HUMAN Connectome PROJECT

WU-Minn HCP Q3 Data Release: Reference Manual

Appendix III – File Names and Directory Structure for Unprocessed, Preprocessed, ICA-FIX denoised rfMRI, and individual tfMRI FEAT-analyzed Data

23 September 2013

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Introduction

This document lists all file names, directories, and subdirectories obtained when downloading data from an exemplar HCP subject (100307) from ConnectomeDB. For all other subjects, the filenames are identical except for the subject identifier. The file names and directory structure is the same whether you obtain data from download from ConnectomeDB or by ordering HCP Connectome in a Box.

If the data are downloaded, the user may choose to download unprocessed data, preprocessed data, ICA-FIX denoised rfMRI data or any combination of the three. Regardless of this choice, all data should unpack to a high level <SubjectID> directory (e.g., **100307/**, as exemplified here). If both unprocessed and preprocessed data are downloaded, this high level directory will contain 5 directories (each with various additional subdirectories):

<**SubjectID**>**/** (e.g., **100307/**)

Diffusion/

T1w/

MNINonLinear/

release-notes/

unprocessed/

The **release-notes/** directory contains text files with release notes for each data type and modality downloaded. These notes are intended to help the user keep track of the version of the data they have downloaded, including the version of the processing pipelines used to generate the files for that modality, and the execution number for that particular run of the pipelines.

release-notes/

Diffusion_preproc.txt
Diffusion_unproc.txt
rfMRI_REST1_preproc.txt
rfMRI_REST1_unproc.txt
rfMRI_REST2_preproc.txt
rfMRI_REST2_unproc.txt
Structural_preproc.txt
Structural_unproc.txt
tfMRI_EMOTION_preproc.txt
tfMRI_EMOTION_unproc.txt

tfMRI_GAMBLING_preproc.txt
tfMRI_GAMBLING_unproc.txt
tfMRI_LANGUAGE_preproc.txt
tfMRI_LANGUAGE_unproc.txt
tfMRI_MOTOR_preproc.txt
tfMRI_MOTOR_unproc.txt
tfMRI_RELATIONAL_preproc.txt
tfMRI_RELATIONAL_unproc.txt
tfMRI_SOCIAL_preproc.txt
tfMRI_SOCIAL_unproc.txt
tfMRI_WM_preproc.txt
tfMRI_WM_unproc.txt
rfMRI_REST_fix.txt
rfMRI_REST_fix_extended.txt

Section A: Unprocessed Data Directory Structure

All unprocessed data for each subject should unpack to the **unprocessed/3T/** directory under the <**SubjectID**> directory:

<**SubjectID**>**/** (e.g., **100307/**)

release-notes/

unprocessed/
3T/

The 3T/ subdirectory signifies that these data were acquired on the 3T Connectome Skyra at Wash U. For the subjects that are later scanned at 7T (200 of the 1200), the 7T data will unpack to a 7T/ subdirectory.

Unprocessed data for exemplar subject 100307 unpacks to the following directory structure:

100307/unprocessed/3T/
- 100307_3T.csv
- Diffusion/
- rfMRI_REST1_LR/
- rfMRI_REST1_RL/
- rfMRI_REST2_LR/
- rfMRI_REST2_RL/
- T1w_MPR1/
- T2w_SPC1/
- tfMRI_EMOTION_LR/
- tfMRI_EMOTION_RL/
- tfMRI_GAMBLING_LR/
- tfMRI_GAMBLING_RL/
- tfMRI_LANGUAGE_LR/
- tfMRI_LANGUAGE_RL/
- tfMRI_MOTOR_LR/
- tfMRI_MOTOR_RL/
- tfMRI_RELATIONAL_LR/
- tfMRI_RELATIONAL_RL/
- tfMRI_SOCIAL_LR/
- tfMRI_SOCIAL_RL/
- tfMRI_WM_LR/
- tfMRI_WM_RL/

