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\\DEV

VCAL

THS_fMRI_coilQA

COILQA_fMRI_RB_20230707

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\localizer_rb**

TA: 0:18 PM: REF Voxel size: 0.5×0.5×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R2.9 A15.4 F49.8 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R15.8 A13.6 F49.8 mm |
| Orientation | Coronal |
| Phase enc. dir. | F >> H |
| Slice group | 3 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R11.0 A7.5 F38.4 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 25 % |
| FoV read | 280 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 7.7 ms |
| TE | 3.67 ms |
| Averages | 1 |
| Concatenations | 9 |
| Filter | Distortion Corr.(3D), Elliptical filter |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 7.7 ms |
| TE | 3.67 ms |
| TD | 0 ms |
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 20 deg |
| Fat suppr. | None |
| Water suppr. | None |
| SWI | Off |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Short term |
| Reconstruction | Magnitude |
| Measurements | 1 |

## Contrast - Dynamic

| | |
|---|---|
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 280 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| Base resolution | 256 |
| Phase resolution | 75 % |
| Phase partial Fourier | Off |
| Interpolation | On |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | On |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R2.9 A15.4 F49.8 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R15.8 A13.6 F49.8 mm |
| Orientation | Coronal |
| Phase enc. dir. | F >> H |
| Slice group | 3 |
| Slices | 3 |
| Dist. factor | 50 % |
| Position | R11.0 A7.5 F38.4 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| FoV read | 280 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 7.7 ms |
| Multi-slice mode | Sequential |
| Series | Interleaved |
| Concatenations | 9 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | R2.9 A15.4 F49.8 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |

### Geometry - AutoAlign

| | |
|---|---|
| Position | R15.8 A13.6 F49.8 mm |
| Orientation | Coronal |
| Phase enc. dir. | F >> H |
| Slice group | 3 |
| Position | R11.0 A7.5 F38.4 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | R2.9 A15.4 F49.8 |
| R | 2.9 mm |
| A | 15.4 mm |
| F | 49.8 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

### Geometry - Saturation

| | |
|---|---|
| Saturation mode | Standard |
| Fat suppr. | None |
| Water suppr. | None |
| Special sat. | None |

### Geometry - Tim CT

| | |
|---|---|
| Tim CT mode | Off |
| Slices | 3 |
| Slice thickness | 5.0 mm |
| Dist. factor | 50 % |
| FoV read | 280 mm |
| FoV phase | 100.0 % |
| Segments | 1 |

### System - Miscellaneous

| | |
|---|---|
| Positioning mode | REF |
| Table position | F |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | H >> F |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Off - AutoCoilSelect |

### System - Adjustments

| | |
|---|---|
| B0 Shim mode | Tune up |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

### System - Adjust Volume

| | |
|---|---|
| ! Position | L0.0 A25.1 F32.6 mm |
| ! Orientation | Transversal |
| ! Rotation | 0.00 deg |
| ! A >> P | 175 mm |
| ! R >> L | 201 mm |
| ! F >> H | 259 mm |
| Reset | Off |

### System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |

### System - Tx/Rx

| | |
|---|---|
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ? Ref. amplitude 1H | 0.000 V |

### Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 7.7 ms |
| Concatenations | 9 |
| Segments | 1 |

### Physio - Cardiac

| | |
|---|---|
| Magn. preparation | None |
| Fat suppr. | None |
| Dark blood | Off |
| FoV read | 280 mm |
| FoV phase | 100.0 % |
| Phase resolution | 75 % |

### Physio - PACE

| | |
|---|---|
| Resp. control | Off |
| Concatenations | 9 |

### Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Liver registration | Off |
| Save original images | On |

### Inline - MIP

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

### Inline - Soft Tissue

| | |
|---|---|
| Wash - In | Off |
| Wash - Out | Off |
| TTP | Off |
| PEI | Off |
| MIP - time | Off |
| Measurements | 1 |

### Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

### Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Phase stabilisation | Off |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Flow comp. | No |
| Multi-slice mode | Sequential |
| Bandwidth | 320 Hz/Px |

### Sequence - Part 2

| | |
|---|---|
| Segments | 1 |
| Acoustic noise reduction | Active |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Normal |
| Gradient mode | Normal |
| Excitation | Slice-sel. |
| RF spoiling | On |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\tfl_sag_2p5mmISO_largeFOV_ISO**
TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Magn. preparation | None |
| Flip angle | 10 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| Base resolution | 144 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H4.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 4.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | ISO |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |

## System - Miscellaneous

| | |
|---|---|
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| Position | L0.1 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Rotation | 0.00 deg |
| A >> P | 208 mm |
| F >> H | 341 mm |
| R >> L | 140 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ? Ref. amplitude 1H | 0.000 V |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save original images | On |

## Inline - MIP

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

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Asymmetric echo | Allowed |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Echo spacing | 5.1 ms |
| Bandwidth | 400 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Low SAR |
| Gradient mode | Normal |
| Excitation | Slice-sel. |

## Sequence - Part 2

| | |
|---|---|
| RF spoiling | On |
| Turbo factor | 88 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\tfl_sag_2p5mmISO_largeFOV_REFVOL optC4_380**

