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\\USER

Khan

NeuroAnalytics

DBS snSx

localizer mp2rage_sag_750iso_p3 sa2rage_B1map T2_spc_600iso 3D_TOF_7slabs_Flow_FH ASPIRE_800iso_7e mbep2d_diff_b2000_b1000_95dir_AP mbep2d_diff_B0_PA gre_field_mapping t2_tse_cor_p2_400x400x1500 t2_tse_tra_320_p2_700x700x1000 t2_tse_cor_320_p2_700x700x1000 susc3d_tra_p2_800iso mp2rage_sag_750iso_p3 sa2rage_B1map T2_spc_700iso mbep2d_diff_95dir_2Shell_1.6mm_AP mbep2d_B0_PA 3D_TOF_3slabs_Flow_FH t2_tse_tra_320_p2_700x700x1000 t2_tse_cor_p2_400x400x1500 resolve_mddw_20_tra_p3 t2_tse_tra_320_p2_700x700x1000

\\USER\Khan\NeuroAnalytics\DBS_snSx\localizer

TA: 0:26 PM: REF Voxel size: 1.2×1.2×5.0 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 preparation	Off
l' '	0#
Wait for user to start	Off
Start measurements	Single measurement

Routine

Routine	
Slice group	1
Slices	3
Dist. factor	400 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	300 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	3
Dist. factor	500 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	300 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	12.0 ms
TE	3.33 ms
Averages	1
Concatenations	9
Filter	None
Coil elements	AC

Contrast - Common

TR	12.0 ms
TE	3.33 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	15 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	300 mm		
FoV phase	100.0 %		
Slice thickness	5.0 mm		
Base resolution	256		
Phase resolution	90 %		
Phase partial Fourier	Off		
Interpolation	Off		

Each measurement

Resolution - iPAT

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	Isocenter
Orientation	Transversal

Geometry - AutoAlign

Phase enc. dir.	A >> P
Slice group	3
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slices	3
Slice thickness	5.0 mm
Dist. factor	500 %
FoV read	300 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	296.941213 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	12.0 ms
Concatenations	9
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	300 mm
FoV phase	100.0 %
Phase resolution	90 %

Physio - PACE

Resp. control	Off
Concatenations	9

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Inline - MapIt

Save original images	On
Maplt	None
Flip angle	15 deg
Measurements	1
Contrasts	1
TR	12.0 ms

SIEMENS MAGNETOM Investigational_Device_7T_Plus

Inline - MapIt

TF	3.33 ms
_	5.55 1118

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	230 Hz/Px

Sequence - Part 2

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

Mode	Off	

\\USER\Khan\NeuroAnalytics\DBS_snSx\mp2rage_sag_750iso_p3

TA: 9:36 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R5.8 A26.9 F29.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	7.7 %
Slices per slab	208
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR	6000.0 ms
TE	2.69 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC2

Contrast - Common

TR	6000.0 ms
TE	2.69 ms
Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	6/8	
Interpolation	Off	

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R5.8 A26.9 F29.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.7 %
Slices per slab	208
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR	6000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R5.8 A26.9 F29.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R5.8 A26.9 F29.1
R	5.8 mm
A	26.9 mm
F	29.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

_	
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R6.5 A14.4 F22.7 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	208 mm
! F >> H	163 mm
! R >> L	178 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Non-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R5.8 A13.4 F22.7 mm
Orientation	T > C-28.4
Rotation	0.00 deg
A >> P	169 mm
R >> L	149 mm
F >> H	122 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %

Physio - Cardiac

Phase resolution	100 %	
Physio - PACE		
Resp. control	Off	
Concatenations	1	

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Inline - MapIt

Save original images	On
MapIt	T1 map
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Measurements	1
TR	6000.0 ms
TE	2.69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.8 ms
Bandwidth	150 Hz/Px

Sequence - Part 2

_	
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	168

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\\USER\Khan\NeuroAnalytics\DBS_snSx\sa2rage_B1map

TA: 2:30 PM: REF Voxel size: 1.9×1.9×2.8 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	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	64
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
TR	2400.0 ms
TE	0.81 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	HC1

Contrast - Common

TR	2400.0 ms
TE	0.81 ms
Magn. preparation	Non-sel. SR
TI 1	45 ms
TI 2	1800 ms
Flip angle 1	4.0 deg
Flip angle 2	11.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	6/8	
Interpolation	Off	

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	64
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
TR	2400.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Navigator

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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	240 mm
F >> H	240 mm
R >> L	176 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Non-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	240 mm
F >> H	240 mm
R >> L	176 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	2400.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. SR
TI 1	45 ms
TI 2	1800 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %

Physio - Cardiac

Phase resolution

Physio - PACE	
Resp. control Concatenations	Off
Concatenations	1

100 %

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle 1	4.0 deg
Flip angle 2	11.0 deg
Measurements	1
TR	2400.0 ms
TE	0.81 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	2.2 ms
Bandwidth	1560 Hz/Px