Diffusion Data

Diffusion/

- 100307_3T_BIAS_32CH.nii.gz
- 100307_3T_BIAS_BC.nii.gz
- 100307_3T_DWI_dir95_LR_SBRef.nii.gz
- 100307_3T_DWI_dir95_LR.bval
- 100307_3T_DWI_dir95_LR.bvec
- 100307_3T_DWI_dir95_LR.nii.gz
- 100307_3T_DWI_dir95_RL_SBRef.nii.gz
- 100307_3T_DWI_dir95_RL.bval
- 100307_3T_DWI_dir95_RL.bvec
- 100307_3T_DWI_dir95_RL.nii.gz
- 100307_3T_DWI_dir96_LR_SBRef.nii.gz
- 100307_3T_DWI_dir96_LR.bval
- 100307_3T_DWI_dir96_LR.bvec
- 100307_3T_DWI_dir96_LR.nii.gz
- 100307_3T_DWI_dir96_RL_SBRef.nii.gz
- 100307_3T_DWI_dir96_RL.bval
- 100307_3T_DWI_dir96_RL.bvec
- 100307_3T_DWI_dir96_RL.nii.gz
- 100307_3T_DWI_dir97_LR_SBRef.nii.gz
- 100307_3T_DWI_dir97_LR.bval
- 100307_3T_DWI_dir97_LR.bvec
- 100307_3T_DWI_dir97_LR.nii.gz
- 100307_3T_DWI_dir97_RL_SBRef.nii.gz
- 100307_3T_DWI_dir97_RL.bval
- 100307_3T_DWI_dir97_RL.bvec
- 100307_3T_DWI_dir97_RL.nii.gz

Structural Data

T1w_MPR1/

- 100307_3T_AFI.nii.gz
- 100307_3T_BIAS_32CH.nii.gz
- 100307_3T_BIAS_BC.nii.gz
- 100307_3T_FieldMap_Magnitude.nii.gz
- 100307_3T_FieldMap_Phase.nii.gz
- 100307_3T_T1w_MPR1.nii.gz

T2w_SPC1/

100307_3T_AFI.nii.gz
100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_FieldMap_Magnitude.nii.gz
100307_3T_FieldMap_Phase.nii.gz
100307_3T_T2w_SPC1.nii.gz

Resting State rfMRI Data

rfMRI_REST1_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_rfMRI_REST1_LR_SBRef.nii.gz
100307_3T_rfMRI_REST1_LR.nii.gz
100307_3T_rfMRI_REST1_LR_Physio_log.txt
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz

rfMRI_REST1_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_rfMRI_REST1_RL_SBRef.nii.gz
100307_3T_rfMRI_REST1_RL.nii.gz
100307_3T_rfMRI_REST1_RL_Physio_log.txt
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz

rfMRI_REST2_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_rfMRI_REST2_LR_SBRef.nii.gz
100307_3T_rfMRI_REST2_LR.nii.gz
100307_3T_rfMRI_REST2_LR_Physio_log.txt
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz

rfMRI_REST2_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz

100307_3T_rfMRI_REST2_RL_SBRef.nii.gz
100307_3T_rfMRI_REST2_RL.nii.gz
100307_3T_rfMRI_REST2_RL_Physio_log.txt
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz

Task tfMRI Data

Emotion Processing

tfMRI_EMOTION_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_EMOTION_LR_SBRef.nii.gz
100307_3T_tfMRI_EMOTION_LR.nii.gz

tfMRI_EMOTION_LR/LINKED_DATA/EPRIME

100307_3T_EMOTION_run2_TAB.txt

tfMRI_EMOTION_LR/LINKED_DATA/EPRIME/EVs

fear.txt
neut.txt
Stats.txt
Sync.txt

tfMRI_EMOTION_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_EMOTION_LR_Physio_log.txt

tfMRI_EMOTION_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_EMOTION_RL_SBRef.nii.gz
100307_3T_tfMRI_EMOTION_RL.nii.gz

tfMRI_EMOTION_RL/LINKED_DATA/EPRIME

100307_3T_EMOTION_run2_TAB.txt

tfMRI_EMOTION_RL/LINKED_DATA/EPRIME/EVs

fear.txt
neut.txt
Stats.txt
Sync.txt

tfMRI_EMOTION_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_EMOTION_RL_Physio_log.txt

Gambling

tfMRI_GAMBLING_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_GAMBLING_LR_SBRef.nii.gz
100307_3T_tfMRI_GAMBLING_LR.nii.gz

tfMRI_GAMBLING_LR/LINKED_DATA/EPRIME

100307_3T_GAMBLING_run2_TAB.txt

tfMRI_GAMBLING_LR/LINKED_DATA/EPRIME/EVs

loss_event.txt
loss.txt
neut_event.txt
Stats.txt
Sync.txt
win_event.txt
win.txt

tfMRI_GAMBLING_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_GAMBLING_LR_Physio_log.txt

tfMRI_GAMBLING_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_GAMBLING_RL_SBRef.nii.gz

100307_3T_tfMRI_GAMBLING_RL.nii.gz

tfMRI_GAMBLING_RL/LINKED_DATA/EPRIME

100307_3T_GAMBLING_run1_TAB.txt

tfMRI_GAMBLING_RL/LINKED_DATA/EPRIME/EVs

loss_event.txt
loss.txt
neut_event.txt
Stats.txt
Sync.txt
win_event.txt
win.txt

tfMRI_GAMBLING_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_GAMBLING_RL_Physio_log.txt

