



version 1.0 release 15-Jun-2024

Subject: job1234567

Sex

Male

Age

22.0

Report date

15-Jul-2024

Image orientation

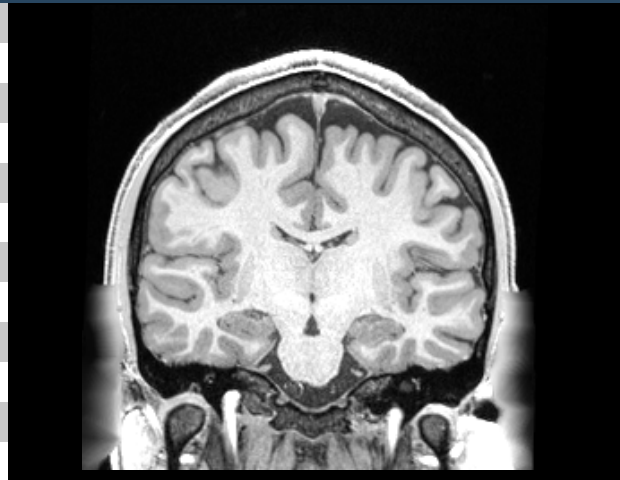
Radiological

Scale factor

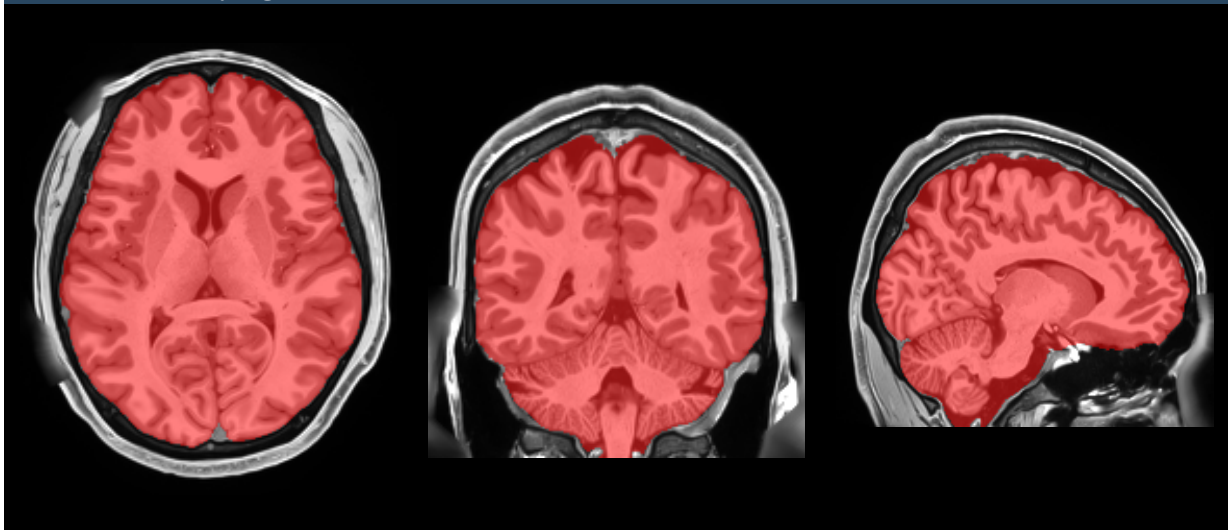
0.75

Total Intracranial Volume (cm³)

1394.25



Intracranial cavity segmentation²

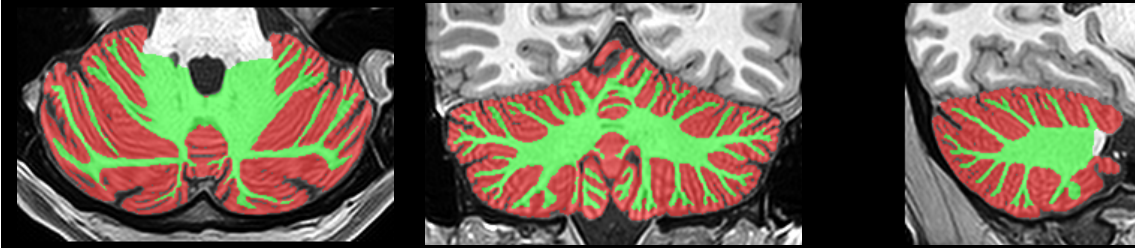


Global Tissue segmentation

Organ/Tissues ¹	Total (cm ³ / %)	Right (cm ³ / %)	Left (cm ³ / %)	Asymmetry (%)
Cerebellum	114.78 / 8.233 [7.687, 9.772]	57.71 / 4.139 [3.832, 4.902]	57.07 / 4.093 [3.858, 4.934]	1.1239 [-3.694, 4.452]
White Matter	37.72 / 2.705 [2.640, 3.340]	18.72 / 1.343 [1.318, 1.679]	18.99 / 1.362 [1.308, 1.678]	-0.2349 [-1.222, 1.214]
Grey Matter	77.06 / 5.527 [4.978, 6.536]	38.99 / 2.796 [2.487, 3.288]	38.08 / 2.731 [2.488, 3.263]	2.4250 [-4.172, 4.865]

