Lifespan HCP 2.0 Data Release
Appendix 1:

File Names and Directory Structure for HCP Aging & HCP Development

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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 HCP-Aging (HCA) and an exemplar HCP-Development (HCD) subject from the Lifespan HCP Release 2.0 from the NIMH Data Archive (NDA). There are some differences in the data collected for each project so there are some differences in the files available for each, but generally the file structure is the same 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

As described in the Lifespan 2.0 Release Data Access & Download Instructions, the user may choose on the HCP Aging & Development Featured Datasets query page 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" via the included HCP manifest JSON files (*.json) files (providing a manifest of files included in the package/filter). These are named {Subject_ID}_V1_MR_{HCP Package shortname}_manifest.json, e.g. HCD0001305_V1_MR_PreprocTfmriCaritRecommended_manifest.json.

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.

Lifespan 2.0 Datasets (HCP Packages) available in OPTION 2:

Study	NDA structure	HCP Package (shortname)	HCP Package Contents
HCA HCD	imagingcollection01	UnprocStruc	multi-echo MPRAGE (T1 weighted) and T2-SPACE (T2 weighted) scans (in NIFTI format)
HCA	imagingcollection01	UnprocTseHires	turbo-spin-echo high spatial resolution hippocampal structural scan (in NIFTI format)
HCA HCD	imagingcollection01	UnprocRfmri	both pairs of resting state fMRI scans (in NIFTI format)
HCA HCD	imagingcollection01	UnprocTfmriCarit	fMRI scans for the CARIT task (in NIFTI format; Go/NoGo Conditioned Approach Response Inhibition Task)
HCA	imagingcollection01	UnprocTfmriFacename	fMRI scan for the FACENAME task (in NIFTI format; paired-associative memory task)
HCA	imagingcollection01	UnprocTfmriVismotor	fMRI scan for the VISMOTOR task (in NIFTI format; simultaneous motor and visual activation task)

Study	NDA structure	HCP Package (shortname)	HCP Package Contents
HCD	imagingcollection01	UnprocTfmriEmotion	fMRI scan for the EMOTION task (in NIFTI format; emotion and face-processing task)
HCD	imagingcollection01	UnprocTfmriGuessing	fMRI scans for the GUESSING task (in NIFTI format; reward, punishment, anticipatory reactivity task)
HCA HCD	imagingcollection01	UnprocDmri	dMRI scans (in NIFTI format), bval, and bvec files for the two sets of diffusion sensitizing directions ('dir98' and 'dir99')
HCA HCD	imagingcollection01	UnprocPcasl	mbPCASLhr scan (in NIFTI format; multiband 2D EPI pseudo-continuous arterial spin labeling with high spatial resolution)
HCA HCD	fmriresults01	PreprocStrucRecommended	recommended starting point for structural analyses and contains files precisely aligned across subjects using the MSMAll multi-modal surface registration
HCA HCD	fmriresults01	PreprocStrucLegacy	structural files coarsely aligned across subjects using the MSMSulc folding surface registration
HCA HCD	fmriresults01	PreprocStrucFreesurfer	actual outputs from the FreeSurferPipeline stage of the HCP Structural Preprocessing, in FreeSurfer's native file formats and directory structure
HCA HCD	fmriresults01	PreprocStrucExtended	additional files related to QC on structural preprocessing outputs and other extra files that may be useful to select users
HCA HCD	fmriresults01	PreprocRfmriRecommended	recommended starting point for rfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
HCA HCD	fmriresults01	PreprocRfmriLegacySurface	cleaned files coarsely aligned across subjects using the MSMSulc folding surface registration, and hcp_fix_multi_run.
HCA HCD	fmriresults01	PreprocRfmriLegacyVolume	cleaned rfMRI files poorly aligned across subjects using nonlinear volume registration
HCA HCD	fmriresults01	PreprocRfmriUncleaned	uncleaned resting state data of all registration types for use in testing alternative data cleanup strategies
HCA HCD	fmriresults01	PreprocRfmriExtended	additional files related to rfMRI data cleanup and other extra files that may be useful to select users
HCA HCD	fmriresults01	PreprocTfmriCaritRecommended	recommended starting point for CARIT tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
HCA HCD	fmriresults01	PreprocTfmriCaritLegacySurface	cleaned CARIT tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration
HCA HCD	fmriresults01	PreprocTfmriCaritLegacyVolume	cleaned CARIT tfMRI files poorly aligned across subjects using nonlinear volume registration
HCA HCD	fmriresults01	PreprocTfmriCaritUncleaned	uncleaned tfMRI CARIT data of all registration types for use in testing alternative data cleanup strategies
HCA HCD	fmriresults01	PreprocTfmriCaritExtended	additional CARIT tfMRI files related to data cleanup and other extra files that may be useful to select users
HCA	fmriresults01	PreprocTfmriFacenameRecommended	recommended starting point for FACENAME tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
HCA	fmriresults01	PreprocTfmriFacenameLegacySurface	cleaned FACENAME tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration.
HCA	fmriresults01	PreprocTfmriFacenameLegacyVolume	cleaned FACENAME tfMRI files poorly aligned across subjects using nonlinear volume registration.
HCA	fmriresults01	PreprocTfmriFacenameUncleaned	uncleaned tfMRI FACENAME data of all registration types for use in testing alternative data cleanup strategies.
HCA	fmriresults01	PreprocTfmriFacenameExtended	additional FACENAME tfMRI files related to data cleanup and other extra files that may be useful to select users.

Study	NDA structure	HCP Package (shortname)	HCP Package Contents
HCA	fmriresults01	PreprocTfmriVismotorRecommended	recommended starting point for VISMOTOR tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration.
HCA	fmriresults01	PreprocTfmriVismotorLegacySurface	cleaned VISMOTOR tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration.
HCA	fmriresults01	PreprocTfmriVismotorLegacyVolume	cleaned VISMOTOR tfMRI files poorly aligned across subjects using nonlinear volume registration.
HCA	fmriresults01	PreprocTfmriVismotorUncleaned	uncleaned tfMRI VISMOTOR data of all registration types for use in testing alternative data cleanup strategies.
HCA	fmriresults01	PreprocTfmriVismotorExtended	additional VISMOTOR tfMRI files related to data cleanup and other extra files that may be useful to select users
HCD	fmriresults01	PreprocTfmriEmotionRecommended	recommended starting point for EMOTION tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration
HCD	fmriresults01	PreprocTfmriEmotionLegacySurface	cleaned EMOTION tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration.
HCD	fmriresults01	PreprocTfmriEmotionLegacyVolume	cleaned EMOTION tfMRI files poorly aligned across subjects using nonlinear volume registration.
HCD	fmriresults01	PreprocTfmriEmotionUncleaned	uncleaned tfMRI EMOTION data of all registration types for use in testing alternative data cleanup strategies.
HCD	fmriresults01	PreprocTfmriEmotionExtended	additional EMOTION tfMRI files related to data cleanup and other extra files that may be useful to select users.
HCD	fmriresults01	PreprocTfmriGuessingRecommended	recommended starting point for GUESSING tfMRI analyses and contains cleaned files precisely aligned across subjects using the MSMAll multi-modal surface registration.
HCD	fmriresults01	PreprocTfmriGuessingLegacySurface	cleaned GUESSING tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration.
HCD	fmriresults01	PreprocTfmriGuessingLegacyVolume	cleaned GUESSING tfMRI files poorly aligned across subjects using nonlinear volume registration.
HCD	fmriresults01	PreprocTfmriGuessingUncleaned	uncleaned tfMRI GUESSING data of all registration types for use in testing alternative data cleanup strategies.
HCD	fmriresults01	PreprocTfmriGuessingExtended	additional GUESSING tfMRI files related to data cleanup and other extra files that may be useful to select users.

Appendix Organization

This appendix is organized into sections by Study (HCP-Aging/HCP-Development) and 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. With help of the HCP manifest files, we map the Lifespan data into the same HCP-style directory structure as that of previously released 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 (via the HCP manifest file name) to which it "belongs". 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 for each study HCPAgingImgManifestBeh and HCPDevImgManifestBeh that contains the datastructure_manifest.txt 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_V1_MR>, directories (e.g., HCA9503576 _V1_MR or HCD0001305 _V1_MR) and a manifests directory of HCP manifests.

The package will download to the Save To: location on your file system with the top directory name matching the package name (<YourPkgName>, or, e.g., HCPAgingRec).

For example, if your package contains Minimally Preprocessed Image Data, Unprocessed Image Data, and Behavioral Data for HCP-Aging, the high-level <YourPkgName> directory will contain:

```
<YourPkgName>/
     asr01.txt
     batbil01.txt
     bsc01.txt
     cogcomp01.txt
     datastructure_manifest.txt        S3 URIs for every per subject file
     dccs01.txt
     deldisk01.txt
     er4001.txt
     edinburgh_hand01.txt
     experiments/                      tfMRI and rsfMRI stimuli info and block design
     facename01.txt
     flanker01.txt
     fmriresults01/                    Preprocessed data
     fmriresults01.txt                 Info on preprocessing pipelines run
     imagingcollection01/              Unprocessed data
     imagingcollection01.txt
     gales01.txt
     ipaq01.txt
     lbadl01.txt
     leap01.txt
     lswmt01.txt
     mchq01.txt
     md5_values.txt                    md5 checksums for download verification
     medh01.txt
     mendt01.txt
```

```
moca01.txt
ndar_subject01.txt
nffi01.txt
orrt01.txt
pcps01.txt
prang01.txt
preda01.txt
predd01.txt
promisgl01.txt
prsi01.txt
psm01.txt
psqi01.txt
pss01.txt
ravlt01.txt
scan_debrief01.txt
self_effic01.txt
ssaga_cover_demo01.txt
tlbx_emsup01.txt
tlbx_friend01.txt
tlbx_motor01.txt
tlbx_perhost01.txt
tlbx_rej01.txt
tlbx_sensation01.txt
tlbx_wellbeing01.txt
tpvt01.txt
trail_ca01.txt
vitals01.txt
ndar_subject01.txt
package_info.txt          Info on NDA filters used to create package
README.pdf                automatic README from NDA
```

Many of these files contain behavioral data in NDA structure format. For more information on the
nda_elements (variables) and instruments, please see the
LS2.0_Crosswalk_Behavioral_Data_Dictionary.xlsx and the other Lifespan 2.0 Documentation.

Section A: HCP Aging Unprocessed MR Data Directory Structure

Unprocessed data for each HCP Aging (HCA) subject is in the

<YourPkgName>/imagingcollection01/<SubjectID_V1_MR>/unprocessed/ directory

The V1_MR in the SubjectID signifies that these are MR data collected in Visit 1. In future releases, Visit 2 data will be available for some subjects.

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 subject HCA9503576_V1_MR has the following directory structure:

```
<YourPkgName>/imagingcollection01/HCA9503576_V1_MR/unprocessed/
├── Diffusion/
├── T1w_MPR_vNav_4e_e1e2_mean/
├── T2w_SPC_vNav/
├── mbPCASLhr/
├── TSE_HiResHp/
├── rfMRI_REST1_AP/
├── rfMRI_REST1_PA/
├── rfMRI_REST2_AP/
├── rfMRI_REST2_PA/
├── tfMRI_CARIT_PA/
├── tfMRI_FACENAME_PA/
├── tfMRI_VISMOTOR_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 Siemens' '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

```
HCA9503576_V1_MR/unprocessed/T1w_MPR_vNav_4e_e1e2_mean/
├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e1e2_mean.json
├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e1e2_mean.nii.gz
└── OTHER_FILES
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.nii.gz
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e1.json
```

```
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e1.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e2.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e2.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e3.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e3.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e4.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_e4.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_RMS.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_4e_RMS.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e1.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e1.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e2.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e2.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e3.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e3.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e4.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_e4.nii.gz
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_RMS.json
    ├── HCA9503576_V1_MR_T1w_MPR_vNav_Norm_4e_RMS.nii.gz
    ├── HCA9503576_V1_MR_T1w_setter.json
    ├── HCA9503576_V1_MR_T1w_setter.nii.gz
    └── session_report.csv
HCA9503576_V1_MR/unprocessed/T2w_SPC_vNav
├── HCA9503576_V1_MR_T2w_SPC_vNav.json
├── HCA9503576_V1_MR_T2w_SPC_vNav.nii.gz
└── OTHER_FILES
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.nii.gz
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.nii.gz
    ├── HCA9503576_V1_MR_T2w_setter.json
    ├── HCA9503576_V1_MR_T2w_setter.nii.gz
    ├── HCA9503576_V1_MR_T2w_SPC_vNav_Norm.json
    └── HCA9503576_V1_MR_T2w_SPC_vNav_Norm.nii.gz
```

Unprocessed High Resolution Hippocampal Structural

This package contains the turbo-spin-echo high spatial resolution hippocampal structural scan (in NIFTI format), reconstructed both without and with Siemen's 'Prescan Normalize', plus SpinEchoFieldMaps.

UnprocTseHires

HCA9503576_V1_MR/unprocessed/TSE_HiResHp/
```
├── HCA9503576_V1_MR_SpinEchoFieldMap4_AP.json
├── HCA9503576_V1_MR_SpinEchoFieldMap4_AP.nii.gz
├── HCA9503576_V1_MR_SpinEchoFieldMap4_PA.json
├── HCA9503576_V1_MR_SpinEchoFieldMap4_PA.nii.gz
```

```
├── HCA9503576_V1_MR_TSE_HiResHp.json
├── HCA9503576_V1_MR_TSE_HiResHp.nii.gz
└── OTHER_FILES
        ├── HCA9503576_V1_MR_TSE_Norm_HiResHp.json
        └── HCA9503576_V1_MR_TSE_Norm_HiResHp.nii.gz
```

Unprocessed Resting State rfMRI

This package contains both 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

HCA9503576_V1_MR/unprocessed/
```
├── rfMRI_REST1_AP
│   ├── HCA9503576_V1_MR_rfMRI_REST1_AP.json
│   ├── HCA9503576_V1_MR_rfMRI_REST1_AP.nii.gz
│   ├── HCA9503576_V1_MR_rfMRI_REST1_AP_SBRef.json
│   ├── HCA9503576_V1_MR_rfMRI_REST1_AP_SBRef.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_e95c8219-5686-44f8-aa9d-2e354a9981f1.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCA9503576_V1_A_run1_design.csv
│   │       └── REST_HCA9503576_V1_A_run1.mp4
│   └── OTHER_FILES
│       └── HCA9503576_V1_MR_rfMRI_REST1_AP_InitialFrames.nii.gz
├── rfMRI_REST1_PA
│   ├── HCA9503576_V1_MR_rfMRI_REST1_PA.json
│   ├── HCA9503576_V1_MR_rfMRI_REST1_PA.nii.gz
│   ├── HCA9503576_V1_MR_rfMRI_REST1_PA_SBRef.json
│   ├── HCA9503576_V1_MR_rfMRI_REST1_PA_SBRef.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_58255d93-7c4c-40be-a4f8-a11a7b635e64.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCA9503576_V1_A_run2_design.csv
│   │       └── REST_HCA9503576_V1_A_run2.mp4
```

```
│     └── OTHER_FILES
│         └── HCA9503576_V1_MR_rfMRI_REST1_PA_InitialFrames.nii.gz
├── rfMRI_REST2_AP
│   ├── HCA9503576_V1_MR_rfMRI_REST2_AP.json
│   ├── HCA9503576_V1_MR_rfMRI_REST2_AP.nii.gz
│   ├── HCA9503576_V1_MR_rfMRI_REST2_AP_SBRef.json
│   ├── HCA9503576_V1_MR_rfMRI_REST2_AP_SBRef.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap3_AP.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap3_AP.nii.gz
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap3_PA.json
│   ├── HCA9503576_V1_MR_SpinEchoFieldMap3_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_0d9fcfd7-da8b-4858-aad6-b2ac0df4f9ae.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCA9503576_V1_B_run1_design.csv
│   │       └── REST_HCA9503576_V1_B_run1.mp4
│   └── OTHER_FILES
│       └── HCA9503576_V1_MR_rfMRI_REST2_AP_InitialFrames.nii.gz
└── rfMRI_REST2_PA
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA.json
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA.nii.gz
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA_SBRef.json
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA_SBRef.nii.gz
    ├── HCA9503576_V1_MR_SpinEchoFieldMap3_AP.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap3_AP.nii.gz
    ├── HCA9503576_V1_MR_SpinEchoFieldMap3_PA.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap3_PA.nii.gz
    ├── LINKED_DATA
    │   ├── PHYSIO
    │   │   └── Physio_combined_bb3c0b71-30c7-4ba5-aa0b-741354a840c1.csv
    │   └── PSYCHOPY
    │       ├── REST_HCA9503576_V1_B_run2_design.csv
    │       └── REST_HCA9503576_V1_B_run2.mp4
    └── OTHER_FILES
        └── HCA9503576_V1_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

HCA9503576_V1_MR/unprocessed/tfMRI_CARIT_PA

```
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.nii.gz
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_CARIT_PA.json
├── HCA9503576_V1_MR_tfMRI_CARIT_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_CARIT_PA_SBRef.json
├── HCA9503576_V1_MR_tfMRI_CARIT_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_c1c956ac-6b69-4862-b831-e40d4b0e26d9.csv
│   └── PSYCHOPY
│       ├── CARIT_HCA9503576_V1_A_run1_stats.csv
│       ├── CARIT_HCA9503576_V1_A_run1_wide.csv
│       └── EVs
│           ├── go.txt
│           ├── miss.txt
│           ├── nogoCR.txt
│           └── nogoFA.txt
└── OTHER_FILES
    └── HCA9503576_V1_MR_tfMRI_CARIT_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI FACENAME

This package contains the fMRI scan for the FACENAME task (in NIFTI format; paired-associative memory task), acquired with PA phase encoding, plus SpinEchoFieldMaps, SBRef, PsychoPy event timing and task modeling files, and a Physio file containing pulse oximetry and respiratory traces.

UnprocTfmriFacename

HCA9503576_V1_MR/unprocessed/tfMRI_FACENAME_PA
```
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.nii.gz
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_FACENAME_PA.json
├── HCA9503576_V1_MR_tfMRI_FACENAME_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_FACENAME_PA_SBRef.json
├── HCA9503576_V1_MR_tfMRI_FACENAME_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_86d4cccc-4972-48d2-80ec-bc1e840d033e.csv
│   └── PSYCHOPY
│       ├── EVs
│       │   ├── encoding.txt
│       │   └── recall.txt
│       ├── FACENAME_HCA9503576_V1_A_run1_stats.csv
```

```
|        └── FACENAME_HCA9503576_V1_A_run1_wide.csv
└── OTHER_FILES
        └── HCA9503576_V1_MR_tfMRI_FACENAME_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI VISMOTOR

This package contains the fMRI scan for the VISMOTOR task (in NIFTI format; simultaneous motor and visual activation task), acquired with PA phase encoding, plus SpinEchoFieldMaps, SBRefs, PsychoPy event timing and task modeling files, and a Physio file containing pulse oximetry and respiratory traces.

