

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\localizer_200V

TA: 0:16 PAT: 2 Voxel size: 1.2x1.1x3.0 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 | On |
| Load images to graphic segments | On |
| Auto open inline display | Off |
| Start measurement without further preparation | On |
| Wait for user to start | Off |
| Start measurements | single |

| | |
|-----------------------|------------|
| Phase resolution | 90 % |
| Phase partial Fourier | 6/8 |
| Interpolation | On |
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 24 |
| Reference scan mode | Integrated |
| Image Filter | Off |
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |
| Raw filter | Off |
| Elliptical filter | Off |

Routine

| | |
|--------------------|-------------|
| Slice group 1 | |
| Slices | 5 |
| Dist. factor | 200 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Slice group 2 | |
| Slices | 5 |
| Dist. factor | 200 % |
| Position | Isocenter |
| Orientation | Coronal |
| Phase enc. dir. | R >> L |
| Rotation | 0.00 deg |
| Slice group 3 | |
| Slices | 5 |
| Dist. factor | 200 % |
| 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 | B4;M2,3;T1 |

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 |
| 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 | Off |
| Shim mode | Tune up |
| Adjust with body coil | Off |
| Confirm freq. adjustment | Off |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 200.000 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 |

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 |
|-----------------|-----|

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 |
| <hr/> | |
| Wash - In | Off |
| Wash - Out | Off |
| TTP | Off |
| PEI | Off |
| MIP - time | Off |
| <hr/> | |
| MapIt | None |
| Contrasts | 1 |

Sequence

| | |
|---------------------|------------|
| Introduction | On |
| Dimension | 2D |
| Phase stabilisation | Off |
| Asymmetric echo | Allowed |
| Bandwidth | 320 Hz/Px |
| Flow comp. | No |
| <hr/> | |
| RF pulse type | Normal |
| Gradient mode | Whisper |
| Excitation | Slice-sel. |
| RF spoiling | On |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\b1map_230V

TA: 1:09

Voxel size: 3.9x3.9x5.0 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 | 8 |
| Dist. factor | 200 % |
| Position | L0.0 A15.0 F2.1 |
| 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 | B4;M2,3;T1 |

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 | Ascending |
| Navigator 1 | |
| Position | R37.1 P12.8 H21.6 |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| Base size phase | 40 mm |
| Base size read | 40 mm |
| Thickness | 40 mm |
| Table position | H |
| Table position | 0 mm |
| Inline Composing | Off |

System

| | |
|----|----|
| T1 | On |
| M2 | On |
| B4 | On |

M3 On
V32 Off

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 230.000 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 1800.0 ms
Angles 1
Amplitude Weighting Linear
Scale Bar Enabled
Raw Data Disabled

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\mp2rage_0.7mm_TR4500

TA: 7:36 PAT: 3 Voxel size: 0.8x0.8x0.8 mm Rel. SNR: 1.00 USER: mp2rage_wip602B

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 |

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |
| Raw filter | Off |
| Elliptical filter | Off |

Geometry

| | |
|------------------|-------------|
| Multi-slice mode | Single shot |
| Series | Interleaved |
| <hr/> | |
| Table position | H |
| Table position | 0 mm |
| Inline Composing | Off |

Routine

| | |
|--------------------|------------------|
| Slab group 1 | |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | L1.2 A28.3 F30.2 |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| Rotation | 90.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 8.3 % |
| Slices per slab | 192 |
| FoV read | 200 mm |
| FoV phase | 90.6 % |
| Slice thickness | 0.80 mm |
| TR | 4500 ms |
| TE | 3.33 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

System

| | |
|--------------------------|------------------|
| T1 | On |
| M2 | On |
| B4 | On |
| M3 | On |
| V32 | Off |
| <hr/> | |
| 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 |
| <hr/> | |
| Shim mode | Standard |
| Adjust with body coil | Off |
| Confirm freq. adjustment | Off |
| Assume Silicone | Off |
| ! Ref. amplitude 1H | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| ! Position | L1.9 A24.9 F9.3 |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! F >> H | 108 mm |
| ! A >> P | 160 mm |
| ! R >> L | 127 mm |

