Table of contents

\\USER
VAARC
Joseph
UC_Berkeley_Comparison
localizer
b1map_230V
ep2d_bold_sos_0pt8_TE29_ax
ep2d_bold_sos_1pt0_TE22_ax
ep2d_bold_sos_0pt8_TE29_sag
ep2d_bold_sos_1pt0_TE22_sag
t2_swi_tra_p4_pt25_ipat15_minTE
T2_3D_FLAIR
T2_3D_FLAIR_p15
t2_spc_TE146_p15
t2_spc_TE146
mp2rage_0.7mm_TR4500
ep2d_bold_dpg_1105c_trig
ep2d_bold_pat3_sms3_1.3x1.3x1.3_dpg
ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV3_dpg
ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV2_dpg
ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_dpg
ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_68PF_dpg
ep2d_bold_pat5_sms3_0.6x0.6x0.6_dpg
ep2d_bold_pat4_sms3_0.6x0.6x0.6_68pf_dpg
ep2d_bold_pat4_sms2_0.6x0.6x0.6_68pf_dpg
ep2d_bold_pat4_sms3_0.5x0.5x0.6_fov3_58PF_dpg

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\localizer

TA: 0:28 PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: 3 Rel. SNR: 1.00 : qfl

Properties

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

Routine

Slice group	1
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	8.6 ms
TE	3.69 ms
Averages	2
Concatenations	15
Filter	Elliptical filter
Coil elements	A32

Contrast - Common

TR	8.6 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

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Contrast - Dynamic

Multiple series	Each measurement

Resolution - Common

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

Resolution - iPAT

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

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	5
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	8.6 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	15

Geometry - AutoAlign

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

Geometry - AutoAlign

Slice group	2
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slices	5
Slice thickness	5.0 mm
Dist. factor	100 %
FoV read	250 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
TR	8.6 ms
Concatenations	15
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	15

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1

Inline - MapIt

TR	8.6 ms
TE	3.69 ms

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

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\b1map_230V

TA: 9.2 s PM: FIX Voxel size: 4.0×4.0×4.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slice group	1
Slices	25
Dist. factor	100 %
Position	L0.0 A18.9 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4000.0 ms
TE	1.72 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4000.0 ms
TE	1.72 ms
Magn. preparation	None
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	16
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slice group	1
Slices	25
Dist. factor	100 %
Position	L0.0 A18.9 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	4000.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L0.0 A18.9 F10.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A18.9 F10.8
L	0.0 mm
A	18.9 mm
F	10.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Tune up

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	3.9 ms
Bandwidth	490 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
Turbo factor	64

Sequence - Assistant

Mode	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_sos_0pt8_TE29_ax

TA: 2:56 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 9 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	141
Dist. factor	0 %
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
TR	3990 ms
TE	29.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3990 ms
TE	29.0 ms
MTC	Off
Flip angle exc	84 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
Base resolution	250
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
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	141
Dist. factor	0 %
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
TR	3990 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L1.2 A7.8 H7.8
L	1.2 mm
A	7.8 mm
H	7.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-14.4
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Rotation	0.00 deg
A >> P	197 mm
R >> L	200 mm
F >> H	113 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3990 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	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

BOLD

Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1 ms
Bandwidth	1112 Hz/Px

Sequence - Part 2

EPI factor	246
RF pulse type	Fast
Gradient mode	Fast

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_sos_1pt0_TE22_ax

TA: 1:55 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 9 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	114
Dist. factor	0 %
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2640 ms
TE	22.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2640 ms
TE	22.0 ms
MTC	Off
Flip angle exc	70 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
Base resolution	200
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
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	114
Dist. factor	0 %
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2640 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L1.2 A7.8 H7.8
L	1.2 mm
A	7.8 mm
H	7.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-14.4
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	L1.2 A7.8 H7.8 mm
Orientation	T > C-14.4
Rotation	0.00 deg
A >> P	201 mm
R >> L	201 mm
F >> H	114 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2640 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	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

BOLD

Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.83 ms
Bandwidth	1388 Hz/Px

Sequence - Part 2

EPI factor	200
RF pulse type	Fast
Gradient mode	Normal

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_sos_0pt8_TE29_sag

TA: 2:56 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 9 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	141
Dist. factor	0 %
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
TR	3990 ms
TE	29.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3990 ms
TE	29.0 ms
MTC	Off
Flip angle exc	84 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
Base resolution	250
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
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	141
Dist. factor	0 %
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	98.4 %
Slice thickness	0.8 mm
TR	3990 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L2.4 A15.7 F23.5
L	2.4 mm
A	15.7 mm
F	23.5 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares

System - Miscellaneous

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	197 mm
F >> H	200 mm
R >> L	113 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	3990 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	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

BOLD

Spatial filter	Off
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1 ms
Bandwidth	1112 Hz/Px

Sequence - Part 2

EPI factor	246
RF pulse type	Fast
Gradient mode	Fast

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_sos_1pt0_TE22_sag

TA: 1:51 PM: FIX Voxel size: 1.0×1.0×1.0 mmPAT: 9 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	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	114
Dist. factor	0 %
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2530 ms
TE	22.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2530 ms
TE	22.0 ms
MTC	Off
Flip angle exc	70 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
Base resolution	200
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
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	114
Dist. factor	0 %
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
FoV read	201 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2530 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L2.4 A15.7 F23.5
L	2.4 mm
A	15.7 mm
F	23.5 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares

System - Miscellaneous

Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

Position	L2.4 A15.7 F23.5 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	201 mm
F >> H	201 mm
R >> L	114 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2530 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	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

BOLD

Spatial filter	Off
Measurements	30
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.83 ms
Bandwidth	1388 Hz/Px

Sequence - Part 2

EPI factor	200
RF pulse type	Fast
Gradient mode	Normal

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\t2_swi_tra_p4_pt25_ipat15_minTE

TA: 5:24 PM: FIX Voxel size: 0.4×0.4×1.5 mmPAT: 15 Rel. SNR: 1.00 : fl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.0 A22.3 F3.6 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	12.5 %
Slices per slab	128
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	42.0 ms
TE 1	3.10 ms
TE 2	5.98 ms
TE 3	8.86 ms
TE 4	11.74 ms
TE 5	14.62 ms
TE 6	17.50 ms
TE 7	20.38 ms
TE 8	23.26 ms
TE 9	26.14 ms
TE 10	29.02 ms
TE 11	31.90 ms
TE 12	34.78 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	42.0 ms
TE 1	3.10 ms
TE 2	5.98 ms
TE 3	8.86 ms
TE 4	11.74 ms
TE 5	14.62 ms
TE 6	17.50 ms
TE 7	20.38 ms
TE 8	23.26 ms
TE 9	26.14 ms
TE 10	29.02 ms
TE 11	31.90 ms
TE 12	34.78 ms
MTC	Off
Magn. preparation	None

Contrast - Common

Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	572
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	5
Ref. lines PE	48
Accel. factor 3D	3
Ref. lines 3D	48
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	R3.0 A22.3 F3.6 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
Slice oversampling	12.5 %
Slices per slab	128
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	42.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.0 A22.3 F3.6 mm
Orientation	T > C-14.4
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.0 A22.3 F3.6
R	3.0 mm
A	22.3 mm
F	3.6 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-14.4
> S	0.0

Geometry - Saturation

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

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	128
Slice thickness	1.50 mm
Dist. factor	20 %
FoV read	220 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R3.0 A22.3 F3.6 mm
Orientation	T > C-14.4
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm

System - Adjust Volume

F >> H	192 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
TR	42.0 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	220 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

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

Inline - MIP

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

Inline - Soft Tissue

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15 deg
Measurements	1
Contrasts	12
TR	42.0 ms

Inline - MapIt

TE 1	3.10 ms
TE 2	5.98 ms
TE 3	8.86 ms
TE 4	11.74 ms
TE 5	14.62 ms
TE 6	17.50 ms
TE 7	20.38 ms
TE 8	23.26 ms
TE 9	26.14 ms
TE 10	29.02 ms
TE 11	31.90 ms
TE 12	34.78 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	12
Flow comp. 1	No
Readout mode	Bipolar
Multi-slice mode	Interleaved
Bandwidth 1	400 Hz/Px
Bandwidth 2	400 Hz/Px
Bandwidth 3	400 Hz/Px
Bandwidth 4	400 Hz/Px
Bandwidth 5	400 Hz/Px
Bandwidth 6	400 Hz/Px
Bandwidth 7	400 Hz/Px
Bandwidth 8	400 Hz/Px
Bandwidth 9	400 Hz/Px
Bandwidth 10	400 Hz/Px
Bandwidth 11	400 Hz/Px
Bandwidth 12	400 Hz/Px

Sequence - Part 2

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

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\T2_3D_FLAIR

TA: 6:50 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 4 Rel. SNR: 1.00 : spcir