Language Processing

tfMRI_LANGUAGE_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_LANGUAGE_LR_SBRef.nii.gz
100307_3T_tfMRI_LANGUAGE_LR.nii.gz

tfMRI_LANGUAGE_LR/LINKED_DATA/EPRIME

100307_3T_LANGUAGE_run2_TAB.txt

tfMRI_LANGUAGE_LR/LINKED_DATA/EPRIME/EVs

cue.txt
math.txt
present_math.txt
present_story.txt
question_math.txt
question_story.txt
response_math.txt
response_story.txt
Stats.txt
story.txt

Sync.txt

tfMRI_LANGUAGE_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_LANGUAGE_LR_Physio_log.txt

tfMRI_LANGUAGE_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_LANGUAGE_RL_SBRef.nii.gz
100307_3T_tfMRI_LANGUAGE_RL.nii.gz

tfMRI_LANGUAGE_RL/LINKED_DATA/EPRIME

100307_3T_LANGUAGE_run1_TAB.txt

tfMRI_LANGUAGE_RL/LINKED_DATA/EPRIME/EVs

cue.txt
math.txt
present_math.txt
present_story.txt
question_math.txt
question_story.txt
response_math.txt
response_story.txt
Stats.txt
story.txt
Sync.txt

tfMRI_LANGUAGE_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_LANGUAGE_RL_Physio_log.txt

Motor

tfMRI_MOTOR_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_MOTOR_LR_SBRef.nii.gz
100307_3T_tfMRI_MOTOR_LR.nii.gz

tfMRI_MOTOR_LR/LINKED_DATA/EPRIME/

100307_3T_MOTOR_run2_TAB.txt

tfMRI_MOTOR_LR/LINKED_DATA/EPRIME/EVs

cue.txt
lf.txt
lh.txt
rf.txt
rh.txt
Sync.txt
t.txt

tfMRI_MOTOR_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_MOTOR_LR_Physio_log.txt

tfMRI_MOTOR_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_MOTOR_RL_SBRef.nii.gz
100307_3T_tfMRI_MOTOR_RL.nii.gz

tfMRI_MOTOR_RL/LINKED_DATA/EPRIME/

100307_3T_MOTOR_run1_TAB.txt

tfMRI_MOTOR_RL/LINKED_DATA/EPRIME/EVs

cue.txt
lf.txt
lh.txt
rf.txt
rh.txt
Sync.txt
t.txt

tfMRI_MOTOR_RI/LINKED_DATA/PHYSIO

100307_3T_tfMRI_MOTOR_RL_Physio_log.txt

Relational Processing

tfMRI_RELATIONAL_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_RELATIONAL_LR_SBRef.nii.gz
100307_3T_tfMRI_RELATIONAL_LR.nii.gz

tfMRI_RELATIONAL_LR/ LINKED_DATA/EPRIME

100307_3T_RELATIONAL_run2_TAB.txt

tfMRI_RELATIONAL_LR/LINKED_DATA/EPRIME/EVs

error.txt
match.txt
relation.txt
Stats.txt
Sync.txt

tfMRI_RELATIONAL_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_RELATIONAL_LR_Physio_log.txt

tfMRI_RELATIONAL_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_RELATIONAL_RL_SBRef.nii.gz
100307_3T_tfMRI_RELATIONAL_RL.nii.gz

tfMRI_RELATIONAL_RL/LINKED_DATA/EPRIME

100307_3T_RELATIONAL_run3_TAB.txt

tfMRI_RELATIONAL_RL/LINKED_DATA/EPRIME/EVs

error.txt
match.txt
relation.txt
Stats.txt
Sync.txt

tfMRI_RELATIONAL_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_RELATIONAL_RL_Physio_log.txt

Social Cognition

tfMRI_SOCIAL_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_SOCIAL_LR_SBRef.nii.gz
100307_3T_tfMRI_SOCIAL_LR.nii.gz

tfMRI_SOCIAL_LR/LINKED_DATA/EPRIME

100307_3T_SOCIAL_run2_TAB.txt

tfMRI_SOCIAL_LR/LINKED_DATA/EPRIME/EVs

mental_resp.txt
mental.txt
other_resp.txt
rnd.txt
Stats.txt
Sync.txt

tfMRI_SOCIAL_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_SOCIAL_LR_Physio_log.txt

tfMRI_SOCIAL_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_SOCIAL_RL_SBRef.nii.gz
100307_3T_tfMRI_SOCIAL_RL.nii.gz

tfMRI_SOCIAL_RL/LINKED_DATA/EPRIME

100307_3T_SOCIAL_run1_TAB.txt

tfMRI_SOCIAL_RL/LINKED_DATA/EPRIME/EVs

mental_resp.txt
mental.txt

other_resp.txt
rnd.txt
Stats.txt
Sync.txt

tfMRI_SOCIAL_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_SOCIAL_RL_Physio_log.txt

