```
Geometry
                            = SENSE-head
Coil selection
                            = SENSE
     coil mode
     connection
                            = d
Multi coil
                             = no
Homogeneity correction
                            = none
CLEAR
                             = no
FOV (mm)
                             = 250.00
                            = 100.00
RFOV (%)
Foldover suppression
                            = no
Matrix scan
                            = 256
       reconstruction
                            = 256
Scan percentage (%)
                            = 50.00
SENSE
                             = no
Stacks
                             = 3
                             = A
    current
    type
                            = parallel
    slices
                            = 3
    slice thickness (mm) = 10.00
    slice thickness (mm) = 10.00

slice gap = user defined
gap (mm) = 10.00

slice orientation = sagittal

foldover direction = AP

fat shift direction = F
    use geometry
                            = none
Slice scan order
                            = default
Stack scan order
                            = ascend
                            = no
Move table per stack
Stack alignment
                             = no
Stack display order
                            = no
PlanAlign
                            = no
REST slabs
                            = 0
Catheter tracking
                            = no
Catheter tracking
Interactive positioning = no
Allow table movement = no
Patient position = head first
        orientation
                            = supine
Contrast
Scan mode
                            = M2D
                             = FFE
    technique
                            = T1
Contrast enhancement
                             = cartesian
Acquisition mode
                            = TFE
Fast Imaging mode
    shot mode
                            = multi-shot
TFE factor
                            = 42
    startup echoes
                            = default
                            = shortest
    shot interval
                            = linear
    profile order
Echoes
                            = no
   partial echo
    shifted echo
                            = no
                            = shortest
Flip angle (deg)
                            = 20.00
TR
                             = user defined
```

```
= 15.00
    (ms)
Half Scan
                         = no
Water fat shift
                          = maximum
Shim
                          = no
SPIR
                          = no
SPAIR
                         = no
TFE prepulse
                         = invert
   slice selection
                         = no
    shared
                          = no
   delay
                          = shortest
ProSet
                          = no
MTC
                         = no
T2prep
                         = no
Research prepulse
                         = no
diffusion mode
                         = no
SAR mode
                         = high
B1 mode
                         = default
gradient mode
                         = regular
SofTone mode
                         = no
Motion
Cardiac synchronisation
                         = no
Respiratory compensation
                          = no
Navigator respiratory comp = no
Flow compensation
                        = no
fMRI echo stabilisation
                        = no
NSA
                          = 1
Dyn/ang
Angio
                          = no
Quantitative flow
                          = no
Manual start
                          = no
Dynamic study
                         = no
Flow labelling
                         = none
Postproc
Preparation phases
                         = auto
B0 field map
MIP/MPR
                          = no
Images
                          =
     0: M no no no
                         = M
Autoview image
Reference tissue
                         = White matter
                       - ...
= soft
- immed
Preset window contrast
Reconstruction mode
                         = immediate
Save raw data
                         = no
Push to workstation
                         = no
Hardcopy protocol
                         = no
Ringing filtering
                         = no
Offc/ang
Stacks
                          = 3
    current
                         = A
                        = -20.00
Stack Offc. AP (P=+mm)
           RL (L=+mm)
                         = 0.00
           FH (H=+mm)
                         = 0.00
     Ang. AP (deg)
                          = 0.00
```

```
RL (deg) = 0.00
FH (deg) = 0.00

Info

SAR (W/kg) / SAR level = 0.3 / 0

Total scan duration = 00:17.4

Measured voxel size M / P / S (mm) = 0.98 / 1.98 / 10.0

Reconstructed voxel size M / P / S (mm) = 0.98 / 0.98 / 10.0

Actual scan percentage (%) = 49.2

TFE shots = 3

TFE shot duration (ms) / TFE acq duration (ms) = 697.1 / 630.0

TFE shot interval (ms) = 697.1

Minimum prepulse TI delay = 372.8

Act. Water fat shift (pixels) / Act. BW per pixel (Hz) = 1.161 / 187.1

Min. Water fat shift (pixels) / Max. BW per pixel (Hz) = 0.522 / 415.8

Act. TR / TE (ms) = 15 / 5.2

Min. TR / TE (ms) = 10 / 5.2

Relative signal level RSL (%) = 100.0
```

## ADNI , ADNI\_SH , Ref/SHC

Geometry = SENSE Coil mode = d Coil connection Foldover suppression = no
Stack Offc. AP (P=+mm) = 0.00
RL (L=+mm) = 0.00
FH (H=+mm) = 0.00
Patient position = head first orientation = supine Respiratory compensation = no NSA = 3 Manual start = no Contrast Coil mode

Coil connection = d

Foldover suppression = no

Offa AP (P=+mm) = 0.00 = SENSE RL (L=+mm) = 0.00 FH (H=+mm) = 0.00 Patient position = head first orientation = supine Respiratory compensation = no NSA = 3 Manual start = no Motion = SENSE Coil mode Coil connection = d