Properties

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

Routine

Slab group	1
Slabs	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	8000 ms
TE	399 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Image Filter, B1 filter
Coil elements	A32

Contrast - Common

TR	8000 ms
TE	399 ms
MTC	Off
Magn. preparation	Non-sel. T2-IR
TI 1	2150 ms
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	2
Ref. lines PE	36
Accel. factor 3D	2
Ref. lines 3D	36
Reordering Shift 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	Off
Normalize	Off
B1 filter	On
Unfiltered images	On

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	8000 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R3.0 A22.3 F25.6
R	3.0 mm
A	22.3 mm
F	25.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
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	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	224 mm
F >> H	224 mm
R >> L	157 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	8000 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. T2-IR
TI 1	2150 ms
Fat suppr.	None
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
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	3.3 ms
Adiabatic-mode	Off
Bandwidth	781 Hz/Px

Sequence - Part 2

Echo train duration	891 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	300

Sequence - Assistant

Allowed delay	30 s

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\T2_3D_FLAIR_p15

TA: 2:58 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 15 Rel. SNR: 1.00 : spcir

Properties

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

Routine

Slab group	1
Slabs	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	8000 ms
TE	399 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Image Filter, B1 filter
Coil elements	A32

Contrast - Common

TR	8000 ms
TE	399 ms
MTC	Off
Magn. preparation	Non-sel. T2-IR
TI 1	2150 ms
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	5
Ref. lines PE	48
Accel. factor 3D	3
Ref. lines 3D	48
Reordering Shift 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	Off
Normalize	Off
B1 filter	On
Unfiltered images	On

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.1 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	8000 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R3.0 A22.3 F25.6
R	3.0 mm
A	22.3 mm
F	25.6 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
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	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.0 A22.3 F25.6 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	224 mm
F >> H	224 mm
R >> L	157 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	8000 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. T2-IR
TI 1	2150 ms
Fat suppr.	None
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
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	3.3 ms
Adiabatic-mode	Off
Bandwidth	781 Hz/Px

Sequence - Part 2

Echo train duration	891 ms
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	300

Sequence - Assistant

Allowed delay	30 s

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\t2_spc_TE146_p15

TA: 2:33 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 15 Rel. SNR: 1.00 : spc

Properties

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

Routine

Slab group	1
Slabs	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	1 %
Slice oversampling	7.1 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2290 ms
TE	148 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, B1 filter
Coil elements	A32

Contrast - Common

TR	2290 ms
TE	148 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	5
Ref. lines PE	48
Accel. factor 3D	3
Ref. lines 3D	48
Reordering Shift 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	7.1 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2290 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R3.0 A22.3 F33.7
R	3.0 mm
A	22.3 mm
F	33.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
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	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	224 mm
F >> H	224 mm
R >> L	157 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	2290 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
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
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	4.34 ms
Adiabatic-mode	Off
Bandwidth	521 Hz/Px

Sequence - Part 2

Echo train duration	352 ms
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	96

Sequence - Assistant

Allowed delay	30 s

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\t2_spc_TE146

TA: 6:24 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 4 Rel. SNR: 1.00 : spc

Properties

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

Routine

Slab group	1
Slabs	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	1 %
Slice oversampling	0.0 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2290 ms
TE	148 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, B1 filter
Coil elements	A32

Contrast - Common

TR	2290 ms
TE	148 ms
MTC	Off
Magn. preparation	None
Fat suppr.	None
Blood suppr.	Off
Restore magn.	Off

Contrast - Dynamic

Averages	1.0
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
Base resolution	320
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Allowed
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Accel. factor PE	2
Ref. lines PE	48
Accel. factor 3D	2
Ref. lines 3D	48
Reordering Shift 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	On
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	224
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	2290 ms
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	R3.0 A22.3 F33.7
R	3.0 mm
A	22.3 mm
F	33.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

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

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
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	Off - AutoCoilSelect

System - Adjustments

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

System - Adjust Volume

Position	R3.0 A22.3 F33.7 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	224 mm
F >> H	224 mm
R >> L	157 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	2.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - Signal1

1st Signal/Mode	None
Trigger delay	0 ms
TR	2290 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
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
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	On
Reordering	Linear
Flow comp.	No
Echo spacing	4.34 ms
Adiabatic-mode	Off
Bandwidth	521 Hz/Px

Sequence - Part 2

Echo train duration	352 ms
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var
Turbo factor	96