UnprocTfmriVismotor

HCA9503576_V1_MR/unprocessed/tfMRI_VISMOTOR_PA
```
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_AP.nii.gz
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.json
├── HCA9503576_V1_MR_SpinEchoFieldMap2_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA.json
├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA.nii.gz
├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA_SBRef.json
├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_2f11bf7b-8b6b-476a-9efc-879f36681a93.csv
│   └── PSYCHOPY
│       ├── EVs
│       │   └── vismotor.txt
│       ├── VISMOTOR_HCA9503576_V1_A_run1_stats.csv
│       └── VISMOTOR_HCA9503576_V1_A_run1_wide.csv
└── OTHER_FILES
        └── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA_InitialFrames.nii.gz
```

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

HCA9503576_V1_MR/unprocessed/Diffusion/
```
├── HCA9503576_V1_MR_dMRI_dir98_AP.bval
├── HCA9503576_V1_MR_dMRI_dir98_AP.bvec
├── HCA9503576_V1_MR_dMRI_dir98_AP.json
├── HCA9503576_V1_MR_dMRI_dir98_AP.nii.gz
├── HCA9503576_V1_MR_dMRI_dir98_AP_SBRef.json
├── HCA9503576_V1_MR_dMRI_dir98_AP_SBRef.nii.gz
├── HCA9503576_V1_MR_dMRI_dir98_PA.bval
```

```
├── HCA9503576_V1_MR_dMRI_dir98_PA.bvec
├── HCA9503576_V1_MR_dMRI_dir98_PA.json
├── HCA9503576_V1_MR_dMRI_dir98_PA.nii.gz
├── HCA9503576_V1_MR_dMRI_dir98_PA_SBRef.json
├── HCA9503576_V1_MR_dMRI_dir98_PA_SBRef.nii.gz
├── HCA9503576_V1_MR_dMRI_dir99_AP.bval
├── HCA9503576_V1_MR_dMRI_dir99_AP.bvec
├── HCA9503576_V1_MR_dMRI_dir99_AP.json
├── HCA9503576_V1_MR_dMRI_dir99_AP.nii.gz
├── HCA9503576_V1_MR_dMRI_dir99_AP_SBRef.json
├── HCA9503576_V1_MR_dMRI_dir99_AP_SBRef.nii.gz
├── HCA9503576_V1_MR_dMRI_dir99_PA.bval
├── HCA9503576_V1_MR_dMRI_dir99_PA.bvec
├── HCA9503576_V1_MR_dMRI_dir99_PA.json
├── HCA9503576_V1_MR_dMRI_dir99_PA.nii.gz
├── HCA9503576_V1_MR_dMRI_dir99_PA_SBRef.json
├── HCA9503576_V1_MR_dMRI_dir99_PA_SBRef.nii.gz
└── OTHER_FILES
    ├── HCA9503576_V1_MR_SpinEchoFieldMap4_AP.json
    ├── HCA9503576_V1_MR_SpinEchoFieldMap4_AP.nii.gz
    ├── HCA9503576_V1_MR_SpinEchoFieldMap4_PA.json
    └── HCA9503576_V1_MR_SpinEchoFieldMap4_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
└── LINKED_DATA
    └── PSYCHOPY
        ├── mbPCASL_HCA9503576_V1_B_run1_design.csv
        └── mbPCASL_HCA9503576_V1_B_run1.mp4
```

Section B: HCP Aging Preprocessed Data Directory Structure

For the Lifespan 2.0 Release, minimally preprocessed MR data is available on released HCP Aging (HCA) subjects in the

<YourPkgName>/fmriresults01/<SubjectID_V1_MR>/ directory.

Note: The structural preprocessing for the Lifespan 2.0 Release does include both MSMSulc and MSMAll registration-based processing.

As in the HCP-YA data, the high level <SubjectID_V1_MR> directory (e.g., **HCA9503576_V1_MR/**, as exemplified here) includes these subdirectories produced by the HCP structural pipeline:

```
<YourPkgName>/fmriresults01/HCA9503576_V1_MR/
├── MNINonLinear/
├── T1w/
├── unprocessed/T1w_MPR_vNav_4e_e1e2_mean/
    └── OTHER_FILES/
            session_report.csv
```

```
<YourPkgName>/fmriresults01/HCA9503576_V1_MR/MNINonLinear/Results/
```
in turn contains subdirectories for 4 rfMRI scans (6.5 min each), collected in 2 sessions (REST1, REST2), and 3 tfMRI scans.

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

```
HCA9503576_V1_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
│   │   ├── HCA9503576_V1_MR.ArealDistortion_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.BiasField_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.corrThickness_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.curvature_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.EdgeDistortion_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.L.atlasroi.32k_fs_LR.shape.gii
│   │   ├── HCA9503576_V1_MR.L.flat.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
```

```
│  │       ├── HCA9503576_V1_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.L.sphere.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.MSMAll.32k_fs_LR.wb.spec
│  │       ├── HCA9503576_V1_MR.MyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.MyelinMap_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.R.atlasroi.32k_fs_LR.shape.gii
│  │       ├── HCA9503576_V1_MR.R.flat.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.sphere.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│  │       ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.SphericalDistortion_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.StrainJ_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.StrainR_MSMAll.32k_fs_LR.dscalar.nii
│  │       ├── HCA9503576_V1_MR.sulc_MSMAll.32k_fs_LR.dscalar.nii
│  │       └── HCA9503576_V1_MR.thickness_MSMAll.32k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.ArealDistortion_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.corrThickness_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.curvature_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.EdgeDistortion_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.L.atlasroi.164k_fs_LR.shape.gii
│  ├── HCA9503576_V1_MR.L.flat.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.inflated_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.midthickness_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.pial_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.sphere.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.very_inflated_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.L.white_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.MSMAll.164k_fs_LR.wb.spec
│  ├── HCA9503576_V1_MR.MyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.R.atlasroi.164k_fs_LR.shape.gii
│  ├── HCA9503576_V1_MR.R.flat.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.inflated_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.midthickness_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.pial_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.sphere.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.very_inflated_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.R.white_MSMAll.164k_fs_LR.surf.gii
│  ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
│  ├── HCA9503576_V1_MR.SphericalDistortion_MSMAll.164k_fs_LR.dscalar.nii
```

```
│   ├── HCA9503576_V1_MR.StrainJ_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.StrainR_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.sulc_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.thickness_MSMAll.164k_fs_LR.dscalar.nii
│   ├── Native
│   │   ├── HCA9503576_V1_MR.aparc.a2009s.native.dlabel.nii
│   │   ├── HCA9503576_V1_MR.aparc.native.dlabel.nii
│   │   ├── HCA9503576_V1_MR.ArealDistortion_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.BiasField_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.corrThickness.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.curvature.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.EdgeDistortion_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.L.atlasroi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.roi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.L.sphere.MSMAll.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.sphere.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.MyelinMap_BC_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.MyelinMap.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.native.wb.spec
│   │   ├── HCA9503576_V1_MR.R.atlasroi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.roi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.MSMAll.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.SphericalDistortion.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainJ_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainR_MSMAll.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.sulc.native.dscalar.nii
│   │   └── HCA9503576_V1_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
│   ├── HCA9503576_V1_MR.StructuralPreprocessing.PROCESS_DATA_job.sh
│   ├── HCA9503576_V1_MR.StructuralPreprocessing.PROCESS_DATA_job.sh.e6806584
│   ├── HCA9503576_V1_MR.StructuralPreprocessing.PROCESS_DATA_job.sh.o6806584
│   ├── processing
│   │   ├── batch_MsmAll.txt
│   │   └── batch_Structural_preproc.txt
│   └── QuNex/processing/logs
│       ├── comlogs
│       │   ├── done_hcp1_HCA9503576_V1_MR_2019-09-13_02.57.1568361464.log
│       │   ├── done_hcp2_HCA9503576_V1_MR_2019-09-13_04.13.1568365998.log
│       │   ├── done_hcp3_HCA9503576_V1_MR_2019-09-13_15.17.1568405840.log
│       │   └── done_setupHCP_HCA9503576_V1_MR_2019-09-13.02.57.40.908975.log
│       ├── runlogs
│       │   ├── Log-hcp1-2019-09-13_02.57.1568361464.log
│       │   ├── Log-hcp2-2019-09-13_04.13.1568365998.log
│       │   └── Log-hcp3-2019-09-13_15.17.1568405840.log
│       ├── run_qunex.sh_2019-09-13-02-57-30.log
│       └── run_qunex.sh_2020-05-20-17-45-42.log
├── T1w
│   ├── aparc.a2009s+aseg.nii.gz
│   ├── aparc+aseg.nii.gz
│   ├── BiasField_acpc_dc.nii.gz
│   ├── brainmask_fs.nii.gz
│   ├── fsaverage_LR32k
│   │   ├── HCA9503576_V1_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness_MSMAll_va.32k_fs_LR.shape.gii
│   │   ├── HCA9503576_V1_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.midthickness_MSMAll_va.32k_fs_LR.dscalar.nii
```

```
│   │       ├── HCA9503576_V1_MR.midthickness_MSMAll_va_norm.32k_fs_LR.dscalar.nii
│   │       ├── HCA9503576_V1_MR.MSMAll.32k_fs_LR.wb.spec
│   │       ├── HCA9503576_V1_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCA9503576_V1_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCA9503576_V1_MR.R.midthickness_MSMAll_va.32k_fs_LR.shape.gii
│   │       ├── HCA9503576_V1_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCA9503576_V1_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │       └── HCA9503576_V1_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│   ├── HCA9503576_V1_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
│   │   ├── HCA9503576_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.native.wb.spec
│   │   ├── HCA9503576_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.native.surf.gii
│   │   └── HCA9503576_V1_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

HCA9503576_V1_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
|    |    ├── HCA9503576_V1_MR.32k_fs_LR.wb.spec
|    |    ├── HCA9503576_V1_MR.aparc.32k_fs_LR.dlabel.nii
|    |    ├── HCA9503576_V1_MR.aparc.a2009s.32k_fs_LR.dlabel.nii
|    |    ├── HCA9503576_V1_MR.ArealDistortion_MSMSulc.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.BiasField_MSMSulc.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.corrThickness.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.curvature.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.EdgeDistortion_MSMSulc.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.L.atlasroi.32k_fs_LR.shape.gii
|    |    ├── HCA9503576_V1_MR.L.flat.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.inflated.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.midthickness.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.pial.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.sphere.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.very_inflated.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.L.white.32k_fs_LR.surf.gii
|    |    ├── HCA9503576_V1_MR.MyelinMap.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.MyelinMap_BC.32k_fs_LR.dscalar.nii
|    |    ├── HCA9503576_V1_MR.R.atlasroi.32k_fs_LR.shape.gii
|    |    ├── HCA9503576_V1_MR.R.flat.32k_fs_LR.surf.gii
```

```
│   │   ├── HCA9503576_V1_MR.R.inflated.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.pial.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.white.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainJ_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainR_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.sulc.32k_fs_LR.dscalar.nii
│   │   └── HCA9503576_V1_MR.thickness.32k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.164k_fs_LR.wb.spec
│   ├── HCA9503576_V1_MR.aparc.164k_fs_LR.dlabel.nii
│   ├── HCA9503576_V1_MR.aparc.a2009s.164k_fs_LR.dlabel.nii
│   ├── HCA9503576_V1_MR.ArealDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.corrThickness.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.curvature.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.EdgeDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.L.atlasroi.164k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.flat.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.inflated.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.midthickness.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.pial.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.sphere.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.very_inflated.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.L.white.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.MyelinMap.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.MyelinMap_BC.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.R.atlasroi.164k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.R.flat.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.inflated.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.midthickness.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.pial.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.sphere.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.very_inflated.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.R.white.164k_fs_LR.surf.gii
│   ├── HCA9503576_V1_MR.SmoothedMyelinMap.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.StrainJ_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.StrainR_MSMSulc.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.sulc.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.thickness.164k_fs_LR.dscalar.nii
│   ├── Native
│   │   ├── HCA9503576_V1_MR.aparc.a2009s.native.dlabel.nii
│   │   ├── HCA9503576_V1_MR.aparc.native.dlabel.nii
```

```
│   │   ├── HCA9503576_V1_MR.ArealDistortion_MSMSulc.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.corrThickness.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.curvature.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.EdgeDistortion_MSMSulc.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.L.atlasroi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.roi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.L.sphere.MSMSulc.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.sphere.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.MyelinMap_BC.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.MyelinMap.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.native.wb.spec
│   │   ├── HCA9503576_V1_MR.R.atlasroi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.roi.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.MSMSulc.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap_BC.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.SmoothedMyelinMap.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.SphericalDistortion.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainJ_MSMSulc.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.StrainR_MSMSulc.native.dscalar.nii
│   │   ├── HCA9503576_V1_MR.sulc.native.dscalar.nii
│   │   └── HCA9503576_V1_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
│   │   ├── HCA9503576_V1_MR.32k_fs_LR.wb.spec
│   │   ├── HCA9503576_V1_MR.L.inflated.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness_va.32k_fs_LR.shape.gii
│   │   ├── HCA9503576_V1_MR.L.pial.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.midthickness_va.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.midthickness_va_norm.32k_fs_LR.dscalar.nii
│   │   ├── HCA9503576_V1_MR.R.inflated.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness_va.32k_fs_LR.shape.gii
│   │   ├── HCA9503576_V1_MR.R.pial.32k_fs_LR.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.32k_fs_LR.surf.gii
│   │   └── HCA9503576_V1_MR.R.white.32k_fs_LR.surf.gii
│   ├── HCA9503576_V1_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
│   │   ├── HCA9503576_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.L.white.native.surf.gii
│   │   ├── HCA9503576_V1_MR.native.wb.spec
│   │   ├── HCA9503576_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.pial.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.very_inflated.native.surf.gii
│   │   └── HCA9503576_V1_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

HCA9503576_V1_MR/T1w/HCA9503576_V1_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
```

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|   |   ├── 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
```

```
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|   ├── rh.BA_exvivo.thresh.stats
|   ├── rh.curv.stats
|   ├── rh.w-g.pct.stats
|   └── wmparc.stats
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|   ├── 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
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|   ├── 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
```

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│   ├── 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
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│   ├── rh.area.mid
│   ├── rh.area.pial
│   ├── rh.avg_curv
│   ├── rh.bak.thickness
│   ├── rh.curv
│   ├── rh.curv.pial
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│   ├── rh.defect_chull
│   ├── rh.defect_labels
│   ├── rh.inflated
│   ├── rh.inflated.H
│   ├── rh.inflated.K
│   ├── rh.inflated.nofix
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│   ├── rh.orig.nofix
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│   ├── rh.pial.rawavg.conf
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│   ├── 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
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│   ├── rh.sphere.reg
│   ├── rh.sulc
│   ├── rh.thickness
│   ├── rh.volume
```

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|   ├── 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
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    ├── 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
```

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├── 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

HCA9503576_V1_MR/MNINonLinear/
```
├── fsaverage_LR32k
│   ├── HCA9503576_V1_MR.ArealDistortion_FS.32k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.atlas_MyelinMap_BC.32k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.atlas_RSNs_d40.32k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.atlas_Topography.32k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.EdgeDistortion_FS.32k_fs_LR.dscalar.nii
│   ├──
HCA9503576_V1_MR.individual_RSNs_d40_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.ds
calar.nii
│   ├──
HCA9503576_V1_MR.individual_Topography_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.
dscalar.nii
│   ├── HCA9503576_V1_MR.L.aparc.32k_fs_LR.label.gii
│   ├── HCA9503576_V1_MR.L.aparc.a2009s.32k_fs_LR.label.gii
│   ├── HCA9503576_V1_MR.L.ArealDistortion_FS.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.ArealDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.corrThickness.32k_fs_LR.shape.gii
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│   ├── HCA9503576_V1_MR.L.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.MyelinMap.32k_fs_LR.func.gii
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│   ├── HCA9503576_V1_MR.L.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
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│   ├── HCA9503576_V1_MR.L.StrainJ_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainR_FS.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainR_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.sulc.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.L.thickness.32k_fs_LR.shape.gii
│   ├── HCA9503576_V1_MR.R.aparc.32k_fs_LR.label.gii
│   ├── HCA9503576_V1_MR.R.aparc.a2009s.32k_fs_LR.label.gii
│   ├── HCA9503576_V1_MR.R.ArealDistortion_FS.32k_fs_LR.shape.gii
```

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│     ├── HCA9503576_V1_MR.R.curvature.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.EdgeDistortion_FS.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
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│     ├── HCA9503576_V1_MR.R.MyelinMap_BC.32k_fs_LR.func.gii
│     ├── HCA9503576_V1_MR.R.SmoothedMyelinMap.32k_fs_LR.func.gii
│     ├── HCA9503576_V1_MR.R.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
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│     ├── HCA9503576_V1_MR.R.StrainJ_MSMSulc.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.StrainR_FS.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.StrainR_MSMSulc.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.sulc.32k_fs_LR.shape.gii
│     ├── HCA9503576_V1_MR.R.thickness.32k_fs_LR.shape.gii
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│     └── HCA9503576_V1_MR.StrainR_FS.32k_fs_LR.dscalar.nii
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├── HCA9503576_V1_MR.EdgeDistortion_FS.164k_fs_LR.dscalar.nii
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├── HCA9503576_V1_MR.L.StrainR_FS.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.L.StrainR_MSMSulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.L.sulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.L.thickness.164k_fs_LR.shape.gii
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├── HCA9503576_V1_MR.R.ArealDistortion_MSMSulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.corrThickness.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.curvature.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.EdgeDistortion_FS.164k_fs_LR.shape.gii
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├── HCA9503576_V1_MR.R.SmoothedMyelinMap_BC.164k_fs_LR.func.gii
├── HCA9503576_V1_MR.R.StrainJ_FS.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.StrainJ_MSMSulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.StrainR_FS.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.StrainR_MSMSulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.sulc.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.R.thickness.164k_fs_LR.shape.gii
├── HCA9503576_V1_MR.StrainJ_FS.164k_fs_LR.dscalar.nii
├── HCA9503576_V1_MR.StrainR_FS.164k_fs_LR.dscalar.nii
├── Native
│   ├── HCA9503576_V1_MR.ArealDistortion_FS.native.dscalar.nii
│   ├── HCA9503576_V1_MR.EdgeDistortion_FS.native.dscalar.nii
│   ├── HCA9503576_V1_MR.L.aparc.a2009s.native.label.gii
│   ├── HCA9503576_V1_MR.L.aparc.native.label.gii
│   ├── HCA9503576_V1_MR.L.ArealDistortion_FS.native.shape.gii
│   ├── HCA9503576_V1_MR.L.ArealDistortion_MSMAll.native.shape.gii
│   ├── HCA9503576_V1_MR.L.ArealDistortion_MSMSulc.native.shape.gii
│   ├── HCA9503576_V1_MR.L.BiasField.native.func.gii
│   ├── HCA9503576_V1_MR.L.corrThickness.native.shape.gii
│   ├── HCA9503576_V1_MR.L.curvature.native.shape.gii
│   ├── HCA9503576_V1_MR.L.EdgeDistortion_FS.native.shape.gii
│   ├── HCA9503576_V1_MR.L.EdgeDistortion_MSMAll.native.shape.gii
│   ├── HCA9503576_V1_MR.L.EdgeDistortion_MSMSulc.native.shape.gii
│   ├── HCA9503576_V1_MR.L.MyelinMap_BC.native.func.gii
│   ├── HCA9503576_V1_MR.L.MyelinMap.native.func.gii
│   ├── HCA9503576_V1_MR.L.RefMyelinMap.native.func.gii
│   ├── HCA9503576_V1_MR.L.SmoothedMyelinMap_BC.native.func.gii
│   ├── HCA9503576_V1_MR.L.SmoothedMyelinMap.native.func.gii
│   ├── HCA9503576_V1_MR.L.sphere.reg.native.surf.gii
│   ├── HCA9503576_V1_MR.L.sphere.reg.reg_LR.native.surf.gii
│   ├── HCA9503576_V1_MR.L.sphere.rot.native.surf.gii
│   ├── HCA9503576_V1_MR.L.SphericalDistortion.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainJ_FS.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainJ_MSMAll.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainJ_MSMSulc.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainR_FS.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainR_MSMAll.native.shape.gii
│   ├── HCA9503576_V1_MR.L.StrainR_MSMSulc.native.shape.gii
│   ├── HCA9503576_V1_MR.L.sulc.native.shape.gii
│   ├── HCA9503576_V1_MR.L.thickness.native.shape.gii
```

```
│   │   ├── HCA9503576_V1_MR.R.aparc.a2009s.native.label.gii
│   │   ├── HCA9503576_V1_MR.R.aparc.native.label.gii
│   │   ├── HCA9503576_V1_MR.R.ArealDistortion_FS.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.ArealDistortion_MSMAll.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.ArealDistortion_MSMSulc.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.BiasField.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.corrThickness.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.curvature.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.EdgeDistortion_FS.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.EdgeDistortion_MSMAll.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.EdgeDistortion_MSMSulc.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.MyelinMap_BC.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.MyelinMap.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.RefMyelinMap.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.SmoothedMyelinMap_BC.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.SmoothedMyelinMap.native.func.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.reg.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.reg.reg_LR.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.sphere.rot.native.surf.gii
│   │   ├── HCA9503576_V1_MR.R.SphericalDistortion.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainJ_FS.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainJ_MSMAll.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainJ_MSMSulc.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainR_FS.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainR_MSMAll.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.StrainR_MSMSulc.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.sulc.native.shape.gii
│   │   ├── HCA9503576_V1_MR.R.thickness.native.shape.gii
│   │   ├── HCA9503576_V1_MR.StrainJ_FS.native.dscalar.nii
│   │   └── HCA9503576_V1_MR.StrainR_FS.native.dscalar.nii
├── StructuralQC
│   ├── HCA9503576_V1_MR.NonlinearRegJacobians_FNIRT.164k_fs_LR.dscalar.nii
│   ├── HCA9503576_V1_MR.NonlinearRegJacobians_log2.nii.gz
│   ├── HCA9503576_V1_MR.structuralQC.wb.scene
│   ├── HCA9503576_V1_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
│       ├── HCA9503576_V1_MR.structuralQC.wb.scene1.png
│       ├── HCA9503576_V1_MR.structuralQC.wb.scene2.png
│       ├── HCA9503576_V1_MR.structuralQC.wb.scene3.png
│       └── HCA9503576_V1_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.

PreprocRfmriRecommended

