

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\localiser_3plane TA:0:14 PAT:Off Voxel size:0.5×0.5×7.0 mm Rel. SNR:1.00 :fl
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## Properties

Prio Recon	Off
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Wait for user to start	Off
Start measurements	single

## Routine

Nr. of slice groups	3
Slices	1
Dist. factor	20 %
Position	L0.0 A30.6 F4.8 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	7.0 mm
TR	8.6 ms
TE	4.00 ms
Averages	2
Concatenations	3
Filter	Normalize, Elliptical filter
Coil elements	HEA;HEP

## 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
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

## Resolution

Base resolution	256
Phase resolution	91 %
Phase partial Fourier	Off
Interpolation	On
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
TD	0 ms
Prescan Normalize	Off
Normalize	On
B1 filter	Off
Raw filter	Off
Elliptical filter	On

Mode	Inplane
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## Geometry

Nr. of slice groups	3
Slices	1
Dist. factor	20 %
Position	L0.0 A30.6 F4.8 mm
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Sequential
Series	Interleaved
Saturation mode	Standard
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	None
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect
B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Frequency 1H	123.257000 MHz
Correction factor	1
SRFExcit 1H	42.652 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

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

## Inline

Distortion correction	Off
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## Sequence

Introduction	On
Dimension	2D
Averaging mode	Short term
Multi-slice mode	Sequential
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	320 Hz/Px
Flow comp.	No
Allowed delay	0 s
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

## BOLD

Subtract	Off
Liver registration	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On
Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\TOF_3D_neck TA:0:42 PAT:3 Voxel size:0.3×0.3×1.3 mm Rel. SNR:1.00 :fl_r
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	-20.00 %
Position	R1.8 A29.4 F69.6 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	20.0 %
FoV read	200 mm
FoV phase	76.9 %
Slice thickness	1.30 mm
TR	21.0 ms
TE	3.43 ms
Averages	1
Concatenations	1
Filter	Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	30 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Measurements	1
Reconstruction	Magnitude

## Resolution

Base resolution	320
Phase resolution	95 %
Phase partial Fourier	6/8
Interpolation	On
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	32
Reference scan mode	Integrated
Image Filter	Off
Distortion Corr.	Off
Accel. factor 3D	1
Prescan Normalize	Off
Normalize	On
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

POCS	Off
Slice resolution	50 %
Slice partial Fourier	7/8

## Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	-20.00 %
Position	R1.8 A29.4 F69.6 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	20.0 %
Slices per slab	40
Multi-slice mode	Sequential
Series	Descending
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Water suppr.	None
Special sat.	Tracking H
Gap	10 mm
Thickness	40 mm
Special sat.	Tracking H
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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	Sum of Squares
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect
B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm
Frequency 1H	123.257000 MHz
Correction factor	1
SRFExcit 1H	492.731 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
Dark blood	Off

## Inline

Distortion correction	Off
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## Sequence

Introduction	On
Dimension	3D
Elliptical scanning	Off
Averaging mode	Short term
Multi-slice mode	Sequential
Asymmetric echo	Allowed
Contrasts	1
Bandwidth	186 Hz/Px
Flow comp.	Yes
Gradient mode	Fast
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

## BOLD

TONE ramp	70 %
Flow direction	F >> H
3D centric reordering	On
Subtract	Off
StdDev	Off
MIP-Sag	On
MIP-Cor	On
MIP-Tra	On
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Contrasts	1
Save original images	On

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\npb_ep2d_VEPCASL_DA_stim TA:9:27 PAT:Off Voxel size:3.4x3.4x5.0 mm Rel. SNR:1.00 :epfid
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	6100 ms
TE 1	14.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Measurements	185
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off
Perfusion mode	PICORE Q2T
Flow limit	100.0 cm/s
Bolus Duration	700 ms
Inversion Array Size	1

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Distortion Corr.	Off
Hamming	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	Off
Elliptical filter	Off

