

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_p8mm_SB1IPAT3_pf6_te23_tr3500_sat_for_reg

TA: 1:33 PAT: 3 Voxel size: 0.8x0.8x0.8 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 | 50 |
| Dist. factor | 0 % |
| Position | L2.1 A10.0 F9.9 |
| Orientation | T > C29.9 |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 180 mm |
| FoV phase | 77.7 % |
| Slice thickness | 0.80 mm |
| TR | 3500 ms |
| TE | 23.4 ms |
| Multi-band accel. factor | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 60 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 20 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|--------|
| Base resolution | 224 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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 |

Sat. region 1

| | |
|--------------|-------------------|
| Thickness | 50 mm |
| Position | L10.9 A51.7 F73.1 |
| Orientation | T > C-33.5 > S4.0 |
| Special sat. | None |

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |

| | |
|--------------------------|-----------------|
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L2.1 A10.0 F9.9 |
| Orientation | T > C29.9 |
| Rotation | 0.00 deg |
| R >> L | 180 mm |
| A >> P | 140 mm |
| F >> H | 40 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|-------------------------|------------|
| Introduction | Off |
| Bandwidth | 1174 Hz/Px |
| Flow comp. | No |
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| <hr/> | |
| SIR accel. factor | 1 |
| EPI factor | 174 |
| Gradient mode | Normal |
| RF spoiling | Off |
| <hr/> | |
| Excite pulse duration | 3640 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 | 0.10 |
| 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 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_MB2IPAT3_pf6_tr3000_m1v1test

TA: 5:09 PAT: 3 Voxel size: 1.4x1.4x1.4 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 | 80 |
| Dist. factor | 0 % |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 280 mm |
| FoV phase | 91.0 % |
| Slice thickness | 1.40 mm |
| TR | 3000 ms |
| TE | 24.0 ms |
| Multi-band accel. factor | 2 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 89 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 93 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-----------|
| Base resolution | 200 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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.

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| R >> L | 280 mm |
| A >> P | 255 mm |
| F >> H | 112 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|--------------|------------|
| Introduction | Off |
| Bandwidth | 1250 Hz/Px |
| Flow comp. | No |

| | |
|--------------------------|----------|
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| SIR accel. factor | 1 |
| EPI factor | 182 |
| Gradient mode | Normal |
| RF spoiling | Off |
| Excite pulse duration | 3640 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 | 0.10 |
| Send B1 shim trigger | Never |
| Triggering scheme | Standard |
| Starting ignore meas | 0 |
| Paradigm size | 2 |
| Multiplier | 1 |
| Step [1] | 1 |
| Step [2] | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_MB2IPAT3_pf6_tr3000_m1

TA: 6:36 PAT: 3 Voxel size: 1.4x1.4x1.4 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 | 80 |
| Dist. factor | 0 % |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 280 mm |
| FoV phase | 91.0 % |
| Slice thickness | 1.40 mm |
| TR | 3000 ms |
| TE | 24.0 ms |
| Multi-band accel. factor | 2 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 89 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 122 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-----------|
| Base resolution | 200 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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.

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| R >> L | 280 mm |
| A >> P | 255 mm |
| F >> H | 112 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|--------------|------------|
| Introduction | Off |
| Bandwidth | 1250 Hz/Px |
| Flow comp. | No |

| | |
|--------------------------|----------|
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| SIR accel. factor | 1 |
| EPI factor | 182 |
| Gradient mode | Normal |
| RF spoiling | Off |
| Excite pulse duration | 3640 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 | 0.10 |
| Send B1 shim trigger | Never |
| Triggering scheme | Standard |
| Starting ignore meas | 0 |
| Paradigm size | 2 |
| Multiplier | 1 |
| Step [1] | 1 |
| Step [2] | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_MB2IPAT3_pf6_tr3000_m1

TA: 6:36 PAT: 3 Voxel size: 1.4x1.4x1.4 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 | 80 |
| Dist. factor | 0 % |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 280 mm |
| FoV phase | 91.0 % |
| Slice thickness | 1.40 mm |
| TR | 3000 ms |
| TE | 24.0 ms |
| Multi-band accel. factor | 2 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 89 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 122 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-----------|
| Base resolution | 200 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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.

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| R >> L | 280 mm |
| A >> P | 255 mm |
| F >> H | 112 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|--------------|------------|
| Introduction | Off |
| Bandwidth | 1250 Hz/Px |
| Flow comp. | No |

| | |
|--------------------------|----------|
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| SIR accel. factor | 1 |
| EPI factor | 182 |
| Gradient mode | Normal |
| RF spoiling | Off |
| Excite pulse duration | 3640 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 | 0.10 |
| Send B1 shim trigger | Never |
| Triggering scheme | Standard |
| Starting ignore meas | 0 |
| Paradigm size | 2 |
| Multiplier | 1 |
| Step [1] | 1 |
| Step [2] | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_MB2IPAT3_pf6_tr3000_V1

TA: 5:09

PAT: 3

Voxel size: 1.4x1.4x1.4 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 | 80 |
| Dist. factor | 0 % |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 280 mm |
| FoV phase | 91.0 % |
| Slice thickness | 1.40 mm |
| TR | 3000 ms |
| TE | 24.0 ms |
| Multi-band accel. factor | 2 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 89 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 93 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-----------|
| Base resolution | 200 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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

| | |
|-----|-----|
| 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |

| | |
|--------------------------|-----------------|
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| R >> L | 280 mm |
| A >> P | 255 mm |
| F >> H | 112 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|--------------|------------|
| Introduction | Off |
| Bandwidth | 1250 Hz/Px |
| Flow comp. | No |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|--------------------------|----------|
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| SIR accel. factor | 1 |
| EPI factor | 182 |
| Gradient mode | Normal |
| RF spoiling | Off |
| Excite pulse duration | 3640 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 | 0.10 |
| Send B1 shim trigger | Never |
| Triggering scheme | Standard |
| Starting ignore meas | 0 |
| Paradigm size | 2 |
| Multiplier | 1 |
| Step [1] | 1 |
| Step [2] | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_MB2IPAT3_pf6_tr3000_v1

