\\USER\Feinberglab\Sequences\General\localizer_100V_newcoil

TA: 0:27 PAT: Off Voxel size: 1.2×1.1×3.0 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	5
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	20 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	10.0 ms
TE	3.00 ms
Averages	1
Concatenations	15
Filter	None
Coil elements	L1-8;R1-8;T1-8

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	6/8
Interpolation	On
PAT mode	None
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	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

T1	On
T2	On
T3	On
T4	On
T5	On
T6	On
T7	On
T8	On
L1	On
L2	On
L3	On
L4	On
L5	On
L6	On
L7	On
L8	On
R1	On
R2	On
R3	On
R4	On
R5	On
R6	On
R7	On
R8	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	50.000 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	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Feinberglab\Sequences\General\AV_ep2d_bold_sd1ipat2mb2_pt5mm_4cm_visloc

TA: 0:39 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	60
Dist. factor	0 %
Position	L0.0 P80.0 H1.4
Orientation	Coronal
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	88.9 %
Slice thickness	0.50 mm
TR	3000 ms
TE	25.2 ms
Multi-band accel. factor	2
Filter	None
Coil elements	B1-8

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	180
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
Reference scan mode	Segmented
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

B1	On
B2	On
B3	On
B4	On
B5	On
B6	On
B7	On
B8	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	130.000 V
Adjustment Tolerance	Auto
Adjust volume	
! Position	L0.0 P79.3 H4.1
! Orientation	Coronal
! Rotation	90.00 deg
! R >> L	90 mm
! F >> H	80 mm
! A >> P	30 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	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active

Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	816 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1.43 ms
SIR accel. factor	1
EPI factor	160
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5820 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
zBlip scheme	0
MB kernel size	0
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 RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.05
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Sequences\General\b1map_100V_TR1000_5cm

TA: 3:17 Voxel size: 3.9×3.9×5.0 mm Rel. SNR: 1.00 USER: b1map_658

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	12
Dist. factor	100 %
Position	R2.7 P2.7 H6.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5 mm
TR	1000 ms
TE 1	14 ms
TE 2	14 ms
Averages	1
Filter	None
Coil elements	B1-8

Contrast

Flip angle 1	90 deg
Flip angle 2	120 deg
Flip angle 3	60 deg
Flip angle 4	135 deg
Flip angle 5	45 deg
Measurements	1

Resolution

Base resolution	64
Phase resolution	100 %
Raw filter	Off

Geometry

Series	Interleaved
Table position	H
Table position	0 mm
Inline Composing	Off

System

B1	On
B2	On
B3	On
B4	On
B5	On
B6	On
B7	On
B8	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	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	100.000 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

Composing

Sequence

Contrasts	2
Bandwidth	260.416667 Hz/Px
T1 Compensation	Mean T1
Mean T1	1000.0 ms
Angles	3
Amplitude Weighting	Linear
Scale Bar	Enabled
Raw Data	Disabled

\\USER\Feinberglab\Sequences\General\gFactorMap_100V_5cm

TA: 2:30 Voxel size: 0.5×0.5×5.0 mm Rel. SNR: 1.00 USER: NoiseMeasSensitivityMap

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	12
Dist. factor	100 %
Position	R2.7 P2.7 H6.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30 ms
TE	6.0 ms
Averages	1
Concatenations	12
Filter	None
Coil elements	B1-8

Contrast

TD	0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	384
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

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

System

B1	On
B2	On
B3	On
B4	On
B5	On
B6	On
B7	On
B8	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	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	100.000 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

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	2D
Contrasts	1
Bandwidth	200 Hz/Px
Gradient mode	Fast
RF spoiling	On
ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off

Rx coil diode switching	On
coil channel reordering	Off
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

\\USER\Feinberglab\Sequences\General\eja_gre_inplane

TA: 3:30 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: eja_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	60
Dist. factor	0 %
Position	L0.0 P80.0 H1.4
Orientation	Coronal
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	100.0 %
Slice thickness	0.5 mm
TR	2420 ms
TE	18.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B1-8

