PDC 1.0 Data Release Appendix:

File Names and Directory Structure for Perturbation of the Treatment Resistant Depression Connectome by Fast-acting Therapies Project

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Introduction

This document lists all file names, directories, and subdirectories obtained when downloading available demographic, unprocessed, and structural preprocessed imaging data from an exemplar Perturbations of Treatment-Resistant Depression by Fast Acting Therapies (PDC) subject from the PDC Release 1.0 from the NIMH Data Archive (NDA). PDC data was collected using protocols almost identical to HCP-Aging so generally the file structure is the same between these projects as they are in the input/output structure expected by the HCP Pipelines. The purpose of this appendix is to quickly orient you to the structure of a download from the NDA, so that you can point your tools to the HCP-style data hidden in its subdirectories.

NDA Download packages vs. HCP-style Packages

On the HCP Aging & Development Featured Datasets query page the user may choose to download the MRI unprocessed data, preprocessed structural data, or both (and the corresponding behavioral data) by downloading premade NDA shared data packages (OPTION ONE) or by creating your own custom NDA package by selecting subsets of the data (OPTION TWO).

The subsets of the data used for the OPTION TWO filters are what we call "HCP Packages" (see table below) and they are analogous to the data packages we offered in ConnectomeDB for HCP-Young Adult. Data files are grouped together across directories into "HCP Packages".

Since subject numbers and data sizes are large, NDA download times are slow, and users with different analysis goals only need parts of the HCP pipeline processing outputs, we took great care to make several different HCP packages available for download. The NDA shared data packages we offer in OPTION ONE were each made with the OPTION TWO filters to make a subset of the data that would be useful to users.

PDC 1.0 Datasets (HCP Packages) available in OPTION 2:

NDA structure	HCP Package (shortname)	HCP Package Contents
imagingcollection01	UnprocStruc	multi-echo MPRAGE (T1 weighted) and T2-SPACE (T2 weighted) scans (in NIFTI format)
imagingcollection01	UnprocRfmri	both pairs of resting state fMRI scans (in NIFTI format)
imagingcollection01	UnprocTfmriCarit	fMRI scans for the CARIT task (in NIFTI format; Go/NoGo Conditioned Approach Response Inhibition Task)
imagingcollection01	UnprocTfmriFacematching	fMRI scan for the FACEMATCHING task (in NIFTI format; paired-associative memory task)
imagingcollection01	UnprocDmri	dMRI scans (in NIFTI format), bval, and bvec files for the two sets of diffusion sensitizing directions ('dir98' and 'dir99')
imagingcollection01	UnprocPcasl	mbPCASLhr scan (in NIFTI format; multiband 2D EPI pseudo-continuous arterial spin labeling with high spatial resolution)
fmriresults01	PreprocStrucRecommended	recommended starting point for structural analyses and contains files precisely aligned across subjects using the MSMAll multi-modal surface registration
fmriresults01	PreprocStrucLegacy	structural files coarsely aligned across subjects using the MSMSulc folding surface registration

NDA structure	HCP Package (shortname)	HCP Package Contents
fmriresults01	PreprocStrucFreesurfer	actual outputs from the FreeSurferPipeline stage of the HCP Structural Preprocessing, in FreeSurfer's native file formats and directory structure
fmriresults01	PreprocStrucExtended	additional files related to QC on structural preprocessing outputs and other extra files that may be useful to select users
fmriresults01	PreprocRfmriRecommended	recommended starting point for rfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
fmriresults01	PreprocRfmriLegacySurface	cleaned files coarsely aligned across subjects using the MSMSulc folding surface registration, and hcp_fix_multi_run.
fmriresults01	PreprocRfmriLegacyVolume	cleaned rfMRI files poorly aligned across subjects using nonlinear volume registration
fmriresults01	PreprocRfmriUncleaned	uncleaned resting state data of all registration types for use in testing alternative data cleanup strategies
fmriresults01	PreprocRfmriExtended	additional files related to rfMRI data cleanup and other extra files that may be useful to select users
fmriresults01	PreprocTfmriCaritRecommended	recommended starting point for CARIT tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
fmriresults01	PreprocTfmriCaritLegacySurface	cleaned CARIT tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration
fmriresults01	PreprocTfmriCaritLegacyVolume	cleaned CARIT tfMRI files poorly aligned across subjects using nonlinear volume registration
fmriresults01	PreprocTfmriCaritUncleaned	uncleaned tfMRI CARIT data of all registration types for use in testing alternative data cleanup strategies
fmriresults01	PreprocTfmriCaritExtended	additional CARIT tfMRI files related to data cleanup and other extra files that may be useful to select users
fmriresults01	PreprocTfmriFacematchingRecommended	recommended starting point for FACEMATCHING tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
fmriresults01	PreprocTfmriFacematchingLegacySurface	cleaned FACEMATCHING tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration.
fmriresults01	PreprocTfmriFacematchingLegacyVolume	cleaned FACEMATCHING tfMRI files poorly aligned across subjects using nonlinear volume registration.
fmriresults01	PreprocTfmriFacematchingUncleaned	uncleaned tfMRI FACEMATCHING data of all registration types for use in testing alternative data cleanup strategies.
fmriresults01	PreprocTfmriFacematchingExtended	additional FACEMATCHING tfMRI files related to data cleanup and other extra files that may be useful to select users.

Appendix Definitions

This appendix is organized into sections by processing level (unprocessed/preprocessed), and then by HCP Package in subsections. The HCP Package file contents are then detailed within their directory structure for a single subject.

If you create a custom download package that contains more than one HCP Package/filter, the files and directories contained in the selected packages will be combined into a single directory tree per subject in your downloaded data.

fmriresults01 and **imagingcollection01** are NDA data structures that contain preprocessed and unprocessed imaging data, respectively. We map the PDC data into the same HCP-style directory structure as that of released HCP Lifespan and HCP Young Adult data into these NDA data structures. This makes it possible to maintain compatibility with the expected inputs and outputs of processing through the HCP Pipelines at the individual subject level.

In addition, when an NDA package is created for download, a datastructure_manifest.txt file is created by NDA that lists per file URI pointers to its S3 bucket location and the name of the HCP package to which it "belongs". These URIs can be used to download files using NDA commandline tools as described in the Lifespan 2.0 Release Data Access & Download Instructions, Within the URI for each file, the HCP file structure is also preserved, which could be used to create directory trees such as the ones contained in this document. Since this is such a useful file, we have made a shared OPTION ONE package PDCImgManifestBeh contains the datastructure_manifest.txt for all imaging files and all behavioral *.txt files in a quick download.

Top-level Download Organization

Your downloaded data from the NDA will have, under the imagingcollection01 and/or fmriresults01 directories, high level <SubjectID_{Session#}_MR> directories (e.g., h0059_01_MR).

The package will download to the Save To: location on your file system with the top directory name matching the package number (<Package_{YourPkgNumber}>, or, e.g., Package_1210439).

For example, if your package contains Minimally Preprocessed Image Data, Unprocessed Image Data, and Behavioral Data, the high-level <Package_{YourPkgNumber}> directory will contain:

```
<YourPkgName>/
      apath01.txt
      bisbas01.txt
      dass01.txt
      dataset_collection.txt          Info on PDC NDA collection
      datastructure_manifest.txt      S3 URIs for every per subject file
      dccs01.txt
      edinburgh_hand01.txt
      er4001.txt
      experiments/                    tfMRI and rsfMRI stimuli info and block design
      fagerstrom01.txt
      flanker01.txt
      fmriresults01/                  Preprocessed data
      fmriresults01.txt               Info on preprocessing pipelines run
      hrsd01.txt
      imagingcollection01/            Unprocessed data
      imagingcollection01.txt
      lswmt01.txt
      mctq01.txt
      md5_values.txt                  md5 checksums for download verification
      ndar_subject01.txt
      orrt01.txt
```

```
package_info.txt          Info on NDA filters used to create download package
pcps01.txt
psm01.txt
psqi01.txt
qids01.txt
README.pdf                NDA default README
sacq01.txt
shaps01.txt
tpvt01.txt
who01.txt
```

Many of these files contain behavioral data in NDA structure format. For more information on the nda_elements (variables) and instruments, please see the PDC1.0_Crosswalk_Behavioral_Data_Dictionary.xlsx and the other PDC 1.0 Documentation.

Section A: Unprocessed MR Data Directory Structure

Unprocessed data for each PDC subject is in the

<Package_YourPkgNumber>/imagingcollection01/<SubjectID_{Session#}_MR>/unprocessed/
directory

Session# signifies the collection timepoint for the subject, which are as follows for the different cohorts:
Healthy control (h) (01 = baseline, 02 = follow-up at 2 weeks post baseline)
Ketamine (k) (01 = baseline, 02 = 24h post first infusion*, 03 = 24h post last infusion, 04 = follow-up)
     *Note: the post first infusion 02 timepoint was dropped midway through the study

ECT (e) (01 = baseline, 02 = post treatment (after ECT index series completed), 03 = follow-up)
TSD (s) (01 = baseline, pre TSD, 02 = post TSD)

JSON files (*.json) with the same name as corresponding NIFTI images contain scan level meta data pulled from the DICOM header.

Unprocessed data for exemplar healthy control subject/session h0059_01_MR has the following directory structure:

```
<Package_YourPkgNumber>/imagingcollection01/h0059_01_MR/unprocessed/
├── Diffusion/
├── T1w_MPR_vNav_4e_e1e2_mean/
├── T2w_SPC_vNav/
├── mbPCASLhr/
├── rfMRI_REST1_AP/
├── rfMRI_REST1_PA/
├── rfMRI_REST2_AP/          REST2 scans not collected on patients, only controls
├── rfMRI_REST2_PA/
├── tfMRI_CARIT_PA/
├── tfMRI_FACEMATCHING_PA/
```

Unprocessed T1w and T2w Structural

This package contains multi-echo MPRAGE (T1 weighted) and T2-SPACE (T2 weighted) scans (in NIFTI format). The T1w image reconstruction of the mean of the first two echoes of the multi-echo T1w scan and the T2w image, both acquired with volumetric navigators (vNav) for real-time motion correction, but collected without Siemen's 'Prescan Normalize' feature, are recommended and were used as the starting point for Structural preprocessing. It also includes the associated navigators for each scan, reconstructions of each of the four separate echoes from the multi-echo T1w scan, reconstructions of the RMS of the four T1w echoes, and a session report file that provides an overview of the usable imaging data collected during the participant's visit.

UnprocStruc

```
h0059_01_MR/unprocessed/T1w_MPR_vNav_4e_e1e2_mean/
├── h0059_01_MR_T1w_MPR_vNav_4e_e1e2_mean.json
├── h0059_01_MR_T1w_MPR_vNav_4e_e1e2_mean.nii.gz
└── OTHER_FILES
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.json
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.nii.gz
```

```
    ├── h0059_01_MR_SpinEchoFieldMap1_PA.json
    ├── h0059_01_MR_SpinEchoFieldMap1_PA.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e1.json
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e1.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e2.json
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e2.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e3.json
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e3.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e4.json
    ├── h0059_01_MR_T1w_MPR_vNav_4e_e4.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_4e_RMS.json
    ├── h0059_01_MR_T1w_MPR_vNav_4e_RMS.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e1.json
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e1.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e2.json
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e2.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e3.json
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e3.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e4.json
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_e4.nii.gz
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_RMS.json
    ├── h0059_01_MR_T1w_MPR_vNav_Norm_4e_RMS.nii.gz
    ├── h0059_01_MR_T1w_setter.json
    ├── h0059_01_MR_T1w_setter.nii.gz
    └── session_report.csv
h0059_01_MR/unprocessed/T2w_SPC_vNav
├── h0059_01_MR_T2w_SPC_vNav.json
├── h0059_01_MR_T2w_SPC_vNav.nii.gz
└── OTHER_FILES
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.json
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.nii.gz
    ├── h0059_01_MR_SpinEchoFieldMap1_PA.json
    ├── h0059_01_MR_SpinEchoFieldMap1_PA.nii.gz
    ├── h0059_01_MR_T2w_setter.json
    ├── h0059_01_MR_T2w_setter.nii.gz
    ├── h0059_01_MR_T2w_SPC_vNav_Norm.json
    └── h0059_01_MR_T2w_SPC_vNav_Norm.nii.gz
```

Unprocessed Resting State rfMRI

This package contains one (patients) or two (controls) pairs of resting state fMRI scans (in NIFTI format), acquired with AP/PA phase encoding, plus SpinEchoFieldMaps, SBRefs, and PsychoPy event timing, Physio files containing pulse oximetry and respiratory traces, and participant eye videos for each run.

UnprocRfmri

h0059_01_MR/unprocessed/
```
├── rfMRI_REST1_AP
│   ├── h0059_01_MR_rfMRI_REST1_AP.json
│   ├── h0059_01_MR_rfMRI_REST1_AP.nii.gz
│   ├── h0059_01_MR_rfMRI_REST1_AP_SBRef.json
│   ├── h0059_01_MR_rfMRI_REST1_AP_SBRef.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap1_AP.json
│   ├── h0059_01_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap1_PA.json
│   ├── h0059_01_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   └── PHYSIO
│   │       └── Physio_combined_ddbd27ec-0230-4406-807a-90dc1df72465.csv
│   └── OTHER_FILES
│       └── h0059_01_MR_rfMRI_REST1_AP_InitialFrames.nii.gz
├── rfMRI_REST1_PA
│   ├── h0059_01_MR_rfMRI_REST1_PA.json
│   ├── h0059_01_MR_rfMRI_REST1_PA.nii.gz
│   ├── h0059_01_MR_rfMRI_REST1_PA_SBRef.json
│   ├── h0059_01_MR_rfMRI_REST1_PA_SBRef.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap1_AP.json
│   ├── h0059_01_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap1_PA.json
│   ├── h0059_01_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   └── PHYSIO
│   │       └── Physio_combined_61bee921-8f7b-4615-9da8-7353bf1c897c.csv
│   └── OTHER_FILES
│       └── h0059_01_MR_rfMRI_REST1_PA_InitialFrames.nii.gz
├── rfMRI_REST2_AP
│   ├── h0059_01_MR_rfMRI_REST2_AP.json
│   ├── h0059_01_MR_rfMRI_REST2_AP.nii.gz
│   ├── h0059_01_MR_rfMRI_REST2_AP_SBRef.json
│   ├── h0059_01_MR_rfMRI_REST2_AP_SBRef.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap3_AP.json
│   ├── h0059_01_MR_SpinEchoFieldMap3_AP.nii.gz
│   ├── h0059_01_MR_SpinEchoFieldMap3_PA.json
│   ├── h0059_01_MR_SpinEchoFieldMap3_PA.nii.gz
│   ├── LINKED_DATA
│   │   └── PHYSIO
│   │       └── Physio_combined_e9d0f23d-9f54-4978-93d2-c1d583ea1fe7.csv
│   └── OTHER_FILES
│       └── h0059_01_MR_rfMRI_REST2_AP_InitialFrames.nii.gz
└── rfMRI_REST2_PA
    ├── h0059_01_MR_rfMRI_REST2_PA.json
    ├── h0059_01_MR_rfMRI_REST2_PA.nii.gz
```

```
├── h0059_01_MR_rfMRI_REST2_PA_SBRef.json
├── h0059_01_MR_rfMRI_REST2_PA_SBRef.nii.gz
├── h0059_01_MR_SpinEchoFieldMap3_AP.json
├── h0059_01_MR_SpinEchoFieldMap3_AP.nii.gz
├── h0059_01_MR_SpinEchoFieldMap3_PA.json
├── h0059_01_MR_SpinEchoFieldMap3_PA.nii.gz
├── LINKED_DATA
│   └── PHYSIO
│       └── Physio_combined_0098f65d-a160-420f-ae9f-45d87a076eb2.csv
└── OTHER_FILES
    └── h0059_01_MR_rfMRI_REST2_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI CARIT

This package contains the fMRI scans for the CARIT task (in NIFTI format; Go/NoGo Conditioned Approach Response Inhibition Task without reward history), acquired with AP/PA phase encoding, plus SpinEchoFieldMaps, SBRefs, PsychoPy event timing and task modeling files, and Physio files containing pulse oximetry and respiratory traces for each run.

UnprocTfmriCarit

h0059_01_MR/unprocessed/tfMRI_CARIT_PA
```
├── h0059_01_MR_SpinEchoFieldMap2_AP.json
├── h0059_01_MR_SpinEchoFieldMap2_AP.nii.gz
├── h0059_01_MR_SpinEchoFieldMap2_PA.json
├── h0059_01_MR_SpinEchoFieldMap2_PA.nii.gz
├── h0059_01_MR_tfMRI_CARIT_PA.json
├── h0059_01_MR_tfMRI_CARIT_PA.nii.gz
├── h0059_01_MR_tfMRI_CARIT_PA_SBRef.json
├── h0059_01_MR_tfMRI_CARIT_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_a0148f61-f11f-44ae-9b54-a386ca0dfd5a.csv
│   └── PSYCHOPY
│       ├── CARIT_h005901_MR_run1_wide.csv
│       └── EVs
│           ├── cond001.txt
│           ├── cond002.txt
│           ├── cond003.txt
│           └── cond004.txt
└── OTHER_FILES
    └── h0059_01_MR_tfMRI_CARIT_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI FACEMATCHING

This package contains the fMRI scan for the FACEMATCHING task (in NIFTI format; emotion recognition task), acquired with AP/PA phase encoding, plus SpinEchoFieldMaps, SBRef, PsychoPy event timing and task modeling files, and a Physio file containing pulse oximetry and respiratory traces.

Note: The *_wide.csv file containing PsychoPy outputs was combined across runs and is available in the LINKED_DATA/PSYCHOPY directory for only one of the two FACEMATCHING runs.

