Protocols for coil testing

23 October 2013

Remember to get \***BOTH DICOM and meas.dat**\*!

* Structural images

1. baby coil + phantom + GRE (whole brain; ~ 30 slices; typical T1 weighted TR/TE/flip angle; image matrix = 256x256; FOV =200 mm x 200 mm)
2. seimens coil + phantom + GRE (whole brain; ~ 30 slices; typical T1 weighted TR/TE/flip angle; image matrix = 256x256; FOV =200 mm x 200 mm)
3. baby coil + human subject + GRE (whole brain; ~ 30 slices; try to TR/TE/flip angle for good white/gray matter constrast; image matrix = 256x256; FOV =200 mm x 200 mm)
4. siemens coil + human subject + GRE (whole brain; ~ 30 slices; try to TR/TE/flip angle for good white/gray matter constrast; image matrix = 256x256; FOV =200 mm x 200 mm)

* Calibration (for noise covariance matrix calculation)

1. baby coil + phantom + GRE (whole brain; ~ 30 slices; T1 weighted TR/TE like in 1. **flip angle = 0 deg** ; image matrix = 256x256; FOV =200 mm x 200 mm)
2. siemens coil + phantom + GRE (whole brain; ~ 30 slices; T1 weighted TR/TE like in 1. **flip angle = 0 deg** ; image matrix = 256x256; FOV =200 mm x 200 mm)

* EPI resting state

1. baby coil + phantom + EPI (whole brain; ~ 30 slices; TR/TE/flip angle = 2 s/40 ms/90 deg; image matrix = 64x64; FOV =200 mm x 200 mm; slice thickness ~ 4 mm with 20% gap; repeat for 5 minutes)
2. siemens coil + phantom + EPI (whole brain; ~ 30 slices; TR/TE/flip angle = 2 s/40 ms/90 deg; image matrix = 64x64; FOV =200 mm x 200 mm; slice thickness ~ 4 mm with 20% gap; repeat for 5 minutes)
3. baby coil + human subject + EPI (whole brain; ~ 30 slices; TR/TE/flip angle = 2 s/40 ms/90 deg; image matrix = 64x64; FOV =200 mm x 200 mm; slice thickness ~ 4 mm with 20% gap; repeat for 5 minutes)
4. siemens coil + human subject + EPI (whole brain; ~ 30 slices; TR/TE/flip angle = 2 s/40 ms/90 deg; image matrix = 64x64; FOV =200 mm x 200 mm; slice thickness ~ 4 mm with 20% gap; repeat for 5 minutes)