Contrast

| | |
|------------------------|-------------------|
| Magn. preparation | Non-sel. IR |
| T1 1 | 1000 ms |
| T1 2 | 3200 ms |
| Flip angle 1 | 4 deg |
| Flip angle 2 | 4 deg |
| Fat suppr. | Water excit. fast |
| Water suppr. | None |
| 2nd Inversion-Contrast | On |
| <hr/> | |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

Physio

| | |
|-----------------|------|
| 1st Signal/Mode | None |
| <hr/> | |
| Dark blood | Off |
| <hr/> | |
| Resp. control | Off |

Resolution

| | |
|-----------------------|------------|
| Base resolution | 256 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | 6/8 |
| Interpolation | Off |
| <hr/> | |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| Ref. lines PE | 36 |
| Accel. factor 3D | 1 |
| Reference scan mode | Integrated |

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

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|-----------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Bandwidth | 200 Hz/Px |
| Flow comp. | Slice |
| Echo spacing | 8.1 ms |
| <hr/> | |
| RF pulse type | Fast |
| Gradient mode | Fast |
| Excitation | Non-sel. |
| RF spoiling | On |
| <hr/> | |
| FFT Scale Factor | 200 % |
| Line/Partition Swap | Off |
| Homodyne Phase Filter | Off |
| Flat Image | On |
| T1 Map | On |
| Division Image | Off |
| ExtInvPulseOn | On |
| OffResFreqInv | 0 |
| Invflipangle | 970 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_grase_clean_VASO_V10t

TA: 12:03 PAT: Off Voxel size: 0.8x0.8x1.5 mm Rel. SNR: 1.00 USER: BP_grase_clean_VASO_V10t

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 | 0 % |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Phase enc. dir. | A >> P |
| Rotation | -20.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 99 mm |
| FoV phase | 25.8 % |
| Slice thickness | 1.5 mm |
| TR | 3000 ms |
| TE | 45.9 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-------------|
| Magn. preparation | Non-sel. IR |
| TI | 1100 ms |
| Flip angle | 165 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magn./Phase |
| Measurements | 241 |
| Pause after meas. | 0.0 s |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 132 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Slice partial Fourier | 5/8 |
| Interpolation | Off |
| PAT mode | None |
| Prescan Normalize | Off |
| Raw filter | Off |

Geometry

| | |
|---------------|-------------|
| Series | Interleaved |
| Sat. region 1 | |
| Thickness | 26 mm |

| | |
|------------------|------------------|
| Position | R1.4 P6.6 H0.7 |
| Orientation | C > S25.3 > T6.2 |
| 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 |
| 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Rotation | -20.00 deg |
| R >> L | 99 mm |
| A >> P | 26 mm |
| F >> H | 12 mm |

Physio

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

Composing

Sequence

| | |
|----------------------|------------|
| Introduction | Off |
| Dimension | 3D |
| Reordering | Centric |
| Contrasts | 2 |
| Bandwidth | 1052 Hz/Px |
| Echo spacing | 1.1 ms |
| Turbo factor | 5 |
| EPI factor | 34 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| BIR4: 2nd segm phase | 338 |
| BIR4: duration | 6400 |
| excite duration | 2560 |
| refoc duration | 2560 |
| excite BWTP | 20.8 |
| refoc BWTP | 5.2 |
| phase encoding | ON |
| Maxwell compensation | Off |
| ICE program | single |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_grase_clean_VASO_V10t_noClip

TA: 12:03 PAT: Off Voxel size: 0.8x0.8x1.5 mm Rel. SNR: 1.00 USER: BP_grase_clean_VASO_V10_noClip

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 | 0 % |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Phase enc. dir. | A >> P |
| Rotation | -20.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 99 mm |
| FoV phase | 25.8 % |
| Slice thickness | 1.5 mm |
| TR | 3000 ms |
| TE | 45.9 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-------------|
| Magn. preparation | Non-sel. IR |
| T1 | 1100 ms |
| Flip angle | 165 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 241 |
| Pause after meas. | 0.0 s |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 132 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Slice partial Fourier | 5/8 |
| Interpolation | Off |
| PAT mode | None |
| Prescan Normalize | Off |
| Raw filter | Off |

