\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\localizer				
TA: 0:21 PAT: Off Voxel size: 1.1×1.0×7.0 mm Rel. SNR: 1.00 SIEMENS: gre				
17 0.21	7.1. 311			
.		Phase resolution	90 %	
Properties	0"	- Phase partial Fourier	Off	
Prio Recon	Off	Interpolation	On	
Before measurement				
After measurement	0.5	PAT mode	None	
Load to viewer Inline movie	On Off	Matrix Coil Mode	CP	
	On	Image Filter	Off	
Auto store images Load to stamp segments	Off	Distortion Corr.	On	
Load images to graphic	Off	Mode	2D	
segments	Oli	Unfiltered images	Off	
Auto open inline display	Off	Unfiltered images	Off	
Start measurement without	Off	Prescan Normalize	On	
further preparation	0.11	Normalize	Off	
Wait for user to start	Off	B1 filter	Off	
Start measurements	single	Raw filter	Off	
ı	5ig.5	Elliptical filter	On	
Routine		Mode	Inplane	
Slice group 1		Geometry		
Slices	3	Multi-slice mode	Sequential	
Dist. factor	114 %	Series	Interleaved	
Position Orientation	Isocenter			
	Sagittal	Saturation mode	Standard	
Phase enc. dir.	A >> P	Special sat.	None	
Rotation	0.00 deg			
Slice group 2 Slices	4	Tim CT mode	Off	
Dist. factor	1 20 %	System		
Position	Isocenter	Body	Off	
Orientation	Transversal	HEP	On	
Phase enc. dir.	A >> P	HEA	On	
Rotation	0.00 deg			
Slice group 3	0.00 deg	Positioning mode	REF	
Slices	1	Table position	H	
Dist. factor	20 %	Table position	0 mm	
Position	Isocenter	MSMA	S - C - T	
Orientation	Coronal	Sagittal	L >> R	
Phase enc. dir.	R >> L	Coronal	P >> A	
Rotation	0.00 deg	Transversal	F >> H	
Phase oversampling	0 %	Save uncombined	Off	
FoV read	250 mm	Coil Combine Mode	Sum of Squares	
FoV phase	100.0 %	AutoAlign Auto Coil Select	 Default	
Slice thickness	7.0 mm	Auto Coil Select		
TR	8.6 ms	Shim mode	Tune up	
TE	4.00 ms	Adjust with body coil	Off	
Averages	2	Confirm freq. adjustment	Off	
Concatenations	5	Assume Silicone	Off	
Filter	Distortion Corr.(2D), Prescan	? Ref. amplitude 1H	0.000 V	
	Normalize, Elliptical filter	Adjustment Tolerance	Auto	
Coil elements	HEA;HEP	Adjust volume		
Contrast		Position	Isocenter	
TD	0 ms	- Orientation	Transversal	
MTC	Off	Rotation	0.00 deg	
Magn. preparation	None	R >> L	350 mm	
Flip angle	20 deg	A >> P	263 mm	
Fat suppr.	None	F >> H	350 mm	
Water suppr.	None	Physio		
SWI	Off	1st Signal/Mode	None	
		Segments	1	
Averaging mode	Short term		O#	
Reconstruction Measurements	Magnitude 1	Dark blood	Off	
Multiple series	Fach measurement	Resp. control	Off	

Inline

Subtract

Each measurement

256

Multiple series

Base resolution

Resolution

Off

Off Off Off Off
Off
On
Off Off Off Off Off

Sequence

	Coquonico	
ĺ	Introduction	On
ı	Dimension	2D
ı	Phase stabilisation	Off
ı	Asymmetric echo	Allowed
ı	Contrasts	1
ı	Bandwidth	320 Hz/Px
ı	Flow comp.	No
ı	Allowed delay	0 s
ı	RF pulse type	Normal
ı	Gradient mode	Normal
ı	Excitation	Slice-sel.
ı	RF spoiling	On
- 1	• •	

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\T2

TA: 2:46	PAT: 2 Voxel size: 0.8×0.8×4	4.0 mm Rel. SNR: 1.00	SIEMENS: tse
		Unfiltered images	Off
Properties		- Unfiltered images	Off
Prio Recon	Off	Prescan Normalize	On
Before measurement		Normalize	Off
After measurement			
Load to viewer	On	B1 filter	Off
Inline movie	Off	Raw filter	Off
Auto store images	On	Elliptical filter	Off
Load to stamp segments	Off	Geometry	
	Off	Multi-slice mode	Interleaved
Load images to graphic	Oli		
segments	0"	Series	Interleaved
Auto open inline display	Off	Special sat.	None
Start measurement without	On		
further preparation		Tim CT mode	O#
Wait for user to start	On	Tim C1 mode	Off
Start measurements	single	System	
Douting		Body	Off
Routine		- HEP	On
Slice group 1	00	HEA	On
Slices	36	IILA	OII
Dist. factor	0 %	Positioning mode	ISO
Position	R1.0 A0.7 H10.2	Table position	H
Orientation	T > C-0.7	Table position	10 mm
Phase enc. dir.	L >> R	MSMA	S - C - T
Rotation	-90.00 deg		L >> R
Phase oversampling	0 %	Sagittal	
FoV read	240 mm	Coronal	P >> A
FoV phase	75.0 %	Transversal	F >> H
Slice thickness	4.0 mm	Save uncombined	Off
		Coil Combine Mode	Sum of Squares
TR	4380 ms	AutoAlign	
TE	60 ms	Auto Coil Select	Default
Averages	1		0: 1 1
Concatenations	2	Shim mode	Standard
Filter	Distortion Corr.(2D), Prescan	Adjust with body coil	Off
	Normalize	Confirm freq. adjustment	Off
Coil elements	HEA;HEP	Assume Silicone	Off
		? Ref. amplitude 1H	0.000 V
Contrast		Adjustment Tolerance	Auto
TD	0.0 ms	Adjust volume	
MTC	Off	Position	R1.0 A0.7 H10.2
Magn. preparation	None	Orientation	T > C-0.7
Flip angle	180 deg	Rotation	-90.00 deg
Fat suppr.	None		•
Water suppr.	None	A >> P	240 mm
Restore magn.	On	R >> L	180 mm
······		F >> H	144 mm
Averaging mode	Short term	Physio	
Reconstruction	Magnitude	1st Signal/Mode	None
Measurements	1		
Multiple series	Each measurement	Dark blood	Off
Resolution		Resp. control	Off
	320	- Resp. Control	Oli
Base resolution	320	Inline	
Phase resolution	100 %	Subtract	Off
Phase partial Fourier	Off	Std-Dev-Sag	Off
Trajectory	Cartesian	Std-Dev-Cor	Off
Interpolation	On	Std-Dev-Tra	Off
PAT mode	CDADDA	Std-Dev-Time	Off
	GRAPPA		
Accel. factor PE	2	MIP-Sag	Off
Ref. lines PE	30	MIP-Cor	Off
Matrix Coil Mode	Auto (Triple)	MIP-Tra	Off
Reference scan mode	Integrated	MIP-Time	Off
		Save original images	On
Image Filter	Off		
Distortion Corr.	On	Sequence	0"
Mode	2D	Introduction	Off

