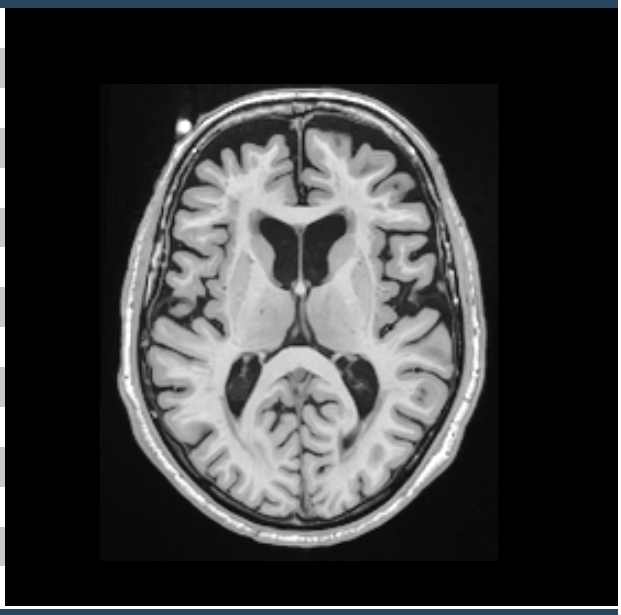
AssemblyNet volumetry report

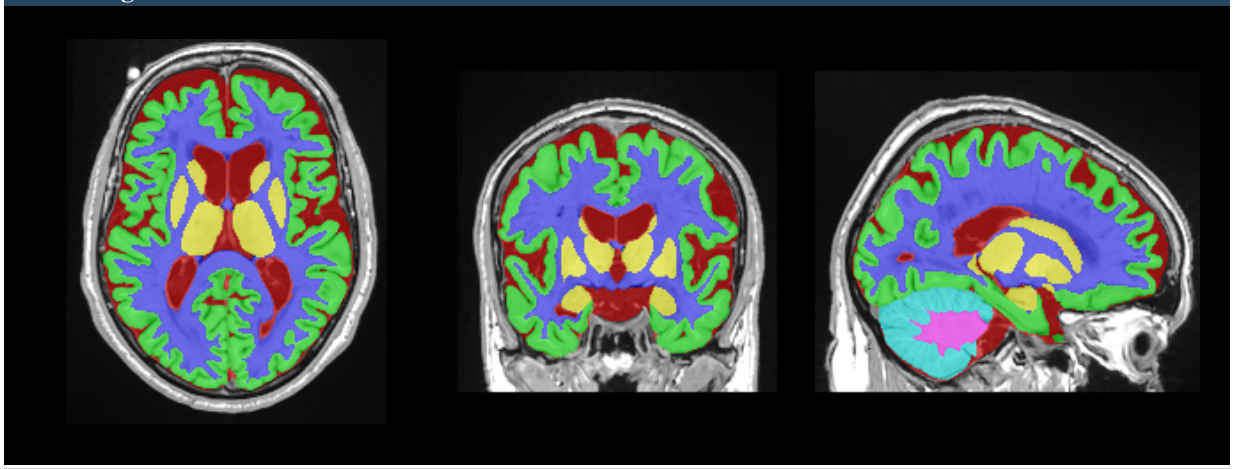
version 1.0 release 10-Nov-2020

Subject: job282815

Sex
UNKNOWN
Age
86.0
Report date
16-Feb-2022
Image orientation
Neurological
Scale factor
0.80
SNR
21.55
Quality control
A



Tissue segmentation



Tissue	Volume (cm^3 / %)	
White Matter (WM)	413.17 / 28.469	[25.412, 30.073]
Grey Matter (GM)	733.83 / 50.563	[47.715, 51.900]
Subcortical GM	40.09 / 2.762	[2.501, 3.144]
Cortical GM	576.18 / 39.700	[37.599, 41.312]
Cerebellar GM	117.56 / 8.100	[6.913, 8.577]
Cerebro Spinal Fluid (CSF)	284.73 / 19.619	[17.617, 24.621]
Brain (WM+GM)	1147.00 / 79.031	[74.160, 81.086]
Intracranial Cavity (IC)	1451.32 / 100.000	[100.000, 100.000]

All the volumes are presented in absolute value (measured in cm^3) and in relative value (measured in relation to the IC volume).

