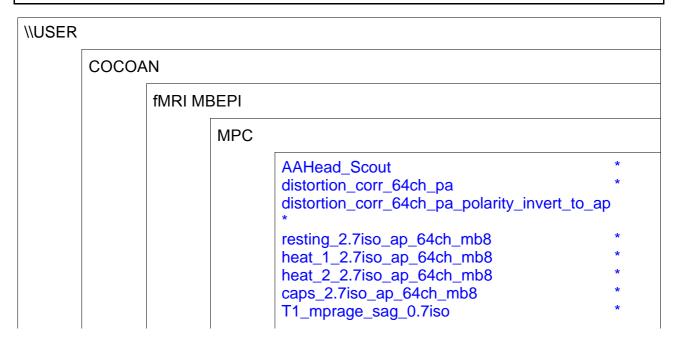
#### SIEMENS MAGNETOM Prisma

#### **Table of contents**



# \\USER\COCOAN\fMRI MBEPI\MPC\AAHead\_Scout \*

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	On
preparation	
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	HC1-7;NC1,2

#### **Contrast - Common**

TR	3.15 ms
TE	1.37 ms
Flip angle	8 deg

## **Contrast - Dynamic**

Ave	erages	1	
Ave	eraging mode	Short term	
Red	construction	Magnitude	
Me	asurements	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**

	Filter Image	-	
Reference scar	n 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	Off - AutoCoilSelect

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
A >> P R >> L F >> H	350 mm
F >> H	350 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

# System - Tx/Rx

Frequency 1H	123.253601 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
----------------------

# Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
Contrasts	1
TR	3.15 ms
TE	1.37 ms

# Sequence - Part 1

Introduction	On
Dimension	3D

## Sequence - Part 1

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.
RF spoiling	On

## Sequence - Assistant

Mode	Off

# \\USER\COCOAN\fMRI MBEPI\MPC\distortion\_corr\_64ch\_pa \*

TA: 0:22 PM: REF Voxel size: 2.7×2.7×2.7 mmPAT: Off 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

O.I.	
Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	7220 ms
TE	73.00 ms
Multi-band accel. factor	1
Filter	Raw filter, Prescan
	Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR	7220 ms
TE	73.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

## **Contrast - Dynamic**

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

# **Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
Base resolution	82
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

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

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

Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

## **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	7220 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

## **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
Р	4.9 mm
F	19.8 mm
Initial Rotation	-180.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

#### **Geometry - Saturation**

Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled
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	Off
AutoAlign	
Coil Select Mode	On - 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	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	180.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	7220 ms
Multi-band accel. factor	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\distortion\_corr\_64ch\_pa\_polarity\_invert\_to\_ap \*

TA: 0:22 PM: FIX Voxel size: 2.7×2.7×2.7 mmPAT: Off 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	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	7220 ms
TE	73.00 ms
Multi-band accel. factor	1
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR	7220 ms
TE	73.00 ms
MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	Fat sat.
Grad. rev. fat suppr.	Disabled

#### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	220 mm	
FoV phase	100.0 %	
Slice thickness	2.70 mm	
Base resolution	82	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

#### **Resolution - iPAT**

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

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

Distortion Corr.	Off
Prescan Normalize	On
Unfiltered images	Off

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

## **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	7220 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	1

## **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	P >> A
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
Р	4.9 mm
F	19.8 mm
Initial Rotation	-180.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

#### **Geometry - Saturation**

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

# System - Miscellaneous

Positioning mode	FIX
Table position	Н
Table position	0 mm
MSMA	S-C-T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	
Coil Select Mode	On - 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	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	180.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	7220 ms
Multi-band accel. factor	1

# **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
RF pulse type	Normal
Gradient mode	Performance
Excitation	Standard

SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Force equal slice timing	Off
FFT scale factor	1.00
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\resting\_2.7iso\_ap\_64ch\_mb8 \*

TA: 6:20 PM: FIX Voxel size: 2.7×2.7×2.7 mmPAT: Off 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	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
TE	27.20 ms
Multi-band accel. factor	8
Filter	Raw filter, Prescan
	Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR	460 ms
TE	27.20 ms
MTC	Off
Magn. preparation	None
Flip angle	44 deg
Fat suppr.	Fat sat.

