

SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Human Protocol\Localizer

Scan Time: 9.2 [s] Voxel size: 2.2x1.1x10.0 [mm] Rel. SNR: 1.00 SIEMENS: gre

Routine

|                    |                   |
|--------------------|-------------------|
| Slice group 1      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Sagittal          |
| Phase enc. dir.    | A >> P            |
| Rotation           | 0 [deg]           |
| Slice group 2      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Transversal       |
| Phase enc. dir.    | A >> P            |
| Rotation           | 0 [deg]           |
| Slice group 3      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Coronal           |
| Phase enc. dir.    | R >> L            |
| Rotation           | 0 [deg]           |
| Phase oversampling | 0 [%]             |
| FoV read           | 280 [mm]          |
| FoV phase          | 100.0 [%]         |
| Slice thickness    | 10 [mm]           |
| TR                 | 20 [ms]           |
| TE                 | 5 [ms]            |
| Averages           | 1                 |
| Concatenations     | 3                 |
| Filter             | Elliptical filter |
| Coil elements      | HE                |

Contrast

|                   |           |
|-------------------|-----------|
| TD                | 0 [ms]    |
| MTC               | 0         |
| Magn. preparation | None      |
| Flip angle        | 40 [deg]  |
| Reconstruction    | Magnitude |
| Fat suppr.        | None      |
| Water suppr.      | None      |
| Measurements      | 1         |

Resolution

|                       |        |
|-----------------------|--------|
| Base resolution       | 256    |
| Phase resolution      | 50 [%] |
| Phase partial Fourier | Off    |
| Filter 1              |        |
| Raw filter            | Off    |
| Filter 2              |        |
| Large FoV             | Off    |
| Filter 3              |        |
| Normalize             | Off    |
| Filter 4              |        |
| Elliptical filter     | On     |
| Interpolation         | 1      |
| -----                 |        |
| PAT mode              | None   |

Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Sequential  |
| Series           | Interleaved |
| -----            |             |
| Saturation mode  | Standard    |
| Special sat.     | None        |

System

|                          |                       |
|--------------------------|-----------------------|
| Save uncombined          | 0                     |
| Scan at current TP       | 0                     |
| Scan region position     | H                     |
| Scan region position     | 0 [mm]                |
| MSMA                     | S - C - T             |
| Sagittal                 | R >> L                |
| Coronal                  | A >> P                |
| Transversal              | F >> H                |
| CP Head Array / HE       | 1                     |
| Body                     | 0                     |
| -----                    |                       |
| Shim mode                | Tune up               |
| Adjust with body coil    | 0                     |
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Transversal           |
| Rotation                 | 0 [deg]               |
| R >> L                   | 350 [mm]              |
| A >> P                   | 263 [mm]              |
| F >> H                   | 350 [mm]              |

Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| Segments        | 1    |
| -----           |      |
| Tagging         | None |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |
| -----                |   |
| Wash - In            | 0 |
| Wash - Out           | 0 |
| TTP                  | 0 |
| PEI                  | 0 |
| MIP - time           | 0 |

Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 2D          |
| Phase stabilisation | 0           |
| Averaging mode      | Short term  |
| Asymmetric echo     | Off         |
| Contrasts           | 1           |
| Bandwidth           | 180 [Hz/Px] |
| Flow comp.          | No          |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal      |
| Excitation          | Slice-sel.  |
| RF spoiling         | 1           |

SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Human Protocol\MPRAGE

Scan Time: 9:38    Voxel size: 1.3x1.3x1.2 [mm]    Rel. SNR: 1.00    USER: tf1\_ADNI

Routine

|                    |           |
|--------------------|-----------|
| Slab group 1       |           |
| Slabs              | 1         |
| Dist. factor       | 50 [%]    |
| Position           | Isocenter |
| Orientation        | Sagittal  |
| Phase enc. dir.    | A >> P    |
| Rotation           | 0 [deg]   |
| Phase oversampling | 0 [%]     |
| Slice oversampling | 20 [%]    |
| Slices per slab    | 160       |
| FoV read           | 240 [mm]  |
| FoV phase          | 100.0 [%] |
| Slice thickness    | 1.2 [mm]  |
| TR                 | 3000 [ms] |
| TE                 | 3.87 [ms] |
| Averages           | 1         |
| Concatenations     | 1         |
| Filter             | None      |
| Coil elements      | HE        |