UnprocTfmriFacematching

h0059_01_MR/unprocessed/tfMRI_FACEMATCHING_AP
```
├── h0059_01_MR_SpinEchoFieldMap2_AP.json
├── h0059_01_MR_SpinEchoFieldMap2_AP.nii.gz
├── h0059_01_MR_SpinEchoFieldMap2_PA.json
├── h0059_01_MR_SpinEchoFieldMap2_PA.nii.gz
├── h0059_01_MR_tfMRI_FACEMATCHING_AP.json
├── h0059_01_MR_tfMRI_FACEMATCHING_AP.nii.gz
├── h0059_01_MR_tfMRI_FACEMATCHING_AP_SBRef.json
├── h0059_01_MR_tfMRI_FACEMATCHING_AP_SBRef.nii.gz
└── LINKED_DATA
    ├── PHYSIO
    │   └── Physio_combined_59bcfe43-e04a-4665-8e50-91d50c679395.csv
    └── PSYCHOPY
        └── EVs
            ├── cond001.txt
            └── cond002.txt
            └── cond003.txt
            └── cond004.txt
```

h0059_01_MR/unprocessed/tfMRI_FACEMATCHING_PA
```
├── h0059_01_MR_SpinEchoFieldMap2_AP.json
├── h0059_01_MR_SpinEchoFieldMap2_AP.nii.gz
├── h0059_01_MR_SpinEchoFieldMap2_PA.json
├── h0059_01_MR_SpinEchoFieldMap2_PA.nii.gz
├── h0059_01_MR_tfMRI_FACEMATCHING_PA.json
├── h0059_01_MR_tfMRI_FACEMATCHING_PA.nii.gz
├── h0059_01_MR_tfMRI_FACEMATCHING_PA_SBRef.json
├── h0059_01_MR_tfMRI_FACEMATCHING_PA_SBRef.nii.gz
└── LINKED_DATA
    ├── PHYSIO
    │   └── Physio_combined_87b0bff2-86dc-40f2-8a44-1bdb4cbd5ecb.csv
    └── PSYCHOPY
        ├── EVs
        │   ├── cond001.txt
        │   └── cond002.txt
        │   └── cond003.txt
        │   └── cond004.txt
        └── h005901_Scanner_ABCD_AB_FaceMatching_wide.csv
```

Unprocessed Diffusion

This package contains the dMRI scans (in NIFTI format), bval, and bvec files for the two sets of diffusion sensitizing directions ('dir98' and 'dir99'), each acquired with AP/PA phase encoding, plus SpinEchoFieldMaps and SBRefs.

UnprocDmri

```
h0059_01_MR/unprocessed/Diffusion/
├── h0059_01_MR_dMRI_dir98_AP.bval
├── h0059_01_MR_dMRI_dir98_AP.bvec
├── h0059_01_MR_dMRI_dir98_AP.json
├── h0059_01_MR_dMRI_dir98_AP.nii.gz
├── h0059_01_MR_dMRI_dir98_AP_SBRef.json
├── h0059_01_MR_dMRI_dir98_AP_SBRef.nii.gz
├── h0059_01_MR_dMRI_dir98_PA.bval
├── h0059_01_MR_dMRI_dir98_PA.bvec
├── h0059_01_MR_dMRI_dir98_PA.json
├── h0059_01_MR_dMRI_dir98_PA.nii.gz
├── h0059_01_MR_dMRI_dir98_PA_SBRef.json
├── h0059_01_MR_dMRI_dir98_PA_SBRef.nii.gz
├── h0059_01_MR_dMRI_dir99_AP.bval
├── h0059_01_MR_dMRI_dir99_AP.bvec
├── h0059_01_MR_dMRI_dir99_AP.json
├── h0059_01_MR_dMRI_dir99_AP.nii.gz
├── h0059_01_MR_dMRI_dir99_AP_SBRef.json
├── h0059_01_MR_dMRI_dir99_AP_SBRef.nii.gz
├── h0059_01_MR_dMRI_dir99_PA.bval
├── h0059_01_MR_dMRI_dir99_PA.bvec
├── h0059_01_MR_dMRI_dir99_PA.json
├── h0059_01_MR_dMRI_dir99_PA.nii.gz
├── h0059_01_MR_dMRI_dir99_PA_SBRef.json
├── h0059_01_MR_dMRI_dir99_PA_SBRef.nii.gz
└── OTHER_FILES
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.json
    ├── h0059_01_MR_SpinEchoFieldMap1_AP.nii.gz
    ├── h0059_01_MR_SpinEchoFieldMap1_PA.json
    └── h0059_01_MR_SpinEchoFieldMap1_PA.nii.gz
```

Unprocessed Arterial Spin Labeling

This package contains the mbPCASLhr scan (in NIFTI format; multiband 2D EPI pseudo-continuous arterial spin labeling with high spatial resolution), plus SpinEchoFieldMaps, PsychoPy event timing and participant eye video for the run.

UnprocPcasl

HCA9503576_V1_MR/unprocessed/mbPCASLhr

```
├── HCA9503576_V1_MR_mbPCASLhr_PA.json
├── HCA9503576_V1_MR_mbPCASLhr_PA.nii.gz
├── HCA9503576_V1_MR_PCASLhr_SpinEchoFieldMap_AP.json
├── HCA9503576_V1_MR_PCASLhr_SpinEchoFieldMap_AP.nii.gz
├── HCA9503576_V1_MR_PCASLhr_SpinEchoFieldMap_PA.json
└── HCA9503576_V1_MR_PCASLhr_SpinEchoFieldMap_PA.nii.gz
```

Section B: Preprocessed Data Directory Structure

For the PDC 1.0 Release, minimally preprocessed MR data is available on released subjects in the

<Package_YourPkgNumber>/fmriresults01/<SubjectID_{Session#}_MR>/ directory.

Session# signifies the collection timepoint for the subject, which are as follows for the different cohorts:
Healthy control (h) (01 = baseline, 02 = follow-up at 2 weeks post baseline)
Ketamine (k) (01 = baseline, 02 = 24h post first infusion*, 03 = 24h post last infusion, 04 = follow-up)
      *Note: the post first infusion 02 timepoint was dropped midway through the study

ECT (e) (01 = baseline, 02 = post treatment (after ECT index series completed), 03 = follow-up)
TSD (s) (01 = baseline, pre TSD, 02 = post TSD)

Note: The structural preprocessing for the PDC 1.0 Release includes both MSMSulc and MSMAll registration-based processing.

The high level <SubjectID_{Session#}_MR> directory (e.g., **h0059_01_MR/**, as exemplified here) includes these subdirectories produced by the HCP structural pipeline:

```
<Package_YourPkgNumber>/fmriresults01/h0059_01_MR/
├── MNINonLinear/
├── T1w/
├── unprocessed/T1w_MPR_vNav_4e_e1e2_mean/
      └──── OTHER_FILES/
            session_report.csv
```

<Package_YourPkgNumber>/**fmriresults01/h0059_01_MR/MNINonLinear/Results/**
in turn contains preprocessed subdirectories for 4 rfMRI scans, collected in 2 sessions (REST1, REST2), and 2 tfMRI scans.

<Package_YourPkgNumber>/**fmriresults01/h0059_01_MR/T1w/** contains outputs of Diffusion and Structural processing.

Structural Preprocessed Recommended

This package is the recommended starting point for structural analyses and contains files precisely aligned across subjects using the MSMAll multi-modal surface registration, plus a session report file that provides an overview of the usable imaging data collected during the participant's visit. It contains outputs of the HCP Structural Preprocessing pipeline, which is the result of applying PreFreeSurferPipeline, FreeSurferPipeline, PostFreeSurferPipeline and MSMAllPipeline.

PreprocStrucRecommended

```
h0059_01_MR/
├── MNINonLinear
│   ├── aparc.a2009s+aseg.nii.gz
│   ├── aparc+aseg.nii.gz
│   ├── BiasField.nii.gz
│   ├── brainmask_fs.2.nii.gz
│   ├── brainmask_fs.nii.gz
```

```
│    ├── fsaverage_LR32k
│    │    ├── h0059_01_MR.ArealDistortion_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.BiasField_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.corrThickness_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.curvature_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.EdgeDistortion_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.L.atlasroi.32k_fs_LR.shape.gii
│    │    ├── h0059_01_MR.L.flat.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.sphere.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.MSMAll.32k_fs_LR.wb.spec
│    │    ├── h0059_01_MR.MyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.MyelinMap_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.R.atlasroi.32k_fs_LR.shape.gii
│    │    ├── h0059_01_MR.R.flat.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.sphere.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│    │    ├── h0059_01_MR.SmoothedMyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.SphericalDistortion_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.StrainJ_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.StrainR_MSMAll.32k_fs_LR.dscalar.nii
│    │    ├── h0059_01_MR.sulc_MSMAll.32k_fs_LR.dscalar.nii
│    │    └── h0059_01_MR.thickness_MSMAll.32k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.ArealDistortion_MSMAll.164k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.corrThickness_MSMAll.164k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.curvature_MSMAll.164k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.EdgeDistortion_MSMAll.164k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.L.atlasroi.164k_fs_LR.shape.gii
│    ├── h0059_01_MR.L.flat.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.inflated_MSMAll.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.midthickness_MSMAll.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.pial_MSMAll.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.sphere.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.very_inflated_MSMAll.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.L.white_MSMAll.164k_fs_LR.surf.gii
│    ├── h0059_01_MR.MSMAll.164k_fs_LR.wb.spec
│    ├── h0059_01_MR.MyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
│    ├── h0059_01_MR.R.atlasroi.164k_fs_LR.shape.gii
```

```
|   ├── h0059_01_MR.R.flat.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.inflated_MSMAll.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.midthickness_MSMAll.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.pial_MSMAll.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.sphere.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.very_inflated_MSMAll.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.R.white_MSMAll.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.SmoothedMyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.SphericalDistortion_MSMAll.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.StrainJ_MSMAll.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.StrainR_MSMAll.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.sulc_MSMAll.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.thickness_MSMAll.164k_fs_LR.dscalar.nii
|   ├── Native
|   |   ├── h0059_01_MR.aparc.a2009s.native.dlabel.nii
|   |   ├── h0059_01_MR.aparc.native.dlabel.nii
|   |   ├── h0059_01_MR.ArealDistortion_MSMAll.native.dscalar.nii
|   |   ├── h0059_01_MR.BiasField_MSMAll.native.dscalar.nii
|   |   ├── h0059_01_MR.corrThickness.native.dscalar.nii
|   |   ├── h0059_01_MR.curvature.native.dscalar.nii
|   |   ├── h0059_01_MR.EdgeDistortion_MSMAll.native.dscalar.nii
|   |   ├── h0059_01_MR.L.atlasroi.native.shape.gii
|   |   ├── h0059_01_MR.L.inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.L.pial.native.surf.gii
|   |   ├── h0059_01_MR.L.roi.native.shape.gii
|   |   ├── h0059_01_MR.L.sphere.MSMAll.native.surf.gii
|   |   ├── h0059_01_MR.L.sphere.native.surf.gii
|   |   ├── h0059_01_MR.L.very_inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.white.native.surf.gii
|   |   ├── h0059_01_MR.MyelinMap_BC_MSMAll.native.dscalar.nii
|   |   ├── h0059_01_MR.MyelinMap.native.dscalar.nii
|   |   ├── h0059_01_MR.native.wb.spec
|   |   ├── h0059_01_MR.R.atlasroi.native.shape.gii
|   |   ├── h0059_01_MR.R.inflated.native.surf.gii
|   |   ├── h0059_01_MR.R.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.R.pial.native.surf.gii
|   |   ├── h0059_01_MR.R.roi.native.shape.gii
|   |   ├── h0059_01_MR.R.sphere.MSMAll.native.surf.gii
|   |   ├── h0059_01_MR.R.sphere.native.surf.gii
|   |   ├── h0059_01_MR.R.very_inflated.native.surf.gii
|   |   ├── h0059_01_MR.R.white.native.surf.gii
|   |   ├── h0059_01_MR.SmoothedMyelinMap_BC_MSMAll.native.dscalar.nii
|   |   ├── h0059_01_MR.SmoothedMyelinMap.native.dscalar.nii
|   |   ├── h0059_01_MR.SphericalDistortion.native.dscalar.nii
|   |   ├── h0059_01_MR.StrainJ_MSMAll.native.dscalar.nii
```

```
│   │   ├── h0059_01_MR.StrainR_MSMAll.native.dscalar.nii
│   │   ├── h0059_01_MR.sulc.native.dscalar.nii
│   │   └── h0059_01_MR.thickness.native.dscalar.nii
│   ├── ribbon.nii.gz
│   ├── ROIs
│   │   ├── Atlas_ROIs.2.nii.gz
│   │   ├── Atlas_wmparc.2.nii.gz
│   │   ├── MissingGrayordinates.2.nii.gz
│   │   ├── MissingGrayordinates.2.txt
│   │   ├── ROIs.2.nii.gz
│   │   └── wmparc.2.nii.gz
│   ├── T1w.nii.gz
│   ├── T1w_restore.2.nii.gz
│   ├── T1w_restore_brain.nii.gz
│   ├── T1w_restore.nii.gz
│   ├── T2w.nii.gz
│   ├── T2w_restore.2.nii.gz
│   ├── T2w_restore_brain.nii.gz
│   ├── T2w_restore.nii.gz
│   ├── wmparc.nii.gz
│   └── xfms
│       ├── acpc_dc2standard.nii.gz
│       └── standard2acpc_dc.nii.gz
├── ProcessingInfo
│   ├── h0059_01_MR.StructuralPreprocessing.PROCESS_DATA_job.sh
│   ├── h0059_01_MR.StructuralPreprocessing.PROCESS_DATA_job.sh.e10240308
│   ├── h0059_01_MR.StructuralPreprocessing.PROCESS_DATA_job.sh.o10240308
│   ├── processing
│   │   ├── batch_MsmAll.txt
│   │   └── batch_Structural_preproc.txt
│   └── QuNex/processing/logs
│       ├── comlogs
│       │   ├── done_hcp1_h0059_01_MR_2021-07-13_16.41.1626212491.log
│       │   ├── done_hcp2_h0059_01_MR_2021-07-13_18.22.1626218545.log
│       │   ├── done_hcp3_h0059_01_MR_2021-07-14_10.25.1626276341.log
│       │   └── done_setupHCP_h0059_01_MR_2021-07-13.16.41.19.069049.log
│       ├── runlogs
│       │   ├── Log-hcp1-2021-07-13_16.41.1626212491.log
│       │   ├── Log-hcp2-2021-07-13_18.22.1626218545.log
│       │   └── Log-hcp3-2021-07-14_10.25.1626276341.log
│       ├── run_qunex.sh_2021-05-12-17-44-49.log
│       └── run_qunex.sh_2021-07-13-16-40-56.log
├── T1w
│   ├── aparc.a2009s+aseg.nii.gz
│   ├── aparc+aseg.nii.gz
│   ├── BiasField_acpc_dc.nii.gz
```

```
│   ├── brainmask_fs.nii.gz
│   ├── fsaverage_LR32k
│   │   ├── h0059_01_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.midthickness_MSMAll_va.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.midthickness_MSMAll_va.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.midthickness_MSMAll_va_norm.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.MSMAll.32k_fs_LR.wb.spec
│   │   ├── h0059_01_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.midthickness_MSMAll_va.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │   └── h0059_01_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│   ├── h0059_01_MR
│   │   └── stats
│   │       ├── aseg.stats
│   │       ├── lh.aparc.a2009s.stats
│   │       ├── lh.aparc.DKTatlas.stats
│   │       ├── lh.aparc.pial.stats
│   │       ├── lh.aparc.stats
│   │       ├── lh.BA_exvivo.stats
│   │       ├── lh.BA_exvivo.thresh.stats
│   │       ├── lh.curv.stats
│   │       ├── lh.w-g.pct.stats
│   │       ├── rh.aparc.a2009s.stats
│   │       ├── rh.aparc.DKTatlas.stats
│   │       ├── rh.aparc.pial.stats
│   │       ├── rh.aparc.stats
│   │       ├── rh.BA_exvivo.stats
│   │       ├── rh.BA_exvivo.thresh.stats
│   │       ├── rh.curv.stats
│   │       ├── rh.w-g.pct.stats
│   │       └── wmparc.stats
│   ├── Native
│   │   ├── h0059_01_MR.L.inflated.native.surf.gii
│   │   ├── h0059_01_MR.L.midthickness.native.surf.gii
│   │   ├── h0059_01_MR.L.pial.native.surf.gii
│   │   ├── h0059_01_MR.L.very_inflated.native.surf.gii
│   │   ├── h0059_01_MR.L.white.native.surf.gii
│   │   ├── h0059_01_MR.native.wb.spec
│   │   ├── h0059_01_MR.R.inflated.native.surf.gii
│   │   ├── h0059_01_MR.R.midthickness.native.surf.gii
```

```
│   │   ├── h0059_01_MR.R.pial.native.surf.gii
│   │   ├── h0059_01_MR.R.very_inflated.native.surf.gii
│   │   └── h0059_01_MR.R.white.native.surf.gii
│   ├── ribbon.nii.gz
│   ├── T1w_acpc_dc.nii.gz
│   ├── T1w_acpc_dc_restore_brain.nii.gz
│   ├── T1w_acpc_dc_restore.nii.gz
│   ├── T1wDividedByT2w.nii.gz
│   ├── T1wDividedByT2w_ribbon.nii.gz
│   ├── T2w_acpc_dc.nii.gz
│   ├── T2w_acpc_dc_restore_brain.nii.gz
│   ├── T2w_acpc_dc_restore.nii.gz
│   └── wmparc.nii.gz
└── unprocessed
    └── T1w_MPR_vNav_4e_e1e2_mean
        └── OTHER_FILES
            └── session_report.csv
```

Structural Preprocessed Legacy

This package contains structural files coarsely aligned across subjects using the MSMSulc folding surface registration, plus a session report file that provides an overview of the usable imaging data collected during the participant's visit. It contains outputs of the HCP Structural Preprocessing pipeline, which is the result of applying PreFreeSurferPipeline, FreeSurferPipeline, and PostFreeSurferPipeline.