```
HCA9503576_V1_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_e95c8219-5686-44f8-aa9d-2e354a9981f1.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_58255d93-7c4c-40be-a4f8-a11a7b635e64.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_0d9fcfd7-da8b-4858-aad6-b2ac0df4f9ae.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_bb3c0b71-30c7-4ba5-aa0b-741354a840c1.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
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
    ├── HCA9503576_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027685
    ├── HCA9503576_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027685
    ├── HCA9503576_V1_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027691
    ├── HCA9503576_V1_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027691
    ├── HCA9503576_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027697
    ├── HCA9503576_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027697
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027703
    ├── HCA9503576_V1_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_HCA9503576_V1_MR_2020-02-26_21.57.1582775821.log
    │   ├── done_hcp4_rfMRI_REST1_PA_HCA9503576_V1_MR_2020-02-26_19.37.1582767475.log
    │   ├── done_hcp4_rfMRI_REST2_AP_HCA9503576_V1_MR_2020-02-26_19.39.1582767571.log
    │   ├── done_hcp4_rfMRI_REST2_PA_HCA9503576_V1_MR_2020-02-26_19.43.1582767828.log
    │   ├── done_hcp5_rfMRI_REST1_AP_HCA9503576_V1_MR_2020-02-27_01.58.1582790317.log
    │   ├── done_hcp5_rfMRI_REST1_PA_HCA9503576_V1_MR_2020-02-26_23.51.1582782666.log
    │   ├── done_hcp5_rfMRI_REST2_AP_HCA9503576_V1_MR_2020-02-26_23.56.1582782980.log
    │   ├── done_hcp5_rfMRI_REST2_PA_HCA9503576_V1_MR_2020-02-26_23.50.1582782603.log
    │   ├── done_hcp_DeDriftAndResample_fMRI_CONCAT_ALL_HCA9503576_V1_MR_2020-05-20_21.00.1590026408.log
    │   ├── done_hcp_ICAFix_fMRI_CONCAT_ALL_HCA9503576_V1_MR_2020-04-20_20.16.1587431808.log
    │   ├── done_hcp_MSMAll_fMRI_CONCAT_ALL_HCA9503576_V1_MR_2020-05-20_17.45.1590014753.log
    │   ├── done_hcp_PostFix_fMRI_CONCAT_ALL_HCA9503576_V1_MR_2020-04-21_01.17.1587449835.log
    │   ├── done_setupHCP_HCA9503576_V1_MR_2020-02-26.19.37.45.737531.log
    │   ├── done_setupHCP_HCA9503576_V1_MR_2020-02-26.19.39.22.529232.log
    │   ├── done_setupHCP_HCA9503576_V1_MR_2020-02-26.19.43.39.469488.log
    │   └── done_setupHCP_HCA9503576_V1_MR_2020-02-26.21.56.51.903530.log
    ├── runlogs
    │   ├── Log-hcp4-2020-02-26_19.37.1582767474.log
    │   ├── Log-hcp4-2020-02-26_19.39.1582767571.log
    │   ├── Log-hcp4-2020-02-26_19.43.1582767828.log
    │   ├── Log-hcp4-2020-02-26_21.57.1582775821.log
    │   ├── Log-hcp5-2020-02-26_23.50.1582782603.log
    │   ├── Log-hcp5-2020-02-26_23.51.1582782666.log
    │   ├── Log-hcp5-2020-02-26_23.56.1582782980.log
    │   ├── Log-hcp5-2020-02-27_01.58.1582790317.log
    │   ├── Log-hcp_ICAFix-2020-04-20_20.16.1587431808.log
    │   └── Log-hcp_MSMAll-2020-05-20_17.45.1590014753.log
    ├── run_qunex.sh_2020-02-26-19-37-35.log
    ├── run_qunex.sh_2020-02-26-19-39-11.log
    ├── run_qunex.sh_2020-02-26-19-43-28.log
    ├── run_qunex.sh_2020-02-26-21-56-38.log
    ├── run_qunex.sh_2020-04-20-20-16-38.log
    └── run_qunex.sh_2020-05-20-17-45-42.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.

PreprocRfmriLegacySurface

```
HCA9503576_V1_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_e95c8219-5686-44f8-aa9d-2e354a9981f1.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_58255d93-7c4c-40be-a4f8-a11a7b635e64.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_0d9fcfd7-da8b-4858-aad6-b2ac0df4f9ae.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_bb3c0b71-30c7-4ba5-aa0b-741354a840c1.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.

PreprocRfmriLegacyVolume

```
HCA9503576_V1_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_e95c8219-5686-44f8-aa9d-2e354a9981f1.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_58255d93-7c4c-40be-a4f8-a11a7b635e64.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_0d9fcfd7-da8b-4858-aad6-b2ac0df4f9ae.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_bb3c0b71-30c7-4ba5-aa0b-741354a840c1.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.

PreprocRfmriUncleaned

```
HCA9503576_V1_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_e95c8219-5686-44f8-aa9d-2e354a9981f1.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_58255d93-7c4c-40be-a4f8-a11a7b635e64.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_0d9fcfd7-da8b-4858-aad6-b2ac0df4f9ae.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_bb3c0b71-30c7-4ba5-aa0b-741354a840c1.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

HCA9503576_V1_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
│  │  │  │  ├── fMRI_CONCAT_ALL_hp0_vn.nii.gz
│  │  │  │  ├── fMRI_CONCAT_ALL_mean.nii.gz
│  │  │  │  ├── fMRI_CONCAT_ALL_Runs.csv
│  │  │  │  ├── fMRI_CONCAT_ALL_SBRef.nii.gz
│  │  │  │  ├── HCA9503576_V1_MR_fMRI_CONCAT_ALL_hp0_ICA_Classification_dualscreen.scene
│  │  │  │  ├── HCA9503576_V1_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

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
|       ├── brainmask_fs.2.nii.gz
|       ├── EVs
|       |       ├── go.txt
|       |       ├── miss.txt
|       |       ├── nogoCR.txt
|       |       └── nogoFA.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_c1c956ac-6b69-4862-b831-e40d4b0e26d9.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
     ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
     ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
     ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
     ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
     ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
     ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
     ├── HCA9503576_V1_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
     ├── HCA9503576_V1_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027709
     ├── HCA9503576_V1_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_HCA9503576_V1_MR_2020-02-26_21.57.1582775879.log
          │    ├── done_hcp5_tfMRI_CARIT_PA_HCA9503576_V1_MR_2020-02-27_07.00.1582808410.log
          │    └── done_setupHCP_HCA9503576_V1_MR_2020-02-26.21.57.50.036761.log
          ├── runlogs
          │    ├── Log-hcp4-2020-02-26_21.57.1582775879.log
          │    ├── Log-hcp5-2020-02-27_07.00.1582808410.log
          │    ├── Log-hcp_ICAFix-2020-04-20_20.16.1587431808.log
          │    └── Log-hcp_MSMAll-2020-05-20_17.45.1590014753.log
          ├── run_qunex.sh_2020-02-26-21-57-01.log
          ├── run_qunex.sh_2020-04-20-20-16-38.log
          └── run_qunex.sh_2020-05-20-17-45-42.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

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │     ├── go.txt
│       │     ├── miss.txt
│       │     ├── nogoCR.txt
│       │     └── nogoFA.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_c1c956ac-6b69-4862-b831-e40d4b0e26d9.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

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_CARIT_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── go.txt
│   │   ├── miss.txt
│   │   ├── nogoCR.txt
│   │   └── nogoFA.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_c1c956ac-6b69-4862-b831-e40d4b0e26d9.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
│   │   ├── go.txt
│   │   ├── miss.txt
│   │   ├── nogoCR.txt
│   │   └── nogoFA.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_c1c956ac-6b69-4862-b831-e40d4b0e26d9.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

```
HCA9503576_V1_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 FACENAME Preprocessed Recommended

This package is the recommended starting point for FACENAME 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 FACENAME (paired-associative memory task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriFacenameRecommended

```
HCA9503576_V1_MR/
├── MNINonLinear/tfMRI_FACENAME_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── encoding.txt
│   │   └── recall.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_86d4cccc-4972-48d2-80ec-bc1e840d033e.csv
│   ├── tfMRI_FACENAME_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│   ├── tfMRI_FACENAME_PA_Atlas_MSMAll_hp0_clean.README.txt
│   ├── tfMRI_FACENAME_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│   ├── tfMRI_FACENAME_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_FACENAME_PA_dropouts.nii.gz
│   ├── tfMRI_FACENAME_PA_finalmask.nii.gz
│   ├── tfMRI_FACENAME_PA_finalmask.stats.txt
│   ├── tfMRI_FACENAME_PA_fovmask.nii.gz
│   ├── tfMRI_FACENAME_PA_Jacobian.nii.gz
│   ├── tfMRI_FACENAME_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_FACENAME_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_FACENAME_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_FACENAME_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_FACENAME_PA_SBRef.nii.gz
│   ├── tfMRI_FACENAME_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_FACENAME_PA_sebased_bias.nii.gz
│   └── tfMRI_FACENAME_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
    ├── HCA9503576_V1_MR_tfMRI_FACENAME_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_tfMRI_FACENAME_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027715
    ├── HCA9503576_V1_MR_tfMRI_FACENAME_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027715
    ├── processing
    │   └── batch_tfMRI_FACENAME_PA_preproc.txt
    └── QuNex/processing/logs/
        ├── comlogs
        │   ├── done_hcp4_tfMRI_FACENAME_PA_HCA9503576_V1_MR_2020-02-26_19.45.1582767905.log
```

```
        |       ├── done_hcp5_tfMRI_FACENAME_PA_HCA9503576_V1_MR_2020-02-27_03.45.1582796734.log
        |       └── done_setupHCP_HCA9503576_V1_MR_2020-02-26.19.44.52.779906.log
        ├── runlogs
        |       ├── Log-hcp4-2020-02-26_19.45.1582767905.log
        |       ├── Log-hcp5-2020-02-27_03.45.1582796734.log
        |       ├── Log-hcp_ICAFix-2020-04-20_20.16.1587431808.log
        |       └── Log-hcp_MSMAll-2020-05-20_17.45.1590014753.log
        ├── run_qunex.sh_2020-02-26-19-44-32.log
        ├── run_qunex.sh_2020-04-20-20-16-38.log
        └── run_qunex.sh_2020-05-20-17-45-42.log
```

tfMRI FACENAME Preprocessed Legacy Surface

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

PreprocTfmriFacenameLegacySurface

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_FACENAME_PA/
|       ├── brainmask_fs.2.nii.gz
|       ├── EVs
|       |       ├── encoding.txt
|       |       └── recall.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_86d4cccc-4972-48d2-80ec-bc1e840d033e.csv
|       ├── tfMRI_FACENAME_PA_Atlas_hp0_clean.dtseries.nii
|       ├── tfMRI_FACENAME_PA_Atlas_hp0_clean.README.txt
|       ├── tfMRI_FACENAME_PA_Atlas_hp0_vn.dscalar.nii
|       ├── tfMRI_FACENAME_PA_Atlas_nonzero.stats.txt
|       ├── tfMRI_FACENAME_PA_dropouts.nii.gz
|       ├── tfMRI_FACENAME_PA_finalmask.nii.gz
|       ├── tfMRI_FACENAME_PA_finalmask.stats.txt
|       ├── tfMRI_FACENAME_PA_fovmask.nii.gz
|       ├── tfMRI_FACENAME_PA_Jacobian.nii.gz
|       ├── tfMRI_FACENAME_PA_PhaseOne_gdc_dc.nii.gz
|       ├── tfMRI_FACENAME_PA_PhaseTwo_gdc_dc.nii.gz
|       ├── tfMRI_FACENAME_PA_pseudo_transmit_field.nii.gz
|       ├── tfMRI_FACENAME_PA_pseudo_transmit_raw.nii.gz
```

```
|     ├── tfMRI_FACENAME_PA_SBRef.nii.gz
|     ├── tfMRI_FACENAME_PA_sebased_bias_dilated.nii.gz
|     ├── tfMRI_FACENAME_PA_sebased_bias.nii.gz
|     └── tfMRI_FACENAME_PA_sebased_reference.nii.gz
└── ProcessingInfo
      └── processing
            └── batch_tfMRI_FACENAME_PA_preproc.txt
```

tfMRI FACENAME Preprocessed Legacy Volume

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

PreprocTfmriFacenameLegacyVolume

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_FACENAME_PA/
|     ├── brainmask_fs.2.nii.gz
|     ├── EVs
|     |     ├── encoding.txt
|     |     └── recall.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_86d4cccc-4972-48d2-80ec-bc1e840d033e.csv
|     ├── tfMRI_FACENAME_PA_Atlas_nonzero.stats.txt
|     ├── tfMRI_FACENAME_PA_dropouts.nii.gz
|     ├── tfMRI_FACENAME_PA_finalmask.nii.gz
|     ├── tfMRI_FACENAME_PA_finalmask.stats.txt
|     ├── tfMRI_FACENAME_PA_fovmask.nii.gz
|     ├── tfMRI_FACENAME_PA_hp0_clean.nii.gz
|     ├── tfMRI_FACENAME_PA_hp0_vn.nii.gz
|     ├── tfMRI_FACENAME_PA_Jacobian.nii.gz
|     ├── tfMRI_FACENAME_PA_PhaseOne_gdc_dc.nii.gz
|     ├── tfMRI_FACENAME_PA_PhaseTwo_gdc_dc.nii.gz
|     ├── tfMRI_FACENAME_PA_pseudo_transmit_field.nii.gz
|     ├── tfMRI_FACENAME_PA_pseudo_transmit_raw.nii.gz
|     ├── tfMRI_FACENAME_PA_SBRef.nii.gz
|     ├── tfMRI_FACENAME_PA_sebased_bias_dilated.nii.gz
|     ├── tfMRI_FACENAME_PA_sebased_bias.nii.gz
```

```
    │   └── tfMRI_FACENAME_PA_sebased_reference.nii.gz
    └── ProcessingInfo
        └── processing
            └── batch_tfMRI_FACENAME_PA_preproc.txt
```

tfMRI FACENAME Preprocessed Uncleaned

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

PreprocTfmriFacenameUncleaned

HCA9503576_V1_MR/
```
├── MNINonLinear/Results/tfMRI_FACENAME_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── encoding.txt
│   │   └── recall.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_86d4cccc-4972-48d2-80ec-bc1e840d033e.csv
│   ├── tfMRI_FACENAME_PA_Atlas.dtseries.nii
│   ├── tfMRI_FACENAME_PA_Atlas_MSMAll.dtseries.nii
│   ├── tfMRI_FACENAME_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_FACENAME_PA_dropouts.nii.gz
│   ├── tfMRI_FACENAME_PA_finalmask.nii.gz
│   ├── tfMRI_FACENAME_PA_finalmask.stats.txt
│   ├── tfMRI_FACENAME_PA_fovmask.nii.gz
│   ├── tfMRI_FACENAME_PA_Jacobian.nii.gz
│   ├── tfMRI_FACENAME_PA.L.native.func.gii
│   ├── tfMRI_FACENAME_PA.nii.gz
│   ├── tfMRI_FACENAME_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_FACENAME_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_FACENAME_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_FACENAME_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_FACENAME_PA.R.native.func.gii
│   ├── tfMRI_FACENAME_PA_SBRef.nii.gz
│   ├── tfMRI_FACENAME_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_FACENAME_PA_sebased_bias.nii.gz
```

```
|       └──  tfMRI_FACENAME_PA_sebased_reference.nii.gz
└──  ProcessingInfo
    └──  processing
        └──  batch_tfMRI_FACENAME_PA_preproc.txt
```

tfMRI FACENAME Preprocessed Extended

This package contains additional FACENAME 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 FACENAME (paired-associative memory task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriFacenameExtended

HCA9503576_V1_MR/
```
├──  MNINonLinear
│    ├──  Results
│    │    └──  tfMRI_FACENAME_PA
│    │         ├──  RibbonVolumeToSurfaceMapping
│    │         │    └──  goodvoxels.nii.gz
│    │         ├──  tfMRI_FACENAME_PA_Atlas_mean.dscalar.nii
│    │         ├──  tfMRI_FACENAME_PA_Atlas_MSMAll_mean.dscalar.nii
│    │         ├──  tfMRI_FACENAME_PA_dims.txt
│    │         ├──  tfMRI_FACENAME_PA_hp0.ica
│    │         │    └──  mc
│    │         │         ├──  prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│    │         │         └──  prefiltered_func_data_mcf_conf_hp.nii.gz
│    │         ├──  tfMRI_FACENAME_PA_mean.nii.gz
│    │         └──  tfMRI_FACENAME_PA_MSMAll_dims.txt
│    └──  xfms
│         ├──  standard2tfMRI_FACENAME_PA.nii.gz
│         └──  tfMRI_FACENAME_PA2standard.nii.gz
└──  T1w
     └──  Results
          └──  tfMRI_FACENAME_PA
               ├──  tfMRI_FACENAME_PA_dropouts.nii.gz
               ├──  tfMRI_FACENAME_PA_pseudo_transmit_field.nii.gz
               ├──  tfMRI_FACENAME_PA_pseudo_transmit_raw.nii.gz
               ├──  tfMRI_FACENAME_PA_sebased_bias.nii.gz
               └──  tfMRI_FACENAME_PA_sebased_reference.nii.gz
```

tfMRI VISMOTOR Preprocessed Recommended

This package is the recommended starting point for VISMOTOR 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 VISMOTOR (simultaneous motor and visual activation task) task scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriVismotorRecommended

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_VISMOTOR_PA
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   └── vismotor.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_2f11bf7b-8b6b-476a-9efc-879f36681a93.csv
│   ├── tfMRI_VISMOTOR_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│   ├── tfMRI_VISMOTOR_PA_Atlas_MSMAll_hp0_clean.README.txt
│   ├── tfMRI_VISMOTOR_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│   ├── tfMRI_VISMOTOR_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_VISMOTOR_PA_dropouts.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.stats.txt
│   ├── tfMRI_VISMOTOR_PA_fovmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_Jacobian.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_VISMOTOR_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_VISMOTOR_PA_SBRef.nii.gz
│   ├── tfMRI_VISMOTOR_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_VISMOTOR_PA_sebased_bias.nii.gz
│   └── tfMRI_VISMOTOR_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8954024
    ├── HCA9503576_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8954024
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8509643
    ├── HCA9503576_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8509643
    ├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e8027721
```

```
        ├── HCA9503576_V1_MR_tfMRI_VISMOTOR_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o8027721
    ├── processing
    │   └── batch_tfMRI_VISMOTOR_PA_preproc.txt
    └── QuNex/processing/logs
        ├── comlogs
        │   ├── done_hcp4_tfMRI_VISMOTOR_PA_HCA9503576_V1_MR_2020-02-26_19.46.1582767970.log
        │   ├── done_hcp5_tfMRI_VISMOTOR_PA_HCA9503576_V1_MR_2020-02-27_01.07.1582787264.log
        │   └── done_setupHCP_HCA9503576_V1_MR_2020-02-26.19.45.57.485798.log
        ├── runlogs
        │   ├── Log-hcp4-2020-02-26_19.46.1582767970.log
        │   ├── Log-hcp5-2020-02-27_01.07.1582787264.log
        │   ├── Log-hcp_ICAFix-2020-04-20_20.16.1587431808.log
        │   └── Log-hcp_MSMAll-2020-05-20_17.45.1590014753.log
        ├── run_qunex.sh_2020-02-26-19-45-37.log
        ├── run_qunex.sh_2020-04-20-20-16-38.log
        └── run_qunex.sh_2020-05-20-17-45-42.log
```

tfMRI VISMOTOR Preprocessed Legacy Surface

This package contains cleaned VISMOTOR tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration. It contains outputs of HCP Functional Preprocessing for the VISMOTOR (simultaneous motor and visual activation task) task scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

PreprocTfmriVismotorLegacySurface

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_VISMOTOR_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   └── vismotor.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_2f11bf7b-8b6b-476a-9efc-879f36681a93.csv
│   ├── tfMRI_VISMOTOR_PA_Atlas_hp0_clean.dtseries.nii
│   ├── tfMRI_VISMOTOR_PA_Atlas_hp0_clean.README.txt
│   ├── tfMRI_VISMOTOR_PA_Atlas_hp0_vn.dscalar.nii
│   ├── tfMRI_VISMOTOR_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_VISMOTOR_PA_dropouts.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.stats.txt
```

```
│   ├── tfMRI_VISMOTOR_PA_fovmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_Jacobian.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_VISMOTOR_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_VISMOTOR_PA_SBRef.nii.gz
│   ├── tfMRI_VISMOTOR_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_VISMOTOR_PA_sebased_bias.nii.gz
│   └── tfMRI_VISMOTOR_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_VISMOTOR_PA_preproc.txt
```

tfMRI VISMOTOR Preprocessed Legacy Volume

This package contains cleaned VISMOTOR tfMRI files poorly aligned across subjects using nonlinear volume registration. It contains outputs of HCP Functional Preprocessing for the VISMOTOR (simultaneous motor and visual activation task) task scan, which is the result of applying the GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

PreprocTfmriVismotorLegacyVolume

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_VISMOTOR_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   └── vismotor.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_2f11bf7b-8b6b-476a-9efc-879f36681a93.csv
│   ├── tfMRI_VISMOTOR_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_VISMOTOR_PA_dropouts.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_finalmask.stats.txt
│   ├── tfMRI_VISMOTOR_PA_fovmask.nii.gz
│   ├── tfMRI_VISMOTOR_PA_hp0_clean.nii.gz
│   ├── tfMRI_VISMOTOR_PA_hp0_vn.nii.gz
│   ├── tfMRI_VISMOTOR_PA_Jacobian.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_VISMOTOR_PA_pseudo_transmit_field.nii.gz
```

```
|       ├── tfMRI_VISMOTOR_PA_pseudo_transmit_raw.nii.gz
|       ├── tfMRI_VISMOTOR_PA_SBRef.nii.gz
|       ├── tfMRI_VISMOTOR_PA_sebased_bias_dilated.nii.gz
|       ├── tfMRI_VISMOTOR_PA_sebased_bias.nii.gz
|       └── tfMRI_VISMOTOR_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_VISMOTOR_PA_preproc.txt
```

tfMRI VISMOTOR Preprocessed Uncleaned

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

PreprocTfmriVismotorUncleaned

```
HCA9503576_V1_MR/
├── MNINonLinear/Results/tfMRI_VISMOTOR_PA/
|       ├── brainmask_fs.2.nii.gz
|       ├── EVs
|       |   └── vismotor.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_2f11bf7b-8b6b-476a-9efc-879f36681a93.csv
|       ├── tfMRI_VISMOTOR_PA_Atlas.dtseries.nii
|       ├── tfMRI_VISMOTOR_PA_Atlas_MSMAll.dtseries.nii
|       ├── tfMRI_VISMOTOR_PA_Atlas_nonzero.stats.txt
|       ├── tfMRI_VISMOTOR_PA_dropouts.nii.gz
|       ├── tfMRI_VISMOTOR_PA_finalmask.nii.gz
|       ├── tfMRI_VISMOTOR_PA_finalmask.stats.txt
|       ├── tfMRI_VISMOTOR_PA_fovmask.nii.gz
|       ├── tfMRI_VISMOTOR_PA_Jacobian.nii.gz
|       ├── tfMRI_VISMOTOR_PA.L.native.func.gii
|       ├── tfMRI_VISMOTOR_PA.nii.gz
|       ├── tfMRI_VISMOTOR_PA_PhaseOne_gdc_dc.nii.gz
|       ├── tfMRI_VISMOTOR_PA_PhaseTwo_gdc_dc.nii.gz
|       ├── tfMRI_VISMOTOR_PA_pseudo_transmit_field.nii.gz
|       ├── tfMRI_VISMOTOR_PA_pseudo_transmit_raw.nii.gz
|       ├── tfMRI_VISMOTOR_PA.R.native.func.gii
```

```
|   ├── tfMRI_VISMOTOR_PA_SBRef.nii.gz
|   ├── tfMRI_VISMOTOR_PA_sebased_bias_dilated.nii.gz
|   ├── tfMRI_VISMOTOR_PA_sebased_bias.nii.gz
|   └── tfMRI_VISMOTOR_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_VISMOTOR_PA_preproc.txt
```

tfMRI VISMOTOR Preprocessed Extended

This package contains additional VISMOTOR 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 VISMOTOR (simultaneous motor and visual activation task) task scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriVismotorExtended

HCA9503576_V1_MR/
```
├── MNINonLinear
|   ├── Results/tfMRI_VISMOTOR_PA/
|   |   ├── RibbonVolumeToSurfaceMapping
|   |   |   └── goodvoxels.nii.gz
|   |   ├── tfMRI_VISMOTOR_PA_Atlas_mean.dscalar.nii
|   |   ├── tfMRI_VISMOTOR_PA_Atlas_MSMAll_mean.dscalar.nii
|   |   ├── tfMRI_VISMOTOR_PA_dims.txt
|   |   ├── tfMRI_VISMOTOR_PA_hp0.ica
|   |   |   └── mc
|   |   |       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |       └── prefiltered_func_data_mcf_conf_hp.nii.gz
|   |   ├── tfMRI_VISMOTOR_PA_mean.nii.gz
|   |   └── tfMRI_VISMOTOR_PA_MSMAll_dims.txt
|   └── xfms
|       ├── standard2tfMRI_VISMOTOR_PA.nii.gz
|       └── tfMRI_VISMOTOR_PA2standard.nii.gz
└── T1w
    └── Results/tfMRI_VISMOTOR_PA
        ├── tfMRI_VISMOTOR_PA_dropouts.nii.gz
        ├── tfMRI_VISMOTOR_PA_pseudo_transmit_field.nii.gz
        ├── tfMRI_VISMOTOR_PA_pseudo_transmit_raw.nii.gz
        ├── tfMRI_VISMOTOR_PA_sebased_bias.nii.gz
        └── tfMRI_VISMOTOR_PA_sebased_reference.nii.gz
```

Section C: HCP Development Unprocessed MR Data Directory Structure

Unprocessed data for each HCP Aging (HCA) subject is in the

<YourPkgName>/imagingcollection01/<SubjectID_V1_MR>/unprocessed/ directory

The V1_MR in the SubjectID signifies that these are MR data collected in Visit 1. In future releases, Visit 2 data will be available for some subjects.

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 subject HCD0001305_V1_MR has the following directory structure:

```
<YourPkgName>/imagingcollection01/HCD0001305_V1_MR/unprocessed/
├── Diffusion/
├── T1w_MPR_vNav_4e_e1e2_mean/
├── T2w_SPC_vNav/
├── mbPCASLhr/
├── rfMRI_REST1_AP/
├── rfMRI_REST1_PA/
├── rfMRI_REST2_AP/
├── rfMRI_REST2_PA/
├── tfMRI_CARIT_PA/
├── tfMRI_FACENAME_PA/
├── tfMRI_VISMOTOR_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

```
HCD0001305_V1_MR/unprocessed/
├── T1w_MPR_vNav_4e_e1e2_mean
│   ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e1e2_mean.json
│   ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e1e2_mean.nii.gz
│   └── OTHER_FILES
│       ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.json
│       ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.nii.gz
│       ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.json
```

```
|       ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e1.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e1.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e2.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e2.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e3.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e3.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e4.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_e4.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_RMS.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_4e_RMS.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e1.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e1.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e2.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e2.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e3.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e3.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e4.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_e4.nii.gz
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_RMS.json
|       ├── HCD0001305_V1_MR_T1w_MPR_vNav_Norm_4e_RMS.nii.gz
|       ├── HCD0001305_V1_MR_T1w_setter.json
|       ├── HCD0001305_V1_MR_T1w_setter.nii.gz
|       └── session_report.csv
└── T2w_SPC_vNav
    ├── HCD0001305_V1_MR_T2w_SPC_vNav.json
    ├── HCD0001305_V1_MR_T2w_SPC_vNav.nii.gz
    └── OTHER_FILES
        ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.json
        ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.nii.gz
        ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.json
        ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.nii.gz
        ├── HCD0001305_V1_MR_T2w_setter.json
        ├── HCD0001305_V1_MR_T2w_setter.nii.gz
        ├── HCD0001305_V1_MR_T2w_SPC_vNav_Norm.json
        └── HCD0001305_V1_MR_T2w_SPC_vNav_Norm.nii.gz
```

Unprocessed Resting State rfMRI

This package contains both 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

HCD0001305_V1_MR/unprocessed/

```
├── rfMRI_REST1_AP
│   ├── HCD0001305_V1_MR_rfMRI_REST1_AP.json
│   ├── HCD0001305_V1_MR_rfMRI_REST1_AP.nii.gz
│   ├── HCD0001305_V1_MR_rfMRI_REST1_AP_SBRef.json
│   ├── HCD0001305_V1_MR_rfMRI_REST1_AP_SBRef.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_abff1e95-416d-42d5-93ee-f294d7c1474a.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCD0001305_V1_A_run1_design.csv
│   │       └── REST_HCD0001305_V1_A_run1.mp4
│   └── OTHER_FILES
│       └── HCD0001305_V1_MR_rfMRI_REST1_AP_InitialFrames.nii.gz
├── rfMRI_REST1_PA
│   ├── HCD0001305_V1_MR_rfMRI_REST1_PA.json
│   ├── HCD0001305_V1_MR_rfMRI_REST1_PA.nii.gz
│   ├── HCD0001305_V1_MR_rfMRI_REST1_PA_SBRef.json
│   ├── HCD0001305_V1_MR_rfMRI_REST1_PA_SBRef.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_AP.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap1_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_5585efe7-1086-4b5c-87b6-44104c293c42.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCD0001305_V1_A_run2_design.csv
│   │       └── REST_HCD0001305_V1_A_run2.mp4
│   └── OTHER_FILES
│       └── HCD0001305_V1_MR_rfMRI_REST1_PA_InitialFrames.nii.gz
├── rfMRI_REST2_AP
│   ├── HCD0001305_V1_MR_rfMRI_REST2_AP.json
│   ├── HCD0001305_V1_MR_rfMRI_REST2_AP.nii.gz
│   ├── HCD0001305_V1_MR_rfMRI_REST2_AP_SBRef.json
│   ├── HCD0001305_V1_MR_rfMRI_REST2_AP_SBRef.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap3_AP.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap3_AP.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap3_PA.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap3_PA.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_d581a1d2-a2e5-4272-a6b2-016523ba7526.csv
│   │   └── PSYCHOPY
│   │       ├── REST_HCD0001305_V1_B_run1_design.csv
│   │       └── REST_HCD0001305_V1_B_run1.mp4
│   └── OTHER_FILES
│       └── HCD0001305_V1_MR_rfMRI_REST2_AP_InitialFrames.nii.gz
└── rfMRI_REST2_PA
    ├── HCD0001305_V1_MR_rfMRI_REST2_PA.json
```

```
├── HCD0001305_V1_MR_rfMRI_REST2_PA.nii.gz
├── HCD0001305_V1_MR_rfMRI_REST2_PA_SBRef.json
├── HCD0001305_V1_MR_rfMRI_REST2_PA_SBRef.nii.gz
├── HCD0001305_V1_MR_SpinEchoFieldMap3_AP.json
├── HCD0001305_V1_MR_SpinEchoFieldMap3_AP.nii.gz
├── HCD0001305_V1_MR_SpinEchoFieldMap3_PA.json
├── HCD0001305_V1_MR_SpinEchoFieldMap3_PA.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_fc9da1d4-ced2-4d41-9554-e925e6df3534.csv
│   └── PSYCHOPY
│       ├── REST_HCD0001305_V1_B_run2_design.csv
│       └── REST_HCD0001305_V1_B_run2.mp4
└── OTHER_FILES
    └── HCD0001305_V1_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 with reward history from GUESSING task), 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

HCD0001305_V1_MR/unprocessed/

```
├── tfMRI_CARIT_AP
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.nii.gz
│   ├── HCD0001305_V1_MR_tfMRI_CARIT_AP.json
│   ├── HCD0001305_V1_MR_tfMRI_CARIT_AP.nii.gz
│   ├── HCD0001305_V1_MR_tfMRI_CARIT_AP_SBRef.json
│   ├── HCD0001305_V1_MR_tfMRI_CARIT_AP_SBRef.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_575eacd0-bfec-4525-a0d1-720daaaba3c4.csv
│   │   └── PSYCHOPY
│   │       ├── CARIT_HCD0001305_V1_A_run2_stats.csv
│   │       ├── CARIT_HCD0001305_V1_A_run2_wide.csv
│   │       └── EVs
│   │           ├── go.txt
│   │           ├── miss.txt
│   │           ├── nogoCRLose.txt
│   │           ├── nogoCRWin.txt
│   │           ├── nogoFALose.txt
│   │           └── nogoFAWin.txt
│   └── OTHER_FILES
```

```
|           └── HCD0001305_V1_MR_tfMRI_CARIT_AP_InitialFrames.nii.gz
└── tfMRI_CARIT_PA
    ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.json
    ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.nii.gz
    ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.json
    ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.nii.gz
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA.json
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA.nii.gz
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA_SBRef.json
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA_SBRef.nii.gz
    ├── LINKED_DATA
    │   ├── PHYSIO
    │   │   └── Physio_combined_8a0aac8c-7d75-413c-8361-8d1ab3b7d389.csv
    │   └── PSYCHOPY
    │       ├── CARIT_HCD0001305_V1_A_run1_stats.csv
    │       ├── CARIT_HCD0001305_V1_A_run1_wide.csv
    │       └── EVs
    │           ├── go.txt
    │           ├── miss.txt
    │           ├── nogoCRLose.txt
    │           ├── nogoCRWin.txt
    │           ├── nogoFALose.txt
    │           └── nogoFAWin.txt
    └── OTHER_FILES
        └── HCD0001305_V1_MR_tfMRI_CARIT_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI EMOTION

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

UnprocTfmriEmotion

```
HCD0001305_V1_MR/unprocessed/tfMRI_EMOTION_PA
├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.json
├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.nii.gz
├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.json
├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.nii.gz
├── HCD0001305_V1_MR_tfMRI_EMOTION_PA.json
├── HCD0001305_V1_MR_tfMRI_EMOTION_PA.nii.gz
├── HCD0001305_V1_MR_tfMRI_EMOTION_PA_SBRef.json
├── HCD0001305_V1_MR_tfMRI_EMOTION_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_1944e135-e209-4ce5-a24d-0e35054092aa.csv
```

```
│       └── PSYCHOPY
│           ├── EMOTION_HCD0001305_V1_A_run1_stats.csv
│           ├── EMOTION_HCD0001305_V1_A_run1_wide.csv
│           └── EVs
│               ├── faces.txt
│               └── shapes.txt
└── OTHER_FILES
    └── HCD0001305_V1_MR_tfMRI_EMOTION_PA_InitialFrames.nii.gz
```

Unprocessed tfMRI GUESSING

This package contains the fMRI scans for the GUESSING task (in NIFTI format; reward, punishment, anticipatory reactivity task), acquired with AP/PA phase encoding, plus SpinEchoFieldMaps, SBRefs, PsychoPy event timing and task modeling files, and a Physio file containing pulse oximetry and respiratory traces for each run.

