

## **Description of files included in the IIT Human Brain Atlas (v.3.1)**

- **Summary:** The IIT Human Brain Atlas contains anatomical, DTI, and HARDI templates, probabilistic gray matter labeling, and files containing information about the quality of the templates. In addition, files that make the IIT Human Brain Atlas directly compatible with common neuroimaging tools such as FSL, TBSS, DTI-TK, ITK-SNAP, MRtrix etc. are provided.
- **Matrix size:** All files are available in two matrix sizes: 182x218x182 and 256x256x256. The spatial resolution is the same in both versions. The 256x256x256 is simply a zero-padded version of the 182x218x182 (the units for some of the files are different between versions; see details below). The origin of the 256x256x256 files is set to (0,0,0). The orientation of the 182x218x182 files is RPI and that of the 256x256x256 files is LPI.
- **Space:** The IIT Human Brain Atlas is in ICBM-152 space. More specifically, in FSL, the 182x218x182 files of the atlas are in MNI152, or MNI152\_T1\_1mm space.
- **Naming:** All files listed below are in 182x218x182 matrix size. The corresponding files in 256x256x256 matrix size are named the same way as the files in native matrix size with a “\_256” suffix. For example, the FA volume of the mean DTI template in 182x218x182 matrix size is called “IITmean\_FA.nii”, and the same volume in 256x256x256 matrix size is called “IITmean\_FA\_256.nii”. The \*\_256.nii files are not discussed separately in this document because they have the same contents as the corresponding files listed below.

### **1) Mean DTI template contains:**

- |                            |   |
|----------------------------|---|
| - IITmean_b0.nii:          | Average of the normalized $b=0$ sec/mm <sup>2</sup> (mean T2-weighted) images over all subjects.  |
| - IITmean_colormap.tif:    | FA-weighted orientation color maps produced from the tensors of the mean DTI template.  |
| - IITmean_cou.nii:         | Cone of uncertainty for the mean DTI template. (Produced based on 100 mean tensor templates generated with a bootstrap approach). (Units: degrees).   |
| - IITmean_dw.nii:          | Average normalized mean DW images over all subjects.  |
| - IITmean_FA.nii:          | FA maps produced from the tensors of the mean DTI template.   |
| - IITmean_FA_skeleton.nii: | White matter skeleton derived from IITmean_FA.nii, for use with TBSS. This skeleton was thresholded at $FA > 0.25$ .  |
| - IITmean_fastd.nii:       | Standard deviation of FA of the mean DTI template. (Produced based on 100 mean tensor templates generated with a bootstrap approach).   |
| - IITmean_L(1,2,3).nii:    | 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> eigenvalues of the mean DTI template. (Units: mm <sup>2</sup> /sec). (For the 256x256x256 version, Units: 10 <sup>-3</sup> mm <sup>2</sup> /sec). |

- IITmean\_lower\_cingulum.nii: Mask of the inferior portion of the cingulum corresponding to IITmean\_FA.nii, for use with TBSS.
- IITmean\_tensor.nii: Full tensors of the mean DTI template. The matrix size of this file is 182x218x182x6. (Units: mm<sup>2</sup>/sec). (The 256x256x256x6 version is compatible with DTI-TK, and has Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmean\_tensor\_mask\_256.nii: Binary mask corresponding to the tensor file of the mean DTI template "IITmean\_tensor\_256.nii", for use in the non-linear registration step of DTI-TK.
- IITmean\_tr.nii: Trace maps produced from the tensors of the mean DTI template. (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmean\_trstd.nii: Standard deviation of trace of the mean DTI template. (Produced based on 100 mean tensor templates generated with a bootstrap approach). (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmean\_tvdt\_scl.nii: Total variance of the diffusion tensor of the mean DTI template. (Produced based on 100 mean tensor templates generated with a bootstrap approach). (Units: 10<sup>-8</sup>(mm<sup>2</sup>/sec)<sup>2</sup>).
- IITmean\_V(1,2,3).nii: 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> eigenvectors of the mean DTI template. The dimensions of the three eigenvector files are 182x218x182x3. (For the 256x256x256 version of the atlas, the dimensions of the three eigenvector files are 256x256x256x3).
- IITmean\_(xx,yx,yy,zx,zy,zz).nii: The xx, yx, yy, zx, zy, zz tensor elements of the mean DTI template. (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- tbss\_3\_postreg\_iit(\_256): Script allowing use of the IIT Human Brain Atlas in TBSS. More specifically, this script applies the nonlinear transformations.
- tbss\_4\_prestats\_iit(\_256): Script allowing use of the IIT Human Brain Atlas in TBSS. More specifically, this script completes the final steps before statistical analysis.
- tbss\_non\_FA\_iit(\_256): Script allowing use of the IIT Human Brain Atlas in TBSS. More specifically, this script applies the nonlinear transformations and projection parameters to non-FA data.