Working Memory

tfMRI_WM_LR

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_WM_LR_SBRef.nii.gz
100307_3T_tfMRI_WM_LR.nii.gz

tfMRI_WM_LR/LINKED_DATA/EPRIME

100307_3T_REC_run2_TAB.txt
100307_3T_WM_run2_TAB.txt

tfMRI_WM_LR/LINKED_DATA/EPRIME/EVs

0bk_body.txt
0bk_cor.txt
0bk_err.txt
0bk_faces.txt
0bk_nlr.txt
0bk_places.txt
0bk_tools.txt
2bk_body.txt
2bk_cor.txt
2bk_err.txt
2bk_faces.txt
2bk_nlr.txt
2bk_places.txt
2bk_tools.txt
all_bk_cor.txt
all_bk_err.txt
Stats.txt
Sync.txt

tfMRI_WM_LR/LINKED_DATA/PHYSIO

100307_3T_tfMRI_WM_LR_Physio_log.txt

tfMRI_WM_RL

100307_3T_BIAS_32CH.nii.gz
100307_3T_BIAS_BC.nii.gz
100307_3T_SpinEchoFieldMap_LR.nii.gz
100307_3T_SpinEchoFieldMap_RL.nii.gz
100307_3T_tfMRI_WM_RL_SBRef.nii.gz
100307_3T_tfMRI_WM_RL.nii.gz

tfMRI_WM_RL/LINKED_DATA/EPRIME

100307_3T_REC_run1_TAB.txt
100307_3T_WM_run1_TAB.txt

tfMRI_WM_RL/LINKED_DATA/EPRIME/EVs

0bk_body.txt
0bk_cor.txt
0bk_err.txt
0bk_faces.txt
0bk_nlr.txt
0bk_places.txt
0bk_tools.txt
2bk_body.txt
2bk_cor.txt
2bk_err.txt
2bk_faces.txt
2bk_nlr.txt
2bk_places.txt
2bk_tools.txt
all_bk_cor.txt
all_bk_err.txt
Stats.txt
Sync.txt

tfMRI_WM_RL/LINKED_DATA/PHYSIO

100307_3T_tfMRI_WM_RL_Physio_log.txt

Section B: Preprocessed Data Directory Structure

All minimally preprocessed data should unpack to a high level <SubjectID> directory (e.g., **100307/**, as exemplified here) that includes 3 (and only 3) subdirectories (each with various additional subdirectories)

<**SubjectID**>**/** (e.g., **100307/**)

Diffusion/

T1w/

MNINonLinear/

Diffusion Data

T1w/

T1w_acpc_dc_restore_1.25.nii.gz

T1w/Diffusion/

bvals
bvecs
data.nii.gz
nodif_brain_mask.nii.gz
grad_dev.nii.gz

Structural Volume and Surface Data

T1w/

100307_3T.csv
aparc.a2009s+aseg.nii.gz
aparc+aseg.nii.gz
BiasField_acpc_dc.nii.gz
brainmask_fs.nii.gz
ribbon.nii.gz
T1w_acpc_dc_restore_brain.nii.gz
T1w_acpc_dc_restore.nii.gz
T1w_acpc_dc.nii.gz
T1wDividedByT2w_ribbon.nii.gz
T1wDividedByT2w.nii.gz

T2w_acpc_dc_restore_brain.nii.gz
T2w_acpc_dc_restore.nii.gz
T2w_acpc_dc.nii.gz
wmparc.nii.gz

T1w/Native/

100307.L.inflated.native.surf.gii
100307.L.midthickness.native.surf.gii
100307.L.pial.native.surf.gii
100307.L.very_inflated.native.surf.gii
100307.L.white.native.surf.gii
100307.native.wb.spec
100307.R.inflated.native.surf.gii
100307.R.midthickness.native.surf.gii
100307.R.pial.native.surf.gii
100307.R.very_inflated.native.surf.gii
100307.R.white.native.surf.gii

T1w/fsaverage_LR32k/

100307.32k_fs_LR.wb.spec
100307.L.inflated.32k_fs_LR.surf.gii
100307.L.midthickness.32k_fs_LR.surf.gii
100307.L.pial.32k_fs_LR.surf.gii
100307.L.very_inflated.32k_fs_LR.surf.gii
100307.L.white.32k_fs_LR.surf.gii
100307.R.inflated.32k_fs_LR.surf.gii
100307.R.midthickness.32k_fs_LR.surf.gii
100307.R.pial.32k_fs_LR.surf.gii
100307.R.very_inflated.32k_fs_LR.surf.gii
100307.R.white.32k_fs_LR.surf.gii