Geometry

| | |
|---------------|-------------|
| Series | Interleaved |
| Sat. region 1 | |
| Thickness | 26 mm |

| | |
|------------------|------------------|
| Position | R1.4 P6.6 H0.7 |
| Orientation | C > S25.3 > T6.2 |
| 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 |
| 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Rotation | -20.00 deg |
| R >> L | 99 mm |
| A >> P | 26 mm |
| F >> H | 12 mm |

Physio

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

Composing

Sequence

| | |
|----------------------|------------|
| Introduction | Off |
| Dimension | 3D |
| Reordering | Centric |
| Contrasts | 2 |
| Bandwidth | 1052 Hz/Px |
| Echo spacing | 1.1 ms |
| Turbo factor | 5 |
| EPI factor | 34 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| BIR4: 2nd segm phase | 338 |
| BIR4: duration | 5120 |
| excite duration | 2560 |
| refoc duration | 2560 |
| excite BWTP | 10.4 |
| refoc BWTP | 5.2 |
| phase encoding | ON |
| Maxwell compensation | Off |
| ICE program | single |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\VASO_116_phantom_M1paper

TA: 12:05 PAT: 2 Voxel size: 0.7x0.7x1.5 mm Rel. SNR: 1.00 USER: VASO_116

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 | R37.8 A6.9 H16.3 |
| Orientation | T > S25.8 > C-11.1 |
| Phase enc. dir. | R >> L |
| Rotation | 70.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 32.8 mm |
| FoV phase | 300.0 % |
| Slice thickness | 1.50 mm |
| TR | 1500.00 ms |
| TE | 24 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|----------------------|---------------|
| Perfusion mode | Picore Q2TIPS |
| T12 | 900 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 26 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magn./Phase |
| Measurements | 483 |
| 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 | 900.0 ms |
| Flow limit | 100.0 cm/s |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 44 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |

| | |
|---------------------|----------|
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 36 |
| Accel. factor 3D | 1 |
| Ref. lines 3D | 8 |
| 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

| | |
|-------------------|----------------|
| 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 | 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 | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R37.8 A6.9 H16.3 |
| Orientation | T > S25.8 > C-11.1 |
| Rotation | 160.00 deg |
| R >> L | 99 mm |
| A >> P | 33 mm |
| F >> H | 12 mm |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 1062 Hz/Px |
| Free echo spacing | Off |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|----------------------------|--------------|
| Echo spacing | 1.07 ms |
| EPI factor | 132 |
| RF pulse type | Normal |
| Gradient mode | Normal |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Ampl | 120 |
| 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 | 2560 us |
| RF BWTP | 25.0 |
| Renzo: Delta TI | 71 ms |
| EFFECTIVE TR | 12000 ms |
| PatPartitions | 8 |
| EPI phase correction | local |
| PAT refscan mode | Flash |
| FlashRef BaseRes | 44 |
| FlashRef BW | 136 Hz/px |
| FlashRef TE | 5000 us |
| FlashRef FA | 5 deg |
| use CAIPI | Off |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\VASO_116_phantom_V1