## 2) Median DTI template contains:

- IITmedian\_colormap.tif: FA-weighted orientation color maps produced from the tensors of the median DTI template.

- IITmedian\_cou.nii: Cone of uncertainty for the median DTI template. (Produced based on 100 median tensor templates generated with a bootstrap approach). (Units: degrees).
- IITmedian\_FA.nii: FA maps produced from the tensors of the median DTI template.
- IITmedian\_fastd.nii: Standard deviation of FA of the median DTI template. (Produced based on 100 median tensor templates generated with a bootstrap approach).
- IITmedian\_L(1,2,3).nii: 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> eigenvalues of the median DTI template. (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmedian\_tr.nii: Trace maps produced from the tensors of the median DTI template. (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmedian\_trstd.nii: Standard deviation of trace of the median DTI template. (Produced based on 100 median tensor templates generated with a bootstrap approach). (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).
- IITmedian\_tvdt\_scl.nii: Total variance of the diffusion tensor of the median DTI template. (Produced based on 100 median tensor templates generated with a bootstrap approach). (Units: 10<sup>-8</sup>(mm<sup>2</sup>/sec)<sup>2</sup>).
- IITmedian\_V(1,2,3).nii: 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> eigenvectors of the median DTI template. The dimensions of the three eigenvector files are 182x218x182x3. (For the 256x256x256 version of the atlas, the dimensions of the three eigenvector files are 256x256x256x3).
- IITmedian\_(xx,yx,yy,zx,zy,zz).nii: The xx, yx, yy, zx, zy, zz tensor elements of the median DTI template. (Units: mm<sup>2</sup>/sec). (For the 256x256x256 version, Units: 10<sup>-3</sup> mm<sup>2</sup>/sec).

### 3) HARDI template contains:

- IIT\_HARDI.nii: Spherical harmonic (SH) coefficients representing the fiber orientation distribution (FOD) function (produced using constrained spherical deconvolution with  $l=6$ ). The dimensions of the file are 182x218x182x28. (For the 256x256x256 version of the atlas, the dimensions of the file are 256x256x256x28). Each of the 28 volumes corresponds to a single spherical harmonic component, in the following order:  
 [1] Y(0,0)  
 [2] Im {Y(2,2)}  
 [3] Im {Y(2,1)}  
 [4] Y(2,0)  
 [5] Re {Y(2,1)}

[6]  $\text{Re}\{Y(2,2)\}$   
 [7]  $\text{Im}\{Y(4,4)\}$   
 [8]  $\text{Im}\{Y(4,3)\}$  etc.

(Note: SH coefficients are stored in a format compatible with the MRtrix toolbox, i.e. the  $(-1)^m$  factor in SH basis was omitted).

- IIT\_GFA.nii: Generalized FA maps produced from the spherical harmonic coefficients of the HARDI template.
- IIT\_correlation.nii: Maps of the average correlation of neighboring FODs (6 neighbors) of the HARDI template. FOD correlation was defined in: "Anderson, A.W., 2005. *Measurement of fiber orientation distributions using high angular resolution diffusion imaging. Magn Reson Med* 54, 1194-1206".

