**MESA Exam 6 Ancillary Study 253 Data Set Variable Guide**

Brain MRI – TR Muse

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| --- | --- |
| **Data Set name :** | MESAe6as253\_BMRITRMuse\_20240108 |
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**MESA Ancillary study #253, Atrial Fibrillation Study**

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See ancillary study publications1,2 in the Reference list for information on ancillary study methods and for examples of how to analyze the brain MRI data. Please acknowledge the Atrial Fibrillation Ancillary Study funding in all publications that use these brain MRI data: R01 HL127659 from the National Heart, Lung, and Blood Institute.

MESA participants from all six field centers who participated in the Atrial Fibrillation ancillary study3,4 at Exam 6 were invited to complete a brain MRI a median (IQR) of 18 (16, 20) months after the Exam 6 visit. This data set contains one record per ancillary study participant (n=1062) who had a brain MRI in March 2018 through August 2019 as part of the Atrial Fibrillation ancillary study. The Brain MRI Reading Center at the University of Pennsylvania provided this Trace (TR) dataset, which includes Trace calculated from axial 2D echo-planar diffusion-tensor imaging (DTI) using automated pipelines5 and reported for MUSE regions of interest (ROIs)6. Trace is a measure of water diffusion in tissue in units of mm2/s. Diffusion of water is hindered by cellular membranes, but readily occurs in the direction parallel to white matter fiber orientation. As WM tissue organization decreases through pathologic processes, water diffusion will change. Trace measures the magnitude of diffusion in all directions, and that magnitude will be low in areas of high WM tissue organization.

QC codes:

The variable qc\_code contains information on quality control issues. The values and their explanations are as follows:

L1 incidental findings detected in initial manual reading; structural brain lesion was present that should not affect regional volumes, either normal or abnormal

L2 incidental findings detected in initial manual reading; structural brain lesion was present that should not affect normal regional volumes, but abnormal volumes may be affected

L3 incidental findings detected in initial manual reading; structural brain lesion was present that may affect both normal and abnormal regional volumes.

QC\_I\_T1\_1 or QC\_I\_T1\_2 scans with image quality issues, such as “missing parts of brain” and “moderate motion”

QC\_I\_DTI\_1 scans with no DTI sequence data available

NA no qc issues

Comments regarding the qc\_code value are found in qc\_note.

Exclusions: for analysis of Trace, analysts must exclude scans with the following qc\_codes:

 L3 (n=15)

 QC\_I\_T1\_1 (n=1)

 QC\_I\_T1\_2 (n=1)

 QC\_I\_DTI\_1 (n=4)

For these 21 participants, the variable tr\_exclude is set to 1 and all Trace variables have been set to missing.

Analysts may also wish to exclude in a sensitivity analyses those with qc\_code = L2 (n=2).

Analysis recommendations: All brain MRI analyses in MESA should be adjusted for field center.

Abbreviations:

bs brainstem

dc diencephalon

**References**

1. Austin TR, Nasrallah IM, Erus G, Desiderio LM, Chen LY, Greenland P, Harding BN, Hughes TM, Jensen PN, Longstreth WT, Jr., et al. Association of Brain Volumes and White Matter Injury With Race, Ethnicity, and Cardiovascular Risk Factors: The Multi-Ethnic Study of Atherosclerosis. *Journal of the American Heart Association*. 2022;11:e023159. doi: 10.1161/JAHA.121.023159

2. Austin TR, Jensen PN, Nasrallah IM, Habes M, Rashid T, Ware JB. Left Atrial Function and Arrhythmias in Relation to Small Vessel Disease on Brain MRI: the Multi-Ethnic Study of Atherosclerosis. (under review).

3. Heckbert SR, Austin TR, Jensen PN, Chen LY, Post WS, Floyd JS, Soliman EZ, Kronmal RA, Psaty BM. Differences by race/ethnicity in the prevalence of clinically detected and monitor-detected atrial fibrillation: MESA. *Circulation Arrhythmia and electrophysiology*. 2020;13:e007698. doi: 10.1161/CIRCEP.119.007698

4. Heckbert SR, Austin TR, Jensen PN, Floyd JS, Psaty BM, Soliman EZ, Kronmal RA. Yield and consistency of arrhythmia detection with patch electrocardiographic monitoring: The Multi-Ethnic Study of Atherosclerosis. *J Electrocardiol*. 2018;51:997-1002.