TA: 5:09 PAT: 3 Voxel size: 1.4x1.4x1.4 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 | 80 |
| Dist. factor | 0 % |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 280 mm |
| FoV phase | 91.0 % |
| Slice thickness | 1.40 mm |
| TR | 3000 ms |
| TE | 24.0 ms |
| Multi-band accel. factor | 2 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 89 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 93 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-----------|
| Base resolution | 200 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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.

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L1.4 A31.7 F4.9 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| R >> L | 280 mm |
| A >> P | 255 mm |
| F >> H | 112 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|--------------|------------|
| Introduction | Off |
| Bandwidth | 1250 Hz/Px |
| Flow comp. | No |

| | |
|--------------------------|----------|
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| SIR accel. factor | 1 |
| EPI factor | 182 |
| Gradient mode | Normal |
| RF spoiling | Off |
| Excite pulse duration | 3640 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 | 0.10 |
| Send B1 shim trigger | Never |
| Triggering scheme | Standard |
| Starting ignore meas | 0 |
| Paradigm size | 2 |
| Multiplier | 1 |
| Step [1] | 1 |
| Step [2] | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\GE_1p4mm_SB1IPAT3_pf6_te24_tr3000

TA: 1:33 PAT: 3 Voxel size: 0.8x0.8x0.8 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 | 50 |
| Dist. factor | 0 % |
| Position | L2.1 A10.0 F9.9 |
| Orientation | T > C29.9 |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 180 mm |
| FoV phase | 77.7 % |
| Slice thickness | 0.80 mm |
| TR | 3500 ms |
| TE | 23.4 ms |
| Multi-band accel. factor | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 60 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 20 |
| Delay in TR | 0 ms |
| Multiple series | Off |

Resolution

| | |
|-----------------------|--------|
| Base resolution | 224 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| 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 |

Sat. region 1

| | |
|--------------|-------------------|
| Thickness | 50 mm |
| Position | L10.9 A51.7 F73.1 |
| Orientation | T > C-33.5 > S4.0 |
| Special sat. | None |

| | |
|------------------|------|
| Table position | H |
| Table position | 0 mm |
| Inline Composing | 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 |
| Coil Combine Mode | Sum of Squares |
| AutoAlign | --- |
| Auto Coil Select | Default |

| | |
|--------------------------|-----------------|
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | On |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | L2.1 A10.0 F9.9 |
| Orientation | T > C29.9 |
| Rotation | 0.00 deg |
| R >> L | 180 mm |
| A >> P | 140 mm |
| F >> H | 40 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 | 12 |
| 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 |
| Motion correction | Off |
| Spatial filter | Off |

Sequence

| | |
|-------------------------|------------|
| Introduction | Off |
| Bandwidth | 1174 Hz/Px |
| Flow comp. | No |
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| <hr/> | |
| SIR accel. factor | 1 |
| EPI factor | 174 |
| Gradient mode | Normal |
| RF spoiling | Off |
| <hr/> | |
| Excite pulse duration | 3640 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 | 0.10 |
| 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 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Jen\M1V1 pilot- ST\t1_mpr_sag_p9mm_iso

TA: 6:14 PAT: Off Voxel size: 0.9x0.9x0.9 mm Rel. SNR: 1.00 SIEMENS: tfl

Properties

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

Routine

| | |
|--------------------|-------------------|
| Slab group 1 | |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 18.2 % |
| Slices per slab | 176 |
| FoV read | 230 mm |
| FoV phase | 87.5 % |
| Slice thickness | 0.90 mm |
| TR | 1900 ms |
| TE | 2.16 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Elliptical filter |
| Coil elements | 8CH |

Contrast

| | |
|-------------------|------------------|
| Magn. preparation | Non-sel. IR |
| T1 | 900 ms |
| Flip angle | 9 deg |
| Fat suppr. | None |
| Water suppr. | None |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 256 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 7/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |
| 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 | Single shot |
| Series | Ascending |
| Table position | H |
| Table position | 0 mm |
| Inline Composing | Off |

System

| | |
|--------------------------|------------------|
| 8CH | 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 | 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 |
| Dark blood | Off |
| Resp. control | Off |

Inline

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

Sequence

| | |
|---------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Asymmetric echo | Allowed |
| Bandwidth | 200 Hz/Px |
| Flow comp. | No |
| Echo spacing | 6.3 ms |
| RF pulse type | Normal |
| Gradient mode | Normal |
| Excitation | Non-sel. |

| RF spoiling On

Table of contents

\\USER

Feinberglab
Jen

M1V1 pilot- ST

20190703_m1v1 test 2Dipi
GE_p8mm_SB1IPAT3_pf6_te23_tr3500_sat_for_reg
GE_1p4mm_MB2IPAT3_pf6_tr3000_m1v1test
071119
GE_1p4mm_MB2IPAT3_pf6_tr3000_m1
GE_1p4mm_MB2IPAT3_pf6_tr3000_m1
GE_1p4mm_MB2IPAT3_pf6_tr3000_V1
GE_1p4mm_MB2IPAT3_pf6_tr3000_v1
GE_1p4mm_SB1IPAT3_pf6_te24_tr3000
t1_mpr_sag_p9mm_iso