TA: 13:16

PAT: 3

Voxel size: 0.8x0.8x1.0 mm

Rel. SNR: 1.00

USER: VASO_116

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 | R37.8 A6.9 H16.3 |
| Orientation | Coronal |
| Phase enc. dir. | H >> F |
| Rotation | -90.00 deg |
| Phase oversampling | 24 % |
| Slice oversampling | 9.1 % |
| Slices per slab | 22 |
| FoV read | 130.0 mm |
| FoV phase | 98.8 % |
| Slice thickness | 1.00 mm |
| TR | 2525.90 ms |
| TE | 24 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|----------------------|---------------|
| Perfusion mode | Picore Q2TIPS |
| T12 | 700 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 4 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magn./Phase |
| Measurements | 315 |
| 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 | 96 |
| 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 A |
| Gap | 25.0 mm |
| Thickness | 100 mm |
| 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 |
| 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 | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R37.8 A6.9 H16.3 |
| Orientation | Coronal |
| Rotation | -90.00 deg |
| R >> L | 130 mm |
| F >> H | 129 mm |
| A >> P | 22 mm |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 1028 Hz/Px |
| Free echo spacing | Off |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|----------------------------|--------------|
| Echo spacing | 1.1 ms |
| EPI factor | 160 |
| 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 | 73 ms |
| EFFECTIVE TR | 60621 ms |
| PatPartitions | 24 |
| EPI phase correction | local |
| PAT refscan mode | Flash |
| FlashRef BaseRes | 162 |
| FlashRef BW | 1000 Hz/px |
| FlashRef TE | 4800 us |
| FlashRef FA | 5 deg |
| use CAIPI | Off |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_grase_clean_VASO_V10_noClip_tSNR_2560_20.8_2560_5.2
TA: 1:15 PAT: Off Voxel size: 0.8x0.8x1.5 mm Rel. SNR: 1.00 USER: BP_grase_clean_VASO_V10_noClip

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 | 0 % |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Phase enc. dir. | A >> P |
| Rotation | -20.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 99 mm |
| FoV phase | 25.8 % |
| Slice thickness | 1.5 mm |
| TR | 3000 ms |
| TE | 45.9 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|----------------------|-------------|
| Magn. preparation | Non-sel. IR |
| T1 | 1100 ms |
| Flip angle | 165 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 25 |
| Pause after meas. 1 | 0.0 s |
| Pause after meas. 2 | 0.0 s |
| Pause after meas. 3 | 0.0 s |
| Pause after meas. 4 | 0.0 s |
| Pause after meas. 5 | 0.0 s |
| Pause after meas. 6 | 0.0 s |
| Pause after meas. 7 | 0.0 s |
| Pause after meas. 8 | 0.0 s |
| Pause after meas. 9 | 0.0 s |
| Pause after meas. 10 | 0.0 s |
| Pause after meas. 11 | 0.0 s |
| Pause after meas. 12 | 0.0 s |
| Pause after meas. 13 | 0.0 s |
| Pause after meas. 14 | 0.0 s |
| Pause after meas. 15 | 0.0 s |
| Pause after meas. 16 | 0.0 s |
| Pause after meas. 17 | 0.0 s |
| Pause after meas. 18 | 0.0 s |

| | |
|----------------------|-------|
| Pause after meas. 19 | 0.0 s |
| Pause after meas. 20 | 0.0 s |
| Pause after meas. 21 | 0.0 s |
| Pause after meas. 22 | 0.0 s |
| Pause after meas. 23 | 0.0 s |
| Pause after meas. 24 | 0.0 s |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 132 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Slice partial Fourier | 5/8 |
| Interpolation | Off |
| PAT mode | None |
| Prescan Normalize | Off |
| Raw filter | Off |

Geometry

| | |
|------------------|------------------|
| Series | Interleaved |
| Sat. region 1 | |
| Thickness | 26 mm |
| Position | R1.4 P6.6 H0.7 |
| Orientation | C > S25.3 > T6.2 |
| 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 |
| 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Rotation | -20.00 deg |
| R >> L | 99 mm |
| A >> P | 26 mm |
| F >> H | 12 mm |

Physio

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

Sequence

| | |
|----------------------|------------|
| Introduction | Off |
| Dimension | 3D |
| Reordering | Centric |
| Contrasts | 2 |
| Bandwidth | 1052 Hz/Px |
| Echo spacing | 1.1 ms |
| <hr/> | |
| Turbo factor | 5 |
| EPI factor | 34 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| <hr/> | |
| BIR4: 2nd segm phase | 338 |
| BIR4: duration | 5120 |
| excite duration | 2560 |
| refoc duration | 2560 |
| excite BWTP | 20.8 |
| refoc BWTP | 5.2 |
| phase encoding | ON |
| Maxwell compensation | Off |
| ICE program | single |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | | | | |
|--|----------|----------------------------|----------------|--------------------------------------|
| \\USER\Feinberglab\Tanja\20180510\BP_grase_clean_VASO_V10_noClip_tSNR_2560_10.4_2560_5.2 | | | | |
| TA: 1:15 | PAT: Off | Voxel size: 0.8x0.8x1.5 mm | Rel. SNR: 1.00 | USER: BP_grase_clean_VASO_V10_noClip |