MNINonLinear/Native/

100307.aparc.a2009s.native.dlabel.nii
100307.aparc.native.dlabel.nii
100307.ArealDistortion.native.dscalar.nii
100307.BA.native.dlabel.nii
100307.corrThickness.native.dscalar.nii
100307.curvature.native.dscalar.nii
100307.L.aparc.a2009s.native.label.gii
100307.L.aparc.native.label.gii
100307.L.ArealDistortion.native.shape.gii
100307.L.BA.native.label.gii

100307.L.BiasField.native.func.gii
100307.L.corrThickness.native.shape.gii
100307.L.curvature.native.shape.gii
100307.L.inflated.native.surf.gii
100307.L.midthickness.native.surf.gii
100307.L.MyelinMap.native.func.gii
100307.L.MyelinMap_BC.native.func.gii
100307.L.pial.native.surf.gii
100307.L.RefMyelinMap.native.func.gii
100307.L.roi.native.shape.gii
100307.L.SmoothedMyelinMap.native.func.gii
100307.L.SmoothedMyelinMap_BC.native.func.gii
100307.L.sphere.native.surf.gii
100307.L.sphere.reg.native.surf.gii
100307.L.sphere.reg.reg_LR.native.surf.gii
100307.L.sulc.native.shape.gii
100307.L.thickness.native.shape.gii
100307.L.very_inflated.native.surf.gii
100307.L.white.native.surf.gii
100307.MyelinMap.native.dscalar.nii
100307.MyelinMap_BC.native.dscalar.nii
100307.native.wb.spec
100307.R.aparc.a2009s.native.label.gii
100307.R.aparc.native.label.gii
100307.R.ArealDistortion.native.shape.gii
100307.R.BA.native.label.gii
100307.R.BiasField.native.func.gii
100307.R.corrThickness.native.shape.gii
100307.R.curvature.native.shape.gii
100307.R.inflated.native.surf.gii
100307.R.midthickness.native.surf.gii
100307.R.MyelinMap.native.func.gii
100307.R.MyelinMap_BC.native.func.gii
100307.R.pial.native.surf.gii
100307.R.RefMyelinMap.native.func.gii
100307.R.roi.native.shape.gii
100307.R.SmoothedMyelinMap.native.func.gii
100307.R.SmoothedMyelinMap_BC.native.func.gii
100307.R.sphere.native.surf.gii
100307.R.sphere.reg.native.surf.gii
100307.R.sphere.reg.reg_LR.native.surf.gii

100307.R.sulc.native.shape.gii
100307.R.thickness.native.shape.gii
100307.R.very_inflated.native.surf.gii
100307.R.white.native.surf.gii
100307.SmoothedMyelinMap.native.dscalar.nii
100307.SmoothedMyelinMap_BC.native.dscalar.nii
100307.sulc.native.dscalar.nii
100307.thickness.native.dscalar.nii

MNINonLinear/

100307.164k_fs_LR.wb.spec
100307.aparc.164k_fs_LR.dlabel.nii
100307.aparc.a2009s.164k_fs_LR.dlabel.nii
100307.ArealDistortion.164k_fs_LR.dscalar.nii
100307.BA.164k_fs_LR.dlabel.nii
100307.corrThickness.164k_fs_LR.dscalar.nii
100307.curvature.164k_fs_LR.dscalar.nii
100307.L.aparc.164k_fs_LR.label.gii
100307.L.aparc.a2009s.164k_fs_LR.label.gii
100307.L.ArealDistortion.164k_fs_LR.shape.gii
100307.L.atlasroi.164k_fs_LR.shape.gii
100307.L.BA.164k_fs_LR.label.gii
100307.L.corrThickness.164k_fs_LR.shape.gii
100307.L.curvature.164k_fs_LR.shape.gii
100307.L.inflated.164k_fs_LR.surf.gii
100307.L.midthickness.164k_fs_LR.surf.gii
100307.L.MyelinMap.164k_fs_LR.func.gii
100307.L.MyelinMap_BC.164k_fs_LR.func.gii
100307.L.RefMyelinMap.164k_fs_LR.func.gii
100307.L.pial.164k_fs_LR.surf.gii
100307.L.SmoothedMyelinMap.164k_fs_LR.func.gii
100307.L.SmoothedMyelinMap_BC.164k_fs_LR.func.gii
100307.L.sphere.164k_fs_LR.surf.gii
100307.L.sulc.164k_fs_LR.shape.gii
100307.L.thickness.164k_fs_LR.shape.gii
100307.L.very_inflated.164k_fs_LR.surf.gii
100307.L.white.164k_fs_LR.surf.gii
100307.MyelinMap.164k_fs_LR.dscalar.nii
100307.MyelinMap_BC.164k_fs_LR.dscalar.nii
100307.R.aparc.164k_fs_LR.label.gii
100307.R.aparc.a2009s.164k_fs_LR.label.gii

