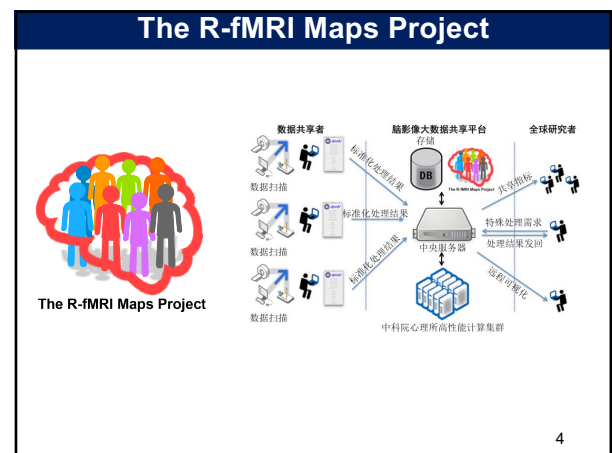
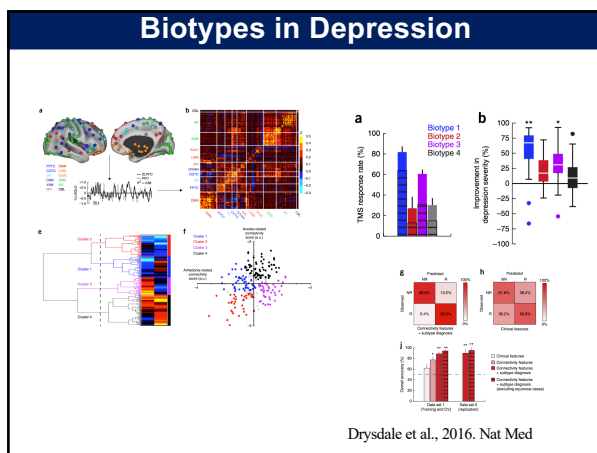
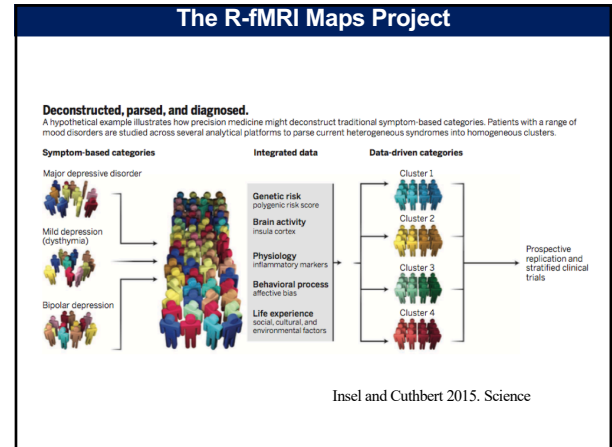


**The R-fMRI Maps Project:
DPABISurf**

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严超赣
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<http://rfmri.org>
Institute of Psychology, Chinese Academy of Sciences

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The R-fMRI Maps Project

已共享**4770**名被试数据，包括：

1. Amplitude of low frequency fluctuations (ALFF)
2. Fractional ALFF (fALFF)
3. Regional Homogeneity (ReHo)
4. Voxel-mirrored homotopic connectivity (VMHC)
5. Degree Centrality (DC)
6. 功能连接矩阵
 - a. Automated Anatomical Labeling (AAL) atlas
 - b. Harvard-Oxford atlas
 - c. Craddock's clustering 200 ROIs
 - d. Zalesky's random parcellations
 - e. Dosenbach's 160 functional ROIs

此外，也共享灰质(GM)、白质(WM)和脑脊液(CSF)密度与体积图像。

已有593名研究者下载

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Outline

- ➡ Data Preparation
- Standardized Preprocessing
- Quality Control
- Data Upload

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Data Organization

ProcessingDemoData.zip

FunRaw

- Sub_001
- Sub_002
- Sub_003

T1Raw

- Sub_001
- Sub_002
- Sub_003

Functional DICOM data

Structural DICOM data

<http://rfmri.org/DemoData>

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Data Organization

ProcessingDemoData.zip

FunImg

- Sub_001
- Sub_002
- Sub_003

T1Img

- Sub_001
- Sub_002
- Sub_003

Functional NIfTI data (.nii.gz, .nii or .img)

Structural NIfTI data (.nii.gz, .nii or .img)

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Data preparation

Arrange each subject's fMRI DICOM images in one directory, and then put them in "FunRaw" directory under the working directory.

