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#### \\FORSKNING

#### Johanna

#### **TSSfinal**

TSS\_coil\_QA\_fMRI\_23-07-03\_D

localizer D localizer D tfl\_sag\_2p5mmISO\_largeFOV tfl\_sag\_2p5mmISO\_largeFOV\_refv550 DREAM2D\_sag\_2p5mmlSO\_largeFOV DREAM2D\_sag\_2p5mmISO\_mediumFOV DREAM2D\_sag\_2p5mmISO\_mediumFOV\_refv367 coilQA\_sag\_FH\_1p5x1p5x2mm\_largeFOV coilQA\_sag\_FH\_1p5x1p5x2mm\_smallFOV coilQA\_tra\_RL\_0p5x0p5x5mm gre\_2mmISO\_multichannel\_uncomb localizer\_D t1\_mp2rage\_cor\_nonSelHS1\_0.7iso tfl\_sag\_2p5mmISO\_largeFOV\_refv550 ep2d\_lgFOVc45\_0p85\_R2PF6\_TE30\_BW1132 dzne\_ep3d\_fmri\_EPI16 dzne\_ep3d\_fmri\_EPI10 gre\_B0\_sag gre\_B0\_tra

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\localizer\_D

TA: 0:18 PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

#### **Properties**

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

#### Routine

Routine	
Slice group	1
Slices	3
Dist. factor	50 %
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	R15.8 A13.6 F49.8 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Slices	3
Dist. factor	50 %
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	25 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
TE	3.67 ms
Averages	1
Concatenations	9
Filter	Distortion Corr.(3D), Elliptical filter
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	7.7 ms
TE	3.67 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

# **Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

#### **Contrast - Dynamic**

Multiple series

Resolution - Common	
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	On

Each measurement

#### **Resolution - iPAT**

PAT mode	Nlana
IPAT mode	None
1 / 11 111000	110110

# **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

# **Geometry - Common**

0	
Slice group	1
Slices	3
Dist. factor	50 %
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	R15.8 A13.6 F49.8 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Slices	3
\$;E1Di&Q <del>td</del> &to&4	50 %
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	9

# Geometry - AutoAlign

Slice group	1
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2

#### **Geometry - AutoAlign**

<u></u>	
Position	R15.8 A13.6 F49.8 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A15.4 F49.8
R	2.9 mm
Α	15.4 mm
F	49.8 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 CT**

Tim CT mode	Off
Slices	3
Slice thickness	5.0 mm
Dist. factor	50 %
FoV read	280 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	H >> F
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

# **System - Adjustments**

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

# **System - Adjust Volume**

! Position	L0.0 A25.1 F32.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	175 mm
! R >> L	201 mm
! F >> H	259 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1

#### System - Tx/Rx

Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	400.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	7.7 ms
Concatenations	9
Segments	1

# Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	280 mm
FoV phase	100.0 %
Phase resolution	75 %

# **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

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

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

# Sequence - Part 2

Segments	1
Acoustic noise reduction	Active

# SIEMENS MAGNETOM Terra

# Sequence - Part 2

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

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04:B05-08:C09-12:D13-16:E17-20:H21-24

Mode	Off	

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\localizer\_D

TA: 7.0 s PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

#### **Properties**

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

# Routine

Slice group	1
Slices	3
Dist. factor	50 %
Position	R15.8 A44.6 F50.5 mm
Orientation	Coronal
Phase enc. dir.	F >> H
AutoAlign	
Phase oversampling	25 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
TE	3.67 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(3D), Elliptical filter
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	7.7 ms
TE	3.67 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

### **Contrast - Dynamic**

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

# **Resolution - Common**

FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	On

#### **Resolution - iPAT**

PAT mode	None
Resolution - Filter Imag	ge
Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	On
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	On	

# **Geometry - Common**

Slice group	1
Slices	3
Dist. factor	50 %
Position	R15.8 A44.6 F50.5 mm
Orientation	Coronal
Phase enc. dir.	F >> H
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3

# Geometry - AutoAlign

9,217 20,1121 21	
Slice group	1
Position	R15.8 A44.6 F50.5 mm
Orientation	Coronal
Phase enc. dir.	F >> H
AutoAlign	
Initial Position	R15.8 A44.6 F50.5
R	15.8 mm
A	44.6 mm
F	50.5 mm
Initial Rotation	89.80 deg
Initial Orientation	Coronal

# **Geometry - Saturation**

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

# **Geometry - Tim CT**

Tim CT mode	Off
Slices	3
Slice thickness	5.0 mm
Dist. factor	50 %
FoV read	280 mm
FoV phase	100.0 %
Segments	1

#### **System - Miscellaneous**

Positioning mode	REF

# **System - Miscellaneous**

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

# **System - Adjustments**

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

# **System - Adjust Volume**

! Position	L0.0 A25.1 F32.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	175 mm
! R >> L	201 mm
! F >> H	259 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	400.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	7.7 ms
Concatenations	3
Segments	1

# Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	280 mm
FoV phase	100.0 %
Phase resolution	75 %