5. Haight T, Nick Bryan R, Erus G, Hsieh MK, Davatzikos C, Nasrallah I, D'Esposito M, Jacobs DR, Jr., Lewis C, Schreiner P, et al. White matter microstructure, white matter lesions, and hypertension: An examination of early surrogate markers of vascular-related brain change in midlife. *Neuroimage Clin*. 2018;18:753-761. doi: 10.1016/j.nicl.2018.02.032

6. Doshi J, Erus G, Ou Y, Resnick SM, Gur RC, Gur RE, Satterthwaite TD, Furth S, Davatzikos C, Alzheimer's Neuroimaging I. MUSE: MUlti-atlas region Segmentation utilizing Ensembles of registration algorithms and parameters, and locally optimal atlas selection. *Neuroimage*. 2016;127:186-195. doi: 10.1016/j.neuroimage.2015.11.073

| **Order** | **Variable** | **Variable Description** |
| --- | --- | --- |
| 1 | idno | MESA Participant ID |
| 2 | agebrainmri6c | Age at Exam 6 Brain MRI (years) |
| 3 | brainmri\_tt6c | Time from baseline to Exam 6 brain MRI (days) |
| 4 | tr\_qc\_code | QC Code for Tr dataset:L1 = Incidental findings, level 1L2 = Incidental findings, level 2L3 = Incidental findings, level 3QC\_I\_T1\_1 = Quality control issue at image levelQC\_I\_T1\_2 = Quality control issue at image levelQC\_I\_DTI\_1 = Quality control issue at image level |
| 5 | qc\_note | MRI Reader Note explaining QC code |
| 6 | tr\_exclude | 0 = Include in analysis of Trace1 = Exclude from analysis of Trace based on QC Code |
| 7 | tr\_totalroi | Total Regions of Interest (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter+ventricle+BS |
| 8 | tr\_gm | Gray Matter (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 9 | tr\_wm | White Matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 10 | tr\_gm\_l | Gray Matter (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 11 | tr\_wm\_l | White Matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 12 | tr\_gm\_r | Gray Matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 13 | tr\_wm\_r | White Matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 14 | tr\_corpus\_callosum | Corpus callosum (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 15 | tr\_cerebellum | Cerebellum (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 16 | tr\_deep\_wm\_gm | Deep White Matter + Gray Matter (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 17 | tr\_frontal | Frontal (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 18 | tr\_limbic | Limbic (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 19 | tr\_occipital | Occipital (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 20 | tr\_parietal | Parietal (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 21 | tr\_temporal | Temporal (mm2/s)Hemisphere: BothTissue Segment: gray matter+white matter |
| 22 | tr\_ventricle | Ventricle (mm2/s)Hemisphere: BothTissue Segment: ventricle |
| 23 | tr\_cerebellum\_l | Cerebellum (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 24 | tr\_deep\_wm\_gm\_l | Deep White Matter + Gray Matter (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 25 | tr\_frontal\_l | Frontal (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 26 | tr\_limbic\_l | Limbic (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 27 | tr\_occipital\_l | Occipital (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 28 | tr\_parietal\_l | Parietal (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 29 | tr\_temporal\_l | Temporal (mm2/s)Hemisphere: LeftTissue Segment: gray matter+white matter |
| 30 | tr\_ventricle\_l | Ventricle (mm2/s)Hemisphere: LeftTissue Segment: ventricle |
| 31 | tr\_cerebellum\_r | Cerebellum (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 32 | tr\_deep\_wm\_gm\_r | Deep White Matter + Gray Matter (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 33 | tr\_frontal\_r | Frontal (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 34 | tr\_limbic\_r | Limbic (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 35 | tr\_occipital\_r | Occipital (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 36 | tr\_parietal\_r | Parietal (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 37 | tr\_temporal\_r | Temporal (mm2/s)Hemisphere: RightTissue Segment: gray matter+white matter |
| 38 | tr\_ventricle\_r | Ventricle (mm2/s)Hemisphere: RightTissue Segment: ventricle |
| 39 | tr\_basal\_ganglia | Basal ganglia (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 40 | tr\_deep\_gm | Deep Gray Matter (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 41 | tr\_deep\_wm | Deep white matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 42 | tr\_frontal\_gm | Frontal (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 43 | tr\_frontal\_wm | Frontal white matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 44 | tr\_limbic\_gm | Limbic (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 45 | tr\_occipital\_gm | Occipital (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 46 | tr\_occipital\_wm | Occipital white matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 47 | tr\_parietal\_gm | Parietal (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 48 | tr\_parietal\_wm | Parietal white matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 49 | tr\_temporal\_gm | Temporal (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 50 | tr\_temporal\_wm | Temporal white matter (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 51 | tr\_basal\_ganglia\_l | Basal ganglia (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 52 | tr\_deep\_gm\_l | Deep (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 53 | tr\_deep\_wm\_l | Deep white matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 54 | tr\_frontal\_gm\_l | Frontal (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 55 | tr\_frontal\_wm\_l | Frontal white matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 