SIEMENS MAGNETOM Verio syngo MR B17

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\localizer

TA: 0:13 PAT: Off Voxel size: 1.4×1.3×7.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	L0.6 A31.5 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	L0.6 A31.5 H0.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	L0.6 A31.5 H0.0
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	320 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	3
Filter	Prescan Normalize, Elliptical filter
Coil elements	HEA;HEP;NE1,2

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	90 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane

Geometry

Multi-slice mode	Sequential
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
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
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\t2_fl3d_tra_p2_swi

TA: 6:39 PAT: 2 Voxel size: 1.0×0.5×2.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	L0.6 P3.6 F36.2
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	256 mm
FoV phase	75.0 %
Slice thickness	2.00 mm
TR	29 ms
TE	20.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP;NE1,2

Contrast

MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	On
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.6 P3.6 F36.2
Orientation	Transversal
Rotation	90.00 deg
A >> P	256 mm
R >> L	192 mm
F >> H	256 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off

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

Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	120 Hz/Px
Flow comp.	Yes
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\3D SPACE SAG FLAIR

TA: 5:20 PAT: 2 Voxel size: 1.0×1.0×1.0 mm Rel. SNR: 1.00 SIEMENS: tse_vfl

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Position	R4.3 P7.4 F30.0
Orientation	S > C-3.7 > T-2.0
Phase enc. dir.	A >> P
Rotation	0.20 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	160
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	6000 ms
TE	397 ms
Averages	1.0
Concatenations	1
Filter	Raw filter, Distortion Corr.(2D), Prescan Normalize
Coil elements	HEA;HEP;NE1,2

Contrast

MTC	Off
Magn. preparation	Non-sel. IR
TI	2200 ms
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	101 %
Slice resolution	75 %
Phase partial Fourier	Allowed
Slice partial Fourier	7/8
Interpolation	On
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Unfiltered images	Off
Prescan Normalize	On
Normalize	Off
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Geometry

Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R4.3 P7.4 F30.0
Orientation	S > C-3.7 > T-2.0
Rotation	0.20 deg
F >> H	256 mm
A >> P	256 mm
R >> L	160 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off

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

Sequence

Introduction	On
Dimension	3D
Bandwidth	781 Hz/Px
Flow comp.	No
Allowed delay	30 s
Echo spacing	3.32 ms
Adiabatic-mode	Off
Define	Echo trains
Turbo factor	141
Slice turbo factor	2
Echo trains per slice	1
Echo train duration	860
RF pulse type	Normal
Gradient mode	Fast
Excitation	Non-sel.
Flip angle mode	T2 var

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\t1_mpr_TRA_1X.5X2

TA: 3:54 PAT: 2 Voxel size: 1.0×0.5×1.0 mm Rel. SNR: 1.00 SIEMENS: tfl

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L0.6 P3.6 F24.2
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	192
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	1680 ms
TE	2.98 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP;NE1,2

Contrast

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	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Single shot
Series	Interleaved

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.6 P3.6 F24.2
Orientation	Transversal
Rotation	90.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	192 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

Save original images	On

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Allowed
Bandwidth	180 Hz/Px
Flow comp.	No
Echo spacing	7.6 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

SIEMENS MAGNETOM Verio syngo MR B17

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\localizer-NECK

TA: 0:19 PAT: Off Voxel size: 2.0×1.6×6.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 2	
Slices	3
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	2
Dist. factor	150 %
Position	L0.0 P18.0 F150.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	38 %
FoV read	400 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.8 ms
TE	3.69 ms
Averages	1
Concatenations	8
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	80 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None

Segments	1
Tagging	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
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	Off
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\TOF_2D_TRA

TA: 6:57 PAT: 2 Voxel size: 1.3×0.6×3.0 mm Rel. SNR: 1.00 SIEMENS: fl_tof

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	128
Dist. factor	-25.00 %
Position	L0.0 P15.4 F124.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	320 mm
FoV phase	75.0 %
Slice thickness	3.0 mm
TR	29 ms
TE	5.02 ms
Averages	1
Concatenations	128
Filter	Elliptical filter
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

TD	0.000 ms
MTC	Off
Flip angle	60 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	Tracking F
Gap	10 mm
Thickness	40 mm

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.0 P15.4 F124.8
Orientation	Transversal
Rotation	0.00 deg
R >> L	320 mm
A >> P	240 mm
F >> H	289 mm