# **Physio - PACE**

Resp. control	Off
Concatenations	3

#### **Inline - Common**

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

#### Inline - MIP

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

#### **Inline - Soft Tissue**

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

# Inline - Composing

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

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

# Sequence - Part 2

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

# Sequence - Nuclei

TX/RX Nucleus	1H	
TX/RX delta frequency	0 Hz	
TX Nucleus	None	
TX delta frequency	0 Hz	
Coil elements	A01-04;B05-08;C09-12;D	13-16;E17-20;H

		_
Mode	Off	
IVIOUC	Oli	

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\tfl\_sag\_2p5mmlSO\_largeFOV

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

#### **Properties**

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

#### Routine

Slice group	1
Slices	28
Dist. factor	100 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	28
Dist. factor	100 %
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
TR	34420.0 ms
TE	2.31 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	34420.0 ms
TE	2.31 ms
Magn. preparation	None
Flip angle	10 deg
Fat suppr. Water suppr.	None
Water suppr.	None

# **Contrast - Dynamic**

Averages	1
Reconstruction	Magnitude
Measurements	1
Modedicinomo	•
Multiple series	Each measurement
Multiple selles	Lacii illeasurement

#### **Resolution - Common**

FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
Base resolution	144
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode

<u> </u>		
Resolution - Filter Image		
Image Filter	Off	
Distortion Corr.	On	
Mode	3D	
Unfiltered images	On	
Prescan Normalize	Off	
Normalize	Off	
B1 filter	Off	

None

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	Off	

# **Geometry - Common**

Slice group	1
Slices	28
Dist. factor	100 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	28
Dist. factor	100 %
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
TR	34420.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1
	•

# Geometry - AutoAlign

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 F2.9
L	2.4 mm
A	45.3 mm
F	2.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

# **System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	3 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P

### **System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

# Sequence - Part 2

RF spoiling	On	
Turbo factor	88	

# **Sequence - Assistant**

Mode	Off

# **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	L1.2 A45.3 F2.9 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	208 mm
F >> H	341 mm
R >> L	140 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

#### Inline - MIP

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

# Inline - Composing

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	5.1 ms
Bandwidth	400 Hz/Px

# Sequence - Part 2

RF pulse type	Low SAR
Gradient mode	Normal
Excitation	Slice-sel.

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\tfl\_sag\_2p5mmlSO\_largeFOV\_refv 550

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

#### **Properties**

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

#### **Routine**

Slice group	1
Slices	28
Dist. factor	100 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	28
Dist. factor	100 %
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
TR	34420.0 ms
TE	2.31 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D13-1

#### **Contrast - Common**

TR TE	34420.0 ms
TE	2.31 ms
Magn. preparation	None
Flip angle	10 deg
Fat suppr. Water suppr.	None
Water suppr.	None

# **Contrast - Dynamic**

Averages	1
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

#### **Resolution - Common**

FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
Base resolution	144
Phase resolution	100 %
Phase partial Fourier	Off

#### **Resolution - Common**

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

#### **Resolution - iPAT**

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

#### **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

Slice group	1
Slices	28
Dist. factor	100 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	28
Dist. factor	100 %
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
TR	34420.0 ms
Multi-signzmoste	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 F2.9
L	2.4 mm
A	45.3 mm
F	2.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

# **System - Miscellaneous**

ſ	Positioning mode	ISO	

# **System - Miscellaneous**

Table position F Table position 3 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		
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	Table position	F
Sagittal R >> L Coronal A >> P Transversal F >> H Coil Combine Mode Sum of Squares Save uncombined Off Matrix Optimization Off AutoAlign	Table position	3 mm
Coronal A >> P Transversal F >> H Coil Combine Mode Sum of Squares Save uncombined Off Matrix Optimization Off AutoAlign	MSMA	S - C - T
Transversal F >> H Coil Combine Mode Sum of Squares Save uncombined Off Matrix Optimization Off AutoAlign	Sagittal	R >> L
Coil Combine Mode Sum of Squares Save uncombined Off Matrix Optimization Off AutoAlign	Coronal	A >> P
Save uncombined Off Matrix Optimization Off AutoAlign	Transversal	F >> H
Matrix Optimization Off AutoAlign	Coil Combine Mode	Sum of Squares
AutoAlign	Save uncombined	Off
<u> </u>	Matrix Optimization	Off
Coil Select Mode Default	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	L1.2 A45.3 F2.9 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	208 mm
F >> H	341 mm
R >> L	140 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

#### **Inline - Common**

Subtract	Off	
Measurements	1	
StdDev	Off	
Save original images	On	

# Inline - MIP

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

# **Inline - Composing**

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	5.1 ms
Bandwidth	400 Hz/Px

# Sequence - Part 2

RF pulse type	Low SAR
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	88

|--|

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\DREAM2D\_sag\_2p5mmlSO\_largeF OV

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00: 727f999

#### **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	11
Dist. factor	0 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
FoV read	384 mm
FoV phase	47.4 %
Slice thickness	2.5 mm
TR	6000 ms
TE 1	2.04 ms
TE 2	3.18 ms
Averages	1
Concatenations	11
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	6000 ms
TE 1	2.04 ms
TE 2	3.18 ms
Flip angle 1	50 deg
Flip angle 2	6 deg

