\\USER\Feinberglab\Jen\Aud spatial res piloting\localizer\_200V\_nova

Rel. SNR: 1.00

Voxel size: 1.2×1.1×3.0 mm

TA: 0:27

PAT: Off

D ::		Phase resolution	90 %
Properties	0"	—— Phase partial Fourier	6/8
Prio Recon	Off	Interpolation	On
Before measurement			
After measurement		PAT mode	None
Load to viewer	On	Image Filter	Off
Inline movie	Off	Distortion Corr.	Off
Auto store images	On	Prescan Normalize	Off
Load to stamp segments	Off	Normalize	Off
Load images to graphic	Off	B1 filter	Off
segments		Raw filter	Off
Auto open inline display	Off		
Start measurement without	On	Elliptical filter	Off
further preparation		Geometry	
Wait for user to start	Off	Multi-slice mode	Sequential
Start measurements	single	Series	Interleaved
Doubles	-		
Routine		Saturation mode	Standard
Slice group 1	_	Special sat.	None
Slices	5		
Dist. factor	500 %	Table position	Н
Position	Isocenter	Table position	0 mm
Orientation	Sagittal	Inline Composing	Off
Phase enc. dir.	A >> P		O#
Rotation	0.00 deg	Tim CT mode	Off
Slice group 2		System	
Slices	5	T1	On
Dist. factor	20 %	M2	On
Position	Isocenter	B4	On
Orientation	Coronal	M3	On
Phase enc. dir.	R >> L	V32	Off
Rotation	0.00 deg	V 32	OII
Slice group 3	<b>G</b>	Positioning mode	FIX
Slices	5	MSMA	S - C - T
Dist. factor	20 %	Sagittal	R >> L
Position	Isocenter	Coronal	A >> P
Orientation	Transversal	Transversal	F >> H
Phase enc. dir.	A >> P	Save uncombined	On
Rotation	0.00 deg	Coil Combine Mode	Sum of Squares
Phase oversampling	0.00 deg	AutoAlign	
FoV read	280 mm	Auto Coil Select	Off
FoV phase	100.0 %		
Slice thickness	3.0 mm	Shim mode	Tune up
TR	10.0 ms	Adjust with body coil	Off
TE		Confirm freq. adjustment	Off
	3.00 ms	Assume Silicone	Off
Averages	1	! Ref. amplitude 1H	200.000 V
Concatenations	15 Nana	Adjustment Tolerance	Auto
Filter	None PAMO 0:T4	Adjust volume	
Coil elements	B4;M2,3;T1	Position	Isocenter
Contrast		Orientation	Transversal
TD	0 ms	Rotation	0.00 deg
MTC	Off	R >> L	350 mm
Magn. preparation	None	A >> P	263 mm
Flip angle	10 deg	F >> H	350 mm
Fat suppr.	None	Į.	300
		Physio	
Water suppr. SWI	None	1st Signal/Mode	None
SVVI	Off	Segments	1
Averaging mode	Short term		Nama
Reconstruction	Magnitude	Tagging	None
Measurements	1	Dark blood	Off
Multiple series	Each measurement	Resp. control	Off
		ı ·	
Resolution		Inline	
Base resolution	256	Subtract	Off

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Bandwidth	320 Hz/Px
Flow comp.	No
 RF pulse type	Normal
Gradient mode	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Feinberglab\Jen\Aud spatial res piloting\b1map\_200V\_32

TA: 2:10	Voxel size: 3.9×3.9×5.0 mi	m Rel. SNR: 1.00 USER	 : b1map_658
Properties		M3   V32	On Off
Prio Recon	Off	–   V32	OTI
Before measurement		Positioning mode	FIX
After measurement		MSMA	S - C - T
Load to viewer	On	Sagittal	R >> L
Inline movie	Off	Coronal	A >> P
Auto store images	On	Transversal	F >> H
Load to stamp segments	Off	Save uncombined	Off
Load images to graphic	Off	Coil Combine Mode	Adaptive Combine
segments		AutoAlign	
Auto open inline display	Off	Auto Coil Select	Default
Start measurement without	On	Chim made	Tuno un
further preparation		Shim mode	Tune up
Wait for user to start	Off	Adjust with body coil	Off
Start measurements	single	Confirm freq. adjustment	Off
Douting		Assume Silicone	Off
Routine		! Ref. amplitude 1H	200.000 V
Slice group 1	40	Adjustment Tolerance	Auto
Slices	12	Adjust volume	laasantan
Dist. factor	100 %	Position	Isocenter
Position	R0.7 A30.3 F0.6	Orientation	Transversal
Orientation	Transversal	Rotation	0.00 deg
Phase enc. dir.	A >> P	R >> L	350 mm
Rotation	0.00 deg	A >> P	263 mm
FoV read	250 mm	F >> H	350 mm
FoV phase	100.0 %	Composing	
Slice thickness	5 mm		
TR	1938 ms	Sequence	
TE 1	14 ms	Contrasts	2
TE 2	14 ms	Bandwidth	260.416667 Hz/Px
Averages	1	T1 Compensation	Mean T1
Filter	None	Mean T1	1000.0 ms
Coil elements	B4;M2,3;T1	Angles	1
Contrast		Amplitude Weighting	ı Linear
Flip angle 1	90 deg	Scale Bar	Enabled
Flip angle 2	120 deg	Raw Data	Disabled
Flip angle 3	60 deg	Naw Data	Disabled
Flip angle 4	135 deg		
Flip angle 5	45 deg		
· ····			
Measurements	1		
Resolution	0.4	_	
Base resolution	64		
Phase resolution	100 %		
Raw filter	Off		
Geometry			
Series	Interleaved	_	
Navigator 1			
Position	L0.0 P35.8 F18.2		
Orientation	Transversal		
Rotation	0.00 deg		
Base size phase	50 mm		
Base size read	50 mm		
Thickness	50 mm		
Table position	Н		
Table position	0 mm		
Inline Composing	Off		
System		_	
T1	On		
M2	On		
B4	On	3/42	
		210.3	

\\USER\Feinberglab\Jen\Aud spatial res piloting\mp2rage\_0.7mm\_TR4500

TA: 9:06 PAT: 3	Voxel size: 0.7×0.7×0.7 mm	Rel. SNR: 1.00 USE	R: mp2rage_wip602B
Dranartica		Image Filter	Off
Properties		Distortion Corr.	Off
Prio Recon	Off	Prescan Normalize	Off
Before measurement		Normalize	Off
After measurement			
Load to viewer	On	B1 filter	Off
Inline movie	Off	Raw filter	Off
		Elliptical filter	Off
Auto store images	On	•	
Load to stamp segments	Off	Geometry	
Load images to graphic	Off	Multi-slice mode	Single shot
segments		Series	Interleaved
Auto open inline display	Off		
Start measurement without	On	T-61(6	1.1
	OII	Table position	H
further preparation	_	Table position	0 mm
Wait for user to start	On	Inline Composing	Off
Start measurements	single		
l		System	
Routine		T1	On
Slab group 1		M2	On
Slabs	1	B4	On
Dist. factor	50 %		
Position		M3	On Off
	L1.2 A29.6 F9.9	V32	Off
Orientation	Sagittal	Positioning mode	FIX
Phase enc. dir.	H >> F	Positioning mode	
Rotation	90.00 deg	MSMA	S - C - T
Phase oversampling	0 %	Sagittal	R >> L
Slice oversampling	7.1 %	Coronal	A >> P
		Transversal	F >> H
Slices per slab	224	Save uncombined	Off
FoV read	224 mm		
FoV phase	90.6 %	Coil Combine Mode	Adaptive Combine
Slice thickness	0.70 mm	AutoAlign	
TR	4500 ms	Auto Coil Select	Default
TE	3.37 ms		
		Shim mode	Standard
Averages	1	Adjust with body coil	Off
Concatenations	1	Confirm freq. adjustment	Off
Filter	None	Assume Silicone	Off
Coil elements	B4;M2,3;T1		
	21,1112,0,11	! Ref. amplitude 1H	230.000 V
Contrast		Adjustment Tolerance	Auto
Magn. preparation	Non-sel. IR	Adjust volume	
TI 1	1000 ms	! Position	L1.9 A24.9 F9.3
		! Orientation	Sagittal
TI 2	3200 ms	! Rotation	0.00 deg
Flip angle 1	4 deg		
Flip angle 2	4 deg	!F>>H	108 mm
Fat suppr.	Water excit. fast	! A >> P	160 mm
Water suppr.	None	! R >> L	127 mm
2nd Inversion-Contrast		Dharia	
Znu inversion-Contrast	On	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction			0"
	Magnitude	Dark blood	Off
Measurements	1	Doop or total	O#
Multiple series	Each measurement	Resp. control	Off
Desclution		Inline	
Resolution			0#
Base resolution	320	Subtract	Off
Phase resolution	100 %	Std-Dev-Sag	Off
Slice resolution	100 %	Std-Dev-Cor	Off
Phase partial Fourier	Off	Std-Dev-Tra	Off
		Std-Dev-Time	Off
Slice partial Fourier	7/8		_
Interpolation	Off	MIP-Sag	Off
	004004	MIP-Cor	Off
PAT mode	GRAPPA	MIP-Tra	Off
Accel. factor PE	3	MIP-Time	Off
Ref. lines PE	36		
Accel. factor 3D	1	Save original images	On
	I Integrated		
Reference scan mode	Integrated	Sequence	
		•	

On
3D
Off
Off
1
200 Hz/Px
Slice
8.3 ms
Fast
Fast
Non-sel.
On
200 %
Off
Off
On
On
On
On
0
970