Contrast

MTC	Off
Magn. preparation	None
Flip angle	39 deg
Fat suppr.	Fat sat.
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	192
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	29
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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

B1	On
B2	On
B3	On
B4	On
B5	On
B6	On
B7	On
B8	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	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	100.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L0.0 P80.0 H1.4
Orientation	Coronal
Rotation	90.00 deg
R >> L	90 mm
F >> H	90 mm
A >> P	30 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
Dark blood	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
Reordering	Linear
Asymmetric echo	Off
Bandwidth	80 Hz/Px
Flow comp.	Yes
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
B0/B1 mapping	None
FFT scale factor	0.10
Trigger per meas.	Off
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

\\USER\Feinberglab\Sequences\General\cmrr_mbep2d_bold_pt5mm

TA: 0:53 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: cmrr_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	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slice group 1	
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	88.9 %
Slice thickness	0.50 mm
TR	3000 ms
TE	25.2 ms
Multi-band accel. factor	2
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	90 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	180
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	90 mm
A >> P	80 mm
F >> H	30 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	20

Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Contrasts	1
Bandwidth	816 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	1.43 ms
EPI factor	160
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	5820 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
MB kernel size	1
Single-band images	On
MB LeakBlock kernel	Off
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
PF omits higher k-space	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	0.50
GRE iPAT ref. FA	12.0 deg
Physio recording	Off
Triggering scheme	Standard

\\USER\Feinberglab\Sequences\General\SWI tra_pt25_1mmSlc

TA: 9:30 PAT: 3 Voxel size: 0.3×0.3×1.0 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	On
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	20 %
Position	L0.0 A27.8 H1.4
Orientation	Transversal
Phase enc. dir.	R >> L
Rotation	90.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	224 mm
FoV phase	81.3 %
Slice thickness	1.00 mm
TR	21 ms
TE	15.60 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

MTC	Off
Magn. preparation	None
Flip angle	10 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	896
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	32
Accel. factor 3D	1
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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

T1	On
M2	On
B4	On
M3	On
V32	Off
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	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 A27.8 H1.4
Orientation	Transversal
Rotation	90.00 deg
A >> P	224 mm
R >> L	182 mm
F >> H	128 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	On
Phase stabilisation	Off
Asymmetric echo	Off
Bandwidth	210 Hz/Px
Flow comp.	Yes
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On

\\USER\Feinberglab\Sequences\General\ep2d_bold_sms_mgh_v22

TA: 1:49 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: ep2d_bold_sms_mgh_v22

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	58
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	100.0 %
Slice thickness	0.5 mm
TR	3030 ms
TE	28 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	T1

Contrast

MTC	Off
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	180
Phase resolution	100 %
Phase partial Fourier	5/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	22
Reference scan mode	Separate
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

T1	On
M2	Off
B4	Off
M3	Off
V32	Off
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	90 mm
A >> P	90 mm
F >> H	29 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	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active

Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	816 Hz/Px
Free echo spacing	Off
Echo spacing	1.38 ms
EPI factor	180
RF pulse type	Normal
Gradient mode	Fast
Dummy Scans	4
Dummy Scans	4
SMS Factor	2
RF Clip	0
VERSE Factor	1.00
SMS Shift	1
Kernel Size	3x3
Compression Factor	1.00

\\USER\Feinberglab\Sequences\24ch tSNR tests\localizer_100V_newcoil

TA: 0:27 PAT: Off Voxel size: 1.2×1.1×3.0 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	5
Dist. factor	20 %
Position	R5.4 P60.7 F2.7
Orientation	Sagittal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Slice group 2	
Slices	5
Dist. factor	20 %
Position	R5.4 P60.7 F2.7
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Slice group 3	
Slices	5
Dist. factor	20 %
Position	R5.4 P60.7 F2.7
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	280 mm
FoV phase	100.0 %
Slice thickness	3.0 mm
TR	10.0 ms
TE	3.00 ms
Averages	1
Concatenations	15
Filter	None
Coil elements	L10-24;LV1-9