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

#### **Resolution - Common**

FoV read	384 mm
FoV phase	47.4 %
Slice thickness	2.5 mm
Base resolution	152
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mo	ode	None
1 / 1 1110	dc	NOTIC

#### **Resolution - Filter Image**

Image Filter	Off
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# **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

Slice group	1
Slices	11
Dist. factor	0 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	384 mm
FoV phase	47.4 %
Slice thickness	2.5 mm
TR	6000 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	11

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation ;E17-20;H21-24 Phase enc. dir.	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 H0.1
L	2.4 mm
Α	45.3 mm
F	0.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

#### **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off

13-1

# System - Adjustments

Adjustment Tolerance	Auto	

# System - Adjust Volume

! Position	L0.9 A43.0 F14.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	41 mm
! F >> H	350 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Multi-slice mode	Sequential
Bandwidth	910 Hz/Px

# Sequence - Part 2

Echo train duration	357 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	72

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21-24

# Sequence - Special

Preparation scans	2
Preparation loops	0
Sample T1	2000 ms
RF-Duration	800 us
Prep RF-Duration	400 us
Time-BW-Product	3.2
Timing Scheme	STE*
Mixing Time	1140 us
FFT Scale	10
Calculate FlipMap	On
HDR DICOMs	Off
Scale risetime	1.20

Mode	Off	
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# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\DREAM2D\_sag\_2p5mmlSO\_mediu mFOV

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00: 727f999

#### **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	11
	• •
Dist. factor	0 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
TR	6000 ms
TE 1	2.04 ms
TE 2	3.10 ms
Averages	1
Concatenations	11
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D13-

#### **Contrast - Common**

TR	6000 ms
TE 1	2.04 ms
TE 2	3.10 ms
Flip angle 1	50 deg
Flip angle 2	6 deg

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

#### **Resolution - Common**

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
Base resolution	80
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode None	
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#### **Resolution - Filter Image**

Image Filter	Off
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# **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	Off	

# **Geometry - Common**

Slice group	1
Slices	11
Dist. factor	0 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
TR	6000 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	11

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation ;E17-20;H21-24 Phase enc. dir.	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 H0.1
L	2.4 mm
Α	45.3 mm
F	0.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

# **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off

# System - Adjustments

Adjustment Tolerance	Auto	

# System - Adjust Volume

! Position	L0.9 A45.6 F3.9 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	41 mm
! F >> H	199 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Multi-slice mode	Sequential
Bandwidth	1010 Hz/Px

# Sequence - Part 2

Echo train duration	386 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	80

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21-24

# Sequence - Special

Preparation scans	2
Preparation loops	0
Sample T1	2000 ms
RF-Duration	800 us
Prep RF-Duration	400 us
Time-BW-Product	3.2
Timing Scheme	STE*
Mixing Time	1060 us
FFT Scale	10
Calculate FlipMap	On
HDR DICOMs	Off
Scale risetime	1.20

Mode Off
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# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\DREAM2D\_sag\_2p5mmlSO\_mediu mFOV\_refv367

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00 : 727f999

#### **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	11	
Dist. factor	0 %	
Position	L2.4 A45.3 F2.9 mm	
Orientation	Sagittal	
Phase enc. dir.	A >> P	
AutoAlign		
FoV read	200 mm	
FoV phase	100.0 %	
Slice thickness	2.5 mm	
TR	6000 ms	
TE 1	2.04 ms	
TE 2	3.10 ms	
Averages	1	
Concatenations	11	
Filter	Distortion Corr.(3D)	
Coil elements	A01-04;B05-08;C09-12;D1	3-1

#### **Contrast - Common**

TR	6000 ms
TE 1	2.04 ms
TE 2	3.10 ms
Flip angle 1	50 deg
Flip angle 2	6 deg

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

#### **Resolution - Common**

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
Base resolution	80
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode		None	
	 _		

# **Resolution - Filter Image**

Image Filter	Off
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#### **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	Off	

#### **Geometry - Common**

Slice group	1
Slices	11
Dist. factor	0 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.5 mm
TR	6000 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	11

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Orientation ;E17-20;H21-24 Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 H0.1
L	2.4 mm
Α	45.3 mm
F	0.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

# **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off

# System - Adjustments

Adjustment Tolerance	Auto	
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# System - Adjust Volume

! Position	L0.9 A45.6 F3.9 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	166 mm
! R >> L	41 mm
! F >> H	199 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	367.000 V

# Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Multi-slice mode	Sequential
Bandwidth	1010 Hz/Px

# Sequence - Part 2

Echo train duration	386 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	80

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21-24

# Sequence - Special

Preparation scans	2
Preparation loops	0
Sample T1	2000 ms
RF-Duration	800 us
Prep RF-Duration	400 us
Time-BW-Product	3.2
Timing Scheme	STE*
Mixing Time	1060 us
FFT Scale	10
Calculate FlipMap	On
HDR DICOMs	Off
Scale risetime	1.20

Mode	Off	
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# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\coilQA\_sag\_FH\_1p5x1p5x2mm\_lar geFOV

TA: 3:20 PM: FIX Voxel size: 1.5×1.5×2.0 mmRel. 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
Wait for user to start	Off
Start measurements	Single measurement