Dimension 2D
Compensate T2 decay On
Reduce Motion Sens. Off
Contrasts 1

Bandwidth 195 Hz/Px
Flow comp. No
Allowed delay 120 s
Echo spacing 10 ms

Define Turbo factor

Turbo factor 15
Echo trains per slice 9
RF pulse type Normal
Gradient mode Fast

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\FLAIR

TA: 2:24 P	AT: Off Voxel size: 1.9×0.9×	4.0 mm Rel. SNR: 1.00	SIEMENS: tse
Dranantias		Unfiltered images	Off
Properties		- Prescan Normalize	On
Prio Recon	Off	Normalize	Off
Before measurement		B1 filter	Off
After measurement		Raw filter	Off
Load to viewer	On	Elliptical filter	Off
Inline movie	Off	Linplical litter	Oli
Auto store images	On	Geometry	
Load to stamp segments	Off	Multi-slice mode	Interleaved
Load images to graphic	Off	Series	Interleaved
segments			
Auto open inline display	Off	Special sat.	None
Start measurement without	On		
further preparation	OII	Tim CT mode	Off
Wait for user to start	Off	ı	
		System	
Start measurements	single	Body	Off
Routine		HEP	On
Slice group 1		HEA	On
Slices	36	Desirie	
Dist. factor	0 %	Positioning mode	ISO
Position	R1.0 A0.7 H10.2	Table position	H
		Table position	10 mm
Orientation	T > C-0.7	MSMA	S - C - T
Phase enc. dir.	L >> R	Sagittal	L >> R
Rotation	-90.00 deg	Coronal	P >> A
Phase oversampling	0 %	Transversal	F >> H
FoV read	240 mm	Save uncombined	Off
FoV phase	100.0 %	Coil Combine Mode	Sum of Squares
Slice thickness	4.0 mm	AutoAlign	
TR	8000 ms	Auto Coil Select	Default
TE	119.0 ms		
Averages	1	Shim mode	Standard
Concatenations	3	Adjust with body coil	Off
Filter	Distortion Corr.(2D), Prescan	Confirm freq. adjustment	Off
1 11.01	Normalize	Assume Silicone	Off
Coil elements	HEA;HEP	? Ref. amplitude 1H	0.000 V
Con elements	I ILA,I ILI	Adjustment Tolerance	Auto
Contrast		Adjust volume	Auto
TD	0.0 ms	Position	R1.0 A0.7 H10.2
MTC	Off	Orientation	T > C-0.7
Magn. preparation	Slice-sel. IR	Rotation	
TI TI	2000 ms		-90.00 deg
Freeze suppressed tissue	Off	A >> P	240 mm
Flip angle	150 deg	R >> L	240 mm
Fat suppr.	None	F >> H	144 mm
	None	Physio	
Water suppr.	Off	1st Signal/Mode	None
Restore magn.	OII		
Averaging mode	Long term	Dark blood	Off
Reconstruction	Magnitude		
Measurements	1	Resp. control	Off
Multiple series	Each measurement	Inline	
Maniple Series	Lacii illeasarement	Subtract	Off
Resolution			Off
Base resolution	256	- Std-Dev-Sag	
Phase resolution	50 %	Std-Dev-Cor	Off
Phase partial Fourier	Off	Std-Dev-Tra	Off
Trajectory	Cartesian	Std-Dev-Time	Off
Interpolation	On	MIP-Sag	Off
	·····	MIP-Cor	Off
PAT mode	None	MIP-Tra	Off
Matrix Coil Mode	CP	MIP-Time	Off
		Save original images	On
Image Filter	Off		
Distortion Corr.	On	Sequence	
Mode	2D	Introduction	Off
Unfiltered images	Off	Dimension	2D
•			

Compensate T2 decay Off Reduce Motion Sens. Off Contrasts 1

Bandwidth 195 Hz/Px
Flow comp. No
Allowed delay 60 s
Echo spacing 9.92 ms

Define Turbo factor

Turbo factor 27
Echo trains per slice 5
RF pulse type Normal
Gradient mode Normal

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\EPI_MID_FU3
TA: 7:07 PAT: 2 Voxel size: 3.4×3.4×2.4 mm Rel. SNR: 1.00 SIEMENS: ep2d_bold