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	6/8
Interpolation	On
PAT mode	None
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	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off
Tim CT mode	Off

System

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
Auto Coil Select	Off
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	100.000 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	Whisper
Excitation	Slice-sel.
RF spoiling	On

\\USER\Feinberglab\Sequences\24ch tSNR tests\b1map_115V_TR1000_24ch

TA: 1:09 Voxel size: 3.9×3.9×5.0 mm Rel. SNR: 1.00 USER: b1map_658

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	12
Dist. factor	100 %
Position	R2.7 P2.7 F15.5
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5 mm
TR	1000 ms
TE 1	14 ms
TE 2	14 ms
Averages	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

Flip angle 1	90 deg
Flip angle 2	120 deg
Flip angle 3	60 deg
Flip angle 4	135 deg
Flip angle 5	45 deg
Measurements	1

Resolution

Base resolution	64
Phase resolution	100 %
Raw filter	Off

Geometry

Series	Interleaved
Table position	H
Table position	0 mm
Inline Composing	Off

System

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	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	Default
Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	115.000 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

Composing

Sequence

Contrasts	2
Bandwidth	260.416667 Hz/Px
T1 Compensation	Mean T1
Mean T1	2000.0 ms
Angles	1
Amplitude Weighting	Linear
Scale Bar	Enabled
Raw Data	Disabled

\\USER\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch

TA: 0:44 PAT: Off Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline

Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.74 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.05
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch_ipat2

TA: 0:48 PAT: 2 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	48
Reference scan mode	Segmented
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20

Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.78 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.05
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch_MB2

TA: 0:48 PAT: Off Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	2
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	None
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline

Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.8 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
zBlip scheme	0
MB kernel size	0
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 RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.05
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch_MB2_ipat2

TA: 0:56 PAT: 2 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	2
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	48
Reference scan mode	Segmented
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20

Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.82 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
zBlip scheme	0
MB kernel size	0
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 RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.05
Send B1 shim trigger	Never
Triggering scheme	Standard
Starting ignore meas	0
Paradigm size	2
Multiplier	1
Step [1]	1
Step [2]	0

\\USER\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch_ipat2_FLASH

TA: 0:53 PAT: 2 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	48
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20

Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.78 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Fake MB factor for SB	1
No. of interleaved TEs	0
RF pulse shape	1
EPI noise scans	0
EPI full reference scan	0
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
FFT scale factor	0.05
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\Feinberglab\Sequences\24ch tSNR tests\AV_ep2d_bold_1pt2_24ch_MB2_ipat2

TA: 0:57 PAT: 2 Voxel size: 1.2×1.2×1.2 mm Rel. SNR: 1.00 USER: AV_ep2d_bold_sd_20140727

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	30
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	96 mm
FoV phase	100.0 %
Slice thickness	1.20 mm
TR	2000 ms
TE	22.4 ms
Multi-band accel. factor	2
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	80 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	20
Delay in TR	0 ms
Multiple series	Off

Resolution

Base resolution	80
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	48
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

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Rotation	90.00 deg
R >> L	96 mm
F >> H	96 mm
A >> P	36 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	20

Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Bandwidth	1524 Hz/Px
Flow comp.	No
Free echo spacing	Off
Echo spacing	0.82 ms
SIR accel. factor	1
EPI factor	80
Gradient mode	Normal
RF spoiling	Off
Excite pulse duration	2560 us
Slice multiplier	1
Multi-band PE shift	0 1/FoV
zBlip scheme	0
MB kernel size	0
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 RF phase scramble	Off
SENSE1 coil combine	Off
Log physiology to file	Off
Invert RO/PE polarity	Off
Save reduced raw data	Off
Readout slice trace	Off
Disable ramp sampling	Off
PF omits higher k-space	Off
Online multi-band recon.	Online
FFT scale factor	0.05
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\Feinberglab\Sequences\24ch tSNR tests\gFactorMap

