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```

$\verb|\Physique|Cyril| Epaule| Droite_in_vivo| localizer_tra_cor$

TA: 0:16 PM: REF Voxel size: 0.5×0.5×6.0 mmPAT: Off 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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	38 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.8 ms
TE	3.69 ms
Averages	1
Concatenations	6
Filter	Distortion Corr.(2D),
	Normalize, Elliptical filter
Coil elements	BO1-3

Contrast - Common

TR	7.8 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	280 mm
FoV phase	100.0 %

Resolution - Common

Slice thickness	6.0 mm
Base resolution	256
Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Unfiltered images	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

•	
Slice group	1
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.8 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	6

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	123.262638 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	7.8 ms
Concatenations	6
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off

Physio - Cardiac

FoV read	280 mm
FoV phase	100.0 %
Phase resolution	90 %

Physio - PACE

Resp. control	Off
Concatenations	6

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.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.8 ms
TE	3.69 ms

Sequence - Part 1

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

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

SIEMENS MAGNETOM Skyra

Mode	Off	
Allowed delay	0 s	

\\Physique\Cyril\Epaule\Droite_in_vivo\localizer_tra_cor_sag

TA: 0:44 PM: REF Voxel size: 0.5×0.5×6.0 mmPAT: Off 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	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Noutille	
Slice group	1
Slices	9
Dist. factor	50 %
Position	R116.5 A1.4 H29.3 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	5
Dist. factor	50 %
Position	R122.4 P6.8 H16.1 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	3
Slices	3
Dist. factor	50 %
Position	R131.6 P5.3 H12.8 mm
Orientation	S > C0.1
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	38 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.8 ms
TE	3.69 ms
Averages	1
Concatenations	17
Filter	Distortion Corr.(2D), Normalize, Elliptical filter
Coil elements	BO1-3

Contrast - Common

TR	7.8 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Contrast - Dynamic

Multiple series

Resolution - Common		
FoV read	280 mm	
FoV phase	100.0 %	
Slice thickness	6.0 mm	
Base resolution	256	
Phase resolution	90 %	
Phase partial Fourier	Off	
Interpolation	On	

Each measurement

Resolution - iPAT

ĺ	PAT mode	None
	1 7 (1 111000	140110

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Unfiltered images	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Coomony Common	
Slice group	1
Slices	9
Dist. factor	50 %
Position	R116.5 A1.4 H29.3 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	2
Slices	5
Dist. factor	50 %
Position	R122.4 P6.8 H16.1 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	3
Slices	3
Dist. factor	50 %
Position	R131.6 P5.3 H12.8 mm
Orientation	S > C0.1
Phase enc. dir.	A >> P
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.8 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	17
•	

Geometry - AutoAlign

Slice group	1
Position	R116.5 A1.4 H29.3 mm
Orientation	Transversal
Phase enc. dir.	A >> P

Geometry - AutoAlign

Slice group	2
Position	R122.4 P6.8 H16.1 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	3
Position	R131.6 P5.3 H12.8 mm
Orientation	S > C0.1
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R116.5 A1.4 H29.3
R	116.5 mm
A	1.4 mm
Н	29.3 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	L2.0 P72.5 H0.0 mm
! Orientation	Transversal
! Rotation	-17.31 deg
! A >> P	51 mm
! R >> L	228 mm
! F >> H	224 mm
Reset	Off
! A >> P ! R >> L ! F >> H	51 mm 228 mm 224 mm

System - Tx/Rx

Frequency 1H	123.262638 MHz
Correction factor	1

System - Tx/Rx

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

Physio - Signal1

1st Signal/Mode	None
TR	7.8 ms
Concatenations	17
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	280 mm
FoV phase	100.0 %
Phase resolution	90 %

Physio - PACE

Resp. control	Off	
Concatenations	17	

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.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7.8 ms
TE	3.69 ms