Contrast

|                   |             |
|-------------------|-------------|
| Magn. preparation | Non-sel. IR |
| TI                | 1000 [ms]   |
| Flip angle        | 8 [deg]     |
| Reconstruction    | Magnitude   |
| Fat suppr.        | None        |
| Water suppr.      | None        |
| Measurements      | 1           |

Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 192     |
| Phase resolution      | 100 [%] |
| Slice resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Slice partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | Off     |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Single shot |
| Series           | Interleaved |

System

|                       |           |
|-----------------------|-----------|
| Save uncombined       | 0         |
| Scan at current TP    | 0         |
| Scan region position  | H         |
| Scan region position  | 0 [mm]    |
| MSMA                  | S - C - T |
| Sagittal              | R >> L    |
| Coronal               | A >> P    |
| Transversal           | F >> H    |
| CP Head Array / HE    | 1         |
| Body                  | 0         |
| -----                 |           |
| Shim mode             | Standard  |
| Adjust with body coil | 0         |

|                          |                       |
|--------------------------|-----------------------|
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Sagittal              |
| Rotation                 | 0 [deg]               |
| F >> H                   | 240 [mm]              |
| A >> P                   | 240 [mm]              |
| R >> L                   | 193 [mm]              |

Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| -----           |      |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |

Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 3D          |
| Elliptical scanning | 0           |
| Averaging mode      | Long term   |
| Asymmetric echo     | Off         |
| Bandwidth           | 180 [Hz/Px] |
| Echo spacing        | 9.8 [ms]    |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal*     |
| Excitation          | Non-sel.    |
| RF spoiling         | 1           |

# SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNIMAIN-PHASE\Human Protocol\MPRAGE Repeat  
 Scan Time: 9:38    Voxel size: 1.3x1.3x1.2 [mm]    Rel. SNR: 1.00    USER: tf1\_ADNI

## Routine

|                    |           |
|--------------------|-----------|
| Slab group 1       |           |
| Slabs              | 1         |
| Dist. factor       | 50 [%]    |
| Position           | Isocenter |
| Orientation        | Sagittal  |
| Phase enc. dir.    | A >> P    |
| Rotation           | 0 [deg]   |
| Phase oversampling | 0 [%]     |
| Slice oversampling | 20 [%]    |
| Slices per slab    | 160       |
| FoV read           | 240 [mm]  |
| FoV phase          | 100.0 [%] |
| Slice thickness    | 1.2 [mm]  |
| TR                 | 3000 [ms] |
| TE                 | 3.87 [ms] |
| Averages           | 1         |
| Concatenations     | 1         |
| Filter             | None      |
| Coil elements      | HE        |

## Contrast

|                   |             |
|-------------------|-------------|
| Magn. preparation | Non-sel. IR |
| TI                | 1000 [ms]   |
| Flip angle        | 8 [deg]     |
| Reconstruction    | Magnitude   |
| Fat suppr.        | None        |
| Water suppr.      | None        |
| Measurements      | 1           |

## Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 192     |
| Phase resolution      | 100 [%] |
| Slice resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Slice partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | Off     |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

## Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Single shot |
| Series           | Interleaved |

## System

|                       |           |
|-----------------------|-----------|
| Save uncombined       | 0         |
| Scan at current TP    | 0         |
| Scan region position  | H         |
| Scan region position  | 0 [mm]    |
| MSMA                  | S - C - T |
| Sagittal              | R >> L    |
| Coronal               | A >> P    |
| Transversal           | F >> H    |
| CP Head Array / HE    | 1         |
| Body                  | 0         |
| -----                 |           |
| Shim mode             | Standard  |
| Adjust with body coil | 0         |

|                          |                       |
|--------------------------|-----------------------|
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Sagittal              |
| Rotation                 | 0 [deg]               |
| F >> H                   | 240 [mm]              |
| A >> P                   | 240 [mm]              |
| R >> L                   | 193 [mm]              |

## Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| -----           |      |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

## Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |

## Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 3D          |
| Elliptical scanning | 0           |
| Averaging mode      | Long term   |
| Asymmetric echo     | Off         |
| Bandwidth           | 180 [Hz/Px] |
| Echo spacing        | 9.8 [ms]    |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal*     |
| Excitation          | Non-sel.    |
| RF spoiling         | 1           |

SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Human Protocol\B1-calibration Head

Scan Time: 1:04 Voxel size: 2.3x2.3x2.5 [mm] Rel. SNR: 1.00 USER: gre\_ADNI

Routine

|                    |           |
|--------------------|-----------|
| Slab group 1       |           |
| Slabs              | 1         |
| Dist. factor       | 20 [%]    |
| Position           | Isocenter |
| Orientation        | Sagittal  |
| Phase enc. dir.    | A >> P    |
| Rotation           | 0 [deg]   |
| Phase oversampling | 0 [%]     |
| Slice oversampling | 0 [%]     |
| Slices per slab    | 96        |
| FoV read           | 300 [mm]  |
| FoV phase          | 100.0 [%] |
| Slice thickness    | 2.5 [mm]  |
| TR                 | 5.1 [ms]  |
| TE                 | 1.67 [ms] |
| Averages           | 1         |
| Concatenations     | 1         |
| Filter             | None      |
| Coil elements      | HE        |

Contrast

|                   |           |
|-------------------|-----------|
| MTC               | 0         |
| Magn. preparation | None      |
| Flip angle        | 2 [deg]   |
| Reconstruction    | Magnitude |
| Fat suppr.        | None      |
| Water suppr.      | None      |
| Measurements      | 1         |

Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 128     |
| Phase resolution      | 100 [%] |
| Slice resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Slice partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | Off     |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Interleaved |
| Series           | Interleaved |
| -----            |             |
| Saturation mode  | Standard    |
| Special sat.     | None        |

System

|                      |           |
|----------------------|-----------|
| Save uncombined      | 0         |
| Scan at current TP   | 0         |
| Scan region position | H         |
| Scan region position | 0 [mm]    |
| MSMA                 | S - C - T |
| Sagittal             | R >> L    |
| Coronal              | A >> P    |
| Transversal          | F >> H    |
| CP Head Array / HE   | 1         |
| Body                 | 0         |

|                          |                       |
|--------------------------|-----------------------|
| Shim mode                | Standard              |
| Adjust with body coil    | 0                     |
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Sagittal              |
| Rotation                 | 0 [deg]               |
| F >> H                   | 300 [mm]              |
| A >> P                   | 300 [mm]              |
| R >> L                   | 240 [mm]              |

Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| Segments        | 1    |
| -----           |      |
| Tagging         | None |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |
| -----                |   |
| Wash - In            | 0 |
| Wash - Out           | 0 |
| TTP                  | 0 |
| PEI                  | 0 |
| MIP - time           | 0 |

Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 3D          |
| Elliptical scanning | 0           |
| Phase stabilisation | 0           |
| Averaging mode      | Long term   |
| Asymmetric echo     | Off         |
| Contrasts           | 1           |
| Bandwidth           | 980 [Hz/Px] |
| Flow comp.          | No          |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal      |
| Excitation          | Non-sel.    |
| RF spoiling         | 1           |

# SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Human Protocol\B1-calibration Body

Scan Time: 1:04    Voxel size: 2.3x2.3x2.5 [mm]    Rel. SNR: 1.00    USER: gre\_ADNI

## Routine

|                    |           |
|--------------------|-----------|
| Slab group 1       |           |
| Slabs              | 1         |
| Dist. factor       | 20 [%]    |
| Position           | Isocenter |
| Orientation        | Sagittal  |
| Phase enc. dir.    | A >> P    |
| Rotation           | 0 [deg]   |
| Phase oversampling | 0 [%]     |
| Slice oversampling | 0 [%]     |
| Slices per slab    | 96        |
| FoV read           | 300 [mm]  |
| FoV phase          | 100.0 [%] |
| Slice thickness    | 2.5 [mm]  |
| TR                 | 5.1 [ms]  |
| TE                 | 1.67 [ms] |
| Averages           | 1         |
| Concatenations     | 1         |
| Filter             | None      |
| Coil elements      | BC        |