TA: 2:30 Voxel size: 0.5×0.5×5.0 mm Rel. SNR: 1.00 USER: NoiseMeasSensitivityMap

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	12
Dist. factor	100 %
Position	R2.7 P15.5 F14.8
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	192 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	30 ms
TE	6.0 ms
Averages	1
Concatenations	12
Filter	None
Coil elements	L10-24;LV1-9

Contrast

TD	0 ms
MTC	Off
Flip angle	10 deg
Fat suppr.	None
Water suppr.	None
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

Resolution

Base resolution	384
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

Multi-slice mode	Sequential
Series	Ascending
Special sat.	None

Table position	H
Table position	0 mm
Inline Composing	Off

System

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	REF
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	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	Isocenter
! Orientation	Transversal
! Rotation	0.00 deg
! R >> L	350 mm
! A >> P	263 mm
! F >> H	350 mm

Physio

1st Signal/Mode	None

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	2D
Contrasts	1
Bandwidth	200 Hz/Px
Gradient mode	Fast
RF spoiling	On
ICE program	CoilArrayUtil
number of noise lines	384 lines
Optimal SNR	On
GFactor	On
Condition number	Off
Rx coil diode switching	On
coil channel reordering	Off
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

\\USER\Feinberglab\Sequences\24ch tSNR tests\eja_gre_inplane_HF_noise

TA: 3:27 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: eja_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	60
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	100.0 %
Slice thickness	0.5 mm
TR	2420 ms
TE	18.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

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

Resolution

Base resolution	180
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
! Orientation	C > T-19.6
! Rotation	90.00 deg
! R >> L	96 mm
! F >> H	96 mm
! A >> P	36 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
Dark blood	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
Reordering	Linear
Asymmetric echo	Off
Bandwidth	80 Hz/Px
Flow comp.	Yes
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
B0/B1 mapping	None
FFT scale factor	0.10
Trigger per meas.	Off
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

\\USER\Feinberglab\Sequences\24ch tSNR tests\eja_gre_inplane_HF

TA: 3:27 PAT: 2 Voxel size: 0.5×0.5×0.5 mm Rel. SNR: 1.00 USER: eja_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	60
Dist. factor	0 %
Position	R7.4 P85.4 H2.0
Orientation	C > T-19.6
Phase enc. dir.	F >> H
Rotation	90.00 deg
Phase oversampling	0 %
FoV read	90 mm
FoV phase	100.0 %
Slice thickness	0.5 mm
TR	2420 ms
TE	18.0 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	L10-24;LV1-9

Contrast

MTC	Off
Magn. preparation	None
Flip angle	39 deg
Fat suppr.	Fat sat.
Water suppr.	None
SWI	Off
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution

Base resolution	180
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off
PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	36
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	Interleaved
Series	Interleaved
Saturation mode	Standard
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

LV1	On
LV2	On
LV3	On
LV4	On
LV5	On
LV6	On
LV7	On
LV8	On
LV9	On
L10	On
L11	On
L12	On
L13	On
L14	On
L15	On
L16	On
L17	On
L18	On
L19	On
L20	On
L21	On
L22	On
L23	On
L24	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	On
Coil Combine Mode	Sum of Squares
AutoAlign	---
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	R7.4 P85.4 H2.0
! Orientation	C > T-19.6
! Rotation	90.00 deg
! R >> L	96 mm
! F >> H	96 mm
! A >> P	36 mm

Physio

1st Signal/Mode	None
Segments	1
Tagging	None
Dark blood	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
Reordering	Linear
Asymmetric echo	Off
Bandwidth	80 Hz/Px
Flow comp.	Yes
RF pulse type	Low SAR
Gradient mode	Fast
Excitation	Slice-sel.
RF spoiling	On
B0/B1 mapping	None
FFT scale factor	0.10
Trigger per meas.	Off
TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz

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