Droportion		Series	Descending
Properties Prio Recon	Off	Special sat.	None
Before measurement	Oli	1 ·	None
After measurement		System	
Load to viewer	On	Body	Off
Inline movie	Off	HEP	On
Auto store images	On	HEA	On
Load to stamp segments	Off	Positioning mode	ISO
Load images to graphic	Off	Table position	Н
segments		Table position	14 mm
Auto open inline display	Off	MSMA	S - C - T
Start measurement without	On	Sagittal	L >> R
further preparation		Coronal	P >> A
Wait for user to start	On	Transversal	F >> H
Start measurements	single	Coil Combine Mode	Sum of Squares
Routine		AutoAlign Auto Coil Select	 Default
Slice group 1		Auto Con Select	Delault
Slices	40	Shim mode	Standard
Dist. factor	42 %	Adjust with body coil	Off
Position	R0.4 A0.9 H14.4	Confirm freq. adjustment	Off
Orientation	T > C-1.7	Assume Silicone	Off
Phase enc. dir. Rotation	A >> P 0.00 deg	? Ref. amplitude 1H	0.000 V
Phase oversampling	0.00 deg 0 %	Adjustment Tolerance	Auto
FoV read	220 mm	Adjust volume Position	R0.4 A0.9 H14.4
FoV phase	100.0 %	Orientation	T > C-1.7
Slice thickness	2.4 mm	Rotation	0.00 deg
TR	2200 ms	R >> L	220 mm
TE	30 ms	A >> P	220 mm
Averages	1	F >> H	136 mm
Concatenations	1	I	
Filter	Prescan Normalize	Physio	Name
Coil elements	HEA;HEP	1st Signal/Mode	None
		DOLD	
Contrast	~	BOLD GLM Statistics	∩ff
MTC	Off	GLM Statistics	Off Off
MTC Flip angle	75 deg	GLM Statistics Dynamic t-maps	Off
MTC	_	GLM Statistics Dynamic t-maps Starting ignore meas	Off 0
MTC Flip angle	75 deg	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition	Off
MTC Flip angle Fat suppr.	75 deg Fat sat.	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states	Off 0 0 Off
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements	75 deg Fat sat. Long term Magnitude 191	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition	Off 0 0
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR	75 deg Fat sat. Long term Magnitude 191 0 ms	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter	Off 0 0 Off Off
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements	75 deg Fat sat. Long term Magnitude 191	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR	75 deg Fat sat. Long term Magnitude 191 0 ms	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2]	Off 0 0 Off Off 4.00 20 Baseline Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series	75 deg Fat sat. Long term Magnitude 191 0 ms	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution	75 deg Fat sat. Long term Magnitude 191 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution	75 deg Fat sat. Long term Magnitude 191 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier Interpolation	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier Interpolation PAT mode	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier Interpolation	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10]	Off 0 0 Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9]	Off 0 0 Off Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11]	Off 0 0 Off Off Off 4.00 20 Baseline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr.	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11]	Off 0 0 Off Off Off 4.00 20 Baseline Active Active
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12]	Off 0 0 Off Off Off 4.00 20 Baseline Active Active Active
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16]	Off 0 0 Off Off Off A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off Off Off On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17]	Off 0 0 Off Off Off A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off On On On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17] Meas[17] Meas[17]	Off 0 0 Off Off Off A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Active
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter Hamming	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off Off Off On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17] Meas[17] Meas[18] Meas[18]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter	75 deg Fat sat. Long term Magnitude 191 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off On On On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17] Meas[17] Meas[17]	Off 0 0 Off Off Off A.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Active

Spatial filter	Off
Sequence	
Introduction	Off
Bandwidth	2298 Hz/Px
Free echo spacing	On
Echo spacing	0.52 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\EPI_Face_FU3
TA: 7:31 PAT: 2 Voxel size: 3.4×3.4×2.4 mm Rel. SNR: 1.00 SIEMENS: ep2d_bold

Properties		Series	Descending
Prio Recon	Off	Special sat.	None
Before measurement		1 '	
After measurement		System Body	Off
Load to viewer	On	HEP	On
Inline movie	Off	HEA	On
Auto store images	On	IILA	
Load to stamp segments	Off	Positioning mode	ISO
Load images to graphic	Off	Table position	Н
segments		Table position	14 mm
Auto open inline display	Off	MSMA	S - C - T
Start measurement without	On	Sagittal	L >> R
further preparation		Coronal	P >> A
Wait for user to start	On	Transversal	F >> H
Start measurements	single	Coil Combine Mode	Sum of Squares
Routine		AutoAlign	 D ()
Slice group 1		Auto Coil Select	Default
Slices	40	Shim mode	Standard
Dist. factor	42 %	Adjust with body coil	Off
Position	R0.4 A0.9 H14.4	Confirm freq. adjustment	Off
Orientation	T > C-1.7	Assume Silicone	Off
Phase enc. dir.	A >> P	? Ref. amplitude 1H	0.000 V
Rotation	0.00 deg	Adjustment Tolerance	Auto
Phase oversampling	0 %	Adjust volume	
FoV read	220 mm	Position	R0.4 A0.9 H14.4
FoV phase	100.0 %	Orientation	T > C-1.7
Slice thickness	2.4 mm	Rotation	0.00 deg
TR	2200 ms	R >> L	220 mm
TE	30 ms	A >> P	220 mm
Averages	1	F >> H	136 mm
Concatenations	1 Danasan Mannadina	Physio	
Filter	Prescan Normalize	1st Signal/Mode	None
Coil elements	HEA;HEP	BOLD	
Contrast	Off	GLM Statistics	Off
MTC Flip angle	75 deg	Dynamic t-maps	Off
Flip angle	Fat sat.	Starting ignore meas	0
Fat suppr.	Fai Sai.	Ignore after transition	0
Averaging mode	Long term	Model transition states	Off
Reconstruction	Magnitude	Temp. highpass filter	Off
Measurements			Oli
Measurements	202	Threshold	4.00
Delay in TR	0 ms		
		Threshold	4.00
Delay in TR Multiple series	0 ms	Threshold Paradigm size	4.00 20
Delay in TR Multiple series Resolution	0 ms Off	Threshold Paradigm size Meas[1]	4.00 20 Baseline Baseline Baseline
Delay in TR Multiple series Resolution Base resolution	0 ms Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4]	4.00 20 Baseline Baseline Baseline Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution	0 ms Off 64 100 %	Threshold Paradigm size Meas[1] Meas[2] Meas[3]	4.00 20 Baseline Baseline Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier	0 ms Off 64 100 % Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation	0 ms Off 64 100 % Off Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode	0 ms Off 64 100 % Off Off GRAPPA	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8]	4.00 20 Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	0 ms Off 64 100 % Off Off GRAPPA 2	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9]	4.00 20 Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE	0 ms Off 64 100 % Off Off GRAPPA 2 24	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]	4.00 20 Baseline
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP	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]	4.00 20 Baseline Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE	0 ms Off 64 100 % Off Off GRAPPA 2 24	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]	4.00 20 Baseline Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Meas[13]	4.00 20 Baseline Active Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr.	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14]	4.00 20 Baseline Active Active Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[15]	4.00 20 Baseline Active Active Active Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr.	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off Off Off	Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[9] Meas[9] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Active Active Active Active Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off Off On On	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[13] Meas[14] Meas[15] Meas[16] Meas[17]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline Bateline Bateline Bateline Bateline Bateline Bateline Bateline Bateline Active Active Active Active Active Active Active Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off Off Off	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[13] Meas[14] Meas[15] Meas[16] Meas[17] Meas[17]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Active
Delay in TR Multiple series Resolution Base resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter Hamming	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off On On Off	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[13] Meas[14] Meas[15] Meas[15] Meas[16] Meas[17] Meas[18] Meas[19]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline Active
Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter	0 ms Off 64 100 % Off Off GRAPPA 2 24 CP Separate Off Off On On Off	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[13] Meas[14] Meas[15] Meas[16] Meas[17] Meas[17]	4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline Active Active Active Active Active Active Active Active