UnprocTfmriGuessing

HCD0001305_V1_MR/unprocessed/
```
├── tfMRI_GUESSING_AP
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.nii.gz
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.json
│   ├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.nii.gz
│   ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP.json
│   ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP.nii.gz
│   ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP_SBRef.json
│   ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP_SBRef.nii.gz
│   ├── LINKED_DATA
│   │   ├── PHYSIO
│   │   │   └── Physio_combined_40218750-ba35-4e66-a137-39a6716be262.csv
│   │   └── PSYCHOPY
│   │       ├── EVs
│   │       │   ├── cueHigh.txt
│   │       │   ├── cueLow.txt
│   │       │   ├── feedbackHighLose.txt
│   │       │   ├── feedbackHighWin.txt
│   │       │   ├── feedbackLowLose.txt
│   │       │   ├── feedbackLowWin.txt
│   │       │   └── guess.txt
│   │       ├── GUESSING_HCD0001305_V1_A_run2_stats.csv
│   │       └── GUESSING_HCD0001305_V1_A_run2_wide.csv
│   └── OTHER_FILES
│       └── HCD0001305_V1_MR_tfMRI_GUESSING_AP_InitialFrames.nii.gz
└── tfMRI_GUESSING_PA
    ├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.json
```

```
├── HCD0001305_V1_MR_SpinEchoFieldMap2_AP.nii.gz
├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.json
├── HCD0001305_V1_MR_SpinEchoFieldMap2_PA.nii.gz
├── HCD0001305_V1_MR_tfMRI_GUESSING_PA.json
├── HCD0001305_V1_MR_tfMRI_GUESSING_PA.nii.gz
├── HCD0001305_V1_MR_tfMRI_GUESSING_PA_SBRef.json
├── HCD0001305_V1_MR_tfMRI_GUESSING_PA_SBRef.nii.gz
├── LINKED_DATA
│   ├── PHYSIO
│   │   └── Physio_combined_4e9086b2-2a25-45df-b303-7f71d9a1a06a.csv
│   └── PSYCHOPY
│       ├── EVs
│       │   ├── cueHigh.txt
│       │   ├── cueLow.txt
│       │   ├── feedbackHighLose.txt
│       │   ├── feedbackHighWin.txt
│       │   ├── feedbackLowLose.txt
│       │   ├── feedbackLowWin.txt
│       │   └── guess.txt
│       ├── GUESSING_HCD0001305_V1_A_run1_stats.csv
│       └── GUESSING_HCD0001305_V1_A_run1_wide.csv
└── OTHER_FILES
    └── HCD0001305_V1_MR_tfMRI_GUESSING_PA_InitialFrames.nii.gz
```

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

HCD0001305_V1_MR/unprocessed/Diffusion/
```
├── HCD0001305_V1_MR_dMRI_dir98_AP.bval
├── HCD0001305_V1_MR_dMRI_dir98_AP.bvec
├── HCD0001305_V1_MR_dMRI_dir98_AP.json
├── HCD0001305_V1_MR_dMRI_dir98_AP.nii.gz
├── HCD0001305_V1_MR_dMRI_dir98_AP_SBRef.json
├── HCD0001305_V1_MR_dMRI_dir98_AP_SBRef.nii.gz
├── HCD0001305_V1_MR_dMRI_dir98_PA.bval
├── HCD0001305_V1_MR_dMRI_dir98_PA.bvec
├── HCD0001305_V1_MR_dMRI_dir98_PA.json
├── HCD0001305_V1_MR_dMRI_dir98_PA.nii.gz
├── HCD0001305_V1_MR_dMRI_dir98_PA_SBRef.json
├── HCD0001305_V1_MR_dMRI_dir98_PA_SBRef.nii.gz
├── HCD0001305_V1_MR_dMRI_dir99_AP.bval
```

```
├── HCD0001305_V1_MR_dMRI_dir99_AP.bvec
├── HCD0001305_V1_MR_dMRI_dir99_AP.json
├── HCD0001305_V1_MR_dMRI_dir99_AP.nii.gz
├── HCD0001305_V1_MR_dMRI_dir99_AP_SBRef.json
├── HCD0001305_V1_MR_dMRI_dir99_AP_SBRef.nii.gz
├── HCD0001305_V1_MR_dMRI_dir99_PA.bval
├── HCD0001305_V1_MR_dMRI_dir99_PA.bvec
├── HCD0001305_V1_MR_dMRI_dir99_PA.json
├── HCD0001305_V1_MR_dMRI_dir99_PA.nii.gz
├── HCD0001305_V1_MR_dMRI_dir99_PA_SBRef.json
├── HCD0001305_V1_MR_dMRI_dir99_PA_SBRef.nii.gz
└── OTHER_FILES
        ├── HCD0001305_V1_MR_SpinEchoFieldMap4_AP.json
        ├── HCD0001305_V1_MR_SpinEchoFieldMap4_AP.nii.gz
        ├── HCD0001305_V1_MR_SpinEchoFieldMap4_PA.json
        └── HCD0001305_V1_MR_SpinEchoFieldMap4_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

HCD0001305_V1_MR/unprocessed/mbPCASLhr/
```
├── HCD0001305_V1_MR_mbPCASLhr_PA.json
├── HCD0001305_V1_MR_mbPCASLhr_PA.nii.gz
├── HCD0001305_V1_MR_PCASLhr_SpinEchoFieldMap_AP.json
├── HCD0001305_V1_MR_PCASLhr_SpinEchoFieldMap_AP.nii.gz
├── HCD0001305_V1_MR_PCASLhr_SpinEchoFieldMap_PA.json
├── HCD0001305_V1_MR_PCASLhr_SpinEchoFieldMap_PA.nii.gz
└── LINKED_DATA
        └── PSYCHOPY
                ├── mbPCASL_HCD0001305_V1_B_run1_design.csv
                └── mbPCASL_HCD0001305_V1_B_run1.mp4
```

Section D: HCP Development Preprocessed MR Data Directory Structure

For the Lifespan 2.0 Release, minimally preprocessed MR data is available on a subset of HCP Aging (HCA) subjects in the

<YourPkgName>/fmriresults01/<SubjectID_V1_MR>/ directory.

Note: The structural preprocessing for the Lifespan 2.0 Release does include both MSMSulc and MSMAll registration-based processing.

As in the HCP-YA data, the high level <SubjectID_V1_MR> directory (e.g., **HCD0001305_V1_MR/**, as exemplified here) includes these subdirectories produced by the HCP structural pipeline:

```
<YourPkgName>/fmriresults01/HCD0001305_V1_MR/
├── MNINonLinear/
├── T1w/
├── unprocessed/T1w_MPR_vNav_4e_e1e2_mean/
        └── OTHER_FILES/
                session_report.csv
```

<YourPkgName>/fmriresults01/HCD0001305_V1_MR/MNINonLinear/Results/

in turn contains subdirectories for 4 rfMRI scans (6.5 min each), collected in 2 sessions (REST1, REST2), and 3 tfMRI scans.

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

```
HCD0001305_V1_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
│   │   ├── HCD0001305_V1_MR.ArealDistortion_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.BiasField_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.corrThickness_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.curvature_MSMAll.32k_fs_LR.dscalar.nii
```

```
│   │   ├── HCD0001305_V1_MR.EdgeDistortion_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.L.atlasroi.32k_fs_LR.shape.gii
│   │   ├── HCD0001305_V1_MR.L.flat.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.sphere.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.MSMAll.32k_fs_LR.wb.spec
│   │   ├── HCD0001305_V1_MR.MyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.MyelinMap_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.R.atlasroi.32k_fs_LR.shape.gii
│   │   ├── HCD0001305_V1_MR.R.flat.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.sphere.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.SphericalDistortion_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.StrainJ_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.StrainR_MSMAll.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.sulc_MSMAll.32k_fs_LR.dscalar.nii
│   │   └── HCD0001305_V1_MR.thickness_MSMAll.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.ArealDistortion_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.corrThickness_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.curvature_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.EdgeDistortion_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.L.atlasroi.164k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.L.flat.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.inflated_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.midthickness_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.pial_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.sphere.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.very_inflated_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.L.white_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.MSMAll.164k_fs_LR.wb.spec
│   ├── HCD0001305_V1_MR.MyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.R.atlasroi.164k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.R.flat.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.R.inflated_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.R.midthickness_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.R.pial_MSMAll.164k_fs_LR.surf.gii
│   ├── HCD0001305_V1_MR.R.sphere.164k_fs_LR.surf.gii
```

```
|   ├── HCD0001305_V1_MR.R.very_inflated_MSMAll.164k_fs_LR.surf.gii
|   ├── HCD0001305_V1_MR.R.white_MSMAll.164k_fs_LR.surf.gii
|   ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC_MSMAll.164k_fs_LR.dscalar.nii
|   ├── HCD0001305_V1_MR.SphericalDistortion_MSMAll.164k_fs_LR.dscalar.nii
|   ├── HCD0001305_V1_MR.StrainJ_MSMAll.164k_fs_LR.dscalar.nii
|   ├── HCD0001305_V1_MR.StrainR_MSMAll.164k_fs_LR.dscalar.nii
|   ├── HCD0001305_V1_MR.sulc_MSMAll.164k_fs_LR.dscalar.nii
|   ├── HCD0001305_V1_MR.thickness_MSMAll.164k_fs_LR.dscalar.nii
|   ├── Native
|   |   ├── HCD0001305_V1_MR.aparc.a2009s.native.dlabel.nii
|   |   ├── HCD0001305_V1_MR.aparc.native.dlabel.nii
|   |   ├── HCD0001305_V1_MR.ArealDistortion_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.BiasField_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.corrThickness.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.curvature.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.EdgeDistortion_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.L.atlasroi.native.shape.gii
|   |   ├── HCD0001305_V1_MR.L.inflated.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.midthickness.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.pial.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.roi.native.shape.gii
|   |   ├── HCD0001305_V1_MR.L.sphere.MSMAll.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.sphere.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.very_inflated.native.surf.gii
|   |   ├── HCD0001305_V1_MR.L.white.native.surf.gii
|   |   ├── HCD0001305_V1_MR.MyelinMap_BC_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.MyelinMap.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.native.wb.spec
|   |   ├── HCD0001305_V1_MR.R.atlasroi.native.shape.gii
|   |   ├── HCD0001305_V1_MR.R.inflated.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.midthickness.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.pial.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.roi.native.shape.gii
|   |   ├── HCD0001305_V1_MR.R.sphere.MSMAll.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.sphere.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.very_inflated.native.surf.gii
|   |   ├── HCD0001305_V1_MR.R.white.native.surf.gii
|   |   ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.SmoothedMyelinMap.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.SphericalDistortion.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.StrainJ_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.StrainR_MSMAll.native.dscalar.nii
|   |   ├── HCD0001305_V1_MR.sulc.native.dscalar.nii
|   |   └── HCD0001305_V1_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
|   ├── HCD0001305_V1_MR.StructuralPreprocessing.PROCESS_DATA_job.sh
|   ├── processing
|   |   ├── batch_MsmAll.txt
|   |   └── batch_Structural_preproc.txt
|   └── QuNex/processing/logs
|       ├── comlogs
|       |   ├── done_hcp1_HCD0001305_V1_MR_2019-09-15_08.14.1568553294.log
|       |   ├── done_hcp2_HCD0001305_V1_MR_2019-09-15_09.29.1568557756.log
|       |   ├── done_hcp3_HCD0001305_V1_MR_2019-09-16_00.44.1568612655.log
|       |   └── done_setupHCP_HCD0001305_V1_MR_2019-09-15.08.14.51.261790.log
|       ├── runlogs
|       |   ├── Log-hcp1-2019-09-15_08.14.1568553294.log
|       |   ├── Log-hcp2-2019-09-15_09.29.1568557756.log
|       |   └── Log-hcp3-2019-09-16_00.44.1568612655.log
|       ├── run_qunex.sh_2019-09-15-08-14-41.log
|       └── run_qunex.sh_2020-05-16-08-57-16.log
├── T1w
|   ├── aparc.a2009s+aseg.nii.gz
|   ├── aparc+aseg.nii.gz
|   ├── BiasField_acpc_dc.nii.gz
|   ├── brainmask_fs.nii.gz
|   ├── fsaverage_LR32k
|   |   ├── HCD0001305_V1_MR.L.inflated_MSMAll.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.midthickness_MSMAll.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.midthickness_MSMAll_va.32k_fs_LR.shape.gii
|   |   ├── HCD0001305_V1_MR.L.pial_MSMAll.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.very_inflated_MSMAll.32k_fs_LR.surf.gii
```

```
│   │       ├── HCD0001305_V1_MR.L.white_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCD0001305_V1_MR.midthickness_MSMAll_va.32k_fs_LR.dscalar.nii
│   │       ├── HCD0001305_V1_MR.midthickness_MSMAll_va_norm.32k_fs_LR.dscalar.nii
│   │       ├── HCD0001305_V1_MR.MSMAll.32k_fs_LR.wb.spec
│   │       ├── HCD0001305_V1_MR.R.inflated_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCD0001305_V1_MR.R.midthickness_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCD0001305_V1_MR.R.midthickness_MSMAll_va.32k_fs_LR.shape.gii
│   │       ├── HCD0001305_V1_MR.R.pial_MSMAll.32k_fs_LR.surf.gii
│   │       ├── HCD0001305_V1_MR.R.very_inflated_MSMAll.32k_fs_LR.surf.gii
│   │       └── HCD0001305_V1_MR.R.white_MSMAll.32k_fs_LR.surf.gii
│   ├── HCD0001305_V1_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
│   │   ├── HCD0001305_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.pial.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.white.native.surf.gii
│   │   ├── HCD0001305_V1_MR.native.wb.spec
│   │   ├── HCD0001305_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.pial.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.very_inflated.native.surf.gii
│   │   └── HCD0001305_V1_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

HCD0001305_V1_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
│   │   ├── HCD0001305_V1_MR.32k_fs_LR.wb.spec
│   │   ├── HCD0001305_V1_MR.aparc.32k_fs_LR.dlabel.nii
│   │   ├── HCD0001305_V1_MR.aparc.a2009s.32k_fs_LR.dlabel.nii
│   │   ├── HCD0001305_V1_MR.ArealDistortion_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.BiasField_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.corrThickness.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.curvature.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.EdgeDistortion_MSMSulc.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.L.atlasroi.32k_fs_LR.shape.gii
│   │   ├── HCD0001305_V1_MR.L.flat.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.inflated.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.midthickness.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.pial.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.sphere.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.very_inflated.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.L.white.32k_fs_LR.surf.gii
│   │   ├── HCD0001305_V1_MR.MyelinMap.32k_fs_LR.dscalar.nii
│   │   ├── HCD0001305_V1_MR.MyelinMap_BC.32k_fs_LR.dscalar.nii
```

```
│  │    ├── HCD0001305_V1_MR.R.atlasroi.32k_fs_LR.shape.gii
│  │    ├── HCD0001305_V1_MR.R.flat.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.inflated.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.midthickness.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.pial.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.sphere.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.very_inflated.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.R.white.32k_fs_LR.surf.gii
│  │    ├── HCD0001305_V1_MR.SmoothedMyelinMap.32k_fs_LR.dscalar.nii
│  │    ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC.32k_fs_LR.dscalar.nii
│  │    ├── HCD0001305_V1_MR.StrainJ_MSMSulc.32k_fs_LR.dscalar.nii
│  │    ├── HCD0001305_V1_MR.StrainR_MSMSulc.32k_fs_LR.dscalar.nii
│  │    ├── HCD0001305_V1_MR.sulc.32k_fs_LR.dscalar.nii
│  │    └── HCD0001305_V1_MR.thickness.32k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.164k_fs_LR.wb.spec
│  ├── HCD0001305_V1_MR.aparc.164k_fs_LR.dlabel.nii
│  ├── HCD0001305_V1_MR.aparc.a2009s.164k_fs_LR.dlabel.nii
│  ├── HCD0001305_V1_MR.ArealDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.corrThickness.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.curvature.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.EdgeDistortion_MSMSulc.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.L.atlasroi.164k_fs_LR.shape.gii
│  ├── HCD0001305_V1_MR.L.flat.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.inflated.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.midthickness.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.pial.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.sphere.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.very_inflated.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.L.white.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.MyelinMap.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.MyelinMap_BC.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.R.atlasroi.164k_fs_LR.shape.gii
│  ├── HCD0001305_V1_MR.R.flat.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.inflated.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.midthickness.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.pial.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.sphere.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.very_inflated.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.R.white.164k_fs_LR.surf.gii
│  ├── HCD0001305_V1_MR.SmoothedMyelinMap.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.StrainJ_MSMSulc.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.StrainR_MSMSulc.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.sulc.164k_fs_LR.dscalar.nii
│  ├── HCD0001305_V1_MR.thickness.164k_fs_LR.dscalar.nii
│  ├── Native
```

```
│   │   ├── HCD0001305_V1_MR.aparc.a2009s.native.dlabel.nii
│   │   ├── HCD0001305_V1_MR.aparc.native.dlabel.nii
│   │   ├── HCD0001305_V1_MR.ArealDistortion_MSMSulc.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.corrThickness.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.curvature.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.EdgeDistortion_MSMSulc.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.L.atlasroi.native.shape.gii
│   │   ├── HCD0001305_V1_MR.L.inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.midthickness.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.pial.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.roi.native.shape.gii
│   │   ├── HCD0001305_V1_MR.L.sphere.MSMSulc.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.sphere.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.very_inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.L.white.native.surf.gii
│   │   ├── HCD0001305_V1_MR.MyelinMap_BC.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.MyelinMap.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.native.wb.spec
│   │   ├── HCD0001305_V1_MR.R.atlasroi.native.shape.gii
│   │   ├── HCD0001305_V1_MR.R.inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.midthickness.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.pial.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.roi.native.shape.gii
│   │   ├── HCD0001305_V1_MR.R.sphere.MSMSulc.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.sphere.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.very_inflated.native.surf.gii
│   │   ├── HCD0001305_V1_MR.R.white.native.surf.gii
│   │   ├── HCD0001305_V1_MR.SmoothedMyelinMap_BC.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.SmoothedMyelinMap.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.SphericalDistortion.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.StrainJ_MSMSulc.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.StrainR_MSMSulc.native.dscalar.nii
│   │   ├── HCD0001305_V1_MR.sulc.native.dscalar.nii
│   │   └── HCD0001305_V1_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
|   |   ├── HCD0001305_V1_MR.32k_fs_LR.wb.spec
|   |   ├── HCD0001305_V1_MR.L.inflated.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.midthickness.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.midthickness_va.32k_fs_LR.shape.gii
|   |   ├── HCD0001305_V1_MR.L.pial.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.very_inflated.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.L.white.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.midthickness_va.32k_fs_LR.dscalar.nii
|   |   ├── HCD0001305_V1_MR.midthickness_va_norm.32k_fs_LR.dscalar.nii
|   |   ├── HCD0001305_V1_MR.R.inflated.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.R.midthickness.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.R.midthickness_va.32k_fs_LR.shape.gii
|   |   ├── HCD0001305_V1_MR.R.pial.32k_fs_LR.surf.gii
|   |   ├── HCD0001305_V1_MR.R.very_inflated.32k_fs_LR.surf.gii
|   |   └── HCD0001305_V1_MR.R.white.32k_fs_LR.surf.gii
|   ├── HCD0001305_V1_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
|   |       ├── HCD0001305_V1_MR.L.inflated.native.surf.gii
|   |       ├── HCD0001305_V1_MR.L.midthickness.native.surf.gii
|   |       ├── HCD0001305_V1_MR.L.pial.native.surf.gii
|   |       ├── HCD0001305_V1_MR.L.very_inflated.native.surf.gii
|   |       ├── HCD0001305_V1_MR.L.white.native.surf.gii
|   |       ├── HCD0001305_V1_MR.native.wb.spec
|   |       ├── HCD0001305_V1_MR.R.inflated.native.surf.gii
|   |       ├── HCD0001305_V1_MR.R.midthickness.native.surf.gii
|   |       ├── HCD0001305_V1_MR.R.pial.native.surf.gii
|   |       ├── HCD0001305_V1_MR.R.very_inflated.native.surf.gii
|   |       └── HCD0001305_V1_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

