deg
A >> P	216 mm
R >> L	216 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	7030 ms
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2778 Hz/Px

Sequence - Part 2

EPI factor	90
RF pulse type	Normal
Gradient mode	Performance*

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\t1_mprage_sag_p
4_0.9iso

TA: 3:26 PM: FIX Voxel size: 0.9×0.9×0.9 mmPAT: 4 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	On
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	12 %
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	2300.0 ms
TE	2.32 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	2300.0 ms
TE	2.32 ms
Magn. preparation	Non-sel. IR
TI	900 ms
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	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

Resolution - Common

Interpolation	Off
---------------	-----

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	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	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	2300.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L0.3 P4.1 H27.3
Phase	4.2 mm
Read	27.3 mm
Shift	1.0 mm
Initial Rotation	-0.15 deg
Initial Orientation	S > T
S > T	-1.4
> C	-0.3

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

Table position	0 mm
MSMA	S - C - T
Sagittal	L >> R
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2300.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	900 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off

Inline - Common

Save original images	On
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Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	2300.0 ms
TE	2.32 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	224

Sequence - Assistant

Mode	Off
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\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\t1_mprage_sag_p
4_0.9iso

TA: 3:26 PM: FIX Voxel size: 0.9×0.9×0.9 mmPAT: 4 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	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	12 %
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	2300.0 ms
TE	2.32 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	2300.0 ms
TE	2.32 ms
Magn. preparation	Non-sel. IR
TI	900 ms
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	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

Resolution - Common

Interpolation	Off
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Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	4
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	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	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	2300.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L0.3 P4.1 H27.3
Phase	4.2 mm
Read	27.3 mm
Shift	1.0 mm
Initial Rotation	-0.15 deg
Initial Orientation	S > T
S > T	-1.4
> C	-0.3

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

Table position	0 mm
MSMA	S - C - T
Sagittal	L >> R
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2300.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	900 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off

Inline - Common

Save original images	On
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Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	2300.0 ms
TE	2.32 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	224

Sequence - Assistant

Mode	Off
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\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\t2_space_sag_iso_p4_2X2

TA: 3:10 PM: FIX Voxel size: 0.9x0.9x0.9 mmPAT: 4 Rel. SNR: 1.00 : spcR

Properties

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

Routine

Slab group	1
Slabs	1
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	12 %
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	3200 ms
TE	408 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	3200 ms
TE	408 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	On

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	24
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
Slice oversampling	16.7 %
Slices per slab	192
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.90 mm
TR	3200 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R2.5 A17.8 F6.3 mm
Orientation	S > T-1.8 > C-0.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L0.3 P4.1 H27.3
Phase	4.2 mm
Read	27.3 mm
Shift	1.0 mm
Initial Rotation	-0.15 deg
Initial Orientation	S > T
S > T	-1.4
> C	-0.3

Geometry - Saturation

Fat suppr.	None
Restore magn.	On
Special sat.	None

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
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System - Miscellaneous

Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	L >> R
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	Head > Basis
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
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	Non-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	3200 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1

Inline - Common

StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Flow comp.	No
Echo spacing	3.64 ms
Adiabatic-mode	Off
Bandwidth	723 Hz/Px

Sequence - Part 2

Echo train duration	925 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	282

Sequence - Assistant

Allowed delay	30 s
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\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_diff_acc6_4s
h_1.7_PA

TA: 2:33 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 6 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	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
TE	71.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4100 ms
TE	71.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
Base resolution	150
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	40
Accel. factor slice	3
Reference scan mode	EPI/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	4.1 mm
Read	-0.8 mm
Shift	-1.4 mm
Initial Rotation	179.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

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	Adaptive Combine
Matrix Optimization	Performance
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	-90.00 deg
R >> L	256 mm
A >> P	263 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4100 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	30
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	50

Diff - Body

Diffusion mode	Free
Diff. directions	30
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
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	50

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.76 ms
Bandwidth	1516 Hz/Px

Sequence - Part 2

EPI factor	154
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_diff_acc6_3s
h_1.7_PA

TA: 2:17 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 6 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	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
TE	71.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4100 ms
TE	71.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
Base resolution	150
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	40
Accel. factor slice	3
Reference scan mode	EPI/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	4.1 mm
Read	-0.8 mm
Shift	-1.4 mm
Initial Rotation	179.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