56 | tr\_limbic\_gm\_l | Limbic (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 57 | tr\_occipital\_gm\_l | Occipital (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 58 | tr\_occipital\_wm\_l | Occipital white matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 59 | tr\_parietal\_gm\_l | Parietal gray matter (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 60 | tr\_parietal\_wm\_l | Parietal white matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 61 | tr\_temporal\_gm\_l | Temporal Gray Matter (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 62 | tr\_temporal\_wm\_l | Temporal White Matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 63 | tr\_basal\_ganglia\_r | Basal Ganglia (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 64 | tr\_deep\_gm\_r | Deep gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 65 | tr\_deep\_wm\_r | Deep white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 66 | tr\_frontal\_gm\_r | Frontal gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 67 | tr\_frontal\_wm\_r | Frontal white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 68 | tr\_limbic\_gm\_r | Limbic gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 69 | tr\_occipital\_gm\_r | Occipital gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 70 | tr\_occipital\_wm\_r | Occipital white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 71 | tr\_parietal\_gm\_r | Parietal gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 72 | tr\_parietal\_wm\_r | Parietal white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 73 | tr\_temporal\_gm\_r | Temporal gray matter (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 74 | tr\_temporal\_wm\_r | Temporal white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 75 | tr\_frontal\_inferior\_gm | Frontal inferior (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 76 | tr\_frontal\_insular\_gm | Frontal insular (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 77 | tr\_frontal\_lateral\_gm | Frontal lateral (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 78 | tr\_frontal\_medial\_gm | Frontal medial (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 79 | tr\_frontal\_opercular\_gm | Frontal opercular (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 80 | tr\_limbic\_cingulate\_gm | Limbic cingulate (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 81 | tr\_limbic\_medialtemporal\_gm | Limbic medialtemporal (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 82 | tr\_occipital\_inferior\_gm | Occipital inferior (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 83 | tr\_occipital\_lateral\_gm | Occipital lateral (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 84 | tr\_occipital\_medial\_gm | Occipital medial (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 85 | tr\_parietal\_lateral\_gm | Parietal lateral (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 86 | tr\_parietal\_medial\_gm | Parietal medial (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 87 | tr\_temporal\_inferior\_gm | Temporal inferior (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 88 | tr\_temporal\_lateral\_gm | Tempora llateral (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 89 | tr\_temporal\_supratemporal\_gm | Temporal supratemporal (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 90 | tr\_frontal\_inferior\_gm\_l | Frontal inferior (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 91 | tr\_frontal\_insular\_gm\_l | Frontal insular (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 92 | tr\_frontal\_lateral\_gm\_l | Frontal lateral (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 93 | tr\_frontal\_medial\_gm\_l | Frontal medial (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 94 | tr\_frontal\_opercular\_gm\_l | Frontal opercular (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 95 | tr\_limbic\_cingulate\_gm\_l | Limbic cingulate (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 96 | tr\_limbic\_medialtemporal\_gm\_l | Limbic medialtemporal (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 97 | tr\_occipital\_inferior\_gm\_l | Occipital inferior (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 98 | tr\_occipital\_lateral\_gm\_l | Occipital lateral (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 99 | tr\_occipital\_medial\_gm\_l | Occipital medial (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 100 | tr\_parietal\_lateral\_gm\_l | Parietal lateral (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 101 | tr\_parietal\_medial\_gm\_l | Parietal medial (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 102 | tr\_temporal\_inferior\_gm\_l | Temporal inferior (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 103 | tr\_temporal\_lateral\_gm\_l | Temporal lateral (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 104 | tr\_temporal\_supratemporal\_gm\_l | Temporal supratemporal (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 105 | tr\_frontal\_inferior\_gm\_r | Frontal inferior (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 106 | tr\_frontal\_insular\_gm\_r | Frontal insular (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 107 | tr\_frontal\_lateral\_gm\_r | Frontal lateral (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 108 | tr\_frontal\_medial\_gm\_r | Frontal medial (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 109 | tr\_frontal\_opercular\_gm\_r | Frontal opercular (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 110 | tr\_limbic\_cingulate\_gm\_r | Limbic cingulate (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 111 | tr\_limbic\_medialtemporal\_gm\_r | Limbic medialtemporal (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 