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 | 0 % |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Phase enc. dir. | A >> P |
| Rotation | -20.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 99 mm |
| FoV phase | 25.8 % |
| Slice thickness | 1.5 mm |
| TR | 3000 ms |
| TE | 45.9 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|----------------------|-------------|
| Magn. preparation | Non-sel. IR |
| T1 | 1100 ms |
| Flip angle | 165 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 25 |
| Pause after meas. 1 | 0.0 s |
| Pause after meas. 2 | 0.0 s |
| Pause after meas. 3 | 0.0 s |
| Pause after meas. 4 | 0.0 s |
| Pause after meas. 5 | 0.0 s |
| Pause after meas. 6 | 0.0 s |
| Pause after meas. 7 | 0.0 s |
| Pause after meas. 8 | 0.0 s |
| Pause after meas. 9 | 0.0 s |
| Pause after meas. 10 | 0.0 s |
| Pause after meas. 11 | 0.0 s |
| Pause after meas. 12 | 0.0 s |
| Pause after meas. 13 | 0.0 s |
| Pause after meas. 14 | 0.0 s |
| Pause after meas. 15 | 0.0 s |
| Pause after meas. 16 | 0.0 s |
| Pause after meas. 17 | 0.0 s |
| Pause after meas. 18 | 0.0 s |

| | |
|----------------------|-------|
| Pause after meas. 19 | 0.0 s |
| Pause after meas. 20 | 0.0 s |
| Pause after meas. 21 | 0.0 s |
| Pause after meas. 22 | 0.0 s |
| Pause after meas. 23 | 0.0 s |
| Pause after meas. 24 | 0.0 s |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 132 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Slice partial Fourier | 5/8 |
| Interpolation | Off |
| PAT mode | None |
| Prescan Normalize | Off |
| Raw filter | Off |

Geometry

| | |
|------------------|------------------|
| Series | Interleaved |
| Sat. region 1 | |
| Thickness | 26 mm |
| Position | R1.4 P6.6 H0.7 |
| Orientation | C > S25.3 > T6.2 |
| 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 |
| 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R43.2 A10.6 H23.0 |
| Orientation | T > S31.6 > C-3.3 |
| Rotation | -20.00 deg |
| R >> L | 99 mm |
| A >> P | 26 mm |
| F >> H | 12 mm |

Physio

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

Sequence

| | |
|----------------------|------------|
| Introduction | Off |
| Dimension | 3D |
| Reordering | Centric |
| Contrasts | 2 |
| Bandwidth | 1052 Hz/Px |
| Echo spacing | 1.1 ms |
| <hr/> | |
| Turbo factor | 5 |
| EPI factor | 34 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| <hr/> | |
| BIR4: 2nd segm phase | 338 |
| BIR4: duration | 5120 |
| excite duration | 2560 |
| refoc duration | 2560 |
| excite BWTP | 10.4 |
| refoc BWTP | 5.2 |
| phase encoding | ON |
| Maxwell compensation | Off |
| ICE program | single |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_ep3d_bold_multiecho_AS

TA: 0:10 PAT: Off Voxel size: 7.1x2.3x1.0 mm Rel. SNR: 1.00 USER: BP_ep3d_bold_multiecho_AS

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 | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 32 |
| FoV read | 150.0 mm |
| FoV phase | 300.0 % |
| Slice thickness | 1.00 mm |
| TR | 5000.00 ms |
| TE | 52 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | T1 |

