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Technologies Qingping dataacq_imagerecon_workflow product_t1_mprage_sag_p2 pulseq_t1_mprage_sag_p2 product_ep2d_bold_tran_slc48_iso2_8mm pulseq_epirs_tran_slc48_iso_2_8mm

$\verb|\MedPhys\Technologies\Qingping\dataacq_imagerecon_workflow\product_t1_mprage_sag_p2||$

TA: 5:38 min Coil Selection: Manual Voxel Size: 1.0×1.0×1.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.00 mm
TR	2500.0 ms
TE	3.37 ms
Averages	1
Concatenations	1
AutoAlign	Head > Basis
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	2500.0 ms
TE	3.37 ms
Magn. Preparation	Non-sel. IR
П	1100 ms
Flip Angle	8 deg
Fat-Water Contrast	Fast Water Excitation
Dark Blood	Off
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off
Reordering	Linear

Resolution - Common

FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.00 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	3D
Normalize	Off
Image Filter	Off

Geometry - Common

[
Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.00 mm
TR	2500.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	Head > Basis

Geometry - AutoAlign

Initial Position	L2.2 P14.4 F2.2
L	2.2 mm
P	14.4 mm
F	2.2 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	2 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
BO Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	240 mm
A >> P F >> H R >> L	256 mm
R >> L	192 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	123.194058 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	0.800

Physio - Signal

1st Signal/Mode	None
TR	2500.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Fast Water Excitation
Magn. Preparation	Non-sel. IR
ТІ	1100 ms
Dark Blood	Off
FOV Read	256 mm
FOV Phase	93.8 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off	
IIIIIII COIIIDOSIIIQ	OII	

Inline - MapIt

MapIt	None
Flip Angle	8 deg
Measurements	1
Contrasts	1
TE	3.37 ms
TR	2500.0 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	tfl
Dimension	3D
Excitation	Non-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Reordering	Linear

SIEMENS MAGNETOM 3.0T XR Numaris/X VA60A-0CMP

Sequence - Part 1

Bandwidth	200 Hz/Px
Echo Spacing	9.18 ms
Asymmetric Echo	Off
Turbo Factor	192

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off

SAR Assistant	Off

$\verb|\MedPhys\Technologies\Qingping\dataacq_imagerecon_workflow\pulseq_t1_mprage_sag_p2|$

TA: 5:40 min Coil Selection: Manual Voxel Size: 1.0×1.0×1.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Slice Oversampling	0.0 %
FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.000 mm
TR	100.000 ms
TE	10.00 ms
AutoAlign	Head > Basis
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	100.000 ms
I N	100.000 1115
TE	10.00 ms
Fat-Water Contrast	Standard
Contrasts	1

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.000 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Slice Oversampling	0.0 %
FOV Read	256 mm
FOV Phase	93.8 %
Slice Thickness	1.000 mm
TR	100.000 ms
Series	Ascending

Geometry - AutoAlign

Slab Group	1
Position	L2.2 P14.4 F2.2 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L2.2 P14.4 F2.2
L	2.2 mm
Р	14.4 mm
F	2.2 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	2 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T

System - Miscellaneous

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L2.2 P14.4 F2.2 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	240 mm
! F >> H	256 mm
! R >> L	192 mm
Reset	Off

System-pTx

B1 Shim	TrueForm

System - Tx/Rx

Frequency 1H	123.194058 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	100.000 ms

Sequence - Part 1

Sequence Name	we_mp
Dimension	3D
Gradient Mode	Fast

Sequence - Part 2

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	HE1-4;NE1,2

Sequence - Special

prage_we.seq

Sequence - Special

Execution mode	pulseq/run
Data handling	ICE STD
Timing and Flip Angles	adapt FA
FOV positioning	enabled
Orientation mapping	XYZ in TRA
libBalance / Grad health	disabled
Number of runs	1
Delay after run(s)	0.00 ms
ADC length per segment	0
Use SET for SLC	Off
Delay before start	0 ms
Gradient scaling[1]	100.00 %
Gradient scaling[2]	100.00 %
Gradient scaling[3]	100.00 %

\\MedPhys\Technologies\Qingping\dataacq_imagerecon_workflow\product_ep2d_bold_tran_slc48_iso 2_8mm