#### Routine

Slice group	1
Slices	13
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	
Phase oversampling	0 %
FoV read	384 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	2
Concatenations	13
Filter	None
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	30.0 ms
TE	6.0 ms
TD	0 ms
MTC	Off
Flip angle	12 deg
Fat suppr. Water suppr.	None
Water suppr.	None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	384 mm	
FoV phase	100.0 %	
Slice thickness	2.0 mm	
Base resolution	256	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

#### **Resolution - Filter Image**

	0"	
limada Filtar	Off	
Image Filter	OII	

#### **Resolution - Filter Image**

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	13
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
FoV read	384 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	13

# Geometry - AutoAlign

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign E17-20 H21-24 Initial Position	 L2.4 A45.3 H0.1
L	2.4 mm
Α	45.3 mm
F	0.1 mm
Initial Rotation	90.00 deg
Initial Orientation	Sagittal

# **Geometry - Saturation**

Fot ourne	None
Fat suppr.	None
Water suppr.	None
Special sat.	None

#### **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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

# System - Adjustments

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

# **System - Adjust Volume**

! Position	L2.0 A36.5 F42.5 mm
! Orientation	Sagittal
! Rotation	77.10 deg
! F >> H ! A >> P	269 mm
! A >> P	68 mm
! R >> L	32 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	30.0 ms
Concatenations	13

# Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	200 Hz/Px

# Sequence - Part 2

Gradient mode	Fast
RF spoiling	On

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21-24

# Sequence - Special

ICE program	IceProgramCoilUtils
Prep. scans duration	0 ms
Optimal SNR	On
GFactor	On
Rx coil diode switching	On

Mode Off	
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# 

TA: 1:40 PM: FIX Voxel size: 1.5×1.5×2.0 mmRel. 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
Wait for user to start	Off
Start measurements	Single measurement

#### Routine

Slice group	1
Slices	13
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	2
Concatenations	13
Filter	None
Coil elements	A01-04;B05-08;C09-12;D13-

#### **Contrast - Common**

TR	30.0 ms
TE	6.0 ms
TD	0 ms
MTC	Off
Flip angle	12 deg
Fat suppr. Water suppr.	None
Water suppr.	None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	192 mm	
FoV phase	100.0 %	
Slice thickness	2.0 mm	
Base resolution	128	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

#### **Resolution - Filter Image**

	0"	
limada Filtar	Off	
Image Filter	OII	

#### **Resolution - Filter Image**

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	13
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	13

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign E17-20,H21-24 Initial Position	 L2.4 A45.3 H0.1
L	2.4 mm
Α	45.3 mm
F	0.1 mm
Initial Rotation	90.00 deg
Initial Orientation	Sagittal

# **Geometry - Saturation**

Fot ourne	None
Fat suppr.	None
Water suppr.	None
Special sat.	None

#### **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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

# System - Adjustments

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

# **System - Adjust Volume**

! Position	L2.0 A36.5 F42.5 mm
! Orientation	Sagittal
! Rotation	77.10 deg
! F >> H	269 mm
! A >> P	68 mm
! R >> L	32 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	30.0 ms
Concatenations	13

# Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	200 Hz/Px

# Sequence - Part 2

Gradient mode	Fast
RF spoiling	On

# Sequence - Nuclei

TX/RX Nucleus	1H	
TX/RX delta frequency	0 Hz	
TX Nucleus	None	
TX delta frequency	0 Hz	
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21	1-24

# Sequence - Special

ICE program	IceProgramCoilUtils
Prep. scans duration	0 ms
Optimal SNR	On
GFactor	On
Rx coil diode switching	On

Mode	Off	

# $\verb|\FORSKNING| Johanna| TSS final| TSS\_coil\_QA\_fMRI\_23-07-03\_D| coilQA\_tra\_RL\_0p5x0p5x5mm| TSS\_coil\_QA\_tra\_RL\_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL\_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5x5mm| TSS\_coil\_QA_tra\_RL_0p5x0p5$

TA: 2:41 PM: FIX Voxel size: 0.5×0.5×5.0 mmRel. 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
Wait for user to start	Off
Start measurements	Single measurement

#### **Routine**

Slice group	1
Slices	7
Dist. factor	300 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
TE	6.0 ms
Averages	2
Concatenations	7
Filter	None
Coil elements	A01-04;B05-08;C09-12;D13-

#### **Contrast - Common**

	••••••
TR	30.0 ms
TE	6.0 ms
TD	0 ms
MTC	Off
Flip angle	12 deg
Fat suppr. Water suppr	None
Water suppr	. None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	384
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - Filter Image**

	=	
Image Filter	Off	
Distortion Corr.	Off	

#### **Resolution - Filter Image**

Prescan Normalize	Off
Normalize	Off
B1 filter	Off

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	Off	

# **Geometry - Common**

Slice group	1
Slices	7
Dist. factor	300 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	7