#### 4) Gray matter atlas contains:

- IIT\_(CSF,GM,WM)\_tissue\_prob.nii: Probability maps for CSF, GM, WM.
- IITmean\_t1.nii: Mean T1-weighted template.
- IITstd\_t1.nii: Standard deviation of the T1-weighted template.
- IIT\_GM\_Desikan\_atlas.nii: 86 GM labels of the IIT Human Brain Atlas. (Based on the Desikan atlas, Neuroimage 2006;31:968-980).
- IIT\_GM\_Desikan\_confidence.nii: Confidence index map for the Desikan GM labels.
- IIT\_GM\_Desikan\_mask.nii: GM mask corresponding to the IIT Human Brain Atlas with the Desikan labels.
- IIT\_GM\_Desikan\_prob.nii: Maps of the probability that a GM voxel belongs to a GM label, for each Desikan GM label separately (thus this file contains 86 volumes, one for each label). The dimensions of this file are 182x218x182x86. (For the 256x256x256 version of the atlas, the dimensions of this file are 256x256x256x86). The order of the 86 GM labels in this file is shown in the "GM Labels" section below (1st column). When opened in FSL, the "volume" index in FSL corresponds to the "order" shown in the "GM Labels" section below. NOTE: DO NOT UNZIP THIS FILE WITHOUT ENOUGH SPACE (~2.5GB) IN THE TARGET DIRECTORY; IF YOU HAVE TROUBLE VIEWING THIS FILE IN FSLVIEW DUE TO ITS LARGE SIZE, YOU CAN OPEN THE INDIVIDUAL PROBABILITY MAPS FOR EACH LABEL AS DESCRIBED NEXT.
- label\_probabilities\_Desikan.zip: This zipped directory contains individual maps of the probability that a GM voxel belongs to a Desikan GM label. There is one file per label, named label-(labelID).nii. This is the same information as in the IIT\_GM\_Desikan\_prob.nii file

above, but divided into 86 files, one for each GM label. The dimensions of each file are 182x218x182. (For the 256x256x256 version of the atlas, the dimensions of each file are 256x256x256). The files are named using the labelID listed in the "GM labels" section below.

- LUT\_GM\_Desikan.txt: Text file containing an appropriate look-up table that allows visualization of all gray matter labels of the atlas in color in ITK-SNAP. This look-up table should be used in conjunction with the IIT\_GM\_Desikan\_atlas.nii.
- IIT\_GM\_Destrieux\_atlas.nii: 164 GM labels of the IIT Human Brain Atlas. (Based on the Destrieux atlas, Neuroimage 2010;53:1-15).
- IIT\_GM\_Destrieux\_confidence.nii: Confidence index map for the Destrieux GM labels.
- IIT\_GM\_Destrieux\_mask.nii: GM mask corresponding to the IIT Human Brain Atlas with the Destrieux labels.
- IIT\_GM\_Destrieux\_prob.nii: Maps of the probability that a GM voxel belongs to a GM label, for each Destrieux GM label separately (thus this file contains 164 volumes, one for each label). The dimensions of this file are 182x218x182x164. (For the 256x256x256 version of the atlas, the dimensions of this file are 256x256x256x164). The order of the 164 GM labels in this file is shown in the "GM Labels" section below (1st column). When opened in FSL, the "volume" index in FSL corresponds to the "order" shown in the "GM Labels" section below. NOTE: DO NOT UNZIP THIS FILE WITHOUT ENOUGH SPACE (~4GB) IN THE TARGET DIRECTORY; IF YOU HAVE TROUBLE VIEWING THIS FILE IN FSLVIEW DUE TO ITS LARGE SIZE, YOU CAN OPEN THE INDIVIDUAL PROBABILITY MAPS FOR EACH LABEL AS DESCRIBED NEXT.
- label\_probabilities\_Destrieux.zip: This zipped directory contains individual maps of the probability that a GM voxel belongs to a Destrieux GM label. There is one file per label, named label-(labelID).nii. This is the same information as in the IIT\_GM\_Destrieux\_prob.nii file above, but divided into 164 files, one for each GM label. The dimensions of each file are 182x218x182. (For the 256x256x256 version of the atlas, the dimensions of each file are 256x256x256). The files are named using the labelID listed in the "GM labels" section below.
- LUT\_GM\_Destrieux.txt: Text file containing an appropriate look-up table that allows visualization of all gray matter labels of the atlas in color in ITK-SNAP. This look-up table should be used in conjunction with the IIT\_GM\_Destrieux\_atlas.nii.