Sequence - Part 2

_	
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	48

Sequence - Special

PPD Config	0	
Workaround Some Siemens	On	
Ineptitude		

Mode	Off
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\\USER\Khan\NeuroAnalytics\DBS_snSx\T2_spc_600iso

TA: 7:28 PM: FIX Voxel size: 0.6×0.6×0.6 mmPAT: 6 Rel. SNR: 1.00 : spc

Properties

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

Routine

Slab group	1
Slabs	1
Position	R3.1 A20.6 F21.3 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	20.0 %
Slices per slab	240
FoV read	225 mm
FoV phase	99.4 %
Slice thickness	0.60 mm
TR	2000 ms
TE	131 ms
Averages	1.0
Concatenations	1
Filter	Distortion Corr.(3D), B1
	filter
Coil elements	HC2

Contrast - Common

TR TE	2000 ms
TE	131 ms
MTC	Off
Magn. preparation	None
Fat suppr. Blood suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	225 mm
FoV phase	99.4 %
Slice thickness	0.60 mm
Base resolution	352
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	3
Ref. lines PE	48
Accel. factor 3D	2
Ref. lines 3D	32
Reordering Shift 3D	0
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slab group	1
Slabs	1
Position	R3.1 A20.6 F21.3 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	20.0 %
Slices per slab	240
FoV read	225 mm
FoV phase	99.4 %
Slice thickness	0.60 mm
TR	2000 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.1 A20.6 F21.3 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R3.1 A20.6 F21.3
R	3.1 mm
A	20.6 mm
F	21.3 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

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	Default

System - Adjustments

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

System - Adjust Volume

! Position	R3.6 A9.1 F0.9 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	206 mm
! F >> H	166 mm
! R >> L	168 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	296.941213 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	2000 ms
Concatenations	1

Physio - Cardiac

•	
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	225 mm
FoV phase	99.4 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

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

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	4.96 ms
Adiabatic-mode	Off
Bandwidth	473 Hz/Px

Sequence - Part 2

Echo train duration	283 ms
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	65

Allowed delay	0 s	
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\\USER\Khan\NeuroAnalytics\DBS_snSx\3D_TOF_7slabs_Flow_FH

TA: 9:08 PM: REF Voxel size: 0.5×0.5×0.5 mmPAT: 3 Rel. SNR: 1.00 : fl_r

Properties

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

Routine

Slab group	1
Slabs	7
Dist. factor	-15.91 %
Position	R1.5 P9.2 H22.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	18.2 %
Slices per slab	44
FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.47 mm
TR	18.0 ms
TE	3.59 ms
Averages	1
Concatenations	7
Filter	Distortion Corr.(2D)
Coil elements	HC1

Contrast - Common

TR TE	18.0 ms
TE	3.59 ms
TD	0.000 ms
MTC	Off
Flip angle	15 deg
Fat suppr. Water suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.47 mm
Base resolution	448
Phase resolution	100 %
Slice resolution	96 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry - Common

Slab group	1
Slabs	7
Dist. factor	-15.91 %
Position	R1.5 P9.2 H22.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	18.2 %
Slices per slab	44
FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.47 mm
TR	18.0 ms
Multi-slice mode	Sequential
Series	Descending
Concatenations	7

Geometry - AutoAlign

Slab group	1
Position	R1.5 P9.2 H22.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R1.5 P9.2 H22.5
R	1.5 mm
P	9.2 mm
Н	22.5 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Special sat.	None

	=	
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R1.5 P9.2 H22.5 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	171 mm
A >> P	210 mm
F >> H	126 mm
Reset	Off

System - pTx Volumes

<u>'</u>	
B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	171 mm
R >> L	210 mm
F >> H	126 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	18.0 ms
Concatenations	7

Physio - Cardiac

Fat suppr.	None
Dark blood	Off
FoV read	210 mm
FoV phase	81.3 %
Phase resolution	100 %

Angio - Common

TONE ramp	70 %
Flow direction	F >> H
Flip angle	15 deg
MTC	Off
Measurements	1
3D centric reordering	On

Angio - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Angio - MIP

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

Angio - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	On

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Sequential
Bandwidth	203 Hz/Px

Sequence - Part 2

Gradient mode	Fast
RF spoiling	On

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

\\USER\Khan\NeuroAnalytics\DBS_snSx\ASPIRE_800iso_7e

TA: 6:06 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R5.8 A9.3 F13.2 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	10.0 %
Slices per slab	160
FoV read	205 mm
FoV phase	87.5 %
Slice thickness	0.75 mm
TR	30.0 ms
TE 1	1.65 ms
TE 2	3.93 ms
TE 3	6.21 ms
TE 4	8.49 ms
TE 5	10.77 ms
TE 6	13.05 ms
TE 7	15.33 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HC2

Contrast - Common

30.0 ms
1.65 ms
3.93 ms
6.21 ms
8.49 ms
10.77 ms
13.05 ms
15.33 ms
Off
None
7 deg
None
None
Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude

Contrast - Dynamic

Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	205 mm
FoV phase	87.5 %
Slice thickness	0.75 mm
Base resolution	272
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
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	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