## Geometry

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Ascending
Nr. of sat. regions	2
Position	Isocenter
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Fat sat. mode	Strong
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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
AutoAlign	---
Coil Select Mode	Default
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	132 mm
Frequency 1H	123.257000 MHz
Correction factor	1
asl_Sat00 1H	185.971 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
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## Inline

Distortion correction	Off
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## Sequence

Introduction	Off
Averaging mode	Long term
Multi-slice mode	Interleaved
Contrasts	2



Bandwidth	2004 Hz/Px
Free echo spacing	Off
Echo spacing	0.56 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast
Perform VEPCASL	On
Use Variable TR?	Off
VEPCASL Tag Mode	Tag/Cntrl All
BGS Mode	Pre-sats + DI
Tag RF Flip Angle	20 degs
Tag RF Duration	600 us
Tag RF Separation	1000 us
Mean Tag Gradient	0.8 mT/m
Tag Gradient Amplitude	6.0 mT/m
Tag Duration	1400 ms
Maximum T1 Opt	500 ms
Trans Grad Angle	0.0 degs
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

**BOLD**


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GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	On
Threshold	4.00
Paradigm size	1
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off
Contrasts	2

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\fieldmap_gre_3.4mm_ep2d TA:0:49 Voxel size:3.4x3.4x4.5 mm Rel. SNR:1.00 :fm_r
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.5 mm
TR	378.0 ms
TE 1	4.92 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	45 deg
Fat suppr.	None
Averaging mode	Long term
Measurements	1
Reconstruction	Magn./Phase
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter

Phase enc. dir.	R >> L
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	None
Special sat.	None
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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	Sum of Squares
AutoAlign	---
Coil Select Mode	Off - All
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	90.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	119 mm
Frequency 1H	123.257000 MHz
Correction factor	1
01GreFCE 1H	95.966 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

## Inline

Distortion correction	Off
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## Sequence

Introduction	Off
Dimension	2D
Averaging mode	Long term
Multi-slice mode	Interleaved
Asymmetric echo	Off
Contrasts	2
Bandwidth	606 Hz/Px
Flow comp.	Yes
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On
TX/RX delta frequency	0 Hz

TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

**BOLD**

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Distortion Corr.	Off
Contrasts	2

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\to_ep2d_PCASL_varTR TA:5:34 PAT:Off Voxel size:3.4x3.4x4.5 mm Rel. SNR:1.00 :epfid
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.5 mm
TR	4100 ms
TE	14.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Measurements	97
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off
Perfusion mode	PICORE Q2T
Flow limit	100.0 cm/s
Bolus Duration	700 ms
Inversion Array Size	1

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Distortion Corr.	Off
Hamming	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	Off
Elliptical filter	Off

## Geometry

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Ascending
Nr. of sat. regions	2
Position	Isocenter
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Fat sat. mode	Strong
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
Positioning mode	FIX
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
AutoAlign	---
Coil Select Mode	Default
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	119 mm
Frequency 1H	123.257000 MHz
Correction factor	1
asl_Sat00 1H	185.971 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
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## Inline

Distortion correction	Off
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## Sequence

Introduction	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	2004 Hz/Px

Free echo spacing	Off
Echo spacing	0.56 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast
Perform VEPCASL	On
Use Variable TR?	On
VEPCASL Tag Mode	Tag/Cntrl All
BGS Mode	Pre-sats + DI
Tag RF Flip Angle	20 degs
Tag RF Duration	600 us
Tag RF Separation	1000 us
Mean Tag Gradient	0.8 mT/m
Tag Gradient Amplitude	6.0 mT/m
Tag Duration	1400 ms
Maximum T1 Opt	500 ms
Trans Grad Angle	0.0 degs
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA,HEP
Acquisition duration	0 ms

**BOLD**


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GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\to_ep2d_PCASL_varTR TA:5:34 PAT:Off Voxel size:3.4x3.4x4.5 mm Rel. SNR:1.00 :epfid
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	4.5 mm
TR	4100 ms
TE	14.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Measurements	97
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off
Perfusion mode	PICORE Q2T
Flow limit	100.0 cm/s
Bolus Duration	700 ms
Inversion Array Size	1

