

Supplementary Table 1. Brain saturation inversion recovery diffusion imaging, 3T Philips Ingenia CX MRI system

Nucleus = "H1";
 SmartSelect = "yes";
 Coil 1 (exclude) = "None";
 Uniformity = "CLEAR";
 FOV RL (mm) = 230;
 AP (mm) = 230;
 FH (mm) = 115.200005;
 ACQ voxel size RL (mm) = 2.4000001;
 AP (mm) = 2.4000001;
 Slice thickness (mm) = 2.4000001;
 Recon voxel size RL (mm) = 2.39583325;
 AP (mm) = 2.39583325;
 Fold-over suppression = "no";
 Reconstruction matrix = 96;
 SENSE = "yes";
 P reduction (AP) = 2;
 MB SENSE = "yes";
 MB Factor = 3;
 MB per package = "yes";
 MB Shift = "default";
 RF Phase opt = "default";
 CS-SENSE = "no";
 Stacks = 1;
 type = "parallel";
 slices = 48;
 slice gap = "user defined";
 gap (mm) = 0;
 slice orientation = "transverse";
 fold-over direction = "AP";
 fat shift direction = "P";
 Stack Offc. AP (P=+mm) = -3.0486846;
 RL (L=+mm) = -2.12899208;
 FH (H=+mm) = 8.92084599;
 Ang. AP (deg) = 0.613435507;
 RL (deg) = -16.9113102;
 FH (deg) = -1.53963256;
 Free rotatable = "no";
 Minimum number of packages = 6;
 Slice scan order = "interleaved";
 Large table movement = "no";
 PlanAlign = "no";
 REST slabs = 0;
 Patient position = "head first";
 Patient body position = "head first";
 Patient orientation = "supine";
 Patient body orientation = "supine";
 Scan type = "Imaging";
 Scan mode = "MS";
 technique = "SE";

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Modified SE = "no";
Acquisition mode = "cartesian";
Fast Imaging mode = "EPI";
  shot mode = "single-shot";
Echoes = 1;
  partial echo = "no";
TE = "user defined";
  (ms) = 90;
Flip angle (deg) = 90;
TR = "shortest";
Halfscan = "no";
Water-fat shift = "maximum";
shared inversion = "yes";
  saturation = "saturation inversion";
  slice shuffling = 300;
  TI definition = "slice gap";
  number of TI = 1;
  TIs = 70, 30, (62) 500;
  slice shuffling = "yes";
    shuffling step = 1;
RF Shims = "fixed";
Shim = "auto";
mDIXON = "no";
Fat suppression = "no";
Grad Rev Fat suppr = "yes";
Water suppression = "no";
CSF suppression = "no";
BB pulse = "no";
EX_ACQ_mtr_optim = "no";
MT-STEAM = "no";
MTC = "no";
Research prepulse = "no";
Diffusion mode = "DTI";
  sequence = "SE";
  gradient duration = "maximum";
  gradient overplus = "no";
  directional resolution = "from file";
  average high b = "no";
  allow complex images = "no";
    multi-modal EPI = "no";
EX_ACQ_enable_proquest = "no";
Multi-transmit = "yes";
Transmit channels = "both";
SAR mode = "high";
B1 mode = "default";
SAR allow first level = "yes";
PNS mode = "high";
Gradient mode = "enhanced";
SofTone mode = "no";
Cardiac synchronization = "no";
Respiratory compensation = "no";
Navigator respiratory comp = "no";
Flow compensation = "no";
Temporal slice spacing = "user defined";
  slice interval = 250;

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package TR extension =          "user defined";
    recovery time =            419;
dummy slice loop =            "no";
NSA =                          1;
Manual start =                 "no";
Dynamic study =                "individual";
    dyn scans =                8;
    dyn scan times =           "shortest";
    fov time mode =            "default";
    dummy scans =              0;
    immediate subtraction =    "no";
    fast next scan =           "no";
    synch. ext. device =       "no";
    dynamic noise scan =       "no";
        M0 scan =              "no";
    dyn stabilization =        "regular";
    prospect. motion corr. =    "no";
Keyhole =                       "no";
Arterial Spin labeling =        "no";
Preparation phases =           "auto";
Interactive F0 =                "no";
B0 field map =                  "no";
B1 field map =                  "no";
MIP/MPR =                       "no";
Images =                        "M", (3) "no";
Autoview image =                "M";
Calculated images =             (4) "no";
Reference tissue =              "Grey matter";
Recon compression =            "No";
Preset window contrast =       "soft";
Reconstruction mode =          "immediate";
Save raw data =                 "no";
Hardcopy protocol =            "no";
Image filter =                  "no";
Uniformity correction =        "no";
Geometry correction =          "default";
IF_info_seperator =            1634755923;
Research Options used =        "9";
Total scan duration =          "45:12.1";
Rel. SNR =                      1;
Act. TR (ms) =                  "2563";
Act. TE (ms) =                  "90";
Dyn. scan time =                "05:38.4";
ACQ matrix M x P =             "96 x 94";
ACQ voxel MPS (mm) =           "2.40 / 2.45 / 2.40";
REC voxel MPS (mm) =           "2.40 / 2.40 / 2.40";
Scan percentage (%) =          97.9166641;
Packages =                      2;
Min. slice gap (mm) =          -0;
Diffusion gradient timing DELTA / delta (ms) =
    "43.6 / 17.4";

User defined DTI scheme =
    "SARDU-NET-Brain (66, 3000)";

prepulse rep time =            250;
nearness =                      1;

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EPI factor = 47;
WFS (pix) / BW (Hz) = "16.649 / 26.1";
BW in EPI freq. dir. (Hz) = "2507.7";
Head SAR = "< 26 %";
Whole body SAR / level = "< 0.1 W/kg / normal";
SED = "< 0.2 kJ/kg";
Coil Power = "26 %";
Max B1+rms = "1.19 uT";
PNS / level = "65 % / normal";
dB/dt = "51.6 T/s";
Sound Pressure Level (dB) = 21.5876656;