# CERES Volumetry Report. version 1.0 release 11-11-2021

| Patient ID                                 | Sex                                       | Age                                       |  | Report Date |  |  |  |
|--|---|---|--|-------------|--|--|--|
| job373755                                  | UNKNOWN                                   | UNKNOWN                                   |  | 15-Feb-2022 |  |  |  |
| Image Information                          | 1   |   |  |             |  |  |  |
| Orientation                                | radiological                              |   |  |             |  |  |  |
| Scale factor                               | 0.85                                      |   |  |             |  |  |  |
| SNR  | 20.93                                     |   |  |             |  |  |  |
| Total intracranial volume $(cm^3)$ 1601.33 |   |   |  |             |  |  |  |
| Volumes                                    | <b>Total</b> ( <i>cm</i> <sup>3</sup> /%) | <b>Right</b> ( <i>cm</i> <sup>3</sup> /%) | <b>Left</b> ( <i>cm</i> <sup>3</sup> /%) | Asym.(%)    |  |  |  |
| Cerebellum                                 | 139.36 (8.7031)                           | 68.63 (4.2857)                            | 70.74 (4.4174)                           | -3.0268     |  |  |  |
| Lobule I-II                                | 0.14 (0.0087)                             | 0.07 (0.0044)                             | 0.07 (0.0044)                            | 0.0000      |  |  |  |
| Lobule III                                 | 1.88 (0.1174)                             | 1.01 (0.0630)                             | 0.87 (0.0545)                            | 14.4218     |  |  |  |
| Lobule IV                                  | 5.26 (0.3284)                             | 2.64 (0.1647)                             | 2.62 (0.1637)                            | 0.5838      |  |  |  |
| Lobule V                                   | 9.04 (0.5643)                             | 4.35 (0.2717)                             | 4.69 (0.2926)                            | -7.3990     |  |  |  |
| Lobule VI                                  | 20.93 (1.3069)                            | 10.06 (0.6285)                            | 10.86 (0.6785)                           | -7.6531     |  |  |  |
| Lobule Crus I                              | 26.04 (1.6264)                            | 13.54 (0.8453)                            | 12.51 (0.7811)                           | 7.8921      |  |  |  |
| Lobule Crus II                             | 19.53 (1.2196)                            | 9.71 (0.6063)                             | 9.82 (0.6133)                            | -1.1528     |  |  |  |
| Lobule VIIB                                | 12.01 (0.7498)                            | 5.53 (0.3455)                             | 6.47 (0.4043)                            | -15.6840    |  |  |  |
| Lobule VIIIA                               | 12.33 (0.7697)                            | 5.96 (0.3725)                             | 6.36 (0.3972)                            | -6.4213     |  |  |  |
| Lobule VIIIB                               | 8.13 (0.5079)                             | 3.83 (0.2389)                             | 4.31 (0.2690)                            | -11.8289    |  |  |  |
| Lobule IX                                  | 6.32 (0.3944)                             | 3.14 (0.1959)                             | 3.18 (0.1985)                            | -1.2962     |  |  |  |
| Lobule X                                   | 1.28 (0.0798)                             | 0.64 (0.0398)                             | 0.64 (0.0401)                            | -0.6671     |  |  |  |
| Grey matter vol.                           | <b>Total</b> ( <i>cm</i> <sup>3</sup> /%) | <b>Right</b> ( <i>cm</i> <sup>3</sup> /%) | <b>Left</b> ( <i>cm</i> <sup>3</sup> /%) | Asym.(%)    |  |  |  |
| Cerebellum                                 | 106.16 (6.6297)                           | 52.09 (3.2531)                            | 54.07 (3.3765)                           | -3.7227     |  |  |  |
| Lobule I-II                                | 0.07 (0.0042)                             | 0.04 (0.0022)                             | 0.03 (0.0019)                            | 18.0389     |  |  |  |
| Lobule III                                 | 1.29 (0.0805)                             | 0.70 (0.0435)                             | 0.59 (0.0370)                            | 19.0894     |  |  |  |
| Lobule IV                                  | 4.51 (0.2815)                             | 2.23 (0.1395)                             | 2.27 (0.1420)                            | -2.1294     |  |  |  |
| Lobule V                                   | 7.68 (0.4798)                             | 3.65 (0.2282)                             | 4.03 (0.2516)                            | -11.4272    |  |  |  |
| Lobule VI                                  | 18.38 (1.1476)                            | 8.69 (0.5426)                             | 9.69 (0.6050)                            | -12.7548    |  |  |  |
| Lobule Crus I                              | 22.62 (1.4126)                            | 11.76 (0.7343)                            | 10.86 (0.6783)                           | 9.3010      |  |  |  |
| Lobule Crus II                             | 17.59 (1.0987)                            | 8.73 (0.5454)                             | 8.86 (0.5534)                            | -1.7051     |  |  |  |
| Lobule VIIB                                | 10.83 (0.6765)                            | 4.99 (0.3116)                             | 5.84 (0.3649)                            | -18.4621    |  |  |  |
| Lobule VIIIA                               | 10.35 (0.6463)                            | 5.00 (0.3123)                             | 5.35 (0.3340)                            | -7.9038     |  |  |  |
| Lobule VIIIB                               | 6.33 (0.3955)                             | 3.04 (0.1898)                             | 3.29 (0.2057)                            | -9.4105     |  |  |  |
| Lobule IX                                  | 5.11 (0.3193)                             | 2.62 (0.1635)                             | 2.50 (0.1558)                            | 5.6319      |  |  |  |
| Lobule X                                   | 1.15 (0.0721)                             | 0.55 (0.0341)                             | 0.61 (0.0380)                            | -12.4700    |  |  |  |
| 20000011                                   | 1.10 (0.0721)                             | 0.00 (0.00 11)                            | 3.01 (0.0230)                            | 12.1700     |  |  |  |

<sup>\*</sup>All the volumes are presented in absolute value (measured in cm<sup>3</sup>) and in relative value (measured in relation to the ICV).