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Distortion Corr.	Off
Hamming	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	Off
Elliptical filter	Off



## Geometry

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Ascending
Nr. of sat. regions	2
Position	Isocenter
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Fat sat. mode	Strong
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
Positioning mode	FIX
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
AutoAlign	---
Coil Select Mode	Default
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	119 mm
Frequency 1H	123.257000 MHz
Correction factor	1
asl_Sat00 1H	185.971 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
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## Inline

Distortion correction	Off
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## Sequence

Introduction	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	2004 Hz/Px

Free echo spacing	Off
Echo spacing	0.56 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast
Perform VEPCASL	On
Use Variable TR?	On
VEPCASL Tag Mode	Tag/Cntrl All
BGS Mode	Pre-sats + DI
Tag RF Flip Angle	20 degs
Tag RF Duration	600 us
Tag RF Separation	1000 us
Mean Tag Gradient	0.8 mT/m
Tag Gradient Amplitude	6.0 mT/m
Tag Duration	1400 ms
Maximum T1 Opt	500 ms
Trans Grad Angle	0.0 degs
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA,HEP
Acquisition duration	0 ms

**BOLD**


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GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	On
Threshold	4.00
Paradigm size	3
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\bold_ep2d_3.4mm_PAT2 TA:7:08 PAT:2 Voxel size:3.4x3.4x5.0 mm Rel. SNR:1.00 :epfid
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## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Measurements	210
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	26
Reference scan mode	Separate
Distortion Corr.	Off
Hamming	Off
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Nr. of slice groups	1
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Slices	24
Dist. factor	10 %
Position	Isocenter
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
Positioning mode	FIX
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
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	132 mm
Frequency 1H	123.257000 MHz
Correction factor	1
SincRFPulse 1H	242.789 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
-----------------	------

## Inline

Distortion correction	Off
-----------------------	-----

## Sequence

Introduction	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1628 Hz/Px
Free echo spacing	Off
Echo spacing	0.7 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Performance

Excitation	Standard
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

**BOLD**

---

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	20
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\bold_ep2d_3.4mm_PAT2 TA:7:08 PAT:2 Voxel size:3.4x3.4x5.0 mm Rel. SNR:1.00 :epfid
---

## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slice groups	1
Slices	24
Dist. factor	10 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	2000 ms
TE	30.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

## Contrast

MTC	Off
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Measurements	210
Delay in TR	0 ms
Reconstruction	Magnitude
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	26
Reference scan mode	Separate
Distortion Corr.	Off
Hamming	Off
Prescan Normalize	Off
Raw filter	Off
Elliptical filter	Off

## Geometry

Nr. of slice groups	1
---------------------	---

Slices	24
Dist. factor	10 %
Position	Isocenter
Phase enc. dir.	A >> P
Phase oversampling	0 %
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
Positioning mode	FIX
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
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	132 mm
Frequency 1H	123.257000 MHz
Correction factor	1
SincRFPulse 1H	242.789 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
-----------------	------

## Inline

Distortion correction	Off
-----------------------	-----

## Sequence

Introduction	On
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	1628 Hz/Px
Free echo spacing	Off
Echo spacing	0.7 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Performance

Excitation	Standard
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

**BOLD**

---

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	Off
Temp. highpass filter	Off
Threshold	4.00
Paradigm size	20
Motion correction	Off
Spatial filter	Off
Delay in TR	0 ms
Distortion Corr.	Off



## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\npb_ep2d_ase_r-2-prime TA:2:54 PAT:Off Voxel size:3.4×3.4×1.3 mm Rel. SNR:1.00 :epse
--

## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slab groups	1
Slabs	24
Dist. factor	50 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	100.0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.25 mm
TR	3000 ms
TE	80.0 ms
Averages	1
Concatenations	1
Filter	Prescan Normalize
Coil elements	HEA;HEP

## Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Measurements	7
Delay in TR	0 ms
Reconstruction	Magn./Phase
Multiple series	Off

## Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
Distortion Corr.	Off
Hamming	Off
Unfiltered images	On
Prescan Normalize	On
Raw filter	Off
Elliptical filter	Off
Slice resolution	100 %
Slice partial Fourier	Off