112 | tr\_occipital\_inferior\_gm\_r | Occipital inferior (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 113 | tr\_occipital\_lateral\_gm\_r | Occipital lateral (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 114 | tr\_occipital\_medial\_gm\_r | Occipital medial (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 115 | tr\_parietal\_lateral\_gm\_r | Parietal lateral (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 116 | tr\_parietal\_medial\_gm\_r | Parietal medial (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 117 | tr\_temporal\_inferior\_gm\_r | Temporal inferior (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 118 | tr\_temporal\_lateral\_gm\_r | Temporal lateral (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 119 | tr\_temporal\_supratemporal\_gm\_r | Temporal supratemporal (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 120 | tr\_thirdventricle | 3rd ventricle (mm2/s)Hemisphere: BothTissue Segment: ventricle |
| 121 | tr\_fourthventricle | 4th ventricle (mm2/s)Hemisphere: BothTissue Segment: ventricle |
| 122 | tr\_rightaccumbensarea | Right accumbens area (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 123 | tr\_leftaccumbensarea | Left accumbens area (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 124 | tr\_rightamygdala | Right amygdala (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 125 | tr\_leftamygdala | Left amygdala (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 126 | tr\_brainstem | Brain stem (mm2/s)Hemisphere: BothTissue Segment: NONE |
| 127 | tr\_rightcaudate | Right caudate (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 128 | tr\_leftcaudate | Left caudate (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 129 | tr\_rightcerebellumexterior | Right cerebellum exterior (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 130 | tr\_leftcerebellumexterior | Left cerebellum exterior (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 131 | tr\_rightcerebellumwhitematter | Right cerebellum white matter (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 132 | tr\_leftcerebellumwhitematter | Left cerebellum white matter (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 133 | tr\_righthippocampus | Right hippocampus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 134 | tr\_lefthippocampus | Left hippocampus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 135 | tr\_rightinflatvent | Right inf lat vent (mm2/s)Hemisphere: RightTissue Segment: ventricle |
| 136 | tr\_leftinflatvent | Left inf lat vent (mm2/s)Hemisphere: LeftTissue Segment: ventricle |
| 137 | tr\_rightlateralventricle | Right lateral ventricle (mm2/s)Hemisphere: RightTissue Segment: ventricle |
| 138 | tr\_leftlateralventricle | Left lateral ventricle (mm2/s)Hemisphere: LeftTissue Segment: ventricle |
| 139 | tr\_rightpallidum | Right pallidum (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 140 | tr\_leftpallidum | Left pallidum (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 141 | tr\_rightputamen | Right putamen (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 142 | tr\_leftputamen | Left putamen (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 143 | tr\_rightthalamusproper | Right thalamus proper (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 144 | tr\_leftthalamusproper | Left thalamus proper (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 145 | tr\_rightventraldc | Right ventral dc (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 146 | tr\_leftventraldc | Left ventral dc (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 147 | tr\_cerebellarvermallobulesiv | Cerebellar vermal lobules i-v (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 148 | tr\_cerebellarvermallobulesvivii | Cerebellar vermal lobules vi-vii (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 149 | tr\_cerebellarvermallobulesviiix | Cerebellar vermal lobules viii-x (mm2/s)Hemisphere: BothTissue Segment: gray matter |
| 150 | tr\_leftbasalforebrain | Left basal forebrain (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 151 | tr\_rightbasalforebrain | Right basal forebrain (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 152 | tr\_frontallobewmright | Frontal lobe wm right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 153 | tr\_frontallobewmleft | Frontal lobe wm left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 154 | tr\_occipitallobewmright | Occipital lobe wm right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 155 | tr\_occipitallobewmleft | Occipital lobe wm left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 156 | tr\_parietallobewmright | Parietal lobe wm right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 157 | tr\_parietallobewmleft | Parietal lobe wm left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 158 | tr\_temporallobewmright | Temporal lobe wm right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 159 | tr\_temporallobewmleft | Temporal lobe wm left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 160 | tr\_fornixright | Fornix right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 161 | tr\_fornixleft | Fornix left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 162 | tr\_anteriorlimbinternalcapsuleri | Anterior limb of internal capsule right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 163 | tr\_anteriorlimbinternalcapsulele | Anterior limb of internal capsule left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 164 | tr\_postlimbofintcapscerebpedrigh | Posterior limb of internal capsule inc. cerebral peduncle right (mm2/s)Hemisphere: RightTissue Segment: white matter |
| 165 | tr\_postlimbofintcapscerebpedleft | Posterior limb of internal capsule inc. cerebral peduncle left (mm2/s)Hemisphere: LeftTissue Segment: white matter |
