Queen Square MS Centre Team
UCL Institute of Neurology, Faculty of Brain Sciences
University College London

- **Team members (in alphabetical order):** Battiston Marco, Gandini Wheeler-Kingshott Claudia A. M., Grussu Francesco, Prados Ferran, Samson Rebecca S., Yiannakas Marios C.
- **Scanner:** Philips Achieva 3 Tesla
- **Software version:** 3.2.1
- **Submission:** Multi-slice fast field echo (FFE) scan, April 16th 2018

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Multi-transmit =                "yes";
    Active channels =           "both";
Nucleus =                       "H1";
Coil selection =                "SENSE-NV-16";
    element selection =         "HNACPC";
    connection =                "d";
Dual coil =                     "no";
CLEAR =                             "yes";
   body tuned =                 "no";
FOV         AP (mm) =                   192;
            RL (mm) =           162;
            FH (mm) =           51;
Voxel size  AP (mm) =                   0.5;
            RL (mm) =           0.5;
Slice thickness (mm) =                  3;
Recon voxel size (mm) =                 0.5;
Fold-over suppression =                 "no";
Reconstruction matrix =                 384;
SENSE =                                 "yes";
   P reduction (RL) =           2;
   P os factor =                1;
Stacks =                        1;
   type =                       "parallel";
   slices =                     17;
   slice gap =                  "user defined";
       gap (mm) =               0;
   slice orientation =          "transverse";
   fold-over direction =        "RL";
   fat shift direction = "P";
Stack Offc. AP (P=+mm) =    -4.44073439;
            RL (L=+mm) =    4.00667763;
            FH (H=+mm) =    -3.98225141;
     Ang.  AP (deg) =       0;
            RL (deg) =      -6.99225521;
            FH (deg) =      0;
Minimum number of packages =    1;
Slice scan order =              "interleaved";
Large table movement =                  "no";
PlanAlign =                     "no";
REST slabs =                    1;
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   shared =                    "no";
   type =                      "free";
   orientation =               "coronal";
   thickness (mm) =            80;
Rest  Offc. AP (P=+mm) =       -104.569756;
         RL (L=+mm) =          -0.677741408;
         FH (H=+mm) =          -8.0724411;
     Ang.  AP (deg) =          -0.0044703735;
         RL (deg) =            0.293235034;
         FH (deg) =            -0.873399973;
   power =                     "1";
Shim  Size  AP (mm) =                72.8470078;
         RL (mm) =             59.3023643;
         FH (mm) =             71;
     Offc. AP (P=+mm) =        -4.58936644;
         RL (L=+mm) =          3.43302441;
         FH (H=+mm) =          -3.96402216;
     Ang.  AP (deg) =          0;
         RL (deg) =            -6.99225521;
         FH (deg) =            0;
Patient position =             "head first";
       orientation =           "supine";
Scan type =                    "Imaging";
Scan mode =                    "MS";
   technique =                 "FFE";
Contrast enhancement =               "no";
Acquisition mode =             "cartesian";
Fast Imaging mode =            "none";
Echoes =                       1;
   partial echo =              "no";
   shifted echo =              "no";
TE =                           "shortest";
Flip angle (deg) =             28;
TR =                           "user defined";
   (ms) =                      355;
Halfscan =                     "yes";
Water-fat shift =              "maximum";
RF Shims =                     "adaptive";
Shim =                         "PB-volume";
ShimAlign =                    "yes";
Fat suppression =              "no";
Water suppression =            "no";
MTC =                                "no";
Research prepulse =            "no";
Diffusion mode =               "no";
SAR mode =                     "high";
B1 mode =                      "default";
SAR Patient data =             "auto";
PNS mode =                     "high";
Gradient mode =                      "maximum";
SofTone mode =                       "no";
Cardiac synchronization =      "no";
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Heart rate > 250 bpm = "no";
Respiratory compensation = "no";
Navigator respiratory comp = "no";
Flow compensation = "yes";
Temporal slice spacing = "default";
fMRI echo stabilisation = "no";
NSA = 8;
SMART = "yes";
Angio / Contrast enh. = "no";
Quantitative flow = "no";
Manual start = "no";
Dynamic study = "no";
Arterial Spin labeling = "no";
Preparation phases = "full";
Interactive F0 = "no";
B0 field map = "no";
B1 field map = "no";
MIP/MPR = "no";
Images = " M", (3) " no";
Autoview image = " no";
Calculated images = (4) " no";
Reference tissue = "Skeletal muscle";
Preset window contrast = "intermediate";
Reconstruction mode = "real time";
Save raw data = "yes";
Hardcopy protocol = "no";
Ringing filtering = "rectangular";
Geometry correction = "default";
IF_info_seperator = 1634755923;
Total scan duration = "09:54.3";
Rel. signal level (%) = 100;
Act. TR/TE (ms) = "355 / 9.8";
ACQ matrix M x P = "384 x 324";
ACQ voxel MPS (mm) = "0.50 / 0.50 / 3.00";
REC voxel MPS (mm) = "0.50 / 0.50 / 3.00";
Scan percentage (%) = 100;
Packages = 2;
Min. slice gap (mm) = 0;
Optimal slices = 14;
Max. slices = 28;
Act. WFS (pix) / BW (Hz) = "4.535 / 95.7";
Min. WFS (pix) / Max. BW (Hz) = "0.658 / 660.0";
Min. TR/TE (ms) = "222 / 9.8";
SAR / local torso = "< 55 %";
Whole body / level = "< 0.9 W/kg / normal";
B1 rms = "1.62 uT / 48 %";
PNS / level = "100 % / 1st level";
Sound Pressure Level (dB) = 17.5852203;