## Contrast

|                   |           |
|-------------------|-----------|
| MTC               | 0         |
| Magn. preparation | None      |
| Flip angle        | 2 [deg]   |
| Reconstruction    | Magnitude |
| Fat suppr.        | None      |
| Water suppr.      | None      |
| Measurements      | 1         |

## Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 128     |
| Phase resolution      | 100 [%] |
| Slice resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Slice partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | Off     |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

## Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Interleaved |
| Series           | Interleaved |
| -----            |             |
| Saturation mode  | Standard    |
| Special sat.     | None        |

## System

|                      |           |
|----------------------|-----------|
| Save uncombined      | 0         |
| Scan at current TP   | 0         |
| Scan region position | H         |
| Scan region position | 0 [mm]    |
| MSMA                 | S - C - T |
| Sagittal             | R >> L    |
| Coronal              | A >> P    |
| Transversal          | F >> H    |
| CP Head Array / HE   | 0         |
| Body                 | 1         |

|                          |                       |
|--------------------------|-----------------------|
| Shim mode                | Standard              |
| Adjust with body coil    | 0                     |
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Sagittal              |
| Rotation                 | 0 [deg]               |
| F >> H                   | 300 [mm]              |
| A >> P                   | 300 [mm]              |
| R >> L                   | 240 [mm]              |

## Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| Segments        | 1    |
| -----           |      |
| Tagging         | None |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

## Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |
| -----                |   |
| Wash - In            | 0 |
| Wash - Out           | 0 |
| TTP                  | 0 |
| PEI                  | 0 |
| MIP - time           | 0 |

## Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 3D          |
| Elliptical scanning | 0           |
| Phase stabilisation | 0           |
| Averaging mode      | Long term   |
| Asymmetric echo     | Off         |
| Contrasts           | 1           |
| Bandwidth           | 980 [Hz/Px] |
| Flow comp.          | No          |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal      |
| Excitation          | Non-sel.    |
| RF spoiling         | 1           |

# SIEMENS MAGNETOM Symphony\_Ultra MR 2002B

\\USER\ADNI\MAIN-PHASE\Human Protocol\Axial PD-T2 TSE  
 Scan Time: 6:50    Voxel size: 0.9x0.9x3.0 [mm]    Rel. SNR: 1.00    SIEMENS: tse

## Routine

|                    |                   |
|--------------------|-------------------|
| Slice group 1      |                   |
| Slices             | 48                |
| Dist. factor       | 0 [%]             |
| Position           | Isocenter         |
| Orientation        | Transversal       |
| Phase enc. dir.    | R >> L            |
| Rotation           | 90 [deg]          |
| Phase oversampling | 0 [%]             |
| FoV read           | 240 [mm]          |
| FoV phase          | 89.1 [%]          |
| Slice thickness    | 3 [mm]            |
| TR                 | 3000 [ms]         |
| TE[1]              | 13 [ms]           |
| TE[2]              | 103 [ms]          |
| Averages           | 1                 |
| Concatenations     | 4                 |
| Filter             | Elliptical filter |
| Coil elements      | HE                |

## Contrast

|                   |           |
|-------------------|-----------|
| TD                | 0 [ms]    |
| MTC               | 0         |
| Magn. preparation | None      |
| Flip angle        | 150 [deg] |
| Reconstruction    | Magnitude |
| Fat suppr.        | None      |
| Fat sat. mode     | Strong    |
| Water suppr.      | None      |
| Measurements      | 1         |

## Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 256     |
| Phase resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | On      |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

## Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Interleaved |
| Series           | Interleaved |
| -----            |             |
| Special sat.     | None        |

## System

|                      |           |
|----------------------|-----------|
| Save uncombined      | 0         |
| Scan at current TP   | 0         |
| Scan region position | H         |
| Scan region position | 0 [mm]    |
| MSMA                 | S - C - T |
| Sagittal             | R >> L    |
| Coronal              | A >> P    |
| Transversal          | F >> H    |
| CP Head Array / HE   | 1         |
| Body                 | 0         |
| -----                |           |
| Shim mode            | Standard  |

|                          |                       |
|--------------------------|-----------------------|
| Adjust with body coil    | 0                     |
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Transversal           |
| Rotation                 | 90 [deg]              |
| A >> P                   | 240 [mm]              |
| R >> L                   | 214 [mm]              |
| F >> H                   | 144 [mm]              |

## Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| -----           |      |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

## Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |

## Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 2D          |
| Compensate T2 decay | 0           |
| Averaging mode      | Long term   |
| Contrasts           | 2           |
| Bandwidth           | 163 [Hz/Px] |
| Flow comp.          | No          |
| Allowed delay       | 30 [s]      |
| Echo spacing        | 12.9 [ms]   |
| -----               |             |
| Turbo factor        | 7           |
| RF pulse type       | Low SAR     |
| Gradient mode       | Normal      |

SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Phantom Protocol\QC Phantom-Localizer

Scan Time: 9.2 [s] Voxel size: 2.2x1.1x10.0 [mm] Rel. SNR: 1.00 SIEMENS: gre

Routine

|                    |                   |
|--------------------|-------------------|
| Slice group 1      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Sagittal          |
| Phase enc. dir.    | A >> P            |
| Rotation           | 0 [deg]           |
| Slice group 2      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Transversal       |
| Phase enc. dir.    | A >> P            |
| Rotation           | 0 [deg]           |
| Slice group 3      |                   |
| Slices             | 1                 |
| Dist. factor       | 20 [%]            |
| Position           | Isocenter         |
| Orientation        | Coronal           |
| Phase enc. dir.    | R >> L            |
| Rotation           | 0 [deg]           |
| Phase oversampling | 0 [%]             |
| FoV read           | 280 [mm]          |
| FoV phase          | 100.0 [%]         |
| Slice thickness    | 10 [mm]           |
| TR                 | 20 [ms]           |
| TE                 | 5 [ms]            |
| Averages           | 1                 |
| Concatenations     | 3                 |
| Filter             | Elliptical filter |
| Coil elements      | HE                |

Contrast

|                   |           |
|-------------------|-----------|
| TD                | 0 [ms]    |
| MTC               | 0         |
| Magn. preparation | None      |
| Flip angle        | 40 [deg]  |
| Reconstruction    | Magnitude |
| Fat suppr.        | None      |
| Water suppr.      | None      |
| Measurements      | 1         |

Resolution

|                       |        |
|-----------------------|--------|
| Base resolution       | 256    |
| Phase resolution      | 50 [%] |
| Phase partial Fourier | Off    |
| Filter 1              |        |
| Raw filter            | Off    |
| Filter 2              |        |
| Large FoV             | Off    |
| Filter 3              |        |
| Normalize             | Off    |
| Filter 4              |        |
| Elliptical filter     | On     |
| Interpolation         | 1      |
| -----                 |        |
| PAT mode              | None   |

Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Sequential  |
| Series           | Interleaved |
| -----            |             |
| Saturation mode  | Standard    |
| Special sat.     | None        |

System

|                          |                       |
|--------------------------|-----------------------|
| Save uncombined          | 0                     |
| Scan at current TP       | 0                     |
| Scan region position     | H                     |
| Scan region position     | 0 [mm]                |
| MSMA                     | S - C - T             |
| Sagittal                 | R >> L                |
| Coronal                  | A >> P                |
| Transversal              | F >> H                |
| CP Head Array / HE       | 1                     |
| Body                     | 0                     |
| -----                    |                       |
| Shim mode                | Tune up               |
| Adjust with body coil    | 0                     |
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Transversal           |
| Rotation                 | 0 [deg]               |
| R >> L                   | 350 [mm]              |
| A >> P                   | 263 [mm]              |
| F >> H                   | 350 [mm]              |

Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| Segments        | 1    |
| -----           |      |
| Tagging         | None |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |
| -----                |   |
| Wash - In            | 0 |
| Wash - Out           | 0 |
| TTP                  | 0 |
| PEI                  | 0 |
| MIP - time           | 0 |

Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 2D          |
| Phase stabilisation | 0           |
| Averaging mode      | Short term  |
| Asymmetric echo     | Off         |
| Contrasts           | 1           |
| Bandwidth           | 180 [Hz/Px] |
| Flow comp.          | No          |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal      |
| Excitation          | Slice-sel.  |
| RF spoiling         | 1           |