| 166 | tr\_corpuscallosum | Corpus callosum (mm2/s)Hemisphere: BothTissue Segment: white matter |
| 167 | tr\_rightacgganteriorcingulategyr | Right anterior cingulate gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 168 | tr\_leftacgganteriorcingulategyru | Left anterior cingulate gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 169 | tr\_rightainsanteriorinsula | Right anterior insula (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 170 | tr\_leftainsanteriorinsula | Left anterior insula (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 171 | tr\_rightaorganteriororbitalgyrus | Right anterior orbital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 172 | tr\_leftaorganteriororbitalgyrus | Left anterior orbital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 173 | tr\_rightangangulargyrus | Right angular gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 174 | tr\_leftangangulargyrus | Left angular gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 175 | tr\_rightcalccalcarinecortex | Right calcarine cortex (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 176 | tr\_leftcalccalcarinecortex | Left calcarine cortex (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 177 | tr\_rightcocentraloperculum | Right central operculum (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 178 | tr\_leftcocentraloperculum | Left central operculum (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 179 | tr\_rightcuncuneus | Right cuneus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 180 | tr\_leftcuncuneus | Left cuneus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 181 | tr\_rightententorhinalarea | Right entorhinal area (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 182 | tr\_leftententorhinalarea | Left entorhinal area (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 183 | tr\_rightfofrontaloperculum | Right frontal operculum (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 184 | tr\_leftfofrontaloperculum | Left frontal operculum (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 185 | tr\_rightfrpfrontalpole | Right frontal pole (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 186 | tr\_leftfrpfrontalpole | Left frontal pole (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 187 | tr\_rightfugfusiformgyrus | Right fusiform gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 188 | tr\_leftfugfusiformgyrus | Left fusiform gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 189 | tr\_rightgregyrusrectus | Right gyrus rectus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 190 | tr\_leftgregyrusrectus | Left gyrus rectus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 191 | tr\_rightioginferioroccipitalgyru | Right inferior occipital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 192 | tr\_leftioginferioroccipitalgyrus | Left inferior occipital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 193 | tr\_rightitginferiortemporalgyrus | Right inferior temporal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 194 | tr\_leftitginferiortemporalgyrus | Left inferior temporal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 195 | tr\_rightliglingualgyrus | Right lingual gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 196 | tr\_leftliglingualgyrus | Left lingual gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 197 | tr\_rightlorglateralorbitalgyrus | Right lateral orbital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 198 | tr\_leftlorglateralorbitalgyrus | Left lateral orbital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 199 | tr\_rightmcggmiddlecingulategyrus | Right middle cingulate gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 200 | tr\_leftmcggmiddlecingulategyrus | Left middle cingulate gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 201 | tr\_rightmfcmedialfrontalcortex | Right medial frontal cortex (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 202 | tr\_leftmfcmedialfrontalcortex | Left medial frontal cortex (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 203 | tr\_rightmfgmiddlefrontalgyrus | Right middle frontal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 204 | tr\_leftmfgmiddlefrontalgyrus | Left middle frontal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 205 | tr\_rightmogmiddleoccipitalgyrus | Right middle occipital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 206 | tr\_leftmogmiddleoccipitalgyrus | Left middle occipital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 207 | tr\_rightmorgmedialorbitalgyrus | Right medial orbital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 208 | tr\_leftmorgmedialorbitalgyrus | Left medial orbital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 209 | tr\_rightmpogpostcentralgyrusmeds | Right postcentral gyrus medial segment (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 210 | tr\_leftmpogpostcentralgyrusmedse | Left postcentral gyrus medial segment (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 211 | tr\_rightmprgprecentralgyrusmedse | Right precentral gyrus medial segment (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 212 | tr\_leftmprgprecentralgyrusmedseg | Left precentral gyrus medial segment (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 213 | tr\_rightmsfgsuperfrontgyrusmedse | Right superior frontal gyrus medial segment (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 214 | tr\_leftmsfgsuperfrontgyrusmedseg | Left superior frontal gyrus medial segment (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 215 | tr\_rightmtgmiddletemporalgyrus | Right middle temporal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 216 | tr\_leftmtgmiddletemporalgyrus | Left