Foldover suppression = no

Stack Offc. AP (P=+mm) = 0.00

RL (L=+mm) = 0.00

FH (H=+mm) = 0.00

Patient position = head first

orientation = supine = d Coil connection Respiratory compensation = no NSA = 3 Manual start = no Dyn/ang = SENSE position = head first orientation = supine Patient position Respiratory compensation = no NSA Manual start = no Postproc = SENSE Coil mode

= d

Coil connection

```
Foldover suppression = no Stack Offc. AP (P=+mm) = 0.00 RL (L=+mm) = 0.00 FH (H=+mm) = 0.00
Patient position
                                = head first
         position = head fi
orientation = supine
Respiratory compensation = no
NSA
                                = 3
Manual start
                                  = no
Offc/ang
Coil mode
                                = SENSE
Coil connection
                                = d
Foldover suppression = no
Stack Offc. AP (P=+mm) = 0.00
RL (L=+mm) = 0.00
FH (H=+mm) = 0.00
                                = head first
Patient position
         position = head fi
orientation = supine
Respiratory compensation = no
NSA
                                = 3
Manual start
                                 = no
Info
SAR (W/kg) / SAR level = 0.3 / 0
Total scan duration = 00:50.6
Total scan duration = 00:50.6 Measured voxel size M / P / S (mm) = 4.69 / 6.00 / 6.00
Reconstructed voxel size M / P / S (mm) = 4.69 / 4.69 / 3.00
Actual scan percentage (%) = 78.1
Number of packages
Act. Water fat shift (pixels) / Act. BW per pixel (Hz) = 0.110 / 1973.9
Min. Water fat shift (pixels) / Max. BW per pixel (Hz) = 0.083 / 2604.2
                                = 8.0 / 0.81
Act. TR / TE (ms)
```