PreprocStrucLegacy

h0059_01_MR/
```
├── MNINonLinear
│   ├── aparc.a2009s+aseg.nii.gz
│   ├── aparc+aseg.nii.gz
│   ├── BiasField.nii.gz
│   ├── brainmask_fs.2.nii.gz
│   ├── brainmask_fs.nii.gz
│   ├── fsaverage_LR32k
│   │   ├── h0059_01_MR.32k_fs_LR.wb.spec
│   │   ├── h0059_01_MR.aparc.32k_fs_LR.dlabel.nii
│   │   ├── h0059_01_MR.aparc.a2009s.32k_fs_LR.dlabel.nii
│   │   ├── h0059_01_MR.ArealDistortion_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.BiasField_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.corrThickness.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.curvature.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.EdgeDistortion_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.L.atlasroi.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.L.flat.32k_fs_LR.surf.gii
```

```
│   │   ├── h0059_01_MR.L.inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.midthickness.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.pial.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.sphere.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.very_inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.white.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.MyelinMap.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.MyelinMap_BC.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.R.atlasroi.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.R.flat.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.midthickness.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.pial.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.sphere.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.very_inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.white.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.SmoothedMyelinMap.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.SmoothedMyelinMap_BC.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.StrainJ_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.StrainR_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.sulc.32k_fs_LR.dscalar.nii
│   │   └── h0059_01_MR.thickness.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.164k_fs_LR.wb.spec
│   ├── h0059_01_MR.aparc.164k_fs_LR.dlabel.nii
│   ├── h0059_01_MR.aparc.a2009s.164k_fs_LR.dlabel.nii
│   ├── h0059_01_MR.ArealDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.corrThickness.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.curvature.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.EdgeDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.L.atlasroi.164k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.flat.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.inflated.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.midthickness.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.pial.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.sphere.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.very_inflated.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.L.white.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.MyelinMap.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.MyelinMap_BC.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.R.atlasroi.164k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.flat.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.R.inflated.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.R.midthickness.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.R.pial.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.R.sphere.164k_fs_LR.surf.gii
│   ├── h0059_01_MR.R.very_inflated.164k_fs_LR.surf.gii
```

```
|   ├── h0059_01_MR.R.white.164k_fs_LR.surf.gii
|   ├── h0059_01_MR.SmoothedMyelinMap.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.SmoothedMyelinMap_BC.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.StrainJ_MSMSulc.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.StrainR_MSMSulc.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.sulc.164k_fs_LR.dscalar.nii
|   ├── h0059_01_MR.thickness.164k_fs_LR.dscalar.nii
|   ├── Native
|   |   ├── h0059_01_MR.aparc.a2009s.native.dlabel.nii
|   |   ├── h0059_01_MR.aparc.native.dlabel.nii
|   |   ├── h0059_01_MR.ArealDistortion_MSMSulc.native.dscalar.nii
|   |   ├── h0059_01_MR.corrThickness.native.dscalar.nii
|   |   ├── h0059_01_MR.curvature.native.dscalar.nii
|   |   ├── h0059_01_MR.EdgeDistortion_MSMSulc.native.dscalar.nii
|   |   ├── h0059_01_MR.L.atlasroi.native.shape.gii
|   |   ├── h0059_01_MR.L.inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.L.pial.native.surf.gii
|   |   ├── h0059_01_MR.L.roi.native.shape.gii
|   |   ├── h0059_01_MR.L.sphere.MSMSulc.native.surf.gii
|   |   ├── h0059_01_MR.L.sphere.native.surf.gii
|   |   ├── h0059_01_MR.L.very_inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.white.native.surf.gii
|   |   ├── h0059_01_MR.MyelinMap_BC.native.dscalar.nii
|   |   ├── h0059_01_MR.MyelinMap.native.dscalar.nii
|   |   ├── h0059_01_MR.native.wb.spec
|   |   ├── h0059_01_MR.R.atlasroi.native.shape.gii
|   |   ├── h0059_01_MR.R.inflated.native.surf.gii
|   |   ├── h0059_01_MR.R.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.R.pial.native.surf.gii
|   |   ├── h0059_01_MR.R.roi.native.shape.gii
|   |   ├── h0059_01_MR.R.sphere.MSMSulc.native.surf.gii
|   |   ├── h0059_01_MR.R.sphere.native.surf.gii
|   |   ├── h0059_01_MR.R.very_inflated.native.surf.gii
|   |   ├── h0059_01_MR.R.white.native.surf.gii
|   |   ├── h0059_01_MR.SmoothedMyelinMap_BC.native.dscalar.nii
|   |   ├── h0059_01_MR.SmoothedMyelinMap.native.dscalar.nii
|   |   ├── h0059_01_MR.SphericalDistortion.native.dscalar.nii
|   |   ├── h0059_01_MR.StrainJ_MSMSulc.native.dscalar.nii
|   |   ├── h0059_01_MR.StrainR_MSMSulc.native.dscalar.nii
|   |   ├── h0059_01_MR.sulc.native.dscalar.nii
|   |   └── h0059_01_MR.thickness.native.dscalar.nii
|   ├── ribbon.nii.gz
|   ├── ROIs
|   |   ├── Atlas_ROIs.2.nii.gz
|   |   ├── Atlas_wmparc.2.nii.gz
```

```
│   │       ├── MissingGrayordinates.2.nii.gz
│   │       ├── MissingGrayordinates.2.txt
│   │       ├── ROIs.2.nii.gz
│   │       └── wmparc.2.nii.gz
│   ├── T1w.nii.gz
│   ├── T1w_restore.2.nii.gz
│   ├── T1w_restore_brain.nii.gz
│   ├── T1w_restore.nii.gz
│   ├── T2w.nii.gz
│   ├── T2w_restore.2.nii.gz
│   ├── T2w_restore_brain.nii.gz
│   ├── T2w_restore.nii.gz
│   ├── wmparc.nii.gz
│   └── xfms
│       ├── acpc_dc2standard.nii.gz
│       └── standard2acpc_dc.nii.gz
├── ProcessingInfo
│   └── processing
│       ├── batch_MsmAll.txt
│       └── batch_Structural_preproc.txt
├── T1w
│   ├── aparc.a2009s+aseg.nii.gz
│   ├── aparc+aseg.nii.gz
│   ├── BiasField_acpc_dc.nii.gz
│   ├── brainmask_fs.nii.gz
│   ├── fsaverage_LR32k
│   │   ├── h0059_01_MR.32k_fs_LR.wb.spec
│   │   ├── h0059_01_MR.L.inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.midthickness.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.midthickness_va.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.L.pial.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.very_inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.L.white.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.midthickness_va.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.midthickness_va_norm.32k_fs_LR.dscalar.nii
│   │   ├── h0059_01_MR.R.inflated.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.midthickness.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.midthickness_va.32k_fs_LR.shape.gii
│   │   ├── h0059_01_MR.R.pial.32k_fs_LR.surf.gii
│   │   ├── h0059_01_MR.R.very_inflated.32k_fs_LR.surf.gii
│   │   └── h0059_01_MR.R.white.32k_fs_LR.surf.gii
│   ├── h0059_01_MR
│   │   └── stats
│   │       ├── aseg.stats
│   │       ├── lh.aparc.a2009s.stats
│   │       ├── lh.aparc.DKTatlas.stats
```

```
|   |           ├── lh.aparc.pial.stats
|   |           ├── lh.aparc.stats
|   |           ├── lh.BA_exvivo.stats
|   |           ├── lh.BA_exvivo.thresh.stats
|   |           ├── lh.curv.stats
|   |           ├── lh.w-g.pct.stats
|   |           ├── rh.aparc.a2009s.stats
|   |           ├── rh.aparc.DKTatlas.stats
|   |           ├── rh.aparc.pial.stats
|   |           ├── rh.aparc.stats
|   |           ├── rh.BA_exvivo.stats
|   |           ├── rh.BA_exvivo.thresh.stats
|   |           ├── rh.curv.stats
|   |           ├── rh.w-g.pct.stats
|   |           └── wmparc.stats
|   ├── Native
|   |   ├── h0059_01_MR.L.inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.L.pial.native.surf.gii
|   |   ├── h0059_01_MR.L.very_inflated.native.surf.gii
|   |   ├── h0059_01_MR.L.white.native.surf.gii
|   |   ├── h0059_01_MR.native.wb.spec
|   |   ├── h0059_01_MR.R.inflated.native.surf.gii
|   |   ├── h0059_01_MR.R.midthickness.native.surf.gii
|   |   ├── h0059_01_MR.R.pial.native.surf.gii
|   |   ├── h0059_01_MR.R.very_inflated.native.surf.gii
|   |   └── h0059_01_MR.R.white.native.surf.gii
|   ├── ribbon.nii.gz
|   ├── T1w_acpc_dc.nii.gz
|   ├── T1w_acpc_dc_restore_brain.nii.gz
|   ├── T1w_acpc_dc_restore.nii.gz
|   ├── T1wDividedByT2w.nii.gz
|   ├── T1wDividedByT2w_ribbon.nii.gz
|   ├── T2w_acpc_dc.nii.gz
|   ├── T2w_acpc_dc_restore_brain.nii.gz
|   ├── T2w_acpc_dc_restore.nii.gz
|   └── wmparc.nii.gz
└── unprocessed
    └── T1w_MPR_vNav_4e_e1e2_mean
        └── OTHER_FILES
            └── session_report.csv
```

Structural Preprocessed FreeSurfer

This package contains the actual outputs from the FreeSurferPipeline stage of the HCP Structural Preprocessing, in FreeSurfer's native file formats and directory structure.

PreprocStrucFreesurfer

h0059_01_MR/T1w/h0059_01_MR/
```
├── label
│   ├── aparc.annot.a2009s.ctab
│   ├── aparc.annot.ctab
│   ├── aparc.annot.DKTatlas.ctab
│   ├── BA_exvivo.ctab
│   ├── BA_exvivo.thresh.ctab
│   ├── lh.aparc.a2009s.annot
│   ├── lh.aparc.annot
│   ├── lh.aparc.DKTatlas.annot
│   ├── lh.BA1_exvivo.label
│   ├── lh.BA1_exvivo.thresh.label
│   ├── lh.BA2_exvivo.label
│   ├── lh.BA2_exvivo.thresh.label
│   ├── lh.BA3a_exvivo.label
│   ├── lh.BA3a_exvivo.thresh.label
│   ├── lh.BA3b_exvivo.label
│   ├── lh.BA3b_exvivo.thresh.label
│   ├── lh.BA44_exvivo.label
│   ├── lh.BA44_exvivo.thresh.label
│   ├── lh.BA45_exvivo.label
│   ├── lh.BA45_exvivo.thresh.label
│   ├── lh.BA4a_exvivo.label
│   ├── lh.BA4a_exvivo.thresh.label
│   ├── lh.BA4p_exvivo.label
│   ├── lh.BA4p_exvivo.thresh.label
│   ├── lh.BA6_exvivo.label
│   ├── lh.BA6_exvivo.thresh.label
│   ├── lh.BA_exvivo.annot
│   ├── lh.BA_exvivo.thresh.annot
│   ├── lh.cortex.label
│   ├── lh.entorhinal_exvivo.label
│   ├── lh.entorhinal_exvivo.thresh.label
│   ├── lh.MT_exvivo.label
│   ├── lh.MT_exvivo.thresh.label
│   ├── lh.perirhinal_exvivo.label
│   ├── lh.perirhinal_exvivo.thresh.label
│   ├── lh.V1_exvivo.label
│   ├── lh.V1_exvivo.thresh.label
│   ├── lh.V2_exvivo.label
│   ├── lh.V2_exvivo.thresh.label
│   ├── rh.aparc.a2009s.annot
│   ├── rh.aparc.annot
```

```
|       ├── rh.aparc.DKTatlas.annot
|       ├── rh.BA1_exvivo.label
|       ├── rh.BA1_exvivo.thresh.label
|       ├── rh.BA2_exvivo.label
|       ├── rh.BA2_exvivo.thresh.label
|       ├── rh.BA3a_exvivo.label
|       ├── rh.BA3a_exvivo.thresh.label
|       ├── rh.BA3b_exvivo.label
|       ├── rh.BA3b_exvivo.thresh.label
|       ├── rh.BA44_exvivo.label
|       ├── rh.BA44_exvivo.thresh.label
|       ├── rh.BA45_exvivo.label
|       ├── rh.BA45_exvivo.thresh.label
|       ├── rh.BA4a_exvivo.label
|       ├── rh.BA4a_exvivo.thresh.label
|       ├── rh.BA4p_exvivo.label
|       ├── rh.BA4p_exvivo.thresh.label
|       ├── rh.BA6_exvivo.label
|       ├── rh.BA6_exvivo.thresh.label
|       ├── rh.BA_exvivo.annot
|       ├── rh.BA_exvivo.thresh.annot
|       ├── rh.cortex.label
|       ├── rh.entorhinal_exvivo.label
|       ├── rh.entorhinal_exvivo.thresh.label
|       ├── rh.MT_exvivo.label
|       ├── rh.MT_exvivo.thresh.label
|       ├── rh.perirhinal_exvivo.label
|       ├── rh.perirhinal_exvivo.thresh.label
|       ├── rh.V1_exvivo.label
|       ├── rh.V1_exvivo.thresh.label
|       ├── rh.V2_exvivo.label
|       └── rh.V2_exvivo.thresh.label
├── mri
|       ├── aparc.a2009s+aseg.mgz
|       ├── aparc+aseg.mgz
|       ├── aparc.DKTatlas+aseg.mgz
|       ├── aseg.auto.mgz
|       ├── aseg.auto_noCCseg.label_intensities.txt
|       ├── aseg.auto_noCCseg.mgz
|       ├── aseg.mgz
|       ├── aseg.presurf.hypos.mgz
|       ├── aseg.presurf.mgz
|       ├── brain.finalsurfs.mgz
|       ├── brainmask.auto.mgz
|       ├── brainmask.mgz
|       ├── brain.mgz
```

```
|   ├── conf.T2.mgz
|   ├── c_ras.mat
|   ├── ctrl_pts.mgz
|   ├── extern.emreg.mask.mgz
|   ├── filled.mgz
|   ├── lh.ribbon.mgz
|   ├── mri_nu_correct.mni.log
|   ├── mri_nu_correct.mni.log.bak
|   ├── norm.mgz
|   ├── nu.mgz
|   ├── orig
|   │   ├── 001.mgz
|   │   └── T2raw.mgz
|   ├── orig.mgz
|   ├── orig_nu.mgz
|   ├── Q.lta~
|   ├── rawavg.aseg.presurf.mgz
|   ├── rawavg.brain.finalsurfs.conf.mgz
|   ├── rawavg.brain.finalsurfs.mgz
|   ├── rawavg.brain.fs.mgz
|   ├── rawavg.cmdc0.mgz
|   ├── rawavg.cmdc.mgz
|   ├── rawavg.filled.mgz
|   ├── rawavg.mgz
|   ├── rawavg.norm.mgz
|   ├── rawavg.T2.mgz
|   ├── rawavg.T2.norm.mgz
|   ├── rawavg.T2.prenorm.mgz
|   ├── rawavg.wm.mgz
|   ├── rh.ribbon.mgz
|   ├── ribbon.mgz
|   ├── segment.dat
|   ├── T1.mgz
|   ├── T1w_hires.nii.gz
|   ├── T1wMulT2w_hires.nii.gz
|   ├── T2.mgz
|   ├── T2w_hires.nii.gz
|   ├── talairach.label_intensities.txt
|   ├── talairach.log
|   ├── talairach_with_externmask.log
|   ├── transforms
|   │   ├── cc_up.lta
|   │   ├── conf2rawavg.dat
|   │   ├── conf2rawavg.lta
|   │   ├── eye.dat
|   │   ├── orig2rawavg.dat
```

```
│    │        ├── orig-to-rawavg.lta
│    │        ├── rawavg2conf.dat
│    │        ├── rawavg2conf.lta
│    │        ├── T2raw.auto.dat
│    │        ├── T2raw.auto.dat~
│    │        ├── T2raw.auto.dat.log
│    │        ├── T2raw.auto.dat.mincost
│    │        ├── T2raw.auto.dat.param
│    │        ├── T2raw.auto.dat.sum
│    │        ├── T2raw.auto.lta
│    │        ├── T2raw.lta
│    │        ├── T2raw.rawavg.lta
│    │        ├── T2wtoT1w.mat
│    │        ├── talairach.auto.xfm
│    │        ├── talairach.auto.xfm.lta
│    │        ├── talairach_avi.log
│    │        ├── talairach_avi_QA.log
│    │        ├── talairach.lta
│    │        ├── talairach.m3z
│    │        ├── talairach_with_externmask.lta
│    │        ├── talairach.xfm
│    │        └── talsrcimg_to_711-2C_as_mni_average_305_t4_vox2vox.txt
│    ├── wm.asegedit.mgz
│    ├── wm.mgz
│    ├── wmparc.mgz
│    └── wm.seg.mgz
├── scripts
│    ├── build-stamp.txt
│    ├── conf2hires.log
│    ├── DoConf2Hires
│    ├── lastcall.build-stamp.txt
│    ├── patchdir.txt
│    ├── pctsurfcon.log
│    ├── pctsurfcon.log.old
│    ├── ponscc.cut.log
│    ├── recon-all.cmd
│    ├── recon-all.done
│    ├── recon-all.env
│    ├── recon-all.local-copy
│    ├── recon-all.log
│    └── recon-all-status.log
├── stats
│    ├── aseg.stats
│    ├── lh.aparc.a2009s.stats
│    ├── lh.aparc.DKTatlas.stats
│    ├── lh.aparc.pial.stats
```

```
|   ├── lh.aparc.stats
|   ├── lh.BA_exvivo.stats
|   ├── lh.BA_exvivo.thresh.stats
|   ├── lh.curv.stats
|   ├── lh.w-g.pct.stats
|   ├── rh.aparc.a2009s.stats
|   ├── rh.aparc.DKTatlas.stats
|   ├── rh.aparc.pial.stats
|   ├── rh.aparc.stats
|   ├── rh.BA_exvivo.stats
|   ├── rh.BA_exvivo.thresh.stats
|   ├── rh.curv.stats
|   ├── rh.w-g.pct.stats
|   └── wmparc.stats
├── surf
|   ├── lh.area
|   ├── lh.area.mid
|   ├── lh.area.pial
|   ├── lh.avg_curv
|   ├── lh.bak.thickness
|   ├── lh.curv
|   ├── lh.curv.pial
|   ├── lh.defect_borders
|   ├── lh.defect_chull
|   ├── lh.defect_labels
|   ├── lh.inflated
|   ├── lh.inflated.H
|   ├── lh.inflated.K
|   ├── lh.inflated.nofix
|   ├── lh.jacobian_white
|   ├── lh.orig
|   ├── lh.orig.nofix
|   ├── lh.pial
|   ├── lh.pial.rawavg
|   ├── lh.pial.rawavg.conf
|   ├── lh.qsphere.nofix
|   ├── lh.smoothwm
|   ├── lh.smoothwm.BE.crv
|   ├── lh.smoothwm.C.crv
|   ├── lh.smoothwm.FI.crv
|   ├── lh.smoothwm.H.crv
|   ├── lh.smoothwm.K1.crv
|   ├── lh.smoothwm.K2.crv
|   ├── lh.smoothwm.K.crv
|   ├── lh.smoothwm.nofix
|   ├── lh.smoothwm.S.crv
```

```
│   ├── lh.sphere
│   ├── lh.sphere.reg
│   ├── lh.sulc
│   ├── lh.thickness
│   ├── lh.volume
│   ├── lh.w-g.pct.mgh
│   ├── lh.white
│   ├── lh.white.deformed
│   ├── lh.white.H
│   ├── lh.white.K
│   ├── lh.white.preaparc
│   ├── lh.white.preaparc.H
│   ├── lh.white.preaparc.K
│   ├── lh.white.preaparc.rawavg
│   ├── lh.white.rawavg
│   ├── lh.white.rawavg.conf
│   ├── lh.woT2.pial
│   ├── lh.woT2.pial.rawavg
│   ├── lh.woT2.pial.rawavg.conf
│   ├── rh.area
│   ├── rh.area.mid
│   ├── rh.area.pial
│   ├── rh.avg_curv
│   ├── rh.bak.thickness
│   ├── rh.curv
│   ├── rh.curv.pial
│   ├── rh.defect_borders
│   ├── rh.defect_chull
│   ├── rh.defect_labels
│   ├── rh.inflated
│   ├── rh.inflated.H
│   ├── rh.inflated.K
│   ├── rh.inflated.nofix
│   ├── rh.jacobian_white
│   ├── rh.orig
│   ├── rh.orig.nofix
│   ├── rh.pial
│   ├── rh.pial.rawavg
│   ├── rh.pial.rawavg.conf
│   ├── rh.qsphere.nofix
│   ├── rh.smoothwm
│   ├── rh.smoothwm.BE.crv
│   ├── rh.smoothwm.C.crv
│   ├── rh.smoothwm.FI.crv
│   ├── rh.smoothwm.H.crv
│   ├── rh.smoothwm.K1.crv
```

```
|   ├── rh.smoothwm.K2.crv
|   ├── rh.smoothwm.K.crv
|   ├── rh.smoothwm.nofix
|   ├── rh.smoothwm.S.crv
|   ├── rh.sphere
|   ├── rh.sphere.reg
|   ├── rh.sulc
|   ├── rh.thickness
|   ├── rh.volume
|   ├── rh.w-g.pct.mgh
|   ├── rh.white
|   ├── rh.white.deformed
|   ├── rh.white.H
|   ├── rh.white.K
|   ├── rh.white.preaparc
|   ├── rh.white.preaparc.H
|   ├── rh.white.preaparc.K
|   ├── rh.white.preaparc.rawavg
|   ├── rh.white.rawavg
|   ├── rh.white.rawavg.conf
|   ├── rh.woT2.pial
|   ├── rh.woT2.pial.rawavg
|   └── rh.woT2.pial.rawavg.conf
└── touch
    ├── aparc.a2009s2aseg.touch
    ├── aparc.DKTatlas2aseg.touch
    ├── apas2aseg.touch
    ├── asegmerge.touch
    ├── ca_label.touch
    ├── ca_normalize.touch
    ├── ca_register.touch
    ├── conf2hires
    ├── conform.touch
    ├── cortical_ribbon.touch
    ├── em_register.touch
    ├── fill.touch
    ├── inorm1.touch
    ├── inorm2.touch
    ├── lh.aparc2.touch
    ├── lh.aparcstats2.touch
    ├── lh.aparcstats3.touch
    ├── lh.aparcstats.touch
    ├── lh.aparc.touch
    ├── lh.avgcurv.touch
    ├── lh.curvstats.touch
    ├── lh.final_surfaces.touch
```

```
├── lh.inflate1.touch
├── lh.inflate2.touch
├── lh.inflate.H.K.touch
├── lh.jacobian_white.touch
├── lh.pctsurfcon.touch
├── lh.qsphere.touch
├── lh.smoothwm1.touch
├── lh.smoothwm2.touch
├── lh.sphmorph.touch
├── lh.sphreg.touch
├── lh.surfvolume.touch
├── lh.tessellate.touch
├── lh.topofix.touch
├── lh.white.H.K.touch
├── lh.white_surface.touch
├── nu.touch
├── relabelhypos.touch
├── rh.aparc2.touch
├── rh.aparcstats2.touch
├── rh.aparcstats3.touch
├── rh.aparcstats.touch
├── rh.aparc.touch
├── rh.avgcurv.touch
├── rh.curvstats.touch
├── rh.final_surfaces.touch
├── rh.inflate1.touch
├── rh.inflate2.touch
├── rh.inflate.H.K.touch
├── rh.jacobian_white.touch
├── rh.pctsurfcon.touch
├── rh.qsphere.touch
├── rh.smoothwm1.touch
├── rh.smoothwm2.touch
├── rh.sphmorph.touch
├── rh.sphreg.touch
├── rh.surfvolume.touch
├── rh.tessellate.touch
├── rh.topofix.touch
├── rh.white.H.K.touch
├── rh.white_surface.touch
├── rusage.mri_ca_register.dat
├── rusage.mris_fix_topology.lh.dat
├── rusage.mris_fix_topology.rh.dat
├── rusage.mris_inflate.lh.dat
├── rusage.mris_inflate.rh.dat
├── rusage.mris_register.lh.dat
```

```
├── rusage.mris_register.rh.dat
├── rusage.mris_sphere.lh.dat
├── rusage.mris_sphere.rh.dat
├── segstats.touch
├── skull.lta.touch
├── skull_strip.touch
├── talairach.touch
├── wmaparc.stats.touch
├── wmaparc.touch
└── wmsegment.touch
```