## Geometry

Nr. of slab groups	1
Slabs	24
Dist. factor	50 %
Position	Isocenter
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	100.0 %
Slices per slab	4
Multi-slice mode	Interleaved
Series	Interleaved
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Fat sat.
Special sat.	None
Fat sat. mode	Strong
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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	Sum of Squares
AutoAlign	---
Coil Select Mode	Default
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	Isocenter
Rotation	0.00 deg
R >> L	220 mm
A >> P	220 mm
F >> H	178 mm
Frequency 1H	123.257000 MHz
Correction factor	1
AddCSaCSatNS 1H	66.311 V
Gain	High
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
Magn. preparation	None

## Inline

Distortion correction	Off
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## Sequence

Introduction	Off
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Dimension	3D
Averaging mode	Long term
Multi-slice mode	Interleaved
Bandwidth	2004 Hz/Px
Free echo spacing	Off
Echo spacing	0.56 ms
EPI factor	64
RF pulse type	Normal
Gradient mode	Fast
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms

**BOLD**


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Delay in TR	0 ms
Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Save original images	On

## SIEMENS MAGNETOM Prisma syngo MR D13D

\\USER\FMRIB Developer\Bulte\CVR\t1_mpr_ax_1.5mm_iso_PSN TA:3:40 PAT:Off Voxel size:1.5×1.5×1.5 mm Rel. SNR:1.00 :tfl
--

## Properties

Prio Recon	Off
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
Wait for user to start	On
Start measurements	single

## Routine

Nr. of slab groups	1
Slabs	1
Dist. factor	50 %
Position	R5.4 A19.2 H3.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
FoV read	192 mm
FoV phase	90.6 %
Slice thickness	1.50 mm
TR	1900.0 ms
TE	3.74 ms
Averages	1
Concatenations	1
Filter	Raw filter, Normalize
Coil elements	HEA;HEP

## Contrast

Magn. preparation	Non-sel. IR
TI	904 ms
Flip angle	8 deg
Fat suppr.	Water excit. normal
Water suppr.	None
Averaging mode	Long term
Measurements	1
Reconstruction	Magnitude
Multiple series	Each measurement

## Resolution

Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
PAT mode	None
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	On
B1 filter	Off
Raw filter	On
Intensity	Weak
Slope	25
Elliptical filter	Off

Slice resolution	100 %
Slice partial Fourier	Off

## Geometry

Nr. of slab groups	1
Slabs	1
Dist. factor	50 %
Position	R5.4 A19.2 H3.5 mm
Phase enc. dir.	R >> L
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
Multi-slice mode	Single shot
Series	Ascending
Nr. of sat. regions	0
Position mode	L-P-H
Fat suppr.	Water excit. normal
Water suppr.	None
Special sat.	None
Table position	P

## System

Body	Off
HEP	On
HEA	On
Position mode	L-P-H
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
AutoAlign	---
Coil Select Mode	Off - All
B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto
? Ref. amplitude 1H	0.000 V
Position	R5.4 A19.2 H3.5 mm
Rotation	90.00 deg
A >> P	192 mm
R >> L	174 mm
F >> H	192 mm
Frequency 1H	123.257000 MHz
Correction factor	1
ExcitWES 0 1H	32.164 V
Gain	Low
Table position	0 mm
Img. Scale. Cor.	1.000

## Physio

1st Signal/Mode	None
Magn. preparation	Non-sel. IR
TI	904 ms
Dark blood	Off
Resp. control	Off

## Inline

Distortion correction	Off
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## Sequence

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Averaging mode	Long term
Multi-slice mode	Single shot
Reordering	Linear
Asymmetric echo	Allowed
Bandwidth	200 Hz/Px
Flow comp.	No
Echo spacing	8.8 ms
Turbo factor	128
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	HEA;HEP
Acquisition duration	0 ms
Mode	Off

## BOLD

Subtract	Off
StdDev	Off
MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On
Distortion Corr.	Off
Save original images	On