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Magn. preparation | None |
| Flip angle | 10 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| Base resolution | 144 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |

## Resolution - Common

| | |
|---|---|
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H4.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 4.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | ISO |

## System - Miscellaneous

| | |
|---|---|
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| Position | L0.1 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Rotation | 0.00 deg |
| A >> P | 208 mm |
| F >> H | 341 mm |
| R >> L | 140 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save original images | On |

## Inline - MIP

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

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Asymmetric echo | Allowed |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Echo spacing | 5.1 ms |
| Bandwidth | 400 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Low SAR |
| Gradient mode | Normal |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 88 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\Dream2D_sag_2p5mmISO_largeFOV**

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00 : 30e5ea5

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| FoV read | 384 mm |
| FoV phase | 46.1 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.18 ms |
| Averages | 1 |
| Concatenations | 11 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.18 ms |
| Flip angle 1 | 50 deg |
| Flip angle 2 | 6 deg |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |

## Resolution - Common

| | |
|---|---|
| FoV read | 384 mm |
| FoV phase | 46.1 % |
| Slice thickness | 2.5 mm |
| Base resolution | 152 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |

## Resolution - Filter Image

| | |
|---|---|
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 384 mm |
| FoV phase | 46.1 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 11 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | R0.9 A6.5 H3.6 mm |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! A >> P | 183 mm |
| ! F >> H | 389 mm |
| ! R >> L | 29 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Multi-slice mode | Sequential |
| Bandwidth | 910 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| Echo train duration | 347 ms |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 70 |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Special

| | |
|---|---|
| Preparation scans | 2 |
| Preparation loops | 0 |
| Sample T1 | 2000 ms |
| RF-Duration | 800 us |
| Prep RF-Duration | 400 us |
| Time-BW-Product | 3.2 |
| Timing Scheme | STE* |
| Mixing Time | 1140 us |
| FFT Scale | 10 |
| Calculate FlipMap | On |
| HDR DICOMs | Off |
| STE<->FID Spoiler | Off |
| Scale risetime | 1.20 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\Dream2D_sag_2p5mmISO_mediumFOV**

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00 : 30e5ea5

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Averages | 1 |
| Concatenations | 11 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Flip angle 1 | 50 deg |
| Flip angle 2 | 6 deg |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |

## Resolution - Common

| | |
|---|---|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| Base resolution | 80 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |

## Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 11 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |

**System - Adjustments**

| | |
|---|---|
| Adjustment Tolerance | Auto |

**System - Adjust Volume**

| | |
|---|---|
| ! Position | L1.8 A7.0 H3.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! A >> P | 203 mm |
| ! F >> H | 198 mm |
| ! R >> L | 29 mm |
| Reset | Off |

**System - Tx/Rx**

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

**Sequence - Part 1**

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Multi-slice mode | Sequential |
| Bandwidth | 1010 Hz/Px |

**Sequence - Part 2**

| | |
|---|---|
| Echo train duration | 386 ms |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 80 |

**Sequence - Nuclei**

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

**Sequence - Special**

| | |
|---|---|
| Preparation scans | 2 |
| Preparation loops | 0 |
| Sample T1 | 2000 ms |
| RF-Duration | 800 us |
| Prep RF-Duration | 400 us |
| Time-BW-Product | 3.2 |
| Timing Scheme | STE* |
| Mixing Time | 1060 us |
| FFT Scale | 10 |
| Calculate FlipMap | On |
| HDR DICOMs | Off |
| STE<->FID Spoiler | Off |
| Scale risetime | 1.20 |

**Sequence - Assistant**

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\Dream2D_sag_2p5mmISO_mediumFOV_REFVOLopt_0P66_253P3**

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00 : 30e5ea5

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Averages | 1 |
| Concatenations | 11 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Flip angle 1 | 50 deg |
| Flip angle 2 | 6 deg |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |

## Resolution - Common

| | |
|---|---|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| Base resolution | 80 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |

## Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 11 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |

**System - Adjustments**

| | |
|---|---|
| Adjustment Tolerance | Auto |

**System - Adjust Volume**

| | |
|---|---|
| ! Position | L1.8 A7.0 H3.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! A >> P | 203 mm |
| ! F >> H | 198 mm |
| ! R >> L | 29 mm |
| Reset | Off |

**System - Tx/Rx**

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 253.300 V |

**Sequence - Part 1**

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Multi-slice mode | Sequential |
| Bandwidth | 1010 Hz/Px |

**Sequence - Part 2**

| | |
|---|---|
| Echo train duration | 386 ms |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 80 |

**Sequence - Nuclei**

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

**Sequence - Special**

| | |
|---|---|
| Preparation scans | 2 |
| Preparation loops | 0 |
| Sample T1 | 2000 ms |
| RF-Duration | 800 us |
| Prep RF-Duration | 400 us |
| Time-BW-Product | 3.2 |
| Timing Scheme | STE* |
| Mixing Time | 1060 us |
| FFT Scale | 10 |
| Calculate FlipMap | On |
| HDR DICOMs | Off |
| STE<->FID Spoiler | Off |
| Scale risetime | 1.20 |