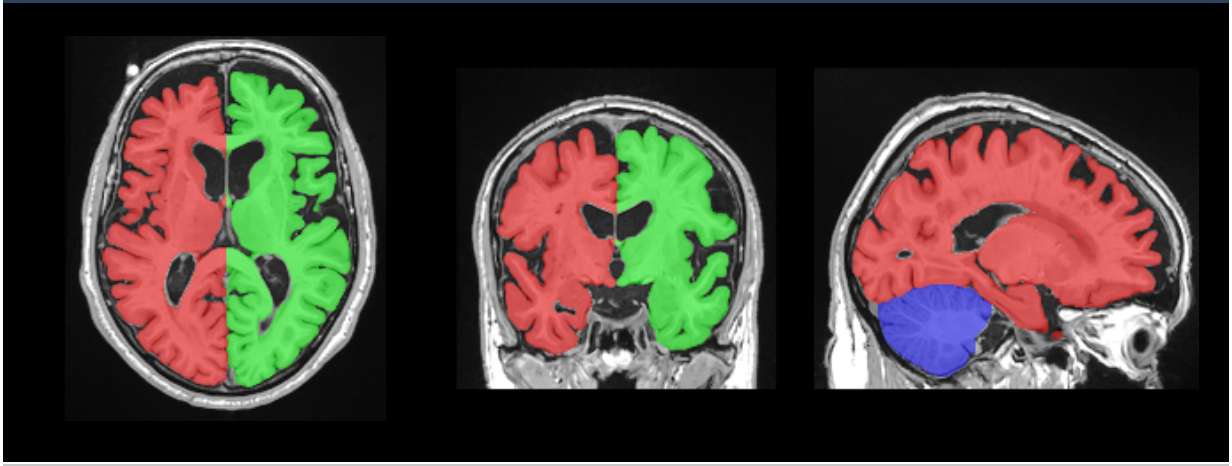
The quality control evaluates the input image quality after preprocessing. A = good, B = moderate (i.e., the output requires human verification) and C = bad (i.e., the output should not be used).

The Asymmetry Index is calculated as the difference between right and left volumes divided by their mean (in percent).

All the result images are located in the MNI space (neurological orientation).

Values between brackets show expected limits (95%) of normalized volume in function of sex and age for each measure for reference purpose. Values outside the limits are highlighted in red.

