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**\\MARTINOS DEVELOPER\RENZO\first_ME_BOLD_installation\import_from_subHuber\localizer**

TA: 10 sec Coil Selection: Auto Voxel Size: 0.5×0.5×7.0 mm³ Acc:: None Rel. SNR: 1.00

### Properties

| | |
|---|---|
| Start measurement without further preparation | On |
| Wait for User to Start | Off |
| Start measurements | Single Measurement |
| Prio Recon | On |
| Auto Open Inline Display | Off |
| Auto Close Inline Display | Off |
| Load Images to MR View&GO | On |
| Auto Store Images | On |
| Disable auto transfer to PACS | Off |
| Load Images to Stamp Segments | On |
| Load Images to Graphic Segments | On |
| Graphic segment | All Segments |
| Inline Movie | Off |

### Routine

| | |
|---|---|
| Slice Group | 1 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 2 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 3 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Phase Oversampling | 0 % |
| FOV Read | 250 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 7.0 mm |
| TR | 6.0 ms |
| TE | 2.16 ms |
| Averages | 2 |
| Concatenations | 3 |
| AutoAlign | --- |

### Contrast - Common

| | |
|---|---|
| TR | 6.0 ms |
| TE | 2.16 ms |
| TD | 0.00 ms |
| MTC | Off |
| Magn. Preparation | None |
| Flip Angle | 20 deg |

### Contrast - Common

| | |
|---|---|
| Fat-Water Contrast | Standard |
| Dark Blood | Off |
| Contrasts | 1 |
| SWI | Off |
| Reconstruction | Magnitude |

### Contrast - Dynamic

| | |
|---|---|
| Dynamic Mode | Standard |
| Measurements | 1 |
| Multiple Series | Each Measurement |

### Resolution - Common

| | |
|---|---|
| FOV Read | 250 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 7.0 mm |
| Base Resolution | 256 |
| Phase Resolution | 91 % |
| Interpolation | On |

### Resolution - Acceleration

| | |
|---|---|
| Acceleration Mode | None |
| Deep Resolve | Off |
| Phase Partial Fourier | Off |
| Asymmetric Echo | Allowed |

### Resolution - Filter

| | |
|---|---|
| Raw Filter | Off |
| Elliptical Filter | On |
| Distortion Correction | 2D |
| Normalize | Image Based |
| Image Filter | Off |

### Geometry - Common

| | |
|---|---|
| Slice Group | 1 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 2 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 3 |
| Slices | 1 |
| Distance Factor | 20 % |
| Position | Isocenter |
| Orientation | Sagittal |

### Geometry - Common

| | |
|---|---|
| Phase Encoding Dir. | A >> P |
| Phase Oversampling | 0 % |
| FOV Read | 250 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 7.0 mm |
| TR | 6.0 ms |
| Multi-Slice Mode | Sequential |
| Series | Interleaved |
| Concatenations | 3 |

### Geometry - AutoAlign

| | |
|---|---|
| Slice Group | 1 |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 2 |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| Slice Group | 3 |
| Position | Isocenter |
| Orientation | Sagittal |
| Phase Encoding Dir. | A >> P |
| AutoAlign | --- |
| Initial Position | Isocenter |
| L | 0.0 mm |
| P | 0.0 mm |
| H | 0.0 mm |
| Initial Orientation | Sagittal |
| Initial Rotation | 0.00 deg |

### Geometry - Saturation

| | |
|---|---|
| Saturation Mode | Standard |
| Special Saturation | None |

### Geometry - Tim Planning Suite

| | |
|---|---|
| Set-n-Go Protocol | Off |
| Table Position | 0 mm |
| Table Position | H |

### System - Miscellaneous

| | |
|---|---|
| Coil Selection | Auto Coil Select |
| Radial Sorting | Off |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combination | Adaptive Combine |
| Matrix Optimization | Off |
| Coil Focus | Flat |

### System - Adjustments

| | |
|---|---|
| Adjustment Strategy | Standard |
| B0 Shim | Tune up |

### System - Adjustments

| | |
|---|---|
| B1 Shim | TrueForm |
| CoilShim | Off |
| Adjustment Tolerance | Auto |
| Adjust with Body Coil | Off |
| Confirm Frequency | Never |
| Assume Silicone | Off |

### System - Adjust Volume

| | |
|---|---|
| Position | Isocenter |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| A >> P | 263 mm |
| R >> L | 350 mm |
| F >> H | 350 mm |
| Reset | Off |

### System - pTx

| | |
|---|---|
| B1 Shim | TrueForm |
| Excitation | Slice-sel. |
| LR Balancing | Off |

### System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 123.188963 MHz |
| ? Ref. Amplitude 1H | 0.000 V |
| Reset | Off |
| Image Scaling | 1.000 |

### Physio - Signal

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 6.0 ms |
| Segments | 1 |
| Concatenations | 3 |

