#### **Table of contents**

# \\USER Auerbach **REMIND RT15** anat-loc\_ses-rt15 fmap-acq-restpre\_dir-PA fmap-acq-restpre\_dir-AP func-bold\_task-2vol\_run-01 func-bold\_task-restpre\_run-01 func-bold\_task-restpre\_run-02 fmap-acq-realtime\_dir-PA fmap-acq-realtime\_dir-AP func-bold\_task-transferpre\_run-01 func-bold\_task-feedback\_run-01 func-bold\_task-feedback\_run-02 func-bold\_task-feedback\_run-03 func-bold\_task-feedback\_run-04 func-bold\_task-feedback\_run-05 func-bold\_task-transferpost\_run-01 fmap-acq-restpost\_dir-PA fmap-acq-restpost\_dir-AP func-bold\_task-restpost\_run-01 func-bold\_task-restpost\_run-02 fmap-acq-selfref\_dir-PA fmap-acq-selfref\_dir-AP func-bold\_task-selfref\_run-01

func-bold\_task-selfref\_run-02

### \\USER\Auerbach\REMIND\RT15\anat-loc\_ses-rt15

TA: 0:12 PM: REF Voxel size: 0.5×0.5×7.0 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

Routine	
Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
TE	3.69 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HC1-7;NC1,2

#### **Contrast - Common**

TR	7.5 ms
TE	3.69 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

### **Contrast - Dynamic**

1	Averages	2
ļ	Averaging mode	Short term
F	Reconstruction	Magnitude
r	Measurements	1

#### **Contrast - Dynamic**

Multiple series	Each measurement
Resolution - Common	
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On

#### **Resolution - iPAT**

PAT mode	Nlana
IPAT mode	None
1 / 11 111000	110110

#### **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	On

### **Geometry - Common**

Geometry - Common	
Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	7.5 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	3
	<u> </u>

# **Geometry - AutoAlign**

Slice group	1
Position	L0.0 A20.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Position	L0.0 A20.0 H0.0 mm

### **Geometry - AutoAlign**

Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	L0.0 A20.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	L0.0 A20.0 H0.0
L	0.0 mm
A	20.0 mm
Н	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

# **Geometry - Saturation**

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

#### **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	
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	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

### Physio - Signal1

1st Signal/Mode	None
TR	7.5 ms
Concatenations	3
Segments	1

### Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	91 %

# 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.	Off	
DISTOLLION CON.	Oli	

### 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	Fast
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On

### **Sequence - Assistant**

Mode	Off
Allowed delay	0 s

# \\USER\Auerbach\REMIND\RT15\fmap-acq-restpre\_dir-PA

TA: 0:36 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

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

### Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

,	
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

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B1 Shim mode	TrueForm
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# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### Inline - Common

Subtract	Off
Measurements	3
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

D1 : 11 O	0"
Distortion Corr.	Off

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\fmap-acq-restpre\_dir-AP

TA: 0:36 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

Prio recon	Off
Load images to viewer	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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
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# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### **Inline - Common**

Subtract	Off
Measurements	3
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

D'atant'an Oam	011	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-2vol\_run-01

TA: 0:15 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	2
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

# **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Sum of Squares
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	
Introduction	UII	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-restpre\_run-01