Structural Preprocessed Extended

This package contains additional files related to QC on structural preprocessing outputs and other extra files that may be useful to select users. It contains outputs of the HCP Structural Preprocessing pipeline, which is the result of applying PreFreeSurferPipeline, FreeSurferPipeline, PostFreeSurferPipeline and MSMAllPipeline.

PreprocStrucExtended

h0059_01_MR/MNINonLinear/
```
├── fsaverage_LR32k
│   ├── h0059_01_MR.ArealDistortion_FS.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.atlas_MyelinMap_BC.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.atlas_RSNs_d40.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.atlas_Topography.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.EdgeDistortion_FS.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.individual_RSNs_d40_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.individual_Topography_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.L.aparc.32k_fs_LR.label.gii
│   ├── h0059_01_MR.L.aparc.a2009s.32k_fs_LR.label.gii
│   ├── h0059_01_MR.L.ArealDistortion_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.ArealDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.corrThickness.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.curvature.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.EdgeDistortion_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.MyelinMap.32k_fs_LR.func.gii
│   ├── h0059_01_MR.L.MyelinMap_BC.32k_fs_LR.func.gii
│   ├── h0059_01_MR.L.SmoothedMyelinMap.32k_fs_LR.func.gii
│   ├── h0059_01_MR.L.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
│   ├── h0059_01_MR.L.StrainJ_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.StrainJ_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.StrainR_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.StrainR_MSMSulc.32k_fs_LR.shape.gii
```

```
│   ├── h0059_01_MR.L.sulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.L.thickness.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.aparc.32k_fs_LR.label.gii
│   ├── h0059_01_MR.R.aparc.a2009s.32k_fs_LR.label.gii
│   ├── h0059_01_MR.R.ArealDistortion_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.ArealDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.corrThickness.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.curvature.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.EdgeDistortion_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.MyelinMap.32k_fs_LR.func.gii
│   ├── h0059_01_MR.R.MyelinMap_BC.32k_fs_LR.func.gii
│   ├── h0059_01_MR.R.SmoothedMyelinMap.32k_fs_LR.func.gii
│   ├── h0059_01_MR.R.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
│   ├── h0059_01_MR.R.StrainJ_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.StrainJ_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.StrainR_FS.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.StrainR_MSMSulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.sulc.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.R.thickness.32k_fs_LR.shape.gii
│   ├── h0059_01_MR.StrainJ_FS.32k_fs_LR.dscalar.nii
│   └── h0059_01_MR.StrainR_FS.32k_fs_LR.dscalar.nii
├── h0059_01_MR.ArealDistortion_FS.164k_fs_LR.dscalar.nii
├── h0059_01_MR.EdgeDistortion_FS.164k_fs_LR.dscalar.nii
├── h0059_01_MR.L.aparc.164k_fs_LR.label.gii
├── h0059_01_MR.L.aparc.a2009s.164k_fs_LR.label.gii
├── h0059_01_MR.L.ArealDistortion_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.L.ArealDistortion_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.corrThickness.164k_fs_LR.shape.gii
├── h0059_01_MR.L.curvature.164k_fs_LR.shape.gii
├── h0059_01_MR.L.EdgeDistortion_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.L.EdgeDistortion_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.MyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.L.MyelinMap_BC.164k_fs_LR.func.gii
├── h0059_01_MR.L.RefMyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.L.refsulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.SmoothedMyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.L.SmoothedMyelinMap_BC.164k_fs_LR.func.gii
├── h0059_01_MR.L.StrainJ_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.L.StrainJ_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.StrainR_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.L.StrainR_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.sulc.164k_fs_LR.shape.gii
├── h0059_01_MR.L.thickness.164k_fs_LR.shape.gii
├── h0059_01_MR.R.aparc.164k_fs_LR.label.gii
├── h0059_01_MR.R.aparc.a2009s.164k_fs_LR.label.gii
```

```
├── h0059_01_MR.R.ArealDistortion_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.R.ArealDistortion_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.corrThickness.164k_fs_LR.shape.gii
├── h0059_01_MR.R.curvature.164k_fs_LR.shape.gii
├── h0059_01_MR.R.EdgeDistortion_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.R.EdgeDistortion_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.MyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.R.MyelinMap_BC.164k_fs_LR.func.gii
├── h0059_01_MR.R.RefMyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.R.refsulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.SmoothedMyelinMap.164k_fs_LR.func.gii
├── h0059_01_MR.R.SmoothedMyelinMap_BC.164k_fs_LR.func.gii
├── h0059_01_MR.R.StrainJ_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.R.StrainJ_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.StrainR_FS.164k_fs_LR.shape.gii
├── h0059_01_MR.R.StrainR_MSMSulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.sulc.164k_fs_LR.shape.gii
├── h0059_01_MR.R.thickness.164k_fs_LR.shape.gii
├── h0059_01_MR.StrainJ_FS.164k_fs_LR.dscalar.nii
├── h0059_01_MR.StrainR_FS.164k_fs_LR.dscalar.nii
├── Native
│   ├── h0059_01_MR.ArealDistortion_FS.native.dscalar.nii
│   ├── h0059_01_MR.EdgeDistortion_FS.native.dscalar.nii
│   ├── h0059_01_MR.L.aparc.a2009s.native.label.gii
│   ├── h0059_01_MR.L.aparc.native.label.gii
│   ├── h0059_01_MR.L.ArealDistortion_FS.native.shape.gii
│   ├── h0059_01_MR.L.ArealDistortion_MSMAll.native.shape.gii
│   ├── h0059_01_MR.L.ArealDistortion_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.L.BiasField.native.func.gii
│   ├── h0059_01_MR.L.corrThickness.native.shape.gii
│   ├── h0059_01_MR.L.curvature.native.shape.gii
│   ├── h0059_01_MR.L.EdgeDistortion_FS.native.shape.gii
│   ├── h0059_01_MR.L.EdgeDistortion_MSMAll.native.shape.gii
│   ├── h0059_01_MR.L.EdgeDistortion_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.L.MyelinMap_BC.native.func.gii
│   ├── h0059_01_MR.L.MyelinMap.native.func.gii
│   ├── h0059_01_MR.L.RefMyelinMap.native.func.gii
│   ├── h0059_01_MR.L.SmoothedMyelinMap_BC.native.func.gii
│   ├── h0059_01_MR.L.SmoothedMyelinMap.native.func.gii
│   ├── h0059_01_MR.L.sphere.reg.native.surf.gii
│   ├── h0059_01_MR.L.sphere.reg.reg_LR.native.surf.gii
│   ├── h0059_01_MR.L.sphere.rot.native.surf.gii
│   ├── h0059_01_MR.L.SphericalDistortion.native.shape.gii
│   ├── h0059_01_MR.L.StrainJ_FS.native.shape.gii
│   ├── h0059_01_MR.L.StrainJ_MSMAll.native.shape.gii
│   ├── h0059_01_MR.L.StrainJ_MSMSulc.native.shape.gii
```

```
│   ├── h0059_01_MR.L.StrainR_FS.native.shape.gii
│   ├── h0059_01_MR.L.StrainR_MSMAll.native.shape.gii
│   ├── h0059_01_MR.L.StrainR_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.L.sulc.native.shape.gii
│   ├── h0059_01_MR.L.thickness.native.shape.gii
│   ├── h0059_01_MR.R.aparc.a2009s.native.label.gii
│   ├── h0059_01_MR.R.aparc.native.label.gii
│   ├── h0059_01_MR.R.ArealDistortion_FS.native.shape.gii
│   ├── h0059_01_MR.R.ArealDistortion_MSMAll.native.shape.gii
│   ├── h0059_01_MR.R.ArealDistortion_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.R.BiasField.native.func.gii
│   ├── h0059_01_MR.R.corrThickness.native.shape.gii
│   ├── h0059_01_MR.R.curvature.native.shape.gii
│   ├── h0059_01_MR.R.EdgeDistortion_FS.native.shape.gii
│   ├── h0059_01_MR.R.EdgeDistortion_MSMAll.native.shape.gii
│   ├── h0059_01_MR.R.EdgeDistortion_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.R.MyelinMap_BC.native.func.gii
│   ├── h0059_01_MR.R.MyelinMap.native.func.gii
│   ├── h0059_01_MR.R.RefMyelinMap.native.func.gii
│   ├── h0059_01_MR.R.SmoothedMyelinMap_BC.native.func.gii
│   ├── h0059_01_MR.R.SmoothedMyelinMap.native.func.gii
│   ├── h0059_01_MR.R.sphere.reg.native.surf.gii
│   ├── h0059_01_MR.R.sphere.reg.reg_LR.native.surf.gii
│   ├── h0059_01_MR.R.sphere.rot.native.surf.gii
│   ├── h0059_01_MR.R.SphericalDistortion.native.shape.gii
│   ├── h0059_01_MR.R.StrainJ_FS.native.shape.gii
│   ├── h0059_01_MR.R.StrainJ_MSMAll.native.shape.gii
│   ├── h0059_01_MR.R.StrainJ_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.R.StrainR_FS.native.shape.gii
│   ├── h0059_01_MR.R.StrainR_MSMAll.native.shape.gii
│   ├── h0059_01_MR.R.StrainR_MSMSulc.native.shape.gii
│   ├── h0059_01_MR.R.sulc.native.shape.gii
│   ├── h0059_01_MR.R.thickness.native.shape.gii
│   ├── h0059_01_MR.StrainJ_FS.native.dscalar.nii
│   └── h0059_01_MR.StrainR_FS.native.dscalar.nii
├── StructuralQC
│   ├── h0059_01_MR.NonlinearRegJacobians_FNIRT.164k_fs_LR.dscalar.nii
│   ├── h0059_01_MR.NonlinearRegJacobians_log2.nii.gz
│   ├── h0059_01_MR.structuralQC.wb.scene
│   ├── h0059_01_MR.T1w_acpc_dc_restore_to_MNILinear.nii.gz
│   ├── MNI152_T1_0.8mm.nii.gz
│   ├── S1200.MyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
│   ├── S1200.sulc_MSMAll.164k_fs_LR.dscalar.nii
│   └── snapshots
│       ├── h0059_01_MR.structuralQC.wb.scene1.png
│       ├── h0059_01_MR.structuralQC.wb.scene2.png
```

```
|           ├── h0059_01_MR.structuralQC.wb.scene3.png
|           └── h0059_01_MR.structuralQC.wb.scene4.png
└── xfms
    ├── acpc2MNILinear.mat
    └── NonlinearRegJacobians.nii.gz
```

rfMRI Preprocessed Recommended

This package is the recommended starting point for rfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration. It contains outputs of HCP Functional Preprocessing for resting state scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

Note: This example control subject has 4 REST scans. Patient subjects only have REST1 AP and PA scans, per project protocol.