# Geometry - AutoAlign

Slice group	1	
Position	L2.4 A45.3 F2.9 mm	
Orientation	Transversal	
Phase enc. dir.	R >> L	
AutoAlign		
Initial Position 6:E17-20:H21-24	L2.4 A45.3 H0.1	
μ. 17-20,1121-24 L	2.4 mm	
A	45.3 mm	
F	0.1 mm	
Initial Rotation	90.00 deg	
Initial Orientation	Transversal	

# **Geometry - Saturation**

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

#### **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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

# **System - Adjustments**

Assume Silicone	Off
Adjustment Tolerance	Auto

# **System - Adjust Volume**

! Position	L2.0 A36.5 F42.5 mm
! Orientation	Sagittal
! Rotation	77.10 deg
! F >> H	269 mm
! A >> P	68 mm
! R >> L	32 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	30.0 ms
Concatenations	7

# Sequence - Part 1

Introduction	Off
Dimension	2D
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	200 Hz/Px

# Sequence - Part 2

Gradient mode	Fast
RF spoiling	On

# Sequence - Nuclei

TX/RX Nucleus	1H	
TX/RX delta frequency	0 Hz	
TX Nucleus	None	
TX delta frequency	0 Hz	
Coil elements	A01-04;B05-08;C09-12;D	13-16;E17-20;H21-24

# Sequence - Special

ICE program	IceProgramCoilUtils
Prep. scans duration	0 ms
Optimal SNR	On
GFactor	On
Rx coil diode switching	On

Mode	Off

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\gre\_2mmlSO\_multichannel\_uncom b

TA: 1:21 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : fl

#### **Properties**

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

#### **Routine**

Slice group	1
Slices	44
Dist. factor	0 %
Position	L2.4 A41.7 F36.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	384 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	550.0 ms
TE	3.80 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	550.0 ms
TE	3.80 ms
MTC	Off
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

# **Contrast - Dynamic**

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

# **Resolution - Common**

FoV read	384 mm	
FoV phase	75.0 %	
Slice thickness	2.0 mm	
Base resolution	192	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

#### **Resolution - iPAT**

PAT mode

B1 filter

Resolution - Filter Image		
Image Filter	Off	
Distortion Corr.	On	
Mode	3D	
Unfiltered images	On	
Prescan Normalize	Off	
Normalize	Off	

None

Off

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

# **Geometry - Common**

Slice group	1
Slices	44
Dist. factor	0 %
Position	L2.4 A41.7 F36.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	384 mm
FoV phase	75.0 %
Slice thickness	2.0 mm
TR	550.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# .04;B05-08;C09-12;D13-16;E17-20;H21-24AutoAlign

Slice group	1
Position	L2.4 A41.7 F36.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A41.7 F33.0
L	2.4 mm
A	41.7 mm
F	33.0 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 CT**

•	
Tim CT mode	Off
Slices	44
Slice thickness	2.0 mm
Dist. factor	0 %
FoV read	384 mm
FoV phase	75.0 %
Segments	1

#### **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	On
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	L2.4 A41.7 F36.0 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	288 mm
F >> H	384 mm
A >> P F >> H R >> L Reset	88 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	550.0 ms
Concatenations	1
Seaments	1

# Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	384 mm
FoV phase	75.0 %
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

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

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

# Sequence - Part 2

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

# Sequence - Nuclei

TX/RX Nucleus	1H	
TX/RX delta frequency	0 Hz	
TX Nucleus	None	
TX delta frequency	0 Hz	
Coil elements	A01-04;B05-08;C09-12;D	13-16;E17-20;H

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

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\localizer\_D

TA: 0:18 PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

#### **Properties**

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

# Routine

Routine	
Slice group	1
Slices	3
Dist. factor	50 %
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	R15.8 A45.8 F48.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Slices	3
Dist. factor	50 %
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	25 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
TE	3.67 ms
Averages	1
Concatenations	9
Filter	Distortion Corr.(3D), Elliptical filter
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	7.7 ms
TE	3.67 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

# **Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

#### **Contrast - Dynamic**

Multiple series

Resolution - Common		
FoV read	280 mm	
FoV phase	100.0 %	
Slice thickness	5.0 mm	
Base resolution	256	
Phase resolution	75 %	
Phase partial Fourier	Off	
Interpolation	On	

Each measurement

#### **Resolution - iPAT**

PAT mode	Nlana
IPAT mode	None
1 / 11 111000	110110

# **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

# **Geometry - Common**

Slice group	1
Slices	3
Dist. factor	50 %
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	50 %
Position	R15.8 A45.8 F48.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Slices	3
\$;E1Di&O <del>Id</del> &1o24	50 %
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.7 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	9

# Geometry - AutoAlign

Slice group	1
Position	R2.9 A15.4 F49.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2

# **Geometry - AutoAlign**

Position	R15.8 A45.8 F48.9 mm
Orientation	Coronal
Phase enc. dir.	F >> H
Slice group	3
Position	R11.0 A7.5 F38.4 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A15.4 F49.8
R	2.9 mm
Α	15.4 mm
F	49.8 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 CT**

Tim CT mode	Off
Slices	3
Slice thickness	5.0 mm
Dist. factor	50 %
FoV read	280 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	H >> F
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

# **System - Adjustments**

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

# **System - Adjust Volume**

! Position	L0.0 A25.1 F32.6 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	175 mm
! R >> L	201 mm
! F >> H	259 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1