I	Spatial filter	Off
5	Sequence	
Γ	Introduction	Off
	Bandwidth	2298 Hz/Px
	Free echo spacing	On
	Echo spacing	0.52 ms
ľ	EPI factor	64
	RF pulse type	Normal
	Gradient mode	Fast

\\USER\Brain\KCL171467_STRATIFY\\32Channel_Protocol_07Aug2018\EPI_SST_FU3 TA: 12:54 PAT: 2 Voxel size: 3.4x3.4x2.4 mm Rel. SNR: 1.00 SIEMENS: ep2d_bold

Properties		Series	Descending
Prio Recon	Off	Special sat.	None
Before measurement		1 ·	
After measurement		System	0"
Load to viewer	On	Body HEP	Off On
Inline movie	Off	HEA	On On
Auto store images	On	ПЕА	On
Load to stamp segments	Off	Positioning mode	ISO
Load images to graphic	Off	Table position	Н
segments		Table position	14 mm
Auto open inline display	Off	MSMA	S - C - T
Start measurement without	On	Sagittal	L >> R
further preparation	0	Coronal	P >> A
Wait for user to start	On	Transversal	F >> H
Start measurements	single	Coil Combine Mode	Sum of Squares
Routine		AutoAlign	
Slice group 1		- Auto Coil Select	Default
Slices	40	Shim mode	Standard
Dist. factor	42 %	Adjust with body coil	Off
Position	R0.4 A0.9 H14.4	Confirm freq. adjustment	Off
Orientation	T > C-1.7	Assume Silicone	Off
Phase enc. dir.	A >> P	? Ref. amplitude 1H	0.000 V
Rotation	0.00 deg	Adjustment Tolerance	Auto
Phase oversampling	0 %	Adjust volume	, tato
FoV read	220 mm	Position	R0.4 A0.9 H14.4
FoV phase	100.0 %	Orientation	T > C-1.7
Slice thickness	2.4 mm	Rotation	0.00 deg
TR	2200 ms	R >> L	220 mm
TE	30 ms	A >> P	220 mm
Averages	1	F >> H	136 mm
Concatenations	1	ı	
Filter	Prescan Normalize	Physio	
Coil elements	HEA;HEP	1st Signal/Mode	None
Ooli elements		•	
Contrast	TIEA,TIET	BOLD	
1	Off	GLM Statistics	Off
Contrast		GLM Statistics Dynamic t-maps	Off
Contrast MTC	Off	GLM Statistics Dynamic t-maps Starting ignore meas	Off 0
Contrast MTC Flip angle Fat suppr.	Off 75 deg Fat sat.	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition	Off 0 0
Contrast MTC Flip angle Fat suppr. Averaging mode	Off 75 deg Fat sat. Long term	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states	Off 0 0 Off
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction	Off 75 deg Fat sat. Long term Magnitude	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter	Off 0 0 Off Off
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements	Off 75 deg Fat sat. Long term Magnitude 349	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold	Off 0 0 Off Off 4.00
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR	Off 75 deg Fat sat. Long term Magnitude 349 0 ms	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size	Off 0 0 Off Off 4.00 20
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series	Off 75 deg Fat sat. Long term Magnitude 349	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2]	Off 0 0 Off Off 4.00 20 Baseline Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 %	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5]	Off 0 0 Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 %	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] - Meas[3] Meas[4] Meas[5] Meas[6] Meas[7]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase partial Fourier Interpolation PAT mode	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] - Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[8]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] - Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10]	Off 0 0 Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple)	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11]	Off 0 0 Off Off Off 4.00 20 Baseline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12]	Off 0 0 Off Off Off 4.00 20 Baseline Active Active
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple)	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Meas[13]	Off 0 0 Off Off Off 4.00 20 Baseline Active Active Active
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[13]	Off 0 0 Off Off Off 4.00 20 Baseline Bathine Baseline Baseline Bathine
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr.	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[13] Meas[14] Meas[14]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off Off On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[13] Meas[14] Meas[15] Meas[15]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off On On On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off Off On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17] Meas[17] Meas[17]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bathine Baseline Bathine B
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter Hamming	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off On On On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[11] Meas[12] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[16] Meas[16] Meas[17] Meas[17] Meas[18] Meas[18]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bateline
Contrast MTC Flip angle Fat suppr. Averaging mode Reconstruction Measurements Delay in TR Multiple series Resolution Base resolution Phase resolution Phase partial Fourier Interpolation PAT mode Accel. factor PE Ref. lines PE Matrix Coil Mode Reference scan mode Distortion Corr. Unfiltered images Prescan Normalize Raw filter Elliptical filter	Off 75 deg Fat sat. Long term Magnitude 349 0 ms Off 64 100 % Off Off GRAPPA 2 24 Auto (Triple) Separate Off Off On On On	GLM Statistics Dynamic t-maps Starting ignore meas Ignore after transition Model transition states Temp. highpass filter Threshold Paradigm size Meas[1] Meas[2] Meas[3] Meas[4] Meas[5] Meas[6] Meas[7] Meas[8] Meas[9] Meas[10] Meas[10] Meas[11] Meas[12] Meas[13] Meas[14] Meas[15] Meas[15] Meas[15] Meas[15] Meas[16] Meas[17] Meas[17] Meas[17]	Off 0 0 Off Off Off 4.00 20 Baseline Baseline Baseline Baseline Baseline Baseline Baseline Baseline Bathine Baseline Bathine B