PreprocRfmriRecommended

```
h0059_01_MR/
├── MNINonLinear/Results
│   ├── rfMRI_REST
│   │   ├── rfMRI_REST_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   └── rfMRI_REST_Atlas_MSMAll_hp0_clean_vn.dscalar.nii
│   ├── rfMRI_REST1_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_ddbd27ec-0230-4406-807a-90dc1df72465.csv
│   │   ├── rfMRI_REST1_AP_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   ├── rfMRI_REST1_AP_Atlas_MSMAll_hp0_clean.README.txt
│   │   ├── rfMRI_REST1_AP_Atlas_MSMAll_hp0_vn.dscalar.nii
│   │   ├── rfMRI_REST1_AP_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST1_AP_dropouts.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.stats.txt
│   │   ├── rfMRI_REST1_AP_fovmask.nii.gz
│   │   ├── rfMRI_REST1_AP_Jacobian.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_field.nii.gz
```

```
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST1_AP_SBRef.nii.gz
│   │   ├── rfMRI_REST1_AP_sebased_bias_dilated.nii.gz
│   │   ├── rfMRI_REST1_AP_sebased_bias.nii.gz
│   │   └── rfMRI_REST1_AP_sebased_reference.nii.gz
│   ├── rfMRI_REST1_PA
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_61bee921-8f7b-4615-9da8-7353bf1c897c.csv
│   │   ├── rfMRI_REST1_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   ├── rfMRI_REST1_PA_Atlas_MSMAll_hp0_clean.README.txt
│   │   ├── rfMRI_REST1_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│   │   ├── rfMRI_REST1_PA_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST1_PA_dropouts.nii.gz
│   │   ├── rfMRI_REST1_PA_finalmask.nii.gz
│   │   ├── rfMRI_REST1_PA_finalmask.stats.txt
│   │   ├── rfMRI_REST1_PA_fovmask.nii.gz
│   │   ├── rfMRI_REST1_PA_Jacobian.nii.gz
│   │   ├── rfMRI_REST1_PA_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_PA_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_PA_pseudo_transmit_field.nii.gz
│   │   ├── rfMRI_REST1_PA_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST1_PA_SBRef.nii.gz
│   │   ├── rfMRI_REST1_PA_sebased_bias_dilated.nii.gz
│   │   ├── rfMRI_REST1_PA_sebased_bias.nii.gz
│   │   └── rfMRI_REST1_PA_sebased_reference.nii.gz
│   ├── rfMRI_REST2_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_e9d0f23d-9f54-4978-93d2-c1d583ea1fe7.csv
│   │   ├── rfMRI_REST2_AP_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   ├── rfMRI_REST2_AP_Atlas_MSMAll_hp0_clean.README.txt
│   │   ├── rfMRI_REST2_AP_Atlas_MSMAll_hp0_vn.dscalar.nii
│   │   ├── rfMRI_REST2_AP_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST2_AP_dropouts.nii.gz
│   │   ├── rfMRI_REST2_AP_finalmask.nii.gz
```

```
|   |   ├── rfMRI_REST2_AP_finalmask.stats.txt
|   |   ├── rfMRI_REST2_AP_fovmask.nii.gz
|   |   ├── rfMRI_REST2_AP_Jacobian.nii.gz
|   |   ├── rfMRI_REST2_AP_PhaseOne_gdc_dc.nii.gz
|   |   ├── rfMRI_REST2_AP_PhaseTwo_gdc_dc.nii.gz
|   |   ├── rfMRI_REST2_AP_pseudo_transmit_field.nii.gz
|   |   ├── rfMRI_REST2_AP_pseudo_transmit_raw.nii.gz
|   |   ├── rfMRI_REST2_AP_SBRef.nii.gz
|   |   ├── rfMRI_REST2_AP_sebased_bias_dilated.nii.gz
|   |   ├── rfMRI_REST2_AP_sebased_bias.nii.gz
|   |   └── rfMRI_REST2_AP_sebased_reference.nii.gz
|   └── rfMRI_REST2_PA
|       ├── brainmask_fs.2.nii.gz
|       ├── Movement_AbsoluteRMS_mean.txt
|       ├── Movement_AbsoluteRMS.txt
|       ├── Movement_Regressors_hp0_clean.txt
|       ├── Movement_Regressors.txt
|       ├── Movement_RelativeRMS_mean.txt
|       ├── Movement_RelativeRMS.txt
|       ├── Physio_combined_0098f65d-a160-420f-ae9f-45d87a076eb2.csv
|       ├── rfMRI_REST2_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
|       ├── rfMRI_REST2_PA_Atlas_MSMAll_hp0_clean.README.txt
|       ├── rfMRI_REST2_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
|       ├── rfMRI_REST2_PA_Atlas_nonzero.stats.txt
|       ├── rfMRI_REST2_PA_dropouts.nii.gz
|       ├── rfMRI_REST2_PA_finalmask.nii.gz
|       ├── rfMRI_REST2_PA_finalmask.stats.txt
|       ├── rfMRI_REST2_PA_fovmask.nii.gz
|       ├── rfMRI_REST2_PA_Jacobian.nii.gz
|       ├── rfMRI_REST2_PA_PhaseOne_gdc_dc.nii.gz
|       ├── rfMRI_REST2_PA_PhaseTwo_gdc_dc.nii.gz
|       ├── rfMRI_REST2_PA_pseudo_transmit_field.nii.gz
|       ├── rfMRI_REST2_PA_pseudo_transmit_raw.nii.gz
|       ├── rfMRI_REST2_PA_SBRef.nii.gz
|       ├── rfMRI_REST2_PA_sebased_bias_dilated.nii.gz
|       ├── rfMRI_REST2_PA_sebased_bias.nii.gz
|       └── rfMRI_REST2_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
    ├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
    ├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
    ├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
    ├── h0059_01_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── h0059_01_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027685
```

```
├── h0059_01_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027685
├── h0059_01_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027691
├── h0059_01_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027691
├── h0059_01_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027697
├── h0059_01_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027697
├── h0059_01_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027703
├── h0059_01_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027703
├── processing
│   ├── batch_rfMRI_REST1_AP_preproc.txt
│   ├── batch_rfMRI_REST1_PA_preproc.txt
│   ├── batch_rfMRI_REST2_AP_preproc.txt
│   └── batch_rfMRI_REST2_PA_preproc.txt
└── QuNex/processing/logs
    ├── comlogs
    │   ├── done_hcp4_rfMRI_REST1_AP_h0059_01_MR_2021-03-25_11.38.1616690292.log
    │   ├── done_hcp4_rfMRI_REST1_PA_h0059_01_MR_2021-03-25_11.38.1616690331.log
    │   ├── done_hcp4_rfMRI_REST2_AP_h0059_01_MR_2021-03-25_11.39.1616690361.log
    │   ├── done_hcp4_rfMRI_REST2_PA_h0059_01_MR_2021-03-25_11.41.1616690498.log
    │   ├── done_hcp5_rfMRI_REST1_AP_h0059_01_MR_2021-03-25_17.59.1616713141.log
    │   ├── done_hcp5_rfMRI_REST1_PA_h0059_01_MR_2021-03-25_17.56.1616712973.log
    │   ├── done_hcp5_rfMRI_REST2_AP_h0059_01_MR_2021-03-25_15.59.1616705962.log
    │   ├── done_hcp5_rfMRI_REST2_PA_h0059_01_MR_2021-03-26_01.30.1616740242.log
    │   ├── done_hcp_DeDriftAndResample_fMRI_CONCAT_ALL_h0059_01_MR_2021-05-12_20.24.1620869079.log
    │   ├── done_hcp_ICAFix_fMRI_CONCAT_ALL_h0059_01_MR_2021-05-11_19.57.1620781060.log
    │   ├── done_hcp_MSMAll_fMRI_CONCAT_ALL_h0059_01_MR_2021-05-12_17.45.1620859503.log
    │   ├── done_hcp_PostFix_fMRI_CONCAT_ALL_h0059_01_MR_2021-05-12_01.19.1620800356.log
    │   ├── done_setupHCP_h0059_01_MR_2021-03-25.11.37.59.905113.log
    │   ├── done_setupHCP_h0059_01_MR_2021-03-25.11.38.39.032426.log
    │   ├── done_setupHCP_h0059_01_MR_2021-03-25.11.39.09.679856.log
    │   └── done_setupHCP_h0059_01_MR_2021-03-25.11.40.52.000346.log
    ├── runlogs
    │   ├── Log-hcp4-2021-03-25_11.38.1616690292.log
    │   ├── Log-hcp4-2021-03-25_11.38.1616690331.log
    │   ├── Log-hcp4-2021-03-25_11.39.1616690361.log
    │   ├── Log-hcp4-2021-03-25_11.41.1616690497.log
    │   ├── Log-hcp5-2021-03-25_15.59.1616705962.log
    │   ├── Log-hcp5-2021-03-25_17.56.1616712972.log
    │   ├── Log-hcp5-2021-03-25_17.59.1616713141.log
    │   ├── Log-hcp5-2021-03-26_01.30.1616740242.log
    │   ├── Log-hcp_ICAFix-2021-05-11_19.57.1620781060.log
    │   └── Log-hcp_MSMAll-2021-05-12_17.45.1620859502.log
    ├── run_qunex.sh_2021-03-25-11-37-45.log
    ├── run_qunex.sh_2021-03-25-11-38-23.log
```

```
├── run_qunex.sh_2021-03-25-11-38-54.log
├── run_qunex.sh_2021-03-25-11-39-27.log
├── run_qunex.sh_2021-05-11-19-57-26.log
└── run_qunex.sh_2021-05-12-17-44-49.log
```

rfMRI Preprocessed Legacy Surface

This package contains cleaned files coarsely aligned across subjects using the MSMSulc folding surface registration. It contains outputs of HCP Functional Preprocessing for resting state scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

Note: This example control subject has 4 REST scans. Patient subjects only have REST1 AP and PA scans, per project protocol.

PreprocRfmriLegacySurface

```
h0059_01_MR/
├── MNINonLinear/Results/
│   ├── rfMRI_REST
│   │   ├── rfMRI_REST_Atlas_hp0_clean.dtseries.nii
│   │   └── rfMRI_REST_Atlas_hp0_clean_vn.dscalar.nii
│   ├── rfMRI_REST1_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_ddbd27ec-0230-4406-807a-90dc1df72465.csv
│   │   ├── rfMRI_REST1_AP_Atlas_hp0_clean.dtseries.nii
│   │   ├── rfMRI_REST1_AP_Atlas_hp0_clean.README.txt
│   │   ├── rfMRI_REST1_AP_Atlas_hp0_vn.dscalar.nii
│   │   ├── rfMRI_REST1_AP_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST1_AP_dropouts.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.stats.txt
│   │   ├── rfMRI_REST1_AP_fovmask.nii.gz
│   │   ├── rfMRI_REST1_AP_Jacobian.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_field.nii.gz
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST1_AP_SBRef.nii.gz
```

```
│   │       ├── rfMRI_REST1_AP_sebased_bias_dilated.nii.gz
│   │       ├── rfMRI_REST1_AP_sebased_bias.nii.gz
│   │       └── rfMRI_REST1_AP_sebased_reference.nii.gz
│   ├── rfMRI_REST1_PA
│   │       ├── brainmask_fs.2.nii.gz
│   │       ├── Movement_AbsoluteRMS_mean.txt
│   │       ├── Movement_AbsoluteRMS.txt
│   │       ├── Movement_Regressors_hp0_clean.txt
│   │       ├── Movement_Regressors.txt
│   │       ├── Movement_RelativeRMS_mean.txt
│   │       ├── Movement_RelativeRMS.txt
│   │       ├── Physio_combined_61bee921-8f7b-4615-9da8-7353bf1c897c.csv
│   │       ├── rfMRI_REST1_PA_Atlas_hp0_clean.dtseries.nii
│   │       ├── rfMRI_REST1_PA_Atlas_hp0_clean.README.txt
│   │       ├── rfMRI_REST1_PA_Atlas_hp0_vn.dscalar.nii
│   │       ├── rfMRI_REST1_PA_Atlas_nonzero.stats.txt
│   │       ├── rfMRI_REST1_PA_dropouts.nii.gz
│   │       ├── rfMRI_REST1_PA_finalmask.nii.gz
│   │       ├── rfMRI_REST1_PA_finalmask.stats.txt
│   │       ├── rfMRI_REST1_PA_fovmask.nii.gz
│   │       ├── rfMRI_REST1_PA_Jacobian.nii.gz
│   │       ├── rfMRI_REST1_PA_PhaseOne_gdc_dc.nii.gz
│   │       ├── rfMRI_REST1_PA_PhaseTwo_gdc_dc.nii.gz
│   │       ├── rfMRI_REST1_PA_pseudo_transmit_field.nii.gz
│   │       ├── rfMRI_REST1_PA_pseudo_transmit_raw.nii.gz
│   │       ├── rfMRI_REST1_PA_SBRef.nii.gz
│   │       ├── rfMRI_REST1_PA_sebased_bias_dilated.nii.gz
│   │       ├── rfMRI_REST1_PA_sebased_bias.nii.gz
│   │       └── rfMRI_REST1_PA_sebased_reference.nii.gz
│   ├── rfMRI_REST2_AP
│   │       ├── brainmask_fs.2.nii.gz
│   │       ├── Movement_AbsoluteRMS_mean.txt
│   │       ├── Movement_AbsoluteRMS.txt
│   │       ├── Movement_Regressors_hp0_clean.txt
│   │       ├── Movement_Regressors.txt
│   │       ├── Movement_RelativeRMS_mean.txt
│   │       ├── Movement_RelativeRMS.txt
│   │       ├── Physio_combined_e9d0f23d-9f54-4978-93d2-c1d583ea1fe7.csv
│   │       ├── rfMRI_REST2_AP_Atlas_hp0_clean.dtseries.nii
│   │       ├── rfMRI_REST2_AP_Atlas_hp0_clean.README.txt
│   │       ├── rfMRI_REST2_AP_Atlas_hp0_vn.dscalar.nii
│   │       ├── rfMRI_REST2_AP_Atlas_nonzero.stats.txt
│   │       ├── rfMRI_REST2_AP_dropouts.nii.gz
│   │       ├── rfMRI_REST2_AP_finalmask.nii.gz
│   │       ├── rfMRI_REST2_AP_finalmask.stats.txt
│   │       ├── rfMRI_REST2_AP_fovmask.nii.gz
```

```
│   │       ├── rfMRI_REST2_AP_Jacobian.nii.gz
│   │       ├── rfMRI_REST2_AP_PhaseOne_gdc_dc.nii.gz
│   │       ├── rfMRI_REST2_AP_PhaseTwo_gdc_dc.nii.gz
│   │       ├── rfMRI_REST2_AP_pseudo_transmit_field.nii.gz
│   │       ├── rfMRI_REST2_AP_pseudo_transmit_raw.nii.gz
│   │       ├── rfMRI_REST2_AP_SBRef.nii.gz
│   │       ├── rfMRI_REST2_AP_sebased_bias_dilated.nii.gz
│   │       ├── rfMRI_REST2_AP_sebased_bias.nii.gz
│   │       └── rfMRI_REST2_AP_sebased_reference.nii.gz
│   └── rfMRI_REST2_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── Movement_AbsoluteRMS_mean.txt
│       ├── Movement_AbsoluteRMS.txt
│       ├── Movement_Regressors_hp0_clean.txt
│       ├── Movement_Regressors.txt
│       ├── Movement_RelativeRMS_mean.txt
│       ├── Movement_RelativeRMS.txt
│       ├── Physio_combined_0098f65d-a160-420f-ae9f-45d87a076eb2.csv
│       ├── rfMRI_REST2_PA_Atlas_hp0_clean.dtseries.nii
│       ├── rfMRI_REST2_PA_Atlas_hp0_clean.README.txt
│       ├── rfMRI_REST2_PA_Atlas_hp0_vn.dscalar.nii
│       ├── rfMRI_REST2_PA_Atlas_nonzero.stats.txt
│       ├── rfMRI_REST2_PA_dropouts.nii.gz
│       ├── rfMRI_REST2_PA_finalmask.nii.gz
│       ├── rfMRI_REST2_PA_finalmask.stats.txt
│       ├── rfMRI_REST2_PA_fovmask.nii.gz
│       ├── rfMRI_REST2_PA_Jacobian.nii.gz
│       ├── rfMRI_REST2_PA_PhaseOne_gdc_dc.nii.gz
│       ├── rfMRI_REST2_PA_PhaseTwo_gdc_dc.nii.gz
│       ├── rfMRI_REST2_PA_pseudo_transmit_field.nii.gz
│       ├── rfMRI_REST2_PA_pseudo_transmit_raw.nii.gz
│       ├── rfMRI_REST2_PA_SBRef.nii.gz
│       ├── rfMRI_REST2_PA_sebased_bias_dilated.nii.gz
│       ├── rfMRI_REST2_PA_sebased_bias.nii.gz
│       └── rfMRI_REST2_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_rfMRI_REST1_AP_preproc.txt
        ├── batch_rfMRI_REST1_PA_preproc.txt
        ├── batch_rfMRI_REST2_AP_preproc.txt
        └── batch_rfMRI_REST2_PA_preproc.txt
```

rfMRI Preprocessed Legacy Volume

This package contains cleaned rfMRI files poorly aligned across subjects using nonlinear volume registration. It contains outputs of HCP Functional Preprocessing for resting state scans, which is the result of applying GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

Note: This example control subject has 4 REST scans. Patient subjects only have REST1 AP and PA scans, per project protocol.