Sequence - Assistant

Allowed delay	30 s

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\mp2rage_0.7mm_TR4500

TA: 7:50 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 3 Rel. SNR: 1.00 : tfl_rs

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L1.8 A7.2 F33.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	240
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	4500.0 ms
TE	3.37 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4500.0 ms
TE	3.37 ms
Magn. preparation	Non-sel. IR
TI 1	900 ms
TI 2	2750 ms
Flip angle 1	5.0 deg
Flip angle 2	3.0 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	6/8

Resolution - Common

Slice partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	36
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L1.8 A7.2 F33.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	240
FoV read	224 mm
FoV phase	100.0 %
Slice thickness	0.70 mm
TR	4500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L1.8 A7.2 F33.1 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L1.8 A7.2 F33.1
L	1.8 mm
A	7.2 mm
F	33.1 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
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	Default

System - Adjustments

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

System - Adjust Volume

Position	L1.8 A7.2 F33.1 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	224 mm
F >> H	224 mm
R >> L	168 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Physio - Signal1

1st Signal/Mode	None
TR	4500.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	900 ms
TI 2	2750 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
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	T1 map
Flip angle 1	5.0 deg
Flip angle 2	3.0 deg
Measurements	1
TR	4500.0 ms
TE	3.37 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Flow comp.	Slice
Multi-slice mode	Single shot
Echo spacing	8.3 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	180

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_dpg_1105c_trig

TA: 6.1 s PM: REF Voxel size: 3.9×3.9×5.0 mmPAT: 9 Rel. SNR: 1.00 : WIPep

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	3
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	500 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	196 ms
TE	96.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	196 ms
TE	96.0 ms
MTC	Off
Flip angle exc	90 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	500 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	36
Accel. factor slice	3
FOV shift factor	2
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	3
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	500 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	196 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

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

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H

System - Miscellaneous

Coil Combine Mode	Sum of Squares
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

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

System - Adjust Volume

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

System - Tx/Rx

Frequency 1H	297.210994 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	196 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	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

BOLD

Motion correction	Off
Spatial filter	Off
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.52 ms
Bandwidth	752 Hz/Px

Sequence - Part 2

EPI factor	128
RF pulse type	Fast
Gradient mode	Fast

Sequence - Special

DPG	Off
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_1.3x1.3x1.3_dpg

TA: 1:08 PM: FIX Voxel size: 1.3×1.3×1.3 mmPAT: 9 Rel. SNR: 1.00 : WIPep

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	111
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.3 mm
TR	2160 ms
TE	23.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2160 ms
TE	23.0 ms
MTC	Off
Flip angle exc	78 deg
Flip angle fat sat	110 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	210 mm
FoV phase	100.0 %
Slice thickness	1.3 mm
Base resolution	168
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
FOV shift factor	2
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	111
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	210 mm
FoV phase	100.0 %
Slice thickness	1.3 mm
TR	2160 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	210 mm
R >> L	210 mm
F >> H	145 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	170.000 V

Physio - Signal1

1st Signal/Mode	None
TR	2160 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.73 ms
Bandwidth	1654 Hz/Px

Sequence - Part 2

EPI factor	168
RF pulse type	Fast
Gradient mode	Normal

Sequence - Special

DPG	On
FLEET	On

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV3_dpg

TA: 1:02 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 9 Rel. SNR: 1.00 : WIPep

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	84
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
TR	2470 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2470 ms
TE	30.0 ms
MTC	Off
Flip angle exc	87 deg
Flip angle fat sat	110 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	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
Base resolution	260
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
FOV shift factor	3
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	84
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
TR	2470 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	205 mm
R >> L	208 mm
F >> H	68 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	2470 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1 ms
Bandwidth	1202 Hz/Px

Sequence - Part 2

EPI factor	256
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV2_dpg

TA: 1:02 PM: FIX Voxel size: 0.8×0.8×0.8 mmPAT: 9 Rel. SNR: 1.00 : WIPep

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	84
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
TR	2470 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2470 ms
TE	30.0 ms
MTC	Off
Flip angle exc	87 deg
Flip angle fat sat	110 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	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
Base resolution	260
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	3

Resolution - iPAT

Ref. lines PE	66
Accel. factor slice	3
FOV shift factor	2
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	84
Dist. factor	0 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	208 mm
FoV phase	98.5 %
Slice thickness	0.8 mm
TR	2470 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	205 mm
R >> L	208 mm
F >> H	68 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	2470 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1 ms
Bandwidth	1202 Hz/Px