**Sequence - Assistant**

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\Dream2D_sag_2p5mmISO_mediumFOV_REFVOL_HWLIM_500**

TA: 1:08 PM: FIX Voxel size: 2.5×2.5×2.5 mmPAT: Off Rel. SNR: 1.00 : 30e5ea5

### Properties

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

### Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Averages | 1 |
| Concatenations | 11 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

### Contrast - Common

| | |
|---|---|
| TR | 6000 ms |
| TE 1 | 2.04 ms |
| TE 2 | 3.10 ms |
| Flip angle 1 | 50 deg |
| Flip angle 2 | 6 deg |

### Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |

### Resolution - Common

| | |
|---|---|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| Base resolution | 80 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

### Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

### Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |

### Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

### Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

### Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 11 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.5 mm |
| TR | 6000 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 11 |

### Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

### System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

### System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |

## System - Adjustments

| | |
|---|---|
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L1.8 A7.0 H3.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 0.00 deg |
| ! A >> P | 203 mm |
| ! F >> H | 198 mm |
| ! R >> L | 29 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 500.000 V |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Multi-slice mode | Sequential |
| Bandwidth | 1010 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| Echo train duration | 386 ms |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 80 |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Special

| | |
|---|---|
| Preparation scans | 2 |
| Preparation loops | 0 |
| Sample T1 | 2000 ms |
| RF-Duration | 800 us |
| Prep RF-Duration | 400 us |
| Time-BW-Product | 3.2 |
| Timing Scheme | STE* |
| Mixing Time | 1060 us |
| FFT Scale | 10 |
| Calculate FlipMap | On |
| HDR DICOMs | Off |
| STE<->FID Spoiler | Off |
| Scale risetime | 1.20 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\coilQA_sag_FH_1p5x1p5x2mm_largeFOV**

TA: 3:20 PM: FIX Voxel size: 1.5×1.5×2.0 mmRel. SNR: 1.00 : fl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 13 |
| Dist. factor | 20 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 384 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 30.0 ms |
| TE | 6.0 ms |
| Averages | 2 |
| Concatenations | 13 |
| Filter | None |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 30.0 ms |
| TE | 6.0 ms |
| TD | 0 ms |
| MTC | Off |
| Flip angle | 12 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 2 |
| Averaging mode | Short term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 384 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| Base resolution | 256 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |

## Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 13 |
| Dist. factor | 20 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| FoV read | 384 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 30.0 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 13 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 90.00 deg |
| Initial Orientation | Sagittal |

## Geometry - Saturation

| | |
|---|---|
| Fat suppr. | None |
| Water suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Adaptive Combine |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |

## System - Adjustments

| | |
|---|---|
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.3 P2.4 F28.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 82.33 deg |
| ! F >> H | 240 mm |
| ! A >> P | 60 mm |
| ! R >> L | 32 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 30.0 ms |
| Concatenations | 13 |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Contrasts | 1 |
| Multi-slice mode | Sequential |
| Bandwidth | 200 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| Gradient mode | Fast |
| RF spoiling | On |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Special

| | |
|---|---|
| ICE program | IceProgramCoilUtils |
| Prep. scans duration | 0 ms |
| Optimal SNR | On |
| GFactor | On |
| Rx coil diode switching | On |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\coilQA_sag_FH_1p5x1p5x2mm_smallFOV**

TA: 1:40 PM: FIX Voxel size: 1.5×1.5×2.0 mmRel. SNR: 1.00 : fl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 13 |
| Dist. factor | 20 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 192 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 30.0 ms |
| TE | 6.0 ms |
| Averages | 2 |
| Concatenations | 13 |
| Filter | None |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 30.0 ms |
| TE | 6.0 ms |
| TD | 0 ms |
| MTC | Off |
| Flip angle | 12 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 2 |
| Averaging mode | Short term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 192 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| Base resolution | 128 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |

## Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 13 |
| Dist. factor | 20 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| FoV read | 192 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 30.0 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 13 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | H >> F |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 90.00 deg |
| Initial Orientation | Sagittal |

## Geometry - Saturation

| | |
|---|---|
| Fat suppr. | None |
| Water suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Adaptive Combine |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |

## System - Adjustments

| | |
|---|---|
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.3 P2.4 F28.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 82.33 deg |
| ! F >> H | 240 mm |
| ! A >> P | 60 mm |
| ! R >> L | 32 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 30.0 ms |
| Concatenations | 13 |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Contrasts | 1 |
| Multi-slice mode | Sequential |
| Bandwidth | 200 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| Gradient mode | Fast |
| RF spoiling | On |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Special

| | |
|---|---|
| ICE program | IceProgramCoilUtils |
| Prep. scans duration | 0 ms |
| Optimal SNR | On |
| GFactor | On |
| Rx coil diode switching | On |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

| **\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\coilQA_tra_RL_0p5x0p5x5mm** |
|---|
| TA: 2:41 PM: FIX Voxel size: 0.5×0.5×5.0 mmRel. SNR: 1.00 : fl |

