\\USER\HEAD 12ch\Harmonia\wjazd_1_migowy\gre_4

Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00

SIEMENS: gre

PAT: Off

TA: 5:27

		1.0.4.1.0 111111 11.01. 01.11.1.1.00	
Properties Prio Recon	Off	Raw filter Elliptical filter	Off Off
Before measurement	Oli	Geometry	
After measurement		Multi-slice mode	Interleaved
Load to viewer	On	Series	Interleaved
Inline movie	Off		·····
Auto store images	On	Saturation mode	Standard
Load to stamp segments	Off	Special sat.	None
Load images to graphic	Off		
segments	Oli	Tim CT mode	Off
Auto open inline display	Off	Contagn	
Start measurement without	On	System	0"
further preparation	On	Body	Off
Wait for user to start	On	HEP	On
Start measurements	single	HEA	On
ı	Single	Positioning mode	FIX
Routine		Table position	Н
Slab group 1		Table position	0 mm
Slabs	1	MSMA	S - C - T
Dist. factor	20 %	Sagittal	R >> L
Position	R2.1 A22.8 F20.9	Coronal	A >> P
Orientation	Sagittal	Transversal	F >> H
Phase enc. dir.	A >> P	Save uncombined	Off
Rotation	0.00 deg	Coil Combine Mode	Adaptive Combine
Phase oversampling	0 %	AutoAlign	Head > Basis
Slice oversampling	0.0 %	Auto Coil Select	Default
Slices per slab	192		
FoV read	256 mm	Shim mode	Tune up
FoV phase	90.6 %	Adjust with body coil	Off
Slice thickness	1.00 mm	Confirm freq. adjustment	Off
TR	7.6 ms	Assume Silicone	Off
TE	2.46 ms	? Ref. amplitude 1H	0.000 V
Averages	1	Adjustment Tolerance	Auto
Concatenations	1	Adjust volume	
Filter	None	Position	Isocenter
Coil elements	HEA;HEP	Orientation	Transversal
Contrast		Rotation	0.00 deg
MTC	Off	R >> L	350 mm
Magn. preparation	None	A >> P	263 mm
Flip angle	4 deg	F >> H	350 mm
Fat suppr.	None	Physio	
Water suppr.	None	1st Signal/Mode	None
SWI	Off	Segments	1
		Ded bleed	O#
Averaging mode	Short term	Dark blood	Off
Reconstruction	Magnitude	Resp. control	Off
Measurements	1	In Eng.	
Multiple series	Each measurement	Inline	
Resolution		Subtract	Off
Base resolution	256	Liver registration	Off
Phase resolution	96 %	Std-Dev-Sag	Off
Slice resolution	100 %	Std-Dev-Cor	Off
Phase partial Fourier	Off	Std-Dev-Tra	Off
Slice partial Fourier	Off	Std-Dev-Time	Off
Interpolation	Off	MIP-Sag	Off
		MIP-Cor	Off
PAT mode	None	MIP-Tra	Off
Matrix Coil Mode	Auto (CP)	MIP-Time	Off
Image Filter	Off	Save original images	On
Distortion Corr.	Off	Wash - In	Off
Prescan Normalize	Off	Wash - Out	Off
Normalize	Off	TTP	Off
B1 filter	Off	PEI	Off
I STIMO	OII	I ·	-

	MIP - time	Off
S	equence	
	Introduction	On
	Dimension	3D
	Elliptical scanning	Off
	Phase stabilisation	Off
	Asymmetric echo	Allowed
	Contrasts	1
	Bandwidth	210 Hz/Px
	Flow comp.	No
	Allowed delay	0 s
	RF pulse type	Normal
	Gradient mode	Fast
	Excitation	Non-sel.
	RF spoiling	On