### Physio - Cardiac

| | |
|---|---|
| Fat-Water Contrast | Standard |
| Magn. Preparation | None |
| Dark Blood | Off |
| FOV Read | 250 mm |
| FOV Phase | 100.0 % |
| Phase Resolution | 91 % |

### Physio - PACE

| | |
|---|---|
| Resp. Control | Off |
| Concatenations | 3 |

### Inline - Liver

| | |
|---|---|
| Liver Registration | Off |
| Save Original Images | On |

### Inline - Subtraction

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save Original Images | On |

### Inline - MIP

| | |
|---|---|
| MIP Sag | Off |
| MIP Cor | Off |
| MIP Tra | Off |
| MIP Time | Off |
| Radial MIP | Off |
| Save Original Images | On |
| MPR Sag | Off |
| MPR Cor | Off |
| MPR Tra | Off |

### Inline - Soft Tissue

| | |
|---|---|
| Wash-in | Off |
| Wash-out | Off |
| TTP | Off |
| PEI | Off |
| MIP Time | Off |
| Measurements | 1 |

### Inline - Composing

### Inline - MapIt

| | |
|---|---|
| MapIt | None |
| Flip Angle | 20 deg |
| Measurements | 1 |
| Contrasts | 1 |
| TE | 2.16 ms |
| TR | 6.0 ms |
| Save Original Images | On |

### Sequence - Part 1

| | |
|---|---|
| Sequence Name | fl |
| Dimension | 2D |
| Excitation | Slice-sel. |
| RF Pulse Type | Fast |
| Gradient Mode | Fast |
| Flow Compensation | None |
| Bandwidth | 340 Hz/Px |
| Asymmetric Echo | Allowed |
| Segments | 1 |

### Sequence - Part 2

| | |
|---|---|
| Introduction | On |
| RF Spoiling | On |
| Acoustic noise reduction | Off |

### Sequence - Assistant

| | |
|---|---|
| SAR Assistant | Off |
| Allowed Delay | 0 s |

**\\MARTINOS DEVELOPER\RENZO\first_ME_BOLD_installation\import_from_subHuber\2mm_9echoes**

TA: 14 sec Coil Selection: Auto Voxel Size: 2.3×2.3×2.0 mm³ Acc:: 4 Rel. SNR: 1.00

### Properties

| | |
|---|---|
| Start measurement without further preparation | Off |
| Wait for User to Start | Off |
| Start measurements | Single Measurement |
| Prio Recon | Off |
| Auto Open Inline Display | Off |
| Auto Close Inline Display | Off |
| Load Images to MR View&GO | On |
| Auto Store Images | On |
| Disable auto transfer to PACS | Off |
| Load Images to Stamp Segments | Off |
| Load Images to Graphic Segments | Off |
| Graphic segment | Default |
| Inline Movie | Off |

### Routine

| | |
|---|---|
| Slab Group | 1 |
| Slabs | 1 |
| Position | Isocenter |
| Orientation | Transversal |
| Phase Encoding Dir. | A >> P |
| Slices per Slab | 48 |
| Phase Oversampling | 0.0 % |
| Slice Oversampling | 0.0 % |
| FOV Read | 192 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 2.00 mm |
| TR | 101.4 ms |
| Vol. TR | 2433.6 ms |
| TE 1 | 6.70 ms |
| TE 2 | 17.20 ms |
| TE 3 | 27.70 ms |
| TE 4 | 38.20 ms |
| TE 5 | 48.70 ms |
| TE 6 | 59.20 ms |
| TE 7 | 69.70 ms |
| TE 8 | 80.20 ms |
| TE 9 | 90.70 ms |
| Averages | 1 |
| Multi-echo Shots | 1 |
| AutoAlign | --- |

### Contrast - Common

| | |
|---|---|
| TR | 101.4 ms |
| Vol. TR | 2433.6 ms |
| TE 1 | 6.70 ms |
| TE 2 | 17.20 ms |
| TE 3 | 27.70 ms |
| TE 4 | 38.20 ms |
| TE 5 | 48.70 ms |
| TE 6 | 59.20 ms |

### Contrast - Common

| | |
|---|---|
| TE 7 | 69.70 ms |
| TE 8 | 80.20 ms |
| TE 9 | 90.70 ms |
| Multi-echo spacing | 10.50 ms |
| MTC | Off |
| Flip Angle | 25 deg |
| Fat-Water Contrast | Water Excitation |
| Magn. Prep. Shots | 1 |
| Contrasts | 9 |
| Reconstruction | Magnitude |

### Contrast - Dynamic

| | |
|---|---|
| Dynamic Mode | Standard |
| Measurements | 4 |
| Reordering | Linear |

### Resolution - Common

| | |
|---|---|
| FOV Read | 192 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 2.00 mm |
| Base Resolution | 84 |
| Phase Resolution | 100 % |
| Slice Resolution | 100 % |
| Interpolation | Off |