100307.R.ArealDistortion.164k_fs_LR.shape.gii
100307.R.atlasroi.164k_fs_LR.shape.gii
100307.R.BA.164k_fs_LR.label.gii
100307.R.corrThickness.164k_fs_LR.shape.gii
100307.R.curvature.164k_fs_LR.shape.gii
100307.R.inflated.164k_fs_LR.surf.gii
100307.R.midthickness.164k_fs_LR.surf.gii
100307.R.MyelinMap.164k_fs_LR.func.gii
100307.R.MyelinMap_BC.164k_fs_LR.func.gii
100307.R.RefMyelinMap.164k_fs_LR.func.gii
100307.R.pial.164k_fs_LR.surf.gii
100307.R.SmoothedMyelinMap.164k_fs_LR.func.gii
100307.R.SmoothedMyelinMap_BC.164k_fs_LR.func.gii
100307.R.sphere.164k_fs_LR.surf.gii
100307.R.sulc.164k_fs_LR.shape.gii
100307.R.thickness.164k_fs_LR.shape.gii
100307.R.very_inflated.164k_fs_LR.surf.gii
100307.R.white.164k_fs_LR.surf.gii
100307.SmoothedMyelinMap.164k_fs_LR.dscalar.nii
100307.SmoothedMyelinMap_BC.164k_fs_LR.dscalar.nii
100307.sulc.164k_fs_LR.dscalar.nii
100307.thickness.164k_fs_LR.dscalar.nii
aparc.a2009s+aseg.nii.gz
aparc+aseg.nii.gz
BiasField.nii.gz
brainmask_fs.nii.gz
ribbon.nii.gz
T1w_restore_brain.nii.gz
T1w_restore.nii.gz
T1w_restore.2.nii.gz
T1w.nii.gz
T2w_restore_brain.nii.gz
T2w_restore.nii.gz
T2w_restore.2.nii.gz
T2w.nii.gz
wmparc.nii.gz

MNINonLinear/xfms/

acpc_dc2standard.nii.gz
NonlinearRegJacobians.nii.gz
standard2acpc_dc.nii.gz

MNINonLinear/fsaverage_LR32k

100307.32k_fs_LR.wb.spec
100307.aparc.32k_fs_LR.dlabel.nii
100307.aparc.a2009s.32k_fs_LR.dlabel.nii
100307.ArealDistortion.32k_fs_LR.dscalar.nii
100307.BA.32k_fs_LR.dlabel.nii
100307.corrThickness.32k_fs_LR.dscalar.nii
100307.curvature.32k_fs_LR.dscalar.nii
100307.L.aparc.32k_fs_LR.label.gii
100307.L.aparc.a2009s.32k_fs_LR.label.gii
100307.L.ArealDistortion.32k_fs_LR.shape.gii
100307.L.atlasroi.32k_fs_LR.shape.gii
100307.L.BA.32k_fs_LR.label.gii
100307.L.corrThickness.32k_fs_LR.shape.gii
100307.L.curvature.32k_fs_LR.shape.gii
100307.L.inflated.32k_fs_LR.surf.gii
100307.L.midthickness.32k_fs_LR.surf.gii
100307.L.MyelinMap.32k_fs_LR.func.gii
100307.L.MyelinMap_BC.32k_fs_LR.func.gii
100307.L.pial.32k_fs_LR.surf.gii
100307.L.SmoothedMyelinMap.32k_fs_LR.func.gii
100307.L.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
100307.L.sphere.32k_fs_LR.surf.gii
100307.L.sulc.32k_fs_LR.shape.gii
100307.L.thickness.32k_fs_LR.shape.gii
100307.L.very_inflated.32k_fs_LR.surf.gii
100307.L.white.32k_fs_LR.surf.gii
100307.MyelinMap.32k_fs_LR.dscalar.nii
100307.MyelinMap_BC.32k_fs_LR.dscalar.nii
100307.R.aparc.32k_fs_LR.label.gii
100307.R.aparc.a2009s.32k_fs_LR.label.gii
100307.R.ArealDistortion.32k_fs_LR.shape.gii
100307.R.atlasroi.32k_fs_LR.shape.gii
100307.R.BA.32k_fs_LR.label.gii
100307.R.corrThickness.32k_fs_LR.shape.gii
100307.R.curvature.32k_fs_LR.shape.gii
100307.R.inflated.32k_fs_LR.surf.gii
100307.R.midthickness.32k_fs_LR.surf.gii
100307.R.MyelinMap.32k_fs_LR.func.gii
100307.R.MyelinMap_BC.32k_fs_LR.func.gii
100307.R.pial.32k_fs_LR.surf.gii