## Properties

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

## Routine

| Slice group | 1 |
|---|---|
| Slices | 7 |
| Dist. factor | 300 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 192 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 30.0 ms |
| TE | 6.0 ms |
| Averages | 2 |
| Concatenations | 7 |
| Filter | None |
| Coil elements | CSP |

## Contrast - Common

| TR | 30.0 ms |
|---|---|
| TE | 6.0 ms |
| TD | 0 ms |
| MTC | Off |
| Flip angle | 12 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| Averages | 2 |
|---|---|
| Averaging mode | Short term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| FoV read | 192 mm |
|---|---|
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| Base resolution | 384 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - Filter Image

| Image Filter | Off |
|---|---|
| Distortion Corr. | Off |

## Resolution - Filter Image

| Prescan Normalize | Off |
|---|---|
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| Raw filter | Off |
|---|---|
| Elliptical filter | Off |

## Geometry - Common

| Slice group | 1 |
|---|---|
| Slices | 7 |
| Dist. factor | 300 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | R >> L |
| FoV read | 192 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 30.0 ms |
| Multi-slice mode | Sequential |
| Series | Ascending |
| Concatenations | 7 |

## Geometry - AutoAlign

| Slice group | 1 |
|---|---|
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 90.00 deg |
| Initial Orientation | Transversal |

## Geometry - Saturation

| Fat suppr. | None |
|---|---|
| Water suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| Positioning mode | FIX |
|---|---|
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Adaptive Combine |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| B0 Shim mode | Brain |
|---|---|
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |

**System - Adjustments**

| | |
|---|---|
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

**System - Adjust Volume**

| | |
|---|---|
| ! Position | L0.3 P2.4 F28.5 mm |
| ! Orientation | Sagittal |
| ! Rotation | 82.33 deg |
| ! F >> H | 240 mm |
| ! A >> P | 60 mm |
| ! R >> L | 32 mm |
| Reset | Off |

**System - Tx/Rx**

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

**Physio - Signal1**

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 30.0 ms |
| Concatenations | 7 |

**Sequence - Part 1**

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Contrasts | 1 |
| Multi-slice mode | Sequential |
| Bandwidth | 200 Hz/Px |

**Sequence - Part 2**

| | |
|---|---|
| Gradient mode | Fast |
| RF spoiling | On |

**Sequence - Nuclei**

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

**Sequence - Special**

| | |
|---|---|
| ICE program | IceProgramCoilUtils |
| Prep. scans duration | 0 ms |
| Optimal SNR | On |
| GFactor | On |
| Rx coil diode switching | On |

**Sequence - Assistant**

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\gre_2mmISO_multichannel_uncomb**

TA: 1:21 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: Off Rel. SNR: 1.00 : fl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 44 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 384 mm |
| FoV phase | 75.0 % |
| Slice thickness | 2.0 mm |
| TR | 550.0 ms |
| TE | 3.80 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 550.0 ms |
| TE | 3.80 ms |
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 30 deg |
| Fat suppr. | None |
| Water suppr. | None |
| SWI | Off |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Short term |
| Reconstruction | Magn./Phase |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 384 mm |
| FoV phase | 75.0 % |
| Slice thickness | 2.0 mm |
| Base resolution | 192 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 44 |
| Dist. factor | 0 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 384 mm |
| FoV phase | 75.0 % |
| Slice thickness | 2.0 mm |
| TR | 550.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H0.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 0.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## Geometry - Saturation

| | |
|---|---|
| Saturation mode | Standard |
| Fat suppr. | None |
| Water suppr. | None |
| Special sat. | None |

## Geometry - Tim CT

| | |
|---|---|
| Tim CT mode | Off |
| Slices | 44 |
| Slice thickness | 2.0 mm |
| Dist. factor | 0 % |
| FoV read | 384 mm |
| FoV phase | 75.0 % |
| Segments | 1 |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |

## System - Miscellaneous

| | |
|---|---|
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | On |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Rotation | 0.00 deg |
| A >> P | 288 mm |
| F >> H | 384 mm |
| R >> L | 88 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 550.0 ms |
| Concatenations | 1 |
| Segments | 1 |

## Physio - Cardiac

| | |
|---|---|
| Magn. preparation | None |
| Fat suppr. | None |
| Dark blood | Off |
| FoV read | 384 mm |
| FoV phase | 75.0 % |
| Phase resolution | 100 % |

## Physio - PACE

| | |
|---|---|
| Resp. control | Off |
| Concatenations | 1 |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Liver registration | Off |
| Save original images | On |

## Inline - MIP

| | |
|---|---|
| MIP-Sag | Off |
| MIP-Cor | Off |
| MIP-Tra | Off |

## Inline - MIP

| | |
|---|---|
| MIP-Time | Off |
| Save original images | On |

## Inline - Soft Tissue

| | |
|---|---|
| Wash - In | Off |
| Wash - Out | Off |
| TTP | Off |
| PEI | Off |
| MIP - time | Off |
| Measurements | 1 |

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Phase stabilisation | On |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Bandwidth | 320 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| Segments | 1 |
| Acoustic noise reduction | None |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slice-sel. |
| RF spoiling | On |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\tfl_sag_2p5mmISO_largeFOV_REFVOL optC4_380**