**GM labels based on the Desikan atlas (Neuroimage 2006;31:968-980)**

order	labelID	label-name
0	8	Left-Cerebellum-Cortex
1	47	Right-Cerebellum-Cortex
2	10	Left-Thalamus-Proper
3	49	Right-Thalamus-Proper
4	11	Left-Caudate
5	50	Right-Caudate
6	12	Left-Putamen
7	51	Right-Putamen
8	17	Left-Hippocampus
9	53	Right-Hippocampus
10	18	Left-Amygdala
11	54	Right-Amygdala
12	26	Left-Accumbens-area
13	58	Right-Accumbens-area
14	1000	ctx-lh-Unknown
15	2000	ctx-rh-Unknown
16	1001	ctx-lh-bankssts
17	2001	ctx-rh-bankssts
18	1002	ctx-lh-caudalanteriorcingulate
19	2002	ctx-rh-caudalanteriorcingulate
20	1003	ctx-lh-caudalmiddlefrontal
21	2003	ctx-rh-caudalmiddlefrontal
22	1004	ctx-lh-corpuscallosum
23	2004	ctx-rh-corpuscallosum
24	1005	ctx-lh-cuneus
25	2005	ctx-rh-cuneus
26	1006	ctx-lh-entorhinal
27	2006	ctx-rh-entorhinal
28	1007	ctx-lh-fusiform
29	2007	ctx-rh-fusiform
30	1008	ctx-lh-inferiorparietal
31	2008	ctx-rh-inferiorparietal
32	1009	ctx-lh-inferiortemporal
33	2009	ctx-rh-inferiortemporal
34	1010	ctx-lh-isthmuscingulate
35	2010	ctx-rh-isthmuscingulate
36	1011	ctx-lh-lateraloccipital
37	2011	ctx-rh-lateraloccipital
38	1012	ctx-lh-lateralorbitofrontal
39	2012	ctx-rh-lateralorbitofrontal
40	1013	ctx-lh-lingual
41	2013	ctx-rh-lingual
42	1014	ctx-lh-medialorbitofrontal
43	2014	ctx-rh-medialorbitofrontal
44	1015	ctx-lh-middletemporal
45	2015	ctx-rh-middletemporal
46	1016	ctx-lh-parahippocampal
47	2016	ctx-rh-parahippocampal

48	1017	ctx-lh-paracentral
49	2017	ctx-rh-paracentral
50	1018	ctx-lh-parsopercularis
51	2018	ctx-rh-parsopercularis
52	1019	ctx-lh-parsorbitalis
53	2019	ctx-rh-parsorbitalis
54	1020	ctx-lh-parstriangularis
55	2020	ctx-rh-parstriangularis
56	1021	ctx-lh-pericalcarine
57	2021	ctx-rh-pericalcarine
58	1022	ctx-lh-postcentral
59	2022	ctx-rh-postcentral
60	1023	ctx-lh-posteriorcingulate
61	2023	ctx-rh-posteriorcingulate
62	1024	ctx-lh-precentral
63	2024	ctx-rh-precentral
64	1025	ctx-lh-precuneus
65	2025	ctx-rh-precuneus
66	1026	ctx-lh-rostralanteriorcingulate
67	2026	ctx-rh-rostralanteriorcingulate
68	1027	ctx-lh-rostralmiddlefrontal
69	2027	ctx-rh-rostralmiddlefrontal
70	1028	ctx-lh-superiorfrontal
71	2028	ctx-rh-superiorfrontal
72	1029	ctx-lh-superiorparietal
73	2029	ctx-rh-superiorparietal
74	1030	ctx-lh-superiortemporal
75	2030	ctx-rh-superiortemporal
76	1031	ctx-lh-supramarginal
77	2031	ctx-rh-supramarginal
78	1032	ctx-lh-frontalpole
79	2032	ctx-rh-frontalpole
80	1033	ctx-lh-temporalpole
81	2033	ctx-rh-temporalpole
82	1034	ctx-lh-transversetemporal
83	2034	ctx-rh-transversetemporal
84	1035	ctx-lh-insula
85	2035	ctx-rh-insula

**GM labels based on the Destrieux atlas (Neuroimage 2010;53:1-15)**

order	labelID	label-name
0	8	Left-Cerebellum-Cortex
1	47	Right-Cerebellum-Cortex
2	10	Left-Thalamus-Proper
3	49	Right-Thalamus-Proper
4	11	Left-Caudate
5	50	Right-Caudate
6	12	Left-Putamen
7	51	Right-Putamen

