



HUMAN  
**Connectome**  
PROJECT

WU-Minn HCP Q2 Data Release:  
Reference Manual

Appendix III – File Names and Directory  
Structure for Unprocessed and  
Preprocessed Q1+Q2 Data

---

**13 June 2013**

## Table of Contents

---

Introduction .....	3
Section A: Unprocessed Data Directory Structure .....	5
Diffusion Data.....	6
Structural Data .....	6
Resting State rfMRI Data.....	7
Task tfMRI Data .....	8
Section B: Preprocessed Data Directory Structure .....	17
Diffusion Data.....	17
Structural Volume and Surface Data .....	17
rfMRI and tfMRI Volume Data .....	23

## 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\\_Q1+Q2 Connectome in a Box](#).

If the data are downloaded, the user may choose to download unprocessed data, preprocessed data, or both. Regardless of this choice, all unprocessed and preprocessed data should unpack to a high level <SubjectID> directory (e.g., **100307/**, as exemplified here). If both types of 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

## Section A: Unprocessed Data Directory Structure

---

All unprocessed data from the Q1 release 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\_fmMRI\_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\_fmMRI\_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\_fmMRI\_LANGUAGE\_LR\_SBRef.nii.gz

100307\_3T\_fmMRI\_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.