I	Spatial filter	Off
5	Sequence	
	Introduction	Off
	Bandwidth	2298 Hz/Px
	Free echo spacing	On
	Echo spacing	0.52 ms
-	EPI factor	64
	RF pulse type	Normal
	Gradient mode	Fast

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\B0 map

Rel. SNR: 1.00

SIEMENS: gre_field_mapping

Voxel size: 4.0×4.0×4.0 mm

TA: 0:45

Series

		1	
Properties		Special sat.	None
Prio Recon	Off	System	
Before measurement		Body	Off
After measurement		HEP	On
Load to viewer	On O"	HEA	On
Inline movie	Off		
Auto store images	On Off	Positioning mode	FIX
Load to stamp segments	Off Off	Table position	H
Load images to graphic	Off	Table position	14 mm
segments	0#	MSMA	S - C - T
Auto open inline display	Off On	Sagittal	L >> R
Start measurement without	On	Coronal	P >> A
further preparation	On	Transversal	F >> H
Wait for user to start	On	Save uncombined	Off
Start measurements	single	Coil Combine Mode	Adaptive Combine
Routine		AutoAlign	
Slice group 1		Auto Coil Select	Default
Slices	36	Shim mode	Standard
Dist. factor	0 %	Adjust with body coil	Off
Position	R0.4 A0.9 H14.4	Confirm freq. adjustment	Off
Orientation	T > C-1.7	Assume Silicone	Off
Phase enc. dir.	A >> P	? Ref. amplitude 1H	0.000 V
Rotation	0.00 deg	Adjustment Tolerance	Auto
Phase oversampling	0 %	Adjust volume	Adio
FoV read	256 mm	Position	R0.4 A0.9 H14.4
FoV phase	87.5 %	Orientation	T > C-1.7
Slice thickness	4.0 mm	Rotation	0.00 deg
TR	378 ms	Rotation R >> L	256 mm
TE 1	4.63 ms	A >> P	224 mm
TE 2	7.09 ms	F >> H	144 mm
Averages	1	F >> F	144 11111
Concatenations	1	Sequence	
Filter	Raw filter	Introduction	On
Coil elements	HEA;HEP	Dimension	2D
1	11273,1121	Asymmetric echo	Off
Contrast		Contrasts	2
MTC	Off	Bandwidth	260 Hz/Px
Flip angle	40 deg	Flow comp.	Yes
Fat suppr.	None	DE 1 .	
Averaging mode	Short term	RF pulse type	Normal
Reconstruction	Magn./Phase	Gradient mode	Fast
Measurements	1	RF spoiling	On
Multiple series	Each measurement		
Widitiple series	Lacifileasurement		
Resolution			
Base resolution	64		
Phase resolution	100 %		
Phase partial Fourier	Off		
Interpolation	Off		
Matrix Coil Mode	Auto (CP)		
Imaga Cites			
Image Filter	Off		
Distortion Corr.	Off Off		
Prescan Normalize	Off Off		
Normalize	Off Off		
B1 filter	Off		
Raw filter	On Marillana		
Intensity	Medium		
Slope	48		
Elliptical filter	Off		
Geometry			
Multi-slice mode	Interleaved		
1 0 1			