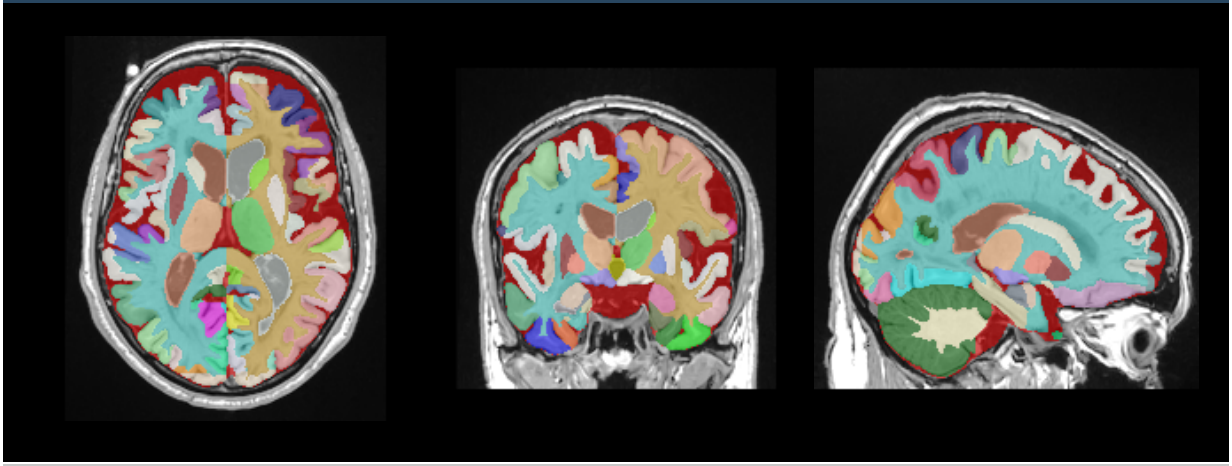
Macrostructure segmentation



Structure	Total (cm^3 / %)	Right (cm^3 / %)	Left (cm^3 / %)	Asymmetry (%)
Cerebrum	1005.82 / 69.303	503.73 / 34.709	502.08 / 34.595	0.3278
	[65.044, 71.823]	[32.630, 36.001]	[32.332, 35.845]	[-1.448, 2.347]
Cerebrum WM	389.55 / 26.841	194.76 / 13.419	194.79 / 13.422	-0.0180
	[23.975, 28.482]	[11.971, 14.269]	[11.986, 14.219]	[-1.883, 2.592]
Cerebrum GM	616.27 / 42.462	308.97 / 21.289	307.29 / 21.173	0.5464
	[40.286, 44.191]	[20.194, 22.142]	[20.059, 22.067]	[-1.569, 2.661]
Cerebellum*	129.75 / 8.940	65.32 / 4.501	64.43 / 4.439	1.3721
	[7.553, 9.448]	[3.816, 4.759]	[3.714, 4.694]	[-2.003, 5.100]
Cerebellum WM	23.62 / 1.627	11.81 / 0.813	11.81 / 0.814	-0.0676
	[1.276, 1.824]	[0.627, 0.902]	[0.649, 0.925]	[-8.734, 4.729]
Cerebellum GM	106.13 / 7.313	53.51 / 3.687	52.62 / 3.625	1.6925
	[6.167, 7.640]	[3.161, 3.930]	[3.024, 3.778]	[-1.610, 5.947]
Vermis	11.43 / 0.787			
	[0.644, 0.877]			
Brainstem	19.59 / 1.350			
	[1.114, 1.447]			

** Cerebellum volumes do not include vermis volume.*

Structure segmentation



Subcortical	Total (cm^3 / %)	Right (cm^3 / %)	Left (cm^3 / %)	Asymmetry (%)
Accumbens	0.73 / 0.051 [0.028, 0.062]	0.35 / 0.024 [0.013, 0.030]	0.38 / 0.026 [0.015, 0.033]	-8.4875 [-41.171, 9.683]
Amygdala	1.58 / 0.109 [0.115, 0.163]	0.75 / 0.051 [0.058, 0.086]	0.83 / 0.057 [0.054, 0.080]	-10.5263 [-10.242, 26.875]
Basal Forebrain	0.82 / 0.056 [0.051, 0.070]	0.36 / 0.025 [0.023, 0.033]	0.45 / 0.031 [0.027, 0.038]	-22.2656 [-35.002, 0.654]
Caudate	5.86 / 0.404 [0.302, 0.475]	2.98 / 0.205 [0.153, 0.241]	2.88 / 0.199 [0.148, 0.234]	3.4046 [-6.484, 11.786]
Hippocampus	5.68 / 0.391 [0.389, 0.538]	2.71 / 0.187 [0.193, 0.274]	2.97 / 0.204 [0.189, 0.270]	-9.0551 [-10.936, 16.031]
Pallidum	2.48 / 0.171 [0.152, 0.213]	1.22 / 0.084 [0.074, 0.103]	1.26 / 0.087 [0.078, 0.111]	-3.0274 [-14.920, 4.014]
Putamen	7.99 / 0.551 [0.461, 0.666]	4.11 / 0.283 [0.229, 0.331]	3.89 / 0.268 [0.231, 0.337]	5.4940 [-9.005, 6.298]
Thalamus	14.95 / 1.030 [0.879, 1.103]	7.61 / 0.524 [0.437, 0.552]	7.34 / 0.506 [0.438, 0.553]	3.6744 [-6.121, 5.936]
Ventral DC	9.70 / 0.668 [0.577, 0.674]	4.71 / 0.325 [0.281, 0.331]	4.99 / 0.344 [0.294, 0.343]	-5.6635 [-8.131, 0.648]