Physio

1st Signal/Mode	None
Dark blood	Off

Angio

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	On
MIP-Cor	On
MIP-Tra	On
MIP-Time	Off
Save original images	On

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	217 Hz/Px
Flow comp.	Yes
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 1:21 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	L0.0 P46.1 F31.1
Orientation	T > C34.5
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 1:21 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	L0.0 P16.7 F73.7
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 1:21 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	L4.6 P16.7 F120.9
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 1:21 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R12.4 P16.7 F252.3
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 1:21 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R5.8 P19.4 F210.4
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3d_vibe_PRE

TA: 1:45 PAT: 2 Voxel size: 0.9×0.9×0.9 mm Rel. SNR: 1.00 SIEMENS: fl3d_vibe

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R2.0 P14.4 F103.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.20 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	256
FoV read	352 mm
FoV phase	78.1 %
Slice thickness	0.90 mm
TR	3.97 ms
TE	1.43 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Normalize
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25.0 deg
Fat suppr.	Q-fat sat.
Lines Per Shot	205
Water suppr.	None
Dixon	No Dixon
Save original images	On
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R2.0 P14.4 F103.0
Orientation	Sagittal
Rotation	0.20 deg
F >> H	352 mm
A >> P	275 mm
R >> L	231 mm

Physio

1st Signal/Mode	None
Resp. control	Off

Inline

3D centric reordering	Off
Time to center	35.0 s
Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Centric
Asymmetric echo	Weak
Bandwidth	690 Hz/Px
Optimization	Min. TE
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\CORONAL 3D_ _DYNAMIC

TA: 4:18 PAT: 3 Voxel size: 0.9×0.9×0.9 mm Rel. SNR: 1.00 SIEMENS: fl3d_ce

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R4.6 P18.6 F126.0
Orientation	C > T3.5 > S0.8
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	8.3 %
Slices per slab	96
FoV read	340 mm
FoV phase	75.0 %
Slice thickness	0.90 mm
TR	3.41 ms
TE	1.27 ms
Averages	1
Filter	None
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	15
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	100 %
Slice resolution	62 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Maximum
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None
Segments	1

Angio

3D centric reordering	On
Time to center	1.0 s
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Allowed
Bandwidth	590 Hz/Px
Optimization	Min. TE TR
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Phase Enc. Rewinder	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3d_vibe_POST

TA: 1:45 PAT: 2 Voxel size: 0.9×0.9×0.9 mm Rel. SNR: 1.00 SIEMENS: fl3d_vibe

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R2.0 P14.4 F103.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.20 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	256
FoV read	352 mm
FoV phase	78.1 %
Slice thickness	0.90 mm
TR	3.97 ms
TE	1.43 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Normalize
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	25.0 deg
Fat suppr.	Q-fat sat.
Lines Per Shot	205
Water suppr.	None
Dixon	No Dixon
Save original images	On
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R2.0 P14.4 F103.0
Orientation	Sagittal
Rotation	0.20 deg
F >> H	352 mm
A >> P	275 mm
R >> L	231 mm

Physio

1st Signal/Mode	None
Resp. control	Off

Inline

3D centric reordering	Off
Time to center	35.0 s
Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Centric
Asymmetric echo	Weak
Bandwidth	690 Hz/Px
Optimization	Min. TE
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_50_tp_retro_iPAT_.57X.57x4

TA: 4:03 PAT: 2 Voxel size: 0.8×0.8×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	3
Dist. factor	20 %
Position	R2.4 P13.3 F143.9
Orientation	C > T2.4 > S2.2
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	350 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	36.00 ms
TE	3.11 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	15 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	150 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	50 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\localizer

TA: 0:16 PAT: Off Voxel size: 2.0×1.6×6.0 mm Rel. SNR: 1.00 SIEMENS: gre

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	3
Dist. factor	50 %
Position	L0.0 P49.4 F330.1
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 2	
Slices	3
Dist. factor	50 %
Position	L0.0 P67.4 F330.1
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	50 %
Position	L0.0 P45.6 F305.1
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	38 %
FoV read	400 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	7.5 ms
TE	3.36 ms
Averages	1
Concatenations	7
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1-3

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	256
Phase resolution	80 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Tim CT mode	Off

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	F
Table position	300 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	None

