Table of contents

\\USER			
	AMRIT		
		Alex	
			UC_Berkeley_Comparison
			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\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_1.3x1.3x1.3_dpg

TA: 1:57 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	R4.4 A19.1 H0.6 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 MTC	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	25
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	R4.4 A19.1 H0.6 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	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 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

Francisco All	007 04007C MI I-
Frequency 1H	297.210676 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	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	25
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

DPG	On
FLEET	On

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV3_dpg

TA: 3:10 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	135
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	3960 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3960 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	25
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	135
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	3960 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
A	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	205 mm
R >> L	208 mm
F >> H	108 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	3960 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat3_sms3_0.8x0.8x0.8_FOV2_dpg

TA: 3:10 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	135
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	3960 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	3960 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	25
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	135
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	3960 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

, ,	
Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	205 mm
R >> L	208 mm
F >> H	108 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	3960 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_dpg

TA: 4:57 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	4720 ms
TE	27.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	4720 ms
TE MTC	27.0 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	25
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	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	4720 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

, ,	
Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P R >> L	200 mm
R >> L	200 mm
F >> H	104 mm
Reset	Off

System - Tx/Rx

Francis and 111	007 040070 MUL
Frequency 1H	297.210676 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	4720 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	25
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*

DPG	On	
FLEET	Off	

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat4_sms4_0.5x0.5x0.6_fov3_68PF_dpg

TA: 5:40 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	5390 ms
TE	42.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	5390 ms
TE MTC	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	25
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.
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	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	5390 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
A	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	104 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	5390 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat5_sms3_0.6x0.6x0.6_dpg

TA: 5:11 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	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	5180 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	5180 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	25
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	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	5180 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

, ,	
Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P R >> L	200 mm
R >> L	200 mm
F >> H	103 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	5180 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat4_sms3_0.6x0.6x0.6_68pf_dpg

TA: 5:29 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	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	6090 ms
TE	35.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR TE MTC	6090 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	25
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	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	6090 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P R >> L	200 mm
R >> L	200 mm
F >> H	103 mm
Reset	Off

System - Tx/Rx

Francisco All	007 04007C MI I-
Frequency 1H	297.210676 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	6090 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat4_sms2_0.6x0.6x0.6_68pf_dpg

TA: 6:53 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	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	9180 ms
TE	35.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	9180 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	25
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	172
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	9180 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

,	
Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	104 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	9180 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	25
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*

DPG	On
FLEET	Off

\\USER\AMRIT\Alex\UC_Berkeley_Comparison\ep2d_bold_pat4_sms3_0.5x0.5x0.6_fov3_58PF_dpg

TA: 5:35 PM: FIX Voxel size: 0.5×0.5×0.6 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	Off
preparation	
Wait for user to start	On
Start measurements	Single measurement

Routine

Slice group	1
Slices	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	6200 ms
TE	26.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

6200 ms
26.0 ms
Off
80 deg
110 deg
Fat sat.

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	25
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	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	171
Dist. factor	0 %
Position	R4.4 A19.1 H0.6 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	6200 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

, ,	
Slice group	1
Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Phase enc. dir.	A >> P
AutoAlign	
Initial Position	R4.4 A19.1 H0.6
R	4.4 mm
Α	19.1 mm
Н	0.6 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	Н
Table position	0 mm
Inline Composing	Off

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

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

System - Adjustments

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

System - Adjust Volume

Position	R4.4 A19.1 H0.6 mm
Orientation	T > C-7.5
Rotation	0.00 deg
A >> P	200 mm
R >> L	200 mm
F >> H	103 mm
Reset	Off

System - Tx/Rx

Frequency 1H	297.210676 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	6200 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	25
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*

DPG	On
FLEET	Off