#### System - Tx/Rx

Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	400.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	7.7 ms
Concatenations	9
Segments	1

# Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	280 mm
FoV phase	100.0 %
Phase resolution	75 %

# **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

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

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

# Sequence - Part 2

Segments	1	
Acoustic noise reduction	Active	

# SIEMENS MAGNETOM Terra

# Sequence - Part 2

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

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;H21-24

Mode	Off	

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\t1\_mp2rage\_cor\_nonSelHS1\_0.7is o

TA: 8:47 PM: FIX Voxel size: 0.7×0.7×0.7 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	R1.7 A47.5 F5.9 mm
Orientation	C > T-12.1 > S-0.1
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	192
FoV read	260 mm
FoV phase	65.8 %
Slice thickness	0.70 mm
TR	5000.0 ms
TE	2.15 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D13-

#### **Contrast - Common**

TR	5000.0 ms	
TE	2.15 ms	
Magn. preparation	Non-sel. IR	
TI 1	700 ms	
TI 2	2400 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	260 mm
FoV phase	65.8 %
Slice thickness	0.70 mm
Base resolution	368
Phase resolution	100 %
Slice resolution	100 %

#### **Resolution - Common**

Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	28
Accel. factor 3D	1
Reference scan mode	Integrated

# **Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	3D
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	50 %
Position	R1.7 A47.5 F5.9 mm
Orientation	C > T-12.1 > S-0.1
Phase enc. dir.	R >> L
6, 원ice 20, 413 any pling	0.0 %
Slices per slab	192
FoV read	260 mm
FoV phase	65.8 %
Slice thickness	0.70 mm
TR	5000.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

# Geometry - AutoAlign

Slab group	1
Position	R1.7 A47.5 F5.9 mm
Orientation	C > T-12.1 > S-0.1
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	R1.7 A47.5 F2.9
R	1.7 mm
A	47.5 mm
F	2.9 mm
Initial Rotation	-0.70 deg
Initial Orientation	C > T
C > T	-12.1
> S	-0.1

# **Geometry - Navigator**

# **System - Miscellaneous**

Positioning mode	FIX
Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

# **System - Adjust Volume**

! Position	L1.0 A51.0 H10.9 mm
! Orientation	T > C10.5 > S2.3
! Rotation	-0.20 deg
! A >> P	51 mm
! R >> L	59 mm
! F >> H	145 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	5000.0 ms
Concatenations	1

#### Physio - Cardiac

Magn. preparation	Non-sel. IR	
TI 1	700 ms	
TI 2	2400 ms	
Fat suppr.	None	
Dark blood	Off	
FoV read	260 mm	
FoV phase	65.8 %	
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

Distortion Corr.	On
Mode	3D
Unfiltered images	Off

# 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	6.4 ms
Bandwidth	220 Hz/Px

# Sequence - Part 2

RF pulse type	Normal
Gradient mode	Normal*
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	192

# Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A01-04;B05-08;C09-12;D13-16;E17-20;F

# Sequence - Special

Use Custom Inversion	On
Inv pulse type	HS1
HS pulse dur	10240 us
HS pulse offset	0 Hz
HS flip angle	360 deg
TR_FOCI B1	0.00 uT
Echo Spacing	6400 us
Denoise Weighting	100

		_
Mode	Off	
IVIOUC	Oli	

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\tfl\_sag\_2p5mmlSO\_largeFOV\_refv 550

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

#### **Properties**

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

#### **Routine**

Slice group	1
Slices	28
Dist. factor	100 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	28
Dist. factor	100 %
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
TR	34420.0 ms
TE	2.31 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(3D)
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	34420.0 ms
TE	2.31 ms
Magn. preparation	None
Flip angle	10 deg
Fat suppr. Water suppr.	None
Water suppr.	None

# **Contrast - Dynamic**

Averages	1
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

#### **Resolution - Common**

FoV read	340 mm
FoV phase	61.1 %
Slice thickness	2.5 mm
Base resolution	144
Phase resolution	100 %
Phase partial Fourier	Off

#### **Resolution - Common**

	Interpolation	Off
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#### **Resolution - iPAT**

PAT mode None
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#### **Resolution - Filter Image**

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

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

	Slice group	1
	Slices	28
	Dist. factor	100 %
	Position	L2.4 A45.3 F2.9 mm
	Orientation	Sagittal
	Phase enc. dir.	A >> P
	Slice group	2
	Slices	28
	Dist. factor	100 %
	Position	R0.1 A45.3 F2.9 mm
	Orientation	Sagittal
	Phase enc. dir.	A >> P
	FoV read	340 mm
	FoV phase	61.1 %
	Slice thickness	2.5 mm
	TR	34420.0 ms
013-1	<u> </u>	Interleaved
	Series	Interleaved
	Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	R0.1 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 F2.9
L	2.4 mm
A	45.3 mm
F	2.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal
	· ·

# **System - Miscellaneous**

Positioning mode	ISO	

# **System - Miscellaneous**

Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

# **System - Adjust Volume**

Position	L1.2 A45.3 F2.9 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	208 mm
F >> H	341 mm
R >> L	140 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