Subjects' DICOM files directory, please name as this Working directory

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Data preparation

Arrange each subject's T1 DICOM images in one directory, and then put them in "T1Raw" directory under the working directory.

Subjects' DICOM files directory, please name as this Working directory

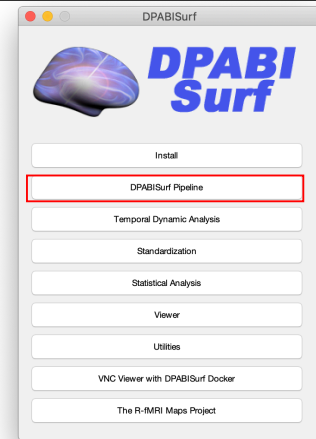
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Outline

- Data Preparation
- ➡ • Standardized Preprocessing
- Quality Control
- Data Upload

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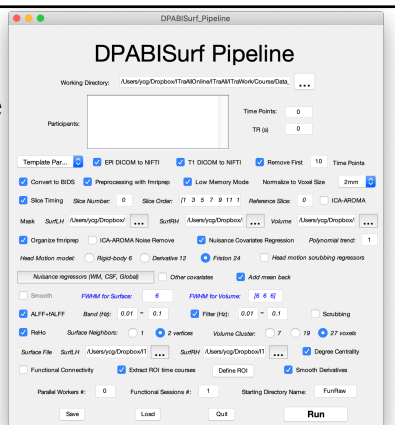
Resting State fMRI Data Processing



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Resting State fMRI Data Processing

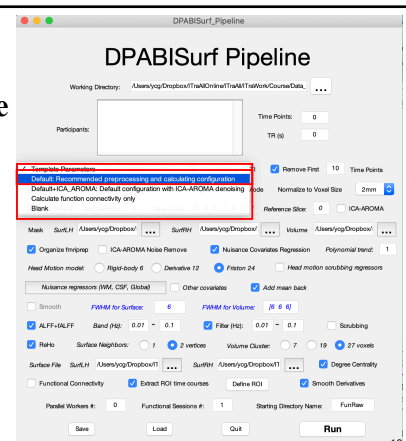
Template Parameters



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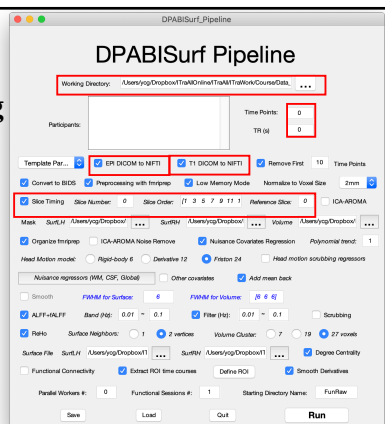
Resting State fMRI Data Processing

Template Parameters



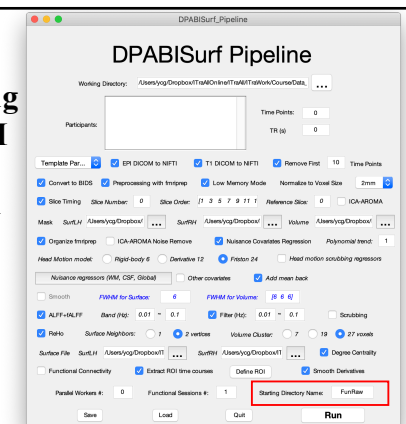
16

Preprocessing and R-fMRI measures Calculation



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Preprocessing and R-fMRI measures Calculation



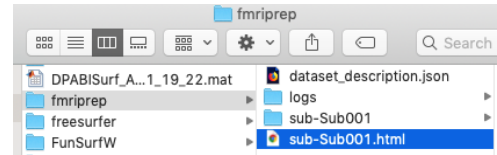
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Outline

- Data Preparation
- Standardized Preprocessing
- ➡ • Quality Control
- Data Upload

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Summary Anatomical Functional About Methods Errors

Summary

- Subject ID: Sub001
- Structural images: 1 T1-weighted
- Functional series: 1
 - Task: rest (1 run)
- Resampling targets: MNI152NLin2009cAsym, fsaverage5
- FreeSurfer reconstruction: Run by fMRIPrep