_	
Slab group	1
Slabs	1
Dist. factor	20 %
Position	R5.8 A9.3 F13.2 mm
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	10.0 %
Slices per slab	160
FoV read	205 mm
FoV phase	87.5 %
Slice thickness	0.75 mm
TR	30.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R5.8 A9.3 F13.2 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R5.8 A9.3 F13.2
R	5.8 mm
A	9.3 mm

Geometry - AutoAlign

F	13.2 mm
Initial Rotation	90.00 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

Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	160
Slice thickness	0.75 mm
Dist. factor	20 %
FoV read	205 mm
FoV phase	87.5 %
Segments	1

System - Miscellaneous

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

System - Adjustments

-		
ſ	B0 Shim mode	Advanced
	B1 Shim mode	Volume-selective
	Confirm freq. adjustment	Off
	Assume Dominant Fat	Off
	Assume Silicone	Off
	Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R5.8 A6.9 F22.7 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	213 mm
! F >> H	173 mm
! R >> L	171 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R5.9 A1.1 F20.4 mm

System - pTx Volumes

Orientation	Sagittal
Rotation	32.05 deg
A >> P	172 mm
F >> H	122 mm
R >> L	142 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	30.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	205 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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	7 deg
Measurements	1
Contrasts	7
TR	30.0 ms
TE 1	1.65 ms
TE 2	3.93 ms
TE 3	6.21 ms
TE 4	8.49 ms
TE 5	10.77 ms
TE 6	13.05 ms
TE 7	15.33 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Phase stabilisation	On
Asymmetric echo	Allowed
Contrasts	7
Flow comp. 1	No
Readout mode	Monopolar
Multi-slice mode	Interleaved
Bandwidth 1	610 Hz/Px
Bandwidth 2	610 Hz/Px
Bandwidth 3	610 Hz/Px
Bandwidth 4	610 Hz/Px
Bandwidth 5	610 Hz/Px
Bandwidth 6	610 Hz/Px
Bandwidth 7	610 Hz/Px

Sequence - Part 2

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

Sequence - Special

<u> </u>	
Phase Combination	ASPIRE
Advanced Options	On
Additional FFT Scale	1.00
Magnitude Scale	1000
PO Smoothing Sigma	5 mm
Use PO for next measurements	Off
ASPIRE 1. Echo	1
ASPIRE 2. Echo	2
Mag of Complex Sum	On
UMPIRE Unwrapping	Off
T2* / R2*	T2* + R2*

Mode	Off
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\\USER\Khan\NeuroAnalytics\DBS_snSx\mbep2d_diff_b2000_b1000_95dir_AP

TA: 9:15 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: 3 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	100
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
TE	60.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	AC

Contrast - Common

TR	5500 ms
TE	60.80 ms
мтс	Off
Magn. preparation	None
Flip angle	80 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

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

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	138
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	54
Reference scan mode	FLEET

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	100
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
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

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

Geometry - Navigator

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	150 mm
Reset	Off

System - pTx Volumes

В1	Shim mode	Patient-specific
Ex	citation	Standard

System - Tx/Rx

Frequency 1H	296.941213 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	5500 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Free	
95	
Monopolar	
2	
0 s/mm²	
2000 s/mm ²	
1	
1	
On	
80	
	95 Monopolar 2 0 s/mm² 2000 s/mm² 1 1 On On On On On

Diff - Body

Diffusion mode	Free
Diff. directions	95
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
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/mm²
Noise level	80

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.75 ms
Bandwidth	1510 Hz/Px

Sequence - Part 2

EPI factor	138
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	5120 us
Refocus pulse duration	10240 us
FLEET ref. prep. scans	0
FLEET ref. min. TR	0 ms
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\mbep2d_diff_B0_PA

TA: 1:06 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: 3 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	100
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
TE	60.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	AC

Contrast - Common

TR	5500 ms
TE	60.80 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

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

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	138
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	54
Reference scan mode	FLEET

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	100
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

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

Geometry - Saturation

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

Geometry - Navigator

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
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 R >> L	208 mm
R >> L	208 mm
F >> H	150 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Standard
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	208 mm
R >> L	208 mm
F >> H	162 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	5500 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1

Diff - Neuro

Diff. weighted images	On	
Trace weighted images	On	
ADC maps	On	
FA maps	On	
Mosaic	On	
Tensor	On	
Noise level	80	

Diff - Body

Diffusion mode	MDDW
Diff. directions	6
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
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/mm²
Noise level	80

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.75 ms
Bandwidth	1510 Hz/Px

Sequence - Part 2

EPI factor	138
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Sequence - Special

Excite pulse duration	5120 us
Refocus pulse duration	10240 us
FLEET ref. prep. scans	0
FLEET ref. min. TR	0 ms
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\gre_field_mapping

TA: 1:27 PM: FIX Voxel size: 2.0×2.0×2.0 mmRel. SNR: 1.00 : fm_r

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	74
Dist. factor	0 %
Position	R0.5 P9.6 H5.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	542.0 ms
TE 1	4.08 ms
TE 2	5.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1