SIEMENS MAGNETOM Symphony\_Ultra syngo MR 2002B

\\USER\ADNI\MAIN-PHASE\Phantom Protocol\QC Phantom Sagittal MPRAGE

Scan Time: 9:38    Voxel size: 1.3x1.3x1.3 [mm]    Rel. SNR: 1.00    USER: tf1\_ADNI

Routine

|                    |           |
|--------------------|-----------|
| Slab group 1       |           |
| Slabs              | 1         |
| Dist. factor       | 50 [%]    |
| Position           | Isocenter |
| Orientation        | Sagittal  |
| Phase enc. dir.    | A >> P    |
| Rotation           | 0 [deg]   |
| Phase oversampling | 0 [%]     |
| Slice oversampling | 20 [%]    |
| Slices per slab    | 160       |
| FoV read           | 240 [mm]  |
| FoV phase          | 100.0 [%] |
| Slice thickness    | 1.3 [mm]  |
| TR                 | 3000 [ms] |
| TE                 | 3.87 [ms] |
| Averages           | 1         |
| Concatenations     | 1         |
| Filter             | None      |
| Coil elements      | HE        |

Contrast

|                   |             |
|-------------------|-------------|
| Magn. preparation | Non-sel. IR |
| TI                | 1000 [ms]   |
| Flip angle        | 8 [deg]     |
| Reconstruction    | Magnitude   |
| Fat suppr.        | None        |
| Water suppr.      | None        |
| Measurements      | 1           |

Resolution

|                       |         |
|-----------------------|---------|
| Base resolution       | 192     |
| Phase resolution      | 100 [%] |
| Slice resolution      | 100 [%] |
| Phase partial Fourier | Off     |
| Slice partial Fourier | Off     |
| Filter 1              |         |
| Raw filter            | Off     |
| Filter 2              |         |
| Large FoV             | Off     |
| Filter 3              |         |
| Normalize             | Off     |
| Filter 4              |         |
| Elliptical filter     | Off     |
| Interpolation         | 0       |
| -----                 |         |
| PAT mode              | None    |

Geometry

|                  |             |
|------------------|-------------|
| Multi-slice mode | Single shot |
| Series           | Interleaved |

System

|                       |           |
|-----------------------|-----------|
| Save uncombined       | 0         |
| Scan at current TP    | 0         |
| Scan region position  | H         |
| Scan region position  | 0 [mm]    |
| MSMA                  | S - C - T |
| Sagittal              | R >> L    |
| Coronal               | A >> P    |
| Transversal           | F >> H    |
| CP Head Array / HE    | 1         |
| Body                  | 0         |
| -----                 |           |
| Shim mode             | Standard  |
| Adjust with body coil | 0         |

|                          |                       |
|--------------------------|-----------------------|
| Confirm freq. adjustment | 0                     |
| Assume Silicone          | 0                     |
| Ref. amplitude [1H]      | Use Default Value [V] |
| Adjust volume            |                       |
| Position                 | Isocenter             |
| Orientation              | Sagittal              |
| Rotation                 | 0 [deg]               |
| F >> H                   | 240 [mm]              |
| A >> P                   | 240 [mm]              |
| R >> L                   | 208 [mm]              |

Physio

|                 |      |
|-----------------|------|
| 1st Signal/Mode | None |
| -----           |      |
| Dark blood      | 0    |
| -----           |      |
| Resp. control   | Off  |

Inline

|                      |   |
|----------------------|---|
| Subtract             | 0 |
| Std-Dev-Sag          | 0 |
| Std-Dev-Cor          | 0 |
| Std-Dev-Tra          | 0 |
| Std-Dev-Time         | 0 |
| MIP-Sag              | 0 |
| MIP-Cor              | 0 |
| MIP-Tra              | 0 |
| MIP-Time             | 0 |
| Save original images | 1 |

Sequence

|                     |             |
|---------------------|-------------|
| Introduction        | 1           |
| Dimension           | 3D          |
| Elliptical scanning | 0           |
| Averaging mode      | Long term   |
| Asymmetric echo     | Off         |
| Bandwidth           | 180 [Hz/Px] |
| Echo spacing        | 9.8 [ms]    |
| -----               |             |
| RF pulse type       | Fast        |
| Gradient mode       | Normal*     |
| Excitation          | Non-sel.    |
| RF spoiling         | 1           |