Interleaved

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\DTI

Voxel size: 2.8×2.8×2.4 mm

TA: 9:15

PAT: Off

Rel. SNR: 1.00

SIEMENS: ep2d_diff

Properties		System	
Prio Recon	Off	Body	Off
Before measurement	.	HEP	On
After measurement		HEA	On
Load to viewer	On		
Inline movie	Off	Positioning mode	FIX
		Table position	Н
Auto store images	On Off	Table position	14 mm
Load to stamp segments	Off	MSMA	S - C - T
Load images to graphic	Off	Sagittal	L >> R
segments		Coronal	P >> A
Auto open inline display	Off	Transversal	F >> H
Start measurement without	Off		
further preparation		Coil Combine Mode	Adaptive Combine
Wait for user to start	On	AutoAlign	 D ():
Start measurements	single	Auto Coil Select	Default
	3 -	Shim mode	Standard
Routine		Adjust with body coil	Off
Slice group 1			
Slices	60	Confirm freq. adjustment	Off
Dist. factor	0 %	Assume Silicone	Off
Position	R0.4 A0.9 H14.4	? Ref. amplitude 1H	0.000 V
Orientation	T > C-1.7	Adjustment Tolerance	Auto
Phase enc. dir.	A >> P	Adjust volume	
Rotation	0.00 deg	Position	R0.4 A0.9 H14.4
	0.00 deg 0 %	Orientation	T > C-1.7
Phase oversampling		Rotation	0.00 deg
FoV read	363 mm	R >> L	363 mm
FoV phase	100.0 %	A >> P	363 mm
Slice thickness	2.4 mm	F >> H	144 mm
TR	15000 ms	1 >>11	177 111111
TE	117 ms	Physio	
Averages	1	1st Signal/Mode	None
Concatenations	1		
Filter	Raw filter, Prescan Normalize	Resp. control	Off
Coil elements	HEA;HEP	Diff	
	,	Diffusion mode	Free
Contrast			
MTC	Off	Diff. weightings	1
Magn. preparation	None	b-value	1300 s/mm²
Fat suppr.	Fat sat.	Diff. weighted images	On
		Trace weighted images	Off
Averaging mode	Long term	Average ADC maps	Off
Reconstruction	Magnitude	Individual ADC maps	Off
Delay in TR	0 ms	FA maps	Off
Multiple series	Off	Mosaic	Off
Pasalution		Tensor	Off
Resolution	400	Noise level	40
Base resolution	128		36
	400.07	I DITT directions	.70
Phase resolution	100 %	Diff. directions	30
Phase resolution Phase partial Fourier	Off	Sequence	30
Phase resolution		•	Off
Phase resolution Phase partial Fourier Interpolation	Off Off	Sequence	Off
Phase resolution Phase partial Fourier Interpolation PAT mode	Off Off None	Sequence Introduction Bandwidth	Off 1860 Hz/Px
Phase resolution Phase partial Fourier Interpolation	Off Off	Sequence Introduction Bandwidth Free echo spacing	Off 1860 Hz/Px On
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode	Off Off None Auto (CP)	Sequence Introduction Bandwidth	Off 1860 Hz/Px
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr.	Off Off None Auto (CP)	Sequence Introduction Bandwidth Free echo spacing	Off 1860 Hz/Px On
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize	Off Off None Auto (CP) Off On	Sequence Introduction Bandwidth Free echo spacing Echo spacing	Off 1860 Hz/Px On 0.59 ms
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter	Off Off None Auto (CP) Off On On	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity	Off Off None Auto (CP) Off On On Strong	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope	Off Off None Auto (CP) Off On On Strong 64	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter	Off Off None Auto (CP) Off On On Strong 64 Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope	Off Off None Auto (CP) Off On On Strong 64	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter Hamming	Off Off None Auto (CP) Off On On Strong 64 Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter Hamming Geometry	Off Off None Auto (CP) Off On On Strong 64 Off Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter Hamming Geometry Multi-slice mode	Off Off Off None Auto (CP) Off On On Strong 64 Off Off Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter Hamming Geometry	Off Off None Auto (CP) Off On On Strong 64 Off Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal
Phase resolution Phase partial Fourier Interpolation PAT mode Matrix Coil Mode Distortion Corr. Prescan Normalize Raw filter Intensity Slope Elliptical filter Hamming Geometry Multi-slice mode	Off Off Off None Auto (CP) Off On On Strong 64 Off Off Off	Sequence Introduction Bandwidth Free echo spacing Echo spacing EPI factor RF pulse type	Off 1860 Hz/Px On 0.59 ms 128 Normal

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\EPI_Rest_FU3
TA: 6:07 PAT: 2 Voxel size: 3.4×3.4×2.4 mm Rel. SNR: 1.00 SIEMENS: ep2d_bold

Properties		Series	Descending
Prio Recon	Off	Special sat.	None
Before measurement		· ·	
After measurement		System	Off
Load to viewer	On	Body HEP	On
Inline movie	Off	HEA	On
Auto store images	On	IILA	
Load to stamp segments	Off	Positioning mode	ISO
Load images to graphic	Off	Table position	Н
segments	0"	Table position	14 mm
Auto open inline display Start measurement without	Off On	MSMA	S - C - T
further preparation	On	Sagittal	L >> R
Wait for user to start	On	Coronal	P >> A
Start measurements	single	Transversal	F >> H
Otart measurements	Single	Coil Combine Mode AutoAlign	Sum of Squares
Routine		Auto Coil Select	Default
Slice group 1		Auto Coil Select	Delauit
Slices	40	Shim mode	Standard
Dist. factor	42 %	Adjust with body coil	Off
Position	R0.4 A0.9 H14.4	Confirm freq. adjustment	Off
Orientation	T > C-1.7	Assume Silicone	Off
Phase enc. dir.	A >> P	? Ref. amplitude 1H	0.000 V
Rotation Phase oversampling	0.00 deg 0 %	Adjustment Tolerance	Auto
FoV read	220 mm	Adjust volume	D0 4 40 0 114 4 4
FoV read FoV phase	100.0 %	Position	R0.4 A0.9 H14.4
Slice thickness	2.4 mm	Orientation	T > C-1.7
TR	2200 ms	Rotation R >> L	0.00 deg 220 mm
TE	30 ms	A >> P	220 mm
Averages	1	F >> H	136 mm
Concatenations	1	ı	130 11111
Filter	Prescan Normalize	Physio	
Coil elements	HEA;HEP	1st Signal/Mode	None
Contrast		BOLD	
MTC	Off	GLM Statistics	Off
Flip angle	75 deg	Dynamic t-maps	Off
Fat suppr.	Fat sat.	Starting ignore meas	0
Averaging mode	Long term	Ignore after transition	0
Reconstruction	Magnitude	Model transition states	Off Off
Measurements	164	Temp. highpass filter Threshold	Off 4.00
Delay in TR	0 ms	Paradigm size	20
Multiple series	Off	Meas[1]	Baseline
•		Meas[2]	Baseline
Resolution	GA.	Meas[3]	Baseline
Base resolution	64	Meas[4]	Baseline
Phase resolution	100 %	Meas[5]	Baseline
Phase partial Fourier Interpolation	Off Off	Meas[6]	Baseline
·······································	·····	Meas[7]	Baseline
PAT mode	GRAPPA	Meas[8]	Baseline
Accel. factor PE	2	Meas[9]	Baseline
Ref. lines PE	24	Meas[10]	Baseline
Matrix Coil Mode	Auto (Triple)	Meas[11]	Active
Reference scan mode	Separate	Meas[12]	Active
Distortion Corr.	Off	Meas[13]	Active
Unfiltered images	Off	Meas[14]	Active
Prescan Normalize	On	Meas[15]	Active
Raw filter	On	Meas[16]	Active
Elliptical filter	Off	Meas[17]	Active
Hamming	Off	Meas[18]	Active
		Meas[19] Meas[20]	Active Active
Geometry Multi-slice mode	Interleaved	Motion correction	Off
	Interleaved	MOUDIT COLLECTION	Oii