Contrast

| | |
|----------------------|------------|
| Perfusion mode | SS-SI VASO |
| T12 | 1100 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 90 deg |
| Fat suppr. | None |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 2 |
| 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 | 1100.0 ms |
| Flow limit | 100 cm/s |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 64 |
| Phase resolution | 33 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | Off |
| Interpolation | Off |
| PAT mode | None |

| | |
|-------------------|-----|
| 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

| | |
|--------------------------|----------------|
| 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 |
| 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 | 0.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | Isocenter |
| Orientation | Transversal |
| Rotation | 90.00 deg |
| A >> P | 450 mm |
| R >> L | 150 mm |
| F >> H | 32 mm |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 752 Hz/Px |
| Free echo spacing | Off |
| Echo spacing | 1.4 ms |
| EPI factor | 63 |
| 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 | 2560 us |
| RF BWTP | 5.2 |
| Renzo: Delta TI | 102 ms |
| EFFECTIVE TR | 160000 ms |
| PatPartitions | 32 |
| EPI phase correction | local |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_ep3d_bold_multiecho_ASL_ReconAlgoNONE

TA: 0:10 PAT: Off Voxel size: 7.1x2.3x1.0 mm Rel. SNR: 1.00 USER: BP_ep3d_bold_multiecho_ASL_Recor

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 | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 32 |
| FoV read | 150.0 mm |
| FoV phase | 300.0 % |
| Slice thickness | 1.00 mm |
| TR | 5000.00 ms |
| TE | 52 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | T1 |

Contrast

| | |
|----------------------|------------|
| Perfusion mode | SS-SI VASO |
| T12 | 1100 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 90 deg |
| Fat suppr. | None |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 2 |
| 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 | 1100.0 ms |
| Flow limit | 100 cm/s |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 64 |
| Phase resolution | 33 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | Off |
| Interpolation | Off |
| PAT mode | None |

| | |
|-------------------|-----|
| 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

| | |
|--------------------------|----------------|
| 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 |
| 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 | 0.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | Isocenter |
| Orientation | Transversal |
| Rotation | 90.00 deg |
| A >> P | 450 mm |
| R >> L | 150 mm |
| F >> H | 32 mm |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 752 Hz/Px |
| Free echo spacing | Off |
| Echo spacing | 1.4 ms |
| EPI factor | 63 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|----------------------------|--------------|
| 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 | 2560 us |
| RF BWTP | 5.2 |
| Renzo: Delta TI | 102 ms |
| EFFECTIVE TR | 160000 ms |
| PatPartitions | 32 |
| EPI phase correction | local |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_ep3d_bold_multiecho_ASL_ReconAlgoPE

TA: 0:10 PAT: Off Voxel size: 7.1x2.3x1.0 mm Rel. SNR: 1.00 USER: BP_ep3d_bold_multiecho_ASL_Recor

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 |

| | |
|-------------------|-----|
| 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 |

Routine

| | |
|--------------------|-------------|
| Slab group 1 | |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | Isocenter |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Rotation | 0.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 32 |
| FoV read | 150.0 mm |
| FoV phase | 300.0 % |
| Slice thickness | 1.00 mm |
| TR | 5000.00 ms |
| TE | 52 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | T1 |

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 |
| 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 | 0.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | Isocenter |
| Orientation | Transversal |
| Rotation | 90.00 deg |
| A >> P | 450 mm |
| R >> L | 150 mm |
| F >> H | 32 mm |

Contrast

| | |
|----------------------|------------|
| Perfusion mode | SS-SI VASO |
| T12 | 1100 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 90 deg |
| Fat suppr. | None |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 2 |
| 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 | 1100.0 ms |
| Flow limit | 100 cm/s |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 752 Hz/Px |
| Free echo spacing | Off |
| Echo spacing | 1.4 ms |
| EPI factor | 63 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 64 |
| Phase resolution | 33 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | Off |
| Interpolation | Off |
| PAT mode | None |

| | |
|----------------------------|--------------|
| 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 | 2560 us |
| RF BWTP | 5.2 |
| Renzo: Delta TI | 102 ms |
| EFFECTIVE TR | 160000 ms |
| PatPartitions | 32 |
| EPI phase correction | local |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\mp2rage_0.7mm_TR4500