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

SIEMENS MAGNETOM Skyra

Sequence - Part 1

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

Sequence - Part 2

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

Mode	Off
Allowed delay	0 s

\\Physique\Cyril\Epaule\Droite_in_vivo\Ax_pd_tse_fs

TA: 4:32 PM: FIX Voxel size: 0.4×0.4×3.0 mmPAT: Off Rel. SNR: 1.00 : tseR_rr

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 Off preparation	
Wait for user to start On	
	measurement

Routine

Slice group	1
Slices	25
Dist. factor	10 %
Position	R135.9 P21.6 H33.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	50 %
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	5000.0 ms
TE	36 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Normalize, Elliptical filter
Coil elements	BO1,2;SP5,6

Contrast - Common

5000.0 ms
36 ms
Off
None
150 deg
Fat sat.
Weak
None
On

Contrast - Dynamic

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

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	None	
Resolution - Filter Imag	ge	
Image Filter	Off	
Distortion Corr.	On	
Mode	2D	
Unfiltered images	Off	
Prescan Normalize	Off	
Normalize	On	
B1 filter	Off	

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	25
Dist. factor	10 %
Position	R135.9 P21.6 H33.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	5000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

occinion y manorangin	
Slice group	1
Position	R135.9 P21.6 H33.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R135.9 P21.6 H90.4
R	135.9 mm
Р	21.6 mm
Н	90.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Water suppr.	None
Restore magn.	On
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	F
Table position	57 mm
Inline Composing	Off

Positioning mode	FIX
Table position	F
Table position	57 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R136.9 P20.2 H32.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	150 mm
! R >> L	144 mm
! F >> H	83 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	5000.0 ms
Concatenations	1

Physio - Cardiac

•	
Magn. preparation	None
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	140 mm
FoV phase	100.0 %
Phase resolution	100 %
Trajectory	Cartesian

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.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	Read
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	11.9 ms
Bandwidth	217 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	53
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Fast
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	11

Mode	Off
Allowed delay	60 s

\\Physique\Cyril\Epaule\Droite_in_vivo\Cor_t2_tse_fs

TA: 5:07 PM: FIX Voxel size: 0.7×0.7×4.0 mmPAT: Off Rel. SNR: 1.00 : tseR_rr

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	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	21
Dist. factor	10 %
Position	R130.9 P11.8 H30.7 mm
Orientation	C > S39.8
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	100 %
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5000.0 ms
TE	52 ms
Averages	2
Concatenations	1
Filter	Distortion Corr.(2D),
	Normalize
Coil elements	BO1,2

Contrast - Common

TR	5000.0 ms
TE	52 ms
MTC	Off
Magn. preparation	None
Flip angle	145 deg
Fat suppr.	Fat sat.
Fat sat. mode	Weak
Water suppr.	None
Restore magn.	On

Contrast - Dynamic

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

Resolution - Common

FoV read	130 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	192
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	None
Resolution - Filter Ima	age
Image Filter	Off
Image Filter Distortion Corr.	On
Mode	2D

Distortion Corr.

Mode 2D
Unfiltered images Off
Prescan Normalize Off
Normalize On
Unfiltered images Off
B1 filter Off

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	21
Dist. factor	10 %
Position	R130.9 P11.8 H30.7 mm
Orientation	C > S39.8
Phase enc. dir.	R >> L
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R130.9 P11.8 H30.7 mm
Orientation	C > S39.8
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R130.9 P11.8 H30.7
R	130.9 mm
Р	11.8 mm
Н	30.7 mm
Initial Rotation	0.00 deg
Initial Orientation	C > S
C > S	39.8
> T	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Water suppr.	None
Restore magn.	On
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R130.9 P11.8 H30.7 mm
Orientation	C > S39.8
Rotation	0.00 deg
R >> L	130 mm
F >> H	130 mm
A >> P	92 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	5000.0 ms
Concatenations	1

Physio - Cardiac

•	
Magn. preparation	None
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	130 mm
FoV phase	100.0 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off	
	•	
Measurements	1	
StdDev	Off	
Clubev	OII	
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	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	Read
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	10.4 ms
Bandwidth	219 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	30
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Fast
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	13

