SIEMENS MAGNETOM Aera

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Fysiker FilipSz FWF_P6_AERA_180130 P6_localizer P6_DTI_AERA_s1 P6_FWF_AE33_STE_s1 P6_FWF_AE33_LTE_s1 P6_DTI_AERA_s2 P6_MPRAGE_AERA P6_FWF_AE33_STE_s2 P6_FWF_AE33_STE_s2 P6_FWF_AE33_LTE_s2 P6_localizer P6_FWF_AE33_STE_lorez P6_FWF_AE33_LTE_lorez

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_localizer

TA: 0:18 PM: REF Voxel size: 0.5×0.5×8.0 mmPAT: Off Rel. SNR: 1.00 : fl

Properties

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

Routine

Noutine	
Slice group	1
Slices	2
Dist. factor	20 %
Position	L0.0 P6.9 H14.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	2
Dist. factor	20 %
Position	L0.0 P0.0 F37.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	2
Dist. factor	20 %
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
TR	7,0 ms
TE	2,38 ms
Averages	2
Concatenations	6
Filter	Distortion Corr.(2D),
	Prescan Normalize,
O. T. alamanta	Elliptical filter
Coil elements	HE1-4;NE1,2;SP1

Contrast - Common

TR	7,0 ms
TE	2,38 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
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Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude

Contrast - Dynamic

Measurements	1
Multiple series	Off

Resolution - Common

FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

PAT mode	None
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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	On	

Geometry - Common

Slice group	1
Slices	2
Dist. factor	20 %
Position	L0.0 P6.9 H14.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	2
Dist. factor	20 %
Position	L0.0 P0.0 F37.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	2
Dist. factor	20 %
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
TR	7,0 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	6

Geometry - AutoAlign

Slice group	1	
Slice group	2	
Slice group	3	

Geometry - AutoAlign

AutoAlign	
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Initial Position	R5.7 P0.0 F14.3
R	5,7 mm
P F	0,0 mm
F	14,3 mm
Initial Rotation	0,00 deg
Initial Orientation	Coronal

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

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

System - Adjustments

B0 Shim mode	Tune up
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 - Tx/Rx

Frequency 1H	63,681516 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	7,0 ms
Concatenations	6
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100,0 %
Phase resolution	75 %

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-Sa MIP-Co	g	Off	
MIP-Co	r	Off	
MIP-Tra	a	Off	
MIP-Tra	ne	Off	
	riginal 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	7,0 ms
TF	2.38 ms

Sequence - Part 1

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

SIEMENS MAGNETOM Aera

Sequence - Part 1

Bandwidth	290 Hz/Px	
Sequence - Part 2		
Segments	1	
Acoustic noise reduction	None	
RF pulse type	Fast	
Gradient mode	Fast	

On

Slice-sel.

Sequence - Assistant

Excitation

RF spoiling

Mode	Off

$\verb|\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_DTI_AERA_s1| \\$

TA: 3:00 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

Properties

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

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
TR	7500 ms
TE	75,0 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	7500 ms
TE	75,0 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	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
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
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
TR	7500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
Н	0,0 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	0 mm
Inline Composing	Off

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

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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	7500 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	20
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	On
Mosaic	Off
Tensor	Off
Noise level	70

Diff - Body

Diffusion mode	MDDW
Diff. directions	20
Diffusion Scheme	Monopolar
Diff. weightings	2

Diff - Body

b-value 1	0 s/mm²
b-value 2	1000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm²
Noise level	70

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

$\verb|\USER|Fysiker|FilipSz|FWF_P6_AERA_180130|P6_FWF_AE33_STE_s1|$

TA: 3:40 PM: FIX Voxel size: 2.0×2.0×4.0 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	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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 ms
Concatenations	1

Physio - PACE

Resp. control	Off	
Concatenations	1	

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	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/mm²
Noise level	40

Diff - Composing

Inline Com	posing	Off
Distortion (Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust01
RotationMode	XYZ
NormalizeMode	To max
PostWFMode	None
TimingMode	Manual
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3509 s/mm2
PreDur	48860 μs
PostDur	42430 µs
PauseDur	6980 µs