HCD0001305_V1_MR/T1w/HCD0001305_V1_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

HCD0001305_V1_MR/MNINonLinear/
```
├── fsaverage_LR32k
│   ├── HCD0001305_V1_MR.ArealDistortion_FS.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.atlas_MyelinMap_BC.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.atlas_RSNs_d40.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.atlas_Topography.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.EdgeDistortion_FS.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.individual_RSNs_d40_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.individual_Topography_MSMAll_InitialReg_2_d40_WRN.32k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.L.aparc.32k_fs_LR.label.gii
│   ├── HCD0001305_V1_MR.L.aparc.a2009s.32k_fs_LR.label.gii
│   ├── HCD0001305_V1_MR.L.ArealDistortion_FS.32k_fs_LR.shape.gii
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│   ├── HCD0001305_V1_MR.L.corrThickness.32k_fs_LR.shape.gii
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│   ├── HCD0001305_V1_MR.L.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.L.MyelinMap.32k_fs_LR.func.gii
│   ├── HCD0001305_V1_MR.L.MyelinMap_BC.32k_fs_LR.func.gii
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│   ├── HCD0001305_V1_MR.L.StrainJ_FS.32k_fs_LR.shape.gii
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│   ├── HCD0001305_V1_MR.L.thickness.32k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.R.aparc.32k_fs_LR.label.gii
│   ├── HCD0001305_V1_MR.R.aparc.a2009s.32k_fs_LR.label.gii
│   ├── HCD0001305_V1_MR.R.ArealDistortion_FS.32k_fs_LR.shape.gii
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```

```
│   ├── HCD0001305_V1_MR.R.EdgeDistortion_FS.32k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.R.EdgeDistortion_MSMSulc.32k_fs_LR.shape.gii
│   ├── HCD0001305_V1_MR.R.MyelinMap.32k_fs_LR.func.gii
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│   ├── HCD0001305_V1_MR.R.thickness.32k_fs_LR.shape.gii
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│   └── HCD0001305_V1_MR.StrainR_FS.32k_fs_LR.dscalar.nii
├── HCD0001305_V1_MR.ArealDistortion_FS.164k_fs_LR.dscalar.nii
├── HCD0001305_V1_MR.EdgeDistortion_FS.164k_fs_LR.dscalar.nii
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├── HCD0001305_V1_MR.L.aparc.a2009s.164k_fs_LR.label.gii
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├── HCD0001305_V1_MR.R.ArealDistortion_FS.164k_fs_LR.shape.gii
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├── HCD0001305_V1_MR.R.EdgeDistortion_MSMSulc.164k_fs_LR.shape.gii
├── HCD0001305_V1_MR.R.MyelinMap.164k_fs_LR.func.gii
├── HCD0001305_V1_MR.R.MyelinMap_BC.164k_fs_LR.func.gii
```

```
├── HCD0001305_V1_MR.R.RefMyelinMap.164k_fs_LR.func.gii
├── HCD0001305_V1_MR.R.refsulc.164k_fs_LR.shape.gii
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├── HCD0001305_V1_MR.R.StrainJ_MSMSulc.164k_fs_LR.shape.gii
├── HCD0001305_V1_MR.R.StrainR_FS.164k_fs_LR.shape.gii
├── HCD0001305_V1_MR.R.StrainR_MSMSulc.164k_fs_LR.shape.gii
├── HCD0001305_V1_MR.R.sulc.164k_fs_LR.shape.gii
├── HCD0001305_V1_MR.R.thickness.164k_fs_LR.shape.gii
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├── HCD0001305_V1_MR.StrainR_FS.164k_fs_LR.dscalar.nii
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│   ├── HCD0001305_V1_MR.EdgeDistortion_FS.native.dscalar.nii
│   ├── HCD0001305_V1_MR.L.aparc.a2009s.native.label.gii
│   ├── HCD0001305_V1_MR.L.aparc.native.label.gii
│   ├── HCD0001305_V1_MR.L.ArealDistortion_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.L.ArealDistortion_MSMAll.native.shape.gii
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│   ├── HCD0001305_V1_MR.L.EdgeDistortion_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.L.EdgeDistortion_MSMSulc.native.shape.gii
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│   ├── HCD0001305_V1_MR.L.RefMyelinMap.native.func.gii
│   ├── HCD0001305_V1_MR.L.SmoothedMyelinMap_BC.native.func.gii
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│   ├── HCD0001305_V1_MR.L.sphere.reg.native.surf.gii
│   ├── HCD0001305_V1_MR.L.sphere.reg.reg_LR.native.surf.gii
│   ├── HCD0001305_V1_MR.L.sphere.rot.native.surf.gii
│   ├── HCD0001305_V1_MR.L.SphericalDistortion.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainJ_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainJ_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainJ_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainR_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainR_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.L.StrainR_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.L.sulc.native.shape.gii
│   ├── HCD0001305_V1_MR.L.thickness.native.shape.gii
│   ├── HCD0001305_V1_MR.R.aparc.a2009s.native.label.gii
│   ├── HCD0001305_V1_MR.R.aparc.native.label.gii
│   ├── HCD0001305_V1_MR.R.ArealDistortion_FS.native.shape.gii
```

```
│   ├── HCD0001305_V1_MR.R.ArealDistortion_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.R.ArealDistortion_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.R.BiasField.native.func.gii
│   ├── HCD0001305_V1_MR.R.corrThickness.native.shape.gii
│   ├── HCD0001305_V1_MR.R.curvature.native.shape.gii
│   ├── HCD0001305_V1_MR.R.EdgeDistortion_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.R.EdgeDistortion_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.R.EdgeDistortion_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.R.MyelinMap_BC.native.func.gii
│   ├── HCD0001305_V1_MR.R.MyelinMap.native.func.gii
│   ├── HCD0001305_V1_MR.R.RefMyelinMap.native.func.gii
│   ├── HCD0001305_V1_MR.R.SmoothedMyelinMap_BC.native.func.gii
│   ├── HCD0001305_V1_MR.R.SmoothedMyelinMap.native.func.gii
│   ├── HCD0001305_V1_MR.R.sphere.reg.native.surf.gii
│   ├── HCD0001305_V1_MR.R.sphere.reg.reg_LR.native.surf.gii
│   ├── HCD0001305_V1_MR.R.sphere.rot.native.surf.gii
│   ├── HCD0001305_V1_MR.R.SphericalDistortion.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainJ_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainJ_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainJ_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainR_FS.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainR_MSMAll.native.shape.gii
│   ├── HCD0001305_V1_MR.R.StrainR_MSMSulc.native.shape.gii
│   ├── HCD0001305_V1_MR.R.sulc.native.shape.gii
│   ├── HCD0001305_V1_MR.R.thickness.native.shape.gii
│   ├── HCD0001305_V1_MR.StrainJ_FS.native.dscalar.nii
│   └── HCD0001305_V1_MR.StrainR_FS.native.dscalar.nii
├── StructuralQC
│   ├── HCD0001305_V1_MR.NonlinearRegJacobians_FNIRT.164k_fs_LR.dscalar.nii
│   ├── HCD0001305_V1_MR.NonlinearRegJacobians_log2.nii.gz
│   ├── HCD0001305_V1_MR.structuralQC.wb.scene
│   ├── HCD0001305_V1_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
│       ├── HCD0001305_V1_MR.structuralQC.wb.scene1.png
│       ├── HCD0001305_V1_MR.structuralQC.wb.scene2.png
│       ├── HCD0001305_V1_MR.structuralQC.wb.scene3.png
│       └── HCD0001305_V1_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.

PreprocRfmriRecommended

```
HCD0001305_V1_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_abff1e95-416d-42d5-93ee-f294d7c1474a.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_5585efe7-1086-4b5c-87b6-44104c293c42.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_d581a1d2-a2e5-4272-a6b2-016523ba7526.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_fc9da1d4-ced2-4d41-9554-e925e6df3534.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
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8906658
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8906658
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8219119
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8219119
    ├── HCD0001305_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864107
    ├── HCD0001305_V1_MR_rfMRI_REST1_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864107
    ├── HCD0001305_V1_MR_rfMRI_REST1_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864120
    ├── HCD0001305_V1_MR_rfMRI_REST2_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864120
    ├── HCD0001305_V1_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864126
    ├── HCD0001305_V1_MR_rfMRI_REST2_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864126
    ├── 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_HCD0001305_V1_MR_2020-01-28_11.38.1580233096.log
    │   ├── done_hcp4_rfMRI_REST1_PA_HCD0001305_V1_MR_2020-01-28_11.39.1580233178.log
    │   ├── done_hcp4_rfMRI_REST2_AP_HCD0001305_V1_MR_2020-01-28_11.38.1580233136.log
    │   ├── done_hcp4_rfMRI_REST2_PA_HCD0001305_V1_MR_2020-01-28_11.38.1580233135.log
    │   ├── done_hcp5_rfMRI_REST1_AP_HCD0001305_V1_MR_2020-01-29_08.40.1580308831.log
    │   ├── done_hcp5_rfMRI_REST1_PA_HCD0001305_V1_MR_2020-01-29_08.40.1580308850.log
    │   ├── done_hcp5_rfMRI_REST2_AP_HCD0001305_V1_MR_2020-01-28_17.47.1580255257.log
    │   ├── done_hcp5_rfMRI_REST2_PA_HCD0001305_V1_MR_2020-01-28_15.44.1580247849.log
    │   ├── done_hcp_DeDriftAndResample_fMRI_CONCAT_ALL_HCD0001305_V1_MR_2020-05-16_12.07.1589648822.log
    │   ├── done_hcp_ICAFix_fMRI_CONCAT_ALL_HCD0001305_V1_MR_2020-03-30_16.23.1585603401.log
    │   ├── done_hcp_MSMAll_fMRI_CONCAT_ALL_HCD0001305_V1_MR_2020-05-16_08.57.1589637451.log
    │   ├── done_hcp_PostFix_fMRI_CONCAT_ALL_HCD0001305_V1_MR_2020-03-31_04.39.1585647545.log
    │   ├── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.38.07.820142.log
    │   ├── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.38.46.485677.log
    │   ├── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.38.46.693194.log
    │   └── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.24.558555.log
    ├── runlogs
    │   ├── Log-hcp4-2020-01-28_11.38.1580233096.log
    │   ├── Log-hcp4-2020-01-28_11.38.1580233135.log
    │   ├── Log-hcp4-2020-01-28_11.38.1580233136.log
    │   ├── Log-hcp4-2020-01-28_11.39.1580233178.log
    │   ├── Log-hcp5-2020-01-28_15.44.1580247849.log
    │   ├── Log-hcp5-2020-01-28_17.47.1580255257.log
    │   ├── Log-hcp5-2020-01-29_08.40.1580308831.log
    │   ├── Log-hcp5-2020-01-29_08.40.1580308849.log
    │   ├── Log-hcp_ICAFix-2020-03-30_16.23.1585603400.log
    │   └── Log-hcp_MSMAll-2020-05-16_08.57.1589637450.log
    ├── run_qunex.sh_2020-01-28-11-37-57.log
    ├── run_qunex.sh_2020-01-28-11-38-35.log
    ├── run_qunex.sh_2020-01-28-11-38-36.log
    ├── run_qunex.sh_2020-01-28-11-39-02.log
    ├── run_qunex.sh_2020-03-30-16-23-08.log
    └── run_qunex.sh_2020-05-16-08-57-16.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.

PreprocRfmriLegacySurface

```
HCD0001305_V1_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_abff1e95-416d-42d5-93ee-f294d7c1474a.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_5585efe7-1086-4b5c-87b6-44104c293c42.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_d581a1d2-a2e5-4272-a6b2-016523ba7526.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_fc9da1d4-ced2-4d41-9554-e925e6df3534.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.

PreprocRfmriLegacyVolume

```
HCD0001305_V1_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_abff1e95-416d-42d5-93ee-f294d7c1474a.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_5585efe7-1086-4b5c-87b6-44104c293c42.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_d581a1d2-a2e5-4272-a6b2-016523ba7526.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_fc9da1d4-ced2-4d41-9554-e925e6df3534.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.

PreprocRfmriUncleaned

```
HCD0001305_V1_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_abff1e95-416d-42d5-93ee-f294d7c1474a.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_5585efe7-1086-4b5c-87b6-44104c293c42.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_d581a1d2-a2e5-4272-a6b2-016523ba7526.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_fc9da1d4-ced2-4d41-9554-e925e6df3534.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

HCD0001305_V1_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
│   │   │   ├── fMRI_CONCAT_ALL_hp0_vn.nii.gz
│   │   │   ├── fMRI_CONCAT_ALL_mean.nii.gz
│   │   │   ├── fMRI_CONCAT_ALL_Runs.csv
│   │   │   ├── fMRI_CONCAT_ALL_SBRef.nii.gz
│   │   │   ├── HCD0001305_V1_MR_fMRI_CONCAT_ALL_hp0_ICA_Classification_dualscreen.scene
│   │   │   ├── HCD0001305_V1_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 with reward history from GUESSING task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriCaritRecommended

```
HCD0001305_V1_MR/
├── MNINonLinear/Results/
│   ├── tfMRI_CARIT_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── go.txt
│   │   │   ├── miss.txt
│   │   │   ├── nogoCRLose.txt
│   │   │   ├── nogoCRWin.txt
│   │   │   ├── nogoFALose.txt
│   │   │   └── nogoFAWin.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_575eacd0-bfec-4525-a0d1-720daaaba3c4.csv
│   │   ├── tfMRI_CARIT_AP_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   ├── tfMRI_CARIT_AP_Atlas_MSMAll_hp0_clean.README.txt
│   │   ├── tfMRI_CARIT_AP_Atlas_MSMAll_hp0_vn.dscalar.nii
│   │   ├── tfMRI_CARIT_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_CARIT_AP_dropouts.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.stats.txt
│   │   ├── tfMRI_CARIT_AP_fovmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_Jacobian.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_field.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_raw.nii.gz
│   │   ├── tfMRI_CARIT_AP_SBRef.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias_dilated.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias.nii.gz
│   │   └── tfMRI_CARIT_AP_sebased_reference.nii.gz
│   └── tfMRI_CARIT_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │   ├── go.txt
│       │   ├── miss.txt
│       │   ├── nogoCRLose.txt
│       │   ├── nogoCRWin.txt
│       │   ├── nogoFALose.txt
│       │   └── nogoFAWin.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_8a0aac8c-7d75-413c-8361-8d1ab3b7d389.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
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8906658
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8906658
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8219119
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8219119
    ├── HCD0001305_V1_MR_tfMRI_CARIT_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_tfMRI_CARIT_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864132
    ├── HCD0001305_V1_MR_tfMRI_CARIT_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864132
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864141
    ├── HCD0001305_V1_MR_tfMRI_CARIT_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864141
    ├── processing
    |   ├── batch_tfMRI_CARIT_AP_preproc.txt
    |   └── batch_tfMRI_CARIT_PA_preproc.txt
    └── QuNex/processing/logs/
        ├── comlogs
        |   ├── done_hcp4_tfMRI_CARIT_AP_HCD0001305_V1_MR_2020-01-28_11.39.1580233170.log
        |   ├── done_hcp4_tfMRI_CARIT_PA_HCD0001305_V1_MR_2020-01-28_11.39.1580233172.log
        |   ├── done_hcp5_tfMRI_CARIT_AP_HCD0001305_V1_MR_2020-01-28_14.26.1580243209.log
        |   ├── done_hcp5_tfMRI_CARIT_PA_HCD0001305_V1_MR_2020-01-28_14.28.1580243328.log
        |   ├── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.21.604395.log
        |   └── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.23.679165.log
        ├── runlogs
        |   ├── Log-hcp4-2020-01-28_11.39.1580233170.log
        |   ├── Log-hcp4-2020-01-28_11.39.1580233172.log
        |   ├── Log-hcp5-2020-01-28_14.26.1580243209.log
        |   ├── Log-hcp5-2020-01-28_14.28.1580243328.log
        |   ├── Log-hcp_ICAFix-2020-03-30_16.23.1585603400.log
        |   └── Log-hcp_MSMAll-2020-05-16_08.57.1589637450.log
        ├── run_qunex.sh_2020-01-28-11-39-12.log
        ├── run_qunex.sh_2020-01-28-11-39-13.log
        ├── run_qunex.sh_2020-03-30-16-23-08.log
        └── run_qunex.sh_2020-05-16-08-57-16.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 with reward history from GUESSING task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

PreprocTfmriCaritLegacySurface

```
HCD0001305_V1_MR/
├── MNINonLinear/Results/
│   ├── tfMRI_CARIT_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── go.txt
│   │   │   ├── miss.txt
│   │   │   ├── nogoCRLose.txt
│   │   │   ├── nogoCRWin.txt
│   │   │   ├── nogoFALose.txt
│   │   │   └── nogoFAWin.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_575eacd0-bfec-4525-a0d1-720daaaba3c4.csv
│   │   ├── tfMRI_CARIT_AP_Atlas_hp0_clean.dtseries.nii
│   │   ├── tfMRI_CARIT_AP_Atlas_hp0_clean.README.txt
│   │   ├── tfMRI_CARIT_AP_Atlas_hp0_vn.dscalar.nii
│   │   ├── tfMRI_CARIT_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_CARIT_AP_dropouts.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.stats.txt
│   │   ├── tfMRI_CARIT_AP_fovmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_Jacobian.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_field.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_raw.nii.gz
│   │   ├── tfMRI_CARIT_AP_SBRef.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias_dilated.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias.nii.gz
│   │   └── tfMRI_CARIT_AP_sebased_reference.nii.gz
│   └── tfMRI_CARIT_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
```