100307.R.SmoothedMyelinMap.32k_fs_LR.func.gii
100307.R.SmoothedMyelinMap_BC.32k_fs_LR.func.gii
100307.R.sphere.32k_fs_LR.surf.gii
100307.R.sulc.32k_fs_LR.shape.gii
100307.R.thickness.32k_fs_LR.shape.gii
100307.R.very_inflated.32k_fs_LR.surf.gii
100307.R.white.32k_fs_LR.surf.gii
100307.SmoothedMyelinMap.32k_fs_LR.dscalar.nii
100307.SmoothedMyelinMap_BC.32k_fs_LR.dscalar.nii
100307.sulc.32k_fs_LR.dscalar.nii
100307.thickness.32k_fs_LR.dscalar.nii

MNINonLinear/ ROIs/

Atlas_ROIs.2.nii.gz
Atlas_wmparc.2.nii.gz
ROIs.2.nii.gz
wmparc.2.nii.gz

rfMRI and tfMRI Volume Data

rfMRI Processing

MNINonLinear/Results/ contains subdirectories for 4 rfMRI scans (15 min each),

rfMRI_REST1_LR
rfMRI_REST1_RL
rfMRI_REST2_LR
rfMRI_REST2_RL

with the subdirectories:

MNINonLinear/Results/rfMRI_REST1_LR/

Movement_Regressors_dt.txt
Movement_Regressors.txt
Movement_AbsoluteRMS.txt
Movement_AbsoluteRMS_mean.txt
Movement_RelativeRMS.txt
Movement_RelativeRMS_mean.txt
rfMRI_REST1_LR_Atlas.dtseries.nii
rfMRI_REST1_LR_Jacobian.nii.gz
rfMRI_REST1_LR_SBRef.nii.gz
rfMRI_REST1_LR.nii.gz

rfMRI_REST1_LR_Physio_log.txt

MNINonLinear/Results/rfMRI_REST1_LR/RibbonVolumeToSurfaceMapping/
goodvoxels.nii.gz

The file names for the other 3 rfMRI scans are similar.

tfMRI Processing

MNINonLinear/Results/ contains 7 pairs of tfMRI scans (each task run once with right-to-left and once with left-to-right phase encoding):

tfMRI_EMOTION_LR
tfMRI_EMOTION_RL
tfMRI_GAMBLING_LR
tfMRI_GAMBLING_RL
tfMRI_LANGUAGE_LR
tfMRI_LANGUAGE_RL
tfMRI_MOTOR_LR
tfMRI_MOTOR_RL
tfMRI_RELATIONAL_LR
tfMRI_RELATIONAL_RL
tfMRI_SOCIAL_LR
tfMRI_SOCIAL_RL
tfMRI_WM_LR
tfMRI_WM_RL

MNINonLinear/Results/tfMRI_EMOTION_LR/
EMOTION_run2_TAB.txt
Movement_Regressors_dt.txt
Movement_Regressors.txt
Movement_AbsoluteRMS.txt
Movement_AbsoluteRMS_mean.txt
Movement_RelativeRMS.txt
Movement_RelativeRMS_mean.txt
RibbonVolumeToSurfaceMapping/
tfMRI_EMOTION_LR_Atlas.dtseries.nii
tfMRI_EMOTION_LR_hp200_s4_level1.fsf
tfMRI_EMOTION_LR_Jacobian.nii.gz
tfMRI_EMOTION_LR_SBRef.nii.gz
tfMRI_EMOTION_LR.nii.gz
tfMRI_EMOTION_LR_Physio_log.txt

MNINonLinear/Results/tfMRI_EMOTION_LR/EVs/

fear.txt
neut.txt
Stats.txt
Sync.txt

MNINonLinear/Results/tfMRI_EMOTION_LR/RibbonVolumeToSurfaceMapping/

goodvoxels.nii.gz

The file names for the other 13 tfMRI scans are similar.

tfMRI Level 2 Processing

MNINonLinear/Results/ also contains 7 other directories, one for each task:

tfMRI_EMOTION
tfMRI_GAMBLING
tfMRI_LANGUAGE
tfMRI_MOTOR
tfMRI_RELATIONAL
tfMRI_SOCIAL
tfMRI_WM

These directories contain an .fsf file that can be used to run a higher-level analysis across the two runs of each task. They also contain a script (prepare_level2_feat_analysis.sh) that must be run first, to set up appropriate registration matrices in the lower-level outputs:

MNINonLinear/Results/tfMRI_EMOTION/

prepare_level2_feat_analysis.sh
tfMRI_EMOTION_hp200_s4_level2.fsf

The file names for the other 7 tasks are similar.