Sergio Morell-Ortega, Marina Ruiz-Perez, Marien Gadea, Roberto Vivo-Hernando, Gregorio Rubio, Fernando Aparici, Maria de la Iglesia-Vaya, Gwenaelle Catheline, Pierrick Coupé, José V. Manjón, *DeepCERES: A Deep learning method for cerebellar lobule segmentation using ultra-high resolution multimodal MRI*, arXiv Preprint arXiv:2401.12074 PDF

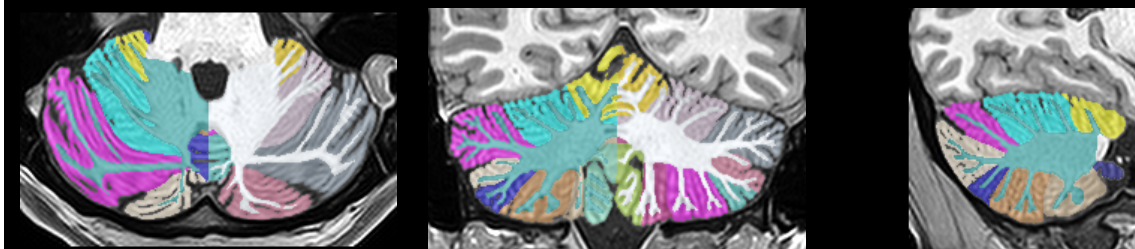
Tissue segmentation



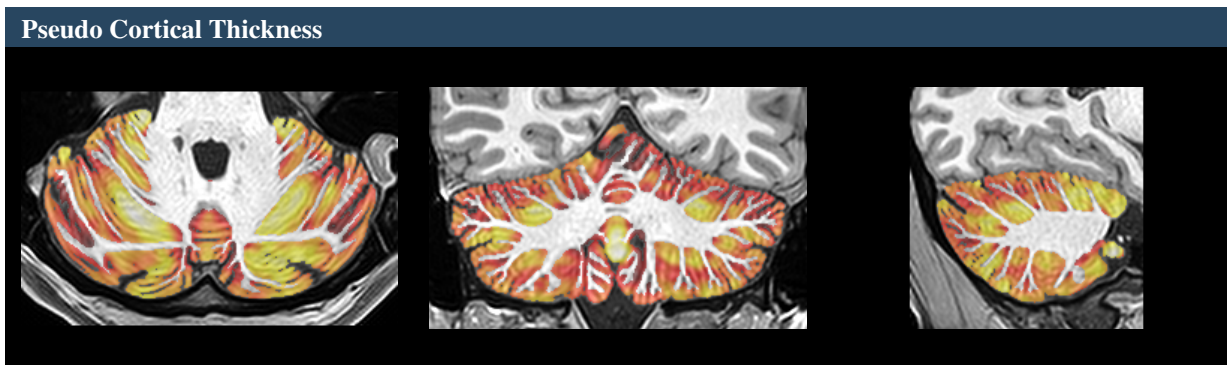
Local Tissue segmentation

Lobules	Total (cm ³ / %)	Right (cm ³ / %)	Left (cm ³ / %)	Asymmetry (%)
Lobules I-II	0.14 / 0.010 [0.002, 0.011]	0.07 / 0.005 [0.001, 0.006]	0.07 / 0.005 [0.001, 0.005]	5.3405 [-26.076, 54.391]
Lobule III	1.05 / 0.075 [0.048, 0.088]	0.54 / 0.038 [0.024, 0.044]	0.51 / 0.037 [0.023, 0.045]	4.4317 [-20.831, 21.878]
Lobule IV	2.87 / 0.206 [0.157, 0.242]	1.37 / 0.098 [0.078, 0.124]	1.50 / 0.108 [0.076, 0.121]	-9.2457 [-15.173, 20.964]
Lobule V	5.90 / 0.423 [0.291, 0.444]	3.06 / 0.220 [0.146, 0.227]	2.84 / 0.204 [0.142, 0.223]	7.6286 [-13.486, 18.046]
Lobule VI	11.58 / 0.831 [0.744, 1.168]	6.07 / 0.436 [0.368, 0.589]	5.51 / 0.395 [0.365, 0.584]	9.7591 [-13.310, 14.283]
Crus I	15.54 / 1.115 [1.060, 1.611]	7.80 / 0.560 [0.519, 0.807]	7.74 / 0.555 [0.532, 0.814]	0.8602 [-13.472, 10.105]
Crus II	12.46 / 0.894 [0.676, 1.112]	5.81 / 0.417 [0.334, 0.565]	6.66 / 0.477 [0.340, 0.573]	-13.5753 [-14.072, 14.337]
Lobule VIIB	6.76 / 0.485 [0.410, 0.646]	3.43 / 0.246 [0.202, 0.326]	3.33 / 0.239 [0.199, 0.329]	3.0344 [-18.369, 17.350]
Lobule VIIIA	9.81 / 0.704 [0.501, 0.738]	5.01 / 0.360 [0.248, 0.378]	4.80 / 0.344 [0.239, 0.372]	4.3508 [-16.587, 20.026]
Lobule VIIIB	5.78 / 0.414 [0.323, 0.486]	3.20 / 0.229 [0.162, 0.258]	2.58 / 0.185 [0.149, 0.245]	21.3707 [-15.711, 26.855]
Lobule IX	4.18 / 0.300 [0.274, 0.468]	2.11 / 0.151 [0.135, 0.231]	2.07 / 0.148 [0.137, 0.239]	1.9765 [-14.248, 10.507]
Lobule X	0.99 / 0.071 [0.051, 0.086]	0.51 / 0.037 [0.025, 0.043]	0.48 / 0.034 [0.025, 0.044]	7.0817 [-19.120, 20.417]

Lobule segmentation



Cortical Thickness				