TA: 3:51 PAT: 3 Voxel size: 0.8x0.8x0.8 mm Rel. SNR: 1.00 USER: mp2rage_wip602B

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 |

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |
| Raw filter | Off |
| Elliptical filter | Off |

Geometry

| | |
|------------------|-------------|
| Multi-slice mode | Single shot |
| Series | Interleaved |
| Table position | H |
| Table position | 0 mm |
| Inline Composing | Off |

Routine

| | |
|--------------------|------------------|
| Slab group 1 | |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | R3.0 A28.1 H16.8 |
| Orientation | Transversal |
| Phase enc. dir. | R >> L |
| Rotation | 90.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 11.1 % |
| Slices per slab | 72 |
| FoV read | 154 mm |
| FoV phase | 84.4 % |
| Slice thickness | 0.80 mm |
| TR | 3530 ms |
| TE | 3.33 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

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 | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| ! Position | L1.9 A24.9 F9.3 |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! F >> H | 108 mm |
| ! A >> P | 160 mm |
| ! R >> L | 127 mm |

Contrast

| | |
|------------------------|-------------------|
| Magn. preparation | Non-sel. IR |
| TI 1 | 1000 ms |
| TI 2 | 3200 ms |
| Flip angle 1 | 4 deg |
| Flip angle 2 | 4 deg |
| Fat suppr. | Water excit. fast |
| Water suppr. | None |
| 2nd Inversion-Contrast | On |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

Physio

| | |
|-----------------|------|
| 1st Signal/Mode | None |
| Dark blood | Off |
| Resp. control | Off |

Resolution

| | |
|-----------------------|------------|
| Base resolution | 192 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | 6/8 |
| Interpolation | Off |
| PAT mode | GRAPPA |
| Accel. factor PE | 3 |
| Ref. lines PE | 36 |
| Accel. factor 3D | 1 |
| Reference scan mode | Integrated |

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

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|-----------------------|-----------|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Bandwidth | 200 Hz/Px |
| Flow comp. | Slice |
| Echo spacing | 8.1 ms |
| <hr/> | |
| RF pulse type | Fast |
| Gradient mode | Fast |
| Excitation | Non-sel. |
| RF spoiling | On |
| <hr/> | |
| FFT Scale Factor | 200 % |
| Line/Partition Swap | Off |
| Homodyne Phase Filter | Off |
| Flat Image | On |
| T1 Map | On |
| Division Image | Off |
| ExtInvPulseOn | On |
| OffResFreqInv | 0 |
| Invflipangle | 970 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\BP_grase_clean_BOLDonly_V04_TR3000

TA: 12:03 PAT: Off Voxel size: 0.8x0.8x1.5 mm Rel. SNR: 1.00 USER: BP_grase_clean_VASO_V04

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 | 0 % |
| Position | R34.6 A6.7 H18.2 |
| Orientation | T > S32.4 > C-12.7 |
| Phase enc. dir. | A >> P |
| Rotation | -20.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 99 mm |
| FoV phase | 25.8 % |
| Slice thickness | 1.5 mm |
| TR | 3000 ms |
| TE | 45.92 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|-------------------|-----------|
| Magn. preparation | None |
| Flip angle | 180 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 241 |
| Pause after meas. | 0.0 s |
| Multiple series | Off |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 132 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Slice partial Fourier | Off |
| Interpolation | Off |
| PAT mode | None |
| Prescan Normalize | Off |
| Raw filter | Off |

Geometry

| | |
|---------------|----------------|
| Series | Interleaved |
| Sat. region 1 | |
| Thickness | 26 mm |
| Position | L7.2 P5.9 F7.0 |

Orientation C > S26.2 > T16.1
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 |
| 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 | 220.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R34.6 A6.7 H18.2 |
| Orientation | T > S32.4 > C-12.7 |
| Rotation | -20.00 deg |
| R >> L | 99 mm |
| A >> P | 26 mm |
| F >> H | 12 mm |