TA: 5:13 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 8 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         72           Dist. factor         0 %           Position         Isocenter           Orientation         Transversal           Phase enc. dir.         P >> A           AutoAlign            Phase oversampling         0 %           FoV read         256 mm           FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None           Coil elements         HC1-7		
Dist. factor         0 %           Position         Isocenter           Orientation         Transversal           Phase enc. dir.         P >> A           AutoAlign            Phase oversampling         0 %           FoV read         256 mm           FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None	Slice group	1
Position         Isocenter           Orientation         Transversal           Phase enc. dir.         P >> A           AutoAlign            Phase oversampling         0 %           FoV read         256 mm           FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None	Slices	72
Orientation         Transversal           Phase enc. dir.         P >> A           AutoAlign            Phase oversampling         0 %           FoV read         256 mm           FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None	Dist. factor	0 %
Phase enc. dir.         P >> A           AutoAlign            Phase oversampling         0 %           FoV read         256 mm           FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None	Position	Isocenter
AutoAlign          Phase oversampling       0 %         FoV read       256 mm         FoV phase       100.0 %         Slice thickness       2.0 mm         TR       1200 ms         TE       30.0 ms         Averages       1         Concatenations       1         Filter       None	Orientation	Transversal
Phase oversampling       0 %         FoV read       256 mm         FoV phase       100.0 %         Slice thickness       2.0 mm         TR       1200 ms         TE       30.0 ms         Averages       1         Concatenations       1         Filter       None	Phase enc. dir.	P >> A
FoV read       256 mm         FoV phase       100.0 %         Slice thickness       2.0 mm         TR       1200 ms         TE       30.0 ms         Averages       1         Concatenations       1         Filter       None	AutoAlign	
FoV phase         100.0 %           Slice thickness         2.0 mm           TR         1200 ms           TE         30.0 ms           Averages         1           Concatenations         1           Filter         None	Phase oversampling	0 %
Slice thickness       2.0 mm         TR       1200 ms         TE       30.0 ms         Averages       1         Concatenations       1         Filter       None	FoV read	256 mm
TR       1200 ms         TE       30.0 ms         Averages       1         Concatenations       1         Filter       None	FoV phase	100.0 %
TE 30.0 ms  Averages 1  Concatenations 1  Filter None	Slice thickness	2.0 mm
Averages 1 Concatenations 1 Filter None	TR	1200 ms
Concatenations 1 Filter None	TE	30.0 ms
Filter None	Averages	1
	Concatenations	1
Coil elements HC1-7	Filter	None
	Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	250
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

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

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat avers	Fat ant
Fat suppr.	Fat sat.
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	Sum of Squares
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
R >> L F >> H Reset	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	Off
Spatial filter	Off
Measurements	250
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-restpre\_run-02

TA: 5:13 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	250
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat avers	Fat ant
Fat suppr.	Fat sat.
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	Sum of Squares
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P R >> L F >> H	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	Off
Spatial filter	Off
Measurements	250
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\fmap-acq-realtime\_dir-PA

TA: 0:36 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

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

### Routine

O.I.	4
Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm

# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### **Inline - Common**

Subtract	Off
Measurements	3
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.	Oπ	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\fmap-acq-realtime\_dir-AP

TA: 0:36 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

Prio recon	Off
Load images to viewer	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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm

# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### Inline - Common

Subtract	Off
Measurements	3
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

D1 : 11 O	0"
Distortion Corr.	Off

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-transferpre\_run-01

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

# **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat avers	Fat ant
Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-feedback\_run-01

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7
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#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-feedback\_run-02

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-feedback\_run-03

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

ſ	Multi-slice mode	Interleaved
	Free echo spacing	Off
	Echo spacing	0.57 ms
	Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-feedback\_run-04

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7
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#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off	
Elliptical filter	Off	
Hamming	Off	

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-feedback\_run-05

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-transferpost\_run-01

TA: 3:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7
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#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	150
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	On
Spatial filter	Off
Measurements	150
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\fmap-acq-restpost\_dir-PA

TA: 0:36 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

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

### Routine

-	
Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off
Prescan Normalize	Off

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm

# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### **Inline - Common**

Subtract	Off
Measurements	3
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

D'atant'an Oam	011	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\fmap-acq-restpost\_dir-AP

TA: 0:36 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

Prio recon	Off
Load images to viewer	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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR TE MTC	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Ave	rages	1
Ave	raging mode	Long term
Red	construction	Magnitude
Mea	asurements	3
Dela	ay in TR	0 ms
Mul	tiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off	
Elliptical filter	Off	
Hamming	Off	

#### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

D4 OL: 1	
TB1 Shim mode	TrueForm
B1 Shim mode	i rue-orm

# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### **Inline - Common**

Subtract	Off
Measurements	3
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

D'atant'an Oam	011	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

### \\USER\Auerbach\REMIND\RT15\func-bold\_task-restpost\_run-01

TA: 5:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7
	<u> </u>

#### **Contrast - Common**

TR	1200 ms
TE	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	250
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off	
Elliptical filter	Off	
Hamming	Off	

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L F >> H	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline Baseline
Meas[9]	24000
Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Active
Motion correction	Off
Spatial filter	Off
Measurements	250
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

### \\USER\Auerbach\REMIND\RT15\func-bold\_task-restpost\_run-02

TA: 5:13 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms
TE MTC	30.0 ms
MTC	Off
Flip angle	61 deg
Fat suppr.	Fat sat.