### Resolution - Acceleration

| | |
|---|---|
| Acceleration Mode | CAIPIRINHA |
| Reference Scans | GRE/Separate |
| Acceleration Factor PE | 2 |
| Reference Lines PE | 24 |
| Acceleration Factor 3D | 2 |
| Reference Lines 3D | 24 |
| Reordering Shift 3D | 1 |
| Phase Partial Fourier | 6/8 |
| Slice Partial Fourier | Off |

### Resolution - Filter

| | |
|---|---|
| Raw Filter | Off |
| Elliptical Filter | Off |
| Distortion Correction | Off |
| Normalize | Off |
| Image Filter | Off |

### Geometry - Common

| | |
|---|---|
| Slab Group | 1 |
| Slabs | 1 |
| Position | Isocenter |
| Orientation | Transversal |
| Phase Encoding Dir. | A >> P |
| Slices per Slab | 48 |

### Geometry - Common

| | |
|---|---|
| Phase Oversampling | 0.0 % |
| Slice Oversampling | 0.0 % |
| FOV Read | 192 mm |
| FOV Phase | 100.0 % |
| Slice Thickness | 2.00 mm |
| TR | 101.4 ms |
| Vol. TR | 2433.6 ms |
| Multi-echo Shots | 1 |

### Geometry - AutoAlign

| | |
|---|---|
| Slab Group | 1 |
| Position | Isocenter |
| Orientation | Transversal |
| Phase Encoding Dir. | A >> P |
| AutoAlign | --- |
| Initial Position | Isocenter |
| L | 0.0 mm |
| P | 0.0 mm |
| H | 0.0 mm |
| Initial Orientation | Transversal |
| Initial Rotation | 0.00 deg |

### Geometry - Saturation

| | |
|---|---|
| Saturation Mode | Standard |

### Geometry - Tim Planning Suite

| | |
|---|---|
| Set-n-Go Protocol | Off |
| Table Position | 0 mm |
| Table Position | H |

### System - Miscellaneous

| | |
|---|---|
| Coil Selection | Auto Coil Select |
| Radial Sorting | Off |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combination | Adaptive Combine |
| Matrix Optimization | Off |
| Coil Focus | Flat |

### System - Adjustments

| | |
|---|---|
| Adjustment Strategy | Standard |
| B0 Shim | Brain |
| B1 Shim | TrueForm |
| CoilShim | Off |
| Adjustment Tolerance | Auto |
| Adjust with Body Coil | Off |
| Confirm Frequency | Never |
| Assume Silicone | Off |

### System - Adjust Volume

| | |
|---|---|
| ! Position | Isocenter |
| ! Orientation | Sagittal |

### System - Adjust Volume

| | |
|---|---|
| ! Rotation | 0.00 deg |
| ! A >> P | 210 mm |
| ! F >> H | 210 mm |
| ! R >> L | 120 mm |
| Reset | Off |

### System - pTx

| | |
|---|---|
| B1 Shim | TrueForm |
| Excitation | Slab-sel. |

### System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 123.188963 MHz |
| ? Ref. Amplitude 1H | 0.000 V |
| Reset | Off |
| Image Scaling | 1.000 |

### Sequence - Part 1

| | |
|---|---|
| Sequence Name | vaso a2d6453 |
| Dimension | 3D |
| Excitation | Slab-sel. |
| RF Pulse Type | Normal |
| Gradient Mode | Performance |
| Reordering | Linear |
| Bandwidth | 3968 Hz/Px |
| Echo Spacing | 0.32 ms |
| Turbo Factor | 24 |
| Segmentation | 1 |
| EPI Factor | 32 |

### Sequence - Part 2

| | |
|---|---|
| Introduction | On |
| RF Spoiling | On |

### Sequence - Special

| | |
|---|---|
| RF duration | 800 us |
| RF time x BW | 20 |
| PAT ref. FA | 3 deg |
| Fat sat. FA | 110 deg |
| T1 (Ernst FA) | 1200 ms |
| Invert PE | Off |
| Min. TE w/ PF | On |
| Ramp Sampling | On |
| Trigger per shot | Off |
| Noise image | Off |
| Relax spoilers | On |
| Round up Vol. TR | Off |
| MT flip angle | 500 deg |
| MT off-res. | 2000 Hz |
| MT RF duration | 10240 us |
| Custom Water Exc. | -none- |
| Phase Correction | per Series |
| Saturation RF | per Shot |
| EPI rise time factor | 1.10 |
| G. spoil dephasing[1] | 0.0 pi |

### Sequence - Special

| | |
|---|---|
| G. spoil dephasing[2] | 4.0 pi |
| G. spoil dephasing[3] | 2.0 pi |
| Modify Ice Config | On |
| G-factor map | Off |
| GRAPPA Regularization | 5000 /10^6 |
| Slab Scale | -15 % |
| RF spoil scheme | Conventional |
| Read polarity | Dual-polarity |

### Sequence - Assistant

| | |
|---|---|
| SAR Assistant | Off |