Acronym Interface Package:

MCL tool for BIDS, AFNI, DICOMs, NIfTIs, CNDA, GLMs, and more!

GUI script (run these!)

Functional script

Data Prep Bundle

To use these scripts, you must have the following installed:

-pydicom: used to read DICOM header info -dcm2niix: used to convert DICOMs to NIfTIs -sshpass: used to upload files to Icarus

AFNI_Script_Bundle

Data_Prep.py GUI to prepare raw MRI and behavioral data

Takes as input: DICOMs (downloaded by script) .csv files containing behavioral data (from PsychoPy) .log files containing timing data (from PsychoPy)

Setup BIDS Folder Structure.py

-Create a folder structure for the participant(s) data, following the BIDS specification

DICOM_Files.py

-Download participant fMRI data (DICOMs) from remote CNDA repository Back up DICOMs to remote Icarus server

NIfTI Files.py

-Convert DICOMs to NIfTI format using dcm2niix -Reorganize NIfTI files into BIDS folder structure

Generate_BIDS_Event_Files.py

-Codes behavioral data (from .csv and .log files) and generates BIDS-style event files

Create_AFNI_Timing_Files.py

-Use BIDS event files to generate AFNI timing (onset) files

These scripts be edited for your individual experiment

Generate AFNI Scripts.py

GUI to create AFNI processing scripts

Creates: -Preprocessing scripts -GLM scripts -t-test scripts

Preprocessing and GLM scripts use a template (.txt file) which can be modified to alter AFNI script outputs

For scripts with "Auto" input options, a spreadsheet can be used to enter data rather than the GUI provided

> Parameter input options: Manual Auto

Preprocessing scripts	✓	
GLM scripts	✓	✓
t-test scripts	-	/

Additionally, all scripts can be backed up to remote Icarus server