```
│         │     ├── go.txt
│         │     ├── miss.txt
│         │     ├── nogoCRLose.txt
│         │     ├── nogoCRWin.txt
│         │     ├── nogoFALose.txt
│         │     └── nogoFAWin.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_8a0aac8c-7d75-413c-8361-8d1ab3b7d389.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_AP_preproc.txt
        └── 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 with reward history from GUESSING task) tfMRI scan, which is the result of applying the GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

PreprocTfmriCaritLegacyVolume

HCD0001305_V1_MR/

```
├── MNINonLinear/Results/
│   ├── tfMRI_CARIT_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── go.txt
│   │   │   ├── miss.txt
│   │   │   ├── nogoCRLose.txt
│   │   │   ├── nogoCRWin.txt
│   │   │   ├── nogoFALose.txt
│   │   │   └── nogoFAWin.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_575eacd0-bfec-4525-a0d1-720daaaba3c4.csv
│   │   ├── tfMRI_CARIT_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_CARIT_AP_dropouts.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_finalmask.stats.txt
│   │   ├── tfMRI_CARIT_AP_fovmask.nii.gz
│   │   ├── tfMRI_CARIT_AP_hp0_clean.nii.gz
│   │   ├── tfMRI_CARIT_AP_hp0_vn.nii.gz
│   │   ├── tfMRI_CARIT_AP_Jacobian.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_field.nii.gz
│   │   ├── tfMRI_CARIT_AP_pseudo_transmit_raw.nii.gz
│   │   ├── tfMRI_CARIT_AP_SBRef.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias_dilated.nii.gz
│   │   ├── tfMRI_CARIT_AP_sebased_bias.nii.gz
│   │   └── tfMRI_CARIT_AP_sebased_reference.nii.gz
│   └── tfMRI_CARIT_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │   ├── go.txt
│       │   ├── miss.txt
│       │   ├── nogoCRLose.txt
│       │   ├── nogoCRWin.txt
│       │   ├── nogoFALose.txt
│       │   └── nogoFAWin.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_8a0aac8c-7d75-413c-8361-8d1ab3b7d389.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_AP_preproc.txt
        └── 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 with reward history from GUESSING task) tfMRI scan, which is the result of applying GenericFMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and MSMAllPipeline.

PreprocTfmriCaritUncleaned

```
HCD0001305_V1_MR/
├── MNINonLinear/Results/
│   ├── tfMRI_CARIT_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── go.txt
│   │   │   ├── miss.txt
│   │   │   ├── nogoCRLose.txt
│   │   │   ├── nogoCRWin.txt
│   │   │   ├── nogoFALose.txt
│   │   │   └── nogoFAWin.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_575eacd0-bfec-4525-a0d1-720daaaba3c4.csv
|   |   ├── tfMRI_CARIT_AP_Atlas.dtseries.nii
|   |   ├── tfMRI_CARIT_AP_Atlas_MSMAll.dtseries.nii
|   |   ├── tfMRI_CARIT_AP_Atlas_nonzero.stats.txt
|   |   ├── tfMRI_CARIT_AP_dropouts.nii.gz
|   |   ├── tfMRI_CARIT_AP_finalmask.nii.gz
|   |   ├── tfMRI_CARIT_AP_finalmask.stats.txt
|   |   ├── tfMRI_CARIT_AP_fovmask.nii.gz
|   |   ├── tfMRI_CARIT_AP_Jacobian.nii.gz
|   |   ├── tfMRI_CARIT_AP.L.native.func.gii
|   |   ├── tfMRI_CARIT_AP.nii.gz
|   |   ├── tfMRI_CARIT_AP_PhaseOne_gdc_dc.nii.gz
|   |   ├── tfMRI_CARIT_AP_PhaseTwo_gdc_dc.nii.gz
|   |   ├── tfMRI_CARIT_AP_pseudo_transmit_field.nii.gz
|   |   ├── tfMRI_CARIT_AP_pseudo_transmit_raw.nii.gz
|   |   ├── tfMRI_CARIT_AP.R.native.func.gii
|   |   ├── tfMRI_CARIT_AP_SBRef.nii.gz
|   |   ├── tfMRI_CARIT_AP_sebased_bias_dilated.nii.gz
|   |   ├── tfMRI_CARIT_AP_sebased_bias.nii.gz
|   |   └── tfMRI_CARIT_AP_sebased_reference.nii.gz
|   └── tfMRI_CARIT_PA
|       ├── brainmask_fs.2.nii.gz
|       ├── EVs
|       |   ├── go.txt
|       |   ├── miss.txt
|       |   ├── nogoCRLose.txt
|       |   ├── nogoCRWin.txt
|       |   ├── nogoFALose.txt
|       |   └── nogoFAWin.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_8a0aac8c-7d75-413c-8361-8d1ab3b7d389.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_AP_preproc.txt
        └── 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 with reward history from GUESSING task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriCaritExtended

```
HCD0001305_V1_MR/
├── MNINonLinear
|   ├── Results
|   |   ├── tfMRI_CARIT_AP
|   |   |   ├── RibbonVolumeToSurfaceMapping
|   |   |   |   └── goodvoxels.nii.gz
|   |   |   ├── tfMRI_CARIT_AP_Atlas_mean.dscalar.nii
|   |   |   ├── tfMRI_CARIT_AP_Atlas_MSMAll_mean.dscalar.nii
|   |   |   ├── tfMRI_CARIT_AP_dims.txt
|   |   |   ├── tfMRI_CARIT_AP_hp0.ica
|   |   |   |   └── mc
|   |   |   |       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
|   |   |   |       └── prefiltered_func_data_mcf_conf_hp.nii.gz
```

```
|   |   |   ├── tfMRI_CARIT_AP_mean.nii.gz
|   |   |   └── tfMRI_CARIT_AP_MSMAll_dims.txt
|   |   └── 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_AP.nii.gz
|       ├── standard2tfMRI_CARIT_PA.nii.gz
|       ├── tfMRI_CARIT_AP2standard.nii.gz
|       └── tfMRI_CARIT_PA2standard.nii.gz
└── T1w
    └── Results
        ├── tfMRI_CARIT_AP
        |   ├── tfMRI_CARIT_AP_dropouts.nii.gz
        |   ├── tfMRI_CARIT_AP_pseudo_transmit_field.nii.gz
        |   ├── tfMRI_CARIT_AP_pseudo_transmit_raw.nii.gz
        |   ├── tfMRI_CARIT_AP_sebased_bias.nii.gz
        |   └── tfMRI_CARIT_AP_sebased_reference.nii.gz
        └── 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 EMOTION Preprocessed Recommended

This package is the recommended starting point for EMOTION 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 EMOTION (emotion and face-processing task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriEmotionRecommended

HCD0001305_V1_MR

```
├── MNINonLinear/Results/tfMRI_EMOTION_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── faces.txt
│   │   └── shapes.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_1944e135-e209-4ce5-a24d-0e35054092aa.csv
│   ├── tfMRI_EMOTION_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
│   ├── tfMRI_EMOTION_PA_Atlas_MSMAll_hp0_clean.README.txt
│   ├── tfMRI_EMOTION_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
│   ├── tfMRI_EMOTION_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_EMOTION_PA_dropouts.nii.gz
│   ├── tfMRI_EMOTION_PA_finalmask.nii.gz
│   ├── tfMRI_EMOTION_PA_finalmask.stats.txt
│   ├── tfMRI_EMOTION_PA_fovmask.nii.gz
│   ├── tfMRI_EMOTION_PA_Jacobian.nii.gz
│   ├── tfMRI_EMOTION_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_EMOTION_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_EMOTION_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_EMOTION_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_EMOTION_PA_SBRef.nii.gz
│   ├── tfMRI_EMOTION_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_EMOTION_PA_sebased_bias.nii.gz
│   └── tfMRI_EMOTION_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8906658
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8906658
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8219119
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8219119
    ├── HCD0001305_V1_MR_tfMRI_EMOTION_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_tfMRI_EMOTION_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864149
    ├── HCD0001305_V1_MR_tfMRI_EMOTION_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864149
    ├── processing
    │   └── batch_tfMRI_EMOTION_PA_preproc.txt
    └── QuNex/processing/logs
        ├── comlogs
        │   ├── done_hcp4_tfMRI_EMOTION_PA_HCD0001305_V1_MR_2020-01-28_11.39.1580233172.log
        │   ├── done_hcp5_tfMRI_EMOTION_PA_HCD0001305_V1_MR_2020-01-28_13.38.1580240324.log
        │   └── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.23.678943.log
        ├── runlogs
```

```
|         ├── Log-hcp4-2020-01-28_11.39.1580233172.log
|         ├── Log-hcp5-2020-01-28_13.38.1580240324.log
|         ├── Log-hcp_ICAFix-2020-03-30_16.23.1585603400.log
|         └── Log-hcp_MSMAll-2020-05-16_08.57.1589637450.log
├── run_qunex.sh_2020-01-28-11-39-13.log
├── run_qunex.sh_2020-03-30-16-23-08.log
└── run_qunex.sh_2020-05-16-08-57-16.log
```

tfMRI EMOTION Preprocessed Legacy Surface

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

PreprocTfmriEmotionLegacySurface

HCD0001305_V1_MR/
```
├── MNINonLinear/Results/tfMRI_EMOTION_PA
|    ├── brainmask_fs.2.nii.gz
|    ├── EVs
|    |    ├── faces.txt
|    |    └── shapes.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_1944e135-e209-4ce5-a24d-0e35054092aa.csv
|    ├── tfMRI_EMOTION_PA_Atlas_hp0_clean.dtseries.nii
|    ├── tfMRI_EMOTION_PA_Atlas_hp0_clean.README.txt
|    ├── tfMRI_EMOTION_PA_Atlas_hp0_vn.dscalar.nii
|    ├── tfMRI_EMOTION_PA_Atlas_nonzero.stats.txt
|    ├── tfMRI_EMOTION_PA_dropouts.nii.gz
|    ├── tfMRI_EMOTION_PA_finalmask.nii.gz
|    ├── tfMRI_EMOTION_PA_finalmask.stats.txt
|    ├── tfMRI_EMOTION_PA_fovmask.nii.gz
|    ├── tfMRI_EMOTION_PA_Jacobian.nii.gz
|    ├── tfMRI_EMOTION_PA_PhaseOne_gdc_dc.nii.gz
|    ├── tfMRI_EMOTION_PA_PhaseTwo_gdc_dc.nii.gz
|    ├── tfMRI_EMOTION_PA_pseudo_transmit_field.nii.gz
|    ├── tfMRI_EMOTION_PA_pseudo_transmit_raw.nii.gz
|    ├── tfMRI_EMOTION_PA_SBRef.nii.gz
|    ├── tfMRI_EMOTION_PA_sebased_bias_dilated.nii.gz
```

```
|     ├── tfMRI_EMOTION_PA_sebased_bias.nii.gz
|     └── tfMRI_EMOTION_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_EMOTION_PA_preproc.txt
```

tfMRI EMOTION Preprocessed Legacy Volume

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

PreprocTfmriEmotionLegacyVolume

```
HCD0001305_V1_MR
├── MNINonLinear/Results/tfMRI_EMOTION_PA
|     ├── brainmask_fs.2.nii.gz
|     ├── EVs
|     |     ├── faces.txt
|     |     └── shapes.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_1944e135-e209-4ce5-a24d-0e35054092aa.csv
|     ├── tfMRI_EMOTION_PA_Atlas_nonzero.stats.txt
|     ├── tfMRI_EMOTION_PA_dropouts.nii.gz
|     ├── tfMRI_EMOTION_PA_finalmask.nii.gz
|     ├── tfMRI_EMOTION_PA_finalmask.stats.txt
|     ├── tfMRI_EMOTION_PA_fovmask.nii.gz
|     ├── tfMRI_EMOTION_PA_hp0_clean.nii.gz
|     ├── tfMRI_EMOTION_PA_hp0_vn.nii.gz
|     ├── tfMRI_EMOTION_PA_Jacobian.nii.gz
|     ├── tfMRI_EMOTION_PA_PhaseOne_gdc_dc.nii.gz
|     ├── tfMRI_EMOTION_PA_PhaseTwo_gdc_dc.nii.gz
|     ├── tfMRI_EMOTION_PA_pseudo_transmit_field.nii.gz
|     ├── tfMRI_EMOTION_PA_pseudo_transmit_raw.nii.gz
|     ├── tfMRI_EMOTION_PA_SBRef.nii.gz
|     ├── tfMRI_EMOTION_PA_sebased_bias_dilated.nii.gz
|     ├── tfMRI_EMOTION_PA_sebased_bias.nii.gz
|     └── tfMRI_EMOTION_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
```

```
                └── batch_tfMRI_EMOTION_PA_preproc.txt
```

tfMRI EMOTION Preprocessed Uncleaned

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

PreprocTfmriEmotionUncleaned

```
HCD0001305_V1_MR/
├── MNINonLinear/Results/tfMRI_EMOTION_PA/
│   ├── brainmask_fs.2.nii.gz
│   ├── EVs
│   │   ├── faces.txt
│   │   └── shapes.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_1944e135-e209-4ce5-a24d-0e35054092aa.csv
│   ├── tfMRI_EMOTION_PA_Atlas.dtseries.nii
│   ├── tfMRI_EMOTION_PA_Atlas_MSMAll.dtseries.nii
│   ├── tfMRI_EMOTION_PA_Atlas_nonzero.stats.txt
│   ├── tfMRI_EMOTION_PA_dropouts.nii.gz
│   ├── tfMRI_EMOTION_PA_finalmask.nii.gz
│   ├── tfMRI_EMOTION_PA_finalmask.stats.txt
│   ├── tfMRI_EMOTION_PA_fovmask.nii.gz
│   ├── tfMRI_EMOTION_PA_Jacobian.nii.gz
│   ├── tfMRI_EMOTION_PA.L.native.func.gii
│   ├── tfMRI_EMOTION_PA.nii.gz
│   ├── tfMRI_EMOTION_PA_PhaseOne_gdc_dc.nii.gz
│   ├── tfMRI_EMOTION_PA_PhaseTwo_gdc_dc.nii.gz
│   ├── tfMRI_EMOTION_PA_pseudo_transmit_field.nii.gz
│   ├── tfMRI_EMOTION_PA_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_EMOTION_PA.R.native.func.gii
│   ├── tfMRI_EMOTION_PA_SBRef.nii.gz
│   ├── tfMRI_EMOTION_PA_sebased_bias_dilated.nii.gz
│   ├── tfMRI_EMOTION_PA_sebased_bias.nii.gz
│   └── tfMRI_EMOTION_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        └── batch_tfMRI_EMOTION_PA_preproc.txt
```

tfMRI EMOTION Preprocessed Extended

This package contains additional EMOTION 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 EMOTION (emotion and face-processing task) tfMRI scan, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriEmotionExtended

```
HCD0001305_V1_MR
├── MNINonLinear
│   ├── Results
│   │   └── tfMRI_EMOTION_PA
│   │       ├── RibbonVolumeToSurfaceMapping
│   │       │   └── goodvoxels.nii.gz
│   │       ├── tfMRI_EMOTION_PA_Atlas_mean.dscalar.nii
│   │       ├── tfMRI_EMOTION_PA_Atlas_MSMAll_mean.dscalar.nii
│   │       ├── tfMRI_EMOTION_PA_dims.txt
│   │       ├── tfMRI_EMOTION_PA_hp0.ica
│   │       │   └── mc
│   │       │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │       │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │       ├── tfMRI_EMOTION_PA_mean.nii.gz
│   │       └── tfMRI_EMOTION_PA_MSMAll_dims.txt
│   └── xfms
│       ├── standard2tfMRI_EMOTION_PA.nii.gz
│       └── tfMRI_EMOTION_PA2standard.nii.gz
└── T1w
    └── Results
        └── tfMRI_EMOTION_PA
            ├── tfMRI_EMOTION_PA_dropouts.nii.gz
            ├── tfMRI_EMOTION_PA_pseudo_transmit_field.nii.gz
            ├── tfMRI_EMOTION_PA_pseudo_transmit_raw.nii.gz
            ├── tfMRI_EMOTION_PA_sebased_bias.nii.gz
            └── tfMRI_EMOTION_PA_sebased_reference.nii.gz
```

tfMRI GUESSING Preprocessed Recommended

This package is the recommended starting point for GUESSING 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 GUESSING (reward, punishment, anticipatory reactivity task) tfMRI scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriGuessingRecommended

HCD0001305_V1_MR/
```
├── MNINonLinear/Results/
│   ├── tfMRI_GUESSING_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── cueHigh.txt
│   │   │   ├── cueLow.txt
│   │   │   ├── feedbackHighLose.txt
│   │   │   ├── feedbackHighWin.txt
│   │   │   ├── feedbackLowLose.txt
│   │   │   ├── feedbackLowWin.txt
│   │   │   └── guess.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_40218750-ba35-4e66-a137-39a6716be262.csv
│   │   ├── tfMRI_GUESSING_AP_Atlas_MSMAll_hp0_clean.dtseries.nii
│   │   ├── tfMRI_GUESSING_AP_Atlas_MSMAll_hp0_clean.README.txt
│   │   ├── tfMRI_GUESSING_AP_Atlas_MSMAll_hp0_vn.dscalar.nii
│   │   ├── tfMRI_GUESSING_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_GUESSING_AP_dropouts.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.stats.txt
│   │   ├── tfMRI_GUESSING_AP_fovmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_Jacobian.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── tfMRI_GUESSING_AP_pseudo_transmit_field.nii.gz
│   │   ├── tfMRI_GUESSING_AP_pseudo_transmit_raw.nii.gz
│   │   ├── tfMRI_GUESSING_AP_SBRef.nii.gz
│   │   ├── tfMRI_GUESSING_AP_sebased_bias_dilated.nii.gz
│   │   ├── tfMRI_GUESSING_AP_sebased_bias.nii.gz
│   │   └── tfMRI_GUESSING_AP_sebased_reference.nii.gz
│   └── tfMRI_GUESSING_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │   ├── cueHigh.txt
│       │   ├── cueLow.txt
│       │   ├── feedbackHighLose.txt
│       │   ├── feedbackHighWin.txt
│       │   ├── feedbackLowLose.txt
```