#### **Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

# Inline - MIP

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

# **Inline - Composing**

Distortion Corr.	On
Mode	3D
Unfiltered images	On

# Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	5.1 ms
Bandwidth	400 Hz/Px

# Sequence - Part 2

RF pulse type	Low SAR
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	88

Mode	Off

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\ep2d\_lgFOVc45\_0p85\_R2PF6\_TE3 0\_BW1132

TA: 10:10 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : epfid

#### **Properties**

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

#### Routine

Slice group	1
Slices	16
Dist. factor	0 %
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR	1290 ms
TE	30.00 ms
Multi-band accel. factor	1
Filter	Raw filter
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	1290 ms
TE	30.00 ms
MTC	Off
Magn. preparation	None
Flip angle	110 deg
Fat suppr.	None

# **Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	466
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
Base resolution	192
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

# **Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	52

#### **Resolution - iPAT**

Reference scan mode	GRE	
Resolution - Filter Image		
Distortion Corr.	Off	
Prescan Normalize	Off	

#### **Resolution - Filter Rawdata**

Raw filter	On
Elliptical filter	Off
Hamming	Off

# **Geometry - Common**

Slice group	1
Slices	16
Dist. factor	0 %
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR	1290 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-band accel. factor	1

#### **Geometry - AutoAlign**

Slice group	1
6;E17920tiA21-24	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A53.3 F9.2
R	2.9 mm
Α	53.3 mm
F	9.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	12.3
> S	0.0

#### **Geometry - Saturation**

Fat suppr.	None
Special sat.	None

#### 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
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	L0.6 A46.9 F8.0 mm
! Orientation	T > C12.3
! Rotation	0.00 deg
! A >> P	40 mm
! R >> L	52 mm
! F >> H	60 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	1290 ms
Multi-band accel. factor	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	466
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1 ms
Bandwidth	1132 Hz/Px

# Sequence - Part 2

EPI factor	192
Gradient mode	Fast
RF spoiling	Off

# Sequence - Special

Excite pulse duration	3840 us
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Disable freq. update	Off
Force equal slice timing	Off
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Physio recording	Legacy
Triggering scheme	Standard

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\dzne\_ep3d\_fmri\_EPI16

TA: 10:14 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : ep3d f015566

#### **Properties**

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

# Routine

Slab group	1
Slabs	1
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Slab Scale	-10 %
Slices per slab	16
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR	2300 ms
TE 1	11.20 ms
Averages	1
Multi-echo Shots	1
Filter	Raw filter
Coil elements	A01-04;B05-08;C09-12;D13-1

#### **Contrast - Common**

TR	2300 ms
TE 1	11.20 ms
Multi-echo spacing	17.18 ms
MTC	Off
Magn. preparation	None
TI	900 ms
Flip angle	17 deg
Fat suppr.	None

#### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	264
Pause after meas.	0.0 s

#### **Resolution - Common**

FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
Base resolution	192
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode	GRAPPA
Acc. factor PE	2
Ref. lines PE	52
Acc. factor 3D	1
Ref. lines 3D	16
Reference Scan Mode	GRE/separate

#### **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
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	16
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR 6:E17-20:H21-24	2300 ms
6;E17-20;H21-24 Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

# Geometry - AutoAlign

Slab group	1
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A53.3 F9.2
R	2.9 mm
A	53.3 mm
F	9.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	12.3
> S	0.0

# **Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None

# System - Miscellaneous

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

# **System - Miscellaneous**

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

# Sequence - Special

EPI rise time factor	1.10	
Mosaic DICOMs	On	

# **Sequence - Assistant**

# System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Freq. adjust	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

# **System - Adjust Volume**

! Position	L0.6 A46.9 F8.0 mm
! Orientation	T > C12.3
! Rotation	0.00 deg
! A >> P	40 mm
! R >> L	52 mm
! F >> H	60 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.01 ms
Bandwidth	1240 Hz/Px

# Sequence - Part 2

EPI factor	16
Segmentation	6
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

# Sequence - Special

PATRef FA	5 deg
RF duration	2560 us
RF BWT product	30
Ernst T1	1300 ms
PATRef prep. shots	200
Volume dummy shots	0
Dummy Measurements	0
CHECK FLIP ANGLE!	On
Integrated PC	Off
Invert PE	Off
Water Exc.	-none-
Phase Correction	per Blade

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\dzne\_ep3d\_fmri\_EPI10

TA: 10:17 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : ep3d f015566

#### **Properties**

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

# Routine

Slab group	1
Slabs	1
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Slab Scale	-10 %
Slices per slab	16
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
TR	2800 ms
TE 1	8.04 ms
Averages	1
Multi-echo Shots	1
Filter	Raw filter
Coil elements	A01-04;B05-08;C09-12;D13-16

#### **Contrast - Common**

TR	2800 ms
TE 1	8.04 ms
Multi-echo spacing	11.32 ms
MTC	Off
Magn. preparation	None
ТІ	900 ms
Flip angle	15 deg
Fat suppr.	None

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	218
Pause after meas.	0.0 s

