# \\USER\Hutcherson\Daniel\FoodRegfMRI Updated\AAHead\_Scout\_32ch-head-coil

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

#### **Properties**

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

# Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
TE	1.37 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

### **Contrast - Common**

TR	3.15 ms
TE	1.37 ms
Flip angle	8 deg

# **Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

#### **Resolution - Common**

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

#### **Resolution - iPAT**

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

#### **Resolution - iPAT**

Reference scan mode	Integrated	
Resolution - Filter Image		
Image Filter	Off	
Distortion Corr.	Off	
Prescan Normalize	On	
Unfiltered images	Off	
Normalize	Off	
B1 filter	Off	

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

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.15 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

#### **Geometry - AutoAlign**

Slab group	1
Position	L0.0 A10.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

# **System - Miscellaneous**

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

# **System - Adjustments**

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off

Confirm freq. adjustment	Off	
	011	
Assume Dominant Fat	Off	
Assume Dominant Fat	Oii	
Assume Silicone	Off	
Assume officence	Oii	
Adjustment Tolerance	Auto	
Aujustilient Tolerance	Auto	

# Sequence - Part 2

RF spoiling	On	
Sequence - Assistant		
Mode	Off	

# **System - Adjust Volume**

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

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

# System - Tx/Rx

Frequency 1H	123.243127 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - PACE

Resp. control	Off
Concatenations	1

#### **Inline - Common**

Flip angle	8 deg
Measurements	1
Time to center	6.2 s

# Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

# Inline - MIP

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

# Inline - Composing

Distortion Corr.	Off
------------------	-----

# Sequence - Part 1

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

# Sequence - Part 2

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

# \\USER\Hutcherson\Daniel\FoodRegfMRI Updated\localizer

TA: 0:49 PM: REF Voxel size: 0.5×0.5×4.0 mmPAT: Off Rel. SNR: 1.00 : fl

#### **Properties**

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

# Routine

Slice group	1			
Slices	10			
Dist. factor	20 %			
Position	L3.3 A17.3 H24.8 mm			
Orientation	S > C-2.0 > T-0.8			
Phase enc. dir.	A >> P			
Slice group	2			
Slices	1			
Dist. factor	20 %			
Position	L3.3 A17.3 H24.8 mm			
Orientation	T > C-2.5 > S0.8			
Phase enc. dir.	A >> P			
Slice group	3			
Slices	1			
Dist. factor	20 %			
Position	L3.3 A17.3 H24.8 mm			
Orientation	C > T2.5 > S2.0			
Phase enc. dir.	R >> L			
AutoAlign	Head > Brain			
Phase oversampling	0 %			
FoV read	240 mm			
FoV phase	100.0 %			
Slice thickness	4.0 mm			
TR	8.6 ms			
TE	4.00 ms			
Averages	2			
Concatenations	12			
	Prescan Normalize,			
	Elliptical filter			
Coil elements	HEA;HEP			

#### **Contrast - Common**

TR	8.6 ms
TE	4.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

# **Contrast - Dynamic**

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

#### **Contrast - Dynamic**

Multiple series	Each measurement	
Resolution - Common		
FoV read	240 mm	
FoV phase	100.0 %	
Slice thickness	4.0 mm	
Base resolution	256	
Phase resolution	90 %	
Phase partial Fourier	Off	
Interpolation	On	

#### **Resolution - iPAT**

П	PAT mode	None
1	r A i illoue	NONE

# **Resolution - Filter Image**

Image	Filter	Off	
Distorti	on Corr.	Off	
Presca	n Normalize	On	
Unfilter	ed images	Off	
Normal	ize	Off	
B1 filte	r	Off	

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

Raw filter	Off
Elliptical filter	On

#### **Geometry - Common**

Slice group	1
Slices	10
Dist. factor	20 %
Position	L3.3 A17.3 H24.8 mm
Orientation	S > C-2.0 > T-0.8
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L3.3 A17.3 H24.8 mm
Orientation	T > C-2.5 > S0.8
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L3.3 A17.3 H24.8 mm
Orientation	C > T2.5 > S2.0
Phase enc. dir.	R >> L
FoV read	240 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	8.6 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	12