Contrast - Common

TR TE 1 TE 2	542.0 ms
TE 1	4.08 ms
TE 2	5.1 ms
MTC	Off
Flip angle Fat suppr.	35 deg
Fat suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	210 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	104
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - Filter Image

	mage Filter	Off	
1	Distortion Corr.	Off	

Resolution - Filter Image

Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	74
Dist. factor	0 %
Position	R0.5 P9.6 H5.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	542.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R0.5 P9.6 H5.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R0.5 P9.6 H5.8
R	0.5 mm
Р	9.6 mm
н	5.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	Н
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	Default

System - Adjustments

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

System - Adjust Volume

Position	R0.5 P9.6 H5.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	148 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	148 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	Yes
Multi-slice mode	Interleaved
Bandwidth	601 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal
RF spoiling	On

Mode	Off
Mode	OII

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_cor_p2_400x400x1500

TA: 5:33 PM: REF Voxel size: 0.4×0.4×1.5 mmPAT: 2 Rel. SNR: 1.00 : tse

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	34
Dist. factor	10 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
TR	4500.0 ms
TE	102 ms
Averages	3
Concatenations	2
Filter	None
Coil elements	AC

Contrast - Common

TR	4500.0 ms
TE	102 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	3
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
Base resolution	480
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	34
Dist. factor	10 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
TR	4500.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

occinion, manaringn	
Slice group	1
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Coronal

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	34
Slice thickness	1.5 mm
Dist. factor	10 %
FoV read	192 mm
FoV phase	84.6 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
R >> L	163 mm
F >> H	192 mm
A >> P	56 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
R >> L	163 mm
F >> H	192 mm
A >> P	56 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	4500.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	192 mm
FoV phase	84.6 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.7 ms
Bandwidth	217 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	12
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	18

Mode	Off
Allowed delay	0 s

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_tra_320_p2_700x700x1000

TA: 4:08 PM: REF Voxel size: 0.7×0.7×1.0 mmPAT: 2 Rel. SNR: 1.00 : tse

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	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	7500.0 ms
TE	76 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	7500.0 ms
TE	76 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
Base resolution	320
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off
Base resolution Phase resolution Phase partial Fourier Trajectory	100 % Off Cartesian

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	7500.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Coomony /tato/mgm	
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	30
Slice thickness	1.0 mm
Dist. factor	50 %
FoV read	220 mm
FoV phase	81.3 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	179 mm
A >> P	220 mm
F >> H	45 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	179 mm
R >> L	220 mm
F >> H	45 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	7500.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	81.3 %
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 MIP-Cor MIP-Tra MIP-Time	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
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.6 ms
Bandwidth	220 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
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	18

Mode	Off
Allowed delay	0 s

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_cor_320_p2_700x700x1000

TA: 4:41 PM: REF Voxel size: 0.7×0.7×1.0 mmPAT: 2 Rel. SNR: 1.00 : tse

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	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	8500.0 ms
TE	101 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	8500.0 ms
TE	101 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
Base resolution	320
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
	0.00.00
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	30
Dist. factor	10 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	8500.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Coomony many	
Slice group	1
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	Coronal

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	30
Slice thickness	1.0 mm
Dist. factor	10 %
FoV read	220 mm
FoV phase	81.3 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
R >> L	179 mm
F >> H	220 mm
R >> L F >> H A >> P Reset	33 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
R >> L	179 mm
F >> H	220 mm
A >> P	33 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	8500.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	81.3 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subt	ract	Off
Mea	surements	1
StdE)ev	Off
Save	e 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
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.6 ms
Bandwidth	220 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
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	18

Mode	Off
Allowed delay	0 s

\\USER\Khan\NeuroAnalytics\DBS_snSx\susc3d_tra_p2_800iso

TA: 10:10 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 2 Rel. SNR: 1.00 : fl_r

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	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	11.1 %
Slices per slab	144
FoV read	220 mm
FoV phase	87.7 %
Slice thickness	0.80 mm
TR	35.0 ms
TE 1	4.61 ms
TE 2	8.24 ms
TE 3	11.87 ms
TE 4	15.50 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	AC

Contrast - Common

TR	35.0 ms
TE 1	4.61 ms
TE 2	8.24 ms
TE 3	11.87 ms
TE 4	15.50 ms
MTC	Off
Magn. preparation	None
Flip angle	13 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	87.7 %

Resolution - Common

Slice thickness	0.80 mm
Base resolution	276
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	29
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	11.1 %
Slices per slab	144
FoV read	220 mm
FoV phase	87.7 %
Slice thickness	0.80 mm
TR	35.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Saturation

Saturation mode Standard

Geometry - Saturation

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

Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	144
Slice thickness	0.80 mm
Dist. factor	20 %
FoV read	220 mm
FoV phase	87.7 %
Segments	1

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	193 mm
A >> P	220 mm
F >> H	116 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	193 mm
R >> L	220 mm
F >> H	103 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	35.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	87.7 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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	On