#### **Resolution - Common**

FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
Base resolution	192
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode	GRAPPA
Acc. factor PE	2
Ref. lines PE	52
Acc. factor 3D	1
Ref. lines 3D	16
Reference Scan Mode	GRE/separate

#### **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
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	16
FoV read	164 mm
FoV phase	100.0 %
Slice thickness	3.00 mm
F17-20:H21-24	2800 ms
6:E17-20;H21-24 Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

# Geometry - AutoAlign

Slab group	1
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A53.3 F9.2
R	2.9 mm
A	53.3 mm
F	9.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	12.3
> S	0.0

# **Geometry - Saturation**

Saturation mode	Standard
Fat suppr.	None

# System - Miscellaneous

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

# System - Miscellaneous

Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	Default

# Sequence - Special

Mosaic DICOMs	On	
Sequence - Assistant		
Mode	Off	

# System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Freq. adjust	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

# **System - Adjust Volume**

! Position	L0.6 A46.9 F8.0 mm
! Orientation	T > C12.3
! Rotation	0.00 deg
! A >> P	40 mm
! R >> L	52 mm
! F >> H	60 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.03 ms
Bandwidth	1302 Hz/Px

# Sequence - Part 2

EPI factor	10
Segmentation	10
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

# Sequence - Special

PATRef FA	5 deg
RF duration	2560 us
RF BWT product	30
Ernst T1	1300 ms
PATRef prep. shots	200
Volume dummy shots	0
Dummy Measurements	0
Integrated PC	Off
Invert PE	Off
Water Exc.	-none-
Phase Correction	per Blade
EPI rise time factor	1.10

# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\gre\_B0\_sag

TA: 0:59 PM: FIX Voxel size: 1.1×1.1×2.0 mmRel. SNR: 1.00 : fm

#### **Properties**

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

# Routine

Slice group	1
Slices	20
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	150.0 ms
TE 1	3.06 ms
TE 2	4.08 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	150.0 ms
TE 1 TE 2	3.06 ms
TE 2	4.08 ms
MTC	Off
Flip angle	19 deg
Fat suppr.	None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	200 mm	
FoV phase	100.0 %	
Slice thickness	2.0 mm	
Base resolution	190	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

# **Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	Off

#### **Resolution - Filter Image**

Prescan Normalize	Off
Normalize	Off
B1 filter	Off

#### **Resolution - Filter Rawdata**

Raw filter	Off	
Elliptical filter	Off	

# **Geometry - Common**

Slice group	1
Slices	20
Dist. factor	20 %
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	150.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.4 A45.3 F2.9 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	L2.4 A45.3 H0.1
[ 6;E17-20;H21-24	2.4 mm
A	45.3 mm
F	0.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

#### **Geometry - Saturation**

Fat suppr.	None
Special sat.	None

#### System - Miscellaneous

Positioning mode	FIX
Table position	F
Table position	3 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	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off

# SIEMENS MAGNETOM Terra

# System - Adjustments

Adjustment Tolerance	Auto	

# System - Adjust Volume

! Position	L0.6 A46.9 F11.0 mm
! Orientation	T > C12.3
! Rotation	0.00 deg
! A >> P	40 mm
! R >> L	52 mm
! F >> H	60 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	797 Hz/Px

# Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Mode Off	
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# \\FORSKNING\Johanna\TSSfinal\TSS\_coil\_QA\_fMRI\_23-07-03\_D\gre\_B0\_tra

TA: 0:59 PM: FIX Voxel size: 1.1×1.1×3.0 mmRel. SNR: 1.00 : fm

#### **Properties**

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

# Routine

Slice group	1
Slices	16
Dist. factor	0 %
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	150.0 ms
TE 1	3.06 ms
TE 2	4.08 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A01-04;B05-08;C09-12;D

#### **Contrast - Common**

TR	150.0 ms
TE 1	3.06 ms
TE 2	4.08 ms
MTC	Off
Flip angle	19 deg
Fat suppr.	None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	200 mm	
FoV phase	100.0 %	
Slice thickness	3.0 mm	
Base resolution	190	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

#### **Resolution - Filter Image**

	•	
Image Filter	Off	
Distortion Corr.	Off	

#### **Resolution - Filter Image**

Prescan Normalize	Off
Normalize	Off
B1 filter	Off

#### **Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

Slice group	1
Slices	16
Dist. factor	0 %
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	150.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	R2.9 A53.3 F9.2 mm
Orientation	T > C12.3
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R2.9 A53.3 F9.2
R 6;E17-20;H21-24	2.9 mm
A A	53.3 mm
F	9.2 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	12.3
> S	0.0

#### **Geometry - Saturation**

Fat suppr.	None
Special sat.	None

#### 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	TrueForm
Confirm freg. adjustment	Off

# System - Adjustments

Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

# System - Adjust Volume

! Position	L0.6 A46.9 F8.0 mm
! Orientation	T > C12.3
! Rotation	0.00 deg
! A >> P	40 mm
! R >> L	52 mm
! F >> H	60 mm
Reset	Off

# System - Tx/Rx

Frequency 1H	297.098817 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	550.000 V

# Sequence - Part 1

On
2D
Off
2
No
Interleaved
797 Hz/Px

# Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Mode	Off
IWOUE	Oli