Cortical	Total (cm^3 / %)	Right (cm^3 / %)	Left (cm^3 / %)	Asymmetry (%)
Frontal lobe	189.41 / 13.051 [12.045, 13.687]	94.28 / 6.496 [6.012, 6.907]	95.13 / 6.555 [5.974, 6.831]	-0.9028 [-2.901, 4.997]
Frontal pole	7.06 / 0.487 [0.398, 0.580]	3.85 / 0.266 [0.205, 0.305]	3.21 / 0.221 [0.187, 0.281]	18.2681 [-4.423, 26.166]
Gyrus rectus	3.61 / 0.249 [0.223, 0.318]	2.24 / 0.154 [0.113, 0.173]	1.37 / 0.094 [0.096, 0.159]	48.2301 [-17.539, 41.535]
Opercular inf. frontal gyrus	6.67 / 0.460 [0.327, 0.560]	3.55 / 0.245 [0.155, 0.292]	3.12 / 0.215 [0.151, 0.292]	12.7273 [-44.248, 44.653]
Orbital inf. frontal gyrus	3.20 / 0.220 [0.148, 0.264]	1.41 / 0.097 [0.069, 0.143]	1.78 / 0.123 [0.064, 0.139]	-23.1096 [-50.597, 50.753]
Triangular inf. frontal gyrus	7.69 / 0.530 [0.341, 0.566]	3.72 / 0.256 [0.159, 0.301]	3.97 / 0.274 [0.161, 0.297]	-6.6632 [-44.033, 35.404]
Medial frontal cortex	3.44 / 0.237 [0.192, 0.291]	2.24 / 0.155 [0.089, 0.160]	1.20 / 0.083 [0.085, 0.145]	60.4543 [-34.935, 49.386]
Middle frontal gyrus	40.66 / 2.802 [2.447, 3.154]	20.18 / 1.390 [1.168, 1.608]	20.48 / 1.411 [1.202, 1.617]	-1.5079 [-14.289, 14.521]
Anterior orbital gyrus	4.09 / 0.282 [0.204, 0.346]	2.53 / 0.174 [0.098, 0.189]	1.56 / 0.107 [0.090, 0.186]	47.5893 [-36.652, 50.479]
Lateral orbital gyrus	6.55 / 0.452 [0.252, 0.412]	3.18 / 0.219 [0.119, 0.216]	3.38 / 0.233 [0.127, 0.226]	-6.0901 [-42.289, 34.245]
Medial orbital gyrus	9.17 / 0.632 [0.566, 0.755]	4.29 / 0.296 [0.275, 0.372]	4.87 / 0.336 [0.280, 0.397]	-12.7156 [-21.175, 16.909]
Posterior orbital gyrus	6.22 / 0.429 [0.359, 0.527]	3.22 / 0.222 [0.173, 0.266]	3.00 / 0.207 [0.174, 0.271]	7.1869 [-26.517, 25.717]
Precentral gyrus	27.81 / 1.916 [1.720, 2.099]	13.67 / 0.942 [0.836, 1.062]	14.14 / 0.975 [0.842, 1.064]	-3.4157 [-12.537, 14.235]
Precentral gyrus medial segment	4.69 / 0.323 [0.317, 0.471]	2.43 / 0.168 [0.147, 0.244]	2.26 / 0.156 [0.161, 0.245]	7.2461 [-29.156, 24.989]
Subcallosal area	4.18 / 0.288 [0.200, 0.346]	1.91 / 0.132 [0.099, 0.173]	2.26 / 0.156 [0.099, 0.173]	-16.6667 [-17.157, 11.193]
Sup. frontal gyrus	31.15 / 2.147 [1.816, 2.379]	15.21 / 1.048 [0.881, 1.198]	15.94 / 1.098 [0.873, 1.224]	-4.6793 [-19.973, 16.762]
Sup. frontal gyrus medial segment	12.16 / 0.838 [0.704, 1.008]	5.04 / 0.347 [0.352, 0.551]	7.12 / 0.490 [0.307, 0.495]	-34.1784 [-23.027, 43.547]
Supplementary motor cortex	11.05 / 0.761 [0.688, 0.917]	5.60 / 0.386 [0.322, 0.474]	5.45 / 0.376 [0.325, 0.482]	2.5576 [-29.670, 24.246]