PreprocRfmriLegacyVolume

```
h0059_01_MR/
├── MNINonLinear/Results/
│   ├── rfMRI_REST
│   │   ├── rfMRI_REST_hp0_clean.nii.gz
│   │   └── rfMRI_REST_hp0_clean_vn.nii.gz
│   ├── rfMRI_REST1_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_ddbd27ec-0230-4406-807a-90dc1df72465.csv
│   │   ├── rfMRI_REST1_AP_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST1_AP_dropouts.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.nii.gz
│   │   ├── rfMRI_REST1_AP_finalmask.stats.txt
│   │   ├── rfMRI_REST1_AP_fovmask.nii.gz
│   │   ├── rfMRI_REST1_AP_hp0_clean.nii.gz
│   │   ├── rfMRI_REST1_AP_hp0_vn.nii.gz
│   │   ├── rfMRI_REST1_AP_Jacobian.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_field.nii.gz
│   │   ├── rfMRI_REST1_AP_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST1_AP_SBRef.nii.gz
│   │   ├── rfMRI_REST1_AP_sebased_bias_dilated.nii.gz
│   │   ├── rfMRI_REST1_AP_sebased_bias.nii.gz
│   │   └── rfMRI_REST1_AP_sebased_reference.nii.gz
│   ├── rfMRI_REST1_PA
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
```

```
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_61bee921-8f7b-4615-9da8-7353bf1c897c.csv
│   │   ├── rfMRI_REST1_PA_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST1_PA_dropouts.nii.gz
│   │   ├── rfMRI_REST1_PA_finalmask.nii.gz
│   │   ├── rfMRI_REST1_PA_finalmask.stats.txt
│   │   ├── rfMRI_REST1_PA_fovmask.nii.gz
│   │   ├── rfMRI_REST1_PA_hp0_clean.nii.gz
│   │   ├── rfMRI_REST1_PA_hp0_vn.nii.gz
│   │   ├── rfMRI_REST1_PA_Jacobian.nii.gz
│   │   ├── rfMRI_REST1_PA_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_PA_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST1_PA_pseudo_transmit_field.nii.gz
│   │   ├── rfMRI_REST1_PA_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST1_PA_SBRef.nii.gz
│   │   ├── rfMRI_REST1_PA_sebased_bias_dilated.nii.gz
│   │   ├── rfMRI_REST1_PA_sebased_bias.nii.gz
│   │   └── rfMRI_REST1_PA_sebased_reference.nii.gz
│   ├── rfMRI_REST2_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── Movement_AbsoluteRMS_mean.txt
│   │   ├── Movement_AbsoluteRMS.txt
│   │   ├── Movement_Regressors_hp0_clean.txt
│   │   ├── Movement_Regressors.txt
│   │   ├── Movement_RelativeRMS_mean.txt
│   │   ├── Movement_RelativeRMS.txt
│   │   ├── Physio_combined_e9d0f23d-9f54-4978-93d2-c1d583ea1fe7.csv
│   │   ├── rfMRI_REST2_AP_Atlas_nonzero.stats.txt
│   │   ├── rfMRI_REST2_AP_dropouts.nii.gz
│   │   ├── rfMRI_REST2_AP_finalmask.nii.gz
│   │   ├── rfMRI_REST2_AP_finalmask.stats.txt
│   │   ├── rfMRI_REST2_AP_fovmask.nii.gz
│   │   ├── rfMRI_REST2_AP_hp0_clean.nii.gz
│   │   ├── rfMRI_REST2_AP_hp0_vn.nii.gz
│   │   ├── rfMRI_REST2_AP_Jacobian.nii.gz
│   │   ├── rfMRI_REST2_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── rfMRI_REST2_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── rfMRI_REST2_AP_pseudo_transmit_field.nii.gz
│   │   ├── rfMRI_REST2_AP_pseudo_transmit_raw.nii.gz
│   │   ├── rfMRI_REST2_AP_SBRef.nii.gz
│   │   ├── rfMRI_REST2_AP_sebased_bias_dilated.nii.gz
│   │   ├── rfMRI_REST2_AP_sebased_bias.nii.gz
│   │   └── rfMRI_REST2_AP_sebased_reference.nii.gz
│   └── rfMRI_REST2_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── Movement_AbsoluteRMS_mean.txt
```

```
|        ├── Movement_AbsoluteRMS.txt
|        ├── Movement_Regressors_hp0_clean.txt
|        ├── Movement_Regressors.txt
|        ├── Movement_RelativeRMS_mean.txt
|        ├── Movement_RelativeRMS.txt
|        ├── Physio_combined_0098f65d-a160-420f-ae9f-45d87a076eb2.csv
|        ├── rfMRI_REST2_PA_Atlas_nonzero.stats.txt
|        ├── rfMRI_REST2_PA_dropouts.nii.gz
|        ├── rfMRI_REST2_PA_finalmask.nii.gz
|        ├── rfMRI_REST2_PA_finalmask.stats.txt
|        ├── rfMRI_REST2_PA_fovmask.nii.gz
|        ├── rfMRI_REST2_PA_hp0_clean.nii.gz
|        ├── rfMRI_REST2_PA_hp0_vn.nii.gz
|        ├── rfMRI_REST2_PA_Jacobian.nii.gz
|        ├── rfMRI_REST2_PA_PhaseOne_gdc_dc.nii.gz
|        ├── rfMRI_REST2_PA_PhaseTwo_gdc_dc.nii.gz
|        ├── rfMRI_REST2_PA_pseudo_transmit_field.nii.gz
|        ├── rfMRI_REST2_PA_pseudo_transmit_raw.nii.gz
|        ├── rfMRI_REST2_PA_SBRef.nii.gz
|        ├── rfMRI_REST2_PA_sebased_bias_dilated.nii.gz
|        ├── rfMRI_REST2_PA_sebased_bias.nii.gz
|        └── rfMRI_REST2_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_rfMRI_REST1_AP_preproc.txt
        ├── batch_rfMRI_REST1_PA_preproc.txt
        ├── batch_rfMRI_REST2_AP_preproc.txt
        └── batch_rfMRI_REST2_PA_preproc.txt
```

rfMRI Preprocessed Uncleaned

This package contains uncleaned resting state data of all registration types for use in testing alternative data cleanup strategies. It contains outputs of HCP Functional Preprocessing for resting state scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and MSMAllPipeline.

Note: This example control subject has 4 REST scans. Patient subjects only have REST1 AP and PA scans, per project protocol.

PreprocRfmriUncleaned

```
h0059_01_MR/
├── MNINonLinear/Results/
|   ├── rfMRI_REST1_AP
|   |   ├── brainmask_fs.2.nii.gz
|   |   ├── Movement_AbsoluteRMS_mean.txt
```

```
|   |   ├── Movement_AbsoluteRMS.txt
|   |   ├── Movement_Regressors_dt.txt
|   |   ├── Movement_Regressors_hp0_clean.txt
|   |   ├── Movement_Regressors.txt
|   |   ├── Movement_RelativeRMS_mean.txt
|   |   ├── Movement_RelativeRMS.txt
|   |   ├── Physio_combined_ddbd27ec-0230-4406-807a-90dc1df72465.csv
|   |   ├── rfMRI_REST1_AP_Atlas.dtseries.nii
|   |   ├── rfMRI_REST1_AP_Atlas_MSMAll.dtseries.nii
|   |   ├── rfMRI_REST1_AP_Atlas_nonzero.stats.txt
|   |   ├── rfMRI_REST1_AP_dropouts.nii.gz
|   |   ├── rfMRI_REST1_AP_finalmask.nii.gz
|   |   ├── rfMRI_REST1_AP_finalmask.stats.txt
|   |   ├── rfMRI_REST1_AP_fovmask.nii.gz
|   |   ├── rfMRI_REST1_AP_Jacobian.nii.gz
|   |   ├── rfMRI_REST1_AP.L.native.func.gii
|   |   ├── rfMRI_REST1_AP.nii.gz
|   |   ├── rfMRI_REST1_AP_PhaseOne_gdc_dc.nii.gz
|   |   ├── rfMRI_REST1_AP_PhaseTwo_gdc_dc.nii.gz
|   |   ├── rfMRI_REST1_AP_pseudo_transmit_field.nii.gz
|   |   ├── rfMRI_REST1_AP_pseudo_transmit_raw.nii.gz
|   |   ├── rfMRI_REST1_AP.R.native.func.gii
|   |   ├── rfMRI_REST1_AP_SBRef.nii.gz
|   |   ├── rfMRI_REST1_AP_sebased_bias_dilated.nii.gz
|   |   ├── rfMRI_REST1_AP_sebased_bias.nii.gz
|   |   └── rfMRI_REST1_AP_sebased_reference.nii.gz
|   ├── rfMRI_REST1_PA
|   |   ├── brainmask_fs.2.nii.gz
|   |   ├── Movement_AbsoluteRMS_mean.txt
|   |   ├── Movement_AbsoluteRMS.txt
|   |   ├── Movement_Regressors_dt.txt
|   |   ├── Movement_Regressors_hp0_clean.txt
|   |   ├── Movement_Regressors.txt
|   |   ├── Movement_RelativeRMS_mean.txt
|   |   ├── Movement_RelativeRMS.txt
|   |   ├── Physio_combined_61bee921-8f7b-4615-9da8-7353bf1c897c.csv
|   |   ├── rfMRI_REST1_PA_Atlas.dtseries.nii
|   |   ├── rfMRI_REST1_PA_Atlas_MSMAll.dtseries.nii
|   |   ├── rfMRI_REST1_PA_Atlas_nonzero.stats.txt
|   |   ├── rfMRI_REST1_PA_dropouts.nii.gz
|   |   ├── rfMRI_REST1_PA_finalmask.nii.gz
|   |   ├── rfMRI_REST1_PA_finalmask.stats.txt
|   |   ├── rfMRI_REST1_PA_fovmask.nii.gz
|   |   ├── rfMRI_REST1_PA_Jacobian.nii.gz
|   |   ├── rfMRI_REST1_PA.L.native.func.gii
|   |   ├── rfMRI_REST1_PA.nii.gz
```

```
|   |       ├── rfMRI_REST1_PA_PhaseOne_gdc_dc.nii.gz
|   |       ├── rfMRI_REST1_PA_PhaseTwo_gdc_dc.nii.gz
|   |       ├── rfMRI_REST1_PA_pseudo_transmit_field.nii.gz
|   |       ├── rfMRI_REST1_PA_pseudo_transmit_raw.nii.gz
|   |       ├── rfMRI_REST1_PA.R.native.func.gii
|   |       ├── rfMRI_REST1_PA_SBRef.nii.gz
|   |       ├── rfMRI_REST1_PA_sebased_bias_dilated.nii.gz
|   |       ├── rfMRI_REST1_PA_sebased_bias.nii.gz
|   |       └── rfMRI_REST1_PA_sebased_reference.nii.gz
|   ├── rfMRI_REST2_AP
|   |       ├── brainmask_fs.2.nii.gz
|   |       ├── Movement_AbsoluteRMS_mean.txt
|   |       ├── Movement_AbsoluteRMS.txt
|   |       ├── Movement_Regressors_dt.txt
|   |       ├── Movement_Regressors_hp0_clean.txt
|   |       ├── Movement_Regressors.txt
|   |       ├── Movement_RelativeRMS_mean.txt
|   |       ├── Movement_RelativeRMS.txt
|   |       ├── Physio_combined_e9d0f23d-9f54-4978-93d2-c1d583ea1fe7.csv
|   |       ├── rfMRI_REST2_AP_Atlas.dtseries.nii
|   |       ├── rfMRI_REST2_AP_Atlas_MSMAll.dtseries.nii
|   |       ├── rfMRI_REST2_AP_Atlas_nonzero.stats.txt
|   |       ├── rfMRI_REST2_AP_dropouts.nii.gz
|   |       ├── rfMRI_REST2_AP_finalmask.nii.gz
|   |       ├── rfMRI_REST2_AP_finalmask.stats.txt
|   |       ├── rfMRI_REST2_AP_fovmask.nii.gz
|   |       ├── rfMRI_REST2_AP_Jacobian.nii.gz
|   |       ├── rfMRI_REST2_AP.L.native.func.gii
|   |       ├── rfMRI_REST2_AP.nii.gz
|   |       ├── rfMRI_REST2_AP_PhaseOne_gdc_dc.nii.gz
|   |       ├── rfMRI_REST2_AP_PhaseTwo_gdc_dc.nii.gz
|   |       ├── rfMRI_REST2_AP_pseudo_transmit_field.nii.gz
|   |       ├── rfMRI_REST2_AP_pseudo_transmit_raw.nii.gz
|   |       ├── rfMRI_REST2_AP.R.native.func.gii
|   |       ├── rfMRI_REST2_AP_SBRef.nii.gz
|   |       ├── rfMRI_REST2_AP_sebased_bias_dilated.nii.gz
|   |       ├── rfMRI_REST2_AP_sebased_bias.nii.gz
|   |       └── rfMRI_REST2_AP_sebased_reference.nii.gz
|   └── rfMRI_REST2_PA
|           ├── brainmask_fs.2.nii.gz
|           ├── Movement_AbsoluteRMS_mean.txt
|           ├── Movement_AbsoluteRMS.txt
|           ├── Movement_Regressors_dt.txt
|           ├── Movement_Regressors_hp0_clean.txt
|           ├── Movement_Regressors.txt
|           ├── Movement_RelativeRMS_mean.txt
```

```
│        ├── Movement_RelativeRMS.txt
│        ├── Physio_combined_0098f65d-a160-420f-ae9f-45d87a076eb2.csv
│        ├── rfMRI_REST2_PA_Atlas.dtseries.nii
│        ├── rfMRI_REST2_PA_Atlas_MSMAll.dtseries.nii
│        ├── rfMRI_REST2_PA_Atlas_nonzero.stats.txt
│        ├── rfMRI_REST2_PA_dropouts.nii.gz
│        ├── rfMRI_REST2_PA_finalmask.nii.gz
│        ├── rfMRI_REST2_PA_finalmask.stats.txt
│        ├── rfMRI_REST2_PA_fovmask.nii.gz
│        ├── rfMRI_REST2_PA_Jacobian.nii.gz
│        ├── rfMRI_REST2_PA.L.native.func.gii
│        ├── rfMRI_REST2_PA.nii.gz
│        ├── rfMRI_REST2_PA_PhaseOne_gdc_dc.nii.gz
│        ├── rfMRI_REST2_PA_PhaseTwo_gdc_dc.nii.gz
│        ├── rfMRI_REST2_PA_pseudo_transmit_field.nii.gz
│        ├── rfMRI_REST2_PA_pseudo_transmit_raw.nii.gz
│        ├── rfMRI_REST2_PA.R.native.func.gii
│        ├── rfMRI_REST2_PA_SBRef.nii.gz
│        ├── rfMRI_REST2_PA_sebased_bias_dilated.nii.gz
│        ├── rfMRI_REST2_PA_sebased_bias.nii.gz
│        └── rfMRI_REST2_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_rfMRI_REST1_AP_preproc.txt
        ├── batch_rfMRI_REST1_PA_preproc.txt
        ├── batch_rfMRI_REST2_AP_preproc.txt
        └── batch_rfMRI_REST2_PA_preproc.txt
```

rfMRI Preprocessed Extended

This package contains additional files related to rfMRI data cleanup and other extra files that may be useful to select users. It contains outputs of HCP Functional Preprocessing for resting state scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocRfmriExtended

h0059_01_MR/
```
├── MNINonLinear
│   ├── Results
│   │   ├── fMRI_CONCAT_ALL
│   │   │   ├── fMRI_CONCAT_ALL_Atlas_hp0_clean.dtseries.nii
│   │   │   ├── fMRI_CONCAT_ALL_Atlas_hp0_clean_vn.dscalar.nii
│   │   │   ├── fMRI_CONCAT_ALL_Atlas_hp0_vn.dscalar.nii
```

```
|   |   |   ├── fMRI_CONCAT_ALL_Atlas_mean.dscalar.nii
|   |   |   ├── fMRI_CONCAT_ALL_Atlas_MSMAll_hp0_clean.dtseries.nii
|   |   |   ├── fMRI_CONCAT_ALL_Atlas_MSMAll_hp0_clean_vn.dscalar.nii
|   |   |   ├── fMRI_CONCAT_ALL_Atlas_MSMAll_hp0_vn.dscalar.nii
|   |   |   ├── fMRI_CONCAT_ALL_Atlas_MSMAll_mean.dscalar.nii
|   |   |   ├── fMRI_CONCAT_ALL_brain_mask.nii.gz
|   |   |   ├── fMRI_CONCAT_ALL_hp0_clean.nii.gz
|   |   |   ├── fMRI_CONCAT_ALL_hp0_clean_vn.nii.gz
|   |   |   ├── fMRI_CONCAT_ALL_hp0_dims.txt
|   |   |   ├── fMRI_CONCAT_ALL_hp0.ica
|   |   |   |   ├── filtered_func_data.ica
|   |   |   |   |   ├── eigenvalues_percent
|   |   |   |   |   ├── log.txt
|   |   |   |   |   ├── melodic_FTmix
|   |   |   |   |   ├── melodic_FTmix.sdseries.nii
|   |   |   |   |   ├── melodic_IC.nii.gz
|   |   |   |   |   ├── melodic_ICstats
|   |   |   |   |   ├── melodic_mix
|   |   |   |   |   ├── melodic_mix.sdseries.nii
|   |   |   |   |   ├── melodic_oIC.dscalar.nii
|   |   |   |   |   ├── melodic_oIC.nii.gz
|   |   |   |   |   ├── melodic_oIC_vol.dscalar.nii
|   |   |   |   |   ├── melodic_Tmodes
|   |   |   |   |   ├── report_folder.zip
|   |   |   |   |   └── stats_folder.zip
|   |   |   |   ├── fix
|   |   |   |   |   ├── features.csv
|   |   |   |   |   ├── features_info.csv
|   |   |   |   |   ├── features.mat
|   |   |   |   |   └── logMatlab.txt
|   |   |   |   ├── fix4melview_HCP_Style_Single_Multirun_Dedrift_thr10.txt
|   |   |   |   ├── mc
|   |   |   |   |   ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |   |   |   ├── prefiltered_func_data_mcf_conf_hp.nii.gz
|   |   |   |   |   └── prefiltered_func_data_mcf_conf.nii.gz
|   |   |   |   ├── Noise.txt
|   |   |   |   ├── ReclassifyAsNoise.txt
|   |   |   |   ├── ReclassifyAsSignal.txt
|   |   |   |   ├── Signal.txt
|   |   |   |   ├── .fix
|   |   |   |   ├── .fix.log
|   |   |   |   └── .fix_2b_predict.log
|   |   |   ├── fMRI_CONCAT_ALL_hp0_vn.nii.gz
|   |   |   ├── fMRI_CONCAT_ALL_mean.nii.gz
|   |   |   ├── fMRI_CONCAT_ALL_Runs.csv
|   |   |   ├── fMRI_CONCAT_ALL_SBRef.nii.gz
```

```
|   |   |       ├── h0059_01_MR_fMRI_CONCAT_ALL_hp0_ICA_Classification_dualscreen.scene
|   |   |       ├── h0059_01_MR_fMRI_CONCAT_ALL_hp0_ICA_Classification_singlescreen.scene
|   |   |       ├── Movement_Regressors_demean.txt
|   |   |       ├── Movement_Regressors_hp0_clean.txt
|   |   |       ├── ReclassifyAsNoise.txt
|   |   |       └── ReclassifyAsSignal.txt
|   |   ├── rfMRI_REST1_AP
|   |   |       ├── rfMRI_REST1_AP_Atlas_mean.dscalar.nii
|   |   |       ├── rfMRI_REST1_AP_Atlas_MSMAll_mean.dscalar.nii
|   |   |       ├── rfMRI_REST1_AP_dims.txt
|   |   |       ├── rfMRI_REST1_AP_hp0.ica
|   |   |       |       └── mc
|   |   |       |               ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |       |               └── prefiltered_func_data_mcf_conf_hp.nii.gz
|   |   |       ├── rfMRI_REST1_AP_mean.nii.gz
|   |   |       ├── rfMRI_REST1_AP_MSMAll_dims.txt
|   |   |       └── RibbonVolumeToSurfaceMapping
|   |   |               └── goodvoxels.nii.gz
|   |   ├── rfMRI_REST1_PA
|   |   |       ├── rfMRI_REST1_PA_Atlas_mean.dscalar.nii
|   |   |       ├── rfMRI_REST1_PA_Atlas_MSMAll_mean.dscalar.nii
|   |   |       ├── rfMRI_REST1_PA_dims.txt
|   |   |       ├── rfMRI_REST1_PA_hp0.ica
|   |   |       |       └── mc
|   |   |       |               ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |       |               └── prefiltered_func_data_mcf_conf_hp.nii.gz
|   |   |       ├── rfMRI_REST1_PA_mean.nii.gz
|   |   |       ├── rfMRI_REST1_PA_MSMAll_dims.txt
|   |   |       └── RibbonVolumeToSurfaceMapping
|   |   |               └── goodvoxels.nii.gz
|   |   ├── rfMRI_REST2_AP
|   |   |       ├── rfMRI_REST2_AP_Atlas_mean.dscalar.nii
|   |   |       ├── rfMRI_REST2_AP_Atlas_MSMAll_mean.dscalar.nii
|   |   |       ├── rfMRI_REST2_AP_dims.txt
|   |   |       ├── rfMRI_REST2_AP_hp0.ica
|   |   |       |       └── mc
|   |   |       |               ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |       |               └── prefiltered_func_data_mcf_conf_hp.nii.gz
|   |   |       ├── rfMRI_REST2_AP_mean.nii.gz
|   |   |       ├── rfMRI_REST2_AP_MSMAll_dims.txt
|   |   |       └── RibbonVolumeToSurfaceMapping
|   |   |               └── goodvoxels.nii.gz
|   |   └── rfMRI_REST2_PA
|   |           ├── rfMRI_REST2_PA_Atlas_mean.dscalar.nii
|   |           ├── rfMRI_REST2_PA_Atlas_MSMAll_mean.dscalar.nii
|   |           ├── rfMRI_REST2_PA_dims.txt
```

```
│   │           ├── rfMRI_REST2_PA_hp0.ica
│   │           │   └── mc
│   │           │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │           │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │           ├── rfMRI_REST2_PA_mean.nii.gz
│   │           ├── rfMRI_REST2_PA_MSMAll_dims.txt
│   │           └── RibbonVolumeToSurfaceMapping
│   │               └── goodvoxels.nii.gz
│   └── xfms
│       ├── rfMRI_REST1_AP2standard.nii.gz
│       ├── rfMRI_REST1_PA2standard.nii.gz
│       ├── rfMRI_REST2_AP2standard.nii.gz
│       ├── rfMRI_REST2_PA2standard.nii.gz
│       ├── standard2rfMRI_REST1_AP.nii.gz
│       ├── standard2rfMRI_REST1_PA.nii.gz
│       ├── standard2rfMRI_REST2_AP.nii.gz
│       └── standard2rfMRI_REST2_PA.nii.gz
└── T1w/Results
    ├── rfMRI_REST1_AP
    │   ├── rfMRI_REST1_AP_dropouts.nii.gz
    │   ├── rfMRI_REST1_AP_pseudo_transmit_field.nii.gz
    │   ├── rfMRI_REST1_AP_pseudo_transmit_raw.nii.gz
    │   ├── rfMRI_REST1_AP_sebased_bias.nii.gz
    │   └── rfMRI_REST1_AP_sebased_reference.nii.gz
    ├── rfMRI_REST1_PA
    │   ├── rfMRI_REST1_PA_dropouts.nii.gz
    │   ├── rfMRI_REST1_PA_pseudo_transmit_field.nii.gz
    │   ├── rfMRI_REST1_PA_pseudo_transmit_raw.nii.gz
    │   ├── rfMRI_REST1_PA_sebased_bias.nii.gz
    │   └── rfMRI_REST1_PA_sebased_reference.nii.gz
    ├── rfMRI_REST2_AP
    │   ├── rfMRI_REST2_AP_dropouts.nii.gz
    │   ├── rfMRI_REST2_AP_pseudo_transmit_field.nii.gz
    │   ├── rfMRI_REST2_AP_pseudo_transmit_raw.nii.gz
    │   ├── rfMRI_REST2_AP_sebased_bias.nii.gz
    │   └── rfMRI_REST2_AP_sebased_reference.nii.gz
    └── rfMRI_REST2_PA
        ├── rfMRI_REST2_PA_dropouts.nii.gz
        ├── rfMRI_REST2_PA_pseudo_transmit_field.nii.gz
        ├── rfMRI_REST2_PA_pseudo_transmit_raw.nii.gz
        ├── rfMRI_REST2_PA_sebased_bias.nii.gz
        └── rfMRI_REST2_PA_sebased_reference.nii.gz
```

tfMRI CARIT Preprocessed Recommended

This package is the recommended starting point for CARIT tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration. It contains outputs of HCP Functional Preprocessing for the CARIT (Go/NoGo Conditioned Approach Response Inhibition Task without reward history) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriCaritRecommended

```
h0059_01_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_a0148f61-f11f-44ae-9b54-a386ca0dfd5a.csv
│   ├── tfMRI_CARIT_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│   ├── tfMRI_CARIT_PA_Atlas_MSMAll_hp0_clean.README.txt
│   ├── tfMRI_CARIT_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│   ├── tfMRI_CARIT_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_CARIT_PA_dropouts.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.stats.txt
│   ├── tfMRI_CARIT_PA_fovmask.nii.gz
│   ├── tfMRI_CARIT_PA_Jacobian.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_CARIT_PA_SBRef.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias.nii.gz
│   └── tfMRI_CARIT_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
    ├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
```

```
├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
├── h0059_01_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027709
├── h0059_01_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027709
├── processing
│   └── batch_tfMRI_CARIT_PA_preproc.txt
└── QuNex/processing/logs/
    ├── comlogs
    │   ├── done_hcp4_tfMRI_CARIT_PA_h0059_01_MR_2021-03-25_11.40.1616690435.log
    │   ├── done_hcp5_tfMRI_CARIT_PA_h0059_01_MR_2021-03-25_16.06.1616706396.log
    │   └── done_setupHCP_h0059_01_MR_2021-03-25.11.40.22.093688.log
    ├── runlogs
    │   ├── Log-hcp4-2021-03-25_11.40.1616690435.log
    │   ├── Log-hcp5-2021-03-25_16.06.1616706395.log
    │   ├── Log-hcp_ICAFix-2021-05-11_19.57.1620781060.log
    │   └── Log-hcp_MSMAll-2021-05-12_17.45.1620859502.log
    ├── run_qunex.sh_2021-03-25-11-40-05.log
    ├── run_qunex.sh_2021-05-11-19-57-26.log
    └── run_qunex.sh_2021-05-12-17-44-49.log
```

tfMRI CARIT Preprocessed Legacy Surface

This package contains cleaned CARIT tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration. It contains outputs of HCP Functional Preprocessing for the CARIT (Go/NoGo Conditioned Approach Response Inhibition Task without reward history) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

PreprocTfmriCaritLegacySurface

```
h0059_01_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
```

```
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_a0148f61-f11f-44ae-9b54-a386ca0dfd5a.csv
│   ├── tfMRI_CARIT_PA_Atlas_hp0_clean.dtseries.nii
│   ├── tfMRI_CARIT_PA_Atlas_hp0_clean.README.txt
│   ├── tfMRI_CARIT_PA_Atlas_hp0_vn.dscalar.nii
│   ├── tfMRI_CARIT_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_CARIT_PA_dropouts.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.stats.txt
│   ├── tfMRI_CARIT_PA_fovmask.nii.gz
│   ├── tfMRI_CARIT_PA_Jacobian.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_CARIT_PA_SBRef.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias.nii.gz
│   └── tfMRI_CARIT_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_CARIT_PA_preproc.txt
```

tfMRI CARIT Preprocessed Legacy Volume

This package contains cleaned CARIT tfMRI files poorly aligned across subjects using nonlinear volume registration. It contains outputs of HCP Functional Preprocessing for the CARIT (Go/NoGo Conditioned Approach Response Inhibition Task without reward history) tfMRI scan, which is the result of applying the GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

PreprocTfmriCaritLegacyVolume

```
h0059_01_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
```

```
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_a0148f61-f11f-44ae-9b54-a386ca0dfd5a.csv
│   ├── tfMRI_CARIT_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_CARIT_PA_dropouts.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.stats.txt
│   ├── tfMRI_CARIT_PA_fovmask.nii.gz
│   ├── tfMRI_CARIT_PA_hp0_clean.nii.gz
│   ├── tfMRI_CARIT_PA_hp0_vn.nii.gz
│   ├── tfMRI_CARIT_PA_Jacobian.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_CARIT_PA_SBRef.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias.nii.gz
│   └── tfMRI_CARIT_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_CARIT_PA_preproc.txt
```

tfMRI CARIT Preprocessed Uncleaned

This package contains uncleaned tfMRI CARIT data of all registration types for use in testing alternative data cleanup strategies. It contains outputs of HCP Functional Preprocessing for the CARIT (Go/NoGo Conditioned Approach Response Inhibition Task without reward history) tfMRI scan, which is the result of applying GenericFMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and MSMAllPipeline.

PreprocTfmriCaritUncleaned

HCA9503576_V1_MR/
```
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_dt.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
```

```
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_78547dc0-741c-428c-83a7-e7f099ac5a2c.csv
│   ├── tfMRI_CARIT_PA_Atlas.dtseries.nii
│   ├── tfMRI_CARIT_PA_Atlas_MSMAll.dtseries.nii
│   ├── tfMRI_CARIT_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_CARIT_PA_dropouts.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.nii.gz
│   ├── tfMRI_CARIT_PA_finalmask.stats.txt
│   ├── tfMRI_CARIT_PA_fovmask.nii.gz
│   ├── tfMRI_CARIT_PA_Jacobian.nii.gz
│   ├── tfMRI_CARIT_PA.L.native.func.gii
│   ├── tfMRI_CARIT_PA.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_CARIT_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_CARIT_PA.R.native.func.gii
│   ├── tfMRI_CARIT_PA_SBRef.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_CARIT_PA_sebased_bias.nii.gz
│   └── tfMRI_CARIT_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_CARIT_PA_preproc.txt
```

tfMRI CARIT Preprocessed Extended

This package contains additional CARIT tfMRI files related to data cleanup and other extra files that may be useful to select users. It contains outputs of HCP Functional Preprocessing for the CARIT (Go/NoGo Conditioned Approach Response Inhibition Task, without reward history) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriCaritExtended

h0059_01_MR/
```
├── MNINonLinear
│   ├── Results
│   │   └── tfMRI_CARIT_PA
│   │       ├── RibbonVolumeToSurfaceMapping
│   │       │   └── goodvoxels.nii.gz
│   │       ├── tfMRI_CARIT_PA_Atlas_mean.dscalar.nii
│   │       ├── tfMRI_CARIT_PA_Atlas_MSMAll_mean.dscalar.nii
│   │       ├── tfMRI_CARIT_PA_dims.txt
│   │       ├── tfMRI_CARIT_PA_hp0.ica
```

```
│   │           │       └── mc
│   │           │               ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │           │               └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │           ├── tfMRI_CARIT_PA_mean.nii.gz
│   │           └── tfMRI_CARIT_PA_MSMAll_dims.txt
│   └── xfms
│           ├── standard2tfMRI_CARIT_PA.nii.gz
│           └── tfMRI_CARIT_PA2standard.nii.gz
└── T1w
    └── Results
        └── tfMRI_CARIT_PA
            ├── tfMRI_CARIT_PA_dropouts.nii.gz
            ├── tfMRI_CARIT_PA_pseudo_transmit_field.nii.gz
            ├── tfMRI_CARIT_PA_pseudo_transmit_raw.nii.gz
            ├── tfMRI_CARIT_PA_sebased_bias.nii.gz
            └── tfMRI_CARIT_PA_sebased_reference.nii.gz
```

tfMRI FACEMATCHING Preprocessed Recommended

This package is the recommended starting point for FACEMATCHING tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration. It contains outputs of HCP Functional Preprocessing for the FACEMATCHING (paired-associative memory task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriFACEMATCHINGRecommended

```
h0059_01_MR/
├── MNINonLinear/Results/tfMRI_FACEMATCHING_AP/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_59bcfe43-e04a-4665-8e50-91d50c679395.csv
│   ├── tfMRI_FACEMATCHING_AP_Atlas_MSMAll_hp0_clean.dtseries.nii
│   ├── tfMRI_FACEMATCHING_AP_Atlas_MSMAll_hp0_clean.README.txt
│   ├── tfMRI_FACEMATCHING_AP_Atlas_MSMAll_hp0_vn.dscalar.nii
```

```
│     ├── tfMRI_FACEMATCHING_AP_Atlas_nonzero.stats.txt
│     ├── tfMRI_FACEMATCHING_AP_dropouts.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_finalmask.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_finalmask.stats.txt
│     ├── tfMRI_FACEMATCHING_AP_fovmask.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_Jacobian.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_PhaseOne_gdc_dc.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_PhaseTwo_gdc_dc.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_field.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_raw.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_SBRef.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_sebased_bias_dilated.nii.gz
│     ├── tfMRI_FACEMATCHING_AP_sebased_bias.nii.gz
│     └── tfMRI_FACEMATCHING_AP_sebased_reference.nii.gz
├── MNINonLinear/Results/tfMRI_FACEMATCHING_PA/
│     ├── brainmask_fs.2.nii.gz
│     ├── EVs
│     │     ├── cond001.txt
│     │     ├── cond002.txt
│     │     ├── cond003.txt
│     │     └── cond004.txt
│     ├── Movement_AbsoluteRMS_mean.txt
│     ├── Movement_AbsoluteRMS.txt
│     ├── Movement_Regressors_hp0_clean.txt
│     ├── Movement_Regressors.txt
│     ├── Movement_RelativeRMS_mean.txt
│     ├── Movement_RelativeRMS.txt
│     ├── Physio_combined_87b0bff2-86dc-40f2-8a44-1bdb4cbd5ecb.csv
│     ├── tfMRI_FACEMATCHING_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│     ├── tfMRI_FACEMATCHING_PA_Atlas_MSMAll_hp0_clean.README.txt
│     ├── tfMRI_FACEMATCHING_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│     ├── tfMRI_FACEMATCHING_PA_Atlas_nonzero.stats.txt
│     ├── tfMRI_FACEMATCHING_PA_dropouts.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_finalmask.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_finalmask.stats.txt
│     ├── tfMRI_FACEMATCHING_PA_fovmask.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_Jacobian.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_PhaseOne_gdc_dc.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_PhaseTwo_gdc_dc.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_field.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_raw.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_SBRef.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_sebased_bias_dilated.nii.gz
│     ├── tfMRI_FACEMATCHING_PA_sebased_bias.nii.gz
│     └── tfMRI_FACEMATCHING_PA_sebased_reference.nii.gz
└── ProcessingInfo
```

```
├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh
├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
├── h0059_01_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
├── h0059_01_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
├── h0059_01_MR_tfMRI_FACEMATCHING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_tfMRI_FACEMATCHING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e9879048
├── h0059_01_MR_tfMRI_FACEMATCHING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o9879048
├── h0059_01_MR_tfMRI_FACEMATCHING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
├── h0059_01_MR_tfMRI_FACEMATCHING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e9879040
├── h0059_01_MR_tfMRI_FACEMATCHING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o9879040
├── processing
│   ├── batch_tfMRI_FACEMATCHING_AP_preproc.txt
│   └── batch_tfMRI_FACEMATCHING_PA_preproc.txt

└── QuNex/processing/logs/
    ├── comlogs
    │   ├── done_hcp4_tfMRI_FACEMATCHING_AP_h0059_01_MR_2021-03-25_11.42.1616690534.log
    │   ├── done_hcp4_tfMRI_FACEMATCHING_PA_h0059_01_MR_2021-03-25_12.01.1616691682.log
    │   ├── done_hcp5_tfMRI_FACEMATCHING_AP_h0059_01_MR_2021-03-26_00.34.1616736863.log
    │   ├── done_hcp5_tfMRI_FACEMATCHING_PA_h0059_01_MR_2021-03-25_20.37.1616722675.log
    │   ├── done_setupHCP_h0059_01_MR_2021-03-25.11.41.35.025098.log
    │   └── done_setupHCP_h0059_01_MR_2021-03-25.12.01.10.951096.log
    ├── runlogs
    │   ├── Log-hcp4-2021-03-25_11.42.1616690533.log
    │   ├── Log-hcp4-2021-03-25_12.01.1616691682.log
    │   ├── Log-hcp5-2021-03-25_20.37.1616722674.log
    │   ├── Log-hcp5-2021-03-26_00.34.1616736862.log
    │   ├── Log-hcp_ICAFix-2021-05-11_19.57.1620781060.log
    │   └── Log-hcp_MSMAll-2021-05-12_17.45.1620859502.log
    ├── run_qunex.sh_2021-03-25-11-40-17.log
    ├── run_qunex.sh_2021-03-25-12-00-57.log
    ├── run_qunex.sh_2021-05-11-19-57-26.log
    └── run_qunex.sh_2021-05-12-17-44-49.log
```

tfMRI FACEMATCHING Preprocessed Legacy Surface

This package contains cleaned FACEMATCHING tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration. It contains outputs of HCP Functional Preprocessing for the FACEMATCHING (paired-associative memory task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