Section C: ICA-FIX rfMRI Data Directory Structure

The **fix** (compact, 1.4 GB per subject) and **fix_extended** (7.4 GB per subject) and structurally denoised ICA-FIX cleaned rfMRI data packages should unpack into the <SubjectID>/MNINonLinear/Results/ directory (e.g., **100307/MNINonLinear/Results/**, as exemplified here) that contains subdirectories for 4 rfMRI scans (15 min each):

100307/MNINonLinear/Results/

rfMRI_REST1_LR/
rfMRI_REST1_RL/
rfMRI_REST2_LR/
rfMRI_REST2_RL/

Fix (compact version containing only grayordinate timeseries data)

For the **fix** data, the subdirectories have the following contents:

MNINonLinear/Results/rfMRI_REST1_LR/
rfMRI_REST1_LR_Atlas_hp2000_clean.dtseries.nii

The file names for the other 3 rfMRI scans are similar.

Fix_extended (containing volume time series data and ICA data)

For the **fix_extended** data, the subdirectories have the following contents:

MNINonLinear/Results/rfMRI_REST1_LR/
rfMRI_REST1_LR_hp2000_clean.nii.gz

MNINonLinear/Results/rfMRI_REST1_LR/rfMRI_REST1_LR_hp2000.ica/
fix4melview_HCP_hp2000_thr5.txt

MNINonLinear/Results/rfMRI_REST1_LR/rfMRI_REST1_LR_hp2000.ica/filtered_func_data.ica
eigenvalues_percent
log.txt
melodic_FTmix
melodic_IC.nii.gz
melodic_ICstats

melodic_mix
melodic_olC.nii.gz
melodic_Tmodes

MNINonLinear/Results/rfMRI_REST1_LR/rfMRI_REST1_LR_hp2000.ica/filtered_func_data.ica/report

00index.html [start with this to navigate the dataset]
EVplot.png
f1.txt
f1.png

…and so on for f2-f88

f89.txt
f89.png
head.html
IC_1_MM.html
IC_1_MMfit.png
IC_1_prob.png
IC_1_thresh.png
IC_1.html
IC_1.png

…and so on for IC_2-IC_88

IC_89_MM.html
IC_89_MMfit.png
IC_89_prob.png
IC_89_thresh.png
IC_89.html
IC_89.png
log.html
nav.html
t1.png
t1.txt

…and so on for f2-f88

t89.png
t89.txt

The file names for the other 3 rfMRI scans are similar.

Section D: tfMRI Individual FEAT-Analyzed Data Directory Structure

The individual cross-run FEAT analyzed tfMRI data (grayordinates-based) download packages should unpack into the <SubjectID>/MNINonLinear/Results/ directory (e.g., **100307/MNINonLinear/Results/**, as exemplified here) that contains 7 cross-run subdirectories, one for each task:

tfMRI_EMOTION
tfMRI_GAMBLING
tfMRI_LANGUAGE
tfMRI_MOTOR
tfMRI_RELATIONAL
tfMRI_SOCIAL
tfMRI_WM

These directories contain a .feat subdirectory that contains the output grayordinates CIFTI, list of contrast names for viewing in Connectome Workbench, design files for the cross-run (level 2) FEAT analysis, and a subdirectory for grayordinate statistics:

MNINonLinear/Results/tfMRI_EMOTION/tfMRI_EMOTION_hp200_s4_level2.feat/

100307_tfMRI_EMOTION_level2_hp200_s4.dscalar.nii
Contrasts.txt
design_cov.png
design_cov.ppm
design.con
design.fsf
design.grp
design.mat
design.png
design.ppm

MNINonLinear/Results/tfMRI_EMOTION/tfMRI_EMOTION_hp200_s4_level2.feat/GrayordinatesStats

cope1.feat/
cope2.feat/
cope3.feat/
cope4.feat/
cope5.feat/
cope6.feat/

MNINonLinear/Results/tfMRI_EMOTION/tfMRI_EMOTION_hp200_s4_level2.feat/GrayordinatesStats/cope1.feat

cope1.dtseries.nii
logfile
mask.dtseries.nii
mean_random_effects_var1.dtseries.nii
pe1.dtseries.nii
res4d.dtseries.nii
tdof_t1.dtseries.nii
tstat1.dtseries.nii
varcope1.dtseries.nii
weights1.dtseries.nii
zflame1lowerstat1.dtseries.nii
zflame1upperstat1.dtseries.nii
zstat1.dtseries.nii

The file names for the 5 other copes.feat subdirectories are similar.

The file names for the other 6 tasks are similar