Mode	Off
Allowed delay	60 s

\\Physique\Cyril\Epaule\Droite_in_vivo\Sag_t2_tse_fs

TA: 6:17 PM: FIX Voxel size: 0.2×0.2×3.5 mmPAT: Off Rel. SNR: 1.00 : tseR

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	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	27
Dist. factor	10 %
Position	R131.2 P16.2 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	100 %
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	5000.0 ms
TE	69 ms
Averages	2
Concatenations	1
Filter	Distortion Corr.(2D), Normalize
Coil elements	BO1,2

Contrast - Common

TR	5000.0 ms
TE	69 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	Fat sat.
Fat sat. mode	Weak
Water suppr.	None
Restore magn.	On
	·

Contrast - Dynamic

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

Resolution - Common

FoV read	130 mm	
FoV phase	100.0 %	
Slice thickness	3.5 mm	
Base resolution	320	
Phase resolution	75 %	
Phase partial Fourier	Off	
Trajectory	Cartesian	
Interpolation	On	

Resolution - iPAT

PAT mode	None	
Resolution - Filter Imag	ge	
Image Filter	Off	
Distortion Corr.	On	
Mode	2D	
Unfiltered images	Off	
Prescan Normalize	Off	
Normalize	On	
Unfiltered images	Off	

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Off

Geometry - Common

B1 filter

Slice group	1
Slices	27
Dist. factor	10 %
Position	R131.2 P16.2 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	5000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R131.2 P16.2 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R131.2 P16.2 H32.2
R	131.2 mm
Р	16.2 mm
Н	32.2 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	-39.6
> T	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Fat sat. mode	Weak
Water suppr.	None
Restore magn.	On
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R131.2 P12.7 H31.8 mm
! Orientation	C > S39.4 > T0.1
! Rotation	0.13 deg
! R >> L	100 mm
! F >> H	130 mm
! A >> P	132 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	5000.0 ms
Concatenations	1

Physio - Cardiac

•	
Magn. preparation	None
Fat suppr.	Fat sat.
Dark blood	Off
FoV read	130 mm
FoV phase	100.0 %
Phase resolution	75 %
Trajectory	Cartesian

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.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	11.4 ms
Bandwidth	217 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	37
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Fast
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	13

Mode	Off
Allowed delay	60 s

\\Physique\Cyril\Epaule\Droite_in_vivo\Sag_t1_tse

TA: 3:15 PM: FIX Voxel size: 0.2×0.2×3.5 mmPAT: Off Rel. SNR: 1.00 : tse_rr

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

Routine

Slice group	1
Slices	27
Dist. factor	10 %
Position	R120.8 P24.8 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	100 %
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	600.0 ms
TE	11 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Normalize, Elliptical filter
Coil elements	BO1,2

Contrast - Common

TR	600.0 ms
TE	11 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	130 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
Base resolution	320
Phase resolution	75 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	On

Resolution - iPAT

PAT mode	None	
Resolution - Filter Image	ge	
Image Filter	Off	
Distortion Corr.	On	
Mode	2D	
Unfiltered images	Off	
Prescan Normalize	Off	
Normalize	On	
Unfiltered images	Off	

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	On	

Off

Geometry - Common

B1 filter

Slice group	1
Slices	27
Dist. factor	10 %
Position	R120.8 P24.8 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
FoV read	130 mm
FoV phase	100.0 %
Slice thickness	3.5 mm
TR	600.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

	_
Slice group	1
Position	R120.8 P24.8 H32.2 mm
Orientation	S > C-39.6
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R120.8 P24.8 H32.2
R	120.8 mm
Р	24.8 mm
Н	32.2 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	-39.6
> T	0.0

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

Positioning mode	FIX
Table position	Н
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	L33.6 P8.8 F31.4 mm
! Orientation	S > C18.8 > T0.8
! Rotation	-1.63 deg
! A >> P	130 mm
! F >> H	130 mm
! R >> L	119 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	600.0 ms
Concatenations	2