TA: 1:53 min Coil Selection: Manual Voxel Size: 2.8×2.8×3.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	48
Distance Factor	0 %
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3630.0 ms
TE	33.00 ms
Averages	1
Concatenations	1
AutoAlign	Head > Basis
Coil Elements	HE1-4;NE1,2
<u> </u>	-

Contrast - Common

TR	3630.0 ms
TE	33.00 ms
MTC	Off
Flip Angle	90 deg
Fat-Water Contrast	Fat Saturation
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	30
Delay in TR	0.00 ms

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %

Resolution - Common

Slice Thickness	3.0 mm
Base Resolution	80
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Static Field Correction	Off
Normalize	Off

Geometry - Common

Slice Group	1
Slices	48
Distance Factor	0 %
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	O %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	3630.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L5.0 P12.1 H0.8
L	5.0 mm
Р	12.1 mm
Н	0.8 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None	
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	1 mm
Table Position	Н
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	144 mm
Reset	Off

System-pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.194058 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	0.600

Physio - Signal

1st Signal/Mode	None
TR	3630.0 ms
Log Signals	Off
Concatenations	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0

BOLD

Model Transition States	On
Temp. Highpass Filter	On
Threshold	4.00
Paradigm Size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion Correction	Off
Spatial Filter	Off
Measurements	30
Delay in TR	0.00 ms

Sequence - Part 1

Sequence Name	epfid
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Performance
Bandwidth	1562 Hz/Px
Echo Spacing	0.70 ms
Free Echo Spacing	Off
EPI Factor	80

Sequence - Part 2

SAR Assistant	Off

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TA: 1:50 min Coil Selection: Manual Voxel Size: 2.8×2.8×3.0 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	48
Distance Factor	0 %
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	100.000 ms
TE	10.00 ms
AutoAlign	Head > Basis
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	100.000 ms
TE	10.00 ms
Fat-Water Contrast	Standard
Contrasts	1

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	30
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

Contrast - Dynamic

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
Pause after Meas. 15	0.0 s
Pause after Meas. 16	0.0 s
Pause after Meas. 17	0.0 s
Pause after Meas. 18	0.0 s
Pause after Meas. 19	0.0 s
Pause after Meas. 20	0.0 s
Pause after Meas. 21	0.0 s
Pause after Meas. 22	0.0 s
Pause after Meas. 23	0.0 s
Pause after Meas. 24	0.0 s
Pause after Meas. 25	0.0 s
Pause after Meas. 26	0.0 s
Pause after Meas. 27	0.0 s
Pause after Meas. 28	0.0 s
Pause after Meas. 29	0.0 s

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	80
Phase Resolution	100 %

Resolution - Acceleration

None	
	None

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	48
Distance Factor	0 %
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	100.000 ms
Series	Ascending

Geometry - AutoAlign

<u> </u>	
Slice Group	1
Position	L5.0 P12.1 H0.8 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	Head > Basis
Initial Position	L5.0 P12.1 H0.8
L	5.0 mm
P	12.1 mm
Н	0.8 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	1 mm
Table Position	Н
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L5.0 P12.1 H0.8 mm
! Orientation	Transversal
! Rotation	0.00 deg
! A >> P	220 mm
! R >> L	220 mm
! F >> H	144 mm
Reset	Off

System - pTx

B1 Shim	TrueForm

System - Tx/Rx

Frequency 1H	123.194058 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00

System - Tx/Rx

0.600	
	0.600

_		
TF	₹	100.000 ms
13	st Signal/Mode	none

Sequence - Part 1

Sequence Name	ері
Dimension	2D
Gradient Mode	Fast

Sequence - Part 2

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	HE1-4;NE1,2

Sequence - Special

Pulseq file	qingping/epi_rs_30rep.sec
Execution mode	pulseq/run
Data handling	ICE STD
Timing and Flip Angles	adapt FA
FOV positioning	enabled
Orientation mapping	XYZ in TRA
libBalance / Grad health	disabled
Number of runs	1
Delay after run(s)	0.00 ms
ADC length per segment	0
Use SET for SLC	Off
Delay before start	0 ms
Gradient scaling[1]	100.00 %
Gradient scaling[2]	100.00 %
Gradient scaling[3]	100.00 %

SAR Assistant	Off