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_FWF_AE33_LTE_s1

TA: 3:40 PM: FIX Voxel size: 2.0×2.0×4.0 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	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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 ms
Concatenations	1

Physio - PACE

Resp. control	Off	
Concatenations	1	

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust09
RotationMode	XCh-1D
NormalizeMode	To max
PostWFMode	None
TimingMode	Equal
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3500 s/mm2
PreDur	42490 µs
PostDur	42490 µs
PauseDur	6980 µs

$\verb|\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_DTI_AERA_s2| \\$

TA: 3:00 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

Properties

Prio recon	Off
Load images to viewer	Off
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	On
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
TR	7500 ms
TE	75,0 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	7500 ms
TE	75,0 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	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
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
Dynamic Field Corr.	Off

Resolution - Filter Rawdata

Raw filter	On	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	2,0 mm
TR	7500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
Н	0,0 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	0 mm
Inline Composing	Off

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

Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

Do Oli	0
B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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	7500 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	20
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	1000 s/mm²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
FA maps	On
Mosaic	Off
Tensor	Off
Noise level	70

Diff - Body

Diffusion mode	MDDW
Diff. directions	20
Diffusion Scheme	Monopolar
Diff. weightings	2

Diff - Body

b-value 1	0 s/mm²
b-value 2	1000 s/mm²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	On
Exponential ADC Maps	Off
FA maps	On
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm²
Noise level	70

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_MPRAGE_AERA

TA: 4:32 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	27,3 %
Slices per slab	176
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	1,00 mm
TR	2200,0 ms
TE	2,97 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize, Elliptical filter, Image Filter
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	2200,0 ms
TE	2,97 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	Off

Resolution - Common

FoV read	224 mm	
FoV phase	100,0 %	
Slice thickness	1,00 mm	
Base resolution	224	
Phase resolution	100 %	
Slice resolution	90 %	
Phase partial Fourier	Off	
Slice partial Fourier	Off	

Resolution - Common

Interpolation	Off	

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	On
! Intensity	Medium
Edge Enhancement	3
Smoothing	2
Unfiltered images	Off
Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

•	
Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	27,3 %
Slices per slab	176
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	1,00 mm
TR	2200,0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
Н	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н

Geometry - Tim Planning Suite

Table position	0 mm
Inline Composing	Off

System - Miscellaneous

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
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
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 - Tx/Rx

- 7	
Frequency 1H	63,681516 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	2200,0 ms
Concatenations	1

Physio - Cardiac

Magn proporation	Non col ID
Magn. preparation	Non-sel. IR
TI	900 ms
Fat suppr.	None
Dark blood	Off
FoV read	224 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

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	2200,0 ms
TE	2,97 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	7,6 ms
Bandwidth	160 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	202

Sequence - Assistant

Mode Off

$\verb|\USER|Fysiker|FilipSz|FWF_P6_AERA_180130|P6_FWF_AE33_STE_s2|$

TA: 3:40 PM: FIX Voxel size: 2.0×2.0×4.0 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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

, ,	
Slice group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
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

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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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 ms
Concatenations	1

Physio - PACE

Resp. control	Off	
Concatenations	1	

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust01
RotationMode	XYZ
NormalizeMode	To max
PostWFMode	None
TimingMode	Manual
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3509 s/mm2
PreDur	48860 μs
PostDur	42430 µs
PauseDur	6980 µs

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_FWF_AE33_LTE_s2

TA: 3:40 PM: FIX Voxel size: 2.0×2.0×4.0 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	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	224 mm	
FoV phase	100,0 %	
Slice thickness	4,0 mm	
Base resolution	112	
Phase resolution	100 %	
Phase partial Fourier	6/8	
Interpolation	Off	

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	224 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

1
Isocenter
Transversal
A >> P
Isocenter
0,0 mm
0,0 mm
0,0 mm
0,00 deg
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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	224 mm
R >> L	224 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	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/mm²
Noise level	40

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,65 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust09
RotationMode	XCh-1D
NormalizeMode	To max
PostWFMode	None
TimingMode	Equal
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3500 s/mm2
PreDur	42490 μs
PostDur	42490 μs
PauseDur	6980 µs