<sup>\*</sup> The Asymmetry Index is calculated as the difference between right and left volumes divided by their mean (in percent).

<sup>\*</sup>Cortical thickness is given in absolute value (mm) and also normalized in relation to the cube root of the intracranial volume (adimensional).

<sup>\*</sup>Result images located in the MNI space (neurological orientation).

| Cortical thickness | <b>Mean</b> $(mm/norm.)$ | <b>Right</b> ( <i>mm</i> / <i>norm</i> .) | <b>Left</b> $(mm/norm.)$ | Asym.(%) |
|--------------------|--------------------------|---|--------------------------|----------|
| Cerebellum         | 4.71 (4.023)             | 4.69 (4.008)                              | 4.72 (4.038)             | -0.7318  |
| Lobule I-II        | 1.62 (1.381)             | 1.52 (1.302)                              | 1.76 (1.505)             | -14.6850 |
| Lobule III         | 3.24 (2.767)             | 3.21 (2.741)                              | 3.27 (2.798)             | -2.0330  |
| Lobule IV          | 4.60 (3.932)             | 4.54 (3.880)                              | 4.66 (3.984)             | -2.6690  |
| Lobule V           | 4.79 (4.098)             | 4.70 (4.014)                              | 4.88 (4.173)             | -3.8741  |
| Lobule VI          | 4.86 (4.157)             | 4.76 (4.068)                              | 4.96 (4.237)             | -4.0773  |
| Lobule Crus I      | 4.55 (3.891)             | 4.66 (3.982)                              | 4.44 (3.793)             | 4.8662   |
| Lobule Crus II     | 5.00 (4.275)             | 4.95 (4.234)                              | 5.05 (4.316)             | -1.9060  |
| Lobule VIIB        | 5.08 (4.346)             | 5.00 (4.274)                              | 5.16 (4.408)             | -3.0932  |
| Lobule VIIIA       | 4.80 (4.101)             | 4.75 (4.059)                              | 4.84 (4.140)             | -1.9774  |
| Lobule VIIIB       | 4.49 (3.836)             | 4.56 (3.894)                              | 4.42 (3.782)             | 2.9418   |
| Lobule IX          | 4.01 (3.425)             | 4.28 (3.658)                              | 3.72 (3.181)             | 13.9308  |
| Lobule X           | 2.45 (2.096)             | 2.15 (1.836)                              | 2.73 (2.335)             | -23.8207 |

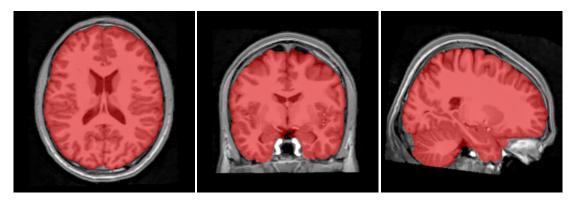
<sup>\*</sup>All the volumes are presented in absolute value (measured in cm<sup>3</sup>) and in relative value (measured in relation to the ICV).

<sup>\*</sup> The Asymmetry Index is calculated as the difference between right and left volumes divided by their mean (in percent).

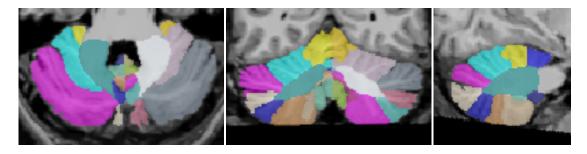
<sup>\*</sup>Cortical thickness is given in absolute value (mm) and also normalized in relation to the cube root of the intracranial volume (adimensional).

<sup>\*</sup>Result images located in the MNI space (neurological orientation).

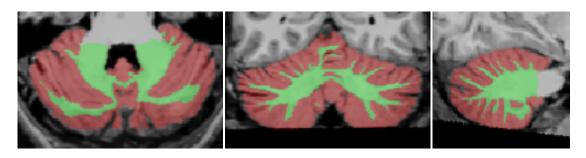
### **Intracranial cavity extraction**



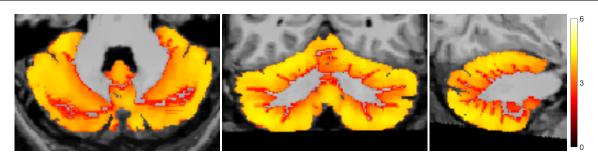
# Lobules segmentation



# Tissue classification



### Cortical thickness



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<sup>\*</sup>Cortical thickness is given in absolute value (mm) and also normalized in relation to the cube root of the intracranial volume (adimensional).

<sup>\*</sup>Result images located in the MNI space (neurological orientation).