8	17	Left-Hippocampus
9	53	Right-Hippocampus
10	18	Left-Amygdala
11	54	Right-Amygdala
12	26	Left-Accumbens-area
13	58	Right-Accumbens-area
14	11100	ctx_lh_Unknown
15	12100	ctx_rh_Unknown
16	11101	ctx_lh_G_and_S_frontomargin
17	12101	ctx_rh_G_and_S_frontomargin
18	11102	ctx_lh_G_and_S_occipital_inf
19	12102	ctx_rh_G_and_S_occipital_inf
20	11103	ctx_lh_G_and_S_paracentral
21	12103	ctx_rh_G_and_S_paracentral
22	11104	ctx_lh_G_and_S_subcentral
23	12104	ctx_rh_G_and_S_subcentral
24	11105	ctx_lh_G_and_S_transv_frontopol
25	12105	ctx_rh_G_and_S_transv_frontopol
26	11106	ctx_lh_G_and_S_cingul-Ant
27	12106	ctx_rh_G_and_S_cingul-Ant
28	11107	ctx_lh_G_and_S_cingul-Mid-Ant
29	12107	ctx_rh_G_and_S_cingul-Mid-Ant
30	11108	ctx_lh_G_and_S_cingul-Mid-Post
31	12108	ctx_rh_G_and_S_cingul-Mid-Post
32	11109	ctx_lh_G_cingul-Post-dorsal
33	12109	ctx_rh_G_cingul-Post-dorsal
34	11110	ctx_lh_G_cingul-Post-ventral
35	12110	ctx_rh_G_cingul-Post-ventral
36	11111	ctx_lh_G_cuneus
37	12111	ctx_rh_G_cuneus
38	11112	ctx_lh_G_front_inf-Opercular
39	12112	ctx_rh_G_front_inf-Opercular
40	11113	ctx_lh_G_front_inf-Orbital
41	12113	ctx_rh_G_front_inf-Orbital
42	11114	ctx_lh_G_front_inf-Triangul
43	12114	ctx_rh_G_front_inf-Triangul
44	11115	ctx_lh_G_front_middle
45	12115	ctx_rh_G_front_middle
46	11116	ctx_lh_G_front_sup
47	12116	ctx_rh_G_front_sup
48	11117	ctx_lh_G_Ins_lg_and_S_cent_ins
49	12117	ctx_rh_G_Ins_lg_and_S_cent_ins
50	11118	ctx_lh_G_insular_short
51	12118	ctx_rh_G_insular_short
52	11119	ctx_lh_G_occipital_middle
53	12119	ctx_rh_G_occipital_middle
54	11120	ctx_lh_G_occipital_sup
55	12120	ctx_rh_G_occipital_sup
56	11121	ctx_lh_G_oc-temp_lat-fusifor
57	12121	ctx_rh_G_oc-temp_lat-fusifor
58	11122	ctx_lh_G_oc-temp_med-Lingual



59	12122	ctx_rh_G_oc-temp_med-Lingual
60	11123	ctx_lh_G_oc-temp_med-Parahip
61	12123	ctx_rh_G_oc-temp_med-Parahip
62	11124	ctx_lh_G_orbital
63	12124	ctx_rh_G_orbital
64	11125	ctx_lh_G_pariet_inf-Angular
65	12125	ctx_rh_G_pariet_inf-Angular
66	11126	ctx_lh_G_pariet_inf-Supramar
67	12126	ctx_rh_G_pariet_inf-Supramar
68	11127	ctx_lh_G_parietal_sup
69	12127	ctx_rh_G_parietal_sup
70	11128	ctx_lh_G_postcentral
71	12128	ctx_rh_G_postcentral
72	11129	ctx_lh_G_precentral
73	12129	ctx_rh_G_precentral
74	11130	ctx_lh_G_precuneus
75	12130	ctx_rh_G_precuneus
76	11131	ctx_lh_G_rectus
77	12131	ctx_rh_G_rectus
78	11132	ctx_lh_G_subcallosal
79	12132	ctx_rh_G_subcallosal
80	11133	ctx_lh_G_temp_sup-G_T_transv
81	12133	ctx_rh_G_temp_sup-G_T_transv
82	11134	ctx_lh_G_temp_sup-Lateral
83	12134	ctx_rh_G_temp_sup-Lateral
84	11135	ctx_lh_G_temp_sup-Plan_polar
85	12135	ctx_rh_G_temp_sup-Plan_polar
86	11136	ctx_lh_G_temp_sup-Plan_tempo
87	12136	ctx_rh_G_temp_sup-Plan_tempo
88	11137	ctx_lh_G_temporal_inf
89	12137	ctx_rh_G_temporal_inf
90	11138	ctx_lh_G_temporal_middle
91	12138	ctx_rh_G_temporal_middle
92	11139	ctx_lh_Lat_Fis-ant-Horizont
93	12139	ctx_rh_Lat_Fis-ant-Horizont
94	11140	ctx_lh_Lat_Fis-ant-Vertical
95	12140	ctx_rh_Lat_Fis-ant-Vertical
96	11141	ctx_lh_Lat_Fis-post
97	12141	ctx_rh_Lat_Fis-post
98	11143	ctx_lh_Pole_occipital
99	12143	ctx_rh_Pole_occipital
100	11144	ctx_lh_Pole_temporal
101	12144	ctx_rh_Pole_temporal
102	11145	ctx_lh_S_calcarine
103	12145	ctx_rh_S_calcarine
104	11146	ctx_lh_S_central
105	12146	ctx_rh_S_central
106	11147	ctx_lh_S_cingul-Marginalis
107	12147	ctx_rh_S_cingul-Marginalis
108	11148	ctx_lh_S_circular_insula_ant
109	12148	ctx_rh_S_circular_insula_ant