Sequence - Part 2

EPI factor	256
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_dpg

TA: 1:46 PM: FIX Voxel size: 0.5×0.5×0.6 mmPAT: 16 Rel. SNR: 1.00 : WIPep

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	100
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	2720 ms
TE	26.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2720 ms
TE	26.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
Base resolution	382
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	4

Resolution - iPAT

Ref. lines PE	88
Accel. factor slice	4
FOV shift factor	3
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	100
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	2720 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	2720 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.35 ms
Bandwidth	818 Hz/Px

Sequence - Part 2

EPI factor	382
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_68PF_dpg

TA: 2:02 PM: FIX Voxel size: 0.5×0.5×0.6 mmPAT: 16 Rel. SNR: 1.00 : WIPep

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	100
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	3140 ms
TE	42.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3140 ms
TE	42.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
Base resolution	382
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.

Resolution - iPAT

Accel. factor PE	4
Ref. lines PE	88
Accel. factor slice	4
FOV shift factor	3
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	100
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	3140 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	120 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	3140 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	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

BOLD

Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.35 ms
Bandwidth	818 Hz/Px

Sequence - Part 2

EPI factor	382
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat5_sms3_0.6x0.6x0.6_dpg

TA: 1:41 PM: FIX Voxel size: 0.6×0.6×0.6 mmPAT: 15 Rel. SNR: 1.00 : WIPep

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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	2730 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2730 ms
TE	30.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 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	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
Base resolution	334
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	5

Resolution - iPAT

Ref. lines PE	70
Accel. factor slice	3
FOV shift factor	2
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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	2730 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	108 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	2730 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.22 ms
Bandwidth	936 Hz/Px

Sequence - Part 2

EPI factor	334
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat4_sms3_0.6x0.6x0.6_68pf_dpg

TA: 1:39 PM: FIX Voxel size: 0.6×0.6×0.6 mmPAT: 12 Rel. SNR: 1.00 : WIPep

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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	3210 ms
TE	35.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3210 ms
TE	35.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 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	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
Base resolution	334
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	4

Resolution - iPAT

Ref. lines PE	56
Accel. factor slice	3
FOV shift factor	2
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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	3210 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	108 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	3210 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.22 ms
Bandwidth	936 Hz/Px

Sequence - Part 2

EPI factor	334
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat4_sms2_0.6x0.6x0.6_68pf_dpg

TA: 1:46 PM: FIX Voxel size: 0.6×0.6×0.6 mmPAT: 8 Rel. SNR: 1.00 : WIPep

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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	4810 ms
TE	35.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4810 ms
TE	35.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 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	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
Base resolution	334
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.
Accel. factor PE	4

Resolution - iPAT

Ref. lines PE	56
Accel. factor slice	2
FOV shift factor	2
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	90
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	0.6 mm
TR	4810 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	108 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	4810 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	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

BOLD

Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	2
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.22 ms
Bandwidth	936 Hz/Px

Sequence - Part 2

EPI factor	334
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off

\\USER\VAARC\Joseph\UC_Berkeley_Comparison\ep2d_bold_pat4_sms3_0.5x0.5x0.6_fov3_58PF_dpg

TA: 1:15 PM: FIX Voxel size: 0.5×0.5×1.0 mmPAT: 12 Rel. SNR: 1.00 : WIPep

Properties

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

Routine

Slice group	1
Slices	69
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2500 ms
TE	26.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2500 ms
TE	26.0 ms
MTC	Off
Flip angle exc	80 deg
Flip angle fat sat	110 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

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

Resolution - Common

FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
Base resolution	382
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off

Resolution - iPAT

Accel. mode	Slice accel.

Resolution - iPAT

Accel. factor PE	4
Ref. lines PE	88
Accel. factor slice	3
FOV shift factor	3
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	69
Dist. factor	100 %
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
FoV read	200 mm
FoV phase	100.0 %
Slice thickness	1.0 mm
TR	2500 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R2.0 A28.1 F8.5
R	2.0 mm
A	28.1 mm
F	8.5 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-7.5
> S	0.0

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

Position	R2.0 A28.1 F8.5 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	137 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210994 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	2500 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	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

BOLD

Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	1
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	1.35 ms
Bandwidth	818 Hz/Px

Sequence - Part 2

EPI factor	382
RF pulse type	Fast
Gradient mode	Fast*

Sequence - Special

DPG	On
FLEET	Off