Dataset used: AOMIC-PIOP1

VoxelBox Processed Files: voxelbox_aomics_files

Subjects Considered:

1. sub-0001
2. sub-0002
3. sub-0003
4. sub-0004
5. sub-0005
6. sub-0006
7. sub-0007
8. sub-0008
9. sub-0009
10. sub-0010

T1w Techniques:

1. RAS Reorientation
2. Bias Field Correction
3. Spatial Denoising
4. Skull-Stripping
5. ACPC Origin Correction
6. MNI Normalisation

rs-fMRI Techniques:

1. Motion Correction
2. Skull-Stripping
3. ACPC Origin Correction & Coregistration with T1w
4. MNI Normalisation
5. Friston24 parameters + ACompCor (CSF & WM confounders) parameters - GLM based Denoising & Band Pass Filtering (0.01 - 0.1)
6. Feature Extraction:
    a. Smoothed ALFF (Smoothing FWHM - 4mm)
    b. Smoothed fALFF (Smoothing FWHM - 4mm)
    c. ReHo
    d. Smoothed ReHO (Smoothing FWHM - 4mm)
    e. AAL Functional Connectivity

Files:

1. FC_4D:
    a. aal_functional_connectivity.mat - Functional Connectivity extracted using Denoised fMRI by parcellating AAL atlas
    b. Denoised_fmri.nii.gz - Confounders removed, band-pass filtered, smoothed, and scrubbed version of the processed fMRI (Scrubbed with FD threshold of 0.8)
    c. Denoised_fmri_no_srub.nii.gz - Confounders removed, band-pass filtered, and smoothed of the processed fMRI. Will still have high FD volumes.
    d. Fc_mni.nii.gz - MNI normalised rs-fMRI

    e. Smooth_fc_mni.nii.gz - MNI normalised and smoothed rs-fMRI
    f. Smooth_fc_filtered_mni.nii.gz - MNI normalised, band-pass filtered and smoothed rs-fMRI
    g. Fc_native.nii.gz - Processed fMRI in native space
2. Confounds:
    a. 6_parameters.1D - Translation and Rotation parameters using Rigid Volume to Base Volume Registration - Motion Confounders
    b. 24_parameters.1D - Translation and Rotation parameters and its derivatives as suggested in Friston, et al.'s paper - Motion Confounders
    c. Overall_6_parameters.1D - Motion Confounders (6 parmateres) and CompCor confounders concatenated together
    d. Overall_24_parameters.1D - Motion Confounders (24 parmateres) and CompCor confounders concatenated together
    e. Framewise_displacement.1D - Framewise displacement for extra fMRI cleaning processes
3. ALFF - Amplitude of Low Frequency Fluctuation (ALFF) using normalised rs-fMRI
4. ALFF_z- Z-Scored Amplitude of Low Frequency Fluctuation (ALFF) using normalised rs-fMRI
5. fALFF- Fractional Amplitude of Low Frequency Fluctuation (fALFF) using normalised rs-fMRI
6. fALFF_z- Z-Scored Fractional Amplitude of Low Frequency Fluctuation (fALFF) using normalised rs-fMRI
7. ReHO - Regional Homogeneity (ReHo) using normalised fMRI
8. ReHo_sz - Smoothed and Z-Scored Regional Homogeneity (ReHo) using normalised fMRI
9. Preprocessed_t1 - Contains pre-processed and skull-stripped T1w in native and MNI space