I	Spatial filter	Off
5	Sequence	
Γ	Introduction	Off
	Bandwidth	2298 Hz/Px
	Free echo spacing	On
	Echo spacing	0.52 ms
ľ	EPI factor	64
	RF pulse type	Normal
	Gradient mode	Fast

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\ADNI MPRAGE

TA: 9:14 F	PAT: Off Voxel size: 1.1×1.1×	1.1 mm Rel. SNR: 1.00	SIEMENS: tfl
Properties		Prescan Normalize	On
Prio Recon	Off	Normalize	Off
Before measurement	Oli	B1 filter	Off
After measurement		Raw filter	Off
Load to viewer	On	Elliptical filter	Off
Inline movie	Off	Geometry	
Auto store images	On	Multi-slice mode	Single shot
Load to stamp segments	Off	Series	Interleaved
Load images to graphic	Off		
segments	5 11	System	
Auto open inline display	Off	Body	Off
Start measurement without	On	HEP	On
further preparation		I HEA	On
Wait for user to start	On		
Start measurements	single	Positioning mode	ISO
1	5g.6	Table position	Н
Routine		Table position	11 mm
Slab group 1		MSMA	S - C - T
Slabs	1	Sagittal	L >> R
Dist. factor	50 %	Coronal	P >> A
Position	R0.7 A3.1 H10.8	Transversal	F >> H
Orientation	Sagittal	Save uncombined	Off
Phase enc. dir.	A >> P	Coil Combine Mode	Sum of Squares
Rotation	0.00 deg	AutoAlign	
Phase oversampling	0 %	Auto Coil Select	Default
Slice oversampling	0.0 %	Shim mode	Standard
Slices per slab	160	Adjust with body coil	Off
FoV read	280 mm	Confirm freq. adjustment	Off
FoV phase	93.8 %	Assume Silicone	Off
Slice thickness	1.10 mm	? Ref. amplitude 1H	0.000 V
TR	2300 ms	Adjustment Tolerance	Auto
TE	2.93 ms	Adjust volume	Auto
Averages	1	Position	R0.7 A3.1 H10.8
Concatenations	1	Orientation	
Filter	Distortion Corr.(2D), Prescan	Rotation	Sagittal 0.00 deg
	Normalize	F >> H	280 mm
Coil elements	HEA;HEP	A >> P	263 mm
Contrast		R >> L	176 mm
Magn. preparation	Non-sel. IR	K >> L	176 11111
TI	900 ms	Physio	
Flip angle	9 deg	1st Signal/Mode	None
Fat suppr.	None	Dark blood	Off
Water suppr.	None	Dark blood	OII
Averaging mode	Long term	Resp. control	Off
Reconstruction	Magnitude	Inline	
Measurements	1	Subtract	Off
Multiple series	Off	Std-Dev-Sag	Off
•		Std-Dev-Cor	Off
Resolution		Std-Dev-Tra	Off
Base resolution	256	Std-Dev-Time	Off
Phase resolution	100 %	MIP-Sag	Off
Slice resolution	100 %	MIP-Cor	Off
Phase partial Fourier	Off	MIP-Tra	Off
Slice partial Fourier	Off	MIP-Time	Off
Interpolation	Off	Save original images	On
PAT mode	None		
Matrix Coil Mode	Auto (CP)	Sequence	0.0
		Introduction	On
Image Filter	Off	Dimension	3D
Distortion Corr.	On	Elliptical scanning	Off
Mode	2D	Asymmetric echo	Off
Unfiltered images	Off	Bandwidth	240 Hz/Px
Unfiltered images	Off	Flow comp.	No
•		Echo spacing	6.9 ms
		17/+	

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

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\noddi,correction TA: 0:28 PAT: Off Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_diff