Inline - MapIt

Noise threshold	15
Save original images	On
MapIt	T2* map
Flip angle	13 deg
Measurements	1
Contrasts	4
TR	35.0 ms
TE 1	4.61 ms

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Inline - MapIt

TE 2	8.24 ms
TE 3	11.87 ms
TE 4	15.50 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Phase stabilisation	On
Asymmetric echo	Allowed
Contrasts	4
Flow comp. 1	Yes
Readout mode	Monopolar
Multi-slice mode	Interleaved
Bandwidth 1	310 Hz/Px
Bandwidth 2	310 Hz/Px
Bandwidth 3	310 Hz/Px
Bandwidth 4	310 Hz/Px

Sequence - Part 2

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

Mode	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\mp2rage_sag_750iso_p3

TA: 9:36 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group 1	
Slabs 1	
Dist. factor 50 %	
Position R6.1 A18.4 F22.	1 mm
Orientation Sagittal	
Phase enc. dir. A >> P	
AutoAlign	
Phase oversampling 0 %	
Slice oversampling 7.7 %	
Slices per slab 208	
FoV read 240 mm	
FoV phase 100.0 %	
Slice thickness 0.75 mm	
TR 6000.0 ms	
TE 2.68 ms	
Averages 1	
Concatenations 1	
Filter Raw filter	
Coil elements HC1	

Contrast - Common

TR	6000.0 ms
TE	2.68 ms
Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	None
Water suppr.	None
	-

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	6/8	
Interpolation	Off	

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On	
Elliptical filter	Off	

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.7 %
Slices per slab	208
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	0.75 mm
TR	6000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.1 A18.4 F22.1
R	6.1 mm
Α	18.4 mm
F	22.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

Set-n-Go Protocol	Off
Table position	Н
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

-	
B1 Shim mode	Volume-selective
Excitation	Non-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R7.3 P39.3 F42.9 mm
Orientation	Sagittal
Rotation	0.06 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R6.7 A32.3 F0.8 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	800 ms
TI 2	2700 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
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	T1 map
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Measurements	1
TR	6000.0 ms
TE	2.68 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.7 ms
Bandwidth	140 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	168

\\USER\Khan\NeuroAnalytics\DBS_snSx\sa2rage_B1map

TA: 2:30 PM: FIX Voxel size: 1.9×1.9×2.8 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	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	64
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
TR	2400.0 ms
TE	0.81 ms
Averages	1
Concatenations	1
Filter	Raw filter
Coil elements	HC1

Contrast - Common

TR	2400.0 ms
TE	0.81 ms
Magn. preparation	Non-sel. SR
TI 1	45 ms
TI 2	1800 ms
Flip angle 1	4.0 deg
Flip angle 2	11.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	30
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On	
Elliptical filter	Off	

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	64
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	2.75 mm
TR	2400.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.1 A18.4 F22.1
R	6.1 mm
Α	18.4 mm
F	22.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

Set-n-Go Protocol	Off
Table position	Н
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Non-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R7.3 P39.3 F42.9 mm
Orientation	Sagittal
Rotation	0.06 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R6.7 A32.3 F0.8 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	2400.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. SR
TI 1	45 ms
TI 2	1800 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
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 1	4.0 deg
Flip angle 2	11.0 deg
Measurements	1
TR	2400.0 ms
TF	0.81 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	2.2 ms
Bandwidth	1560 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	48

Sequence - Special

PPD Config	0
Workaround Some Siemens	On
Ineptitude	

SIEMENS MAGNETOM Investigational_Device_7T_Plus

Mode	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\T2_spc_700iso

TA: 7:04 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 2 Rel. SNR: 1.00 : spc

Properties

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

Routine

Slab group	1
Slabs	1
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
Slice oversampling	7.7 %
Slices per slab	208
FoV read	246 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	4000 ms
TE	399 ms
Averages	1.0
Concatenations	1
Filter	Elliptical filter
Coil elements	HC1

Contrast - Common

TD	1000
TR	4000 ms
TE	399 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	246 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
Base resolution	352
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	6/8
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	Off	
Distortion Corr.	Off	
Prescan Normalize	Off	
Normalize	Off	
B1 filter	Off	

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slab group	1
Slabs	1
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.7 %
Slices per slab	208
FoV read	246 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	4000 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R6.1 A18.4 F22.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.1 A18.4 F22.1
R	6.1 mm
A	18.4 mm
F	22.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

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
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Non-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R7.3 P39.3 F42.9 mm
Orientation	Sagittal
Rotation	0.06 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R6.7 A32.3 F0.8 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	4000 ms

Physio - Signal1

|--|

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	246 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag MIP-Cor MIP-Tra MIP-Time	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
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	3.58 ms
Adiabatic-mode	Off
Bandwidth	789 Hz/Px

Sequence - Part 2

Echo train duration	841 ms
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	250

\\USER\Khan\NeuroAnalytics\DBS_snSx\mbep2d_diff_95dir_2Shell_1.6mm_AP

TA: 9:13 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: 3 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	80
Dist. factor	0 %
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
TE	60.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	HC1