# **Geometry - AutoAlign**

Slice group	1
Position	L3.3 A17.3 H24.8 mm
Orientation	S > C-2.0 > T-0.8
Phase enc. dir.	A >> P
Slice group	2
Position	L3.3 A17.3 H24.8 mm

# **Geometry - AutoAlign**

Orientation	T > C-2.5 > S0.8
Phase enc. dir.	A >> P
Slice group	3
Position	L3.3 A17.3 H24.8 mm
Orientation	C > T2.5 > S2.0
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
Α	20.0 mm
Н	0.0 mm
Initial Rotation	-0.02 deg
Initial Orientation	Sagittal

# **Geometry - Saturation**

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

#### **System - Miscellaneous**

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

# **System - Adjustments**

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

# System - Adjust Volume

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

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

# System - Tx/Rx

Frequency 1H	123.243127 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	8.6 ms
Concatenations	12
Segments	1

# Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	100.0 %
Phase resolution	90 %

# **Physio - PACE**

Resp. control	Off	
Concatenations	12	

#### Inline - Common

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

#### Inline - MIP

MIP-Sag MIP-Cor MIP-Tra MIP-Time	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
PEI MIP - time	Off
Measurements	1

# **Inline - Composing**

Ο#	
Off	
	Off

# Sequence - Part 1

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

# Sequence - Part 2

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

# **Sequence - Assistant**

Mode	Off
Allowed delay	0 s

# \\USER\Hutcherson\Daniel\FoodRegfMRI Updated\t1\_mprage\_tra\_p2\_iso

TA: 7:10 PM: REF Voxel size: 1.0×1.0×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

#### **Properties**

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

# Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L3.5 A17.9 H22.0 mm
Orientation	T > C-6.7 > S1.2
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
Slice oversampling	60.0 %
Slices per slab	160
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	1.00 mm
TR	2000.0 ms
TE	2.4 ms
Averages	2
Concatenations	1
Filter	Prescan Normalize,
	Image Filter
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000.0 ms
TE	2.4 ms
Magn. preparation	Non-sel. IR
ТІ	1100 ms
Flip angle	9 deg
Fat suppr.	None
Water suppr.	None

### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	256 mm	
FoV phase	75.0 %	
Slice thickness	1.00 mm	
Base resolution	256	
Phase resolution	100 %	
Slice resolution	100 %	
Phase partial Fourier	Off	
Slice partial Fourier	Off	

#### **Resolution - Common**

Interpolation	Off
•	

#### **Resolution - iPAT**

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

# **Resolution - Filter Image**

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

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

Raw filter	Off
Elliptical filter	Off

#### **Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L3.5 A17.9 H22.0 mm
Orientation	T > C-6.7 > S1.2
Phase enc. dir.	R >> L
Slice oversampling	60.0 %
Slices per slab	160
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	1.00 mm
TR	2000.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

#### **Geometry - AutoAlign**

1
L3.5 A17.9 H22.0 mm
T > C-6.7 > S1.2
R >> L
Head > Brain
L0.0 A20.5 F2.8
0.0 mm
20.5 mm
2.8 mm
90.09 deg
T > C
-4.2
0.2

# **Geometry - Navigator**

#### **System - Miscellaneous**

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

# **System - Adjustments**

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

# System - Adjust Volume

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

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

# System - Tx/Rx

Frequency 1H	123.243127 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	2000.0 ms
Concatenations	1

# Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1100 ms
Fat suppr.	None
Dark blood	Off
FoV read	256 mm
FoV phase	75.0 %
Phase resolution	100 %

# **Physio - PACE**

Resp. control	Off
Concatenations	1

# Inline - Common

Subtract	Off	

#### **Inline - Common**

Measurements	1
StdDev	Off
Save original images	On

#### Inline - MIP

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

# **Inline - Composing**

Distortion Corr.	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	6.9 ms
Bandwidth	260 Hz/Px

# Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On
Turbo factor	256

# **Sequence - Assistant**

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

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TR TE MTC	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

1	Accel. mode	Slice accel.
	Accel. factor PE	1
	Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

# **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F>> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off
·	<u> </u>

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

#### **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

1	Accel. mode	Slice accel.
	Accel. factor PE	1
	Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

# **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F>> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off
·	<u> </u>

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	70 deg	
Fat suppr.	Fat sat.	