middle temporal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 217 | tr\_rightocpoccipitalpole | Right occipital pole (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 218 | tr\_leftocpoccipitalpole | Left occipital pole (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 219 | tr\_rightofugoccipitalfusiformgyr | Right occipital fusiform gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 220 | tr\_leftofugoccipitalfusiformgyru | Left occipital fusiform gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 221 | tr\_rightopifgoperpartinffrontgyr | Right opercular part of the inferior frontal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 222 | tr\_leftopifgoperpartinffrontgyru | Left opercular part of the inferior frontal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 223 | tr\_rightorifgorbitalinffrontalgy | Right orbital part of the inferior frontal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 224 | tr\_leftorifgorbitalinffrontalgyr | Left orbital part of the inferior frontal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 225 | tr\_rightpcggposteriorcingulategy | Right posterior cingulate gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 226 | tr\_leftpcggposteriorcingulategyr | Left posterior cingulate gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 227 | tr\_rightpcuprecuneus | Right precuneus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 228 | tr\_leftpcuprecuneus | Left precuneus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 229 | tr\_rightphgparahippocampalgyrus | Right parahippocampal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 230 | tr\_leftphgparahippocampalgyrus | Left parahippocampal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 231 | tr\_rightpinsposteriorinsula | Right posterior insula (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 232 | tr\_leftpinsposteriorinsula | Left posterior insula (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 233 | tr\_rightpoparietaloperculum | Right parietal operculum (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 234 | tr\_leftpoparietaloperculum | Left parietal operculum (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 235 | tr\_rightpogpostcentralgyrus | Right postcentral gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 236 | tr\_leftpogpostcentralgyrus | Left postcentral gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 237 | tr\_rightporgposteriororbitalgyru | Right posterior orbital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 238 | tr\_leftporgposteriororbitalgyrus | Left posterior orbital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 239 | tr\_rightppplanumpolare | Right planum polare (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 240 | tr\_leftppplanumpolare | Left planum polare (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 241 | tr\_rightprgprecentralgyrus | Right precentral gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 242 | tr\_leftprgprecentralgyrus | Left precentral gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 243 | tr\_rightptplanumtemporale | Right planum temporale (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 244 | tr\_leftptplanumtemporale | Left planum temporale (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 245 | tr\_rightscasubcallosalarea | Right subcallosal area (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 246 | tr\_leftscasubcallosalarea | Left subcallosal area (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 247 | tr\_rightsfgsuperiorfrontalgyrus | Right superior frontal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 248 | tr\_leftsfgsuperiorfrontalgyrus | Left superior frontal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 249 | tr\_rightsmcsupplementarymotorcor | Right supplementary motor cortex (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 250 | tr\_leftsmcsupplementarymotorcort | Left supplementary motor cortex (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 251 | tr\_rightsmgsupramarginalgyrus | right supramarginal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 252 | tr\_leftsmgsupramarginalgyrus | Left supramarginal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 253 | tr\_rightsogsuperioroccipitalgyru | Right superior occipital gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 254 | tr\_leftsogsuperioroccipitalgyrus | Left superior occipital gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 255 | tr\_rightsplsuperiorparietallobul | Right superior parietal lobule (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 256 | tr\_leftsplsuperiorparietallobule | Left superior parietal lobule (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 257 | tr\_rightstgsuperiortemporalgyrus | Right superior temporal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 258 | tr\_leftstgsuperiortemporalgyrus | Left superior temporal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 259 | tr\_righttmptemporalpole | Right temporal pole (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 260 | tr\_lefttmptemporalpole | Left temporal pole (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 261 | tr\_righttrifgtripartinffrontgyrus | Right triangular part of the inferior frontal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 262 | tr\_lefttrifgtripartinffrontgyrus | Left triangular part of the inferior frontal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 263 | tr\_rightttgtransversetemporalgyrus | Right transverse temporal gyrus (mm2/s)Hemisphere: RightTissue Segment: gray matter |
| 264 | tr\_leftttgtransversetemporalgyrus | Left transverse temporal gyrus (mm2/s)Hemisphere: LeftTissue Segment: gray matter |
| 265 | bmri\_tr\_muse\_exam | Exam of ancillary AS253 brain MRI |