Contrast - Common

TR	5500 ms
TE	60.80 ms
MTC	Off
Magn. preparation	None
Flip angle	80 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

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

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	138
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	54
Reference scan mode	FLEET

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	80
Dist. factor	0 %
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 P5.1 F0.7
R	4.4 mm
P	5.1 mm
F	0.7 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-24.8
> S	0.0

Geometry - Saturation

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

Geometry - Navigator

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	Sum of Squares
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Standard
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R7.3 P20.5 F57.6 mm
Orientation	Sagittal
Rotation	24.86 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R6.7 A26.8 H10.7 mm
Orientation	Sagittal
Rotation	24.80 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	5500 ms
Multi-band accel. factor	2

Physio - PACE

-	
Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	Free
Diff. directions	95
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	80

Diff - Body

,	
Diffusion mode	Free
Diff. directions	95
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	2000 s/mm ²
b-value 1	1
b-value 2	1
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/mm²
Noise level	80

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.75 ms
Bandwidth	1510 Hz/Px

Sequence - Part 2

EPI factor	138
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

Excite pulse duration	5120 us
Refocus pulse duration	10240 us
FLEET ref. prep. scans	0
FLEET ref. min. TR	0 ms
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off

SIEMENS MAGNETOM Investigational_Device_7T_Plus

PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\mbep2d_B0_PA

TA: 0:31 PM: REF Voxel size: 1.5×1.5×1.5 mmPAT: 3 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	80
Dist. factor	0 %
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
TE	60.80 ms
Multi-band accel. factor	2
Filter	None
Coil elements	HC1

Contrast - Common

TR	5500 ms
TE	60.80 ms
мтс	Off
Magn. preparation	None
Flip angle	80 deg
Refocus flip angle	160 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled

Contrast - Dynamic

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

Resolution - Common

FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	138
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	54
Reference scan mode	FLEET

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	80
Dist. factor	0 %
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	P >> A
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	5500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	2

Geometry - AutoAlign

Slice group	1
Position	R4.4 P5.1 F0.7 mm
Orientation	T > C-24.8
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	R4.4 P5.1 F0.7
R	4.4 mm
Р	5.1 mm
F	0.7 mm
Initial Rotation	-180.00 deg
Initial Orientation	T > C
T > C	-24.8
> S	0.0

Geometry - Saturation

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

Geometry - Navigator

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	Sum of Squares
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Standard
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R7.3 P20.5 F57.6 mm
Orientation	Sagittal
Rotation	24.86 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R6.7 A26.8 H10.7 mm
Orientation	Sagittal
Rotation	24.80 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	5500 ms
Multi-band accel. factor	2

Physio - PACE

Resp. control	Off
Multi-band accel. factor	2

Diff - Neuro

Diffusion mode	Free
Diff. directions	95
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 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	80

Diff - Body

Diffusion mode	Free
Diff. directions	95
Diffusion Scheme	Monopolar
Diff. weightings	1
b-value	0 s/mm²
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	80

Diff - Composing

Inline Composing	Off	
Distortion Corr.	Off	

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.75 ms
Bandwidth	1510 Hz/Px

Sequence - Part 2

EPI factor	138
Gradient mode	Fast
Excitation	Standard
RF spoiling	Off

5120 us
10240 us
0
0 ms
Off
On
Off
Online

SIEMENS MAGNETOM Investigational_Device_7T_Plus

FFT scale factor	1.00
FLEET iPAT ref. FA	12.0 deg
Physio recording	Off

\\USER\Khan\NeuroAnalytics\DBS_snSx\3D_TOF_3slabs_Flow_FH

TA: 5:21 PM: REF Voxel size: 0.3×0.3×0.4 mmPAT: 3 Rel. SNR: 1.00 : fl_r

Properties

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

Routine

Slab group	1
Slabs	3
Dist. factor	-17.50 %
Position	R5.8 P0.3 F27.0 mm
Orientation	T > C5.3
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	20.0 %
Slices per slab	40
FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.40 mm
TR	18.0 ms
TE	3.75 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D)
Coil elements	HC1

Contrast - Common

TR TE	18.0 ms
TE	3.75 ms
TD	0.000 ms
MTC	Off
Flip angle	15 deg
Fat suppr. Water suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.40 mm
Base resolution	704
Phase resolution	100 %
Slice resolution	96 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry - Common

Slab group	1
Slabs	3
Dist. factor	-17.50 %
Position	R5.8 P0.3 F27.0 mm
Orientation	T > C5.3
Phase enc. dir.	R >> L
Slice oversampling	20.0 %
Slices per slab	40
FoV read	210 mm
FoV phase	81.3 %
Slice thickness	0.40 mm
TR	18.0 ms
Multi-slice mode	Sequential
Series	Descending
Concatenations	3

Geometry - AutoAlign

_	
Slab group	1
Position	R5.8 P0.3 F27.0 mm
Orientation	T > C5.3
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R5.8 P0.3 F27.0
R	5.8 mm
Р	0.3 mm
F	27.0 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	5.3
> S	0.0