110	11149	ctx_lh_S_circular_insula_inf
111	12149	ctx_rh_S_circular_insula_inf
112	11150	ctx_lh_S_circular_insula_sup
113	12150	ctx_rh_S_circular_insula_sup
114	11151	ctx_lh_S_collat_transv_ant
115	12151	ctx_rh_S_collat_transv_ant
116	11152	ctx_lh_S_collat_transv_post
117	12152	ctx_rh_S_collat_transv_post
118	11153	ctx_lh_S_front_inf
119	12153	ctx_rh_S_front_inf
120	11154	ctx_lh_S_front_middle
121	12154	ctx_rh_S_front_middle
122	11155	ctx_lh_S_front_sup
123	12155	ctx_rh_S_front_sup
124	11156	ctx_lh_S_interm_prim-Jensen
125	12156	ctx_rh_S_interm_prim-Jensen
126	11157	ctx_lh_S_intrapariet_and_P_tran
127	12157	ctx_rh_S_intrapariet_and_P_tran
128	11158	ctx_lh_S_oc_middle_and_Lunatus
129	12158	ctx_rh_S_oc_middle_and_Lunatus
130	11159	ctx_lh_S_oc_sup_and_transversal
131	12159	ctx_rh_S_oc_sup_and_transversal
132	11160	ctx_lh_S_occipital_ant
133	12160	ctx_rh_S_occipital_ant
134	11161	ctx_lh_S_oc-temp_lat
135	12161	ctx_rh_S_oc-temp_lat
136	11162	ctx_lh_S_oc-temp_med_and_Lingual
137	12162	ctx_rh_S_oc-temp_med_and_Lingual
138	11163	ctx_lh_S_orbital_lateral
139	12163	ctx_rh_S_orbital_lateral
140	11164	ctx_lh_S_orbital_med-olfact
141	12164	ctx_rh_S_orbital_med-olfact
142	11165	ctx_lh_S_orbital-H_Shaped
143	12165	ctx_rh_S_orbital-H_Shaped
144	11166	ctx_lh_S_parieto_occipital
145	12166	ctx_rh_S_parieto_occipital
146	11167	ctx_lh_S_pericallosal
147	12167	ctx_rh_S_pericallosal
148	11168	ctx_lh_S_postcentral
149	12168	ctx_rh_S_postcentral
150	11169	ctx_lh_S_precentral-inf-part
151	12169	ctx_rh_S_precentral-inf-part
152	11170	ctx_lh_S_precentral-sup-part
153	12170	ctx_rh_S_precentral-sup-part
154	11171	ctx_lh_S_suborbital
155	12171	ctx_rh_S_suborbital
156	11172	ctx_lh_S_subparietal
157	12172	ctx_rh_S_subparietal
158	11173	ctx_lh_S_temporal_inf
159	12173	ctx_rh_S_temporal_inf
160	11174	ctx_lh_S_temporal_sup

161	12174	ctx_rh_S_temporal_sup
162	11175	ctx_lh_S_temporal_transverse
163	12175	ctx_rh_S_temporal_transverse