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Magn. preparation | None |
| Flip angle | 10 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| Base resolution | 144 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |

## Resolution - Common

| | |
|---|---|
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 28 |
| Dist. factor | 100 % |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.3 A7.5 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Position | R1.2 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H4.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 4.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | ISO |

## System - Miscellaneous

| | |
|---|---|
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| Position | L0.1 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Rotation | 0.00 deg |
| A >> P | 208 mm |
| F >> H | 341 mm |
| R >> L | 140 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 380.000 V |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save original images | On |

## Inline - MIP

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

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Asymmetric echo | Allowed |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Echo spacing | 5.1 ms |
| Bandwidth | 400 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Low SAR |
| Gradient mode | Normal |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 88 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\tfl_sag_2p5mmISO_largeFOV_REFVOL optC4C5_434**

TA: 1:10 PM: ISO Voxel size: 2.4×2.4×2.5 mmPAT: Off Rel. SNR: 1.00 : tfl

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
|    Slices | 28 |
|    Dist. factor | 100 % |
|    Position | L1.3 A7.5 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| Slice group | 2 |
|    Slices | 28 |
|    Dist. factor | 100 % |
|    Position | R1.2 A7.4 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 34420.0 ms |
| TE | 2.31 ms |
| Magn. preparation | None |
| Flip angle | 10 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| Base resolution | 144 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |

## Resolution - Common

| | |
|---|---|
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | None |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
|    Slices | 28 |
|    Dist. factor | 100 % |
|    Position | L1.3 A7.5 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| Slice group | 2 |
|    Slices | 28 |
|    Dist. factor | 100 % |
|    Position | R1.2 A7.4 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| FoV read | 340 mm |
| FoV phase | 61.1 % |
| Slice thickness | 2.5 mm |
| TR | 34420.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
|    Position | L1.3 A7.5 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| Slice group | 2 |
|    Position | R1.2 A7.4 H4.3 mm |
|    Orientation | Sagittal |
|    Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.3 A7.5 H4.3 |
| L | 1.3 mm |
| A | 7.5 mm |
| H | 4.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | ISO |

## System - Miscellaneous

| | |
|---|---|
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| Position | L0.1 A7.4 H4.3 mm |
| Orientation | Sagittal |
| Rotation | 0.00 deg |
| A >> P | 208 mm |
| F >> H | 341 mm |
| R >> L | 140 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save original images | On |

## Inline - MIP

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

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | On |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Dimension | 2D |
| Asymmetric echo | Allowed |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Echo spacing | 5.1 ms |
| Bandwidth | 400 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Low SAR |
| Gradient mode | Normal |
| Excitation | Slice-sel. |
| RF spoiling | On |
| Turbo factor | 88 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\t1_mp2rage_cor_nonSelHS1_0.7iso_OPT434_RUN370**

TA: 8:47 PM: FIX Voxel size: 0.7×0.7×0.7 mmPAT: 2 Rel. SNR: 1.00 : tfl

## Properties

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

## Routine

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | C > T-0.3 > S-0.1 |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| Slice oversampling | 0.0 % |
| Slices per slab | 192 |
| FoV read | 260 mm |
| FoV phase | 65.8 % |
| Slice thickness | 0.70 mm |
| TR | 5000.0 ms |
| TE | 2.13 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 5000.0 ms |
| TE | 2.13 ms |
| Magn. preparation | Non-sel. IR |
| TI 1 | 700 ms |
| TI 2 | 2400 ms |
| Flip angle 1 | 4.0 deg |
| Flip angle 2 | 5.0 deg |
| Fat suppr. | None |
| Water suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 1 |
| Multiple series | Each measurement |

## Resolution - Common

| | |
|---|---|
| FoV read | 260 mm |
| FoV phase | 65.8 % |
| Slice thickness | 0.70 mm |
| Base resolution | 368 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |

## Resolution - Common

| | |
|---|---|
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 28 |
| Accel. factor 3D | 1 |
| Reference scan mode | Integrated |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Dist. factor | 50 % |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | C > T-0.3 > S-0.1 |
| Phase enc. dir. | R >> L |
| Slice oversampling | 0.0 % |
| Slices per slab | 192 |
| FoV read | 260 mm |
| FoV phase | 65.8 % |
| Slice thickness | 0.70 mm |
| TR | 5000.0 ms |
| Multi-slice mode | Single shot |
| Series | Ascending |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slab group | 1 |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | C > T-0.3 > S-0.1 |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Initial Position | R1.7 A3.6 F17.1 |
| R | 1.7 mm |
| A | 3.6 mm |
| F | 17.1 mm |
| Initial Rotation | -0.70 deg |
| Initial Orientation | C > T |
| C > T | -0.3 |
| > S | -0.1 |

## Geometry - Navigator

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L1.0 A2.8 F13.7 mm |
| ! Orientation | T > C6.6 |
| ! Rotation | 0.00 deg |
| ! A >> P | 54 mm |
| ! R >> L | 59 mm |
| ! F >> H | 217 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 370.000 V |

## Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 5000.0 ms |
| Concatenations | 1 |