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Special sat.	None

Set-n-Go Protocol	Off
Table position	Н

Geometry - Tim Planning Suite

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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R8.0 A0.4 F8.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	204 mm
! F >> H	162 mm
! R >> L	175 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R4.4 P23.3 F56.3 mm
Orientation	Sagittal
Rotation	19.56 deg
A >> P	91 mm
F >> H	84 mm
R >> L	145 mm
Vol. Visibility	On
pTx Volume	2
Vol. Property	B1 Shim Vol.
Position	R3.8 A30.1 H7.3 mm
Orientation	Sagittal
Rotation	19.50 deg
A >> P	98 mm
F >> H	125 mm
R >> L	143 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	18.0 ms
Concatenations	3

Physio - Cardiac

Fat suppr.	None
Dark blood	Off
FoV read	210 mm
FoV phase	81.3 %
Phase resolution	100 %

Angio - Common

TONE ramp	70 %
Flow direction	F >> H
Flip angle	15 deg
MTC	Off
Measurements	1
3D centric reordering	On

Angio - Inline

Subtract	Off	
Measurements	1	
StdDev	Off	
Save original images	On	

Angio - MIP

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

Angio - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	On

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	Yes
Multi-slice mode	Sequential
Bandwidth	203 Hz/Px

Sequence - Part 2

Gradient mode	Fast
RF spoiling	On

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_tra_320_p2_700x700x1000

TA: 4:08 PM: REF Voxel size: 0.7×0.7×1.0 mmPAT: 2 Rel. SNR: 1.00 : tse

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	50 %
Position	R6.5 A3.9 F26.6 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	7500.0 ms
TE	76 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HC1

Contrast - Common

TR	7500.0 ms
TE	76 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

220 mm
81.3 %
1.0 mm
320
100 %
Off
Cartesian
Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	30
Dist. factor	50 %
Position	R6.5 A3.9 F26.6 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	7500.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Occinicity AutoAngii	
Slice group	1
Position	R6.5 A3.9 F26.6 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R6.5 A3.9 F26.6
R	6.5 mm
A	3.9 mm
F	26.6 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	30
Slice thickness	1.0 mm
Dist. factor	50 %
FoV read	220 mm
FoV phase	81.3 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R6.5 A3.9 F26.6 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	179 mm
A >> P	220 mm
A >> P F >> H	45 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R6.5 A3.9 F26.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	172 mm
R >> L	140 mm
F >> H	65 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	7500.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	81.3 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subt	ract	Off
Mea	surements	1
StdE)ev	Off
Save	e 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
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.6 ms
Bandwidth	220 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
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	18

Mode	Off	
Allowed delay	Λe	

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_cor_p2_400x400x1500

TA: 9:15 PM: REF Voxel size: 0.4×0.4×1.5 mmPAT: 2 Rel. SNR: 1.00 : tse

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	34
Dist. factor	10 %
Position	R4.4 P4.5 F17.5 mm
Orientation	C > T-18.8
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
TR	7500.0 ms
TE	102 ms
Averages	3
Concatenations	2
Filter	None
Coil elements	HC1

Contrast - Common

TR	7500.0 ms
TE	102 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	3
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
Base resolution	480
Phase resolution	100 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off	
Elliptical filter	Off	

Geometry - Common

Slice group	1
Slices	34
Dist. factor	10 %
Position	R4.4 P4.5 F17.5 mm
Orientation	C > T-18.8
Phase enc. dir.	R >> L
FoV read	192 mm
FoV phase	84.6 %
Slice thickness	1.5 mm
TR	7500.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
Position	R4.4 P4.5 F17.5 mm
Orientation	C > T-18.8
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R4.4 P4.5 F17.5
R	4.4 mm
Р	4.5 mm
F	17.5 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-18.8
> S	0.0

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	34
Slice thickness	1.5 mm
Dist. factor	10 %
FoV read	192 mm
FoV phase	84.6 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R4.4 P4.5 F17.5 mm
Orientation	C > T-18.8
Rotation	0.00 deg
R >> L	163 mm
R >> L F >> H A >> P	192 mm
A >> P	56 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R4.4 P4.5 F17.5 mm
Orientation	C > T-18.8
Rotation	0.00 deg
R >> L	144 mm
F >> H	161 mm
A >> P	71 mm
Vol. Visibility	On
•	

System - Tx/Rx

Frequency 1H	296.941213 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	7500.0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	192 mm
FoV phase	84.6 %
Phase resolution	100 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag MIP-Cor MIP-Tra MIP-Time	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
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.7 ms
Bandwidth	217 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	12
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	18

Mode	Off
Allowed delay	0 s

\\USER\Khan\NeuroAnalytics\DBS_snSx\resolve_mddw_20_tra_p3

TA: 10:28 PM: REF Voxel size: 1.0×1.0×1.0 mmPAT: 3 Rel. SNR: 1.00 : resolve

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	26
Dist. factor	0 %
Position	L0.0 P0.0 F10.5 mm
Orientation	T > C14.9
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	3500 ms
TE 1	57 ms
TE 2	93 ms
Concatenations	1
Filter	Raw filter
Coil elements	HC1