Segments	1
Tagging	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
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	Off
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3d_vibe_coronal

TA: 2:22 PAT: 2 Voxel size: 1.3×1.3×0.9 mm Rel. SNR: 1.00 SIEMENS: fl3d_vibe

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	L12.6 P28.1 F20.3
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	100.0 %
Slices per slab	128
FoV read	500 mm
FoV phase	78.1 %
Slice thickness	0.90 mm
TR	5.41 ms
TE	1.76 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Normalize
Coil elements	SP1-3

Contrast

Flip angle	15.0 deg
Fat suppr.	Q-fat sat.
Lines Per Shot	205
Water suppr.	None
Dixon	No Dixon
Save original images	On
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
HEP	Off
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L12.6 P28.1 F20.3
Orientation	Coronal
Rotation	0.00 deg
F >> H	500 mm
R >> L	391 mm
A >> P	116 mm

Physio

1st Signal/Mode	None
Resp. control	Off

Inline

3D centric reordering	Off
Time to center	47.7 s
Subtract	Off

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

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Centric
Asymmetric echo	Weak
Bandwidth	350 Hz/Px
Optimization	Min. TE
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\TOF_2D_TRA

TA: 13:00 PAT: 2 Voxel size: 1.0×0.5×3.0 mm Rel. SNR: 1.00 SIEMENS: fl_tof

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	128
Dist. factor	-33.00 %
Position	R1.2 P36.5 F329.5
Orientation	T > S0.1
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	20 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	36 ms
TE	5.02 ms
Averages	1
Concatenations	128
Filter	Elliptical filter
Coil elements	NE1,2;SP1-3

Contrast

TD	0.000 ms
MTC	Off
Flip angle	60 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Sat. region 1	
Thickness	86 mm
Position	L0.0 A26.6 F300.6
Orientation	C > T-1.3
Special sat.	Parallel H
Gap	10 mm
Thickness	50 mm

System

Body	Off
NE2	On
NE1	On
HEP	Off
HEA	Off
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	300 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R1.2 P36.5 F329.5
Orientation	T > S0.1
Rotation	90.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	259 mm

Physio

1st Signal/Mode	None
Dark blood	Off

Angio

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	On

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

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	217 Hz/Px
Flow comp.	Yes
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\TOF_2D_PARA-COR

TA: 2:41 PAT: 2 Voxel size: 1.3×0.6×3.0 mm Rel. SNR: 1.00 SIEMENS: fl_tof

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	32
Dist. factor	-33.00 %
Position	L9.6 P13.8 F305.2
Orientation	T > C44.1 > S33.0
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	320 mm
FoV phase	75.0 %
Slice thickness	3.0 mm
TR	45 ms
TE	5.02 ms
Averages	1
Concatenations	32
Filter	Elliptical filter
Coil elements	HEA;HEP;NE1,2;SP1-3

Contrast

TD	0.000 ms
MTC	Off
Flip angle	60 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	On
Mode	Inplane
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Sat. region 1	
Thickness	86 mm
Position	L0.0 A2.3 F0.1
Orientation	C > T-1.3
Sat. region 2	
Thickness	86 mm
Position	L0.0 A10.8 F159.0
Orientation	T > C4.4
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	300 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L9.6 P13.8 F305.2
Orientation	T > C44.1 > S33.0
Rotation	90.00 deg
A >> P	320 mm
R >> L	240 mm
F >> H	66 mm

Physio

1st Signal/Mode	None
Dark blood	Off

Angio

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off

Std-Dev-Time	Off
MIP-Sag	On
MIP-Cor	On
MIP-Tra	On
MIP-Time	Off
Save original images	On

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	217 Hz/Px
Flow comp.	Yes
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_40_tp_retro_iPAT_.57X.57x4

TA: 3:59 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R4.9 P57.8 F287.4
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	3
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1-3

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	300 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	40 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3_40_tp_retro_iPAT_.57X.57x4

TA: 3:59 PAT: 2 Voxel size: 0.6×0.6×4.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R4.8 P60.9 F347.3
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	42.15 ms
TE	4.14 ms
Averages	3
Concatenations	1
Filter	Distortion Corr.(2D)
Coil elements	HEA;HEP;NE1,2;SP1-3

Contrast

Flip angle	25 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	448
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	On
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	F
Table position	300 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	On
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	30
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	40 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off

MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Strong
Contrasts	1
Bandwidth	531 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Fast
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\t1_mpr_TRA_1X.5X2_POST

TA: 3:54 PAT: 2 Voxel size: 1.0×0.5×1.0 mm Rel. SNR: 1.00 SIEMENS: tfl

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	50 %
Position	L0.6 P3.6 F24.2
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	192
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	1.00 mm
TR	1680 ms
TE	2.98 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP;NE1,2

Contrast

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	Each measurement

Resolution

Base resolution	512
Phase resolution	50 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Single shot
Series	Interleaved

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.6 P3.6 F24.2
Orientation	Transversal
Rotation	90.00 deg
A >> P	256 mm
R >> L	256 mm
F >> H	192 mm

Physio

1st Signal/Mode	None
Dark blood	Off
Resp. control	Off

Inline

Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off

Save original images	On

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Allowed
Bandwidth	180 Hz/Px
Flow comp.	No
Echo spacing	7.6 ms
RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\fl3d_vibe

TA: 1:45 PAT: 2 Voxel size: 0.9×0.9×0.9 mm Rel. SNR: 1.00 SIEMENS: fl3d_vibe

Properties

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 segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	R5.1 P7.4 F49.4
Orientation	S > C-3.7 > T-2.0
Phase enc. dir.	A >> P
Rotation	0.20 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	256
FoV read	352 mm
FoV phase	78.1 %
Slice thickness	0.90 mm
TR	3.97 ms
TE	1.43 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Normalize
Coil elements	HEA;HEP;NE1,2;SP1,2

Contrast

Flip angle	25.0 deg
Fat suppr.	Q-fat sat.
Lines Per Shot	205
Water suppr.	None
Dixon	No Dixon
Save original images	On
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	384
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Matrix Coil Mode	Auto (Triple)
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	Off
Normalize	On
Intensity	Medium
Cut off	20
Width	4
Unfiltered images	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off
POCS	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	On
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	R5.1 P7.4 F49.4
Orientation	S > C-3.7 > T-2.0
Rotation	0.20 deg
F >> H	352 mm
A >> P	275 mm
R >> L	231 mm

Physio

1st Signal/Mode	None
Resp. control	Off

Inline

3D centric reordering	Off
Time to center	35.0 s
Subtract	Off
Liver registration	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
MapIt	None
Contrasts	1

Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Centric
Asymmetric echo	Weak
Bandwidth	690 Hz/Px
Optimization	Min. TE
Allowed delay	0 s
RF pulse type	Fast
Gradient mode	Fast*
Excitation	Non-sel.
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\CSF FLOW AXIAL 10

TA: 2:05 PAT: Off Voxel size: 0.6×0.6×5.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	On
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R4.4 P26.9 F77.2
Orientation	T > S2.0 > C0.1
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	30 %
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	83.35 ms
TE	9.13 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	20 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	24
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	10 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Weak

Contrasts	1
Bandwidth	195 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Normal
RF spoiling	On

\\USER\ZAHID_RESEARCH\NECK\PREFERRED_MS_HAACKE\CSF FLOW AXIAL 10

TA: 2:05 PAT: Off Voxel size: 0.6×0.6×5.0 mm Rel. SNR: 1.00 SIEMENS: fl_fq_retro

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	On
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	20 %
Position	R7.0 P33.1 F15.8
Orientation	T > C37.0 > S-0.6
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	30 %
FoV read	160 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	83.35 ms
TE	9.13 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP;NE1,2;SP1

Contrast

Flip angle	20 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	256
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

System

Body	Off
NE2	On
NE1	On
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	On
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Auto Coil Select	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Physio

1st Signal/Mode	Pulse/Retro
Average cycle	No Signal ms
Calculated phases	24
Segments	3
Arrhythmia detection	None

Angio

Flow mode	Single dir.
Encodings	1
Velocity enc.	10 cm/s
Direction	Through plane
Rephased images	On
Magnitude images	On
Phase images	On
Subtract	Off
Std-Dev-Sag	Off
Std-Dev-Cor	Off
Std-Dev-Tra	Off
Std-Dev-Time	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Sequence

Introduction	Off
Asymmetric echo	Weak

Contrasts	1
Bandwidth	195 Hz/Px
Flow comp.	No
RF pulse type	Fast
Gradient mode	Normal
RF spoiling	On

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