

3T structural scans

Almost anything you may need IS or CAN BE available for structural scanning of your subject population. Below is a list of “standard” sequences we use that may suit your needs.

- 1) MPRAGE - 5 echo: A 3D scan collected in the Sagittal plane - 192 slices x 5 echos. Beautiful high resolution scan for structure. 6:03 min.
- 2) T2 Weighted Sequence: A 2D scan collected in the axial plane - image matrix 1.1 x 1.1 x 1.5mm thick slice - 120 slices 3:08 min.
- 3) T2 Flair: A 2D scan collected in the axial plane - image matrix 1 x 1 x 3 mm thick slice - 46 slices 6:03 min.
- 4) T2 Flair: A 3D scan collected in the sagittal plane - image matrix 1 x 1 x 1 mm - 192 slices 7:14 min
- 5) Axial Flair: A 2D scan - image matrix 1 x 1 x 4mm - 30 slices 3:56 min.
- 6) Axial Flair: A 2D scan - image matrix 1 x 1 x 2mm - 72 slices 6:18 min.
- 7) T1 Mid-line Sagittal sequence - image matrix .9 x .9 x 4mm - can collect from 1 center slice to 25 slices - generally used to set up ac/pc axial angles - 1:14 min.
- 8) T2 SWI 3D (Susceptibility Weighted Image) - image matrix 1.1 x 1.0 x 1.5 mm - collected in an axial plane - 88 slices - 4:56 min.

3T diffusion tensor imaging

- 1) DTI - 35 direction/ b-value 800 Image matrix 2 x 2 x 2mm collected in an axial plane with 72 slices - 5:42 min.
 - 2) DTI - 36 direction/ b-value 800 Image matrix 2 x 2 x 2mm collected in an axial plane with 72 slices - 5:51 min.
 - 3) DTI - 35 direction/ b-value 1600 Image matrix 2 x 2 x 2mm collected in an axial plane with 72 slices - 6:12 min.
 - 4) DTI - 36 direction/ b-value 1600 Image matrix 2 x 2 x 2mm collected in an axial plane with 72 slices - 6:22 min.
 - 5) DTI - 71 direction / b-value 800 Image matrix 2 x 2 x 2mm collected in an axial plane with 72 slices - 11:06 min.
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3T arterial spin labeling

- 1) ASL FAIR - Arterial Spin Labeling sequence run in the axial plane - image matrix 3.4 x 3.4 x 4mm - 24 slices - 6:26 min.

2) ASL Picore - Arterial Spin Labeling sequence run in the axial plane - image matrix 3.8 x 3.8 x 4mm - 24 slices - 7:02 min.

3T spectroscopy

1) CSI (15mm thick slab - volumetric spectroscopy) voxel size - 9.2 x 9.2 x 15mm -

9:32 min. - Also must collect same region with a water reference for post processing data

CSI - 9:32 min. - Total time for CSI - 19:04

2) SVS (Single Voxel Spectroscopy) voxel size - 20 x 30 x 20mm - 4:54 min. Must also collect a water reference for post processing data - :30 sec - total time for SVS 5:26 min

3) MegaPress (Single Voxel Spectroscopy) voxel size 26 x 20 x 40 mm - 13:18 min. Must also collect a water reference for post processing data - 1:54 min. - Total Time: 15:12 min.