## **Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	812
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	220 mm	
FoV phase	100.0 %	
Slice thickness	2.70 mm	
Base resolution	82	
Phase resolution	100 %	
Phase partial Fourier	Off	
Interpolation	Off	

## **Resolution - iPAT**

DAT made	Nana
PAT mode	None

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

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

#### **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
Р	4.9 mm
F	19.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

## **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	Off
AutoAlign	
Coil Select Mode	On - 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	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	460 ms
Multi-band accel. factor	8

## **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	812
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.90
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\heat\_1\_2.7iso\_ap\_64ch\_mb8 \*

TA: 6:20 PM: FIX Voxel size: 2.7×2.7×2.7 mmPAT: Off 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	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
TE	27.20 ms
Multi-band accel. factor	8
Filter	Raw filter, Prescan
	Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR	460 ms
TE	27.20 ms
MTC	Off
Magn. preparation	None
Flip angle	44 deg
Fat suppr.	Fat sat.

## **Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	812
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
Base resolution	82
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

DAT made	Nana
PAT mode	None

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

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

## **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
Р	4.9 mm
F	19.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

## **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	Off
AutoAlign	
Coil Select Mode	On - AutoCoilSelect

B0 Shim mode	Standard	
B1 Shim mode	TrueForm	ļ
Adjust with body coil	Off	ļ
Confirm freq. adjustment	Off	ļ

Assume Dominant Fat	Off	
Assume Silicone	Off	
Adjustment Tolerance	Auto	

# System - Adjust Volume

Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	0.00 deg
A >> P R >> L F >> H	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	460 ms
Multi-band accel. factor	8

## **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	812
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.90
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\heat\_2\_2.7iso\_ap\_64ch\_mb8 \*

TA: 8:20 PM: FIX Voxel size: 2.7×2.7×2.7 mmPAT: Off 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	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
TE	27.20 ms
Multi-band accel. factor	8
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR TE	460 ms
TE	27.20 ms
MTC	Off
Magn. preparation	None
Flip angle	44 deg
Fat suppr.	Fat sat.

## **Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1073
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
Base resolution	82
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

#### **Resolution - iPAT**

PAT mode	Nama
IPAT mode	None
1 7 11 111000	110110

### **Resolution - Filter Image**

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

#### **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
Р	4.9 mm
F	19.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

## **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	Off
AutoAlign	
Coil Select Mode	On - 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	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	460 ms
Multi-band accel. factor	8

#### **BOLD**

BOLD	
GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	1073
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.90
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\caps\_2.7iso\_ap\_64ch\_mb8 \*

TA: 11:50 PM: FIX Voxel size: 2.7×2.7×2.7 mmPAT: Off 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	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
TE	27.20 ms
Multi-band accel. factor	8
Filter	Raw filter, Prescan Normalize
Coil elements	HC1-7;NC1

#### **Contrast - Common**

TR	460 ms
TR TE	27.20 ms
MTC	Off
Magn. preparation	None
Flip angle	44 deg
Fat suppr.	Fat sat.

## **Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1528
Delay in TR	0 ms
Multiple series	Off

#### **Resolution - Common**

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
Base resolution	82
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

## **Resolution - iPAT**

PAT mode	None

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

Distortion Corr.	Off	
Prescan Normalize	On	

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

Raw filter	On
Elliptical filter	Off
Hamming	Off

#### **Geometry - Common**

Slice group	1
Slices	56
Dist. factor	0 %
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	2.70 mm
TR	460 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	8

## **Geometry - AutoAlign**

Slice group	1
Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R6.2 P4.9 F19.8
R	6.2 mm
P	4.9 mm
F	19.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-19.8
> S	-1.4