## Physio - Cardiac

| | |
|---|---|
| Magn. preparation | Non-sel. IR |
| TI 1 | 700 ms |
| TI 2 | 2400 ms |
| Fat suppr. | None |
| Dark blood | Off |
| FoV read | 260 mm |
| FoV phase | 65.8 % |
| Phase resolution | 100 % |

## Physio - PACE

| | |
|---|---|
| Resp. control | Off |
| Concatenations | 1 |

## Inline - Common

| | |
|---|---|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Save original images | On |

## Inline - MIP

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

## Inline - Composing

| | |
|---|---|
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Reordering | Linear |
| Asymmetric echo | Allowed |
| Flow comp. | No |
| Multi-slice mode | Single shot |
| Echo spacing | 6.3 ms |
| Bandwidth | 220 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Normal |
| Gradient mode | Normal* |
| Excitation | Non-sel. |
| RF spoiling | On |
| Incr. Gradient spoiling | Off |
| Turbo factor | 192 |

## Sequence - Nuclei

| | |
|---|---|
| TX/RX Nucleus | 1H |
| TX/RX delta frequency | 0 Hz |
| TX Nucleus | None |
| TX delta frequency | 0 Hz |
| Coil elements | CSP |

## Sequence - Special

| | |
|---|---|
| Use Custom Inversion | On |
| Inv pulse type | HS1 |
| HS pulse dur | 10240 us |
| HS pulse offset | 0 Hz |
| HS flip angle | 360 deg |
| TR_FOCI B1 | 0.00 uT |
| Echo Spacing | 6340 us |
| Denoise Weighting | 100 |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

---

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\ep2d_lgFOVc45_0p85_R2PF6_TE30_BW1132_FA65**

TA: 10:10 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : epfid

---

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 16 |
| Dist. factor | 0 % |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 1290 ms |
| TE | 30.00 ms |
| Multi-band accel. factor | 1 |
| Filter | Raw filter |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 1290 ms |
| TE | 30.00 ms |
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 65 deg |
| Fat suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 466 |
| Delay in TR | 0 ms |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| Base resolution | 192 |
| Phase resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | GRAPPA |
| Accel. factor PE | 2 |
| Ref. lines PE | 52 |

## Resolution - iPAT

| | |
|---|---|
| Reference scan mode | GRE |

## Resolution - Filter Image

| | |
|---|---|
| Distortion Corr. | Off |
| Prescan Normalize | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | On |
| Elliptical filter | Off |
| Hamming | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 16 |
| Dist. factor | 0 % |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 1290 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| Multi-band accel. factor | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.8 A16.7 H2.7 |
| L | 1.8 mm |
| A | 16.7 mm |
| H | 2.7 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | 1.0 |
| > S | 0.0 |

## Geometry - Saturation

| | |
|---|---|
| Fat suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.2 A8.1 H3.8 mm |
| ! Orientation | T > C1.0 |
| ! Rotation | 0.00 deg |
| ! A >> P | 40 mm |
| ! R >> L | 52 mm |
| ! F >> H | 60 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

## Physio - Signal1

| | |
|---|---|
| 1st Signal/Mode | None |
| TR | 1290 ms |
| Multi-band accel. factor | 1 |

## BOLD

| | |
|---|---|
| GLM Statistics | Off |
| Dynamic t-maps | Off |
| Ignore meas. at start | 0 |
| Ignore after transition | 0 |
| Model transition states | On |
| Temp. highpass filter | On |
| Threshold | 4.00 |
| Paradigm size | 20 |
| Meas[1] | Baseline |
| Meas[2] | Baseline |
| Meas[3] | Baseline |
| Meas[4] | Baseline |
| Meas[5] | Baseline |
| Meas[6] | Baseline |
| Meas[7] | Baseline |
| Meas[8] | Baseline |
| Meas[9] | Baseline |
| Meas[10] | Baseline |
| Meas[11] | Active |
| Meas[12] | Active |
| Meas[13] | Active |
| Meas[14] | Active |
| Meas[15] | Active |
| Meas[16] | Active |
| Meas[17] | Active |
| Meas[18] | Active |
| Meas[19] | Active |
| Meas[20] | Active |
| Motion correction | Off |
| Spatial filter | Off |
| Measurements | 466 |
| Delay in TR | 0 ms |
| Multiple series | Off |

## Sequence - Part 1

| | |
|---|---|
| Introduction | Off |
| Contrasts | 1 |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Free echo spacing | Off |
| Echo spacing | 1 ms |
| Bandwidth | 1132 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| EPI factor | 192 |
| Gradient mode | Fast |
| RF spoiling | Off |

## Sequence - Special

| | |
|---|---|
| Excite pulse duration | 3840 us |
| SENSE1 coil combine | Off |
| Invert RO/PE polarity | Off |
| PF omits higher k-space | Off |
| Disable freq. update | Off |
| Force equal slice timing | Off |
| FFT scale factor | 1.00 |
| GRE iPAT ref. FA | 12.0 deg |
| Physio recording | Legacy |
| Triggering scheme | Standard |