\\USER\HEAD 12ch\Harmonia\wjazd_1_migowy\gre_18

Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00

SIEMENS: gre

PAT: Off

TA: 5:27

		1.0.41.0 11111 1.00. 01111. 1.00	- 3
Properties	Off	Raw filter Elliptical filter	Off Off
Prio Recon Before measurement	Off	Geometry	
		Multi-slice mode	Interleaved
After measurement	0.5	Series	
Load to viewer	On O#	Series	Interleaved
Inline movie	Off	Saturation mode	Standard
Auto store images	On O"	Special sat.	None
Load to stamp segments	Off		
Load images to graphic	Off	Tim CT mode	Off
segments	0"	1 mode	On
Auto open inline display	Off	System	
Start measurement without	On	Body	Off
further preparation		HEP	On
Wait for user to start	Off	HEA	On
Start measurements	single		
Routine		Positioning mode	FIX
		Table position	Н
Slab group 1 Slabs	1	Table position	0 mm
Dist. factor	20 %	MSMA	S - C - T
		Sagittal	R >> L
Position	R2.1 A22.8 F20.9	Coronal	A >> P
Orientation	Sagittal	Transversal	F >> H
Phase enc. dir.	A >> P	Save uncombined	Off
Rotation	0.00 deg	Coil Combine Mode	Adaptive Combine
Phase oversampling	0 %	AutoAlign	Head > Basis
Slice oversampling	0.0 %	Auto Coil Select	Default
Slices per slab	192		
FoV read	256 mm	Shim mode	Tune up
FoV phase	90.6 %	Adjust with body coil	Off
Slice thickness	1.00 mm	Confirm freq. adjustment	Off
TR	7.6 ms	Assume Silicone	Off
TE	2.46 ms	? Ref. amplitude 1H	0.000 V
Averages	1	Adjustment Tolerance	Auto
Concatenations	1	Adjust volume	
Filter	None	Position	Isocenter
Coil elements	HEA;HEP	Orientation	Transversal
ı	1127 (,1121	Rotation	0.00 deg
Contrast		R >> L	350 mm
MTC	Off	A >> P	263 mm
Magn. preparation	None	F >> H	350 mm
Flip angle	18 deg	·	333 11111
Fat suppr.	None	Physio	
Water suppr.	None	1st Signal/Mode	None
SWI	Off	Segments	1
Λ	Ch and tanna	Dark blood	Off
Averaging mode	Short term	Dark blood	OII
Reconstruction	Magnitude	Resp. control	Off
Measurements	1	1 '	
Multiple series	Each measurement	Inline	
Resolution		Subtract	Off
Base resolution	256	Liver registration	Off
Phase resolution	96 %	Std-Dev-Sag	Off
Slice resolution	100 %	Std-Dev-Cor	Off
Phase partial Fourier	Off	Std-Dev-Tra	Off
Slice partial Fourier	Off	Std-Dev-Time	Off
		MIP-Sag	Off
Interpolation	Off	MIP-Cor	Off
PAT mode	None	MIP-Tra	Off
Matrix Coil Mode	Auto (CP)	MIP-Time	Off
		Save original images	On
Image Filter	Off		
Distortion Corr.	Off	Wash - In	Off
Prescan Normalize	Off	Wash - Out	Off
Normalize	Off	TTP	Off
B1 filter	Off	PEI	Off
=	= :-	l	

	MIP - time	Off
S	equence	
	Introduction	On
	Dimension	3D
	Elliptical scanning	Off
	Phase stabilisation	Off
	Asymmetric echo	Allowed
	Contrasts	1
	Bandwidth	210 Hz/Px
	Flow comp.	No
	Allowed delay	0 s
	RF pulse type	Normal
	Gradient mode	Fast
	Excitation	Non-sel.
	RF spoiling	On

\\USER\HEAD 12ch\Harmonia\wjazd_1_migowy\rf_map

	Voxel size: 4.0×4.0×5.0 n	nm Rel. SNR: 1.00 SERV	ICE: rf_map
		MSMA	S-C-T
Properties		— Sagittal	R >> L
Prio Recon	Off	Coronal	A >> P
Before measurement		Transversal	F >> H
After measurement		Save uncombined	Off
Load to viewer	On	Coil Combine Mode	Adaptive Combine
Inline movie	Off		
Auto store images	On	Auto Cail Calast	Head > Basis
Load to stamp segments	Off	Auto Coil Select	Default
Load images to graphic	Off	Shim mode	Tune up
segments		Adjust with body coil	Off
Auto open inline display	Off	Confirm freq. adjustment	Off
Start measurement without	On	Assume Silicone	Off
	Oli		0.000 V
further preparation	Off	? Ref. amplitude 1H	
Wait for user to start		Adjustment Tolerance	Auto
Start measurements	single	Adjust volume	
Routine		Position	Isocenter
Slice group 1		Orientation	Transversal
Slices	20	Rotation	0.00 deg
Dist. factor	100 %	R >> L	350 mm
		A >> P	263 mm
Position	R2.1 A22.8 F20.9	F >> H	350 mm
Orientation	Sagittal	ı	
Phase enc. dir.	A >> P	Sequence	
Rotation	0.00 deg	Contrasts	2
FoV read	256 mm	Bandwidth	260.416667 Hz/Px
FoV phase	100.0 %	T4 O	0.0
Slice thickness	5 mm	T1 Compensation	0.0 ms
TR	5000 ms	Angles	1
TE 1	14 ms		
TE 2	14 ms		
Averages	1		
Filter	None		
	HEA;HEP		
Coil elements	нсм,псг		
Contrast	00 de s	_	
Flip angle 1	90 deg		
Flip angle 2	120 deg		
Flip angle 3	60 deg		
Flip angle 4	135 deg		
Flip angle 5	45 deg		
Measurements	1		
Resolution			
Base resolution	64	_	
Phase resolution	100 %		
Matrix Coil Mode	Auto (CP)		
Imaga Filtor			
Image Filter	Off		
Distortion Corr.	Off		
Distortion Corr. Prescan Normalize	Off Off		
Distortion Corr. Prescan Normalize Normalize	Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter	Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize	Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter	Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter	Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter	Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Geometry	Off Off Off Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Seometry Series	Off Off Off Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Seometry Series System Body	Off Off Off Off Off Off Off Off Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Seometry Series System Body HEP	Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Secometry Series System Body HEP HEA	Off		
Distortion Corr. Prescan Normalize Normalize B1 filter Raw filter Elliptical filter Seometry Series System Body HEP	Off		

T1-mapping protocol

Basis protocol
1mm isotropic resolution (no Grappa)