Contrast - Common

TR	3500 ms	
TE 1	57 ms	
TE 2	93 ms	
MTC	Off	
Magn. preparation	None	
Flip angle	170 deg	
Fat suppr.	Fat sat.	
Fat sat. mode	Weak	

Contrast - Dynamic

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	210 mm	
FoV phase	100.0 %	
Slice thickness	1.0 mm	
Base resolution	210	
Phase resolution	100 %	
Phase partial Fourier	Off	
Readout partial Fourier	Off	
Readout segments	7	
Interpolation	Off	

Resolution - iPAT

Accel, mode	GRAPPA

Resolution - iPAT

Accel	. factor PE	3	
Ref. li	nes PE	70	
Refer	ence scan mode	EPI/separate	

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	On	

Geometry - Common

Slice group	1
Slices	26
Dist. factor	0 %
Position	L0.0 P0.0 F10.5 mm
Orientation	T > C14.9
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	3500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L0.0 P0.0 F10.5 mm
Orientation	T > C14.9
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P0.0 F10.5
R	0.0 mm
A	0.0 mm
F	10.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	14.9
> S	0.0

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	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	L0.0 P0.0 F10.5 mm
Orientation	T > C14.9
Rotation	0.00 deg
A >> P R >> L F >> H	210 mm
R >> L	210 mm
F >> H	26 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	296.941213 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	3500 ms
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	700 s/mm ²
b-value 1	1
b-value 2	1
Diff. weighted images	On
Trace weighted images	On
ADC maps	On
FA maps	On
Mosaic	On
Tensor	On
Noise level	50

Diff - Body

Diffusion mode	MDDW
Diff. directions	20
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	700 s/mm ²

Diff - Body

b-value 1	1
b-value 2	1
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/mm²
Noise level	50

Diff - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Contrasts	2
Optimization	Min. TE
Multi-slice mode	Interleaved
Echo spacing	0.34 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	70
RF pulse type	Low SAR
Gradient mode	Fast
Reacquisition mode	On

Mode	Off	

\\USER\Khan\NeuroAnalytics\DBS_snSx\t2_tse_tra_320_p2_700x700x1000

TA: 4:24 PM: REF Voxel size: 0.7×0.7×1.0 mmPAT: 2 Rel. SNR: 1.00 : tse

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	50 %
Position	L0.0 A15.1 F81.9 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	8000.0 ms
TE	76 ms
Averages	4
Concatenations	1
Filter	None
Coil elements	HC2

Contrast - Common

TR	8000.0 ms
TE	76 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

Contrast - Dynamic

Averages	4
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	220 mm	
FoV phase	81.3 %	
Slice thickness	1.0 mm	
Base resolution	320	
Phase resolution	100 %	
Phase partial Fourier	Off	
Trajectory	Cartesian	
Interpolation	Off	

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	30
Dist. factor	50 %
Position	L0.0 A15.1 F81.9 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	220 mm
FoV phase	81.3 %
Slice thickness	1.0 mm
TR	8000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Comony AutoAngii	
Slice group	1
Position	L0.0 A15.1 F81.9 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	L0.0 A15.1 F81.9
L	0.0 mm
A	15.1 mm
F	81.9 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Saturation

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

Geometry - Navigator

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

Geometry - Tim CT

Tim CT mode	Off
Slices	30
Slice thickness	1.0 mm
Dist. factor	50 %
FoV read	220 mm
FoV phase	81.3 %

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	Volume-selective
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 A15.1 F81.9 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	179 mm
A >> P	220 mm
F >> H	45 mm
Reset	Off

System - pTx Volumes

B1 Shim mode Volume-selective pTx Volume 1 Vol. Property B1 Shim Vol. Position L0.0 A3.5 F82.5 mm Orientation Transversal Rotation 0.00 deg A >> P 142 mm R >> L 220 mm F >> H 55 mm		
Vol. Property B1 Shim Vol. Position L0.0 A3.5 F82.5 mm Orientation Transversal Rotation 0.00 deg A >> P 142 mm R >> L 220 mm	B1 Shim mode	Volume-selective
Position L0.0 A3.5 F82.5 mm Orientation Transversal Rotation 0.00 deg A >> P 142 mm R >> L 220 mm	pTx Volume	1
Orientation Transversal Rotation 0.00 deg A >> P 142 mm R >> L 220 mm	Vol. Property	B1 Shim Vol.
Rotation 0.00 deg A >> P 142 mm R >> L 220 mm	Position	L0.0 A3.5 F82.5 mm
A >> P 142 mm R >> L 220 mm	Orientation	Transversal
R >> L 220 mm	Rotation	0.00 deg
	A >> P	142 mm
F >> H 55 mm	R >> L	220 mm
	F >> H	55 mm
Vol. Visibility On	Vol. Visibility	On

System - Tx/Rx

Frequency 1H	296.941213 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	8000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	81.3 %
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.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Optimization	In phase
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	12.6 ms
Bandwidth	220 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	8
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	18

Mode	Off
Allowed delay	0 s