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	Adaptive Combine
Matrix Optimization	Performance
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	270.00 deg
R >> L	256 mm
A >> P	263 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4100 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	26
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	50

Diff - Body

Diffusion mode	Free
Diff. directions	26
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
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	50

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.76 ms
Bandwidth	1516 Hz/Px

Sequence - Part 2

EPI factor	154
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_diff_acc6_6b
0_1.7_AP

TA: 0:54 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 6 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	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
TE	70.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4100 ms
TE	70.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
Base resolution	150
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	40
Accel. factor slice	3
Reference scan mode	EPI/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	-4.1 mm
Read	0.8 mm
Shift	-1.4 mm
Initial Rotation	-0.14 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

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	Adaptive Combine
Matrix Optimization	Performance
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	90.00 deg
R >> L	256 mm
A >> P	263 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4100 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
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	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	On
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	50

Diff - Body

Diffusion mode	Free
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	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	On
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	50

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.76 ms
Bandwidth	1516 Hz/Px

Sequence - Part 2

EPI factor	154
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_diff_acc6_2s
h_1.7_PA

TA: 2:41 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 6 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	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
TE	71.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4100 ms
TE	71.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
Base resolution	150
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	40
Accel. factor slice	3
Reference scan mode	EPI/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	87
Dist. factor	0 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	4.1 mm
Read	-0.8 mm
Shift	-1.4 mm
Initial Rotation	179.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

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	Adaptive Combine
Matrix Optimization	Performance
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	270.00 deg
R >> L	256 mm
A >> P	263 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4100 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	32
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	50

Diff - Body

Diffusion mode	Free
Diff. directions	32
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
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	50

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.76 ms
Bandwidth	1516 Hz/Px

Sequence - Part 2

EPI factor	154
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep2d_diff_acc6_1s
h_1.7_PA

TA: 2:45 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 6 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	87
Dist. factor	0 %
Position	R0.8 A4.2 F1.2 mm
Orientation	T > C-3.6 > S-0.3
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
TE	71.0 ms
Averages	1
Concatenations	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC2

Contrast - Common

TR	4100 ms
TE	71.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
Base resolution	150
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	40
Accel. factor slice	3
Reference scan mode	EPI/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	87
Dist. factor	0 %
Position	R0.8 A4.2 F1.2 mm
Orientation	T > C-3.6 > S-0.3
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	102.7 %
Slice thickness	1.7 mm
TR	4100 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R0.8 A4.2 F1.2 mm
Orientation	T > C-3.6 > S-0.3
Phase enc. dir.	P >> A
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	4.1 mm
Read	-0.8 mm
Shift	-1.4 mm
Initial Rotation	179.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

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	Adaptive Combine
Matrix Optimization	Performance
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R0.8 A4.2 F1.2 mm
Orientation	T > C-3.6 > S-0.3
Rotation	269.86 deg
R >> L	256 mm
A >> P	263 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4100 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	33
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	On
Tensor	Off
Noise level	50

Diff - Body

Diffusion mode	Free
Diff. directions	33
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm ²
b-value 2	2000 s/mm ²
b-value 1	1
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	50

Diff - Composing

Distortion Corr.	Off
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Sequence - Part 1

Introduction	On
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.76 ms
Bandwidth	1516 Hz/Px

Sequence - Part 2

EPI factor	154
RF pulse type	Low SAR
Gradient mode	Performance
Excitation	Standard

Sequence - pTX Pulses

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\gre_3D_MToff_1.7

TA: 4:02 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	33.0 ms
TE	3.81 ms
Averages	2
Concatenations	1
Filter	None
Coil elements	HC1-7;NC2

Contrast - Common

TR	33.0 ms
TE	3.81 ms
MTC	Off
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	Off
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Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	33.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	R0.8 A4.3 F2.0
Phase	-0.8 mm
Read	-4.1 mm
Shift	-2.2 mm
Initial Rotation	89.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

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

System - Miscellaneous

Positioning mode	FIX
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System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Rotation	90.00 deg
R >> L	163 mm
A >> P	217 mm
F >> H	177 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	33.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	217 mm
FoV phase	75.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1