Physio - Cardiac

•		
Magn. preparation	None	
Fat suppr.	None	
Dark blood	Off	
FoV read	130 mm	
FoV phase	100.0 %	
Phase resolution	75 %	
Trajectory	Cartesian	

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off	
	•	
Measurements	1	
StdDev	Off	
Clubev	OII	
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	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	Read
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	11 ms
Bandwidth	226 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	160
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Normal
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	3

Mode	Off
Allowed delay	60 s

\\Physique\Cyril\Epaule\Droite_in_vivo\t1_vibe_dixon_Tra_iso1

TA: 4:52 PM: ISO Voxel size: 1.0×1.0×1.0 mmPAT: Off 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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R100.3 P30.4 H8.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	25 %
Slice oversampling	23.1 %
Slices per slab	208
FoV read	320 mm
FoV phase	49.4 %
Slice thickness	1.0 mm
TR	5.76 ms
TE 1	2.46 ms
TE 2	3.69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1,2

Contrast - Common

TR	5.76 ms
TE 1	2.46 ms
TE 2	3.69 ms
Flip angle	11.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	320 mm
FoV phase	49.4 %
Slice thickness	1.0 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Slice partial Fourier	Off
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None
----------	------

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R100.3 P30.4 H8.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	23.1 %
Slices per slab	208
FoV read	320 mm
FoV phase	49.4 %
Slice thickness	1.0 mm
TR	5.76 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

occinion, matering.	
Slab group	1
Position	R100.3 P30.4 H8.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R100.3 P30.4 H8.4
R	100.3 mm
P	30.4 mm
Н	8.4 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off	
Table position	Н	
Table position	8 mm	
Inline Composing	Off	

System - Miscellaneous

Positioning mode	ISO
Table position	Н
Table position	8 mm
MSMA	S-C-T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
Coil Select Mode	On - 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	R98.8 P28.2 H3.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	179 mm
! R >> L	205 mm
! F >> H	207 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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

View sharing	Off
Flip angle	11.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
Time to center	146.6 s

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off

Inline - Inline

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.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	11.0 deg
Measurements	1
Contrasts	2
TR	5.76 ms
TE 1	2.46 ms
TE 2	3.69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	870 Hz/Px
Bandwidth 2	820 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Mode	Off
Allowed delay	30 s

$\verb|\Physique| Cyril| Epaule| Droite_in_vivo| ep2d_mreUIUC_v03_Tra_100Hz_G18_Amp80pct_sl30_iPAT| epsilone to the context of th$

TA: 1:29 PM: FIX Voxel size: 3.0×3.0×3.0 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	10 %
Position	R49.3 P31.4 H36.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	50 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3300 ms
TE	48.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BO1,2

Contrast - Common

TR	3300 ms
TE	48.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	24
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	24
Reference scan mode	EPI/separate

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	10 %
Position	R49.3 P31.4 H36.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R49.3 P31.4 H36.6 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R49.3 P31.4 H85.6
R	49.3 mm
Р	31.4 mm
Н	85.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	F
Table position	49 mm
Inline Composing	Off

Positioning mode	FIX
Table position	F
Table position	49 mm
MSMA	S-C-T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Sum of Squares

Save	e uncombined	Off
Matı	rix Optimization	Off
Coil	Focus	Flat
	Align	
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	R48.2 P32.1 H31.6 mm
! Orientation	T > S0.4 > C-0.2
! Rotation	0.00 deg
! A >> P	169 mm
! R >> L	304 mm
! F >> H	113 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	3300 ms
Concatenations	1

Inline - Common

Subtract	Off
Measurements	24
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

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2246 Hz/Px

Sequence - Part 2

EPI factor	54	
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Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast*

Sequence - Special

Encoding Directions	P,R,S
Pos/Neg Encoding	On
Vibration Frequency	100.0
Phase Offsets	4
Fract Enc Factor	1.00
Flow Comp Grads	On
Grad Amplitude	18.0 mT/m
Grad Ramp Time	800 us
Encoding Sensitivity	10.731 um/rad
Waveform Cycles	11

