Table S2.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Population | Time period | Approximate geological dates (ka) | N | Cranial capacity (Mean cc +/- stdev) |
| Neanderthals | Würm | 115-40 | 14 | 1,459 +/- 182 |
| *Homo sapiens* | Middle Pleistocene | 300-129 | 10 | 1,464 +/- 89 |
| *Homo sapiens* | Late Pleistocene MIS 5 | 129-71 | 5 | 1,454 +/- 124 |
| *Homo sapiens* | Late Pleistocene MIS 4 | 71-57 | 1 | 1,567 |
| *Homo sapiens* | Late Pleistocene MIS 3 | 57-29 | 16 | 1,451 +/- 157 |
| *Homo sapiens* | Late Pleistocene MIS 2 | 29-11.7 | 104 | 1,458 +/- 144 |
| *Homo sapiens* | Holocene Greenlandian | 11.7-8.3 | 41 | 1,509 +/- 159 |
| *Homo sapiens* | Holocene Northgrippian | 8.3-4.2 | 28 | 1,439 +/- 154 |
| *Homo sapiens* | Holocene Meghalayan | 4.2-1.0 | 30 | 1,396 +/- 150 |
| *Homo sapiens* | Modern archaeological/anatomical global (this study) | <1.0 | 455 | 1,304 +/- 154 |
| *Homo sapiens* | Modern archaeological/anatomical global (Beals et al., 1984) | <1.0 | 5,288 | 1,349 +/- 78 |
| *Homo sapiens* | Modern medical U.S. (Dekaban & Sadowski, 1978\*) | 0 | 3,399 | 1,334.5 +/- 205.9 |
| *Homo sapiens* | Modern medical MRI-based U.S. & Europe (Miller and Penke, 2007+) | 0 | 2,717 | 1,370.8 +/- 103.8 |
| *Homo sapiens* | Global average weighted by modern population size today (this study) | 0 | 477 | 1,327.5 +/- 144.9 |
| *Homo sapiens* | Global average weighted by modern population size ca. 1500 (this study) | 500-0 | 477 | 1,331.3 +/- 153 |

\*Brain weights converted to cranial capacity

\*Cranial capacity can be converted from brain weight (g) using Hofman (1983) brain mass (g) = cranial capacity (cc) \* 0.95. This equation is derived from brain volume (cc) = cranial capacity (cc) \*0.92 and the specific gravity of human brain tissue =1.036 g/cm^3. Ruff et al. (1997) brain mass (g) = 1.147 \* cranial capacity (cc) ^ 0.976. Here, we averaged the results of the two methods which were on average only 1-2% different from one another.

+MRI brain volume converted to cranial capacity using equation brain volume (cc) = cranial capacity (cc) \*0.92 (Hofman, 1983).