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMIT\_GE\_1p2mm\_SBIPAT3\_pf6\_te23\_tr1500\_sat\_testrx TA: 0:15 PAT: 3 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1	
Prio Recon	Off	Thickness	50 mm
Before measurement	Oli	Position	L10.9 A51.7 F73.1
		Orientation	T > C-33.5 > S4.0
After measurement	0.5	Special sat.	None
Load to viewer	On O"	T. I.I. 22	
Inline movie	Off	Table position	H
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation			
Wait for user to start	Off	M3	On Off
Start measurements	single	V32	Off
Routine	· ·	Positioning mode	FIX
Slice group 1		MSMA	S-C-T
Slices	21	Sagittal	R >> L
Dist. factor	0%	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares
Phase enc. dir.	1 > C29.9 A >> P	AutoAlign	
		Auto Coil Select	Default
Rotation	0.00 deg 0 %		
Phase oversampling		Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	R >> L	268 mm
Magn. preparation	None	A >> P	216 mm
•		F >> H	26 mm
Flip angle	60 deg	I ·	
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	2	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
•	-	Ignore after transition	0
Resolution		Model transition states	On
Base resolution	224	Temp. highpass filter	On
Phase resolution	100 %	Threshold	4.00
Phase partial Fourier	6/8		12
Interpolation	Off	Paradigm size	
DAT mode	CDADDA	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
Distortion Corr.	Off	Meas[6]	Baseline
Prescan Normalize	Off	Meas[7]	Baseline
Raw filter	On	Meas[8]	Baseline
Elliptical filter	Off	Meas[9]	Baseline
1	Off	Meas[10]	Baseline
Hamming	Oli	Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off
		•	

Ooquonoo	
Introduction	Off
Bandwidth	1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.10
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
•	

	\\I ISER\Fainhard	ab\Jen\Aud spatial res			
TA: 8:19 PAT: 3 V	oxel size: 1.2×1.2×1.2 mm		ep2d_bold_sd_20140727		
Properties Sat. region 1					
Properties		— Thickness	50 mm		
Prio Recon	Off	Position	L10.9 A51.7 F73.1		
Before measurement		Orientation	T > C-33.5 > S4.0		
After measurement		Special sat.	None		
Load to viewer	On				
Inline movie	Off	Table position	Н		
Auto store images	On O"	Table position	0 mm		
Load to stamp segments	Off	Inline Composing	Off		
Load images to graphic	Off	System			
segments	0"	T1	On		
Auto open inline display	Off	M2	On		
Start measurement without	On	B4	On		
further preparation	0"	M3	On		
Wait for user to start	Off	V32	Off		
Start measurements	single				
Routine		Positioning mode	FIX		
Slice group 1		— MSMA	S - C - T		
Slices	21	Sagittal	R >> L		
Dist. factor	0 %	Coronal	A >> P		
Position	L2.1 A10.0 F9.9	Transversal	F >> H		
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares		
Phase enc. dir.	A >> P	AutoAlign	 		
Rotation	0.00 deg	Auto Coil Select	Default		
Phase oversampling	0 %	Shim mode	Standard		
FoV read	268 mm	Adjust with body coil	Off		
FoV phase	80.4 %	Confirm freq. adjustment	On		
Slice thickness	1.20 mm	Assume Silicone	Off		
TR	1500 ms	! Ref. amplitude 1H	230.000 V		
TE	23.4 ms	Adjustment Tolerance	Auto		
Multi-band accel. factor	1	Adjust volume	7.0.10		
Filter	None	Position	L2.1 A10.0 F9.9		
Coil elements	B4;M2,3;T1	Orientation	T > C29.9		
	, , ,	Rotation	0.00 deg		
Contrast		— R >> L	268 mm		
MTC	Off	A >> P	216 mm		
Magn. preparation	None	F >> H	26 mm		
Flip angle	60 deg	· ·			
Fat suppr.	Fat sat.	Physio			
Averaging mode	Long term	1st Signal/Mode	None		
Reconstruction	Magnitude	BOLD			
Measurements	325	GLM Statistics	Off		
Delay in TR	0 ms	Dynamic t-maps	Off		
Multiple series	Off	Starting ignore meas	0		
•	<b>.</b>	Ignore after transition	0		
Resolution		Model transition states	On		
Base resolution	224	Temp. highpass filter	On		
Phase resolution	100 %	Temp. Highpass liller	011		

Before measurement		Orientation	T > C-33.5 > S4.0
After measurement	0-	Special sat.	None
Load to viewer	On Off	Table as a title a	
Inline movie	Off	Table position	H
Auto store images	On O"	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On		
further preparation		B4	On
Wait for user to start	Off	M3	On
Start measurements	single	V32	Off
Routine	5g.c	Positioning mode	FIX
Slice group 1		MSMA	S - C - T
Slices	21	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
		Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg	Auto Coll Gelect	
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms		
<u> </u>		Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	R >> L	268 mm
		A >> P	216 mm
Magn. preparation	None	F >> H	26 mm
Flip angle	60 deg		
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	325	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off		0
Iditiple collect	<b>5</b>	Starting ignore meas	
Resolution		Ignore after transition	0
Base resolution	224	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase partial Fourier	6/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
	····	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
	U.V.E	Meas[6]	Baseline
Distortion Corr.	Off		Baseline
Prescan Normalize	Off	Meas[7]	
Raw filter	On	Meas[8]	Baseline
Elliptical filter	Off	Meas[9]	Baseline
Hamming	Off	Meas[10]	Baseline
Hallining	Oil	Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Multi-slice mode Series	Interleaved Interleaved		

Ocquerioc	
Introduction Bandwidth	Off 1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space FFT scale factor	Off
GRE iPAT ref. FA	0.10
Send B1 shim trigger	12.0 deg Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
	-

	\\USER\Feinbe	erglab\Jen\Aud spatial res	
TA: 8:19 PAT: 3	Voxel size: 1.2×1.2×1.2 mr	ABIBATA 70 / 00 / 1500 /	ep2d_bold_sd_20140727
Properties		Sat. region 1	50
Prio Recon	Off	Thickness Position	50 mm L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement		Special sat.	None
Load to viewer	On	opecial sat.	
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		System T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	М2 В4	-
further preparation			On On
Wait for user to start	Off	M3 V32	On Off
Start measurements	single	V32	OII
Routine		Positioning mode	FIX
Slice group 1		—— MSMA	S - C - T
Slices	21	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0.00 deg 0 %	China mada	Otomoloud
FoV read	268 mm	Shim mode	Standard Off
FoV phase	80.4 %	Adjust with body coil	-
Slice thickness	1.20 mm	Confirm freq. adjustment Assume Silicone	On O#
TR	1500 ms		Off
TE	23.4 ms	! Ref. amplitude 1H	230.000 V
Multi-band accel. factor	23.4 1115	Adjustment Tolerance	Auto
Filter	None	Adjust volume	121 110 0 50 0
Coil elements	B4;M2,3;T1	Position	L2.1 A10.0 F9.9
Con elements	D4,IVIZ,3, I I	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off		268 mm
Magn. preparation	None	A >> P	216 mm
Flip angle	60 deg	F >> H	26 mm
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Averaging mode Reconstruction	Long term Magnitude	BOLD	
Measurements	325		Off
Delevie TD	323	GLM Statistics	Off

Load to stamp segments	0"	militie Composing	Oli
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation			_
Wait for user to start	Off	M3	On
Start measurements	single	V32	Off
Routine		Positioning mode	FIX
Slice group 1		MSMA	S - C - T
Slices	21	Sagittal	R >> L
	0 %	Coronal	A >> P
Dist. factor		Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg	Auto Coli Select	
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms		
Multi-band accel. factor	23.4 ms 1	Adjustment Tolerance	Auto
	•	Adjust volume	101110050
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	R >> L	268 mm
		A >> P	216 mm
Magn. preparation	None	F >> H	26 mm
Flip angle	60 deg	I	
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	325	GLM Statistics	Off
Delay in TR	0 ms		
-		Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	224	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase partial Fourier	6/8	Threshold	4.00
	Off	Paradigm size	12
Interpolation	OII	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
	OILL		Baseline
Distortion Corr.	Off	Meas[6]	
Prescan Normalize	Off	Meas[7]	Baseline
Raw filter	On	Meas[8]	Baseline
Elliptical filter	Off	Meas[9]	Baseline
Hamming	Off	Meas[10]	Baseline
Tanining	OII	Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off

Sequence	
Introduction	Off
Bandwidth	1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
	2640 us
Excite pulse duration	3640 us 1
Slice multiplier Fake MB factor for SB	1
No. of interleaved TEs	<u>.</u>
	0 1
RF pulse shape EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.10
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
1	

\\USER\Feinberglab\Jen\Aud spatial res					
TA: 8:19	PAT: 3	Voxel size: 1.2x1.2x1.2 mm	Rel. SNR: 1.00	USER: AV_ep2d_bold_sd_20140727	
Droparties			Sat. region 1	1	

Properties		Sat. region 1	
Prio Recon	Off	Thickness	50 mm
Before measurement	O.I.	Position	L10.9 A51.7 F73.1
After measurement		Orientation	T > C-33.5 > S4.0
Load to viewer	On	Special sat.	None
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
	Off	Inline Composing	Off
Load to stamp segments		Inline Composing	Oli
Load images to graphic	Off	System	
segments	0"		On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation		M3	On
Wait for user to start	Off	V32	Off
Start measurements	single	V 32	
Routine		Positioning mode	FIX
		—— MSMA	S - C - T
Slice group 1	0.4	Sagittal	R >> L
Slices	21	Coronal	A >> P
Dist. factor	0 %	Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg	Auto Coli Select	Delauli
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1		Auto
Filter	None	Adjust volume	104 440 0 50 0
		Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	— R >> L	268 mm
Magn. preparation	None	A >> P	216 mm
Flip angle	60 deg	F >> H	26 mm
Fat suppr.	Fat sat.	Physio	
	ı aı saı.	-	None
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
	Magnitude 325	BOLD GLM Statistics	Off
Reconstruction		GLM Statistics	Off Off
Reconstruction Measurements Delay in TR	325 0 ms	GLM Statistics Dynamic t-maps	Off
Reconstruction Measurements Delay in TR Multiple series	325	GLM Statistics Dynamic t-maps Starting ignore meas	Off 0
Reconstruction Measurements Delay in TR Multiple series Resolution	325 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition	Off 0 0
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution	325 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states	Off 0 0 On
Reconstruction Measurements Delay in TR Multiple series Resolution	325 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter	Off 0 0 On On
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution	325 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold	Off 0 0 On On 4.00
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase partial Fourier	325 0 ms Off 224 100 %	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size	Off 0 0 On On 4.00
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation	325 0 ms Off 224 100 % 6/8 Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1]	Off 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode	325 0 ms Off 224 100 % 6/8 Off GRAPPA	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2]	Off 0 0 On On 4.00 12 Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3]	Off 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode	325 0 ms Off 224 100 % 6/8 Off GRAPPA	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2]	Off 0 0 On On 4.00 12 Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3]	Off 0 0 On On 4.00 12 Baseline Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]	Off 0 0 On On 4.00 12 Baseline Baseline Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr.	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6]	Off 0 0 On On 4.00 12 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]  Meas[6] Meas[7]	Off 0 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]  Weas[5] Meas[6] Meas[7] Meas[8]	Off 0 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9]	Off 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[9] Meas[10]	Off 0 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off Off On Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11]	Off 0 0 On On 4.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming  Geometry	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off Off On Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11]	Off 0 0 On On A.00 12 Baseline
Reconstruction Measurements Delay in TR Multiple series  Resolution Base resolution Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	325 0 ms Off 224 100 % 6/8 Off GRAPPA 3 48 GRE Off Off On Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11]	Off 0 0 On On 4.00 12 Baseline

	Ocquerioc	
	Introduction	Off
	Bandwidth	1174 Hz/Px
	Flow comp.	No
	Free echo spacing	Off
ı	Echo spacing	1 ms
	SIR accel. factor	1
	EPI factor	180
ı	Gradient mode	Normal
	RF spoiling	Off
ı		
ı	Excite pulse duration	3640 us
ı	Slice multiplier	1
	Fake MB factor for SB	1
	No. of interleaved TEs	0
	RF pulse shape	1
	EPI noise scans	0
	EPI full reference scan	0
	SENSE1 coil combine	Off
ı	Log physiology to file	Off
	Invert RO/PE polarity	Off
	Save reduced raw data	Off
	Readout slice trace	Off
	Disable ramp sampling	Off
	PF omits higher k-space	Off
	FFT scale factor	0.10
	GRE iPAT ref. FA	12.0 deg
	Send B1 shim trigger	Never
	Triggering scheme	Standard
	Starting ignore meas	0
	Paradigm size	2 1
	Multiplier	1
	Step [1]	•
	Step [2]	0

\_ TA: 8:19 PAT: 3 V		ab\Jen\Aud spatial res Rel. SNR: 1.00 USER: AV_	ep2d_bold_sd_20140727
		Sat. region 1	
Properties		— Thickness	50 mm
Prio Recon	Off	Position	L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement	_	Special sat.	None
Load to viewer	On		
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation		M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		
Routine		Positioning mode	FIX
Slice group 1		— MSMA	S - C - T
Slices	21	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0.00 deg 0 %	Obine no ada	Otandand
FoV read	268 mm	Shim mode	Standard
FoV read FoV phase	80.4 %	Adjust with body coil	Off
Slice thickness	1.20 mm	Confirm freq. adjustment	On O#
TR	1.20 mm 1500 ms	Assume Silicone	Off
TE		! Ref. amplitude 1H	230.000 V
Multi-band accel. factor	23.4 ms 1	Adjustment Tolerance	Auto
Filter		Adjust volume	1044400500
	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	—   R >> L	268 mm
Magn. preparation	None	A >> P	216 mm
Flip angle	60 deg	F >> H	26 mm
Fat suppr.	Fat sat.	Physio	
A		1st Signal/Mode	None
Averaging mode	Long term	,	
Reconstruction	Magnitude	BOLD	2"
Measurements Delay in TR	325 0 ms	GLM Statistics	Off
1		Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	224	— Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On 4.00
Phase partial Fourier	6/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
	CD A DD A	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline Baseline
Accel. factor PE	3	Meas[3]	Baseline Baseline
Ref. lines PE	48 CDF	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
Distortion Corr.	Off	Meas[6]	Baseline
Prescan Normalize	Off	Meas[7]	Baseline
Raw filter	On	Meas[8]	Baseline
Elliptical filter	Off	Meas[9]	Baseline
Hamming	Off	Meas[10]	Baseline
		Meas[11]	Active
Geometry		Meas[12]	Active

Interleaved

Interleaved

Meas[12]

Spatial filter

Motion correction

Active

Off

Off

Geometry

Series

Multi-slice mode

Coquentos	
Introduction	Off
Bandwidth	1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
	2040
Excite pulse duration	3640 us
Slice multiplier Fake MB factor for SB	1 1
No. of interleaved TEs	·
RF pulse shape	0 1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.10
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
·	

	\\USER\Feinberglab	b\Jen\Aud spatial res	
TA: 6:22 PAT: 3	Voxel size: 1.2×1.2×1.2 mm F	Rel. SNR: 1.00 USER: AV_	ep2d_bold_sd_20140727
Properties		Sat. region 1	
Prio Recon	Off	- Thickness	50 mm
	Oii	Position	L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement	0	Special sat.	None
Load to viewer	On	Table a said as	
Inline movie	Off	Table position	Н
Auto store images	On O"	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments	0"		On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation	0"	M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		
Routine		Positioning mode	FIX
Slice group 1		- MSMA	S - C - T
Slices	21	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	Auto
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
	D+,1012,0,11	Rotation	0.00 deg
Contrast		- R >> L	268 mm
MTC	Off	A >> P	216 mm
Magn. preparation	None	F >> H	26 mm
Flip angle	60 deg	1 >>11	20 111111
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	247	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
1		Ignore after transition	0
Resolution		- Model transition states	On
Base resolution	224	Temp. highpass filter	On
Phase resolution	100 %	Threshold	4.00
Phase partial Fourier	6/8	Paradigm size	12
Interpolation	Off	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	3 48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
	ONE	Meas[6]	Baseline
Distortion Corr.	Off	= · _ = ·	Baseline
Prescan Normalize	Off	Meas[7]	Baseline
Raw filter	On	Meas[8] Meas[9]	Baseline Baseline
Elliptical filter	Off	Meas[10]	Baseline
Hamming	Off		Active
		Meas[11]	
Geometry	lata da a cad	Meas[12]  Motion correction	Active Off
Multi-slice mode	Interleaved	Spatial filter	Off
Series	Interleaved	Opanai ilitei	Oli

Ocquerioc	
Introduction Bandwidth	Off 1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space FFT scale factor	Off
GRE iPAT ref. FA	0.10
Send B1 shim trigger	12.0 deg Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
	-

	\\USER\Feinberglab\	Jen\Aud spatial res	
TA: 6:22 PAT: 3 V		TO 100 1 1500 1	ep2d_bold_sd_20140727
Properties		Sat. region 1	
Prio Recon	Off	Thickness	50 mm
Before measurement	Oli	Position	L10.9 A51.7 F73.1
After measurement		Orientation	T > C-33.5 > S4.0
Load to viewer	On	Special sat.	None
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	I milite Composing	Oli
segments	Oll	System	
Auto open inline display	Off	T1	On
Start measurement without	On	M2	On
further preparation		B4	On
Wait for user to start	Off	M3	On
Start measurements	single	V32	Off
,	<b>g</b> .•	Positioning mode	FIX
Routine		MSMA	S - C - T
Slice group 1		Sagittal	R >> L
Slices	21	Coronal	A >> P
Dist. factor	0 %	Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg		
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On O"
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE Multi band social factor	23.4 ms 1	Adjustment Tolerance	Auto
Multi-band accel. factor Filter	•	Adjust volume	1044400500
Coil elements	None	Position	L2.1 A10.0 F9.9
Coll elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	R >> L A >> P	268 mm 216 mm
Magn. preparation	None	F >> H	
Flip angle	60 deg	Г >> П	26 mm
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	247	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
		Ignore after transition	0
Resolution	224	Model transition states	On
Base resolution	224	Temp. highpass filter	On
Phase resolution	100 %	Threshold	4.00
Phase partial Fourier	6/8 Off	Paradigm size	12
Interpolation	OII	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
Distortion Corr.	Off	Meas[6]	Baseline
Prescan Normalize	Off	Meas[7]	Baseline
Raw filter	On	Meas[8]	Baseline
Elliptical filter	Off	Meas[9]	Baseline
Hamming	Off	Meas[10]	Baseline
	<b></b>	Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off

Introduction Bandwidth	Off 1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.10
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

# TA: 0:19 PAT: 3 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1	
Prio Recon	Off	Thickness	50 mm
Before measurement	<b></b>	Position	L10.9 A51.7 F73.1
After measurement		Orientation	T > C-33.5 > S4.0
Load to viewer	On	Special sat.	None
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off		311
segments	<b>5</b>	System	
Auto open inline display	Off	T1	On
Start measurement without	On	M2	On
further preparation	311	B4	On
Wait for user to start	Off	M3	On
Start measurements	single	V32	Off
!	Sirigio	Positioning mode	FIX
Routine		MSMA	S - C - T
Slice group 1		Sagittal	R >> L
Slices	21	Coronal	A >> P
Dist. factor	0 %	Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	P >> A	Auto Coil Select	Default
Rotation	-180.00 deg	Auto Coli Select	
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	-180.00 deg
MTC	Off	R >> L	268 mm
	None	A >> P	216 mm
Magn. preparation Flip angle	60 deg	F >> H	26 mm
Fat suppr.	Fat sat.	Dhysis	
rat suppr.	rai sai.	Physio 1st Signal/Mode	None
Averaging mode	Long term		None
Reconstruction	Magnitude	BOLD	
Measurements	5	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	224	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase resolution  Phase partial Fourier	6/8	Threshold	4.00
Interpolation	6/8 Off	Paradigm size	12
Interpolation	OII	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off	Meas[10]	Baseline
Hamming	Off	Meas[11]	Active
Geometry		Meas[12]	Active
Geometry Multi-slice mode	Interleaved	Meas[12] Motion correction	Active Off
Geometry  Multi-slice mode Series	Interleaved Interleaved	Meas[12] Motion correction Spatial filter	Active Off Off

Ocquerioc	
Introduction Bandwidth	Off 1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space FFT scale factor	Off
GRE iPAT ref. FA	0.10
Send B1 shim trigger	12.0 deg Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
	-

\\USE	:R\Feinberg	lab\Jen\Aud spatial res pilotii	ng\BP_GRASE_C	CS_CFA_1mm_22SL	
TA: 9:48	PAT: Off	Voxel size: 1.0×1.0×1.0 mm	Rel. SNR: 1.00	USER: BP_GRASE_SH	

Proceedings	Properties		Orientation Special sat.	Sagittal None
After measurement   Load to viewer   On   Inline movie   Off   Auto store images   Coad to stamp segments   Off   System   Auto store images   Orf   Bal	Prio Recon	Off		
Load to viewer				
Inline movie				
Auto store images		_	Inline Composing	Off
Ti		_	System	
Description   Contract   Contra				On
Bat				
Auto Open inline display   Off   No.		Off		_
Start measurement without   On   Value   Company		0"	M3	On
Further preparation   Wait for user to start   Off   Start measurements   Single   Sagittal   R >> L			V32	Off
Wait for user to start   Start measurements   Sangle   Sagittal   R > L		On		
Sagttat measurements		Off	_	
Routine			_	
Transversal   F >> H   Slab group 1   Slab group	Start measurements	Sirigie		
Sale group   Sales   1	Routine			
Dist. factor	Slab group 1			
Distriction	Slabs			_
Position   Note   Phase enc. dir.   R >> L   Shim mode   Standard	Dist. factor	0 %		
Phase enc. dir.   R >> L   Shim mode   Standard	Position	Isocenter	•	
Rotation		Transversal	Auto Coli Select	Delauli
Phase oversampling   0 %   Slice oversampling   0.0 %   Slice oversampling   0.0 %   Slice sper slab   22   1 Ref. amplitude 1H   220.000 V   Assume Silicone   Off   120.000 V   Assume Silicone   Off   120.000 V   Assume Silicone   Off   120.000 V   Adjustment Tolerance   Auto   Auto   Adjustment Tolerance   Auto   Auto   Adjustment Tolerance   Auto   Auto   Auto   Adjustment Tolerance   Auto   Auto   Adjustment Tolerance   Auto   Auto   Auto   Auto   Adjustment Tolerance   Auto			Shim mode	Standard
Slice oversampling			Adjust with body coil	Off
Silcos per slab				Off
FoV read			Assume Silicone	Off
FoV phase	·			220.000 V
Silice thickness				Auto
TR         1500 ms         Orientation         Transversal           TE         22.08 ms         Rotation         90.00 deg           Averages         1         A >> P         112 mm           Concatenations         1         R >> L         28 mm           Filter         None         F >> H         22 mm           Coil elements         B4;M2,3;T1         Physio           Contrast           Magn, preparation         None         Composing           Filip angle         180 deg         Composing           Fat suppr.         Fat sat.         Sequence           Fat suppr.         Fat sat.         Sequence           Fat sat. mode         Strong         Introduction         Off           Averaging mode         Long term         Recordering         Centric           Reconstruction         Magnitude         Reordering         Centric           Measurements         392         Contrasts         1           Pause after meas.         0.0 s         Bandwidth         1144 Hz/Px           Resolution         112         Turbo factor         22           Phase resolution         100 %         Gradient mode         Fast <t< td=""><td></td><td></td><td></td><td></td></t<>				
TE         22.08 ms         Rotation         90.00 deg           Averages         1         A >> P         112 mm           Concatenations         1         R >> L         28 mm           Filter         None         F >> H         22 mm           Coil elements         B4;M2,3;T1         Physio         Text Signal/Mode         None           Contrast         Tomposing         Text Signal/Mode         None         Composing           Magn. preparation         None         Composing         Sequence           Fat suppr.         Fat sat.         Sequence         Fat sat. mode         Sequence           Fat suppr.         Fat sat.         Sequence         Fat sat. mode         Contracts         1           Averaging mode         Long term         Reordering         Centric           Reconstruction         Magnitude         Reordering         Centric           Measurements         392         Bandwidth         1144 Hz/Px           Pause after meas.         0.0 s         Echo spacing         1.1 ms           Resolution         112         Turbo factor         22           Epil factor         12         RF pulse type         Normal           Sice resolution         <				
Averages         1         A >> P         112 mm           Concatenations         1         R >> L         28 mm           Filter         None         F >> H         22 mm           Contrast         Physio         Physio           Contrast         Tomposing         None           Magn. preparation         None         Composing           Flip angle         180 deg         Composing           Fat suppr.         Fat sat.         Sequence           Fat sat. mode         Strong         Introduction         Off           Averaging mode         Long term         Dimension         3D           Recordering         Centric         Centric           Contrasts         1         Contrasts         1           Massurements         392         Contrasts         1           Pause after meas.         0.0 s         Bandwidth         1144 Hz/Px           Multiple series         Off         Echo spacing         1.1 ms           Resolution         112         Turbo factor         22           Phase resolution         100 %         RF pulse type         Normal           Slice resolution         100 %         RF pulse type         Normal				
Concatenations         1         R >> L         28 mm           Filter         None         F >> H         22 mm           Coll elements         B4';M2,3;T1         Physio           Contrast           Magn. preparation         None         1st Signal/Mode         None           Fall suppr.         Fat sat.         Sequence           Fat sat. mode         Strong         Introduction         Off           Averaging mode         Long term         Reordering         Centric           Reconstruction         Magnitude         Reordering         Centric           Measurements         392         Contrasts         1           Pause after meas.         0.0 s         Echo spacing         1.1 ms           Resolution         112         Base resolution         111 ms           Resolution         110 %         Turbo factor         22           EPI factor         12         RF pulse type         Normal           Slice partial Fourier         Off         Gradient mode         Fast           Interpolation         Off         Interpolation         Off         Off           PAT mode         None         Maxwell compensation         Off <td< td=""><td></td><td></td><td></td><td></td></td<>				
Filter Coil elements         None B4;M2,3;T1         F⇒ H         22 mm           Contrast         Physio         1st Signal/Mode         None           Magn, preparation Flip angle         180 deg         Composing           Fat suppr.         Fat sat.         Sequence           Fat sat. mode         Strong         Introduction         Off           Averaging mode Reconstruction         Long term         Reordering         Centric           Measurements         392         Contrasts         1           Pause after meas.         0.0 s         Bandwidth         1144 Hz/Px           Puse after meas.         0.0 s         Echo spacing         1.1 ms           Resolution         112         Fr pulse type         Normal           Phase resolution         100 %         Gradient mode         Fast           Slice partial Fourier         Off         refocussing type         sinc 2560           Interpolation         Off         phase encoding         ON           PAT mode         None         Maxwell compensation         Off           Prescan Normalize         Off         ICE program         single           Raw filter         Off         ICE program         single           Recilies	~	•		
Physio		•		-
Contrast			F >> H	22 mm
Contrast         1st Signal/Mode         None           Magn. preparation         None         Composing           Filip angle         180 deg         Composing           Fat suppr.         Fat sat.         Sequence           Fat sat. mode         Strong         Introduction         Off           Averaging mode         Long term         Dimension         3D           Reconstruction         Magnitude         Reordering         Centric           Measurements         392         Contrasts         1           Pause after meas.         0.0 s         Bandwidth         1144 Hz/Px           Echo spacing         1.1 ms         112           Resolution         112         Turbo factor         22           Epl factor         12         RF pulse type         Normal           Slice resolution         100 %         Gradient mode         Fast           Slice partial Fourier         Off         refocussing type         sinc 2560           Interpolation         Off         flip angle excit         90           PAT mode         None         Maxwell compensation         Off           Prescan Normalize         Off         ICE program         single           Raw filter	Coll elements	B4,1VI2,3,11	Physio	
Magn. preparation       None         Flip angle       180 deg         Fat suppr.       Fat sat.         Fat syst.       Sequence         Averaging mode       Long term         Reconstruction       Magnitude         Measurements       392         Pause after meas.       0.0 s         Multiple series       Off         Resolution       112         Phase resolution       100 %         Slice resolution       100 %         Slice partial Fourier       Off         Introduction       Off         PAT mode       None         More and filter       Off         Resolution       100 %         Slice partial Fourier       Off         Interpolation       Off         PAT mode       None         Maxwell compensation       Off         Prescan Normalize       Off         Raw filter       Off         Series       Interleaved         Series       Interleaved         Series       Interleaved         Series       Interleaved         Variable Flip Angle 01       180         Variable Flip Angle 02       180 <td>Contrast</td> <td></td> <td></td> <td>None</td>	Contrast			None
Fat suppr. Fat sat. Fat suppr. Fat sat. Fat suppr. Fat sat. Fat sat. mode   Averaging mode Reconstruction Measurements Measurements Multiple series Multiple series Moliton  Base resolution Slice resolution Slice partial Fourier Interpolation Mone Mone Mone Measurements Molitor  Fescan Normalize Raw filter  Geometry  Series  Interleaved  Strong  Introduction Off Dimension Mentroduction Centric Contrasts 1 Introduction Off Dimension Mentroduction Off Dimension  Total Hall Hz/Px Echo spacing 1.1 ms  Turbo factor 22 EPI factor 12 EPI factor 12 Frefocussing type Sinc 2560 Fast Off Interpolation Off Int			Composing	
Fat sat. mode  Strong  Introduction  Averaging mode Reconstruction Magnitude Measurements Measurements Multiple series Multiple series Multiple series Moff  Resolution  Resolution  Resolution  Base resolution Flace partial Fourier Interpolation  PAT mode Mone Prescan Normalize Raw filter  Geometry  Series  Interleaved  Introduction Dimension  Reordering Centric Contrasts 1 Bandwidth 1144 Hz/Px Echo spacing 1.1 ms  Turbo factor 22 EPI factor 12 RF pulse type Normal Gradient mode Fast  refocussing type flip angle excit 90 Maxwell compensation Off ICE program prepscans Off ICE program prefoc duration 2560 excite duration 2560 excite BWTP 12.0 Thickness 20 mm Variable Flip Angle 01 Variable Flip Angle 02 180		180 deg	Composing	
Averaging mode Reconstruction Magnitude Reconstruction Measurements Measurements Magnitude Measurements Magnitude Measurements Multiple series Multiple series Off  Resolution  Resolution  Resolution  Base resolution Slice resolution Slice partial Fourier Interpolation Off PAT mode None  Mone  Mone  Measurements Magnitude Recontrats 1 Recordering Contrasts 1 Bandwidth 11144 Hz/Px Echo spacing 1.1 ms  Turbo factor 22 EFI factor 12 RF pulse type Normal Gradient mode Fast  refocussing type flip angle excit 90 PAT mode None  Maxwell compensation Off ICE program Single Prepscans Off ICE program Single ICE prepscans Off ICE pr			Sequence	
Reconstruction Magnitude Reconstruction Magnitude Measurements 392 Pause after meas. 0.0 s Multiple series Off  Resolution  Resolution  Base resolution 100 % Slice resolution 100 % Slice partial Fourier Off Interpolation Off PAT mode None  Prescan Normalize Raw filter Off Raw filter Off Series Interleaved  Sat. region 1 Thickness 20 mm Position Isocenter  Recordering Centric Contrasts 1 Bandwidth 1144 Hz/Px Echo spacing 114 Hz Echo spacing 114 Hz Fcho spacing 11	Fat sat. mode	Strong	Introduction	Off
Reconstruction Magnitude Measurements 392 Pause after meas. 0.0 s Bandwidth 1144 Hz/Px Phase resolution 100 % Slice resolution 100 % Slice partial Fourier Off Interpolation Off Prescan Normalize Raw filter Off Series Interleaved  Sat. region 1  Sat. region 1  Tourbo factor 22  EPI factor 12  RF pulse type Normal Gradient mode Fast Filter Angle Prescans Occurrence of the fact	Averaging mode	Long term	Dimension	3D
Measurements Pause after meas. Multiple series392 OffContrasts 	5 5	•	Reordering	Centric
Pause after meas. Multiple series0.0 s OffBandwidth Echo spacing1144 Hz/Px Echo spacingResolution112 Phase resolutionTurbo factor 100 % Slice resolution22 EPI factorSlice resolution Slice partial Fourier Interpolation100 % OffRF pulse type Gradient modeNormal FastPAT modeNonerefocussing type flip angle excit phase encoding Maxwell compensationsinc 2560 90 Phase encoding Maxwell compensationPrescan Normalize Raw filterOff OffICE program prepscans excite duration excite duration excite duration excite BWTP refoc BWTP0 12.0 2560 2			Contrasts	1
Multiple seriesOffEcho spacing1.1 msResolutionTurbo factor22Base resolution100 %EPI factor12Phase resolution100 %RF pulse typeNormalSlice resolution100 %Gradient modeFastSlice partial FourierOffrefocussing typesinc 2560InterpolationOffflip angle excit90PAT modeNonephase encodingONPrescan NormalizeOffICE programsingleRaw filterOffICE programsingleGeometrySeriesInterleavedexcite duration2560Sat. region 1refoc duration2560Thickness20 mmVariable Flip Angle 01180PositionIsocenterVariable Flip Angle 02180				1144 Hz/Px
Resolution  Base resolution 112 Phase resolution 100 % Slice resolution 100 % Slice partial Fourier Off Interpolation Off PAT mode None Prescan Normalize Raw filter Off Raw filter Off Series Interleaved Sat. region 1 Turbo factor 22 EPI factor 12 RF pulse type Normal Gradient mode Fast  refocussing type sinc 2560 flip angle excit 90 Maxwell compensation Off ICE program single prepscans 0 excite duration 2560 refoc duration 2560 excite BWTP 12.0 Sat. region 1 Thickness 20 mm Position Isocenter  Turbo factor 22 EPI factor 12 RF pulse type Normal Fast  Iter Quadrie of Fast  Interleaved Sinc 2560  refocussing type sinc 2560 flip angle excit 90 Maxwell compensation Off ICE program single prepscans 0 excite duration 2560 excite BWTP 12.0  Yariable Flip Angle 01 180 Variable Flip Angle 02 180	Multiple series		Echo spacing	1.1 ms
Base resolution 112 Phase resolution 100 % Slice resolution 100 % Slice partial Fourier Off Interpolation Off PAT mode None Prescan Normalize Raw filter  Geometry  Series Interleaved Sat. region 1 Thickness 20 mm Position Isocenter  Pigate type Normal Repulse type Sinc 2560 Interpolation Off Ile program Single Prescan Normalize Noff ICE program Single Prescan Normalize Normalize Normalize Preform Normal Sinc 2560 Interleaved  Series Interleaved  Sat. region 1 Thickness 20 mm Variable Flip Angle 01 Variable Flip Angle 02  Variable Flip Angle 02  Variable Flip Angle 02	i .		Turbo factor	22
Phase resolution 100 % Slice resolution 100 % Slice partial Fourier Off refocussing type sinc 2560 Interpolation Off flip angle excit 90  PAT mode None phase encoding ON  Prescan Normalize Off ICE program single Raw filter Off prepscans 0  Geometry Series Interleaved excite duration 2560  Sat. region 1 refoc BWTP 12.0  Thickness 20 mm Variable Flip Angle 01 180  Position Isocenter Variable Flip Angle 02 180		112		
Slice resolution 100 % Slice partial Fourier Off refocussing type sinc 2560 Interpolation Off flip angle excit 90  PAT mode None phase encoding ON Maxwell compensation Off ICE program single prepscans 0 excite duration 2560  Geometry excite duration 2560 Series Interleaved excit 90  Thickness 20 mm Variable Flip Angle 01 180  Fast Gradient mode Fast Since 2560  Interleaved excite BWTP 12.0  Variable Flip Angle 01 180  Variable Flip Angle 02 180				· <del>-</del>
Slice partial Fourier Off Interpolation Off Ilip angle excit 90  PAT mode None Maxwell compensation Off ICE program single Prescan Normalize Off Prescan Normalize Off ICE program single Prepscans 0 Excite duration 2560 For excite duration 2560 For excite BWTP 12.0  Sat. region 1 Fosition Isocenter Variable Flip Angle 01 180  Thickness 20 mm Variable Flip Angle 02 180				
Interpolation Off flip angle excit 90 PAT mode None phase encoding ON Maxwell compensation Off Prescan Normalize Off ICE program single Raw filter Off prepscans 0 Geometry excite duration 2560 Series Interleaved excite BWTP 12.0 Sat. region 1 refoc BWTP 8.0 Thickness 20 mm Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180				
PAT mode None phase encoding phase encoding ON Maxwell compensation Off ICE program single prepscans of excite duration refoc duration 2560 refoc duration excite BWTP 12.0 Sat. region 1 refoc BWTP 8.0 Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180		_		
Maxwell compensation Off Prescan Normalize Off Raw filter Off  Geometry  Series Interleaved  Sat. region 1 Thickness 20 mm Position Isocenter  Maxwell compensation Off ICE program single prepscans 0 excite duration 2560 refoc duration 2560 excite BWTP 12.0 Variable Flip Angle 01 180 Variable Flip Angle 02 180	·····			
Prescan Normalize Raw filter Off Peometry  Series Interleaved Sat. region 1 Thickness Position Position  ICE program prepscans o excite duration prefoc duration excite BWTP refoc BWTP Variable Flip Angle 01 Variable Flip Angle 02  ICE program prepscans 0 excite duration 2560 excite BWTP 12.0 Variable Flip Angle 01 180 Variable Flip Angle 02	PAT mode	None		
Raw filter Off prepscans 0  Geometry excite duration 2560 refoc duration 2560 excite BWTP 12.0 Sat. region 1 refoc BWTP 8.0 Thickness 20 mm Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180	Prescan Normalize	Off	=	
Geometry         excite duration refoc duration refoc duration         2560 refoc duration refoc duration           Sat. region 1 Thickness         20 mm         refoc BWTP refoc BWTP         8.0 region 1 laso           Position         Isocenter         Variable Flip Angle 01 laso         180 region 1 laso		_	. •	<del>-</del>
Series Interleaved refoc duration 2560 excite BWTP 12.0 Sat. region 1 refoc BWTP 8.0 Thickness 20 mm Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180				-
Series Interleaved excite BWTP 12.0 Sat. region 1 refoc BWTP 8.0 Thickness 20 mm Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180				
Sat. region 1refoc BWTP8.0Thickness20 mmVariable Flip Angle 01180PositionIsocenterVariable Flip Angle 02180	Series	Interleaved		
Thickness 20 mm Variable Flip Angle 01 180 Position Isocenter Variable Flip Angle 02 180	Sat region 1			
Position Isocenter Variable Flip Angle 02 180		20 mm		
			22/42	-

Variable Flip Angle 03	180
Variable Flip Angle 04	180
Variable Flip Angle 05	180
Variable Flip Angle 06	180
Variable Flip Angle 07	180
Variable Flip Angle 08	180
Variable Flip Angle 09	180
Variable Flip Angle 10	180
Variable Flip Angle 11	180
Variable Flip Angle 12	180
Variable Flip Angle 13	180
Variable Flip Angle 14	180
Variable Flip Angle 15	180
Variable Flip Angle 16	180
Variable Flip Angle 17	180
Variable Flip Angle 18	180
Variable Flip Angle 19	180
Variable Flip Angle 20	180
Regular or CS	CS
actual ETL	8
Which areas?	Visual Cortex

\\USER\Feinberglab\Jen\Aud spatial res piloting\PIFrSn\_GE\_1mm\_SBIPAT3\_pf6\_te23\_tr1500\_sat\_391i TA: 9:59 PAT: 3 Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1	
Prio Recon	Off	Thickness	50 mm
Before measurement	OII	Position	L10.9 A51.7 F73.1
		Orientation	T > C-33.5 > S4.0
After measurement	0.5	Special sat.	None
Load to viewer	On O"	<b>—</b> 11 %	
Inline movie	Off	Table position	H
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation			
Wait for user to start	Off	M3	On O"
Start measurements	single	V32	Off
Routine	v	Positioning mode	FIX
Slice group 1		MSMA	S-C-T
Slices	21	Sagittal	R >> L
Dist. factor	0%	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
		Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg		
Phase oversampling	0 %	Shim mode	Standard
FoV read	224 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.00 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contract		Rotation	0.00 deg
Contrast		R >> L	224 mm
MTC	Off	A >> P	180 mm
Magn. preparation	None	F >> H	21 mm
Flip angle	60 deg		21 111111
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	391		O#
		GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	224	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase partial Fourier	6/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
	·····	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off	Meas[10]	Baseline
Hamming	Off	Meas[10] Meas[11]	Active
Goometry			Active
Geometry	lota da accad	Meas[12]	
Multi-slice mode	Interleaved	Motion correction	Off Off
Series	Interleaved	Spatial filter	Oil
1			

Ooquonoo	
Introduction	Off
Bandwidth	1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

TA: 8:19	\\USER\Feinbergle		l res 1502 - 100
		Sat region 1	

Properties		Sat. region 1	F0 mm
Prio Recon	Off	Thickness Position	50 mm L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement		Special sat.	None
Load to viewer	On		
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation	0"	M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		
Routine		Positioning mode  MSMA	FIX S - C - T
Slice group 1		Sagittal	R >> L
Slices	21	Coronal	A >> P
Dist. factor	0 %	Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg		
Phase oversampling	0 %	Shim mode	Standard
FoV read	268 mm	Adjust with body coil	Off
FoV phase	80.4 %	Confirm freq. adjustment	On
Slice thickness	1.20 mm	Assume Silicone	Off
TR	1500 ms	! Ref. amplitude 1H	230.000 V
TE	23.4 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	——   R >> L	268 mm
Magn. preparation	None	A >> P	216 mm
Flip angle	60 deg	F >> H	26 mm
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long torm	1st Signal/Mode	None
Averaging mode Reconstruction	Long term Magnitude	BOLD	
Measurements	325		Off
Delay in TR	0 ms	GLM Statistics	Off Off
Multiple series	Off	Dynamic t-maps Starting ignore meas	0
	Jii	Ignore after transition	0
Resolution		—— Model transition states	On
Base resolution	224	Temp. highpass filter	On
Phase resolution	100 %	Threshold	4.00
Phase partial Fourier	6/8	Paradigm size	12
Interpolation	Off	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[1]	Baseline
Accel. factor PE	3	Meas[2]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off	Meas[10]	Baseline
Hamming	Off	Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off

Ooquonoo	
Introduction	Off
Bandwidth	1174 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	180
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.10
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
•	

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr1-4\_GE\_1p6mm\_MB2IPAT2\_pf7\_te21\_tr600 TA: 8:21 PAT: 2 Voxel size: 1.6×1.6×1.6 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Special sat.	None
Prio Recon	Off	Table position	Н
Before measurement		Table position	0 mm
After measurement		Inline Composing	Off
Load to viewer	On		
Inline movie	Off	System	
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments	Oli	M3	On
Auto open inline display	Off	V32	Off
	On		FIV
Start measurement without	On	Positioning mode	FIX
further preparation	0"	MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Routine		Transversal	F >> H
Slice group 1		Coil Combine Mode	Sum of Squares
Slices	22	AutoAlign	
Dist. factor	0 %	Auto Coil Select	Default
Position	L3.4 A17.5 H15.4	Chim	Ctondord
		Shim mode	Standard
Orientation	T > C21.3 > S-2.6	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	On
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	! Ref. amplitude 1H	210.000 V
FoV read	212 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	1.61 mm	Position	L3.4 A17.5 H15.4
TR	600 ms	Orientation	T > C21.3 > S-2.6
TE	21.0 ms	Rotation	0.00 deg
Multi-band accel, factor	2	R >> L	212 mm
Filter	None	A >> P	212 mm
Coil elements	B4;M2,3;T1	F >> H	36 mm
Contrast	D4,1V12,3,11	ļ	30 111111
MTC	Off	Physio	NI .
		1st Signal/Mode	None
Magn. preparation	None	BOLD	
Flip angle	40 deg	GLM Statistics	Off
Fat suppr.	Fat sat.	Dynamic t-maps	Off
Averaging mode	Long term	Starting ignore meas	0
Reconstruction	Magnitude		0
Measurements	813	Ignore after transition	_
		Model transition states	On
Delay in TR	0 ms	Temp. highpass filter	On
Multiple series	Off	Threshold	4.00
Resolution			
		Paradigm size	12
Base resolution	132	— Meas[1]	Baseline
Base resolution	132 100 %	S .	
Phase resolution	100 %	— Meas[1]	Baseline
Phase resolution Phase partial Fourier	100 % 7/8	Meas[1] Meas[2]	Baseline Baseline
Phase resolution	100 %	Meas[1] Meas[2] Meas[3] Meas[4]	Baseline Baseline Baseline
Phase resolution Phase partial Fourier Interpolation	100 % 7/8 Off	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]	Baseline Baseline Baseline Baseline
Phase resolution Phase partial Fourier Interpolation PAT mode	100 % 7/8 Off GRAPPA	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6]	Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	100 % 7/8 Off GRAPPA 2	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7]	Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE	100 % 7/8 Off GRAPPA 2 64	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8]	Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE	100 % 7/8 Off GRAPPA 2	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9]	Baseline
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE	100 % 7/8 Off GRAPPA 2 64	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10]	Baseline
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode	100 % 7/8 Off GRAPPA 2 64 GRE	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11]	Baseline Active
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize	100 % 7/8 Off  GRAPPA 2 64 GRE  Off	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12]	Baseline Active Active
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter	100 % 7/8 Off  GRAPPA 2 64 GRE  Off Off	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Motion correction	Baseline Active Active Off
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter	100 % 7/8 Off  GRAPPA 2 64 GRE  Off Off Off On	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12]	Baseline Active Active
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	100 % 7/8 Off  GRAPPA 2 64 GRE  Off Off	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Motion correction	Baseline Active Active Off
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming  Geometry	100 % 7/8 Off GRAPPA 2 64 GRE Off Off Off On Off	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Motion correction Spatial filter	Baseline Active Active Off
Phase resolution Phase partial Fourier Interpolation  PAT mode Accel. factor PE Ref. lines PE Reference scan mode  Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	100 % 7/8 Off  GRAPPA 2 64 GRE  Off Off Off On	Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Motion correction Spatial filter  Sequence	Baseline Active Active Off

SIR accel. factor 1 EPI factor 132 Gradient mode Normal RF spoiling Off  Excite pulse duration 3180 us Slice multiplier 1 Multi-band PE shift 3 1/FoV zBlip scheme 0 MB kernel size 0 MB knockout band 0 No. of interleaved TEs 0 RF pulse shape 1 EPI noise scans 0 EPI full reference scan Single-band images On MB RF phase scramble Off SENSE1 coil combine Off Log physiology to file Invert RO/PE polarity Off Save reduced raw data Off Readout slice trace Off Disable ramp sampling Off PF omits higher k-space Off Online multi-band recon. FFT scale factor 1.00 GRE iPAT ref. FA 12.0 deg Send B1 shim trigger Never Triggering scheme Standard Starting ignore meas Paradigm size 2 Multiplier 1 Step [1]	Free echo spacing Echo spacing	Off 0.64 ms
Slice multiplier  Multi-band PE shift  ZBlip scheme  MB kernel size  MB knockout band  No. of interleaved TEs  RF pulse shape  EPI noise scans  EPI full reference scan  Single-band images  MB RF phase scramble  SENSE1 coil combine  Log physiology to file Invert RO/PE polarity  Save reduced raw data  Readout slice trace  Disable ramp sampling  PF omits higher k-space  Online multi-band recon.  FFT scale factor  Triggering scheme  Starting ignore meas  Paradigm size  MB RF phase scramble  Off  Online  Off  Online  Triggering scheme  Standard  Starting ignore meas  Paradigm size  Multiplier  Step [1]	EPI factor Gradient mode	132 Normal
Sieb [5]	Slice multiplier Multi-band PE shift zBlip scheme MB kernel size MB knockout band No. of interleaved TEs RF pulse shape EPI noise scans EPI full reference scan Single-band images MB RF phase scramble SENSE1 coil combine Log physiology to file Invert RO/PE polarity Save reduced raw data Readout slice trace Disable ramp sampling PF omits higher k-space Online multi-band recon. FFT scale factor GRE iPAT ref. FA Send B1 shim trigger Triggering scheme Starting ignore meas Paradigm size Multiplier	1 3 1/FoV 0 0 0 0 1 0 0 1 0 On Off Off Off Off Off Off Off Off Off

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr5-6\_GE\_1p6mm\_MB2IPAT2\_pf7\_te21\_tr600 TA: 6:24 PAT: 2 Voxel size: 1.6×1.6×1.6 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Special sat.	None
Prio Recon	Off	Table position	Н
Before measurement		Table position	0 mm
After measurement		Inline Composing	Off
Load to viewer	On		
Inline movie	Off	System	
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments	Oli	M3	On
Auto open inline display	Off	V32	Off
	On	Destinate and	FIV
Start measurement without	On	Positioning mode	FIX
further preparation	0"	MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Routine		Transversal	F >> H
Slice group 1		Coil Combine Mode	Sum of Squares
Slices	22	AutoAlign	
Dist. factor	0 %	Auto Coil Select	Default
Position	L3.4 A17.5 H15.4	Chim	Ctondord
		Shim mode	Standard
Orientation	T > C21.3 > S-2.6	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	On
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	! Ref. amplitude 1H	210.000 V
FoV read	212 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	1.61 mm	Position	L3.4 A17.5 H15.4
TR	600 ms	Orientation	T > C21.3 > S-2.6
TE	21.0 ms	Rotation	0.00 deg
Multi-band accel, factor	2	R >> L	212 mm
Filter	None	A >> P	212 mm
Coil elements	B4;M2,3;T1	F >> H	36 mm
Contrast	D+,IVI2,3,1 1	ļ.	36 11111
MTC	0#	Physio	NI .
	Off	1st Signal/Mode	None
Magn. preparation	None	BOLD	
Flip angle	40 deg	GLM Statistics	Off
Fat suppr.	Fat sat.	Dynamic t-maps	Off
Averaging mode	Long term	Starting ignore meas	0
Reconstruction	Magnitude		0
Measurements	618	Ignore after transition  Model transition states	On
Delay in TR	0 ms		
•		Temp. highpass filter	On
Multiple series	Off	Threshold	4.00
Resolution		Paradigm size	12
Base resolution	132	— Meas[1]	Baseline
Phase resolution	100 %	Meas[2]	Baseline
Phase partial Fourier	7/8	Meas[3]	Baseline
	Off	Meas[4]	Baseline
Interpolation	OII	Meas[5]	Baseline
PAT mode	GRAPPA	Meas[6]	Baseline
Accel. factor PE	2	Meas[7]	Baseline
Ref. lines PE	64	Meas[8]	Baseline
Reference scan mode	_	Meas[9]	Baseline
Notoroniou duan iniuuu	GRE		
	GRE	Maac[10]	
Distortion Corr.	GRE Off	Meas[10]	Baseline
Distortion Corr. Prescan Normalize		Meas[11]	Active
	Off	Meas[11] Meas[12]	Active Active
Prescan Normalize Raw filter	Off Off On	Meas[11] Meas[12] Motion correction	Active Active Off
Prescan Normalize Raw filter Elliptical filter	Off Off	Meas[11] Meas[12]	Active Active
Prescan Normalize Raw filter Elliptical filter Hamming	Off Off On Off	Meas[11] Meas[12] Motion correction Spatial filter Sequence	Active Active Off Off
Prescan Normalize Raw filter Elliptical filter Hamming Geometry	Off Off On Off Off	Meas[11] Meas[12] Motion correction Spatial filter Sequence Introduction	Active Active Off Off
Prescan Normalize Raw filter Elliptical filter Hamming	Off Off On Off	Meas[11] Meas[12] Motion correction Spatial filter Sequence	Active Active Off Off

SIR accel. factor 1 EPI factor 132 Gradient mode Normal RF spoiling Off  Excite pulse duration 3180 us Slice multiplier 1 Multi-band PE shift 3 1/FoV zBlip scheme 0 MB kernel size 0 MB knockout band 0 No. of interleaved TEs 0 RF pulse shape 1 EPI noise scans 0 EPI full reference scan Single-band images On MB RF phase scramble Off SENSE1 coil combine Off Invert RO/PE polarity Off Save reduced raw data Off Readout slice trace Off Disable ramp sampling Off PF omits higher k-space Off Online multi-band recon. Online FFT scale factor 1.00 GRE iPAT ref. FA 12.0 deg Send B1 shim trigger Never Triggering scheme Standard Starting ignore meas 0 Paradigm size 2 Multiplier 1 Step [1] 1 Step [2]	Free echo spacing Echo spacing	Off 0.64 ms
Excite pulse duration Slice multiplier Multi-band PE shift ZBlip scheme O MB kernel size O MB knockout band No. of interleaved TEs O RF pulse shape EPI noise scans O EPI full reference scan Single-band images MB RF phase scramble SENSE1 coil combine Log physiology to file Invert RO/PE polarity Save reduced raw data Readout slice trace Off Disable ramp sampling Off PF omits higher k-space Online multi-band recon. FFT scale factor Online Triggering scheme Standard Starting ignore meas Paradigm size Multiplier Step [1]  1	EPI factor Gradient mode RF spoiling	132 Normal Off
	Excite pulse duration Slice multiplier Multi-band PE shift zBlip scheme MB kernel size MB knockout band No. of interleaved TEs RF pulse shape EPI noise scans EPI full reference scan Single-band images MB RF phase scramble SENSE1 coil combine Log physiology to file Invert RO/PE polarity Save reduced raw data Readout slice trace Disable ramp sampling PF omits higher k-space Online multi-band recon. FFT scale factor GRE iPAT ref. FA Send B1 shim trigger Triggering scheme Starting ignore meas Paradigm size Multiplier Step [1]	3180 us 1 3 1/FoV 0 0 0 0 1 0 0 O O Off Off Off Off Off Off Off Off

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr1-4\_GE\_1p6mm\_MB2IPAT2\_pf7\_te21\_tr700\_sat TA: 8:24 PAT: 2 Voxel size: 1.6×1.6×1.6 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1 Thickness	50 mm
Prio Recon	Off	Position	50 mm L1.2 A64.1 F70.8
Before measurement		Orientation	
After measurement			T > C-42.1 > S0.7
Load to viewer	On	Special sat.	None
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off		0.11
segments	O.I.	System	
Auto open inline display	Off	T1	On
Start measurement without	On	M2	On
	On	B4	On
further preparation	0#	M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		
Routine		Positioning mode	FIX
Slice group 1		MSMA	S-C-T
Slices	22	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	L3.4 A17.5 H15.4	Transversal	F >> H
Orientation	T > C21.3 > S-2.6	Coil Combine Mode	Sum of Squares
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0.00 deg 0 %	Shim mode	Standard
FoV read	212 mm		
		Adjust with body coil	Off
FoV phase	100.0 %	Confirm freq. adjustment	On
Slice thickness	1.61 mm	Assume Silicone	Off
TR	700 ms	! Ref. amplitude 1H	230.000 V
TE	22.0 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	2	Adjust volume	
Filter	None	Position	L3.4 A17.5 H15.4
Coil elements	B4;M2,3;T1	Orientation	T > C21.3 > S-2.6
Contrast		Rotation	0.00 deg
MTC	Off	— R >> L	212 mm
	_	A >> P	212 mm
Magn. preparation	None	F >> H	36 mm
Flip angle	45 deg		
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	697	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off		
iviuitipie selles	Oii	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	132	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase partial Fourier	7/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
	·····	Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	2	Meas[3]	Baseline
Ref. lines PE	64	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off		Baseline
Hamming	Off	Meas[10]	
· ·		Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off

Introduction	Off
Bandwidth	2104 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	132
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5120 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	0
MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI hoise scans EPI full reference scan	0
	On
Single-band images	
MB RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0
•	

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr5-6\_GE\_1p6mm\_MB2IPAT2\_pf7\_te21\_tr700\_sat TA: 6:27 PAT: 2 Voxel size: 1.6×1.6×1.6 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1	F0 mm
Prio Recon	Off	Thickness Position	50 mm L1.2 A64.1 F70.8
Before measurement		Orientation	
After measurement			T > C-42.1 > S0.7 None
Load to viewer	On	Special sat.	
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off	System	
segments		T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation		M3	On
Wait for user to start	Off	V32	Off
Start measurements	single	V 32	
Routine		Positioning mode	FIX
Slice group 1		MSMA	S-C-T
Slices	22	Sagittal	R >> L A >> P
Dist. factor	0 %	Coronal Transversal	A >> P F >> H
Position	L3.4 A17.5 H15.4		
Orientation	T > C21.3 > S-2.6	Coil Combine Mode AutoAlign	Sum of Squares
Phase enc. dir.	A >> P	Auto Coil Select	 Default
Rotation	0.00 deg	Auto Coli Select	Delauli
Phase oversampling	0 %	Shim mode	Standard
FoV read	212 mm	Adjust with body coil	Off
FoV phase	100.0 %	Confirm freq. adjustment	On
Slice thickness	1.61 mm	Assume Silicone	Off
TR	700 ms	! Ref. amplitude 1H	230.000 V
TE	22.0 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	2	Adjust volume	
Filter	None	Position	L3.4 A17.5 H15.4
Coil elements	B4;M2,3;T1	Orientation	T > C21.3 > S-2.6
Contrast		Rotation	0.00 deg
MTC	Off	R >> L	212 mm
Magn. preparation	None	A >> P	212 mm
Flip angle	45 deg	F >> H	36 mm
Fat suppr.	Fat sat.	Physio	
	I are at the man	1st Signal/Mode	None
Averaging mode	Long term	-	
Reconstruction	Magnitude	BOLD	0"
Measurements	529	GLM Statistics	Off
Delay in TR	0 ms Off	Dynamic t-maps	Off
Multiple series	OII	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	132	Model transition states	On On
Phase resolution	100 %	Temp. highpass filter	_
Phase partial Fourier	7/8	Threshold Paradigm size	4.00 12
Interpolation	Off	Meas[1]	12 Baseline
PAT mode	GRAPPA	Meas[1] Meas[2]	Baseline Baseline
Accel. factor PE	2	Meas[2] Meas[3]	Baseline Baseline
Ref. lines PE	64	Meas[4]	Baseline
Reference scan mode	GRE	Meas[4] Meas[5]	Baseline
	OILE	Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
		Ινισασίτ]	
Prescan Normalize	Off	Meas[8]	Raseline
Raw filter	Off On	Meas[8]	Baseline Baseline
	On Off	Meas[9]	Baseline
Raw filter	On	Meas[9] Meas[10]	Baseline Baseline
Raw filter Elliptical filter Hamming	On Off	Meas[9] Meas[10] Meas[11]	Baseline Baseline Active
Raw filter Elliptical filter Hamming Geometry	On Off Off	Meas[9] Meas[10] Meas[11] Meas[12]	Baseline Baseline Active Active
Raw filter Elliptical filter Hamming	On Off	Meas[9] Meas[10] Meas[11]	Baseline Baseline Active

Sequence	
Introduction Bandwidth Flow comp. Free echo spacing Echo spacing	Off 2104 Hz/Px No Off 0.64 ms
SIR accel. factor EPI factor Gradient mode RF spoiling	1 132 Normal Off
Excite pulse duration Slice multiplier Multi-band PE shift zBlip scheme MB kernel size MB knockout band No. of interleaved TEs RF pulse shape EPI noise scans EPI full reference scan Single-band images MB RF phase scramble SENSE1 coil combine Log physiology to file Invert RO/PE polarity Save reduced raw data Readout slice trace Disable ramp sampling PF omits higher k-space Online multi-band recon. FFT scale factor GRE iPAT ref. FA Send B1 shim trigger Triggering scheme Starting ignore meas Paradigm size Multiplier Step [1] Step [2]	5120 us 1 3 1/FoV 0 0 0 0 1 0 0 O The control of th

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr1-4\_GE\_1p5mm\_SBIPAT3\_pf6\_te18\_tr1000\_sat\_450i TA: 7:40 PAT: 3 Voxel size: 1.5×1.5×1.5 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1 Thickness	40 mm
Prio Recon	Off	Position	L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement		Special sat.	None
Load to viewer	On	opedal sat.	
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off		
segments		System	
Auto open inline display	Off	T1	On
Start measurement without	On	M2	On
further preparation	311	B4	On
Wait for user to start	Off	M3	On
		V32	Off
Start measurements	single		
Routine		Positioning mode	FIX S - C - T
Slice group 1		MSMA	
Slices	18	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
Position	L2.1 A10.0 F9.9	Transversal	F >> H
Orientation	T > C29.9	Coil Combine Mode	Sum of Squares
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Default
Phase oversampling	0.00 deg 0 %	Shim mode	Standard
FoV read	216 mm		
FoV phase		Adjust with body coil	Off
	80.6 %	Confirm freq. adjustment	On
Slice thickness	1.50 mm	Assume Silicone	Off
TR	1000 ms	! Ref. amplitude 1H	210.000 V
TE	18.0 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	—— R >> L	216 mm
	None	A >> P	174 mm
Magn. preparation		F >> H	27 mm
Flip angle	50 deg		
Fat suppr.	Fat sat.	Physio	
Averaging mode	Long term	1st Signal/Mode	None
Reconstruction	Magnitude	BOLD	
Measurements	450	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off		
•	On .	Starting ignore meas	0
Resolution		Ignore after transition	0
Base resolution	144	Model transition states	On
Phase resolution	100 %	Temp. highpass filter	On
Phase partial Fourier	6/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
		Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off	Meas[10]	Baseline
Hamming	Off	Meas[10] Meas[11]	Active
Coomotry			Active
Geometry		Meas[12]	
Multi-slice mode	Interleaved Interleaved	Motion correction Spatial filter	Off Off
Series			

- Coquonico	
Introduction	Off
Bandwidth	1158 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor	1
EPI factor	116
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Jen\Aud spatial res piloting\TIMITr5-6\_GE\_1p5mm\_SBIPAT3\_pf6\_te18\_tr1000\_sat\_350i TA: 6:00 PAT: 3 Voxel size: 1.5×1.5×1.5 mm Rel. SNR: 1.00 USER: AV\_ep2d\_bold\_sd\_20140727

Properties		Sat. region 1 Thickness	40 mm
Prio Recon	Off	Position	L10.9 A51.7 F73.1
Before measurement		Orientation	T > C-33.5 > S4.0
After measurement		Special sat.	None
Load to viewer	On	Special Sat.	
Inline movie	Off	Table position	Н
Auto store images	On	Table position	0 mm
Load to stamp segments	Off	Inline Composing	Off
Load images to graphic	Off		<b></b>
segments	OII	System	
Auto open inline display	Off	T1	On
		M2	On
Start measurement without	On	B4	On
further preparation	2"	M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		
Routine		Positioning mode	FIX
Slice group 1		—   MSMA	S - C - T
Slices	18	Sagittal	R >> L
Dist. factor	0 %	Coronal	A >> P
		Transversal	F >> H
Position	L2.1 A10.0 F9.9	Coil Combine Mode	Sum of Squares
Orientation	T > C29.9	AutoAlign	
Phase enc. dir.	A >> P	Auto Coil Select	Default
Rotation	0.00 deg	, 10.0 001 001001	
Phase oversampling	0 %	Shim mode	Standard
FoV read	216 mm	Adjust with body coil	Off
FoV phase	80.6 %	Confirm freq. adjustment	On
Slice thickness	1.50 mm	Assume Silicone	Off
TR	1000 ms	! Ref. amplitude 1H	210.000 V
TE	18.0 ms	Adjustment Tolerance	Auto
Multi-band accel. factor	1	Adjust volume	Auto
Filter	None	Position	L2.1 A10.0 F9.9
Coil elements	B4;M2,3;T1		
Con elements	D4,IVI2,3,1 1	Orientation	T > C29.9
Contrast		Rotation	0.00 deg
MTC	Off	—   R >> L	216 mm
Magn. preparation	None	A >> P	174 mm
Flip angle	50 deg	F >> H	27 mm
Fat suppr.	Fat sat.	Physio	
·····		1st Signal/Mode	None
Averaging mode	Long term	1st Signal/Wode	None
Reconstruction	Magnitude	BOLD	
Measurements	350	GLM Statistics	Off
Delay in TR	0 ms	Dynamic t-maps	Off
Multiple series	Off	Starting ignore meas	0
•		Ignore after transition	0
Resolution		— Model transition states	On
Base resolution	144		
Phase resolution	100 %	Temp. highpass filter	On 4.00
Phase partial Fourier	6/8	Threshold	4.00
Interpolation	Off	Paradigm size	12
		Meas[1]	Baseline
PAT mode	GRAPPA	Meas[2]	Baseline
Accel. factor PE	3	Meas[3]	Baseline
Ref. lines PE	48	Meas[4]	Baseline
Reference scan mode	GRE	Meas[5]	Baseline
		Meas[6]	Baseline
Distortion Corr.	Off	Meas[7]	Baseline
Prescan Normalize	Off	Meas[8]	Baseline
Raw filter	On	Meas[9]	Baseline
Elliptical filter	Off		Baseline
Hamming	Off	Meas[10]	
•		Meas[11]	Active
Geometry		Meas[12]	Active
Multi-slice mode	Interleaved	Motion correction	Off
Series	Interleaved	Spatial filter	Off

Ocquerioc	
Introduction Bandwidth Flow comp.	Off 1158 Hz/Px No
Free echo spacing	Off
Echo spacing	1 ms
SIR accel. factor EPI factor Gradient mode RF spoiling	1 116 Normal Off
Excite pulse duration	3640 us
Slice multiplier	1
Fake MB factor for SB No. of interleaved TEs	1 0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine Log physiology to file	Off Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling PF omits higher k-space	Off Off
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger Triggering scheme	Never Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1 1
Step [1] Step [2]	0
1, r=1	-

\\USER\Feinberglab\Jen\Aud spatial res piloting\mp2rage\_1mm\_TR4000

			: mp2rage_wip602B
Dranartica		Image Filter	Off
Properties	0"	Distortion Corr.	Off
Prio Recon	Off	Prescan Normalize	Off
Before measurement		Normalize	Off
After measurement	0:-	B1 filter	Off
Load to viewer	On Off	Raw filter	Off
Inline movie	Off	Elliptical filter	Off
Auto store images	On		
Load to stamp segments	Off	Geometry	0. 1 1
Load images to graphic	Off	Multi-slice mode	Single shot
segments		Series	Interleaved
Auto open inline display	Off		
Start measurement without	On	Table position	Н
further preparation		Table position	0 mm
Wait for user to start	On	Inline Composing	Off
Start measurements	single	System	
Routine		T1	On
Slab group 1		M2	On
Slabs	1	B4	On
Dist. factor	50 %	M3	On
Position	L1.9 A29.6 F31.5	V32	Off
Orientation	Sagittal		
Phase enc. dir.	H >> F	Positioning mode	FIX
Rotation	90.00 deg	MSMA	S - C - T
Phase oversampling	0 %	Sagittal	R >> L
Slice oversampling	11.1 %	Coronal	A >> P
Slices per slab	144	Transversal	F >> H
FoV read	200 mm	Save uncombined	Off
FoV phase	90.6 %	Coil Combine Mode	Adaptive Combine
Slice thickness	1.00 mm	AutoAlign	
TR	4000 ms	Auto Coil Select	Default
TE	3.23 ms	China mada	Ctondord
Averages	1	Shim mode	Standard
Concatenations	1	Adjust with body coil	Off
Filter	None	Confirm freq. adjustment	Off
Coil elements	B4;M2,3;T1	Assume Silicone	Off
Con elements	D4,IVIZ,3,11	! Ref. amplitude 1H	240.000 V
Contrast		Adjustment Tolerance	Auto
Magn. preparation	Non-sel. IR	Adjust volume	1.4.0.4.0.4.0.50.0
TI 1	1000 ms	! Position	L1.9 A24.9 F9.3
TI 2	3200 ms	! Orientation	Sagittal
Flip angle 1	4 deg	! Rotation	0.00 deg
Flip angle 2	4 deg	! F >> H	108 mm
Fat suppr.	Water excit. fast	! A >> P	160 mm
Water suppr.	None	! R >> L	127 mm
2nd Inversion-Contrast	On	Physio	
Avoraging mode	Long torm	1st Signal/Mode	None
Averaging mode Reconstruction	Long term Magnitude		O#
Measurements	1	Dark blood	Off
Multiple series	Each measurement	Resp. control	Off
•	Edon medsarement	Inline	
Resolution	400	Subtract	Off
Base resolution	192	Std-Dev-Sag	Off
Phase resolution	100 %	Std-Dev-Sag Std-Dev-Cor	Off
Slice resolution	100 %	Std-Dev-Col	Off
Phase partial Fourier	Off		Off
Slice partial Fourier	6/8	Std-Dev-Time	_
Interpolation	Off	MIP-Sag	Off
PAT mode	GRAPPA	MIP-Cor	Off
		MIP-Tra	Off
Accel. factor PE	3	MIP-Time	Off
Ref. lines PE	36 1	Save original images	On
Accel. factor 3D Reference scan mode	Integrated	Sequence	

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	1
Bandwidth	200 Hz/Px
Flow comp.	Slice
Echo spacing	7.8 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Non-sel.
RF spoiling	On
FFT Scale Factor	200 %
Line/Partition Swap	Off
Homodyne Phase Filter	Off
Flat Image	On
T1 Map	On
Division Image	Off
ExtInvPulseOn	On
OffResFreqInv	0
Invflipangle	970

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#### \\USER

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,	Jen	
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		b1map_200V_32
		mp2rage_0.7mm_TR4500
		TIMIT_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_testrx
		TIMITr1-4_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_325i_run1
		TIMITr1-4_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_325i_run2
		TIMITr1-4_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_325i_run3
		TIMITr1-4_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_325i_run4
		TIMITr5-6_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_247i_run5
		TIMITr5-6_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_247i_run6
		TIMIT_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_325i_PA2
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		BP_GRASE_CS_CFA_1mm_22SL
		PIFrSn_GE_1mm_SBIPAT3_pf6_te23_tr1500_sat_391i
		PIFrSn_GE_1p2mm_SBIPAT3_pf6_te23_tr1500_sat_392i_runX
		====202002067-test 1p6mm, tr700/600====
		TIMIT-1-4_GE_1p6mm_MB2IPAT2_pf7_te21_tr600
		TIMITr5-6_GE_1p6mm_MB2IPAT2_pf7_te21_tr600
		=== reduce SAT voltage if SAR is high === TIMITr1-4_GE_1p6mm_MB2IPAT2_pf7_te21_tr700_sat
		TIMITT5-6_GE_1p6mm_MB2IPAT2_pf7_te21_tr700_sat
		=== double check fft scale factor ===
		TIMITr1-4_GE_1p5mm_SBIPAT3_pf6_te18_tr1000_sat_450i
		TIMITr5-6 GE 1p5mm SBIPAT3 pf6 te18 tr1000_sat_450i
		mp2rage_1mm_TR4000
		IIIp21490_111111_1144000