```
|        |        ├── feedbackLowWin.txt
|        |        └── guess.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_4e9086b2-2a25-45df-b303-7f71d9a1a06a.csv
|        ├── tfMRI_GUESSING_PA_Atlas_MSMAll_hp0_clean.dtseries.nii
|        ├── tfMRI_GUESSING_PA_Atlas_MSMAll_hp0_clean.README.txt
|        ├── tfMRI_GUESSING_PA_Atlas_MSMAll_hp0_vn.dscalar.nii
|        ├── tfMRI_GUESSING_PA_Atlas_nonzero.stats.txt
|        ├── tfMRI_GUESSING_PA_dropouts.nii.gz
|        ├── tfMRI_GUESSING_PA_finalmask.nii.gz
|        ├── tfMRI_GUESSING_PA_finalmask.stats.txt
|        ├── tfMRI_GUESSING_PA_fovmask.nii.gz
|        ├── tfMRI_GUESSING_PA_Jacobian.nii.gz
|        ├── tfMRI_GUESSING_PA_PhaseOne_gdc_dc.nii.gz
|        ├── tfMRI_GUESSING_PA_PhaseTwo_gdc_dc.nii.gz
|        ├── tfMRI_GUESSING_PA_pseudo_transmit_field.nii.gz
|        ├── tfMRI_GUESSING_PA_pseudo_transmit_raw.nii.gz
|        ├── tfMRI_GUESSING_PA_SBRef.nii.gz
|        ├── tfMRI_GUESSING_PA_sebased_bias_dilated.nii.gz
|        ├── tfMRI_GUESSING_PA_sebased_bias.nii.gz
|        └── tfMRI_GUESSING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.e8906658
    ├── HCD0001305_V1_MR.MsmAllProcessing.PROCESS_DATA_job.sh.o8906658
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.e8219119
    ├── HCD0001305_V1_MR.MultiRunIcaFixProcessing.PROCESS_DATA_job.sh.o8219119
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864158
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_AP.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864158
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.e7864166
    ├── HCD0001305_V1_MR_tfMRI_GUESSING_PA.FunctionalPreprocessing.PROCESS_DATA_job.sh.o7864166
    ├── processing
    │   ├── batch_tfMRI_GUESSING_AP_preproc.txt
    │   └── batch_tfMRI_GUESSING_PA_preproc.txt
    └── QuNex/processing/logs
        ├── comlogs
        │   ├── done_hcp4_tfMRI_GUESSING_AP_HCD0001305_V1_MR_2020-01-28_11.39.1580233172.log
        │   ├── done_hcp4_tfMRI_GUESSING_PA_HCD0001305_V1_MR_2020-01-28_11.40.1580233207.log
        │   ├── done_hcp5_tfMRI_GUESSING_AP_HCD0001305_V1_MR_2020-01-28_14.22.1580242933.log
```

```
│      ├── done_hcp5_tfMRI_GUESSING_PA_HCD0001305_V1_MR_2020-01-28_14.21.1580242883.log
│      ├── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.23.299178.log
│      └── done_setupHCP_HCD0001305_V1_MR_2020-01-28.11.39.58.640083.log
├── runlogs
│      ├── Log-hcp4-2020-01-28_11.39.1580233172.log
│      ├── Log-hcp4-2020-01-28_11.40.1580233207.log
│      ├── Log-hcp5-2020-01-28_14.21.1580242883.log
│      ├── Log-hcp5-2020-01-28_14.22.1580242933.log
│      ├── Log-hcp_ICAFix-2020-03-30_16.23.1585603400.log
│      └── Log-hcp_MSMAll-2020-05-16_08.57.1589637450.log
├── run_qunex.sh_2020-01-28-11-39-13.log
├── run_qunex.sh_2020-01-28-11-39-48.log
├── run_qunex.sh_2020-03-30-16-23-08.log
└── run_qunex.sh_2020-05-16-08-57-16.log
```

tfMRI GUESSING Preprocessed Legacy Surface

This package contains cleaned GUESSING tfMRI files coarsely aligned across subjects using the MSMSulc folding surface registration. It contains outputs of HCP Functional Preprocessing for GUESSING (reward, punishment, anticipatory reactivity task) tfMRI scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and hcp_fix_multi_run.

PreprocTfmriGuessingLegacySurface

```
HCD0001305_V1_MR
├── MNINonLinear/Results/
│      ├── tfMRI_GUESSING_AP
│      │      ├── brainmask_fs.2.nii.gz
│      │      ├── EVs
│      │      │      ├── cueHigh.txt
│      │      │      ├── cueLow.txt
│      │      │      ├── feedbackHighLose.txt
│      │      │      ├── feedbackHighWin.txt
│      │      │      ├── feedbackLowLose.txt
│      │      │      ├── feedbackLowWin.txt
│      │      │      └── guess.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_40218750-ba35-4e66-a137-39a6716be262.csv
│      │      ├── tfMRI_GUESSING_AP_Atlas_hp0_clean.dtseries.nii
│      │      ├── tfMRI_GUESSING_AP_Atlas_hp0_clean.README.txt
```

```
│   │       ├── tfMRI_GUESSING_AP_Atlas_hp0_vn.dscalar.nii
│   │       ├── tfMRI_GUESSING_AP_Atlas_nonzero.stats.txt
│   │       ├── tfMRI_GUESSING_AP_dropouts.nii.gz
│   │       ├── tfMRI_GUESSING_AP_finalmask.nii.gz
│   │       ├── tfMRI_GUESSING_AP_finalmask.stats.txt
│   │       ├── tfMRI_GUESSING_AP_fovmask.nii.gz
│   │       ├── tfMRI_GUESSING_AP_Jacobian.nii.gz
│   │       ├── tfMRI_GUESSING_AP_PhaseOne_gdc_dc.nii.gz
│   │       ├── tfMRI_GUESSING_AP_PhaseTwo_gdc_dc.nii.gz
│   │       ├── tfMRI_GUESSING_AP_pseudo_transmit_field.nii.gz
│   │       ├── tfMRI_GUESSING_AP_pseudo_transmit_raw.nii.gz
│   │       ├── tfMRI_GUESSING_AP_SBRef.nii.gz
│   │       ├── tfMRI_GUESSING_AP_sebased_bias_dilated.nii.gz
│   │       ├── tfMRI_GUESSING_AP_sebased_bias.nii.gz
│   │       └── tfMRI_GUESSING_AP_sebased_reference.nii.gz
│   └── tfMRI_GUESSING_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │   ├── cueHigh.txt
│       │   ├── cueLow.txt
│       │   ├── feedbackHighLose.txt
│       │   ├── feedbackHighWin.txt
│       │   ├── feedbackLowLose.txt
│       │   ├── feedbackLowWin.txt
│       │   └── guess.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_4e9086b2-2a25-45df-b303-7f71d9a1a06a.csv
│       ├── tfMRI_GUESSING_PA_Atlas_hp0_clean.dtseries.nii
│       ├── tfMRI_GUESSING_PA_Atlas_hp0_clean.README.txt
│       ├── tfMRI_GUESSING_PA_Atlas_hp0_vn.dscalar.nii
│       ├── tfMRI_GUESSING_PA_Atlas_nonzero.stats.txt
│       ├── tfMRI_GUESSING_PA_dropouts.nii.gz
│       ├── tfMRI_GUESSING_PA_finalmask.nii.gz
│       ├── tfMRI_GUESSING_PA_finalmask.stats.txt
│       ├── tfMRI_GUESSING_PA_fovmask.nii.gz
│       ├── tfMRI_GUESSING_PA_Jacobian.nii.gz
│       ├── tfMRI_GUESSING_PA_PhaseOne_gdc_dc.nii.gz
│       ├── tfMRI_GUESSING_PA_PhaseTwo_gdc_dc.nii.gz
│       ├── tfMRI_GUESSING_PA_pseudo_transmit_field.nii.gz
│       ├── tfMRI_GUESSING_PA_pseudo_transmit_raw.nii.gz
│       ├── tfMRI_GUESSING_PA_SBRef.nii.gz
```

```
|           ├── tfMRI_GUESSING_PA_sebased_bias_dilated.nii.gz
|           ├── tfMRI_GUESSING_PA_sebased_bias.nii.gz
|           └── tfMRI_GUESSING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_tfMRI_GUESSING_AP_preproc.txt
        └── batch_tfMRI_GUESSING_PA_preproc.txt
```

tfMRI GUESSING Preprocessed Legacy Volume

This package contains cleaned GUESSING tfMRI files poorly aligned across subjects using nonlinear volume registration. It contains outputs of HCP Functional Preprocessing for GUESSING (reward, punishment, anticipatory reactivity task) tfMRI scans, which is the result of applying the GenericfMRIVolumeProcessingPipeline and hcp_fix_multi_run.

PreprocTfmriGuessingLegacyVolume

```
HCD0001305_V1_MR/
├── MNINonLinear/Results
│   ├── tfMRI_GUESSING_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── cueHigh.txt
│   │   │   ├── cueLow.txt
│   │   │   ├── feedbackHighLose.txt
│   │   │   ├── feedbackHighWin.txt
│   │   │   ├── feedbackLowLose.txt
│   │   │   ├── feedbackLowWin.txt
│   │   │   └── guess.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_40218750-ba35-4e66-a137-39a6716be262.csv
│   │   ├── tfMRI_GUESSING_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_GUESSING_AP_dropouts.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.stats.txt
│   │   ├── tfMRI_GUESSING_AP_fovmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_hp0_clean.nii.gz
│   │   ├── tfMRI_GUESSING_AP_hp0_vn.nii.gz
│   │   ├── tfMRI_GUESSING_AP_Jacobian.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseTwo_gdc_dc.nii.gz
```

```
|   |   ├── tfMRI_GUESSING_AP_pseudo_transmit_field.nii.gz
|   |   ├── tfMRI_GUESSING_AP_pseudo_transmit_raw.nii.gz
|   |   ├── tfMRI_GUESSING_AP_SBRef.nii.gz
|   |   ├── tfMRI_GUESSING_AP_sebased_bias_dilated.nii.gz
|   |   ├── tfMRI_GUESSING_AP_sebased_bias.nii.gz
|   |   └── tfMRI_GUESSING_AP_sebased_reference.nii.gz
|   └── tfMRI_GUESSING_PA
|       ├── brainmask_fs.2.nii.gz
|       ├── EVs
|       |   ├── cueHigh.txt
|       |   ├── cueLow.txt
|       |   ├── feedbackHighLose.txt
|       |   ├── feedbackHighWin.txt
|       |   ├── feedbackLowLose.txt
|       |   ├── feedbackLowWin.txt
|       |   └── guess.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_4e9086b2-2a25-45df-b303-7f71d9a1a06a.csv
|       ├── tfMRI_GUESSING_PA_Atlas_nonzero.stats.txt
|       ├── tfMRI_GUESSING_PA_dropouts.nii.gz
|       ├── tfMRI_GUESSING_PA_finalmask.nii.gz
|       ├── tfMRI_GUESSING_PA_finalmask.stats.txt
|       ├── tfMRI_GUESSING_PA_fovmask.nii.gz
|       ├── tfMRI_GUESSING_PA_hp0_clean.nii.gz
|       ├── tfMRI_GUESSING_PA_hp0_vn.nii.gz
|       ├── tfMRI_GUESSING_PA_Jacobian.nii.gz
|       ├── tfMRI_GUESSING_PA_PhaseOne_gdc_dc.nii.gz
|       ├── tfMRI_GUESSING_PA_PhaseTwo_gdc_dc.nii.gz
|       ├── tfMRI_GUESSING_PA_pseudo_transmit_field.nii.gz
|       ├── tfMRI_GUESSING_PA_pseudo_transmit_raw.nii.gz
|       ├── tfMRI_GUESSING_PA_SBRef.nii.gz
|       ├── tfMRI_GUESSING_PA_sebased_bias_dilated.nii.gz
|       ├── tfMRI_GUESSING_PA_sebased_bias.nii.gz
|       └── tfMRI_GUESSING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_tfMRI_GUESSING_AP_preproc.txt
        └── batch_tfMRI_GUESSING_PA_preproc.txt
```

tfMRI GUESSING Preprocessed Uncleaned

This package contains uncleaned tfMRI GUESSING data of all registration types for use in testing alternative data cleanup strategies. It contains outputs of HCP Functional Preprocessing for GUESSING (reward, punishment, anticipatory reactivity task) tfMRI scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, and MSMAllPipeline.

PreprocTfmriGuessingUncleaned

```
HCD0001305_V1_MR
├── MNINonLinear/Results
│   ├── tfMRI_GUESSING_AP
│   │   ├── brainmask_fs.2.nii.gz
│   │   ├── EVs
│   │   │   ├── cueHigh.txt
│   │   │   ├── cueLow.txt
│   │   │   ├── feedbackHighLose.txt
│   │   │   ├── feedbackHighWin.txt
│   │   │   ├── feedbackLowLose.txt
│   │   │   ├── feedbackLowWin.txt
│   │   │   └── guess.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_40218750-ba35-4e66-a137-39a6716be262.csv
│   │   ├── tfMRI_GUESSING_AP_Atlas.dtseries.nii
│   │   ├── tfMRI_GUESSING_AP_Atlas_MSMAll.dtseries.nii
│   │   ├── tfMRI_GUESSING_AP_Atlas_nonzero.stats.txt
│   │   ├── tfMRI_GUESSING_AP_dropouts.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_finalmask.stats.txt
│   │   ├── tfMRI_GUESSING_AP_fovmask.nii.gz
│   │   ├── tfMRI_GUESSING_AP_Jacobian.nii.gz
│   │   ├── tfMRI_GUESSING_AP.L.native.func.gii
│   │   ├── tfMRI_GUESSING_AP.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseOne_gdc_dc.nii.gz
│   │   ├── tfMRI_GUESSING_AP_PhaseTwo_gdc_dc.nii.gz
│   │   ├── tfMRI_GUESSING_AP_pseudo_transmit_field.nii.gz
│   │   ├── tfMRI_GUESSING_AP_pseudo_transmit_raw.nii.gz
│   │   ├── tfMRI_GUESSING_AP.R.native.func.gii
│   │   ├── tfMRI_GUESSING_AP_SBRef.nii.gz
│   │   ├── tfMRI_GUESSING_AP_sebased_bias_dilated.nii.gz
│   │   ├── tfMRI_GUESSING_AP_sebased_bias.nii.gz
```

```
│   │       └── tfMRI_GUESSING_AP_sebased_reference.nii.gz
│   └── tfMRI_GUESSING_PA
│       ├── brainmask_fs.2.nii.gz
│       ├── EVs
│       │   ├── cueHigh.txt
│       │   ├── cueLow.txt
│       │   ├── feedbackHighLose.txt
│       │   ├── feedbackHighWin.txt
│       │   ├── feedbackLowLose.txt
│       │   ├── feedbackLowWin.txt
│       │   └── guess.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_4e9086b2-2a25-45df-b303-7f71d9a1a06a.csv
│       ├── tfMRI_GUESSING_PA_Atlas.dtseries.nii
│       ├── tfMRI_GUESSING_PA_Atlas_MSMAll.dtseries.nii
│       ├── tfMRI_GUESSING_PA_Atlas_nonzero.stats.txt
│       ├── tfMRI_GUESSING_PA_dropouts.nii.gz
│       ├── tfMRI_GUESSING_PA_finalmask.nii.gz
│       ├── tfMRI_GUESSING_PA_finalmask.stats.txt
│       ├── tfMRI_GUESSING_PA_fovmask.nii.gz
│       ├── tfMRI_GUESSING_PA_Jacobian.nii.gz
│       ├── tfMRI_GUESSING_PA.L.native.func.gii
│       ├── tfMRI_GUESSING_PA.nii.gz
│       ├── tfMRI_GUESSING_PA_PhaseOne_gdc_dc.nii.gz
│       ├── tfMRI_GUESSING_PA_PhaseTwo_gdc_dc.nii.gz
│       ├── tfMRI_GUESSING_PA_pseudo_transmit_field.nii.gz
│       ├── tfMRI_GUESSING_PA_pseudo_transmit_raw.nii.gz
│       ├── tfMRI_GUESSING_PA.R.native.func.gii
│       ├── tfMRI_GUESSING_PA_SBRef.nii.gz
│       ├── tfMRI_GUESSING_PA_sebased_bias_dilated.nii.gz
│       ├── tfMRI_GUESSING_PA_sebased_bias.nii.gz
│       └── tfMRI_GUESSING_PA_sebased_reference.nii.gz
└── ProcessingInfo
    └── processing
        ├── batch_tfMRI_GUESSING_AP_preproc.txt
        └── batch_tfMRI_GUESSING_PA_preproc.txt
```

tfMRI GUESSING Preprocessed Extended

This package contains additional GUESSING 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 GUESSING (reward, punishment, anticipatory reactivity task) tfMRI scans, which is the result of applying GenericfMRIVolumeProcessingPipeline, GenericfMRISurfaceProcessingPipeline, hcp_fix_multi_run, and MSMAllPipeline.

PreprocTfmriGuessingExtended

```
HCD0001305_V1_MR/
├── MNINonLinear/
│   ├── Results
│   │   ├── tfMRI_GUESSING_AP
│   │   │   ├── RibbonVolumeToSurfaceMapping
│   │   │   │   └── goodvoxels.nii.gz
│   │   │   ├── tfMRI_GUESSING_AP_Atlas_mean.dscalar.nii
│   │   │   ├── tfMRI_GUESSING_AP_Atlas_MSMAll_mean.dscalar.nii
│   │   │   ├── tfMRI_GUESSING_AP_dims.txt
│   │   │   ├── tfMRI_GUESSING_AP_hp0.ica
│   │   │   │   └── mc
│   │   │   │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │   │   │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │   │   ├── tfMRI_GUESSING_AP_mean.nii.gz
│   │   │   └── tfMRI_GUESSING_AP_MSMAll_dims.txt
│   │   └── tfMRI_GUESSING_PA
│   │       ├── RibbonVolumeToSurfaceMapping
│   │       │   └── goodvoxels.nii.gz
│   │       ├── tfMRI_GUESSING_PA_Atlas_mean.dscalar.nii
│   │       ├── tfMRI_GUESSING_PA_Atlas_MSMAll_mean.dscalar.nii
│   │       ├── tfMRI_GUESSING_PA_dims.txt
│   │       ├── tfMRI_GUESSING_PA_hp0.ica
│   │       │   └── mc
│   │       │       ├── prefiltered_func_data_mcf_conf_hp_clean.nii.gz
│   │       │       └── prefiltered_func_data_mcf_conf_hp.nii.gz
│   │       ├── tfMRI_GUESSING_PA_mean.nii.gz
│   │       └── tfMRI_GUESSING_PA_MSMAll_dims.txt
│   └── xfms
│       ├── standard2tfMRI_GUESSING_AP.nii.gz
│       ├── standard2tfMRI_GUESSING_PA.nii.gz
│       ├── tfMRI_GUESSING_AP2standard.nii.gz
│       └── tfMRI_GUESSING_PA2standard.nii.gz
└── T1w
    └── Results
        ├── tfMRI_GUESSING_AP
        │   ├── tfMRI_GUESSING_AP_dropouts.nii.gz
        │   ├── tfMRI_GUESSING_AP_pseudo_transmit_field.nii.gz
```

```
│   ├── tfMRI_GUESSING_AP_pseudo_transmit_raw.nii.gz
│   ├── tfMRI_GUESSING_AP_sebased_bias.nii.gz
│   └── tfMRI_GUESSING_AP_sebased_reference.nii.gz
└── tfMRI_GUESSING_PA
    ├── tfMRI_GUESSING_PA_dropouts.nii.gz
    ├── tfMRI_GUESSING_PA_pseudo_transmit_field.nii.gz
    ├── tfMRI_GUESSING_PA_pseudo_transmit_raw.nii.gz
    ├── tfMRI_GUESSING_PA_sebased_bias.nii.gz
    └── tfMRI_GUESSING_PA_sebased_reference.nii.gz
```