Lobules ³	Mean (mm/norm.)	Right (mm/norm.)	Left (mm/norm.)	Asymmetry (%)
Lobules I-II	3.75 / 30.503 [8.915, 30.605]	3.86 / 31.453 [9.264, 30.863]	3.63 / 29.553 [8.261, 30.379]	6.2287 [-13.212, 25.221]
Lobule III	1.99 / 16.159 [12.705, 19.613]	1.95 / 15.855 [12.519, 20.154]	2.02 / 16.464 [12.376, 19.793]	-3.7692 [-16.744, 19.834]
Lobule IV	2.13 / 17.332 [17.372, 22.538]	2.15 / 17.486 [17.002, 22.797]	2.11 / 17.178 [17.120, 22.673]	1.7790 [-12.089, 12.731]
Lobule V	2.72 / 22.147 [16.937, 24.018]	2.90 / 23.642 [16.585, 24.522]	2.54 / 20.652 [16.715, 24.310]	13.5012 [-16.600, 13.406]
Lobule VI	2.75 / 22.405 [20.370, 25.070]	2.82 / 22.943 [20.326, 25.484]	2.69 / 21.868 [20.049, 25.008]	4.7953 [-7.721, 10.667]
Crus I	2.67 / 21.727 [21.282, 26.468]	2.72 / 22.118 [21.105, 26.648]	2.62 / 21.335 [21.242, 26.665]	3.6059 [-7.198, 8.572]
Crus II	3.08 / 25.057 [23.287, 28.814]	3.11 / 25.305 [23.017, 28.943]	3.05 / 24.809 [23.127, 29.094]	1.9778 [-7.821, 7.481]
Lobule VIIB	3.18 / 25.916 [24.597, 30.095]	3.31 / 26.958 [24.405, 30.491]	3.06 / 24.874 [24.327, 30.339]	8.0408 [-9.168, 9.677]
Lobule VIIIA	3.11 / 25.292 [23.444, 28.602]	3.21 / 26.155 [23.286, 28.968]	3.00 / 24.429 [23.343, 28.805]	6.8243 [-8.222, 9.075]
Lobule VIIIB	3.22 / 26.231 [23.855, 28.442]	3.27 / 26.646 [23.731, 28.755]	3.17 / 25.817 [23.518, 28.680]	3.1612 [-7.880, 9.070]
Lobule IX	3.05 / 24.844 [20.797, 27.154]	3.05 / 24.790 [20.614, 27.245]	3.06 / 24.898 [20.532, 27.540]	-0.4354 [-10.158, 9.764]
Lobule X	3.69 / 30.070 [23.801, 33.131]	3.83 / 31.212 [23.506, 34.020]	3.55 / 28.928 [22.313, 33.503]	7.5954 [-16.254, 24.294]



1 Result images located in the MNI space (neurological orientation). All the volumes are presented in absolute value (measured in cm^3) and in relative value (measured in relation to the IC volume).

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

3 Cortical thickness is given in MNI space in absolute value (mm) and also normalized in relation to the cube root of the intracranial volume (adimensional).

4 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.