CIT168 Subcortical Reinforcement Learning Atlas v1.0.0

OSF Storage Information

Directory Organization

```
├── CIT168_T1w_700um.nii.gz
├── CIT168_T1w_head_700um.nii.gz
├── CIT168_T2w_700um.nii.gz
├── CIT168_T2w_head_700um.nii.gz
├── MNI152_2009c_nonlin_asym_1mm
│   ├── CIT168toMNI152_T1w_head_1mm.nii.gz
│   ├── CIT168toMNI152_T2w_head_1mm.nii.gz
│   ├── CIT168toMNI152_prob_atlas_bilat_1mm.nii.gz
│   ├── cit2mni.sh
│   ├── cit2mni_Affine.txt
│   ├── cit2mni_InverseWarp.nii.gz
│   └── cit2mni_Warp.nii.gz
├── Report
│   ├── index.html
│   ├── inter_report.html
│   ├── inter_tmp_00_dice.png
│   ├── inter_tmp_00_haus.png
│   ├── inter_tmp_01_dice.png
│   ├── inter_tmp_01_haus.png
│   ├── inter_tmp_02_dice.png
│   ├── inter_tmp_02_haus.png
│   ├── inter_tmp_03_dice.png
│   ├── inter_tmp_03_haus.png
│   ├── inter_tmp_04_dice.png
│   ├── inter_tmp_04_haus.png
│   ├── inter_tmp_05_dice.png
│   ├── inter_tmp_05_haus.png
│   ├── inter_tmp_06_dice.png
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|   ├── inter_tmp_06_haus.png
|   ├── inter_tmp_07_dice.png
|   ├── inter_tmp_07_haus.png
|   ├── intra_obs_00_dice.png
|   ├── intra_obs_00_haus.png
|   ├── intra_obs_01_dice.png
|   ├── intra_obs_01_haus.png
|   ├── intra_obs_02_dice.png
|   ├── intra_obs_02_haus.png
|   ├── obs-00_label_mean_montage.png
|   ├── obs-01_label_mean_montage.png
|   ├── obs-02_label_mean_montage.png
|   ├── observer_00_report.html
|   ├── observer_01_report.html
|   ├── observer_02_report.html
|   ├── prob_atlas_colorkey.png
|   └── prob_atlas_montage.png
├── inter_observer_metrics.csv
├── intra_observer_metrics.csv
├── labels.txt
├── obs-00_label_mean.nii.gz
├── obs-00_label_var.nii.gz
├── obs-01_label_mean.nii.gz
├── obs-01_label_var.nii.gz
├── obs-02_label_mean.nii.gz
├── obs-02_label_var.nii.gz
├── prob_atlas.nii.gz
└── prob_atlas_bilateral.nii.gz
```

Contents

CIT168_T*w_700um*.nii.gz CIT168 700 um native space T1w and T2w templates. The "_head" suffix indicates templates without skull stripping

MNI152_2009c_nonlin_asym_1mm Directory containing T1w and T2w templates and the bilateral probabilistic labels transformed by diffeomorphic warping to the MNI152 2009c nonlinear asymmetric 1 mm isotropic space. This is one of the most common spaces used in human neuroimaging and the templates and probabilistic atlas labels are provided in this space for convenience. The ANTs affine transformation and diffeomorphic warp files are included with an example script which demonstrates how to calculate and perform the CIT168 to MNI152 transformation (see the ANTs v2.1.0 documentation for more details)

Report Directory containing an HTML report of the inter- and intra-observer similarities for the subcortical reinforcement learning atlas regions over all three observers and 8 validation templates. The top level page is *index.html.*

***_observer_metrics.csv** Dice Coefficients and Directed Hausdorff Distances for all inter- and intra-observer label differences over all three observers and 8 validation templates (comma-separated text files).

labels.txt Label key for use with the probabilistic label files below

obs-*_label*.nii.gz Left hemisphere label mean and variance maps for each of the three observers over all 8 validation templates.

prob_atlas_*.nii.gz Left hemisphere and bilateral versions of the 4D probabilistic labels in CIT168 700 um native space. The fourth dimension spans the individual labels, each of which is a 3D volume with intensities in the range [0,1].