Drapartica		Series	Interleaved
Properties Prio Recon	Off	Special sat.	None
Before measurement	Oli	•	None
After measurement		System	
Load to viewer	On	Body	Off
Inline movie	Off	HEP	On
Auto store images	On	HEA	On
Load to stamp segments	Off	Positioning mode	REF
Load images to graphic	Off	Table position	Н
segments		Table position	0 mm
Auto open inline display	Off	MSMA	S - C - T
Start measurement without	On	Sagittal	R >> L
further preparation		Coronal	A >> P
Wait for user to start	On	Transversal	F >> H
Start measurements	single	Coil Combine Mode	Sum of Squares
Routine		AutoAlign Auto Coil Select	 Default
Slice group 1		Auto Coil Select	Delauit
Slices	66	Shim mode	Standard
Dist. factor	0 %	Adjust with body coil	Off
Position	L0.0 P0.0 H10.0	Confirm freq. adjustment	Off
Orientation	Transversal	Assume Silicone	Off
Phase enc. dir.	A >> P	? Ref. amplitude 1H	0.000 V
Rotation	0.00 deg 0 %	Adjustment Tolerance	Auto
Phase oversampling FoV read	0 % 256 mm	Adjust volume	1 0 0 D0 0 1140 0
FoV phase	100.0 %	Position	L0.0 P0.0 H10.0
Slice thickness	2.00 mm	Orientation Rotation	Transversal
TR	3500 ms	Rotation R >> L	0.00 deg 256 mm
TE	100.6 ms	A >> P	256 mm
Multi-band accel. factor	3	F >> H	132 mm
Filter	Raw filter	1	102 11111
Coil elements	HEA;HEP	Physio	N
Contrast		1st Signal/Mode	None
MTC	Off	Diff	
Magn. preparation	None	Diffusion mode	Free
Flip angle	80 deg	Diff. weightings	1
Refocus flip angle	168 deg	b-value	2000 s/mm²
Fat suppr.	None	Diff. weighted images	On Off
Grad. rev. fat suppr.	Enabled	Trace weighted images	Off Off
Averaging mode	Long term	Average ADC maps Individual ADC maps	Off
Reconstruction	Magnitude	FA maps	Off
Measurements	1	Mosaic	On
Delay in TR	0 ms	Tensor	Off
Multiple series	Off	Noise level	40
Resolution		Diff. directions	4
Base resolution	128	Sequence	
Phase resolution	100 %	Introduction	Off
Phase partial Fourier	6/8	Bandwidth	1628 Hz/Px
Interpolation	Off	Free echo spacing	On
PAT mode	None	Echo spacing	0.69 ms
Matrix Coil Mode	Auto (CP)	EPI factor	120
		Gradient mode	128 Fast
Distortion Corr.	Off	RF spoiling	Off
Prescan Normalize	Off		
Raw filter	On	Excite pulse duration	3200 us
Intensity	Weak	Refocus pulse duration	7040 us
Slope	25 Off	Diffusion Scheme	Monopolar
Elliptical filter	Off	Single-band images	Off
Hamming	Oil	MB LeakBlock kernel	On Off
Geometry	<u> </u>	MB dual kernel MB RF phase scramble	Off Off
Multi-slice mode	Interleaved	MID KE PHASE SCIAITIBLE	Oil

Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	On
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

\\USER\Brain\KCL171467_STRATIFY\32Channel_Protocol_07Aug2018\noddi,dir200

TA: 11:54 PAT: Off Voxel size: 2.0×2.0×2.0 mm Rel. SNR: 1.00 USER: cmrr_mbep2d_diff

Properties		Series	Interleaved
Prio Recon	Off	Special sat.	None
Before measurement		System	
After measurement	0	Body	Off
Load to viewer	On O#	HEP	On
Inline movie Auto store images	Off On	HEA	On
Load to stamp segments	Off	Desitioning and	FIV
Load images to graphic	Off	Positioning mode	FIX
segments	Oll	Table position Table position	H 0 mm
Auto open inline display	Off	MSMA	S - C - T
Start measurement without	On	Sagittal	R >> L
further preparation		Coronal	A >> P
Wait for user to start	Off	Transversal	F >> H
Start measurements	single	Coil Combine Mode	Sum of Squares
Douting	ŭ	AutoAlign	
Routine		- Auto Coil Select	Default
Slice group 1	66		
Slices Dist. factor	66 0 %	Shim mode	Standard
Position	0 % L0.0 P0.0 H10.0	Adjust with body coil	Off
Orientation	Transversal	Confirm freq. adjustment	Off
Phase enc. dir.	A >> P	Assume Silicone	Off 0.000 V
Rotation	0.00 deg	? Ref. amplitude 1H Adjustment Tolerance	
Phase oversampling	0 %	Adjust volume	Auto
FoV read	256 mm	Position	L0.0 P0.0 H10.0
FoV phase	100.0 %	Orientation	Transversal
Slice thickness	2.00 mm	Rotation	0.00 deg
TR	3500 ms	R >> L	256 mm
TE	100.6 ms	A >> P	256 mm
Multi-band accel. factor	3	F >> H	132 mm
Filter	Raw filter	ı	
Coil elements	HEA;HEP	Physio	N.
Contrast		1st Signal/Mode	None
MTC	Off	- Diff	
Magn. preparation	None	Diffusion mode	Free
Flip angle	80 deg	Diff. weightings	1
Refocus flip angle	168 deg	b-value	2000 s/mm²
Fat suppr.	None	Diff. weighted images	On
Grad. rev. fat suppr.	Enabled	Trace weighted images	Off
Averaging mode	Long term	Average ADC maps	Off
Reconstruction	Magnitude	Individual ADC maps	Off
Measurements	1	FA maps	Off On
Delay in TR	0 ms	Mosaic Tensor	Off
Multiple series	Off	Noise level	40
1		Diff. directions	200
Resolution	400	<u> </u>	200
Base resolution	128	Sequence	
Phase resolution	100 % 6/8	Introduction	Off
Phase partial Fourier	Off	Bandwidth	1628 Hz/Px
Interpolation	OII	Free echo spacing	On
PAT mode	None	Echo spacing	0.69 ms
Matrix Coil Mode	Auto (CP)	EPI factor	128
Distortion Corr.	Off	Gradient mode	Fast
Prescan Normalize	Off	RF spoiling	Off
Raw filter	On	Excite pulse duration	3200 us
Intensity	Weak	Excite pulse duration Refocus pulse duration	7040 us
Slope	25	Diffusion Scheme	Monopolar
Elliptical filter	Off	Single-band images	Off
Hamming	Off	MB LeakBlock kernel	On
		MB dual kernel	Off
Geometry	late de esse d	- MB RF phase scramble	Off
Multi-slice mode	Interleaved	1 p	÷ · ·

Time-shifted MB RF	Off
SENSE1 coil combine	On
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Physio recording	Off

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\\USER

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		EPI_MID_FU3
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