## **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	Off
AutoAlign	
Coil Select Mode	On - AutoCoilSelect

B0 Shim mode	Standard	
B1 Shim mode	TrueForm	ļ
Adjust with body coil	Off	ļ
Confirm freq. adjustment	Off	ļ

Assume Dominant Fat	Off	
Assume Silicone	Off	
Adjustment Tolerance	Auto	

# System - Adjust Volume

Position	R6.2 P4.9 F19.8 mm
Orientation	T > C-19.8 > S-1.4
Rotation	0.00 deg
A >> P R >> L F >> H	220 mm
R >> L	220 mm
F >> H	152 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Standard

# System - Tx/Rx

Frequency 1H	123.253601 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	460 ms
Multi-band accel. factor	8

## **BOLD**

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	1528
Delay in TR	0 ms
Multiple series	Off

# Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.49 ms
Bandwidth	3048 Hz/Px

# Sequence - Part 2

EPI factor	82
Gradient mode	Performance
Excitation	Standard
RF spoiling	Off

Excite pulse duration	5120 us
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.90
Physio recording	Off
Triggering scheme	Standard

# \\USER\COCOAN\fMRI MBEPI\MPC\T1\_mprage\_sag\_0.7iso \*

TA: 7:38 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 2 Rel. SNR: 1.00 : tfl

#### **Properties**

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

## Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R6.4 A11.1 F29.8 mm
Orientation	S > T-3.6 > C3.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	10 %
Slice oversampling	14.3 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2400.0 ms
TE	2.34 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize,
	Image Filter
Coil elements	HC1-7;NC1

### **Contrast - Common**

TR	2400.0 ms
TE	2.34 ms
Magn. preparation	Non-sel. IR
ТІ	1150 ms
Flip angle	8 deg
Fat suppr.	Water excit. fast
Water suppr.	None

### **Contrast - Dynamic**

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

#### **Resolution - Common**

FoV read	224 mm	
FoV phase	100.0 %	
Slice thickness	0.70 mm	
Base resolution	320	
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	32
Accel. factor 3D	1
Reference scan mode	Integrated

## **Resolution - Filter Image**

Image Filter	On
Intensity	Medium
Edge Enhancement	3
Smoothing	3
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	R6.4 A11.1 F29.8 mm
Orientation	S > T-3.6 > C3.3
Phase enc. dir.	A >> P
Slice oversampling	14.3 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2400.0 ms
Multi-slice mode	Single shot
Series	Ascending
Concatenations	1

## Geometry - AutoAlign

<u>-</u>	
Slab group	1
Position	R6.4 A11.1 F29.8 mm
Orientation	S > T-3.6 > C3.3
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R1.6 P2.8 H25.4
R	1.6 mm
P	2.8 mm
Н	25.4 mm
Initial Rotation	0.08 deg
Initial Orientation	S > C
S > C	-0.1
> T	0.0

## **Geometry - Navigator**

### **System - Miscellaneous**

•	
Positioning mode	FIX
Table position	Н
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	Head > Basis
Coil Select Mode	On - 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	R6.4 A11.1 F29.8 mm
Orientation	S > T-3.6 > C3.3
Rotation	7.19 deg
A >> P	224 mm
F >> H	224 mm
R >> L	157 mm
Reset	Off

# System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Non-sel.

# System - Tx/Rx

Frequency 1H	123.253601 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	2400.0 ms
Concatenations	1

# Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1150 ms
Fat suppr.	Water excit. fast
Dark blood	Off
FoV read	224 mm
FoV phase	100.0 %
Phase resolution	100 %

## **Physio - PACE**

Resp. control	Off
Concatenations	1

#### Inline - Common

Subtract	Off

#### **Inline - Common**

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	

# Inline - MapIt

Save original images	On
MapIt	None
Flip angle	8 deg
Measurements	1
TR	2400.0 ms
TE	2.34 ms

# Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	8.8 ms
Bandwidth	210 Hz/Px

# Sequence - Part 2

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

# Sequence - Assistant

Mode	Off
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