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\dzne_ep3d_fmri_EPI16**

TA: 10:14 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : ep3d f015566

## Properties

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

## Routine

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Slab Scale | -10 % |
| Slices per slab | 16 |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 2300 ms |
| TE 1 | 11.20 ms |
| Averages | 1 |
| Multi-echo Shots | 1 |
| Filter | Raw filter |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 2300 ms |
| TE 1 | 11.20 ms |
| Multi-echo spacing | 17.18 ms |
| MTC | Off |
| Magn. preparation | None |
| TI | 900 ms |
| Flip angle | 11 deg |
| Fat suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 264 |
| Pause after meas. | 0.0 s |

## Resolution - Common

| | |
|---|---|
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| Base resolution | 192 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | GRAPPA |
| Acc. factor PE | 2 |
| Ref. lines PE | 52 |
| Acc. factor 3D | 1 |
| Ref. lines 3D | 16 |
| Reference Scan Mode | GRE/separate |

## Resolution - Filter Image

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

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | On |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| Slab Scale | -10 % |
| Slices per slab | 16 |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 2300 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| Multi-echo Shots | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slab group | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.8 A16.7 H2.7 |
| L | 1.8 mm |
| A | 16.7 mm |
| H | 2.7 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | 1.0 |
| > S | 0.0 |

## Geometry - Saturation

| | |
|---|---|
| Saturation mode | Standard |
| Fat suppr. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |

## System - Miscellaneous

| | |
|---|---|
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Freq. adjust | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.2 A8.1 H3.8 mm |
| ! Orientation | T > C1.0 |
| ! Rotation | 0.00 deg |
| ! A >> P | 40 mm |
| ! R >> L | 52 mm |
| ! F >> H | 60 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.01 ms |
| Bandwidth | 1240 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| EPI factor | 16 |
| Segmentation | 6 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |

## Sequence - Special

| | |
|---|---|
| PATRef FA | 5 deg |
| RF duration | 2560 us |
| RF BWT product | 30 |
| Ernst T1 | 1300 ms |
| PATRef prep. shots | 200 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Integrated PC | Off |
| Invert PE | Off |
| Water Exc. | -none- |
| Phase Correction | per Blade |
| EPI rise time factor | 1.10 |

## Sequence - Special

| | |
|---|---|
| Mosaic DICOMs | On |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

---

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\dzne_ep3d_fmri_EPI10**

TA: 10:17 PM: FIX Voxel size: 0.9×0.9×3.0 mmPAT: 2 Rel. SNR: 1.00 : ep3d f015566

---

## Properties

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

## Routine

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Slab Scale | -10 % |
| Slices per slab | 16 |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 2800 ms |
| TE 1 | 8.04 ms |
| Averages | 1 |
| Multi-echo Shots | 1 |
| Filter | Raw filter |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 2800 ms |
| TE 1 | 8.04 ms |
| Multi-echo spacing | 11.32 ms |
| MTC | Off |
| Magn. preparation | None |
| TI | 900 ms |
| Flip angle | 9 deg |
| Fat suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 218 |
| Pause after meas. | 0.0 s |

## Resolution - Common

| | |
|---|---|
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| Base resolution | 192 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | Off |
| Slice partial Fourier | Off |
| Interpolation | Off |

## Resolution - iPAT

| | |
|---|---|
| PAT mode | GRAPPA |
| Acc. factor PE | 2 |
| Ref. lines PE | 52 |
| Acc. factor 3D | 1 |
| Ref. lines 3D | 16 |
| Reference Scan Mode | GRE/separate |

## Resolution - Filter Image

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

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | On |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slab group | 1 |
| Slabs | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| Slab Scale | -10 % |
| Slices per slab | 16 |
| FoV read | 164 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.00 mm |
| TR | 2800 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| Multi-echo Shots | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slab group | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.8 A16.7 H2.7 |
| L | 1.8 mm |
| A | 16.7 mm |
| H | 2.7 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | 1.0 |
| > S | 0.0 |

## Geometry - Saturation

| | |
|---|---|
| Saturation mode | Standard |
| Fat suppr. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |

## System - Miscellaneous

| | |
|---|---|
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Freq. adjust | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.2 A8.1 H3.8 mm |
| ! Orientation | T > C1.0 |
| ! Rotation | 0.00 deg |
| ! A >> P | 40 mm |
| ! R >> L | 52 mm |
| ! F >> H | 60 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 3D |
| Elliptical scanning | Off |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.03 ms |
| Bandwidth | 1302 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| EPI factor | 10 |
| Segmentation | 10 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |

## Sequence - Special

| | |
|---|---|
| PATRef FA | 5 deg |
| RF duration | 2560 us |
| RF BWT product | 30 |
| Ernst T1 | 1300 ms |
| PATRef prep. shots | 200 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Integrated PC | Off |
| Invert PE | Off |
| Water Exc. | -none- |
| Phase Correction | per Blade |
| EPI rise time factor | 1.10 |

## Sequence - Special

| | |
|---|---|
| Mosaic DICOMs | On |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |

# SIEMENS MAGNETOM Terra

| \\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\gre_B0_sag |
|---|
| TA: 0:59 PM: FIX Voxel size: 1.1×1.1×2.0 mmRel. SNR: 1.00 : fm |