\\Physique\Cyril\Epaule\Droite_in_vivo\ep2d_diff_3x3x3_fs_Tra_A2P

TA: 4:50 PM: FIX Voxel size: 3.0×3.0×3.0 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	Off
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	50 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3700 ms
TE	80.0 ms
Concatenations	1
Filter	Dynamic Field Corr.
Coil elements	BO1,2

Contrast - Common

TR TE	3700 ms
TE	80.0 ms
MTC	Off
Magn. preparation	None
Fat suppr. Fat sat. mode	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	GRE/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3700 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R94.1 P26.9 H5.9
R	94.1 mm
P	26.9 mm
Н	5.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	8 mm
Inline Composing	Off

-,	
Positioning mode	FIX
Table position	Н
Table position	8 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off

Coil Focus	Flat
AutoAlign	
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	R84.8 P28.2 H12.4 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	178 mm
! R >> L	273 mm
! F >> H	111 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	3700 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	0 s/mm ²
b-value 2	500 s/mm ²
b-value 3	800 s/mm ²
b-value 1	2
b-value 2	2
b-value 3	4
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	40

Diff - Body

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	3

Diff - Body

b-value 1	0 s/mm²
b-value 2	500 s/mm ²
b-value 3	800 s/mm ²
b-value 1	2
b-value 2	2
b-value 3	4
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
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
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.12 ms
Bandwidth	982 Hz/Px

EPI factor	54
RF pulse type	Low SAR
Gradient mode	Fast

TA: 0:21 PM: FIX Voxel size: 3.0×3.0×3.0 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	50 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3200 ms
TE	63.0 ms
Concatenations	1
Filter	Dynamic Field Corr.
Coil elements	BO1,2

Contrast - Common

TR TE	3200 ms
TE	63.0 ms
MTC	Off
Magn. preparation	None
Fat suppr. Fat sat. mode	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	GRE/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R94.1 P26.9 H13.9 mm
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	R94.1 P26.9 H5.9
R	94.1 mm
P	26.9 mm
Н	5.9 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

ĺ	Set-n-Go Protocol	Off
	Table position	Н
	Table position	8 mm
l	Inline Composing	Off

Positioning mode	FIX
Table position	Н
Table position	8 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off

Coil Focus	Flat
AutoAlign	
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	R84.8 P28.2 H12.4 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	192 mm
! R >> L	273 mm
! F >> H	111 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	3200 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm ²
b-value	2
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

Diff - Body

- ··· ··· /		
Diffusion mode	MDDW	
Diff. directions	12	
Diffusion Scheme	Monopolar	
Diff. weightings	1	
b-value	0 s/mm²	
b-value	2	
Diff. weighted images	On	
Trace weighted images	Off	

Diff - Body

ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm²
Noise level	40

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.12 ms
Bandwidth	982 Hz/Px

EPI factor	54
RF pulse type	Low SAR
Gradient mode	Fast

\\Physique\Cyril\Epaule\Droite_in_vivo\ep2d_diff_3x3x3_fs_Cor_H2F

TA: 6:25 PM: FIX Voxel size: 3.0×3.0×3.0 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	46
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	H >> F
AutoAlign	
Phase oversampling	0 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	4900 ms
TE	68.0 ms
Concatenations	1
Filter	Dynamic Field Corr.
Coil elements	BO1,2

Contrast - Common

TR	4900 ms
TR TE MTC	68.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	GRE/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	46
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	H >> F
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	4900 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	H >> F
AutoAlign	
Initial Position	R94.1 P26.9 H5.9
R	94.1 mm
P	26.9 mm
Н	5.9 mm
Initial Rotation	-90.00 deg
Initial Orientation	Coronal

Geometry - Saturation

Sat. region	1
Thickness	82 mm
Position	L0.0 P0.0 F129.5 mm
Orientation	Transversal
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	8 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
Table position	8 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R91.0 P28.2 H10.4 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	178 mm
! R >> L	303 mm
! F >> H	198 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	4900 ms
Concatenations	1