PreprocTfmriFACEMATCHINGLegacySurface

h0059_01_MR/
├── MNINonLinear/Results/tfMRI_FACEMATCHING_AP/

```
|   ├── brainmask_fs.2.nii.gz
|   ├── EVs
|   |   ├── cond001.txt
|   |   ├── cond002.txt
|   |   ├── cond003.txt
|   |   └── cond004.txt
|   ├── Movement_AbsoluteRMS_mean.txt
|   ├── Movement_AbsoluteRMS.txt
|   ├── Movement_Regressors_hp0_clean.txt
|   ├── Movement_Regressors.txt
|   ├── Movement_RelativeRMS_mean.txt
|   ├── Movement_RelativeRMS.txt
|   ├── Physio_combined_59bcfe43-e04a-4665-8e50-91d50c679395.csv
|   ├── tfMRI_FACEMATCHING_AP_Atlas_hp0_clean.dtseries.nii
|   ├── tfMRI_FACEMATCHING_AP_Atlas_hp0_clean.README.txt
|   ├── tfMRI_FACEMATCHING_AP_Atlas_hp0_vn.dscalar.nii
|   ├── tfMRI_FACEMATCHING_AP_Atlas_nonzero.stats.txt
|   ├── tfMRI_FACEMATCHING_AP_dropouts.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_finalmask.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_finalmask.stats.txt
|   ├── tfMRI_FACEMATCHING_AP_fovmask.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_Jacobian.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_PhaseOne_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_PhaseTwo_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_field.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_raw.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_SBRef.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_sebased_bias_dilated.nii.gz
|   ├── tfMRI_FACEMATCHING_AP_sebased_bias.nii.gz
|   └── tfMRI_FACEMATCHING_AP_sebased_reference.nii.gz
├── MNINonLinear/Results/tfMRI_FACEMATCHING_PA/
|   ├── brainmask_fs.2.nii.gz
|   ├── EVs
|   |   ├── cond001.txt
|   |   ├── cond002.txt
|   |   ├── cond003.txt
|   |   └── cond004.txt
|   ├── Movement_AbsoluteRMS_mean.txt
|   ├── Movement_AbsoluteRMS.txt
|   ├── Movement_Regressors_hp0_clean.txt
|   ├── Movement_Regressors.txt
|   ├── Movement_RelativeRMS_mean.txt
|   ├── Movement_RelativeRMS.txt
|   ├── Physio_combined_87b0bff2-86dc-40f2-8a44-1bdb4cbd5ecb.csv
|   ├── tfMRI_FACEMATCHING_PA_Atlas_hp0_clean.dtseries.nii
|   ├── tfMRI_FACEMATCHING_PA_Atlas_hp0_clean.README.txt
```

```
|   ├── tfMRI_FACEMATCHING_PA_Atlas_hp0_vn.dscalar.nii
|   ├── tfMRI_FACEMATCHING_PA_Atlas_nonzero.stats.txt
|   ├── tfMRI_FACEMATCHING_PA_dropouts.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_finalmask.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_finalmask.stats.txt
|   ├── tfMRI_FACEMATCHING_PA_fovmask.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_Jacobian.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_PhaseOne_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_PhaseTwo_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_field.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_raw.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_SBRef.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_sebased_bias_dilated.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_sebased_bias.nii.gz
|   └── tfMRI_FACEMATCHING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_tfMRI_FACEMATCHING_AP_preproc.txt
        └── batch_tfMRI_FACEMATCHING_PA_preproc.txt
```

tfMRI FACEMATCHING Preprocessed Legacy Volume

This package contains cleaned FACEMATCHING tfMRI files poorly aligned across subjects using nonlinear volume registration. It contains outputs of HCP Functional Preprocessing for the FACEMATCHING (paired-associative memory task) tfMRI scan, which is the result of applying the GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

PreprocTfmriFACEMATCHINGLegacyVolume

```
h0059_01_MR/
├── MNINonLinear/Results/tfMRI_FACEMATCHING_AP/
|   ├── brainmask_fs.2.nii.gz
|   ├── EVs
|   |   ├── cond001.txt
|   |   ├── cond002.txt
|   |   ├── cond003.txt
|   |   └── cond004.txt
|   ├── Movement_AbsoluteRMS_mean.txt
|   ├── Movement_AbsoluteRMS.txt
|   ├── Movement_Regressors_hp0_clean.txt
|   ├── Movement_Regressors.txt
|   ├── Movement_RelativeRMS_mean.txt
|   ├── Movement_RelativeRMS.txt
|   ├── Physio_combined_59bcfe43-e04a-4665-8e50-91d50c679395.csv
|   ├── tfMRI_FACEMATCHING_AP_Atlas_nonzero.stats.txt
```

```
│   ├── tfMRI_FACEMATCHING_AP_dropouts.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_finalmask.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_finalmask.stats.txt
│   ├── tfMRI_FACEMATCHING_AP_fovmask.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_hp0_clean.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_hp0_vn.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_Jacobian.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_field.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_SBRef.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_sebased_bias_dilated.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_sebased_bias.nii.gz
│   └── tfMRI_FACEMATCHING_AP_sebased_reference.nii.gz
├── MNINonLinear/Results/tfMRI_FACEMATCHING_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_87b0bff2-86dc-40f2-8a44-1bdb4cbd5ecb.csv
│   ├── tfMRI_FACEMATCHING_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_FACEMATCHING_PA_dropouts.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_finalmask.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_finalmask.stats.txt
│   ├── tfMRI_FACEMATCHING_PA_fovmask.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_hp0_clean.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_hp0_vn.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_Jacobian.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_SBRef.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_FACEMATCHING_PA_sebased_bias.nii.gz
│   └── tfMRI_FACEMATCHING_PA_sebased_reference.nii.gz
└── ProcessingInfo
```

```
└── processing
    ├── batch_tfMRI_FACEMATCHING_AP_preproc.txt
    └── batch_tfMRI_FACEMATCHING_PA_preproc.txt
```

tfMRI FACEMATCHING Preprocessed Uncleaned

This package contains uncleaned tfMRI FACEMATCHING data of all registration types for use in testing alternative data cleanup strategies. It contains outputs of HCP Functional Preprocessing for the FACEMATCHING (emotion recognition task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and MSMAllPipeline.

PreprocTfmriFACEMATCHINGUncleaned

h0059_01_MR/
```
├── MNINonLinear/Results/tfMRI_FACEMATCHING_AP/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── cond001.txt
│   │   ├── cond002.txt
│   │   ├── cond003.txt
│   │   └── cond004.txt
│   ├── Movement_AbsoluteRMS_mean.txt
│   ├── Movement_AbsoluteRMS.txt
│   ├── Movement_Regressors_dt.txt
│   ├── Movement_Regressors_hp0_clean.txt
│   ├── Movement_Regressors.txt
│   ├── Movement_RelativeRMS_mean.txt
│   ├── Movement_RelativeRMS.txt
│   ├── Physio_combined_59bcfe43-e04a-4665-8e50-91d50c679395.csv
│   ├── tfMRI_FACEMATCHING_AP_Atlas.dtseries.nii
│   ├── tfMRI_FACEMATCHING_AP_Atlas_MSMAll.dtseries.nii
│   ├── tfMRI_FACEMATCHING_AP_Atlas_nonzero.stats.txt
│   ├── tfMRI_FACEMATCHING_AP_dropouts.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_finalmask.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_finalmask.stats.txt
│   ├── tfMRI_FACEMATCHING_AP_fovmask.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_Jacobian.nii.gz
│   ├── tfMRI_FACEMATCHING_AP.L.native.func.gii
│   ├── tfMRI_FACEMATCHING_AP.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_field.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_FACEMATCHING_AP.R.native.func.gii
│   ├── tfMRI_FACEMATCHING_AP_SBRef.nii.gz
│   ├── tfMRI_FACEMATCHING_AP_sebased_bias_dilated.nii.gz
```

```
|   ├── tfMRI_FACEMATCHING_AP_sebased_bias.nii.gz
|   └── tfMRI_FACEMATCHING_AP_sebased_reference.nii.gz
├── MNINonLinear/Results/tfMRI_FACEMATCHING_PA/
|   ├── brainmask_fs.2.nii.gz
|   ├── EVs
|   │   ├── cond001.txt
|   │   ├── cond002.txt
|   │   ├── cond003.txt
|   │   └── cond004.txt
|   ├── Movement_AbsoluteRMS_mean.txt
|   ├── Movement_AbsoluteRMS.txt
|   ├── Movement_Regressors_dt.txt
|   ├── Movement_Regressors_hp0_clean.txt
|   ├── Movement_Regressors.txt
|   ├── Movement_RelativeRMS_mean.txt
|   ├── Movement_RelativeRMS.txt
|   ├── Physio_combined_87b0bff2-86dc-40f2-8a44-1bdb4cbd5ecb.csv
|   ├── tfMRI_FACEMATCHING_PA_Atlas.dtseries.nii
|   ├── tfMRI_FACEMATCHING_PA_Atlas_MSMAll.dtseries.nii
|   ├── tfMRI_FACEMATCHING_PA_Atlas_nonzero.stats.txt
|   ├── tfMRI_FACEMATCHING_PA_dropouts.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_finalmask.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_finalmask.stats.txt
|   ├── tfMRI_FACEMATCHING_PA_fovmask.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_Jacobian.nii.gz
|   ├── tfMRI_FACEMATCHING_PA.L.native.func.gii
|   ├── tfMRI_FACEMATCHING_PA.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_PhaseOne_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_PhaseTwo_gdc_dc.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_field.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_pseudo_transmit_raw.nii.gz
|   ├── tfMRI_FACEMATCHING_PA.R.native.func.gii
|   ├── tfMRI_FACEMATCHING_PA_SBRef.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_sebased_bias_dilated.nii.gz
|   ├── tfMRI_FACEMATCHING_PA_sebased_bias.nii.gz
|   └── tfMRI_FACEMATCHING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_tfMRI_FACEMATCHING_AP_preproc.txt
        └── batch_tfMRI_FACEMATCHING_PA_preproc.txt
```

tfMRI FACEMATCHING Preprocessed Extended

This package contains additional FACEMATCHING tfMRI files related to data cleanup and other extra files that may be useful to select users. It contains outputs of HCP Functional Preprocessing for the FACEMATCHING (paired-associative memory task) tfMRI scan, which is the result of applying

GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriFACEMATCHINGExtended


```
h0059_01_MR/
├── MNINonLinear
│   ├── Results
│   │   ├── tfMRI_FACEMATCHING_AP
│   │   │   ├── RibbonVolumeToSurfaceMapping
│   │   │   │   └── goodvoxels.nii.gz
│   │   │   ├── tfMRI_FACEMATCHING_AP_Atlas_mean.dscalar.nii
│   │   │   ├── tfMRI_FACEMATCHING_AP_Atlas_MSMAll_mean.dscalar.nii
│   │   │   ├── tfMRI_FACEMATCHING_AP_dims.txt
│   │   │   ├── tfMRI_FACEMATCHING_AP_hp0.ica
│   │   │   │   └── mc
│   │   │   │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │   │   │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │   │   ├── tfMRI_FACEMATCHING_AP_mean.nii.gz
│   │   │   └── tfMRI_FACEMATCHING_AP_MSMAll_dims.txt
│   │   └── tfMRI_FACEMATCHING_PA
│   │       ├── RibbonVolumeToSurfaceMapping
│   │       │   └── goodvoxels.nii.gz
│   │       ├── tfMRI_FACEMATCHING_PA_Atlas_mean.dscalar.nii
│   │       ├── tfMRI_FACEMATCHING_PA_Atlas_MSMAll_mean.dscalar.nii
│   │       ├── tfMRI_FACEMATCHING_PA_dims.txt
│   │       ├── tfMRI_FACEMATCHING_PA_hp0.ica
│   │       │   └── mc
│   │       │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │       │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │       ├── tfMRI_FACEMATCHING_PA_mean.nii.gz
│   │       └── tfMRI_FACEMATCHING_PA_MSMAll_dims.txt
│   └── xfms
│       ├── standard2tfMRI_FACEMATCHING_AP.nii.gz
│       ├── tfMRI_FACEMATCHING_AP2standard.nii.gz
│       ├── standard2tfMRI_FACEMATCHING_PA.nii.gz
│       └── tfMRI_FACEMATCHING_PA2standard.nii.gz
└── T1w
    └── Results
        ├── tfMRI_FACEMATCHING_AP
        │   ├── tfMRI_FACEMATCHING_AP_dropouts.nii.gz
        │   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_field.nii.gz
        │   ├── tfMRI_FACEMATCHING_AP_pseudo_transmit_raw.nii.gz
        │   ├── tfMRI_FACEMATCHING_AP_sebased_bias.nii.gz
        │   └── tfMRI_FACEMATCHING_AP_sebased_reference.nii.gz
        └── tfMRI_FACEMATCHING_PA
```

```
├── tfMRI_FACEMATCHING_PA_dropouts.nii.gz
├── tfMRI_FACEMATCHING_PA_pseudo_transmit_field.nii.gz
├── tfMRI_FACEMATCHING_PA_pseudo_transmit_raw.nii.gz
├── tfMRI_FACEMATCHING_PA_sebased_bias.nii.gz
└── tfMRI_FACEMATCHING_PA_sebased_reference.nii.gz
```

Diffusion MRI Preprocessed

This package contains dMRI data preprocessed with the HCP diffusion pipeline (https://github.com/Washington-University/HCPpipelines, updated to EDDY 5.3.0), including diffusion weighting (bvals), direction (bvecs), time series, brain mask, a file (grad_dev.nii.gz) that can be used to account for gradient nonlinearities during model fitting, and log files of EDDY processing.

PreprocDiffusion

h0059_01_MR/
```
├── ProcessingInfo
│   ├── processing
│   │       └── batch_Diffusion_preproc.txt
│   ├── QuNex
│   │   └── processing
│   │       └── logs
│   │           ├── comlogs
│   │           │   ├── done_hcp_Diffusion_h0059_01_MR_2021-05-13_13.22.1620930178.log
│   │           │   └── done_setupHCP_h0059_01_MR_2021-05-13.13.22.48.687458.log
│   │           └── run_qunex.sh_2021-05-13-13-22-37.log
│   ├── h0059_01_MR.DiffusionPreprocessing.PROCESS_DATA_job.sh
│   ├── h0059_01_MR.DiffusionPreprocessing.PROCESS_DATA_job.sh.e10140071
│   └── h0059_01_MR.DiffusionPreprocessing.PROCESS_DATA_job.sh.o10140071
└── T1w
    ├── Diffusion
    │   ├── bvals
    │   ├── bvecs
    │   ├── data.nii.gz
    │   ├── eddylogs
    │   │   ├── eddy_unwarped_images.eddy_command_txt
    │   │   ├── eddy_unwarped_images.eddy_movement_over_time
    │   │   ├── eddy_unwarped_images.eddy_movement_rms
    │   │   ├── eddy_unwarped_images.eddy_outlier_map
    │   │   ├── eddy_unwarped_images.eddy_outlier_n_sqr_stdev_map
    │   │   ├── eddy_unwarped_images.eddy_outlier_n_stdev_map
    │   │   ├── eddy_unwarped_images.eddy_outlier_report
    │   │   ├── eddy_unwarped_images.eddy_parameters
    │   │   ├── eddy_unwarped_images.eddy_post_eddy_shell_alignment_parameters
    │   │   ├── eddy_unwarped_images.eddy_post_eddy_shell_PE_translation_parameters
```

```
│   │       ├── eddy_unwarped_images.eddy_restricted_movement_rms
│   │       ├── eddy_unwarped_images.eddy_rotated_bvecs
│   │       └── eddy_unwarped_images.eddy_values_of_all_input_parameters
│   ├── fov_mask.nii.gz
│   ├── grad_dev.nii.gz
│   ├── nodif_brain_mask.nii.gz
│   ├── nodif_brain_mask.stats.txt
│   └── QC
│       ├── avg_b0.png
│       ├── avg_b0_pe0.png
│       ├── avg_b0_pe1.png
│       ├── avg_b1495.png
│       ├── avg_b2995.png
│       ├── cnr0000.nii.gz.png
│       ├── cnr0001.nii.gz.png
│       ├── cnr0002.nii.gz.png
│       ├── cnr_maps.nii.gz
│       ├── eddy_msr.txt
│       ├── qc.json
│       ├── qc.pdf
│       ├── ref.txt
│       ├── ref_list.png
│       └── vdm.png
└── T1w_acpc_dc_restore_1.50.nii.gz
```