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 20 |
| Dist. factor | 20 % |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 150.0 ms |
| TE 1 | 3.06 ms |
| TE 2 | 4.08 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 150.0 ms |
| TE 1 | 3.06 ms |
| TE 2 | 4.08 ms |
| MTC | Off |
| Flip angle | 19 deg |
| Fat suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Short term |
| Reconstruction | Magn./Phase |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| Base resolution | 190 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | Off |

## Resolution - Filter Image

| | |
|---|---|
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 20 |
| Dist. factor | 20 % |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 2.0 mm |
| TR | 150.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | R1.7 A3.6 F13.1 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | R1.7 A3.6 F17.1 |
| R | 1.7 mm |
| A | 3.6 mm |
| F | 17.1 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Sagittal |

## Geometry - Saturation

| | |
|---|---|
| Fat suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 4 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |

**System - Adjustments**

| | |
|---|---|
| Adjustment Tolerance | Auto |

**System - Adjust Volume**

| | |
|---|---|
| ! Position | L0.2 A8.1 H7.8 mm |
| ! Orientation | T > C1.0 |
| ! Rotation | 0.00 deg |
| ! A >> P | 40 mm |
| ! R >> L | 52 mm |
| ! F >> H | 60 mm |
| Reset | Off |

**System - Tx/Rx**

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

**Sequence - Part 1**

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Bandwidth | 797 Hz/Px |

**Sequence - Part 2**

| | |
|---|---|
| RF pulse type | Normal |
| Gradient mode | Fast |
| RF spoiling | On |

**Sequence - Assistant**

| | |
|---|---|
| Mode | Off |

---

**\\DEV\VCAL\THS_fMRI_coilQA\COILQA_fMRI_RB_20230707\gre_B0_tra**

TA: 0:59 PM: FIX Voxel size: 1.1×1.1×3.0 mmRel. SNR: 1.00 : fm

---

## Properties

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

## Routine

| | |
|---|---|
| Slice group | 1 |
| Slices | 20 |
| Dist. factor | 0 % |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.0 mm |
| TR | 150.0 ms |
| TE 1 | 3.06 ms |
| TE 2 | 4.08 ms |
| Averages | 1 |
| Concatenations | 1 |
| Filter | None |
| Coil elements | CSP |

## Contrast - Common

| | |
|---|---|
| TR | 150.0 ms |
| TE 1 | 3.06 ms |
| TE 2 | 4.08 ms |
| MTC | Off |
| Flip angle | 19 deg |
| Fat suppr. | None |

## Contrast - Dynamic

| | |
|---|---|
| Averages | 1 |
| Averaging mode | Short term |
| Reconstruction | Magn./Phase |
| Measurements | 1 |
| Multiple series | Off |

## Resolution - Common

| | |
|---|---|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.0 mm |
| Base resolution | 190 |
| Phase resolution | 100 % |
| Phase partial Fourier | Off |
| Interpolation | Off |

## Resolution - Filter Image

| | |
|---|---|
| Image Filter | Off |
| Distortion Corr. | Off |

## Resolution - Filter Image

| | |
|---|---|
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

## Resolution - Filter Rawdata

| | |
|---|---|
| Raw filter | Off |
| Elliptical filter | Off |

## Geometry - Common

| | |
|---|---|
| Slice group | 1 |
| Slices | 20 |
| Dist. factor | 0 % |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 3.0 mm |
| TR | 150.0 ms |
| Multi-slice mode | Interleaved |
| Series | Interleaved |
| Concatenations | 1 |

## Geometry - AutoAlign

| | |
|---|---|
| Slice group | 1 |
| Position | L1.8 A16.7 H2.7 mm |
| Orientation | T > C1.0 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L1.8 A16.7 H2.7 |
| L | 1.8 mm |
| A | 16.7 mm |
| H | 2.7 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | 1.0 |
| > S | 0.0 |

## Geometry - Saturation

| | |
|---|---|
| Fat suppr. | None |
| Special sat. | None |

## System - Miscellaneous

| | |
|---|---|
| Positioning mode | FIX |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

## System - Adjustments

| | |
|---|---|
| B0 Shim mode | Brain |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |

## System - Adjustments

| | |
|---|---|
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

## System - Adjust Volume

| | |
|---|---|
| ! Position | L0.2 A8.1 H3.8 mm |
| ! Orientation | T > C1.0 |
| ! Rotation | 0.00 deg |
| ! A >> P | 40 mm |
| ! R >> L | 52 mm |
| ! F >> H | 60 mm |
| Reset | Off |

## System - Tx/Rx

| | |
|---|---|
| Frequency 1H | 297.191007 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 434.000 V |

## Sequence - Part 1

| | |
|---|---|
| Introduction | On |
| Dimension | 2D |
| Asymmetric echo | Off |
| Contrasts | 2 |
| Flow comp. | No |
| Multi-slice mode | Interleaved |
| Bandwidth | 797 Hz/Px |

## Sequence - Part 2

| | |
|---|---|
| RF pulse type | Normal |
| Gradient mode | Fast |
| RF spoiling | On |

## Sequence - Assistant

| | |
|---|---|
| Mode | Off |