Physio - PACE

Resp. control	Off	
Concatenations	1	

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	0 s/mm²
b-value 2	500 s/mm ²
b-value 3	800 s/mm ²
b-value 1	2
b-value 2	2
b-value 3	4
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	40

Diff - Body

Diffusion mode	MDDW	
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Diff - Body

Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	0 s/mm ²
b-value 2	500 s/mm ²
b-value 3	800 s/mm ²
b-value 1	2
b-value 2	2
b-value 3	4
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
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
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.12 ms
Bandwidth	982 Hz/Px

EPI factor	54
RF pulse type	Low SAR
Gradient mode	Fast

TA: 0:33 PM: FIX Voxel size: 3.0×3.0×3.0 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	46
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
AutoAlign	
Phase oversampling	0 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	4900 ms
TE	48.0 ms
Concatenations	1
Filter	Dynamic Field Corr.
Coil elements	BO1,2

Contrast - Common

TR TE	4900 ms
	48.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Strong

Contrast - Dynamic

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

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	GRE/separate

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	46
Dist. factor	10 %
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	4900 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R94.1 P26.9 H13.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
AutoAlign	
Initial Position	R94.1 P26.9 H5.9
R	94.1 mm
P	26.9 mm
Н	5.9 mm
Initial Rotation	90.00 deg
Initial Orientation	Coronal

Geometry - Saturation

Sat. region	1
Thickness	82 mm
Position	L0.0 P0.0 F119.2 mm
Orientation	Transversal
Fat sat. mode	Strong
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	8 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
Table position	8 mm
MSMA	S-C-T
Sagittal	R >> L
Coronal	A >> P

Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R91.0 P28.2 H10.4 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	178 mm
! R >> L	303 mm
! F >> H	198 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	4900 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm²
b-value	2
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	40

Diff - Body

Diffusion mode	MDDW
Diff. directions	12
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm²

Diff - Body

b-value	2
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/mm²
Noise level	40

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.12 ms
Bandwidth	982 Hz/Px

EPI factor	54
RF pulse type	Low SAR
Gradient mode	Fast

$\verb|\Physique| Cyril| Epaule| Droite_in_vivo| ep2d_mreUIUC_v03_Tra_100Hz_G21_Amp60pct_sl30_iPAT| epsilon for the context of th$

TA: 1:29 PM: FIX Voxel size: 3.0×3.0×3.0 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	30
Dist. factor	10 %
Position	R91.5 P30.8 H3.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3300 ms
TE	40.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	BO1,2

Contrast - Common

TR	3300 ms
TE	40.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magn./Phase
Measurements	24
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
Base resolution	106
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2

Resolution - iPAT

Ref. lines PE	24
Reference scan mode	EPI/separate

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	10 %
Position	R91.5 P30.8 H3.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	318 mm
FoV phase	50.9 %
Slice thickness	3.0 mm
TR	3300 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R91.5 P30.8 H3.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R91.5 P30.8 H1.7
R	91.5 mm
Р	30.8 mm
Н	1.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
Table position	2 mm
Inline Composing	Off

Positioning mode	FIX
Table position	Н
Table position	2 mm
MSMA	S-C-T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Sum of Squares

Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	
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	R74.4 P32.2 H3.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	264 mm
! F >> H	111 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.262638 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	3300 ms
Concatenations	1

Inline - Common

Subtract	Off
Measurements	24
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	

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2246 Hz/Px

Sequence - Part 2

EPI factor	54	
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Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast*

Sequence - Special

Encoding Directions	P,R,S
Pos/Neg Encoding	On
Vibration Frequency	100.0
Phase Offsets	4
Fract Enc Factor	1.00
Flow Comp Grads	On
Grad Amplitude	21.0 mT/m
Grad Ramp Time	800 us
Encoding Sensitivity	9.198 um/rad
Waveform Cycles	11