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_localizer

TA: 0:34 PM: REF Voxel size: 0.5×0.5×8.0 mmPAT: Off Rel. SNR: 1.00 : fl

Properties

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

Routine

Noutine	
Slice group	1
Slices	8
Dist. factor	20 %
Position	L0.0 P6.9 H14.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	2
Dist. factor	20 %
Position	L0.0 P0.0 F37.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	2
Dist. factor	20 %
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
TR	7,0 ms
TE	2,38 ms
Averages	2
Concatenations	12
Filter	Distortion Corr.(2D),
	Prescan Normalize,
Cail alamenta	Elliptical filter
Coil elements	HE1-4;NE1,2;SP1

Contrast - Common

TR	7,0 ms
TE	2,38 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

	_
Averages	2
Averaging mode	Short term
Reconstruction	Magnitude

Contrast - Dynamic

Measurements	1	
Multiple series	Off	

Resolution - Common

FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
Base resolution	256
Phase resolution	75 %
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	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	8
Dist. factor	20 %
Position	L0.0 P6.9 H14.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	2
Dist. factor	20 %
Position	L0.0 P0.0 F37.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	2
Dist. factor	20 %
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	260 mm
FoV phase	100,0 %
Slice thickness	8,0 mm
TR	7,0 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	12

Geometry - AutoAlign

Slice group	1
Slice group	2
Slice group	3

Geometry - AutoAlign

AutoAlign	
Position	R5.7 P0.0 F14.3 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Initial Position	L0.0 P6.9 H14.6
L	0,0 mm
P	6,9 mm
Н	14,6 mm
Initial Rotation	0,00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up
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 - Tx/Rx

Frequency 1H	63,681516 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	7,0 ms
Concatenations	12
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100,0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	12

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	7,0 ms
TF	2.38 ms

Sequence - Part 1

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

SIEMENS MAGNETOM Aera

Sequence - Part 1

Gradient mode

Excitation

RF spoiling

290 Hz/Px
1
None
Fast

Fast

On

Slice-sel.

Sequence - Assistant

Mode	Off

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_FWF_AE33_STE_lorez

TA: 3:40 PM: FIX Voxel size: 2.5×2.5×4.0 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	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
Н	0,0 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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	280 mm
R >> L	280 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 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 ms
Concatenations	1

Physio - PACE

Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	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/mm²
Noise level	40

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,64 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust01
RotationMode	XYZ
NormalizeMode	To max
PostWFMode	None
TimingMode	Manual
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3488 s/mm2
PreDur	48860 μs
PostDur	42430 µs
PauseDur	6420 µs

\\USER\Fysiker\FilipSz\FWF_P6_AERA_180130\P6_FWF_AE33_LTE_lorez

TA: 3:40 PM: FIX Voxel size: 2.5×2.5×4.0 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	On
preparation	
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
TE	115,0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HE1-4;NE1,2

Contrast - Common

TR	5000 ms
TE	115,0 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
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	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	112
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	280 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	5000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
AutoAlign	
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
Н	0,0 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	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
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
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	280 mm
R >> L	280 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63,681516 MHz
Correction factor	1
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1st Signal/Mode	None
TR	5000 ms
Concatenations	1

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Resp. control	Off
Concatenations	1

Diff - Neuro

Diffusion mode	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²
b-value	1
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	Free
Diff. directions	41
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	2000 s/mm ²

Diff - Body

b-value	1
Diff. weighted images	On
Trace weighted images	Off
ADC maps	Off
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	0 s/mm ²
Noise level	40

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Optimization	None
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0,64 ms
Bandwidth	1786 Hz/Px

Sequence - Part 2

EPI factor	112
RF pulse type	Normal
Gradient mode	Fast

WFBank	Bank09
WFSelect	Cust09
RotationMode	XCh-1D
NormalizeMode	To max
PostWFMode	None
TimingMode	Equal
PauseMode	Min
BalanceGradMode	On
ICEHeader	Standard
MaxBVal	3611 s/mm2
PreDur	43000 µs
PostDur	43000 µs
PauseDur	6420 μs