Relative signal level RSL (%) = 100.0

```
ADNI ,
      ADNI_SH , MPRAGE_ASO (and MPRAGE_ASO_repeat)
Geometry
Coil selection
                       = SENSE-head
                        = SENSE
    coil mode
    connection
                        = d
FOV (mm)
                       = 240.00
RFOV (%)
                        = 100.00
                        = no
Foldover suppression
Matrix scan
                        = 192
      reconstruction = 256
Scan percentage (%)
                       = 100.00
SENSE
                        = yes
   P reduction (AP)
                       = 1.00
   S reduction (RL)
                       = 1.00
                       = no
Overcontiguous slices
Stacks
                        = 1
                        = 170
   slices
   slice thickness (mm) = 1.20
   slice orientation = sagittal
   foldover direction
                       = AP
   fat shift direction
                       = F
                        = none
   use geometry
Chunks
                        = 1
                        = no
PlanAliqn
REST slabs
                        = 0
Catheter tracking
                       = no
Interactive positioning = no
                       = no
Allow table movement
                        = head first
Patient position
       orientation = supine
Contrast
Scan mode
                        = 3D
                        = FFE
   technique
Contrast enhancement
                       = T1
                        = cartesian
Acquisition mode
Fast Imaging mode
                       = TFE
   shot mode
                       = multi-shot
                       = 192
TFE factor
                      = default
= user defined
   startup echoes
   shot interval
                        = 2300.00
       (ms)
   profile order
                        = linear
   turbo direction
                        = 1
Echoes
   partial echo
                        = no
   shifted echo
                       = no
                       = user defined
TE:
                        = 4.00
   (ms)
                       = 8.00
Flip angle (deg)
TR
                       = shortest
                        = no
Half Scan
Water fat shift
                      = maximum
Shim
                        = auto
SPIR
                        = no
SPAIR
                         = no
```

```
TFE prepulse
                         = invert
   slice selection
                        = no
                          = user defined
   delay
                         = 1000.00
       (ms)
ProSet
                         = no
MTC
                         = no
T2prep
                         = no
Research prepulse
                         = no
diffusion mode
                         = no
SAR mode
                         = high
                        = default
= default
B1 mode
gradient mode
SofTone mode
                         = no
Motion
Cardiac synchronisation
                          = no
Respiratory compensation
                          = no
Navigator respiratory comp = no
Flow compensation
                     = no
fMRI echo stabilisation
                        = no
NSA
                          = 1
Dyn/ang
Angio
                          = no
Quantitative flow
                         = no
Manual start
                         = no
Dynamic study
                         = no
Flow labelling
                         = none
Postproc
Preparation phases
                          = auto
B0 field map
                          = no
MIP/MPR
                         = no
Images
     0: M no no no
                        = M
Autoview image
Reference tissue
                         = White matter
                      = soft
Preset window contrast
Reconstruction mode
                        = immediate
Save raw data
                         = no
Push to workstation
                        = no
Hardcopy protocol
                         = no
Ringing filtering
                         = yes
Offc/ang
Stacks
                          = 1
Stack Offc. AP (P=+mm)
                         = 0.00
           RL (L=+mm)
                         = 0.00
           FH (H=+mm)
                         = 0.00
                         = 0.00
     Ang.
           AP (deg)
           RL (deg)
                          = 0.00
           FH (deg)
                          = 0.00
Info
SAR (W/kg) / SAR level
                        = 0.1 / 0
                       = 07:11.9
Total scan duration
                      M / P / S (mm) = 1.25 / 1.25 / 1.20
Measured voxel size
```

```
Reconstructed voxel size M / P / S (mm) = 0.94 / 0.94 / 1.20 Actual scan percentage (%) = 100.0 TFE shots = 187 TFE shot duration (ms) / TFE acq duration (ms) = 1833.9 / 1654.5 Minimum prepulse TI delay = 864.3 Act. Water fat shift (pixels) / Act. BW per pixel (Hz) = 1.322 / 164.2 Min. Water fat shift (pixels) / Max. BW per pixel (Hz) = 0.250 / 868.1 Act. TR / TE (ms) = 8.6 / 4.0 Min. TR / TE (ms) = 8.6 / 3.0 Relative signal level RSL (%) = 100.0
```

```
ADNI ,
      ADNI_SH , Double_TSE
Geometry
Coil selection
                        = SENSE-head
    coil mode
                        = SENSE
    connection
                        = d
FOV (mm)
                        = 240.00
RFOV (%)
                        = 88.00
                        = no
Foldover suppression
Matrix scan
                        = 256
                        = 256
      reconstruction
Scan percentage (%)
                        = 100.00
SENSE
                        = yes
   P reduction (RL)
                        = 1.00
Stacks
                        = 1
                        = parallel
   type
   slices
                         = 48
   slice thickness (mm) = 3.00
                = user defined
   slice gap
                        = 0.00
         gap (mm)
   slice orientation
                        = transverse
   foldover direction
                        = RL
   fat shift direction
                        = P
   use geometry
                         = none
Minimum number of packages = 1
Slice scan order = default
PlanAlign
                        = no
REST slabs
                        = 0
                        = no
Catheter tracking
                        = no
Interactive positioning
Allow table movement
                         = no
                        = head first
Patient position
       orientation
                        = supine
Contrast
Scan mode
                        = MS
   technique
                         = SE
                        = no
Modified SE
Acquisition mode
                        = cartesian
                        = TSE
Fast Imaging mode
TSE factor
                        = 10
   startup echoes
                        = 0
                        = default
   profile orders
   DRIVE
                         = no
   ultrashort
                         = no
Echoes
                         = 2
   partial echo
                        = no
TE first
                        = user defined
                        = 12.00
          (ms)
                        = 96.00
   second (ms)
                        = 90.00
Flip angle (deg)
                        = no
Refocusing control
                        = user defined
   (ms)
                        = 3000.00
Half Scan
                        = no
Water fat shift
                        = maximum
Shim
                         = auto
```

```
SPIR
                          = no
SPAIR
                          = no
BB pulse
                          = no
ProSet
                          = no
MTC
                         = no
Research prepulse
                         = no
Zoom imaging
                         = no
diffusion mode
                         = no
SAR mode
                         = low
                        = default
= regular
B1 mode
gradient mode
SofTone mode
                         = no
Motion
Cardiac synchronisation
                         = no
Respiratory compensation = no
Navigator respiratory comp = no
Flow compensation
                    = no
Temporal slice spacing
                        = default
NSA
                         = 1
Dyn/ang
Manual start
                         = no
Dynamic study
Flow labelling
                         = none
Postproc
Preparation phases
                         = auto
B0 field map
                          = no
MIP/MPR
                          = no
Images
     0: M no no no
Autoview image
                         = M
     Calculated images
Reference tissue
Preset window contrast = soft
Reconstruction mode
                         = immediate
Save raw data
                         = no
Push to workstation
                         = no
Hardcopy protocol
                         = no
Offc/ang
Stacks
                       = 0.00
Stack Offc. AP (P=+mm)
                         = 0.00
           RL (L=+mm)
           FH (H=+mm)
                         = 0.00
     Ang. AP (deg)
                         = 0.00
           RL (deg)
                         = 0.00
           FH (deg)
                          = 0.00
Info
SAR (W/kg) / SAR level = 1.1 / 0
Total scan duration = 06:45.0
Measured voxel size M / P / S (mm) = 0.94 / 0.95 / 3.00
Reconstructed voxel size \, M \, / P \, S \, (mm) = 0.94 \, / 0.94 \, / 3.00
Actual scan percentage (%) = 98.2
```

Number of packages = 3
Minimum slice gap = 3.00
Optimal number of slices = 42
Maximum number of slices = 63
Water fat shift (pixels) / BW per pixel (Hz) = 1.323 / 164.1
TSE echo spacing / shot duration (ms) = 12.0 / 120
Min. TR (ms) = 2201
Relative signal level RSL (%) = 100.0