Parietal lobe	108.89 / 7.502 [7.377, 8.594]	56.24 / 3.875 [3.654, 4.302]	52.64 / 3.627 [3.706, 4.330]	6.6133 [-7.711, 6.950]
Angular gyrus	21.19 / 1.460 [1.211, 1.754]	10.97 / 0.756 [0.654, 0.975]	10.22 / 0.705 [0.534, 0.836]	7.0212 [-9.327, 41.532]
Postcentral gyrus	22.89 / 1.577 [1.422, 1.768]	10.57 / 0.728 [0.661, 0.880]	12.32 / 0.849 [0.723, 0.935]	-15.3202 [-24.509, 7.866]
Postcentral gyrus medial segment	1.90 / 0.131 [0.108, 0.199]	1.05 / 0.072 [0.051, 0.112]	0.86 / 0.059 [0.047, 0.098]	20.1174 [-44.791, 58.609]
Precuneus	23.21 / 1.599 [1.455, 1.852]	11.89 / 0.819 [0.719, 0.943]	11.32 / 0.780 [0.711, 0.922]	4.9046 [-11.469, 12.950]
Sup. parietal lobule	21.32 / 1.469 [1.365, 1.871]	11.35 / 0.782 [0.674, 0.964]	9.98 / 0.687 [0.653, 0.933]	12.8482 [-17.716, 20.482]
Supramarginal gyrus	18.36 / 1.265 [1.071, 1.486]	10.42 / 0.718 [0.504, 0.763]	7.94 / 0.547 [0.521, 0.777]	26.9965 [-28.302, 24.901]
Temporal lobe	112.50 / 7.751 [7.158, 8.297]	53.25 / 3.669 [3.597, 4.206]	59.25 / 4.082 [3.526, 4.126]	-10.6590 [-5.684, 7.823]
Fusiform gyrus	15.02 / 1.035 [0.871, 1.309]	8.02 / 0.553 [0.427, 0.687]	7.00 / 0.482 [0.421, 0.652]	13.7018 [-19.326, 25.526]
Planum polare	4.08 / 0.281 [0.242, 0.343]	1.99 / 0.137 [0.120, 0.175]	2.09 / 0.144 [0.117, 0.179]	-4.6148 [-25.615, 21.398]
Planum temporale	3.15 / 0.217 [0.203, 0.337]	0.78 / 0.054 [0.080, 0.157]	2.38 / 0.164 [0.110, 0.204]	-101.4170 [-75.326, 15.436]
Inf. temporal gyrus	25.72 / 1.772 [1.660, 2.155]	12.28 / 0.846 [0.797, 1.091]	13.44 / 0.926 [0.817, 1.123]	-9.0503 [-20.545, 16.520]
Middle temporal gyrus	32.13 / 2.214 [1.795, 2.341]	14.91 / 1.027 [0.898, 1.197]	17.22 / 1.187 [0.876, 1.216]	-14.3915 [-15.747, 17.869]
Sup. temporal gyrus	13.36 / 0.921 [0.835, 1.149]	5.72 / 0.394 [0.415, 0.595]	7.64 / 0.526 [0.406, 0.589]	-28.6944 [-22.135, 21.869]
Transverse temporal gyrus	3.24 / 0.223 [0.173, 0.294]	1.82 / 0.125 [0.072, 0.138]	1.42 / 0.098 [0.090, 0.167]	24.5562 [-55.969, 16.132]
Temporal pole	15.79 / 1.088 [0.972, 1.356]	7.73 / 0.532 [0.478, 0.707]	8.06 / 0.555 [0.474, 0.676]	-4.2476 [-13.532, 20.618]

