This hcp7t_ret Session 2 includes:
Localizer
AAHScout_32ch
Localizer_aligned
=== resting ===
BOLD_REST2_AP
BOLD_PA_SE
BOLD_AP_SE
=== retinotopy ===
BOLD_RET1_AP
BOLD_RET2_PA
BOLD_RET3_AP
BOLD_RET4_PA
BOLD_PA_SE
BOLD_AP_SE
BOLD_RET5_AP
BOLD_RET6_PA
FieldMap

Notes:
1. "Raw Filter" is listed as "On" in PDF throughout. But it was "Off". That is a bug in the protocol printout under VB17.
2. Phase enc. dir. for "PA" scans is left as "A >> P", and the polarity inversion is accomplished by setting "Invert RO/PE polarity" flag to "On" in the Sequence:Special tab.

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\Localizer

TA: 5.8 s   PAT: Off   Voxel size: 1.1×1.0×5.0 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	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	1
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	6.2 ms
TE	2.67 ms
Averages	1
Concatenations	3
Filter	Elliptical filter
Coil elements	A32

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	10 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
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
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
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
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	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
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\AAHScout_32ch

TA: 8.9 s   PAT: 4   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   SIEMENS: AALScout

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

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	L0.0 A50.0 H0.0
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0 deg
AutoAlign	Head
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	2.90 ms
TE	1.2 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

Flip angle	9.0 deg
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution

Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	2
Ref. lines 3D	24
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
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Sum of Squares
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	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	350 mm
A >> P	263 mm
F >> H	350 mm

Inline

Time to center	4.5 s
MapIt	None
Contrasts	1

Sequence

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Bandwidth	550 Hz/Px
RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\Localizer_aligned

TA: 0:23   PAT: Off   Voxel size: 1.1×1.0×5.0 mm   Rel. SNR: 1.00   SIEMENS: gre

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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	On
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	5
Dist. factor	400 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	600 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	300 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	6.2 ms
TE	2.67 ms
Averages	1
Concatenations	15
Filter	Elliptical filter
Coil elements	A32

Contrast

TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	10 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
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
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
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	Head > Brain
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	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

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

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_REST2_AP

TA: 16:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

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	On
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	900
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_PA_SE

TA: 1:26   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_se

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.51 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3000 ms
TE	60 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	4480 us
Refocus pulse duration	10240 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0

MB kernel size	5
MB knockout band	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	On
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_AP_SE

TA: 1:26　　PAT: 2　　Voxel size: 1.6×1.6×1.6 mm　　Rel. SNR: 1.00　　USER: hcp_v2_mbep2d_se

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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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.51 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3000 ms
TE	60 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved

Series	Interleaved
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	4480 us
Refocus pulse duration	10240 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0

MB kernel size	5
MB knockout band	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET1_AP

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

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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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET2_PA

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	On
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET3_AP

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

---

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET4_PA

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	On
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_PA_SE

TA: 1:26   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_se

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.51 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3000 ms
TE	60 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	4480 us
Refocus pulse duration	10240 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0

MB kernel size	5
MB knockout band	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	On
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_AP_SE

TA: 1:26   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_se

---

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.51 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3000 ms
TE	60 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Refocus flip angle	180 deg
Fat suppr.	None
Grad. rev. fat suppr.	Disabled
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	4480 us
Refocus pulse duration	10240 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0

MB kernel size	5
MB knockout band	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	Off
Time-shifted MB RF	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
Online multi-band recon.	Online
FFT scale factor	1.00
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET5_AP

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

---

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\BOLD_RET6_PA

TA: 6:20   PAT: 2   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: hcp_v2_mbep2d_bold

---

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	On
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	-0.52 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	1000 ms
TE	22.2 ms
Multi-band accel. factor	5
Filter	None
Coil elements	A32

Contrast

MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	300
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	7/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	96
Reference scan mode	GRE
Distortion Corr.	Off
Prescan Normalize	Off
Raw filter	On
Elliptical filter	Off
Hamming	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved

Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 P13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Physio

1st Signal/Mode	None

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Starting ignore meas	0
Ignore after transition	0
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

Sequence

Introduction	Off
Bandwidth	1924 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.64 ms
SIR accel. factor	1
EPI factor	130
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5760 us
Slice multiplier	1
Multi-band PE shift	3 1/FoV
zBlip scheme	0
MB kernel size	5

MB knockout band	0
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
Single-band images	On
MB LeakBlock kernel	Off
MB RF phase scramble	On
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	On
Save reduced raw data	On
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.60
GRE iPAT ref. FA	12.0 deg
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	0
Multiplier	0

\\USER\HCP\HCP_Phase2_7T_autoAlign\Session 2 (ret_7T)\FieldMap

TA: 2:09   Voxel size: 1.6×1.6×1.6 mm   Rel. SNR: 1.00   USER: gre_field_mapping

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	Off
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	85
Dist. factor	0 %
Position	L0.0 P12.0 H13.0
Orientation	T > C-20.0
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	208 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	642.0 ms
TE 1	4.08 ms
TE 2	5.1 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast

MTC	Off
Flip angle	32 deg
Fat suppr.	None
Averaging mode	Short term
Reconstruction	Magn./Phase
Measurements	1
Multiple series	Off

Resolution

Base resolution	130
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Multi-slice mode	Interleaved
Series	Interleaved
Special sat.	None
Table position	H

Table position	0 mm
Inline Composing	Off

System

V32	Off
A32	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	Head > Brain
Auto Coil Select	Default
Shim mode	Advanced
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.7 A13.2 H9.5
! Orientation	T > C-15.6 > S0.3
! Rotation	0.00 deg
! R >> L	130 mm
! A >> P	170 mm
! F >> H	120 mm

Composing

Sequence

Introduction	On
Dimension	2D
Asymmetric echo	Off
Contrasts	2
Bandwidth	401 Hz/Px
Flow comp.	Yes
RF pulse type	Normal
Gradient mode	Fast
RF spoiling	On

Table of contents

```
\\USER
    HCP
        HCP_Phase2_7T_autoAlign
            Session 2 (ret_7T)
                    Localizer
                    AAHScout_32ch
                    Localizer_aligned
                    === resting ===
                    BOLD_REST2_AP
                    BOLD_PA_SE
                    BOLD_AP_SE
                    === retinotopy ===
                    BOLD_RET1_AP
                    BOLD_RET2_PA
                    BOLD_RET3_AP
                    BOLD_RET4_PA
                    BOLD_PA_SE
                    BOLD_AP_SE
                    BOLD_RET5_AP
                    BOLD_RET6_PA
                    FieldMap
```