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	250
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

	<u> </u>
Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 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	15
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]	Active
Motion correction	Off
Spatial filter	Off
Measurements	250
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\fmap-acq-selfref\_dir-PA

TA: 0:36 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

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

### Routine

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Ave	rages	1
Ave	raging mode	Long term
Red	construction	Magnitude
Mea	asurements	3
Dela	ay in TR	0 ms
Mul	tiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
Orientation	Transversal
Rotation	180.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
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# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### Inline - Common

Subtract	Off
Measurements	3
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

D'atant'an Oam	011	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\fmap-acq-selfref\_dir-AP

TA: 0:36 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : epse

#### **Properties**

Prio recon	Off
Load images to viewer	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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
TE	43.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	6000 ms
TE	43.0 ms
MTC	Off
Magn. preparation	None
Fat suppr.	Fat sat.
Fat sat. mode	Weak

### **Contrast - Dynamic**

Ave	rages	1
Ave	raging mode	Long term
Red	construction	Magnitude
Mea	asurements	3
Dela	ay in TR	0 ms
Mul	tiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2

#### **Resolution - iPAT**

Ref. lines PE	36
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	6000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
Fat sat. mode	Weak
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm

# System - Tx/Rx

Frequency 1H	123.259412 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

# Physio - Signal1

1st Signal/Mode	None
TR	6000 ms
Concatenations	1

### **Inline - Common**

Subtract	Off
Measurements	3
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

D'atant'an Oam	011	
Distortion Corr.	Off	

# Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	On
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-selfref\_run-01

TA: 6:42 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7
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#### **Contrast - Common**

TR	1200 ms	
TE	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	324
Delay in TR	0 ms
Multiple series	Off

### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

#### **Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat avers	Fataat
Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
! F >> H	144 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.259412 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	1200 ms
Concatenations	1

### **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
'	0
Ignore meas. at start	•
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	15
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]	Active
Motion correction	Off
Spatial filter	Off
Measurements	324
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

# \\USER\Auerbach\REMIND\RT15\func-bold\_task-selfref\_run-02

TA: 6:42 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 8 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	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HC1-7

#### **Contrast - Common**

TR	1200 ms	
TE MTC	30.0 ms	
MTC	Off	
Flip angle	61 deg	
Fat suppr.	Fat sat.	

### **Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	324
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

Accel. mode	Slice accel.
Accel. factor PE	2
Ref. lines PE	36

#### **Resolution - iPAT**

Accel. factor slice	4
Reference scan mode	EPI/separate

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	Off	

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

Raw filter	Off
Elliptical filter	Off
Hamming	Off

### **Geometry - Common**

Slice group	1
Slices	72
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	2.0 mm
TR	1200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

### Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	Isocenter
L	0.0 mm
Р	0.0 mm
Н	0.0 mm
Initial Rotation	-180.00 deg
Initial Orientation	Transversal

### **Geometry - Saturation**

Fat suppr.	Fat sat.
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	Performance
AutoAlign	
Coil Select Mode	Off - AutoCoilSelect

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	Isocenter
! Orientation	Transversal
! Rotation	179.00 deg
! A >> P	256 mm
! R >> L	256 mm
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Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

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

# Physio - Signal1

1st Signal/Mode	None
TR	1200 ms
Concatenations	1

### **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
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Temp. highpass filter	On
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Paradigm size	15
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Meas[10]	Baseline
Meas[11]	Baseline
Meas[12]	Baseline
Meas[13]	Baseline
Meas[14]	Baseline
Meas[15]	Active
Motion correction	Off
Spatial filter	Off
Measurements	324
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off	

# Sequence - Part 1

Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.57 ms
Bandwidth	2170 Hz/Px

# Sequence - Part 2

EPI factor	128
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard