\\USER\Feinberglab\Test\test1118\localizer_200V : Off Voxel size: 1.2×1.1×3.0 mm Rel. SNR: 1.00

SIEMENS: gre

PAT: Off

TA: 0:27

TA. 0.27 P	AT. OII VOXEI SIZE. T.ZX	T. IX3.0 IIIII Rei. SNR. 1.00	SIEWENS. gre
		Phase resolution	90 %
Properties			90 % 6/8
Prio Recon	Off	Phase partial Fourier	
Before measurement		Interpolation	On
After measurement		PAT mode	None
Load to viewer	On	Imaga Filtor	
Inline movie	Off	Image Filter	Off
Auto store images	On	Distortion Corr.	Off
Load to stamp segments	Off	Prescan Normalize	Off
Load images to graphic	Off	Normalize	Off
segments		B1 filter	Off
Auto open inline display	Off	Raw filter	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
	y -		
Routine		Saturation mode	Standard
Slice group 1		Special sat.	None
Slices	5		
Dist. factor	20 %	Table position	Н
Position	Isocenter	Table position	0 mm
Orientation	Sagittal	Inline Composing	Off
Phase enc. dir.	A >> P		
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 UZ	
Slice group 3	<u> </u>	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	Off
Rotation	0.00 deg	Coil Combine Mode	Adaptive Combine
Phase oversampling	0 %	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	3.00 ms	Confirm freq. adjustment	Off
Averages	1	Assume Silicone	Off
Concatenations	15	! Ref. amplitude 1H	200.000 V
Filter	None	Adjustment Tolerance	Auto
Coil elements	B4;M2,3;T1	Adjust volume	
John Gleriferits	₽Ŧ,IVIZ,♥, I I	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	Dhysia	
Water suppr.	None	Physio	None
SWI	Off	1st Signal/Mode	None
		Segments	1
Averaging mode	Short term	Tagging	None
Reconstruction	Magnitude	Dark blood	Off
Measurements	1		
Multiple series	Each measurement	Resp. control	Off
Resolution		Inline	
Base resolution	256	Subtract	Off
Dase resolution	200	Subtract	Oii

Liver registration Std-Dev-Sag Std-Dev-Cor Std-Dev-Tra Std-Dev-Time MIP-Sag MIP-Cor MIP-Tra MIP-Time Save original images	Off
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

Sequence

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\Test\test1118\b1map_200V_TR100

TA: 0:32	Voxel size: 3.9x3.9x5.0 mm	Rel. SNR: 1.00 USER:	: b1map_658
Properties		M3 V32	On Off
Prio Recon	Off		OII
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
	Oli		
segments	0"	AutoAlign	 D ()
Auto open inline display	Off	Auto Coil Select	Default
Start measurement without	On	Shim mode	Tune up
further preparation		Adjust with body coil	Off
Wait for user to start	Off	Confirm freq. adjustment	Off
Start measurements	single	Assume Silicone	
Douting			Off
Routine		! Ref. amplitude 1H	200.000 V
Slice group 1		Adjustment Tolerance	Auto
Slices	1	Adjust volume	
Dist. factor	150 %	Position	Isocenter
Position	L0.0 A5.4 H40.7	Orientation	Transversal
Orientation	T > C-17.8	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 %	I	
Slice thickness	5 mm	Composing	
TR	425 ms	Sequence	
TE 1	14 ms		0
		Contrasts	2
TE 2	14 ms	Bandwidth	260.416667 Hz/Px
Averages	1	T1 Compensation	Mean T1
Filter	None	Mean T1	500.0 ms
Coil elements	B4;M2,3;T1	Angles	1
Contrast		Amplitude Weighting	Linear
Flip angle 1	90 deg		
Flip angle 2	120 deg	Scale Bar	Enabled
	S .	Raw Data	Disabled
Flip angle 3	60 deg		
Flip angle 4	135 deg		
Flip angle 5	45 deg		
Measurements	1		
Resolution	0.4		
Base resolution Phase resolution	64 100 %		
Raw filter	Off		
Geometry Series	Interleaved		
Navigator 1			
Position	R1.4 A11.5 H37.3		
Orientation	T > C-18.6		
Rotation	0.00 deg		
Base size phase	129 mm		
Base size read	87 mm		
Thickness	50 mm		
	Н		
Table position			
Table position	0 mm		
	0 mm Off		
Table position			
Table position Inline Composing			
Table position Inline Composing System	Off		

	\\USER\Feinberglal	o\Test\test1118\MPRAGE	
TA: 4:46 F	PAT: Off Voxel size: 1.0x	1.0×1.2 mm Rel. SNR: 1.00	SIEMENS: tfl
Properties		Geometry	
Prio Recon	Off	Multi-slice mode	Single shot
Before measurement After measurement	O.I.	Series	Interleaved
Load to viewer	On	Table position	Н
Inline movie	Off	Table position	0 mm
Auto store images	On	Inline Composing	Off
Load to stamp segments	Off	miline Composing	Oli
Load images to graphic	Off	System	
segments	Oll	T1	On
Auto open inline display	Off	M2	On
Start measurement without	On	B4	On
further preparation	OII	M3	On
Wait for user to start	Off	V32	Off
Start measurements	single		DEE
Start measurements	Sirigie	Positioning mode	REF
Routine		MSMA	S-C-T
Slab group 1		Sagittal	R >> L
Slabs	1	Coronal	A >> P
Dist. factor	50 %	Transversal	F >> H
Position	R2.0 A27.1 F10.2	Save uncombined	Off
Orientation	Sagittal	Coil Combine Mode	Adaptive Combine
Phase enc. dir.	A >> P	AutoAlign	
Rotation	0.00 deg	Auto Coil Select	Off
Phase oversampling	0 %	Shim mode	Standard
Slice oversampling	0.0 %	Adjust with body coil	Off
Slices per slab	144	Confirm freq. adjustment	Off
FoV read	256 mm	Assume Silicone	Off
FoV phase	81.3 %	? Ref. amplitude 1H	0.000 V
Slice thickness	1.20 mm	Adjustment Tolerance	Auto
TR	1370 ms	Adjust volume	
TE	2.84 ms	Position	R2.0 A27.1 F10.2
Averages	1	Orientation	Sagittal
Concatenations	1	Rotation	0.00 deg
Filter	None	F >> H	256 mm
Coil elements	B4;M2,3;T1	A >> P	208 mm
Contrast		R >> L	173 mm
Magn. preparation	Non-sel. IR	Physio	
TI	900 ms	1st Signal/Mode	None
Flip angle	9 deg		
Fat suppr.	None	Dark blood	Off
Water suppr.	None	Resp. control	Off
Averaging mode	Long term	Inline	
Reconstruction	Magnitude	Subtract	Off
Measurements	1	Std-Dev-Sag	Off
Multiple series	Off	Std-Dev-Sag Std-Dev-Cor	Off
1		Std-Dev-Tra	Off
Resolution	050	Std-Dev-Time	Off
Base resolution	256	MIP-Sag	Off
Phase resolution Slice resolution	100 %	MIP-Cor	Off
Phase partial Fourier	100 % Off	MIP-Tra	Off
Slice partial Fourier	Off	MIP-Time	Off
Interpolation	Off	Save original images	On
PAT mode	None		
		Sequence Introduction	On
Image Filter	Off	Dimension	3D
Distortion Corr.	Off	Elliptical scanning	Off
Prescan Normalize	Off	Asymmetric echo	Off
Normalize	Off Off	Bandwidth	240 Hz/Px
B1 filter	Off Off	Flow comp.	No
Raw filter	Off	Echo spacing	6.5 ms

Elliptical filter

Off

Echo spacing

6.5 ms

RF pulse type Fast
Gradient mode Normal
Excitation Non-sel.
RF spoiling On

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\\USEK\FeInbergiab\Test\test\T	T&\DCasi Di	- BO	nasn	maragi

TA: 5:34 PAT: 4 Voxel size: 1.5×1.5×3.0 mm Rel. SNR: 1.00 USER: ep2d_fid_mb_pcasl_DE_BS_flash

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	mine Composing	Oli
Inline movie	Off	System	
Auto store images	On		On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On		
further preparation		Positioning mode	REF
Wait for user to start	Off	MSMA	S - C - T
Start measurements	single	Sagittal	R >> L
	5ig.5	Coronal	A >> P
Routine		Transversal	F >> H
Slice group 1		Save uncombined	Off
Slices	24	Coil Combine Mode	Sum of Squares
Dist. factor	20 %	AutoAlign	
Position	L0.0 A20.3 H54.9	Auto Coil Select	Default
Orientation	Transversal	Ob-i	04
Phase enc. dir.	A >> P	Shim mode	Standard
Rotation	0.00 deg	Adjust with body coil	Off
Phase oversampling	0 %	Confirm freq. adjustment	Off
FoV read	192 mm	Assume Silicone	Off
FoV phase	100.0 %	? Ref. amplitude 1H	0.000 V
Slice thickness	3.0 mm	Adjustment Tolerance	Auto
TR	8560 ms	Adjust volume	
TE 1	15 ms	! Position	L4.1 A27.1 H44.1
TE 2	32 ms	! Orientation	Sagittal
Averages	1	! Rotation	0.00 deg
Concatenations	1	! F >> H	70 mm
Filter	None	! A >> P	208 mm
Coil elements	B4;M2,3;T1	! R >> L	173 mm
	D+,IVI2,0,11	Physio	
Contrast	~"	- 1st Signal/Mode	None
MTC	Off	13t Olgital/Wode	140110
Flip angle	90 deg	Perf	
Fat suppr.	Fat sat.	GBP	Off
Averaging mode	Long term	PBP	Off
Reconstruction	Magnitude	TTP	Off
Measurements	33	Original images	On
Delay in TR	0 ms	0	
Multiple series	Off	Sequence	0"
Multiple Selles	Oli	Introduction	Off
Resolution		Contrasts	2
Base resolution	128	— Bandwidth	1954 Hz/Px
Phase resolution	100 %	Free echo spacing	Off
Phase partial Fourier	6/8	Echo spacing	0.64 ms
Interpolation	Off	EPI factor	128
		RF pulse type	Normal
PAT mode	GRAPPA	Gradient mode	Fast
Accel. factor PE	4	RF spoiling	On
Ref. lines PE	48		
Reference scan mode	Separate	RF90 duration	12890
Distortion Corr.	Off	MB Number	2
Prescan Normalize	Off	DummyScan Number	1
Raw filter	Off	FOV Shift Number	1
		Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	BS Type	1
Geometry		Background Suppr.	Off
Multi-slice mode	Interleaved	BS parameter[1]	500 ms
	Ascending		
Series	Ascending	BS parameter[2]	10 ms

BS parameter[3]	0 ms
FOCI parameter[1]	800
FOCI parameter[2]	24
FOCI parameter[3]	1.0
FOCI parameter[4]	2000
Label Offset	80 mm
Post Label Delay	2000000 us
MD Massumanasata	20

MB Measurements 30 Ramp On On

TA: 5:34 Voxel size: 1.5x1.5x3.0 mm Rel. SNR: 1.00 USER: ep2d_fid_mb_pcasl_DE_BS_flash PAT: 4

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 Composing	Oli
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		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On		
further preparation		Positioning mode	REF
Wait for user to start	Off	MSMA	S - C - T
Start measurements	single	Sagittal	R >> L
	on ig.o	Coronal	A >> P
Routine		Transversal	F >> H
Slice group 1		Save uncombined	Off
Slices	24	Coil Combine Mode	Sum of Squares
Dist. factor	20 %	AutoAlign	·
Position	L0.0 A20.3 H31.9	Auto Coil Select	Default
Orientation	Transversal		
Phase enc. dir.	A >> P	Shim mode	Standard
Rotation	0.00 deg	Adjust with body coil	Off
Phase oversampling	0 %	Confirm freq. adjustment	Off
FoV read	192 mm	Assume Silicone	Off
FoV phase	100.0 %	? Ref. amplitude 1H	0.000 V
Slice thickness	3.0 mm	Adjustment Tolerance	Auto
TR	8560 ms	Adjust volume	
TE 1	15 ms	! Position	L4.1 A27.1 H44.1
TE 2	32 ms	! Orientation	Sagittal
Averages	1	! Rotation	0.00 deg
Concatenations	1	! F >> H	70 mm
Filter	None	! A >> P	208 mm
Coil elements	B4;M2,3;T1	! R >> L	173 mm
	D4,IVI2,3,1 1	Physio	
Contrast		1st Signal/Mode	None
MTC	Off	13t Signal/Mode	None
Flip angle	90 deg	Perf	
Fat suppr.	Fat sat.	GBP	Off
Averaging mode	Long term	PBP	Off
Reconstruction	Magnitude	TTP	Off
Measurements	33	Original images	On
Delay in TR	0 ms		
		Sequence	
Multiple series	Off	Introduction	Off
Resolution		Contrasts	2
Base resolution	128	Bandwidth	1954 Hz/Px
Phase resolution	100 %	Free echo spacing	Off
Phase partial Fourier	6/8	Echo spacing	0.64 ms
Interpolation	Off	EPI factor	128
		RF pulse type	Normal
PAT mode	GRAPPA	Gradient mode	Fast
Accel. factor PE	4		
Ref. lines PE	48	RF spoiling	On
Reference scan mode	Separate	RF90 duration	12890
Distortion Corr	Off	MB Number	2
Distortion Corr.	Off	DummyScan Number	1
Prescan Normalize	Off	FOV Shift Number	1
Raw filter	Off	Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	BS Type	1
			Off
Geometry			
Geometry Multi-slice mode	Interleaved	Background Suppr.	
Multi-slice mode Series	Interleaved Ascending	BS parameter[1] BS parameter[2]	500 ms 10 ms

BS parameter[3]	0 ms
FOCI parameter[1]	800
FOCI parameter[2]	24
FOCI parameter[3]	1.0
FOCI parameter[4]	2000
Label Offset	80 mm
Post Label Delay	2000000 us
MD Massumanasata	20

MB Measurements 30 Ramp On On

		\\USER\Feinberglab\Te	est\test1118\venc	_m3f3p4_flashref
TA: 34:00	PAT: 4	Voxel size: 1.6×1.6×5.0 mm	Rel. SNR: 1.00	USER: ep2d_venc_ms_sbmb_SAT_flashref

Properties		Special sat.	None
Prio Recon	Off	Table position	Н
Before measurement	5	Table position	0 mm
After measurement		Inline Composing	Off
Load to viewer	On	1	0.11
Inline movie	Off	System	
Auto store images	On	T1	On
	Off	M2	On
Load to stamp segments	Off	B4	On
Load images to graphic	Oii	M3	On
segments	0#	V32	Off
Auto open inline display	Off		
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	3	AutoAlign	
Dist. factor	700 %	Auto Coil Select	Default
	L0.0 A5.4 H2.0	China mada	Otandand
Position Orientation		Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	5.0 mm	! Position	L12.7 P37.1 H14.7
TR	5000 ms	! Orientation	T > C-15.0
TE	36.0 ms	! Rotation	0.00 deg
Averages	1	! R >> L	100 mm
Concatenations	1	! A >> P	70 mm
Filter	None	! F >> H	48 mm
Coil elements	B4;M2,3;T1	l	
_	, , ,	Physio	
Contrast	~"	1st Signal/Mode	None
MTC	Off	Angio	
Flip angle	15 deg	Flow mode	Single dir.
Fat suppr.	Fat sat.	Encodings	Sirigle dir.
Averaging mode	Long term		F om/o
Reconstruction	Magnitude	Velocity enc.	5 cm/s
Measurements	420	Direction	Through plane
		Magnitude sum	Off
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	Off
Resolution		Bandwidth	1776 Hz/Px
Base resolution	128	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	0.88 ms
Phase partial Fourier	6/8		
Interpolation	Off	EPI factor	128
		RF pulse type	Normal
PAT mode		1 0 1 1	- .
Accel, factor PE	GRAPPA	Gradient mode	Fast
Accel. lactor PE	GRAPPA 4	RF spoiling	Fast On
Ref. lines PE		RF spoiling	On
	4	RF spoiling RF90 duration	On 5120
Ref. lines PE Reference scan mode	4 36 Separate	RF spoiling RF90 duration MB Number	On 5120 3
Ref. lines PE Reference scan mode Distortion Corr.	4 36 Separate	RF spoiling RF90 duration MB Number DummyScan Number	On 5120 3 2
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize	4 36 Separate Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number	On 5120 3
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	4 36 Separate Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center	On 5120 3 2
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter	4 36 Separate Off Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number	On 5120 3 2
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	4 36 Separate Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center	On 5120 3 2
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	4 36 Separate Off Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice	On 5120 3 2
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming Geometry	4 36 Separate Off Off Off Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number	On 5120 3 2 3 1 1 1
Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	4 36 Separate Off Off Off Off	RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number Venc Repetition	On 5120 3 2 3 1 1 1 400

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\venc	m3f3p3	flashref
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TA: 34:00 PAT: 3 Voxel size: 1.6×1.6×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	System	
Inline movie	Off	System T1	On
Auto store images	On	M2	On
Load to stamp segments	Off	B4	On
Load images to graphic	Off	M3	On
segments		V32	Off
Auto open inline display	Off	V 32	OII
Start measurement without	On	Positioning mode	FIX
further preparation		MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Deutine	-	Transversal	F >> H
Routine		- Coil Combine Mode	Sum of Squares
Slice group 1	_	AutoAlign	
Slices	3	Auto Coil Select	Default
Dist. factor	700 %		
Position	L0.0 A5.4 H2.0	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	5.0 mm	! Position	L12.7 P37.1 H14.7
TR	5000 ms	! Orientation	T > C-15.0
TE	36.0 ms	! Rotation	0.00 deg
Averages	1	! R >> L	100 mm
Concatenations	1	! A >> P	70 mm
Filter	None	! F >> H	48 mm
Coil elements	B4;M2,3;T1	Physio	
Contrast			None
MTC	Off	1st Signal/Mode	None
Flip angle	15 deg	Angio	
Fat suppr.	Fat sat.	Flow mode	Single dir.
Fat Suppi.	rai sai.	Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	Through plane
Measurements	420	Magnitude sum	Off
Delay in TR	0 ms	I -	
Multiple series	Off	Sequence	
Resolution		Introduction	Off
Resolution	120	Bandwidth	1776 Hz/Px
Base resolution	128	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	0.88 ms
Phase partial Fourier	6/8	EPI factor	128
Interpolation	Off	RF pulse type	Normal
PAT mode	GRAPPA	Gradient mode	Fast
Accel. factor PE	3	RF spoiling	On
Ref. lines PE	36		
Reference scan mode	Separate	RF90 duration	5120
		MB Number	3
Distortion Corr.	Off	DummyScan Number	2
		FOV Shift Number	3
Prescan Normalize	Off	1 O V OHIII MUHIDEI	-
Raw filter	Off	Shift K0 Center	1
Raw filter Elliptical filter	Off Off		1 1
Raw filter	Off	Shift K0 Center	1 1 1
Raw filter Elliptical filter Hamming	Off Off	Shift K0 Center Every Other Slice	1 1 1 400
Raw filter Elliptical filter Hamming Geometry	Off Off Off	Shift K0 Center Every Other Slice SER Number	1 1 1
Raw filter Elliptical filter Hamming	Off Off	Shift K0 Center Every Other Slice SER Number Venc Repetition	1 1 1 400

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\venc	m3f3p2	flashref
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TA: 9:00 PAT: 2 Voxel size: 1.6×1.6×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	Custom	
Inline movie	Off	System	0:5
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	FIX
further preparation	3.1	MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Otal measurements	Single	Transversal	F >> H
Routine			
Slice group 1		Coil Combine Mode	Sum of Squares
Slices	3	AutoAlign	 D ()
Dist. factor	700 %	Auto Coil Select	Default
Position	L0.0 A5.4 H2.0	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %		Auto
Slice thickness	5.0 mm	Adjust volume	140 7 007 4 144 7
TR	5000 ms	! Position	L12.7 P37.1 H14.7
TE		! Orientation	T > C-15.0
	41.0 ms	! Rotation	0.00 deg
Averages	1	! R >> L	100 mm
Concatenations	1	! A >> P	70 mm
Filter	None	! F >> H	48 mm
Coil elements	B4;M2,3;T1	Physio	
Contrast		1st Signal/Mode	None
MTC	Off	_ Tat Olgital/Wode	None
Flip angle	15 deg	Angio	
Fat suppr.	Fat sat.	Flow mode	Single dir.
		Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	Through plane
Measurements	200	Magnitude sum	Off
Delay in TR	0 ms	1 -	
Multiple series	Off	Sequence	
Decelution		Introduction	Off
Resolution	400	Bandwidth	1776 Hz/Px
Base resolution	128	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	0.88 ms
Phase partial Fourier	6/8	EPI factor	128
Interpolation	Off	RF pulse type	Normal
PAT mode	GRAPPA		
Accel, factor PE	2	Gradient mode	Fast
Ref. lines PE	24	RF spoiling	On
		RF90 duration	5120
Reference scan mode	Separate	MB Number	3
Distortion Corr.	Off	DummyScan Number	2
Prescan Normalize	Off	FOV Shift Number	3
Raw filter	Off	Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	SER Number	1
1	Jii		100
Geometry		Venc Repetition	100
Geometry			
Multi-slice mode	Interleaved	- Spoil factor	5
	Interleaved Ascending	Spoil factor Skew Direction Dual On(1)	5 1 0

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\ep2d_M2P2_OVS_flash_iso75

TA: 1:37 PAT: 2	Voxel size: 0.8×0.8×0.8 mm	•	ep2d_bold_OVS_flash
Dranartia		Sat. region 1	
Properties	0"	_ Thickness	110 mm
Prio Recon	Off	Position	L0.0 A43.2 H1.5
Before measurement		Orientation	C > T2.0
After measurement		Sat. region 2	
Load to viewer	On	Thickness	110 mm
Inline movie	Off	Position	L0.0 P136.2 F35.7
Auto store images	On	Orientation	C > T14.7
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Off		
segments		Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without further preparation	On	Inline Composing	Off
Wait for user to start	Off	System	
Start measurements	single	T1	On
ļ.	Single	M2	On
Routine		B4	On
Slice group 1		_ M3	On
Slices	50	V32	Off
Dist. factor	50 %	Positioning made	EIV
Position	L1.2 P44.6 H15.4	Positioning mode MSMA	FIX S - C - T
Orientation	Transversal	_	
Phase enc. dir.	A >> P	Sagittal	R >> L
Rotation	0.00 deg	Coronal	A >> P
Phase oversampling	0 %	Transversal	F >> H
FoV read	192 mm	Coil Combine Mode	Sum of Squares
FoV phase	50.0 %	AutoAlign	
Slice thickness	0.75 mm	Auto Coil Select	Default
TR	3120 ms	Shim mode	Standard
TE	27 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	? Ref. amplitude 1H	0.000 V
Coil elements	B4;M2,3;T1	Adjustment Tolerance	Auto
I and the second	_ ·,···_,e, · ·	Adjust volume	Adio
Contrast		- ! Position	L12.7 P37.1 H14.7
MTC	Off	! Orientation	T > C-15.0
Flip angle	70 deg	! Rotation	0.00 deg
Fat suppr.	Fat sat.	! R >> L	100 mm
Averaging mode	Long term	! A >> P	70 mm
Reconstruction	Magnitude	!F>> H	48 mm
Measurements	28	I	10 11111
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
•		BOLD	
Resolution	050	- GLM Statistics	Off
Base resolution	256	Dynamic t-maps	Off
Phase resolution	100 %	Starting ignore meas	0
Phase partial Fourier	6/8	Ignore after transition	0
Interpolation	Off	Model transition states	On
PAT mode	GRAPPA	Temp. highpass filter	On
Accel. factor PE	2	Threshold	4.00
Ref. lines PE	24	Paradigm size	20
Reference scan mode	Separate	Meas[1]	Baseline
		Meas[2]	Baseline
Distortion Corr.	Off	Meas[3]	Baseline
Prescan Normalize	Off	Meas[4]	Baseline
Raw filter	On	Meas[5]	Baseline
Elliptical filter	Off		Baseline
Hamming	Off	Meas[6]	
		Meas[7]	Baseline Baseline
Geometry	Lata da accada	Meas[8]	Baseline
Multi-slice mode	Interleaved	Meas[9]	Baseline
Series	Ascending	Meas[10]	Baseline

Meas[11]

Active

Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Sequence	
Introduction	Off
Asymmetric echo	Off
Bandwidth	1086 Hz/Px
Free echo spacing	Off
Echo spacing	1.05 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On
RF90 duration	7600
MB Number	7680 2
DummyScan Number	1
FOV Shift Number	1
SkewType(1ff)	0
OVS flash(1on)	1
SER Number	1
Spoil factor	1
Skew Direction	1
Sat RF90 duration	5120
Dual On(1)	3
Echo Distance	1.00
MB Measurements	25
Ramp On	On
Trainp On	O11

\\USER\Feinberglab\Test\test1118\ep2d_M2P2_OVS_flash_iso55

TA: 1:37 PAT: 2	Voxel size: 0.5×0.5×0.6 mm	. – – –	ep2d_bold_OVS_flash
Proportion		Sat. region 1	
Properties	0"	_ Thickness	110 mm
Prio Recon	Off	Position	L0.0 A43.2 H1.5
Before measurement		Orientation	C > T2.0
After measurement		Sat. region 2	
Load to viewer	On	Thickness	110 mm
Inline movie	Off	Position	L0.0 P136.2 F35.7
Auto store images	On	Orientation	C > T14.7
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Off		
segments		Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
further preparation	•	System	
Wait for user to start	Off	T1	On
Start measurements	single	M2	Off
Routine		B4	Off
Slice group 1		_ M3	Off
Slices	50	V32	Off
Dist. factor	50 %		
Position	L1.2 P44.6 H15.4	Positioning mode	FIX
Orientation	Transversal	MSMA	S - C - T
Phase enc. dir.	A >> P	Sagittal	R >> L
Rotation	0.00 deg	Coronal	A >> P
Phase oversampling	0 %	Transversal	F >> H
FoV read	140 mm	Coil Combine Mode	Sum of Squares
FoV phase	50.0 %	AutoAlign	
Slice thickness	0.55 mm	Auto Coil Select	Default
TR	3120 ms	China manda	Chandand
TE	34 ms	Shim mode	Standard
		Adjust with body coil	Off
Averages	1 1	Confirm freq. adjustment	Off
Concatenations Filter	-	Assume Silicone	Off
	None	? Ref. amplitude 1H	0.000 V
Coil elements	T1	Adjustment Tolerance	Auto
Contrast		Adjust volume	140 7 007 4 114 4 7
MTC	Off	- ! Position	L12.7 P37.1 H14.7
Flip angle	70 deg	! Orientation	T > C-15.0
Fat suppr.	Fat sat.	! Rotation	0.00 deg
		! R >> L	100 mm
Averaging mode	Long term	! A >> P	70 mm
Reconstruction	Magnitude	! F >> H	48 mm
Measurements	28	Physio	
Delay in TR	0 ms	1st Signal/Mode	None
Multiple series	Off	1	110110
Resolution		BOLD	
Base resolution	256	- GLM Statistics	Off
Phase resolution	100 %	Dynamic t-maps	Off
Phase partial Fourier	6/8	Starting ignore meas	0
Interpolation	Off	Ignore after transition	0
		Model transition states	On
PAT mode	GRAPPA	Temp. highpass filter	On
Accel. factor PE	2	Threshold	4.00
Ref. lines PE	24	Paradigm size	20
Reference scan mode	Separate	Meas[1]	Baseline
Distortion Com		Meas[2]	Baseline
Distortion Corr.	Off	Meas[3]	Baseline
Prescan Normalize	Off	Meas[4]	Baseline
Raw filter	On O"	Meas[5]	Baseline
Elliptical filter	Off	Meas[6]	Baseline
Hamming	Off	Meas[7]	Baseline
Geometry		Meas[8]	Baseline
Multi-slice mode	Interleaved	- Meas[9]	Baseline
Series	Ascending	Meas[10]	Baseline
Jelles	According	M[44]	_ 4 d

Meas[11]

Active

Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Sequence	
Introduction	Off
Asymmetric echo	Off
Bandwidth	782 Hz/Px
Free echo spacing	Off
Echo spacing	1.4 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On
RF90 duration	7680
MB Number	2
DummyScan Number	1
FOV Shift Number	1
SkewType(1ff)	0
OVS flash(1on)	1
SER Number	1
Spoil factor	1
Skew Direction	1
Sat RF90 duration	5120
Dual On(1)	3
Echo Distance	1.00
MB Measurements	25
Ramp On	On

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TA: 1:37 PAT: 2	Voxel size: 0.5×0.5×0.6	mm Rel. SNR: 1.00 USER: 6	ep2d_bold_OVS_flash
Properties		Sat. region 1	
Prio Recon	Off	Thickness	110 mm
Before measurement	Oli	Position	L0.0 A43.2 H1.5
After measurement		Orientation	C > T2.0
Load to viewer	On	Sat. region 2	
Inline movie	Off	Thickness	110 mm
Auto store images	On	Position	L0.0 P136.2 F35.7
<u> </u>	Off	Orientation	C > T14.7
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Oli	Table position	⊔
segments	0"	Table position	H 0
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
further preparation	0#	System	
Wait for user to start	Off		On
Start measurements	single	M2	Off
Routine		B4	Off
Slice group 1		 M3	Off
Slices	50	V32	Off
Dist. factor	50 %		
Position	L1.2 P44.6 H15.4	Positioning mode	FIX
Orientation	Transversal	MSMA	S - C - T
Phase enc. dir.	A >> P	Sagittal	R >> L
Rotation	0.00 deg	Coronal	A >> P
Phase oversampling	0.00 deg 0 %	Transversal	F >> H
FoV read	140 mm	Coil Combine Mode	Sum of Squares
		AutoAlign	·
FoV phase Slice thickness	50.0 % 0.55 mm	Auto Coil Select	Default
TR	3120 ms	Shim mode	Standard
TE	34 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	? Ref. amplitude 1H	0.000 V
Coil elements	T1	Adjustment Tolerance	Auto
Contrast		Adjust volume	
MTC	Off	! Position	L12.7 P37.1 H14.7
Flip angle	70 deg	! Orientation	T > C-15.0
Fat suppr.	Fat sat.	! Rotation	0.00 deg
		! R >> L	100 mm
Averaging mode	Long term	! A >> P	70 mm
Reconstruction	Magnitude	! F >> H	48 mm
Measurements	28	Dhysis	
Delay in TR	0 ms	Physio	Maria
Multiple series	Off	1st Signal/Mode	None
Decelution		BOLD	
Resolution	050	GLM Statistics	Off
Base resolution	256	Dynamic t-maps	Off
Phase resolution	100 %	Starting ignore meas	0
Phase partial Fourier	6/8	Ignore after transition	0
Interpolation	Off	Model transition states	On
PAT mode	GRAPPA	Temp. highpass filter	On
Accel. factor PE	2	Threshold	4.00
Ref. lines PE	24	Paradigm size	20
Reference scan mode		_	Baseline
Reference scan mode	Separate	Meas[1]	
Distortion Corr.	Off	Meas[2]	Baseline
Prescan Normalize	Off	Meas[3]	Baseline
Raw filter	On	Meas[4]	Baseline
Elliptical filter	Off	Meas[5]	Baseline
Hamming	Off	Meas[6]	Baseline
· ·		Meas[7]	Baseline
_		Meas[8]	Baseline
Geometry			
Geometry Multi-slice mode	Interleaved	Meas[9]	Baseline
Geometry Multi-slice mode Series	Interleaved Ascending	Meas[9] Meas[10] Meas[11]	Baseline Baseline Active

Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Sequence	
Introduction	Off
Asymmetric echo	Off
Bandwidth	782 Hz/Px
Free echo spacing	Off
Echo spacing	1.4 ms
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On
RF90 duration	7680
MB Number	2
DummyScan Number	1
FOV Shift Number	1
SkewType(1ff)	0
OVS flash(1on)	1
SER Number	1
Spoil factor	1
Skew Direction	1
Sat RF90 duration	5120
Dual On(1)	3
Echo Distance	1.00
MB Measurements	25
Ramp On	On

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TA: 9:14 PAT: Off Voxel size: 1.0x1.0x1.2 mm Rel. SNR: 1.00 SIEMENS: tfl

Properties		Geometry	
Prio Recon	Off	Multi-slice mode	Single shot
Before measurement		Series	Interleaved
After measurement			
Load to viewer	On	Table position	H
Inline movie	Off	Table position	0 mm
Auto store images	On	Inline Composing	Off
Load to stamp segments	Off		.
Load images to graphic	Off	System	
segments	_	8CH	On
Auto open inline display	Off	Positioning mode	REF
Start measurement without	On	MSMA	S-C-T
further preparation	O.I.	_	
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Ctart measurements	Single	Transversal	F >> H
Routine		Save uncombined	Off
Slab group 1		Coil Combine Mode	Adaptive Combine
Slabs	1	AutoAlign	
Dist. factor	50 %	Auto Coil Select	Off
Position	Isocenter	Shim mode	Standard
Orientation	Sagittal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0.00 deg 0 %		Oπ 0.000 V
Slice oversampling	0.0 %	? Ref. amplitude 1H	
Slices per slab	160	Adjustment Tolerance	Auto
FoV read	256 mm	Adjust volume	
		Position	Isocenter
FoV phase	93.8 %	Orientation	Sagittal
Slice thickness	1.20 mm	Rotation	0.00 deg
TR	2300 ms	F >> H	256 mm
TE	2.84 ms	A >> P	240 mm
Averages	1	R >> L	192 mm
Concatenations	1	Physio	
Filter	None		None
Coil elements	8CH	1st Signal/Mode	None
Contrast		Dark blood	Off
Magn. preparation	Non-sel. IR	Resp. control	Off
TI	900 ms		
Flip angle	9 deg	Inline	
Fat suppr.	None	Subtract	Off
Water suppr.	None	Std-Dev-Sag	Off
	Long torm	Std-Dev-Cor	Off
Averaging mode	Long term	Std-Dev-Tra	Off
Reconstruction	Magnitude	Std-Dev-Time	Off
Measurements	1	MIP-Sag	Off
Multiple series	Off	MIP-Cor	Off
Resolution		MIP-Tra	Off
	256	MIP-Time	Off
I Base resolution	/3n	1 11110	
Base resolution	256 100 %		On
Phase resolution	100 %	Save original images	_
Phase resolution Slice resolution	100 % 100 %	Save original images	_
Phase resolution Slice resolution Phase partial Fourier	100 % 100 % Off	Save original images Sequence	On
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier	100 % 100 % Off Off	Save original images Sequence Introduction	On On
Phase resolution Slice resolution Phase partial Fourier	100 % 100 % Off	Save original images Sequence Introduction Dimension	On On 3D
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier	100 % 100 % Off Off	Save original images Sequence Introduction Dimension Elliptical scanning	On On 3D Off
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode	100 % 100 % Off Off Off None	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo	On On 3D Off Off
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter	100 % 100 % Off Off Off Off None	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth	On 3D Off Off 240 Hz/Px
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode	100 % 100 % Off Off Off None	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth Flow comp.	On 3D Off Off 240 Hz/Px No
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter	100 % 100 % Off Off Off Off None	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth	On 3D Off Off 240 Hz/Px
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter Distortion Corr.	100 % 100 % Off Off Off None Off Off	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth Flow comp. Echo spacing	On On 3D Off Off 240 Hz/Px No 6.5 ms
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter Distortion Corr. Prescan Normalize	100 % 100 % Off Off Off None Off Off Off	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth Flow comp. Echo spacing RF pulse type	On On 3D Off Off 240 Hz/Px No 6.5 ms
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter Distortion Corr. Prescan Normalize Normalize	100 % 100 % Off Off Off None Off Off Off Off Off	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth Flow comp. Echo spacing RF pulse type Gradient mode	On 3D Off Off 240 Hz/Px No 6.5 ms Fast Normal
Phase resolution Slice resolution Phase partial Fourier Slice partial Fourier Interpolation PAT mode Image Filter Distortion Corr. Prescan Normalize Normalize B1 filter	100 % 100 % Off Off Off None Off Off Off Off Off Off	Save original images Sequence Introduction Dimension Elliptical scanning Asymmetric echo Bandwidth Flow comp. Echo spacing RF pulse type	On On 3D Off Off 240 Hz/Px No 6.5 ms

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NOOLINI CIIIDCI GIAD II CSINCSI I I TO DUASI	-	-	Hash	11101 0

TA: 1:33	PAT: 4	Voxel size: 1.5×1.5×1.5 mm	Rel. SNR: 1.00	USER: ep2d fid mb	pcast DE BS flash
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Prio Recon Off Before measurement After measurement Load to viewer On Inline movie Off Auto store images On Load to stamp segments Off Load images to graphic Off Segments M3 On Auto open inline display Off V32 Off Start measurement without further preparation Off W33 On Wait for user to start Off Sagittal R > L Start measurements single Sagittal R > L Routine Silice group 1 Sagittal R > L Slices 36 Cold Combine Mode Sum of Squares Dist. factor 0 % AutoAldign Position L0.0 A20.3 H2.7 AutoAldign Rotation 0.00 deg Adjust with body coil Off Phase oversampling 0 % Confirm freq. adjustment Off FoV read 192 mm Adjust with body coil Off	Properties		Special set	None
Before measurement After measurement Load to viewer On Table position H Table position H Table position On Table position Infine Composing Off		Off	Special sat.	None
After measurement Load to viewer On Inline Composing Off		Oil		
Load to stamp segments Off System Load inages to graphic segments Off May 20 On Load inages to graphic segments Off B4 On Auto open inline display star measurement without further preparation Vol. 20 Off Wait for user to start Off W3.2 Off Slar measurements single Single Segments Slices group 1 36 Segments Segments Slices group 1 36 Dist factor 0% Auto-Coll Select Default Position Lo.0 A20.3 H2.7 Orientation Transversal F>> H Say uncombined Off Phase enc. dir. A > P Auto-Coll Select Default FoV read 192 mm Auto-Coll Select Default FoV read 1,5 mm Agists with body coil Off TE 1 13 ms 1 E 1 (27, P27.1 H14.7 TE 2 30 ms Auto-Coll Select Auto-Coll Select Averages 1 Concitation Off			Table position	0 mm
Inline movie		On	Inline Composing	Off
Auto store images On Load to stamp segments Off Load unages to graphic segments Off Auto open inline display start measurement without further preparation wait for user to start On Wait for user to start Off Start measurements off Start measurements off Start measurements off Silices 36 Dist factor 0 % Position L.0.0 A20.3 H2.7 Orientation Transversal Phase enc. dir. A > P Rotation 0.00 deg Phase enc. dir. A > P Rotation 0.00 deg FoV read 192 mm FoV phase 10.00 % Silce thickness 1.5 mm TE 1 13 ms TE 2 30 ms Averages 1 1 Concatenations 1 1 Filter None Coll elements BAM2,3:T1 Contrast Phase paraital Fourier Masurements 0<		_	System	
Load to stamp segments Off				On
Load images to graphic segments' Auto open inline display Start measurement without further preparation Wait for user to start Start measurements single M3 On On On Off Wait for user to start Start measurements Off V32 Off Start measurements Single Single Routine Solices of Dist, factor A>> P Slice group 1 Silice stactor 36 Slices of Dist, factor 0% Auto-Roll Select Position L0 A 20.3 H2.7 Auto-Roll Select Position L0 A 20.3 H2.7 Auto-Roll Select Position of Position L0 A 20.3 H2.7 Auto-Roll Select Phase enc. dir. A >> P Auto-Roll Select Default Phase eversampling of Phase oversampling oversampling of Phase oversampling oversampli				
Segments				
Auto open inline displays Start measurement without further preparation Wait for user to start Off Wait for user to start Off Start measurements single Routine Social Region Slice group 1 Sagittal Slices 36 Dist. factor 0% Position L0.0 A20.3 H2.7 Orientation Transversal Phase enc. dir. A > P Rottation O% FoV read 192 mm FoV phase 100.0 % Slice thickness 1.5 mm FE 1 13 ms TE 2 30 ms Averages 1 TE 1 13 ms TE 2 30 ms Averages 1 Coil elements B4/M2.3:T1 Coil elements B4/M2.3:T1 Coil elements B4/M2.3:T1 Phase resolution 10 Fest astuppr. Fest astuppr. Fat suppr. Fest astuppr. Fol as a resolution 100 mm <tr< td=""><td></td><td>On</td><td></td><td>_</td></tr<>		On		_
Start measurement without further preparation Wait for user to start Off Start measurements Single Start measurements Single Start measurements Single Sin		Off		_
Mustif or user to start Master or start Ma			V 32	OII
Wait for user to start of Start measurements single MSMM S - C - I Routine Signitial R >> L Coronal A >> P Slice group 1 Sagual Coronal A >> P Slices 36 Coli Combine Mode Sum of Squares Position L 0.0 A20.3 H2.7 Auto Coli Select Default Orientation Transversal Auto Coli Select Default Phase enc. dir. A >> P Auto Coli Select Default FoV read 192 mm Adjust with body coil Off FoV read 192 mm Assume Silicone Off FoV read 192 mm Assume Silicone Off FoV read 192 mm Assume Silicone Off FoV phase 1 5 mm Adjust volume 1 12.7 P37.1 H14.7 TE 1 13 ms 1 Position L 12.7 P37.1 H14.7 TE 2 30 ms 1 Rotation 0.00 deg Averages 1 1 RS > L 1 Rotation 0.00 deg Filip angle 90 deg <td< td=""><td></td><td></td><td>Positioning mode</td><td>REF</td></td<>			Positioning mode	REF
Sagital R >> L		Off	MSMA	S - C - T
Coronal A >> P Transversal F >> H Silce group 1 Silce group 1 Transversal F >> H Save uncombined Off Coll Combine Mode Sum of Squares AutoAlign			Sagittal	R >> L
Slice group 1	1	5g.c	Coronal	A >> P
Silces 36				
Dist. factor 0 % AutoAlign AutoAlign AutoAlign AutoAlign AutoAlign AutoCoil Select Default			Save uncombined	Off
Position				Sum of Squares
Orientation Transversal Shim mode Standard Phase enc, dir. A >> P Adjust with body coil Off FoV read 192 mm Adjust with body coil Off FoV phase 100.0 % ? Ref. amplitude 1H 0.000 V Slice thickness 1.5 mm Adjust volume				
Phase enc. dir. A > P Rotation 0.00 deg Rotation 0.00 deg Phase oversampling 0 % Assume Silicone Off Confirm freq. adjustment Off Confirm freq. adjust volume Feet Confirm freq. adjust volume Feet Confirm freq. adjust volume Feet Feet Feet Feet Feet Feet Confirm freq. adjust volume Feet			Auto Coil Select	Default
Rotation			Shim mode	Standard
Phase oversampling				
FoV read				
FoV Plase 192 mm FoV Plase 100.0 % Adjustment Tolerance Auto Adjustment Tolerance Adjustment Tolerance Auto Adjustment Tolerance Adjustment Tolerance Adjustment Tolerance Auto Adjustment Tolerance Adjustment Tolerance Auto Adjustment Tolerance Auto Adjustment Tolerance Adjustment Tolerance Auto Adjustment Tolerance Adjustment Tolerance Auto				
Note				_
TR	•			
TE 1				71010
Interpolation				I 12 7 P37 1 H14 7
Rotation	1			
I R >> L				
I A >> P		1		•
F >> H		1 Name		
Physio				
MTC Flip angle Fat suppr. Fat sat. Moreaging mode Reconstruction Measurements Multiple series Phase resolution Phase partial Fourier Interpolation Off Ref. Ref. lines PE Rew little Rew little Ref. lines PE Rew little Re	Coll elements	B4;M2,3;11	I	
Flip angle Fat suppr. Fat sat. Filip angle Fat suppr. Fat sat. Averaging mode Long term Reconstruction Magnitude Measurements 10 Original images On Delay in TR 0 ms Sequence Multiple series Off Introduction Off Contrasts 2 Bandwidth 1954 Hz/Px Phase resolution 128 Phase resolution Off Echo spacing Off Spacing Off Echo spacing Off Spacing Off Echo spacing Of	Contrast			Nega
Fat suppr. Fat sat. GBP Off Averaging mode Reconstruction Long term TTP Off Measurements Delay in TR 0 ms On On Multiple series Off Introduction Off Resolution 128 Introduction Off Phase resolution 128 Handwidth 1954 Hz/Px Phase partial Fourier 6/8 Handwidth 1954 Hz/Px Interpolation Off Echo spacing Off PAT mode GRAPPA RF pulse type Normal Accel. factor PE 4 RF pulse type Normal Accel. factor PE 4 RF spoiling On Reference scan mode Separate RF90 duration 5120 Distortion Corr. Off MB Number 3 Prescan Normalize Off FOV Shift Number 1 Raw filter Off Shift K0 Center 1 Hamming Off Shift K0 Center 1 Background Suppr.		Off	1st Signal/Mode	None
Averaging mode Reconstruction Reconstruction Magnitude Measurements Long term TTP Off Off Off Delay in TR	Flip angle	90 deg	Perf	
Averaging mode Reconstruction Measurements Long term Magnitude Magnitude Modesurements PBP Off Off Delay in TR Multiple series 0 ms Sequence Multiple series Off Introduction Off Resolution 128 Phase resolution 100 % Free echo spacing Off Phase partial Fourier Interpolation 6/8 Off Echo spacing Off D.64 ms PAT mode Accel. factor PE Ref. lines PE Reference scan mode 4 Separate RF pulse type Gradient mode RF spoiling Normal Frast On Distortion Corr. Prescan Normalize Raw filter Off MB Number Shift K0 Center 3 DummyScan Number 2 DummyScan Number Elliptical filter Hamming Off Shift K0 Center 1 Every Other Slice 1 BS Type 1 BS Type 1 BS Type 1 Background Suppr. BS parameter[1] 500 ms Series Ascending BS parameter[2] 10 ms	Fat suppr.	Fat sat.	GBP	Off
Reconstruction Measurements Magnitude 10 TTP Original images Onf Delay in TR Multiple series 0 ms Sequence Multiple series Off Introduction Off Resolution 128 Entroduction Off Phase resolution Phase partial Fourier Interpolation 100 % Free echo spacing Echo spacing Off Interpolation Off EPI factor 128 PAT mode Accel. factor PE 4 4 EPI factor 128 Ref. lines PE 48. 4 RF spoiling On Reference scan mode Separate RF90 duration 5120 Distortion Corr. Prescan Normalize Off MB Number 3 DummyScan Number Prescan Normalize Off DummyScan Number 2 FOV Shift Number 1 Every Other Slice 1 Raw filter Off Shift K0 Center 1 Elliptical filter Hamming Off BS Type 1 Multi-slice mode Series Ascending BS parameter[1] 500 ms	Averaging mode	Long term		Off
Measurements 10 Original images On Delay in TR 0 ms Sequence Multiple series Off Introduction Off Resolution 128 Introduction Off Phase resolution 100 % Free echo spacing Off Phase partial Fourier 6/8 Echo spacing 0.64 ms Interpolation Off EPI factor 128 PAT mode GRAPPA RF pulse type Normal Accel. factor PE 4 Gradient mode Fast Ref. lines PE 48 RF spoiling On Reference scan mode Separate RF90 duration 5120 Distortion Corr. Off MB Number 3 Prescan Normalize Off FOV Shift Number 1 Raw filter Off Shift K0 Center 1 Hamming Off Shift K0 Center 1 Hamming Off BS Type 1 Background Suppr. Off Back			TTP	Off
Delay in TR Multiple series Off Sequence Resolution Introduction Off Base resolution Phase resolution Phase partial Fourier Interpolation 128 PAT mode GRAPPA Free echo spacing Echo spacing Off 0.64 ms PAT mode Accel. factor PE Are Iines PE Reference scan mode Separate 4 Ref. lines PE Reference scan mode Separate RF pollier to Gradient mode Fast Prescan Normalize Off Prescan Normalize Off Prescan Normalize Off Prescan Normalize Off Elliptical filter Off Elliptical filter Off Hamming Off RF90 duration S120 DummyScan Number 2 ProV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] S0 ms Geometry Multi-slice mode Series Interleaved BS parameter[2] 10 ms			Original images	
Multiple series Multiple series Off Resolution Base resolution Base resolution Phase resolution Phase partial Fourier Introduction Off Contrasts 2 Bandwidth 1954 Hz/Px Free echo spacing Off Echo spacing O.64 ms O.64 ms PAT mode Accel. factor PE Accel. factor PE Ref. lines PE Ref. lines PE Reference scan mode Separate Distortion Corr. Off Prescan Normalize Prescan Normalize Raw filter Elliptical filter Hamming Off Geometry Multi-slice mode Series Ascending Introduction Off Contrasts 2 Bandwidth 1954 Hz/Px Free echo spacing Off Echo spacing Off Refo spacing On Refo spacing On Normal Gardient mode Fast RF spoiling On RF90 duration MB Number 3 DummyScan Number 2 FOV Shift Number 1 Shift KO Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] Soo ms BS parameter[2] 10 ms			Caguanas	
Resolution Base resolution 128 Phase resolution 100 % Phase partial Fourier 6/8 Interpolation Off PAT mode GRAPPA Accel. factor PE 4 Ref. lines PE 48 Reference scan mode Separate Distortion Corr. Off Prescan Normalize Off Raw filter Off Elliptical filter Off Hamming Off Geometry Multi-slice mode Series Ascending Milti-slice mode Interleaved Series Ascending Accel. factor PE 4 Ref. don't Accel. factor PE 4 Ref. lines PE 48 Ref. lines PE 50 Reference scan mode Separate Ref. lines PE 70				Off
Base resolution 128 Phase resolution 100 % Phase partial Fourier 6/8 Interpolation Off EPI factor 128 PAT mode GRAPPA Ref. lines PE 48 Ref. lines PE 48 Reference scan mode Separate RF90 duration S120 Distortion Corr. Off Prescan Normalize Off Elliptical filter Hamming Off Series Ascending Interleaved Series Ascending Multi-slice mode Graph Interleaved Separate Interleaved Series Ascending Bandwidth 1954 Hz/Px Bandwidth 1954 Hz/Px Free echo spacing Off Free echo spacing 0.64 ms Interleaved Sepacing 0.64 ms Perl factor 128 RF pulse type Normal Gendent mode Fast RF spoiling On RF90 duration 5120 MB Number 3 DummyScan Number 2 FOV Shift Number 1 Shift KO Center 1 Every Other Slice 1 BS parameter[1] 500 ms BS parameter[2] 10 ms				
Phase resolution 100 % Phase partial Fourier 6/8 Interpolation Off Echo spacing 0.64 ms Interpolation Off EPI factor 128 PAT mode GRAPPA RF pulse type Normal Accel. factor PE 4 Ref. lines PE 48 Reference scan mode Separate RF spoiling On Distortion Corr. Off MB Number 3 Prescan Normalize Off DummyScan Number 2 Raw filter Off FOV Shift Number 1 Elliptical filter Off Shift K0 Center 1 Hamming Off BS Type 1 Geometry Background Suppr. Off BS parameter[1] 500 ms Free echo spacing Off Echo spacing 0.64 ms Free echo spacing 0.64 ms Interleaved Sepacing 0.64 ms Interleaved Sepacing 0.64 ms Interleaved BS parameter[2] 10 ms				
Phase partial Fourier 6/8 Interpolation Off EPI factor 128 PAT mode GRAPPA RF pulse type Normal Accel. factor PE 4 Gradient mode Fast Ref. lines PE 48 RF spoiling On Reference scan mode Separate RF90 duration 5120 Distortion Corr. Off MB Number 3 DummyScan Number 2 Raw filter Off FOV Shift Number 1 Elliptical filter Off Shift K0 Center 1 Hamming Off Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms BS parameter[2] 10 ms				
Interpolation Off EPI factor 128 PAT mode GRAPPA RF pulse type Normal Accel. factor PE 4 Ref. lines PE 48 Reference scan mode Separate RF spoiling On Distortion Corr. Off MB Number 3 DummyScan Number 2 Prescan Normalize Off FOV Shift Number 1 Elliptical filter Off Shift K0 Center 1 Elming Off Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms PREPI factor 128 RF pulse type Normal Reference Scan mode Fast				_
PAT mode GRAPPA Accel. factor PE 4 Ref. lines PE 48 Reference scan mode Separate Distortion Corr. Off MB Number 3 Prescan Normalize Off Fluit F	1 · · · · · · · · · · · · · · · · · · ·			V.UT IIIU
Accel. factor PE Ref. lines PE Reference scan mode Separate RF spoiling RF spoiling On RF90 duration S120 MB Number Separate S	Interpolation	Off		128
Accel. factor PE 4 Ref. lines PE 48 Reference scan mode Separate Distortion Corr. Off Prescan Normalize Off Raw filter Off Elliptical filter Off Hamming Off Geometry Multi-slice mode Separate Gradient mode RF spt RF spoiling On RF90 duration 5120 MB Number 3 DummyScan Number 2 FOV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms Sp parameter[2] 10 ms	PAT mode	GRAPPA		
Ref. lines PE 48 Reference scan mode Separate RF90 duration 5120 Distortion Corr. Off MB Number 3 Prescan Normalize Off POV Shift Number 1 Elliptical filter Off Shift K0 Center 1 Hamming Off Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms BY parameter[2] 10 ms				
Reference scan mode Separate RF90 duration S120 MB Number Distortion Corr. Prescan Normalize Raw filter Off Elliptical filter Hamming Off Geometry Multi-slice mode Series Ascending RF90 duration S120 MB Number 3 DummyScan Number 2 FOV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] S00 ms BS parameter[2] 10 ms			RF spoiling	On
Distortion Corr. Off Prescan Normalize Off Raw filter Off Elliptical filter Off Hamming Off Geometry MB Number 3 DummyScan Number 2 FOV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms Sparameter[2] 10 ms			RF90 duration	5120
Prescan Normalize Off Raw filter Off Elliptical filter Off Hamming Off Geometry Multi-slice mode Series Ascending DummyScan Number 2 FOV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms BS parameter[2] 10 ms				
Raw filter Off Elliptical filter Off Hamming Off Geometry Multi-slice mode Series Ascending FOV Shift Number 1 Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms BS parameter[2] 10 ms		_		
Shift K0 Center 1 Elliptical filter Off Hamming Off Geometry Multi-slice mode Interleaved Series Ascending Shift K0 Center 1 Every Other Slice 1 BS Type 1 Background Suppr. Off BS parameter[1] 500 ms BS parameter[2] 10 ms				1
Hamming Off Every Other Slice 1 BS Type 1 Background Suppr. Off Multi-slice mode Interleaved BS parameter[1] 500 ms Series Ascending BS parameter[2] 10 ms				1
BS Type 1 Background Suppr. Off Background Suppr. Off Background Suppr. Off BS parameter[1] 500 ms BS parameter[2] 10 ms	<u> </u>			1
GeometryBackground Suppr.OffMulti-slice modeInterleavedBS parameter[1]500 msSeriesAscendingBS parameter[2]10 ms	Hamming	Off		1
Multi-slice mode Interleaved BS parameter[1] 500 ms Series Ascending BS parameter[2] 10 ms	Geometry			Off
Series Ascending BS parameter[2] 10 ms	•	Interleaved		
	1			

0 ms
800
24
1.0
2000
80 mm
1000000 us

MB Measurements 2 Ramp On On

\\USER\Feinberglab\Test\test1118\pcasl_DE_BS_flash_m3F3d1

TA: 1:16 PAT: 4 Voxel size: 1.5×1.5×1.5 mm Rel. SNR: 1.00 USER: ep2d_fid_mb_pcasl_DE_BS_flash

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	0.00	M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	REF
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		Save uncombined	Off
Slices	36	Coil Combine Mode	Sum of Squares
Dist. factor	0 %	AutoAlign	
Position	L0.0 A20.3 H2.7	Auto Coil Select	Default
Orientation	Transversal		
Phase enc. dir.	A >> P	Shim mode	Standard
Rotation	0.00 deg	Adjust with body coil	Off
Phase oversampling	0 %	Confirm freq. adjustment	Off
FoV read	192 mm	Assume Silicone	Off
FoV phase	100.0 %	? Ref. amplitude 1H	0.000 V
Slice thickness	1.5 mm	Adjustment Tolerance	Auto
TR	5820 ms	Adjust volume	
TE 1	13 ms	! Position	L12.7 P37.1 H14.7
TE 2	30 ms	! Orientation	T > C-15.0
Averages	1	! Rotation	0.00 deg
Concatenations	1	! R >> L	100 mm
Filter	None	! A >> P	70 mm
Coil elements	B4;M2,3;T1	! F >> H	48 mm
Contrast		Physio	
MTC	Off	1st Signal/Mode	None
Flip angle	90 deg	Perf	
Fat suppr.	Fat sat.	GBP	Off
Averaging mode	Long term	PBP	Off
Reconstruction	Magnitude	TTP	Off
Measurements	7	Original images	On
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	Off
Resolution		Contrasts	2
Base resolution	128	Bandwidth	1954 Hz/Px
Phase resolution	100 %	Free echo spacing	Off
Phase partial Fourier		Echo spacing	0.64 ms
•	6/8 Off		
Interpolation	Off	EPI factor	128
PAT mode	GRAPPA	RF pulse type	Normal
Accel. factor PE	4	Gradient mode	Fast
Ref. lines PE	48	RF spoiling	On
Reference scan mode	Separate	RF90 duration	5120
Distortion Corr	Off	MB Number	3
Distortion Corr.	Off Off	DummyScan Number	1
Prescan Normalize	Off	FOV Shift Number	1
Raw filter	Off	Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	BS Type	1
Geometry		Background Suppr.	Off
Multi-slice mode	Interleaved	BS parameter[1]	500 ms
Series	Ascending	BS parameter[2]	10 ms
•••		DO parameterizi	

BS parameter[3]	0 ms
FOCI parameter[1]	800
FOCI parameter[2]	24
FOCI parameter[3]	1.0
FOCI parameter[4]	2000
Label Offset	80 mm
Post Label Delay	1000000 us

MB Measurements 3 Ramp On On \\USER\Feinberglab\Test\test1118\localizer_200V

TA: 0:27 P.	AT: Off Voxel size: 1.2x	<1.1×3.0 mm Rel. SNR: 1.00	SIEMENS: gre
Proportios		Phase resolution	90 %
Prio Page	Off	Phase partial Fourier	6/8
Prio Recon Before measurement	OII	Interpolation	On
		PAT mode	None
After measurement Load to viewer	On	PAT mode	
Inline movie	Off	Image Filter	Off
Auto store images	On	Distortion Corr.	Off
Load to stamp segments	Off	Prescan Normalize	Off
Load images to graphic	Off	Normalize	Off
segments	311	B1 filter	Off
Auto open inline display	Off	Raw filter	Off
Start measurement without	On	Elliptical filter	Off
further preparation	J	Geometry	
Wait for user to start	Off	Multi-slice mode	Sequential
Start measurements	single	Series	Interleaved
1	-		
Routine		Saturation mode	Standard
Slice group 1	_	Special sat.	None
Slices	5		
Dist. factor	20 %	Table position	Н
Position	Isocenter	Table position	0 mm
Orientation	Sagittal	Inline Composing	Off
Phase enc. dir.	A >> P	Tim CT mode	Off
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		
Slice group 3	_	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	Off
Rotation	0.00 deg	Coil Combine Mode	Adaptive Combine
Phase oversampling	0 %	AutoAlign	 O#
FoV read	280 mm	Auto Coil Select	Off
FoV phase	100.0 %	Shim mode	Tune up
Slice thickness	3.0 mm	Adjust with body coil	Off
TR	10.0 ms	Confirm freq. adjustment	Off
TE	3.00 ms	Assume Silicone	Off
Averages	1	! Ref. amplitude 1H	200.000 V
Concatenations	15 Name	Adjustment Tolerance	Auto
Filter	None	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	Dhyois	
Water suppr.	None	Physio	Name
SWI	Off	1st Signal/Mode	None
		Segments	1
Averaging mode	Short term	Tagging	None
Reconstruction	Magnitude	Dark blood	Off
Measurements	1		
Multiple series	Each measurement	Resp. control	Off
Resolution		Inline	
Base resolution	256	Subtract	Off
Dago resolution	200	Castidot	5 11

Liver registration Std-Dev-Sag Std-Dev-Cor Std-Dev-Tra Std-Dev-Time MIP-Sag MIP-Cor MIP-Tra MIP-Time Save original images Wash - In Wash - Out TTP PEI	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

Sequence

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\Test\test1118\MPRAGE					
TA: 4:46 PAT: Off Voxel size: 1.0×1.0×1.2 mm Rel. SNR: 1.00 SIEMENS: tfl					
Properties		Geometry			
Prio Recon	Off	Multi-slice mode	Single shot		
Before measurement		Series	Interleaved		
After measurement					
Load to viewer	On O"	Table position	H		
Inline movie	Off	Table position	0 mm		
Auto store images	On	Inline Composing	Off		
Load to stamp segments	Off Off	System			
Load images to graphic segments	Oil	T1	On		
Auto open inline display	Off	M2	On		
Start measurement without	On	B4	On		
further preparation	Oll	M3	On		
Wait for user to start	Off	V32	Off		
Start measurements	single	Positioning mode	REF		
I	5g.c	MSMA	S-C-T		
Routine		Sagittal	R >> L		
Slab group 1	4	Coronal	A >> P		
Slabs	1	Transversal	F >> H		
Dist. factor	50 %	Save uncombined	Off		
Position	R2.0 A27.1 F10.2	Coil Combine Mode	Adaptive Combine		
Orientation	Sagittal	AutoAlign			
Phase enc. dir. Rotation	A >> P	Auto Coil Select	Off		
Phase oversampling	0.00 deg 0 %				
Slice oversampling	0.0 %	Shim mode	Standard		
Slices per slab	144	Adjust with body coil	Off		
FoV read	256 mm	Confirm freq. adjustment Assume Silicone	Off Off		
FoV phase	81.3 %	? Ref. amplitude 1H	0.000 V		
Slice thickness	1.20 mm	Adjustment Tolerance	Auto		
TR	1370 ms	Adjust volume	Auto		
TE	2.84 ms	Position	R2.0 A27.1 F10.2		
Averages	1	Orientation	Sagittal		
Concatenations	1	Rotation	0.00 deg		
Filter	None	F >> H	256 mm		
Coil elements	B4;M2,3;T1	A >> P	208 mm		
Contrast		R >> L	173 mm		
Magn. preparation	Non-sel. IR	 Dhysis			
TI	900 ms	Physio 1st Signal/Mode	None		
Flip angle	9 deg				
Fat suppr.	None	Dark blood	Off		
Water suppr.	None	Resp. control	Off		
Averaging model	Language	•	Oli		
Averaging mode Reconstruction	Long term Magnitude	Inline			
Measurements	1	Subtract	Off		
Multiple series	Off	Std-Dev-Sag	Off		
1		Std-Dev-Cor	Off		
Resolution		Std-Dev-Tra	Off		
Base resolution	256	Std-Dev-Time MIP-Sag	Off Off		
Phase resolution	100 %	MIP-Sag MIP-Cor	Off		
Slice resolution	100 %	MIP-Tra	Off		
Phase partial Fourier	Off	MIP-Time	Off		
Slice partial Fourier Interpolation	Off Off	Save original images	On		
PAT mode	None	Sequence			
Image Filter	Off	Introduction	On		
Distortion Corr.	Off	Dimension	3D		
Prescan Normalize	Off	Elliptical scanning	Off		
Normalize	Off	Asymmetric echo	Off		
B1 filter	Off	Bandwidth	240 Hz/Px		
Raw filter	Off	Flow comp. Echo spacing	No 6.5 ms		
Elliptical filter	/ 1 11	i EGNO SUAGNO	0.0 105		

Elliptical filter

Off

Echo spacing

6.5 ms

RF pulse type Fast
Gradient mode Normal
Excitation Non-sel.
RF spoiling On

\\USER\Feinberglab\Test\test1118\pcasl	DF	RS	flash	m3F3d1
//USE1// GITIDGI (18D/) GSL/(GSL) 10/DC8SL	ν L	טט	Hash	IIIOI OU I

TA: 5:34	PAT: 4	Voxel size: 1.5×1.5×3.0 mm	Rel. SNR: 1.00	USER: ep2d_fid_mb_pcasl_DE_BS_flash
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Proportios		Chariel and	None
Properties Prio Recon	Off	Special sat.	None
Before measurement	Oii	Table position	Н
After measurement		Table position	0 mm
Load to viewer	On	Inline Composing	Off
Inline movie	Off	Cyatam	
	On	System	0
Auto store images		T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments	0#	M3	On O"
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	REF
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		Save uncombined	Off
Slices	24	Coil Combine Mode	Sum of Squares
Dist. factor	20 %	AutoAlign	
Position	L0.0 A20.3 H54.9	Auto Coil Select	Default
Orientation	Transversal	Auto Coll Select	Delauit
Phase enc. dir.	A >> P	Shim mode	Standard
Rotation	0.00 deg	Adjust with body coil	Off
Phase oversampling	0.00 deg 0 %	Confirm freq. adjustment	Off
FoV read	192 mm	Assume Silicone	Off
FoV phase	100.0 %	? Ref. amplitude 1H	0.000 V
Slice thickness	3.0 mm	Adjustment Tolerance	Auto
TR	8560 ms	Adjust volume	
TE 1	15 ms	! Position	L4.1 A27.1 H44.1
TE 2		! Orientation	Sagittal
	32 ms	! Rotation	0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1	! A >> P	208 mm
Filter	None	!R >> L	173 mm
Coil elements	B4;M2,3;T1	1	170 11111
Contrast		Physio	
MTC	Off	1st Signal/Mode	None
Flip angle	90 deg	Perf	
Fat suppr.	Fat sat.	GBP	Off
		PBP	Off
Averaging mode	Long term	TTP	Off
Reconstruction	Magnitude	Original images	On
Measurements	33		On
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	Off
Resolution		Contrasts	2
Base resolution	128	Bandwidth	1954 Hz/Px
Phase resolution	100 %	Free echo spacing	Off
Phase partial Fourier	6/8	Echo spacing	0.64 ms
Interpolation	Off		400
·······································	OII	EPI factor	128
PAT mode	GRAPPA	RF pulse type	Normal
Accel. factor PE	4	Gradient mode	Fast
Ref. lines PE	48	RF spoiling	On
Reference scan mode	Separate	RF90 duration	12890
Distantian Os		MB Number	2
Distortion Corr.	Off Off	DummyScan Number	_ 1
Prescan Normalize	()TT		
	_	I FOV Shift Number	1
Raw filter	Off	FOV Shift Number	1
Elliptical filter	Off Off	Shift K0 Center	1 1 1
	Off	Shift K0 Center Every Other Slice	1 1 1
Elliptical filter Hamming	Off Off	Shift K0 Center Every Other Slice BS Type	1 1 1 1
Elliptical filter Hamming Geometry	Off Off Off	Shift K0 Center Every Other Slice BS Type Background Suppr.	Off
Elliptical filter Hamming	Off Off	Shift K0 Center Every Other Slice BS Type	•

0 ms
800
24
1.0
2000
80 mm
2000000 us
30
On

TA: 5:34 Voxel size: 1.5x1.5x3.0 mm Rel. SNR: 1.00 USER: ep2d_fid_mb_pcasl_DE_BS_flash PAT: 4

Dranartica		0	NI
Properties Prio Recon	Off	_ Special sat.	None
Before measurement	Oil	Table position	Н
After measurement		Table position	0 mm
Load to viewer	On	Inline Composing	Off
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		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On		
further preparation		Positioning mode	REF
Wait for user to start	Off	MSMA	S-C-T
Start measurements	single	Sagittal	R >> L
Routine		Coronal Transversal	A >> P F >> H
Slice group 1		Save uncombined	Off
Slices	24	Coil Combine Mode	Sum of Squares
Dist. factor	20 %	AutoAlign	
Position	L0.0 A20.3 H31.9	Auto Coil Select	Default
Orientation	Transversal		
Phase enc. dir.	A >> P	Shim mode	Standard
Rotation	0.00 deg	Adjust with body coil	Off
Phase oversampling	0 %	Confirm freq. adjustment	Off
FoV read	192 mm	Assume Silicone	Off
FoV phase	100.0 %	? Ref. amplitude 1H	0.000 V
Slice thickness	3.0 mm	Adjustment Tolerance	Auto
TR	8560 ms	Adjust volume	144 007 4 1144 4
TE 1	15 ms	! Position	L4.1 A27.1 H44.1
TE 2	32 ms	! Orientation ! Rotation	Sagittal 0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1	! F >> F	208 mm
Filter	None	! R >> L	173 mm
Coil elements	B4;M2,3;T1	ı	17311111
Contrast		Physio	N
MTC	Off	1st Signal/Mode	None
Flip angle	90 deg	Perf	
Fat suppr.	Fat sat.	GBP	Off
Averaging mode	Long term	PBP	Off
Reconstruction	Magnitude	TTP	Off
Measurements	33	Original images	On
Delay in TR	0 ms	Sequence	
Multiple series	Off	Introduction	Off
		Contrasts	2
Resolution	100	- Bandwidth	1954 Hz/Px
Base resolution	128	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	0.64 ms
Phase partial Fourier	6/8 Off		
Interpolation	OII	EPI factor	128
PAT mode	GRAPPA	RF pulse type	Normal
Accel. factor PE	4	Gradient mode	Fast
Ref. lines PE	48	RF spoiling	On
Reference scan mode	Separate	RF90 duration	12890
Distortion Corr.	Off	MB Number	2
Prescan Normalize	Off	DummyScan Number	1
Raw filter	Off	FOV Shift Number	1
Elliptical filter	Off	Shift K0 Center	1
Hamming	Off	Every Other Slice	1
		BS Type	1
Geometry		Background Suppr.	Off
Multi-slice mode	Interleaved	BS parameter[1]	500 ms
Series	Ascending	BS parameter[2]	10 ms
		33/59	

BS parameter[3]	0 ms
FOCI parameter[1]	800
FOCI parameter[2]	24
FOCI parameter[3]	1.0
FOCI parameter[4]	2000
Label Offset	80 mm
Post Label Delay	2000000 us
MD Massumanasata	20

MB Measurements 30 Ramp On On

\\USER\Feinberglab\Test\test1118\venc	m3f3p4	flashref
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TA: 34:00 PAT: 4 Voxel size: 1.6×1.6×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	Curatana	
Inline movie	Off	System	0.5
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	FIX
further preparation	011	MSMA	S - C - T
Wait for user to start	Off		8 - C - 1 R >> L
Start measurements	single	Sagittal Coronal	K >> L A >> P
Start measurements	Single		
Routine		Transversal	F >> H
Slice group 1		- Coil Combine Mode	Sum of Squares
Slices	3	AutoAlign	
Dist. factor	700 %	Auto Coil Select	Default
Position	L0.0 A23.7 H12.9	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg		
Phase oversampling	0.00 deg 0 %	Assume Silicone	Off
	200 mm	? Ref. amplitude 1H	0.000 V
FoV read		Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	5.0 mm	! Position	L4.1 A27.1 H44.1
TR	5000 ms	! Orientation	Sagittal
TE	36.0 ms	! Rotation	0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1	! A >> P	208 mm
Filter	None	! R >> L	173 mm
Coil elements	B4;M2,3;T1	Dhysia	
Contrast		Physio	N
MTC	Off	1st Signal/Mode	None
		Angio	
Flip angle	15 deg	Flow mode	Single dir.
Fat suppr.	Fat sat.	Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	
Measurements	420	Magnitude sum	Through plane Off
Delay in TR	0 ms	Iviagilitude suiti	Oli
Multiple series	Off	Sequence	
Waltiple Selles	Oli	Introduction	Off
Resolution		Bandwidth	1776 Hz/Px
Base resolution		Danawiatii	
Dasc resolution	128	=	Off
Phase resolution	128 100 %	Free echo spacing	Off
Phase resolution	-	Free echo spacing Echo spacing	Off 0.88 ms
Phase resolution Phase partial Fourier	100 % 6/8	Free echo spacing Echo spacing EPI factor	Off
Phase resolution Phase partial Fourier Interpolation	100 % 6/8 Off	Free echo spacing Echo spacing EPI factor RF pulse type	Off 0.88 ms
Phase resolution Phase partial Fourier Interpolation PAT mode	100 % 6/8	Free echo spacing Echo spacing EPI factor	Off 0.88 ms 128
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	100 % 6/8 Off GRAPPA 4	Free echo spacing Echo spacing EPI factor RF pulse type	Off 0.88 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode	100 % 6/8 Off GRAPPA	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling	Off 0.88 ms 128 Normal Fast On
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	100 % 6/8 Off GRAPPA 4	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration	Off 0.88 ms 128 Normal Fast On 5120
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode	100 % 6/8 Off GRAPPA 4 48 Separate	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number	Off 0.88 ms 128 Normal Fast On 5120 3
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr.	100 % 6/8 Off GRAPPA 4 48 Separate	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number	Off 0.88 ms 128 Normal Fast On 5120 3
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize	100 % 6/8 Off GRAPPA 4 48 Separate Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number	Off 0.88 ms 128 Normal Fast On 5120 3
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	100 % 6/8 Off GRAPPA 4 48 Separate Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center	Off 0.88 ms 128 Normal Fast On 5120 3
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 % 6/8 Off GRAPPA 4 48 Separate Off Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number	Off 0.88 ms 128 Normal Fast On 5120 3
Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	100 % 6/8 Off GRAPPA 4 48 Separate Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center	Off 0.88 ms 128 Normal Fast On 5120 3
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 % 6/8 Off GRAPPA 4 48 Separate Off Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice	Off 0.88 ms 128 Normal Fast On 5120 3
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 % 6/8 Off GRAPPA 4 48 Separate Off Off Off Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number Venc Repetition	Off 0.88 ms 128 Normal Fast On 5120 3 2 3 1
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 % 6/8 Off GRAPPA 4 48 Separate Off Off Off	Free echo spacing Echo spacing EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number	Off 0.88 ms 128 Normal Fast On 5120 3 2 3 1 1 1 1 400

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\venc	m3f3p3	flashref
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TA: 34:00 PAT: 3 Voxel size: 1.6×1.6×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	System	
Inline movie	Off	System	05
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4 M3	On On
segments			_
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	FIX
further preparation		MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
,	ŭ	Transversal	F >> H
Routine		- Coil Combine Mode	Sum of Squares
Slice group 1		AutoAlign	
Slices	3	Auto Coil Select	Default
Dist. factor	700 %		
Position	L0.0 A23.7 H12.9	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	
Slice thickness	5.0 mm	! Position	L4.1 A27.1 H44.1
TR	5000 ms	! Orientation	Sagittal
TE	36.0 ms	! Rotation	0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1	! A >> P	208 mm
Filter	None	! R >> L	173 mm
Coil elements	B4;M2,3;T1	į.	
	, ,-,	Physio	
Contrast	0"	_ 1st Signal/Mode	None
MTC	Off	Angio	
Flip angle	15 deg	Flow mode	Single dir.
Fat suppr.	Fat sat.	Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	
Measurements	420	Magnitude sum	Through plane Off
Delay in TR	0 ms	1	Oll
Multiple series	Off	Sequence	
1	Oli	Introduction	Off
Resolution		Bandwidth	1776 Hz/Px
Base resolution	128	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	0.88 ms
Phase partial Fourier	6/8	CDI foctor	400
Interpolation	Off	EPI factor	128
DAT mode	CDADDA	RF pulse type	Normal
PAT mode	GRAPPA	Gradient mode	Fast
Accel. factor PE	3	RF spoiling	On
Ref. lines PE	36	RF90 duration	5120
Reference scan mode	Separate	MB Number	3
Distortion Corr.	Off	DummyScan Number	2
Prescan Normalize	Off	FOV Shift Number	3
Raw filter	Off	Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	SER Number	1 1
1	OII		1 400
Geometry		Venc Repetition	400
N.A. 142 12 1	Interleaved	 Spoil factor 	5
Multi-slice mode	IIIICIICAVCU	Oleman Dina attan	4
Multi-slice mode Series	Ascending	Skew Direction Dual On(1)	1 0

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\venc	m3f3p2	flashref
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TA: 34:00 PAT: 2 Voxel size: 1.6×1.6×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	Curatara	
Inline movie	Off	System	0.5
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	FIX
further preparation		MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
	g	Transversal	F >> H
Routine		- Coil Combine Mode	Sum of Squares
Slice group 1		AutoAlign	
Slices	3	Auto Coil Select	Default
Dist. factor	700 %	Auto Coll Select	Delauli
Position	L0.0 A23.7 H12.9	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	71010
Slice thickness	5.0 mm	! Position	L4.1 A27.1 H44.1
TR	5000 ms	! Orientation	Sagittal
TE	41.0 ms	! Rotation	0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1		-
Filter	None	! A >> P	208 mm
		! R >> L	173 mm
Coil elements	B4;M2,3;T1	Physio	
Contrast		1st Signal/Mode	None
MTC	Off	_ ,	
Flip angle	15 deg	Angio	
Fat suppr.	Fat sat.	Flow mode	Single dir.
		Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	Through plane
Measurements	420	Magnitude sum	Off
Delay in TR	0 ms	Sequence	
Multiple series	Off		Off
Resolution		Introduction Bandwidth	Off
Base resolution	128	_	1776 Hz/Px
Phase resolution	120	Free echo spacing	Off
1 11035 15301411011	100 %	L Echo cocina	
Phase partial Fourier	100 % 6/8	Echo spacing	0.88 ms
Phase partial Fourier	6/8	Echo spacing EPI factor	128
Phase partial Fourier Interpolation		EPI factor	128
•	6/8	EPI factor RF pulse type	128 Normal
Interpolation	6/8 Off	EPI factor RF pulse type Gradient mode	128 Normal Fast
Interpolation PAT mode Accel. factor PE	6/8 Off GRAPPA 2	EPI factor RF pulse type Gradient mode RF spoiling	128 Normal
Interpolation PAT mode Accel. factor PE Ref. lines PE	6/8 Off GRAPPA 2 24	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration	128 Normal Fast
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode	6/8 Off GRAPPA 2 24 Separate	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number	128 Normal Fast On
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr.	6/8 Off GRAPPA 2 24 Separate Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration	128 Normal Fast On 5120
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode	6/8 Off GRAPPA 2 24 Separate Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number	128 Normal Fast On 5120 3
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	6/8 Off GRAPPA 2 24 Separate Off Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number	128 Normal Fast On 5120 3
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize	6/8 Off GRAPPA 2 24 Separate Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number	128 Normal Fast On 5120 3
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter	6/8 Off GRAPPA 2 24 Separate Off Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center	128 Normal Fast On 5120 3
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	6/8 Off GRAPPA 2 24 Separate Off Off Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number	128 Normal Fast On 5120 3
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming Geometry	6/8 Off GRAPPA 2 24 Separate Off Off Off Off Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number Venc Repetition	128 Normal Fast On 5120 3 2 3 1 1
Interpolation PAT mode Accel. factor PE Ref. lines PE Reference scan mode Distortion Corr. Prescan Normalize Raw filter Elliptical filter Hamming	6/8 Off GRAPPA 2 24 Separate Off Off Off Off	EPI factor RF pulse type Gradient mode RF spoiling RF90 duration MB Number DummyScan Number FOV Shift Number Shift K0 Center Every Other Slice SER Number	128 Normal Fast On 5120 3 2 3 1 1 1 400

Venc Type(0off,1+-,20+,3on) 1

\\US	ER\Feinberglab\Test\test111	8\ep2d_M2P2_OVS_flash	_iso75
TA: 2:24 PAT: 2	Voxel size: 0.8×0.8×0.8 mm	Rel. SNR: 1.00 USER:	ep2d_bold_OVS_flash
Properties		Sat. region 1	
	0"	Thickness	110 mm
Prio Recon	Off	Position	L0.0 A69.7 H0.0
Before measurement		Orientation	Coronal
After measurement	_	Sat. region 2	
Load to viewer	On	Thickness	110 mm
Inline movie	Off	Position	L0.0 P136.2 F35.7
Auto store images	On	Orientation	C > T14.7
Load to stamp segments	Off		
Load images to graphic	Off	Special sat.	None
segments		Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
	On	Inline Composing	Oli
further preparation	0"	System	
Wait for user to start	Off		On
Start measurements	single	M2	On
Routine		B4	On
			_
Slice group 1		M3	On
Slices	50	V32	Off
Dist. factor	50 %	Positioning mode	FIX
Position	L1.2 P26.9 H15.4		
Orientation	Transversal	MSMA	S-C-T
Phase enc. dir.	A >> P	Sagittal	R >> L
Rotation	0.00 deg	Coronal	A >> P
Phase oversampling	0 %	Transversal	F >> H
		Coil Combine Mode	Sum of Squares
FoV read	192 mm	AutoAlign	·
FoV phase	50.0 %	Auto Coil Select	Default
Slice thickness	0.75 mm		
TR	3120 ms	Shim mode	Standard
TE	27 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	? Ref. amplitude 1H	0.000 V
Coil elements	B4;M2,3;T1		
Con elements	D4,1V12,3,1 1	Adjustment Tolerance	Auto
Contrast		Adjust volume	D0 4 D07 4 1145 4
MTC	Off	! Position	R0.1 P37.1 H15.4
Flip angle	70 deg	! Orientation	T > C-15.0
Fat suppr.	Fat sat.	! Rotation	0.00 deg
	· at 5at.	! R >> L	100 mm
Averaging mode	Long term	! A >> P	70 mm
Reconstruction	Magnitude	! F >> H	48 mm
Measurements	43	I	
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Ividitiple series	Oll	BOLD	
Resolution			0"
Base resolution	256	GLM Statistics	Off
Phase resolution	100 %	Dynamic t-maps	Off
Phase partial Fourier	6/8	Starting ignore meas	0
	Off	Ignore after transition	0
Interpolation	OII	Model transition states	On
PAT mode	GRAPPA	Temp. highpass filter	On
Accel. factor PE	2	Threshold	4.00
Ref. lines PE	24	Paradigm size	20
Reference scan mode	Separate	Meas[1]	Baseline
izeletetice scatt illoue			
Distortion Corr.	Off	Meas[2]	Baseline
Prescan Normalize	Off	Meas[3]	Baseline
Raw filter	On	Meas[4]	Baseline
		Meas[5]	Baseline
Elliptical filter	Off	Meas[6]	Baseline
Hamming	Off	Meas[7]	Baseline
Geometry		Meas[8]	Baseline
Multi-slice mode	Interleaved	Meas[9]	Baseline
ividiti-slice mode	Interleaved	Macal401	Daseline

Ascending

Series

Meas[10]

Meas[11]

Baseline

Active

Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Dequence	
Introduction Asymmetric echo Bandwidth Free echo spacing Echo spacing	Off Off 1086 Hz/Px Off 1.05 ms
EPI factor RF pulse type Gradient mode RF spoiling	128 Normal Fast On
RF90 duration MB Number DummyScan Number FOV Shift Number SkewType(1ff) OVS flash(1on) SER Number Spoil factor Skew Direction Sat RF90 duration Dual On(1) Echo Distance MB Measurements Ramp On	7680 2 1 1 0 1 1 1 1 5120 3 1.00 40 On
	▼ ··

TA: 2:24 PAT: 2	Voxel size: 0.5×0.5×0.6 mm	Rel. SNR: 1.00 USER:	ep2d_bold_OVS_flash
Properties		Sat. region 1	
Prio Recon	Off	Thickness	110 mm
Before measurement	Oil	Position	L0.0 A50.0 H0.0
After measurement		Orientation	Coronal
Load to viewer	On	Sat. region 2	
	Off	Thickness	110 mm
Inline movie		Position	L0.0 P136.2 F35.7
Auto store images	On Off	Orientation	C > T14.7
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Oil	Table position	
segments	0"	Table position	H
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
further preparation	Off	System	
Wait for user to start		T1	On
Start measurements	single	M2	On
Routine		B4	On
Slice group 1		M3	On
Slices	50	V32	Off
Dist. factor	50 %		FIV
Position	L1.2 P36.9 H15.4	Positioning mode	FIX
Orientation	Transversal	MSMA	S-C-T
Phase enc. dir.	A >> P	Sagittal	R >> L
Rotation	0.00 deg	Coronal	A >> P
Phase oversampling	0 %	Transversal	F >> H
FoV read	140 mm	Coil Combine Mode	Sum of Squares
FoV phase	50.0 %	AutoAlign	
Slice thickness	0.55 mm	Auto Coil Select	Default
TR	3120 ms	Shim mode	Standard
TE	34 ms	Adjust with body coil	Off
Averages	1	Confirm freq. adjustment	Off
Concatenations	1	Assume Silicone	Off
Filter	None	? Ref. amplitude 1H	0.000 V
Coil elements	B4;M2,3;T1	Adjustment Tolerance	Auto
	2 1,1112,0,1 1	Adjust volume	Auto
Contrast		! Position	R0.1 P37.1 H15.4
MTC	Off	! Orientation	T > C-15.0
Flip angle	70 deg	! Rotation	0.00 deg
Fat suppr.	Fat sat.	! R >> L	100 mm
Averaging mode	Long term	! A >> P	70 mm
Reconstruction	Magnitude	!F>> H	48 mm
Measurements	43	I	10 11111
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
	OII	BOLD	
Resolution		GLM Statistics	Off
Base resolution	256	Dynamic t-maps	Off
Phase resolution	100 %	Starting ignore meas	0
Phase partial Fourier	6/8	Ignore after transition	0
Interpolation	Off	Model transition states	On
PAT mode	CD A DD A		
Accel. factor PE	GRAPPA	Temp. highpass filter Threshold	On 4.00
	2 24		4.00
Ref. lines PE		Paradigm size	20 Basalina
Reference scan mode	Separate	Meas[1]	Baseline
Distortion Corr.	Off	Meas[2]	Baseline
Prescan Normalize	Off	Meas[3]	Baseline
Raw filter	On	Meas[4]	Baseline
Elliptical filter	Off	Meas[5]	Baseline
Hamming	Off	Meas[6]	Baseline
		Meas[7]	Baseline
Geometry		Meas[8]	Baseline
Multi-slice mode	Interleaved	Meas[9]	Baseline
Series	Ascending	Meas[10]	Baseline
		Meas[11]	Active

Meas[11]

Active

Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence	
Introduction Asymmetric echo Bandwidth Free echo spacing Echo spacing	Off Off 782 Hz/Px Off 1.4 ms
EPI factor RF pulse type Gradient mode RF spoiling	128 Normal Fast On
RF90 duration MB Number DummyScan Number FOV Shift Number SkewType(1ff) OVS flash(1on) SER Number Spoil factor Skew Direction Sat RF90 duration Dual On(1) Echo Distance MB Measurements Ramp On	10970 2 1 1 0 1 1 0 1 5120 3 1.00 40

\\USER\Feinberglab\Test\test1118\localizer_200V

SIEMENS: gre

PAT: Off Voxel size: 1.2x1.1x3.0 mm Rel. SNR: 1.00

TA: 0:27

TA. 0.27 PA	AT. OII VOXEI SIZE. T.ZXT.TX	3.0 IIIII Rei. SINK. 1.00	SIEWENS. gre
Properties		Phase resolution	90 %
Prio Recon	Off	Phase partial Fourier	6/8
Before measurement		Interpolation	On
After measurement		PAT mode	None
Load to viewer	On		
Inline movie	Off	Image Filter	Off
Auto store images	On	Distortion Corr.	Off
Load to stamp segments	Off	Prescan Normalize	Off
Load images to graphic	Off	Normalize	Off
segments		B1 filter	Off
Auto open inline display	Off	Raw filter	Off
Start measurement without	On	Elliptical filter	Off
further preparation	Oll	Geometry	
Wait for user to start	Off		Cognential
Start measurements	single	Multi-slice mode	Sequential
Start measurements	Sirigle	Series	Interleaved
Routine		Saturation mode	Standard
Slice group 1		Special sat.	None
Slices	5		
Dist. factor	20 %	Table position	Н
Position	Isocenter	Table position	П 0 mm
Orientation	Sagittal	Inline Composing	Off
Phase enc. dir.	A >> P	mine Composing	
Rotation	0.00 deg	Tim CT mode	Off
Slice group 2	0.00 deg	I .	
Slices	5	System	
Dist. factor	20 %	E17	On
		E18	On
Position	Isocenter	E19	On
Orientation	Coronal	E20	On
Phase enc. dir.	R >> L	E01	On
Rotation	0.00 deg	E02	On
Slice group 3	_	E03	On
Slices	5	E04	On
Dist. factor	20 %	E05	On
Position	Isocenter	E06	On
Orientation	Transversal	E07	On
Phase enc. dir.	A >> P	E08	On
Rotation	0.00 deg	E09	On
Phase oversampling	0 %	E10	On
FoV read	280 mm	E11	On
FoV phase	100.0 %	E12	On
Slice thickness	3.0 mm	E13	On
TR	10.0 ms	E14	On
TE	3.00 ms	E15	On
Averages	1	E16	On
Concatenations	15	L 10	OII
Filter	None	Positioning mode	FIX
Coil elements	E01-20	MSMA	S - C - T
	, . 	Sagittal	R >> L
Contrast		Coronal	A >> P
TD	0 ms	Transversal	F >> H
MTC	Off	Save uncombined	Off
Magn. preparation	None	Coil Combine Mode	Adaptive Combine
Flip angle	10 deg	AutoAlign	
Fat suppr.	None	Auto Coil Select	Off
Water suppr.	None		····
SWI	Off	Shim mode	Tune up
		Adjust with body coil	Off
Averaging mode	Short term	Confirm freq. adjustment	Off
Reconstruction	Magnitude	Assume Silicone	Off
Measurements	1	! Ref. amplitude 1H	200.000 V
Multiple series	Each measurement	Adjustment Tolerance	Auto
Resolution		Adjust volume	
Base resolution	256	Position	Isocenter
Dase resolution	200	Orientation	Transversal
		4E/E0	

Rotation R >> L A >> P F >> H	0.00 deg 350 mm 263 mm 350 mm
Physio	
1st Signal/Mode Segments	None 1
Tagging Dark blood	None Off
Resp. control	Off
Inline	
Subtract Liver registration Std-Dev-Sag Std-Dev-Cor Std-Dev-Tra Std-Dev-Time MIP-Sag MIP-Cor MIP-Tra MIP-Time Save original images Wash - In Wash - Out TTP PEI	Off
MIP - time	Off
MapIt Contrasts	None 1
Sequence	On
Introduction Dimension Phase stabilisation Asymmetric echo Bandwidth Flow comp.	On 2D Off Allowed 320 Hz/Px No
RF pulse type Gradient mode Excitation RF spoiling	Normal Whisper Slice-sel. On

\\USER\Feinberglab\Test\test1118\MPRAGE

TA: 4:46 PAT: Off Voxel size: 1.0x1.0x1.2 mm Rel. SNR: 1.00 SIEMENS: tfl

Before measurement	Properties		Geometry	
After measurement Load to viewer On Inline movie Off Table position H Table position O mm Inline Composing Off Table position O mm Table po	Prio Recon	Off	Multi-slice mode	Single shot
Load to viewer On	Before measurement		Series	Interleaved
Inline movie	After measurement			
Inline movie	Load to viewer	On	Table position	Н
Auto store images Con	Inline movie	Off		0 mm
Load to stamp segments Off System F17	Auto store images	On		_
Load images to graphic segments Filtron	•			.
Segments				
Auto open inline display				_
Start measurement without On		Off	E18	On
further preparation			_	On
Wat for user to start Off E01 On Start measurements Single E02 On		311	E20	On
Statt measurements		Off	E01	On
Routine			E02	On
Siab group 1	Start measurements	Single	E03	On
Slab group 1	Routine		E04	On
Slabs	Slab group 1			
Dist. factor		1		
Position				
Orientation Sagittal E09 On Phase enc. dir. A >> P E10 On Rotation 0.00 deg E11 On Phase oversampling 0.% E12 On Silice oversampling 0.0% E13 On Silice oversampling 0.0% E16 On Silice oversampling 0.0% REF On Revariation 1.0 MSMA S - C - T Averages 1 Coronal A > P Filip and				_
Phase enc. dir.				_
Rotation				_
Phase oversampling				
Silce oversampling				
Silices per slab				_
FoV read				_
FoV phase				_
Silice thickness				
TR	II		E16	On
TE			Positioning mode	DEE
Averages				
Averages		2.84 ms		
Transversal F > H	Averages	1		
Save uncombined Coil combine Coil combine Coil combine Magn. preparation Non-sel. IR Auto Coil Select Off	Concatenations	1		
Contrast Coil Combine Mode AutoAlign Adaptive Combine AutoAlign Magn, preparation Non-sel. IR Auto Coil Select Off TI 900 ms Shim mode Standard Filip angle 9 deg Adjust with body coil Off Fat suppr. None Adjust with body coil Off Water suppr. None Adjust with body coil Off Averaging mode Long term ? Ref. amplitude 1H 0.000 V Reconstruction Magnitude Adjustment Tolerance Auto Measurements 1 Adjust volume None Multiple series Off Position L0.7 A18.3 F10.8 Resolution Discription L0.7 A18.3 F10.8 Orientation Sagittal Resolution 256 Phase resolution Discription L0.7 A18.3 F10.8 Orientation Sagittal Resolution 100 % A >> P 208 mm A >> P 208 mm Rotation 0.00 deg F >> H 256 mm A >> P 208 mm	Filter	None		
Contrast AutoAlign	Coil elements	E01-20		
Magn. preparation Non-sel. IR TI 900 ms Flip angle 9 deg Fat suppr. None Water suppr. None Averaging mode Long term Reconstruction Magnitude Measurements 1 Multiple series Off Phase resolution 256 Phase resolution 100 % Slice resolution 100 % Phase partial Fourier Off Slice partial Fourier Off Interpolation Off PAT mode None Dark blood Off Inline Subtract Off Subtract Off Subtract Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Trime	0			
Ti				
Flip angle 9 deg Shim mode Standard Fat suppr. None Adjust with body coil Off Water suppr. None Confirm freq. adjustment Off Averaging mode Long term ? Ref. amplitude 1H 0.000 V Reconstruction Magnitude Adjustment Tolerance Auto Measurements 1 Adjustment Tolerance Auto Multiple series Off Position L0.7 A18.3 F10.8 Resolution 256 Position L0.7 A18.3 F10.8 Phase resolution 100 % F >> H 256 mm Phase resolution 100 % F >> H 256 mm Phase resolution 100 % A >> P 208 mm Slice resolution 0ff P >> L 173 mm Slice partial Fourier Off Physio Interpolation None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Subtract O			Auto Coil Select	Off
Fat suppr. None None None None None None None None			Shim mode	Standard
Vater suppr. None None Confirm freq. adjustment Off		_		
Averaging mode Averaging mode Reconstruction Magnitude Measurements Multiple series Off Position Assume Silicone Resolution Magnitude Magnitude Magnitude Measurements 1 Multiple series Off Position Base resolution Base resolution Slice resolution Slice partial Fourier Interpolation Off Distortion Corr. PAT mode None PAT mode None Dark blood None Magnitude Adjust volume Adjust volume Position Adjust volume Position Adjust volume Adjust volume Adjust volume Position Adjust volume Adjust volume Adjust volume Adjust volume Adjust volume Auto Adjust volume Auto Adjust volume Position Distortion Sagittal Rotation O.00 deg F > H 256 mm A >> P 208 mm R >> L 173 mm Physio Interpolation Off Assignal/Mode None PAT mode None Dark blood Off Resp. control Off Distortion Corr. Off Normalize Off Normalize Off Subtract Subtract Subtract Off Std-Dev-Sag Off Std-Dev-Sag Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off				
Averaging mode Reconstruction Long term Magnitude ? Ref. amplitude 1H 0.000 V Measurements Multiple series Off Adjust volume Auto Multiple series Off Position L0.7 A18.3 F10.8 Resolution Sagittal Rotation Sagittal Resolution 100 % Rotation 0.00 deg Phase resolution 100 % A >> P 256 mm Phase partial Fourier Off R >> L 173 mm Slice partial Fourier Off Physio Interpolation Off 1st Signal/Mode None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Subtract Off Normalize Off Subtract Off Normalize Off Std-Dev-Sag Off B1 filter Off Std-Dev-Cor Off Raw filter Off Std-Dev-Time Off	Water suppr.	None	· · ·	
Reconstruction Magnitude Measurements 1 Adjustment Tolerance Aduo Measurements 1 Adjust volume Multiple series Off Position L0.7 A18.3 F10.8 Resolution Sagittal Rotation 0.00 deg Phase resolution 100 % A > P 256 mm Slice resolution 100 % A > P 208 mm Phase partial Fourier Off Physio Interpolation Off Slice partial Fourier Off Std-Dev-Cortol Off Std-Dev-Sag Off Std-Dev-Sag Off Std-Dev-Cor Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Time Off	Averaging mode	Long term		
Measurements Multiple series 1 Adjust volume Resolution Position L0.7 A18.3 F10.8 Base resolution 256 Rotation 0.00 deg Phase resolution 100 % F >> H 256 mm Slice resolution 100 % A >> P 208 mm Phase partial Fourier Off Physio Interpolation Off 1st Signal/Mode None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Inline Normalize Off Subtract Off Normalize Off Std-Dev-Sag Off B1 filter Off Std-Dev-Cor Off Raw filter Off Std-Dev-Tra Off Elliptical filter Off Std-Dev-Time Off				
Multiple series Off Position L0.7 A18.3 F10.8 Resolution Sagittal Orientation Sagittal Base resolution 100 % Rotation 0.00 deg Phase resolution 100 % F >> H 256 mm Slice resolution 100 % R >> P 208 mm Phase partial Fourier Off R >> L 173 mm Slice partial Fourier Off Physio Interpolation Off Physio Interpolation Off None PAT mode None Dark blood Off Image Filter Off Resp. control Off Inline Inline Subtract Off Normalize Off Std-Dev-Sag Off Std-Dev-Cor Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off Off Off		_		AUIO
Resolution Orientation Sagittal Base resolution 256 Rotation 0.00 deg Phase resolution 100 % F >> H 256 mm Slice resolution 100 % A >> P 208 mm Slice partial Fourier Off R >> L 173 mm Slice partial Fourier Off Physio Interpolation Off 1st Signal/Mode None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Inline Prescan Normalize Off Subtract Off Normalize Off Std-Dev-Sag Off B1 filter Off Std-Dev-Cor Off Raw filter Off Std-Dev-Tra Off Elliptical filter Off Std-Dev-Time Off				107 440 0 540 0
Rotation 0.00 deg	wulliple series	Oii		
Phase resolution	Resolution			
Phase resolution 100 % Slice resolution 100 % Phase partial Fourier Off Slice partial Fourier Off Slice partial Fourier Off Interpolation Off PAT mode None Dark blood Off Image Filter Off Distortion Corr. Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Std-Dev-Sag Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off	Base resolution	256		
Slice resolution 100 % R >> P 208 mm Phase partial Fourier Off Slice partial Fourier Off Interpolation Off PAT mode None Dark blood Off Image Filter Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Std-Dev-Sag Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Time Off				
Phase partial Fourier Off Slice partial Fourier Off Interpolation Off Interpolation Off PAT mode None Dark blood Off Image Filter Off Distortion Corr. Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Std-Dev-Sag Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Time Off				
Slice partial Fourier Off Physio Interpolation Off 1st Signal/Mode None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Prescan Normalize Off Subtract Off Normalize Off Std-Dev-Sag Off Raw filter Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off			R >> L	173 mm
Interpolation Off 1st Signal/Mode None PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Prescan Normalize Off Subtract Off Normalize Off Std-Dev-Sag Off Raw filter Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off			Physio	
PAT mode None Dark blood Off Image Filter Off Resp. control Off Distortion Corr. Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Elliptical filter Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Time Off				None
Image Filter Off Resp. control Off Distortion Corr. Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off			- Ist Signal/Mode	
Distortion Corr. Off Prescan Normalize Off Normalize Off B1 filter Off Raw filter Off Elliptical filter Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Time Off	PAT mode	None	Dark blood	Off
Prescan Normalize Off Normalize Off Subtract Off B1 filter Off Raw filter Off Elliptical filter Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Time Off		_	Resp. control	Off
Normalize Off Normalize Off B1 filter Off Raw filter Off Elliptical filter Off Subtract Off Std-Dev-Sag Off Std-Dev-Cor Off Std-Dev-Tra Off Std-Dev-Tra Off Std-Dev-Time Off			Inline	
B1 filter Off Std-Dev-Sag Off Raw filter Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off				Off
Raw filter Off Std-Dev-Cor Off Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off				
Elliptical filter Off Std-Dev-Tra Off Std-Dev-Time Off				
Std-Dev-Time Off				
	Elliptical filter	Off		
	•		Std-Dev-Time 47/59	OII

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

Introduction	On
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Bandwidth	240 Hz/Px
Flow comp.	No
Echo spacing	6.5 ms
RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

\\USER\Feinberglab\Test\test1118\pcasl_DE_BS_flash_m3F3d1

TA: 5:34 PAT: 4 Voxel size: 1.5×1.5×3.0 mm Rel. SNR: 1.00 USER: ep2d_fid_mb_pcasl_DE_BS_flash

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 Composing	Oii
Inline movie	Off	System	
Auto store images	On	E17	On
Load to stamp segments	Off	E18	On
Load images to graphic	Off	E19	On
segments		E20	On
Auto open inline display	Off	E01	On
Start measurement without	On	E02	On
further preparation	OII	E02 E03	On
Wait for user to start	Off		_
Start measurements		E04	On
Start measurements	single	E05	On
Routine		E06	On
Slice group 1		E07	On
Slices	24	E08	On
Dist. factor	20 %	E09	On
Position	L0.0 A20.3 H54.9	E10	On
Orientation	Transversal	E11	On
Phase enc. dir.	A >> P	E12	On
Rotation	0.00 deg	E13	On
	0.00 deg 0 %	E14	On
Phase oversampling		E15	On
FoV read	192 mm	E16	On
FoV phase	100.0 %		
Slice thickness	3.0 mm	Positioning mode	REF
TR	8560 ms	MSMA	S - C - T
TE 1	15 ms	Sagittal	R >> L
TE 2	32 ms	Coronal	A >> P
Averages	1	Transversal	F >> H
Concatenations	1	Save uncombined	Off
Filter	None	Coil Combine Mode	Sum of Squares
Coil elements	E01-20	AutoAlign	
Contrast		Auto Coil Select	Default
MTC	Off	China manda	Oten devel
		Shim mode	Standard
Flip angle	90 deg	Adjust with body coil	Off
Fat suppr.	Fat sat.	Confirm freq. adjustment	Off
Averaging mode	Long term	Assume Silicone	Off
Reconstruction	Magnitude	? Ref. amplitude 1H	0.000 V
Measurements		Adjustment Tolerance	Auto
	33		
	33 0 ms	Adjust volume	
Delay in TR	0 ms		L4.1 A27.1 H44.1
		Adjust volume	L4.1 A27.1 H44.1 Sagittal
Delay in TR	0 ms	Adjust volume ! Position	
Delay in TR Multiple series	0 ms Off	Adjust volume ! Position ! Orientation	Sagittal 0.00 deg
Delay in TR Multiple series Resolution Base resolution	0 ms Off	Adjust volume ! Position ! Orientation ! Rotation	Sagittal 0.00 deg 70 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution	0 ms Off 128 100 %	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P	Sagittal 0.00 deg 70 mm 208 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier	0 ms Off 128 100 % 6/8	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L	Sagittal 0.00 deg 70 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation	0 ms Off 128 100 % 6/8 Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio	Sagittal 0.00 deg 70 mm 208 mm 173 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode	0 ms Off 128 100 % 6/8	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L	Sagittal 0.00 deg 70 mm 208 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	0 ms Off 128 100 % 6/8 Off GRAPPA 4	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode	Sagittal 0.00 deg 70 mm 208 mm 173 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode	0 ms Off 128 100 % 6/8 Off GRAPPA	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf	Sagittal 0.00 deg 70 mm 208 mm 173 mm
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	0 ms Off 128 100 % 6/8 Off GRAPPA 4	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP	Sagittal 0.00 deg 70 mm 208 mm 173 mm None
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP	Sagittal 0.00 deg 70 mm 208 mm 173 mm None
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.	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP	Sagittal 0.00 deg 70 mm 208 mm 173 mm None
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images Sequence	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off Off On
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images Sequence Introduction	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off Off On
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images Sequence Introduction Contrasts	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off Off On
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images Sequence Introduction Contrasts Bandwidth	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off Off On Off 2 1954 Hz/Px
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	0 ms Off 128 100 % 6/8 Off GRAPPA 4 48 Separate Off Off Off Off	Adjust volume ! Position ! Orientation ! Rotation ! F >> H ! A >> P ! R >> L Physio 1st Signal/Mode Perf GBP PBP TTP Original images Sequence Introduction Contrasts	Sagittal 0.00 deg 70 mm 208 mm 173 mm None Off Off Off Off On

EPI factor RF pulse type Gradient mode RF spoiling	128 Normal Fast On
RF90 duration	12890
MB Number	2
DummyScan Number	1
FOV Shift Number	1
Shift K0 Center	1
Every Other Slice	1
BS Type	1
Background Suppr.	Off
BS parameter[1]	500 ms
BS parameter[2]	10 ms
BS parameter[3]	0 ms
FOCI parameter[1]	800
FOCI parameter[2]	24
FOCI parameter[3]	1.0
FOCI parameter[4]	2000
Label Offset	80 mm
Post Label Delay	2000000 us
MB Measurements	30
Ramp On	On

\\US	ER\Feinberglab\Test\test111		lash_iso75
TA: 2:24 PAT: 2	Voxel size: 0.8×0.8×0.8 mm	•	ER: ep2d_bold_OVS_flash
Properties		Sat. region 1	440
Prio Recon	Off	Thickness	110 mm
Before measurement		Position	L0.0 A69.7 H0.0
After measurement		Orientation	Coronal
Load to viewer	On	Sat. region 2	440
Inline movie	Off	Thickness	110 mm
Auto store images	On	Position	L0.0 P136.2 F35.7
Load to stamp segments	Off	Orientation	C > T14.7
Load images to graphic	Off	Special sat.	None
segments		Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
further preparation	•		
Wait for user to start	Off	System	
Start measurements	single	E17	On
	5g.0	E18	On
Routine		E19	On
Slice group 1		E20	On
Slices	50	E01	On
Dist. factor	50 %	E02	On
Position	L1.2 P26.9 H15.4	E03	On
Orientation	Transversal	E04	On
Phase enc. dir.	A >> P	E05	On
Rotation	0.00 deg	E06	On
Phase oversampling	0 %	E07	On
FoV read	192 mm	E08	On
FoV phase	50.0 %	E09	On
Slice thickness	0.75 mm	E10	On
TR	3120 ms	E11	On
TE	27 ms	E12	On
Averages	1	E13	On
Concatenations	1	E14	On
Filter	None	E15	On
Coil elements	E01-20	E16	On
Contrast		Positioning mode	FIX
MTC	Off	MSMA	S - C - T
Flip angle	70 deg	Sagittal	R >> L
Fat suppr.	Fat sat.	Coronal	A >> P
Averaging mode	Long torm	Transversal	F >> H
Averaging mode Reconstruction	Long term Magnitude	Coil Combine Mode	Sum of Squares
Measurements	43	AutoAlign	
Delay in TR	0 ms	Auto Coil Select	Default
Multiple series	Off	Shim mode	Standard
•	Oli	Adjust with body coil	Off
Resolution		Confirm freq. adjustme	
Base resolution	256	Assume Silicone	Off
Phase resolution	100 %	? Ref. amplitude 1H	0.000 V
Phase partial Fourier	6/8	Adjustment Tolerance	Auto
Interpolation	Off	Adjust volume	Auto
PAT mode	GRAPPA	! Position	R0.1 P37.1 H15.4
Accel. factor PE	2	! Orientation	T > C-15.0
Ref. lines PE	24	! Rotation	0.00 deg
Reference scan mode	Separate Separate	! R >> L	100 mm
		! A >> P	70 mm
Distortion Corr.	Off	!F>> H	48 mm
Prescan Normalize	Off	I	TO HIIII
Raw filter	On	Physio	
Elliptical filter	Off	1st Signal/Mode	None
Hamming	Off	BOLD	
Geometry		GLM Statistics	Off
Multi-slice mode	Interleaved	Dynamic t-maps	Off
Series	Ascending	Starting ignore meas	0

Ascending

Series

Starting ignore meas

Ignore after transition

0

0

Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence	
Introduction Asymmetric echo Bandwidth Free echo spacing Echo spacing	Off Off 1086 Hz/Px Off 1.05 ms
EPI factor RF pulse type Gradient mode RF spoiling	128 Normal Fast On
RF90 duration MB Number DummyScan Number FOV Shift Number SkewType(1ff) OVS flash(1on) SER Number Spoil factor Skew Direction Sat RF90 duration Dual On(1) Echo Distance MB Measurements Ramp On	7680 2 1 1 0 1 1 1 1 5120 3 1.00 40 On

\\US	ER\Feinberglab\Test\test111	8\ep2d_M2P2_OVS_	flash_iso55
TA: 2:24 PAT: 2	Voxel size: 0.5×0.5×0.6 mm	•	SER: ep2d_bold_OVS_flash
Properties		Sat. region 1	
Prio Recon	Off	Thickness	110 mm
Before measurement	Oli	Position	L0.0 A50.0 H0.0
After measurement		Orientation	Coronal
Load to viewer	On	Sat. region 2	
Inline movie	Off	Thickness	110 mm
Auto store images	On	Position	L0.0 P136.2 F35.7
Load to stamp segments	Off	Orientation	C > T14.7
Load images to graphic	Off	Special sat.	None
segments	Oli	Table position	Н
Auto open inline display	Off	Table position	0 mm
Start measurement without	On	Inline Composing	Off
	Oli	millie Composing	Oil
further preparation Wait for user to start	Off	System	
Start measurements		E17	On
Start measurements	single	E18	On
Routine		E19	On
Slice group 1		E20	On
Slices	50	E01	On
Dist. factor	50 %	E02	On
Position	L1.2 P36.9 H15.4	E03	On
Orientation	Transversal	E04	On
Phase enc. dir.	A >> P	E05	On
Rotation	0.00 deg	E06	On
Phase oversampling	0 %	E07	On
FoV read	140 mm	E08	On
FoV phase	50.0 %	E09	On
Slice thickness	0.55 mm	E10	On
TR	3120 ms	E11	On
TE	34 ms	E12	On
Averages	1	E13	On
Concatenations	1	E14	On
Filter	None	E15	On
Coil elements	E01-20	E16	On
Contrast		Positioning mode	FIX
MTC	Off	MSMA	S - C - T
Flip angle	70 deg	Sagittal	R >> L
Fat suppr.	Fat sat.	Coronal	A >> P
		Transversal	F >> H
Averaging mode	Long term	Coil Combine Mode	Sum of Squares
Reconstruction	Magnitude	AutoAlign	
Measurements	43	Auto Coil Select	Default
Delay in TR	0 ms Off	Shim mode	Standard
Multiple series	Oil	Adjust with body coil	Off
Resolution		Confirm freq. adjustm	
Base resolution	256	Assume Silicone	Off
Phase resolution	100 %	? Ref. amplitude 1H	0.000 V
Phase partial Fourier	6/8	Adjustment Tolerance	
Interpolation	Off	Adjust volume	e Auto
PAT mode	GRAPPA	! Position	R0.1 P37.1 H15.4
Accel. factor PE	2	! Orientation	T > C-15.0
Ref. lines PE	2 24	! Rotation	0.00 deg
		! Rotation	100 mm
Reference scan mode	Separate	! K >> L ! A >> P	70 mm
Distortion Corr.	Off	! F >> H	48 mm
Prescan Normalize	Off	l	1 0 IIIII
Raw filter	On	Physio	
Elliptical filter	Off	1st Signal/Mode	None
Hamming	Off	BOLD	
•		GLM Statistics	Off
Geometry Multi-slice mode	Interleaved	Dynamic t-maps	Off
Series	Ascending	Starting ignore meas	0

Ascending

Series

Starting ignore meas

Ignore after transition

0

Model transition states Temp. highpass filter Threshold	On On 4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
_	

Sequence	
Introduction Asymmetric echo Bandwidth Free echo spacing Echo spacing	Off Off 782 Hz/Px Off 1.4 ms
EPI factor RF pulse type Gradient mode RF spoiling	128 Normal Fast On
RF90 duration MB Number DummyScan Number FOV Shift Number SkewType(1ff) OVS flash(1on) SER Number Spoil factor Skew Direction Sat RF90 duration Dual On(1) Echo Distance MB Measurements Ramp On	10970 2 1 1 0 1 1 0 1 5120 3 1.00 40 On

\\USER\Feinberglab\Test\test1118\venc m3f3p4 flash
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TA: 34:00 PAT: 4 Voxel size: 0.8×0.8×5.0 mm Rel. SNR: 1.00 USER: ep2d_venc_ms_sbmb_SAT_flashref

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	Cyatam	
Inline movie	Off	System	0.5
Auto store images	On	T1	On
Load to stamp segments	Off	M2	On
Load images to graphic	Off	B4	On
segments		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	FIX
further preparation	.	MSMA	S - C - T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
Otar measurements	Sirigio	Transversal	F >> H
Routine			
Slice group 1		Coil Combine Mode	Sum of Squares
Slices	3	AutoAlign	 D ()
Dist. factor	700 %	Auto Coil Select	Default
Position	L0.0 A23.7 H12.9	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	Auto
Slice thickness	5.0 mm		144 007 4 1144 4
TR	5000 ms	! Position	L4.1 A27.1 H44.1
TE		! Orientation	Sagittal
	36.0 ms	! Rotation	0.00 deg
Averages	1	! F >> H	70 mm
Concatenations	1	! A >> P	208 mm
Filter	None	! R >> L	173 mm
Coil elements	B4;M2,3;T1	Physio	
Contrast		1st Signal/Mode	None
MTC	Off	_ Tat digital/Mode	None
Flip angle	20 deg	Angio	
Fat suppr.	Fat sat.	Flow mode	Single dir.
1 at suppr.		Encodings	1
Averaging mode	Long term	Velocity enc.	5 cm/s
Reconstruction	Magnitude	Direction	Through plane
Measurements	420	Magnitude sum	Off
Delay in TR	0 ms	1	
Multiple series	Off	Sequence	
· · ·		Introduction	Off
Resolution	0.50	_ Bandwidth	1396 Hz/Px
Base resolution	256	Free echo spacing	Off
Phase resolution	100 %	Echo spacing	1.18 ms
Phase partial Fourier	6/8	EPI factor	256
Interpolation	Off	RF pulse type	Normal
PAT mode	GRAPPA		
Accel. factor PE	4	Gradient mode	Fast
Ref. lines PE	48	RF spoiling	On
		RF90 duration	5120
Reference scan mode	Separate	MB Number	3
Distortion Corr.	Off	DummyScan Number	2
Prescan Normalize	Off	FOV Shift Number	3
Raw filter	Off	Shift K0 Center	1
Elliptical filter	Off	Every Other Slice	1
Hamming	Off	SER Number	1
	5		400
Geometry		Venc Repetition	400
Multi-slice mode	Interleaved	Spoil factorSkew Direction	5
		- Skew Lifection	
Series	Ascending	Dual On(1)	0

Venc Type(0off,1+-,20+,3on) 1

\\USER\Feinberglab\Test\test1118\ep2d_s1m3p3_roseg_flash

TA: 0:17 PAT: 3 Voxel size: 3.1×3.1×3.0 mm Rel. SNR: 1.00 USER: ep2d_bold_sbmb_ipat_roseg_flash

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	Cuatom	
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		M3	On
Auto open inline display	Off	V32	Off
Start measurement without	On	Positioning mode	REF
further preparation	.	MSMA	S-C-T
Wait for user to start	Off	Sagittal	R >> L
Start measurements	single	Coronal	A >> P
	Single	Transversal	F >> H
Routine		- Coil Combine Mode	Sum of Squares
Slice group 1			
Slices	12	AutoAlign	
Dist. factor	200 %	Auto Coil Select	Default
Position	Isocenter	Shim mode	Standard
Orientation	Transversal	Adjust with body coil	Off
Phase enc. dir.	A >> P	Confirm freq. adjustment	Off
Rotation	0.00 deg	Assume Silicone	Off
Phase oversampling	0 %	? Ref. amplitude 1H	0.000 V
FoV read	200 mm	Adjustment Tolerance	Auto
FoV phase	100.0 %	Adjust volume	Add
Slice thickness	3.00 mm	Position	Isocenter
TR	500 ms	Orientation	Transversal
TE	24 ms	Rotation	
Averages	1	Rotation R >> L	0.00 deg 200 mm
Concatenations	1		
Filter	None	A >> P	200 mm
		F >> H	102 mm
Coil elements	B4;M2,3;T1	Physio	
Contrast	0"	1st Signal/Mode	None
MTC	Off	BOLD	
Flip angle	40 deg	GLM Statistics	On
Fat suppr.	Fat sat.		
Averaging mode		I I I Whamic t-mans	∩ff
	Long term	Dynamic t-maps	Off
	Long term Magnitude	Starting ignore meas	0
Reconstruction	Magnitude	Starting ignore meas Ignore after transition	0 0
Reconstruction Measurements	Magnitude 28	Starting ignore meas Ignore after transition Model transition states	0 0 On
Reconstruction Measurements Delay in TR	Magnitude 28 0 ms	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter	0 0 On On
Reconstruction Measurements Delay in TR Multiple series	Magnitude 28	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold	0 0 On On 4.00
Reconstruction Measurements Delay in TR Multiple series Resolution	Magnitude 28 0 ms	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size	0 0 On On 4.00 20
Reconstruction Measurements Delay in TR Multiple series	Magnitude 28 0 ms	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1]	0 0 On On 4.00 20 Baseline
Reconstruction Measurements Delay in TR Multiple series Resolution	Magnitude 28 0 ms Off	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2]	0 0 On On 4.00 20 Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution	Magnitude 28 0 ms Off	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size - Meas[1] Meas[2] Meas[3]	0 0 On On 4.00 20 Baseline Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution	Magnitude 28 0 ms Off 64 100 %	Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size - Meas[1] Meas[2] Meas[3] Meas[4]	0 0 On On 4.00 20 Baseline Baseline Baseline Baseline Baseline
Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation	Magnitude 28 0 ms Off 64 100 % Off Off	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36	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]	0 0 On On 4.00 20 Baseline
Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate	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[6] Meas[7] Meas[8] Meas[9] Meas[10]	0 0 On On 4.00 20 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.	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off	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[6] Meas[7] Meas[8] Meas[9] Meas[10]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off	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]	0 0 On On 4.00 20 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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off Off Off	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] Meas[12]	0 0 On On 4.00 20 Baseline Active Active
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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off	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[10] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14]	0 0 On On A.00 20 Baseline Bateline
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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off Off Off	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[12] Meas[13] Meas[14] Meas[14]	0 0 On On A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off Off Off Off Off	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[10] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16]	0 0 0 On On 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
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	Magnitude 28 0 ms Off 64 100 % Off Off GRAPPA 3 36 Separate Off Off Off Off Off	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[12] Meas[13] Meas[14] Meas[14]	0 0 On On A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline

Meas[20]	Active
Motion correction	On
Interpolation	3D-K-space
Spatial filter	Off

•	
Introduction Bandwidth Free echo spacing Echo spacing	Off 752 Hz/Px Off 1.44 ms
EPI factor RF pulse type Gradient mode RF spoiling	64 Normal Fast On
RF90 duration MB Number DummyScan Number FOV Shift Number Echo Gap Factor Every Other Slice SER Number 2nd RFoff(1) Polarity(1) Dephase(0) Echo Distance MB Measurements	5120 3 2 1 100 1 1 0 0 0 1.00 20
Ramp On	On

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Feinber	glab Test		
	rest	test1118	0
		lestiit	localizer_200V
			b1map_200V_TR100
			MPRAGE
			pcasl_DE_BS_flash_m3F3d1
			pcasl_DE_BS_flash_m3F3d1_low
			venc_m3f3p4_flashref
			venc_m3f3p3_flashref
			venc_m3f3p2_flashref
			ep2d_M2P2_OVS_flash_iso75
			ep2d M2P2 OVS flash iso55
			ep2d_M2P2_OVS_flash_iso55
			MPRAGE_long
			test
			pcasl_DE_BS_flash_m3F3
			pcasl_DE_BS_flash_m3F3d1
			run nova coil
			localizer_200V
			MPRAGE
			MPRAGE pcasl_DE_BS_flash_m3F3d1
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p3_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p2_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p2_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p2_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p2_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55
			MPRAGE pcasl_DE_BS_flash_m3F3d1 pcasl_DE_BS_flash_m3F3d1_low venc_m3f3p4_flashref venc_m3f3p2_flashref venc_m3f3p2_flashref ep2d_M2P2_OVS_flash_iso75 ep2d_M2P2_OVS_flash_iso55