# SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Emily\171208\Localizer DLPFC

TA: 1:05 PAT: Off Voxel size: 1.0×1.0×5.0 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 | Off |
| Wait for user to start | Off |
| Start measurements | single |

## Routine

| | |
|---|---|
| Slice group 1 | |
| Slices | 9 |
| Dist. factor | 200 % |
| Position | R7.2 A19.0 F6.3 |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Slice group 2 | |
| Slices | 5 |
| Dist. factor | 80 % |
| Position | R8.2 A20.7 H10.1 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Slice group 3 | |
| Slices | 7 |
| Dist. factor | 200 % |
| Position | R8.2 A46.4 F8.3 |
| Orientation | Coronal |
| Phase enc. dir. | R >> L |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 3000 ms |
| TE | 3.17 ms |
| Averages | 1 |
| Concatenations | 21 |
| Filter | None |
| Coil elements | A32 |

## Contrast

| | |
|---|---|
| TD | 0 ms |
| Magn. preparation | Slice-sel. IR |
| TI | 1100 ms |
| Flip angle | 6 deg |
| Fat suppr. | None |
| Water suppr. | None |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution

| | |
|---|---|
| Base resolution | 192 |
| Phase resolution | 100 % |
| Phase 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 | 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 | 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 | 220.000 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 | 2D |
| Asymmetric echo | Off |
| Bandwidth | 240 Hz/Px |
| Flow comp. | No |
| Echo spacing | 6.4 ms |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |

# SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\UserProtocols\Emily\171208\epi_sms3_ip2_2mm_10_20GLM

TA: 6:18 PAT: 2 Voxel size: 2.0×2.0×2.0 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 | 57 |
| Dist. factor | 0 % |
| Position | L0.0 A19.0 H6.2 |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| FoV read | 195 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 1000 ms |
| TE | 23 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | A32 |

## Contrast

| | |
|---|---|
| MTC | Off |
| Flip angle | 65 deg |
| Fat suppr. | Fat sat. |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 360 |
| Delay in TR | 0 ms |
| Multiple series | Off |

## Resolution

| | |
|---|---|
| Base resolution | 98 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 24 |
| 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

| | |
|---|---|
| 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 | --- |
| Auto Coil Select | Default |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | Off |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| ! Position | R6.3 A21.1 H26.4 |
| ! Orientation | T > C3.0 |
| ! Rotation | 0.00 deg |
| ! R >> L | 120 mm |
| ! A >> P | 162 mm |
| ! F >> H | 50 mm |

## Physio

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

## BOLD

| | |
|---|---|
| GLM Statistics | On |
| Dynamic t-maps | Off |
| Starting ignore meas | 0 |
| Ignore after transition | 1 |
| Model transition states | Off |
| 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] | Active |
| 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 | 1890 Hz/Px |
| Free echo spacing | Off |
| Echo spacing | 0.63 ms |
| EPI factor | 98 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Dummy Scans | 3 |
| Dummy Scans | 4 |
| SMS Factor | 3 |
| RF Clip | 0 |
| VERSE Factor | 1.00 |
| SMS Shift | 2 |
| Kernel Size | 5x5 |
| Compression Factor | 1.00 |

\\USER\UserProtocols\Emily\171208\FA4_VASO_122_130mmFOV

TA: 11:04 PAT: 3 Voxel size: 0.9×0.9×1.1 mm Rel. SNR: 1.00 UNKNOWN:

### 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 | R6.3 A42.8 H29.1 |
| Orientation | T > C24.1 |
| Phase enc. dir. | P >> A |
| Rotation | 180.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 9.1 % |
| Slices per slab | 22 |
| FoV read | 150.0 mm |
| FoV phase | 100.0 % |
| Slice thickness | 1.10 mm |
| TR | 2006.00 ms |
| TE | 20 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | A32 |

### Contrast

| | |
|---|---|
| Perfusion mode | SS-SI VASO |
| TI2 | 700 ms |
| TI1 | 50 ms |
| TI1s | 50 ms |
| Flip angle | 4 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Weak |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 331 |
| Delay in TR | 0 ms |
| Multiple series | Off |
| Perfusion mode | PICORE Q2T |
| Inversion time 1 | 50 ms |
| Saturation stop time | 50 ms |
| Inversion time 2 | 700.0 ms |
| Flow limit | 100 cm/s |

### Resolution

| | |
|---|---|
| Base resolution | 162 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| Ref. lines PE | 48 |
| Accel. factor 3D | 1 |
| Ref. lines 3D | 24 |
| Reference scan mode | Separate |
| Prescan Normalize | Off |
| Raw filter | Off |
| Elliptical filter | Off |
| Hamming | Off |

### Geometry

| | |
|---|---|
| Multi-slice mode | Interleaved |
| Series | Ascending |
| Special sat. | Parallel F |
| Gap | 25.0 mm |
| Thickness | 100 mm |
| 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 | 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| ! Position | L0.0 A28.9 H28.3 |
| ! Orientation | T > C6.9 |
| ! Rotation | 0.00 deg |
| ! R >> L | 120 mm |
| ! A >> P | 162 mm |
| ! F >> H | 54 mm |

### Physio

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

### BOLD

| | |
|---|---|
| Motion correction | Off |
| Spatial filter | Off |

### Sequence

| | |
|---|---|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 1144 Hz/Px |
| Free echo spacing | Off |
| Echo spacing | 0.98 ms |
| EPI factor | 162 |

| | |
|---|---|
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Ampl | 100 |
| BWDTH | 150 3.1kHz |
| ph.skip 4 Robert (the one) | 30 |
| use Ernst angle | Off |
| Maxwell Correction | Off |
| log physio files | Off |
| FFT scale | 1.00 |
| dummy prepscan time | 3 s |
| z shim | 0.00 mT/m*ms |
| RF duration | 2000 us |
| RF BWTP | 25.0 |
| Renzo: Delta TI | 51 ms |
| EFFECTIVE TR | 48144 ms |
| PatPartitions | 24 |
| EPI phase correction | local |
| PAT refscan mode | Flash |
| FlashRef BaseRes | 162 |
| FlashRef BW | 141 Hz/px |
| FlashRef TE | 4800 us |
| FlashRef FA | 5 deg |
| use CAIPI | Off |

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