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

1	Accel. mode	Slice accel.
	Accel. factor PE	1
	Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

# **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.58 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
P	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F>> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off
·	<u> </u>

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

# **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 4:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	130
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	130
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 6:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	190
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

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

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off	
Elliptical filter	Off	
Hamming	Off	

# **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	190
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 3:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	1
Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

# **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	100
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

TA: 3:31 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 3 Rel. SNR: 1.00 : epfid

#### **Properties**

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

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	2000 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	70 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	100
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

#### **Resolution - iPAT**

1	Accel. mode	Slice accel.
	Accel. factor PE	1
	Ref. lines PE	32

#### **Resolution - iPAT**

Accel. factor slice	3
Reference scan mode	EPI/separate

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

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	2000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# Geometry - AutoAlign

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	A >> P
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	0.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

# **Geometry - Saturation**

Fat suppr.	Fat sat.
Special sat.	None

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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	-1.30 deg
A >> P	192 mm
R >> L	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.243127 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	2000 ms
Concatenations	1

# **BOLD**

01110: 313	0"
GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	40
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Baseline
Meas[16]	Baseline
Meas[17]	Baseline
Meas[18]	Baseline
Meas[19]	Baseline
Meas[20]	Baseline
Meas[21]	Active

# **BOLD**

Meas[22]	Active
Meas[23]	Active
Meas[24]	Active
Meas[25]	Active
Meas[26]	Active
Meas[27]	Active
Meas[28]	Active
Meas[29]	Active
Meas[30]	Active
Meas[31]	Active
Meas[32]	Active
Meas[33]	Active
Meas[34]	Active
Meas[35]	Active
Meas[36]	Active
Meas[37]	Active
Meas[38]	Active
Meas[39]	Active
Meas[40]	Active
Motion correction	Off
Spatial filter	Off
Measurements	100
Delay in TR	0 ms
Multiple series	Off
	·

# Sequence - Part 1

Introduction	On
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.55 ms
Bandwidth	2368 Hz/Px

# Sequence - Part 2

EPI factor	96
RF pulse type	Normal
Gradient mode	Performance*
Excitation	Standard

# \\USER\Hutcherson\Daniel\FoodRegfMRI Updated\gre\_field\_mapping

TA: 1:57 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	On
Start measurements	Single measurement

# Routine

Slice group	1
Slices	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	679.0 ms
TE 1	4.92 ms
TE 2	7.38 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

#### **Contrast - Common**

TR	679.0 ms
TE 1	4.92 ms
TE 1 TE 2	7.38 ms
MTC	Off
Flip angle	60 deg
Fat suppr.	None

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	96
Phase resolution	100 %
Phase partial Fourier	7/8
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	69
Dist. factor	0 %
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	R >> L
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	679.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

# **Geometry - AutoAlign**

Slice group	1
Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Phase enc. dir.	R >> L
AutoAlign	Head > Brain
Initial Position	L0.0 P4.2 H4.7
L	0.0 mm
Р	4.2 mm
Н	4.7 mm
Initial Rotation	90.14 deg
Initial Orientation	T > C
T > C	-24.2
> S	-0.4

#### **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	Head > Brain
Coil Select Mode	Off - AutoCoilSelect

# **System - Adjustments**

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off

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

# System - Adjust Volume

Position	L2.5 P7.1 H28.4 mm
Orientation	T > C-26.7 > S1.2
Rotation	88.70 deg
R >> L	192 mm
A >> P	192 mm
F >> H	138 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
--------------	----------

# System - Tx/Rx

Frequency 1H	123.243127 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	599 Hz/Px

# Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

# Sequence - Assistant

Mode	Off