Anatomical

Anatomical Conformation

- Input T1w images: 1
- Output orientation: RAS
- Output dimensions: 128x78x200
- Output voxel size: 1.3mm x 1mm x 1mm
- Discarded images: 0

Brain mask and brain tissue segmentation of the T1w

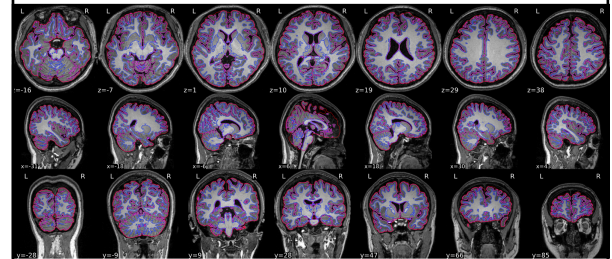
This panel shows the template T1-weighted image (if several T1w images were found), with contours delineating the detected brain mask and brain tissue segmentations.

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Brain mask and brain tissue segmentation of the T1w

This panel shows the template T1-weighted image (if several T1w images were found), with contours delineating the detected brain mask and brain tissue segmentations.

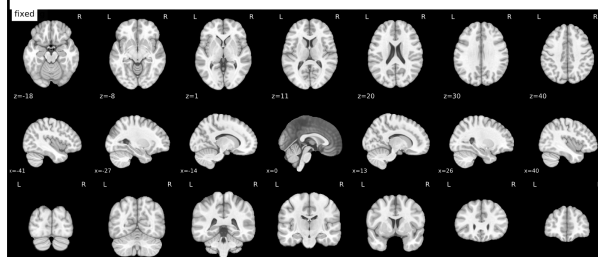


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T1 to MNI registration

Nonlinear mapping of the T1w image into MNI space. Hover on the panel with the mouse to transition between both spaces.

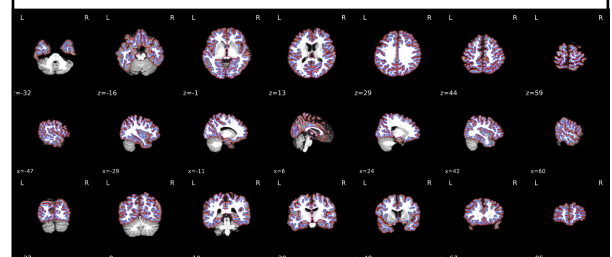


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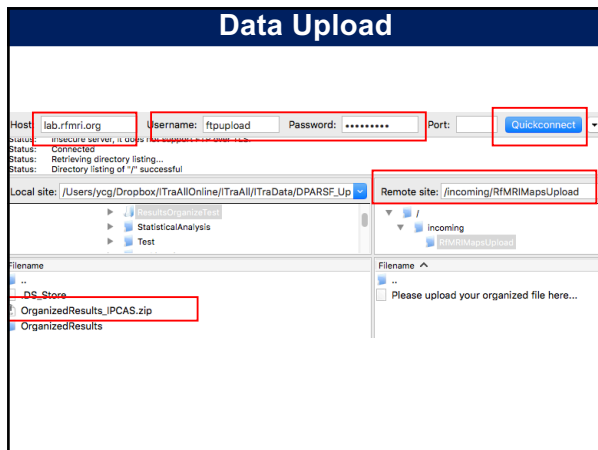
Surface reconstruction

Surfaces (white and pink) reconstructed with FreeSurfer (v5.0.1) overlaid on the participant's T1w template.



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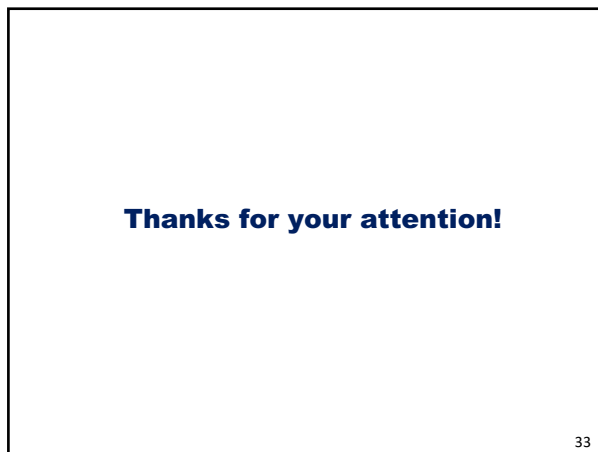
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