Occipital lobe	93.88 / 6.469 [5.419, 6.610]	49.78 / 3.430 [2.738, 3.392]	44.10 / 3.039 [2.616, 3.290]	12.0936 [-5.618, 12.686]
Calcarine cortex	7.70 / 0.530 [0.426, 0.673]	3.81 / 0.262 [0.216, 0.355]	3.89 / 0.268 [0.198, 0.334]	-2.1363 [-16.073, 25.735]
Cuneus	13.28 / 0.915 [0.580, 0.819]	6.82 / 0.470 [0.283, 0.431]	6.46 / 0.445 [0.274, 0.419]	5.3255 [-22.710, 29.067]
Lingual gyrus	21.40 / 1.474 [1.105, 1.532]	11.39 / 0.785 [0.547, 0.789]	10.01 / 0.690 [0.525, 0.782]	12.9085 [-16.790, 21.422]
Occipital fusiform gyrus	9.30 / 0.641 [0.442, 0.752]	3.95 / 0.272 [0.194, 0.380]	5.36 / 0.369 [0.216, 0.416]	-30.3124 [-53.500, 31.787]
Inf. occipital gyrus	17.50 / 1.206 [0.929, 1.337]	10.03 / 0.691 [0.445, 0.694]	7.48 / 0.515 [0.432, 0.688]	29.1083 [-30.621, 32.378]
Middle occipital gyrus	10.31 / 0.711 [0.620, 0.903]	5.28 / 0.363 [0.295, 0.492]	5.04 / 0.347 [0.275, 0.450]	4.6296 [-27.555, 44.460]
Sup. occipital gyrus	9.26 / 0.638 [0.453, 0.749]	5.62 / 0.387 [0.231, 0.417]	3.63 / 0.250 [0.198, 0.354]	42.9188 [-13.061, 46.245]
Occipital pole	5.13 / 0.354 [0.282, 0.482]	2.90 / 0.200 [0.141, 0.253]	2.23 / 0.154 [0.129, 0.243]	25.7974 [-31.421, 39.970]
Limbic cortex	41.46 / 2.857 [2.673, 3.207]	20.95 / 1.444 [1.284, 1.599]	20.51 / 1.413 [1.350, 1.674]	2.1256 [-17.353, 8.492]
Entorhinal area	4.35 / 0.300 [0.261, 0.408]	2.02 / 0.139 [0.127, 0.212]	2.33 / 0.161 [0.126, 0.211]	-14.4141 [-23.498, 30.214]
Anterior cingulate gyrus	9.28 / 0.640 [0.538, 0.816]	5.04 / 0.348 [0.227, 0.403]	4.24 / 0.292 [0.270, 0.459]	17.3345 [-52.930, 18.749]
Middle cingulate gyrus	11.61 / 0.800 [0.658, 0.871]	6.07 / 0.418 [0.320, 0.453]	5.54 / 0.381 [0.306, 0.452]	9.2566 [-18.756, 29.928]
Posterior cingulate gyrus	10.02 / 0.690 [0.648, 0.814]	4.81 / 0.331 [0.312, 0.412]	5.21 / 0.359 [0.319, 0.415]	-7.8903 [-17.811, 15.213]
Parahippocampal gyrus	6.20 / 0.427 [0.395, 0.543]	3.00 / 0.207 [0.183, 0.264]	3.20 / 0.220 [0.206, 0.293]	-6.2057 [-26.758, 6.826]
Insular cortex	30.04 / 2.070 [1.834, 2.261]	14.38 / 0.991 [0.888, 1.116]	15.66 / 1.079 [0.930, 1.146]	-8.5089 [-15.425, 3.491]
Anterior insula	9.28 / 0.639 [0.511, 0.690]	4.87 / 0.336 [0.251, 0.344]	4.41 / 0.304 [0.257, 0.349]	9.9630 [-13.234, 10.414]
Posterior insula	5.03 / 0.347 [0.282, 0.387]	2.43 / 0.167 [0.137, 0.198]	2.60 / 0.179 [0.132, 0.192]	-6.9141 [-21.748, 17.143]
Central operculum	7.76 / 0.535 [0.448, 0.598]	3.69 / 0.254 [0.209, 0.308]	4.07 / 0.281 [0.220, 0.307]	-9.9979 [-25.410, 16.089]
Frontal operculum	3.55 / 0.245 [0.190, 0.316]	1.38 / 0.095 [0.085, 0.160]	2.17 / 0.149 [0.090, 0.169]	-44.4094 [-48.743, 32.623]
Parietal operculum	4.42 / 0.304 [0.260, 0.405]	2.01 / 0.139 [0.107, 0.188]	2.40 / 0.166 [0.140, 0.226]	-17.6694 [-53.194, 11.459]

CSF	Total (cm^3 / %)	Right (cm^3 / %)	Left (cm^3 / %)	Asymmetry (%)
Inf. Lateral Ventricle	2.30 / 0.159 [0.075, 0.289]	1.11 / 0.077 [0.039, 0.147]	1.19 / 0.082 [0.033, 0.148]	-6.7961 [-46.323, 46.268]
Lateral Ventricle	49.63 / 3.419 [2.072, 6.212]	26.48 / 1.824 [0.984, 3.001]	23.15 / 1.595 [1.072, 3.264]	13.4230 [-36.323, 16.401]
3rd Ventricle	2.04 / 0.140 [0.086, 0.235]			
4th Ventricle	1.38 / 0.095 [0.079, 0.203]			
External CSF	229.39 / 15.805 [13.500, 19.897]			

Cerebellar vermis	Total (cm^3 / %)
Lobules I-V	5.67 / 0.391 [0.303, 0.457]
Lobules VI-VII	2.40 / 0.165 [0.136, 0.217]
Lobules VIII-X	3.36 / 0.231 [0.175, 0.257]