Physio

1st Signal/Mode None

Composing

Sequence

| | |
|----------------------|------------|
| Introduction | Off |
| Dimension | 3D |
| Reordering | Centric |
| Contrasts | 1 |
| Bandwidth | 1052 Hz/Px |
| Echo spacing | 1.1 ms |
| Turbo factor | 8 |
| EPI factor | 34 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| flip angle excit | 90 |
| phase encoding | ON |
| Maxwell compensation | Off |
| ICE program | single |
| prepscans | 0 |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Tanja\20180510\VASO_116_phantom_M1paper_CSgraseComp

TA: 12:05 PAT: 2 Voxel size: 0.7x0.7x1.5 mm Rel. SNR: 1.00 USER: VASO_116

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 | R37.8 A6.9 H16.3 |
| Orientation | T > S25.8 > C-11.1 |
| Phase enc. dir. | R >> L |
| Rotation | 70.00 deg |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 8 |
| FoV read | 32.8 mm |
| FoV phase | 300.0 % |
| Slice thickness | 1.50 mm |
| TR | 1500.00 ms |
| TE | 24 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | B4;M2,3;T1 |

Contrast

| | |
|----------------------|---------------|
| Perfusion mode | Picore Q2TIPS |
| T12 | 900 ms |
| T11 | 50 ms |
| T11s | 50 ms |
| Flip angle | 26 deg |
| Fat suppr. | Fat sat. |
| Fat sat. mode | Strong |
| Averaging mode | Long term |
| Reconstruction | Magn./Phase |
| Measurements | 483 |
| 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 | 900.0 ms |
| Flow limit | 100.0 cm/s |

Resolution

| | |
|-----------------------|-------|
| Base resolution | 44 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |

| | |
|---------------------|----------|
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 36 |
| Accel. factor 3D | 1 |
| Ref. lines 3D | 8 |
| 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

| | |
|-------------------|----------------|
| 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 | 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 | 230.000 V |
| Adjustment Tolerance | Auto |
| Adjust volume | |
| Position | R37.8 A6.9 H16.3 |
| Orientation | T > S25.8 > C-11.1 |
| Rotation | 160.00 deg |
| R >> L | 99 mm |
| A >> P | 33 mm |
| F >> H | 12 mm |

Physio

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

BOLD

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

Sequence

| | |
|-------------------|------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Contrasts | 1 |
| Bandwidth | 1062 Hz/Px |
| Free echo spacing | Off |

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

| | |
|----------------------------|--------------|
| Echo spacing | 1.07 ms |
| EPI factor | 132 |
| RF pulse type | Normal |
| Gradient mode | Normal |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Ampl | 120 |
| 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 | 2560 us |
| RF BWTP | 25.0 |
| Renzo: Delta TI | 71 ms |
| EFFECTIVE TR | 12000 ms |
| PatPartitions | 8 |
| EPI phase correction | local |
| PAT refscan mode | Flash |
| FlashRef BaseRes | 44 |
| FlashRef BW | 136 Hz/px |
| FlashRef TE | 5000 us |
| FlashRef FA | 5 deg |
| use CAIPI | Off |

Table of contents

\\USER

Feinberglab

Tanja

20180510

localizer_200V

b1map_230V

mp2rage_0.7mm_TR4500

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BP_grase_clean_VASO_V10t_noClip

VASO_116_phantom_M1paper

VASO_116_phantom_V1

Clipping test

BP_grase_clean_VASO_V10_noClip_tSNR_2560_20.8_2560_5.2

BP_grase_clean_VASO_V10_noClip_tSNR_2560_10.4_2560_5.2

EPI from Renzo (added 11.01.2018)

BP_ep3d_bold_multiecho_AS

BP_ep3d_bold_multiecho_AS_ReconAlgoNONE

BP_ep3d_bold_multiecho_AS_ReconAlgoPE

mp2rage_0.7mm_TR4500

BP_grase_clean_BOLDonly_V04_TR3000

VASO_116_phantom_M1paper_CSgraseComp