Inline - Common

StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Distortion Corr.	Off
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Inline - Maplt

Save original images	On
Maplt	None
Flip angle	10 deg
Measurements	1
Contrasts	1
TR	33.0 ms
TE	3.81 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	260 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\gre_3D_MTon_1.7

TA: 4:02 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	33.0 ms
TE	3.81 ms
Averages	2
Concatenations	1
Filter	None
Coil elements	HC1-7;NC2

Contrast - Common

TR	33.0 ms
TE	3.81 ms
MTC	On
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	Off
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Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	33.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	R0.8 A4.3 F2.0
Phase	-0.8 mm
Read	-4.1 mm
Shift	-2.2 mm
Initial Rotation	89.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

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

System - Miscellaneous

Positioning mode	FIX
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System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Rotation	90.00 deg
R >> L	163 mm
A >> P	217 mm
F >> H	177 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	33.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	217 mm
FoV phase	75.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1

Inline - Common

StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Distortion Corr.	Off
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Inline - Maplt

Save original images	On
Maplt	None
Flip angle	10 deg
Measurements	1
Contrasts	1
TR	33.0 ms
TE	3.81 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	260 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\BIC FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\gre_3D_T1w_1.7

TA: 1:50 PM: FIX Voxel size: 1.7×1.7×1.7 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	15.0 ms
TE	3.81 ms
Averages	2
Concatenations	1
Filter	None
Coil elements	HC1-7;NC2

Contrast - Common

TR	15.0 ms
TE	3.81 ms
MTC	Off
Magn. preparation	None
Flip angle	25 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	Off
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Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	104
FoV read	217 mm
FoV phase	75.0 %
Slice thickness	1.70 mm
TR	15.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	R0.8 A4.3 F2.0
Phase	-0.8 mm
Read	-4.1 mm
Shift	-2.2 mm
Initial Rotation	89.86 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

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

System - Miscellaneous

Positioning mode	FIX
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System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A13.0 F2.6 mm
Orientation	T > C-10.0
Rotation	90.00 deg
R >> L	163 mm
A >> P	217 mm
F >> H	177 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	15.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	217 mm
FoV phase	75.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1

Inline - Common

StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Distortion Corr.	Off
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Inline - Maplt

Save original images	On
Maplt	None
Flip angle	25 deg
Measurements	1
Contrasts	1
TR	15.0 ms
TE	3.81 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	260 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep_seg_se_60

TA: 1:08 PM: FIX Voxel size: 2.0×2.0×5.0 mmRel. 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	30
Dist. factor	20 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	4000 ms
TE	18.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7;NC2

Contrast - Common

TR	4000 ms
TE	18.0 ms
MTC	Off
Magn. preparation	None
Flip angle	60 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	30
Dist. factor	20 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	4000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	-4.1 mm
Read	0.8 mm
Shift	-1.4 mm
Initial Rotation	-0.14 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	0.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	179 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4000 ms
Concatenations	1

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.18 ms
Bandwidth	1002 Hz/Px

Sequence - Part 2

EPI factor	9
RF pulse type	Normal
Gradient mode	Fast

\\BIC_FUNCTIONAL\Functional\Dr. Jacquemont\pathways_higher-res_15sep2017\ep_seg_se_120

TA: 1:08 PM: FIX Voxel size: 2.0×2.0×5.0 mmRel. 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	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	20 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	4000 ms
TE	18.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7;NC2

Contrast - Common

TR	4000 ms
TE	18.0 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	30
Dist. factor	20 %
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	4000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	R0.8 A4.2 F1.2
Phase	-4.1 mm
Read	0.8 mm
Shift	-1.4 mm
Initial Rotation	-0.14 deg
Initial Orientation	T > C
T > C	-3.6
> S	-0.3

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.4 A12.8 F1.8 mm
Orientation	T > C-10.0
Rotation	0.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	179 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
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System - Tx/Rx

Frequency 1H	123.250236 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4000 ms
Concatenations	1

Sequence - Part 1

Introduction	Off
Dimension	2D
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.18 ms
Bandwidth	1002 Hz/Px

Sequence - Part 2

EPI factor	9
RF pulse type	Normal
Gradient mode	Fast