

**Table S1.** Mean values of the factors used in our models.

|    | MAT   | MAP    | MTWQ  | MTCQ  | MPWQ   | MPDQ  | ELE    | HPE                         |
|----|-------|--------|-------|-------|--------|-------|--------|-----------------------------|
| PL | (° C) | (mm)   | (° C) | (° C) | (mm)   | (mm)  | (m)    | (people/5 km <sup>2</sup> ) |
| 1  | 17.9  | 1020.6 | 18.7  | 16.7  | 395.3  | 98.8  | 1366.6 | 3500                        |
| 10 | 25.9  | 2338.3 | 26.4  | 25.5  | 898.4  | 353.7 | 193.2  | 1                           |
| 13 | 26    | 1452.7 | 26.1  | 25    | 653.4  | 145.2 | 229    | 1.3                         |
| 14 | 25    | 1375.4 | 26    | 24.8  | 640.9  | 116.1 | 289    | 1                           |
| 16 | 26    | 1122.5 | 26    | 25    | 476.9  | 127   | 202.8  | 2                           |
| 19 | 19.7  | 1793.4 | 20.3  | 19.1  | 730.6  | 177.9 | 1225.7 | 1                           |
| 20 | 25.9  | 2254.4 | 26    | 25    | 851.9  | 323   | 192.4  | 1                           |
| 25 | 21.5  | 3223.7 | 21.9  | 20.9  | 1287.8 | 366   | 1008.6 | 1                           |
| 29 | 26    | 2459.1 | 26    | 25    | 922.2  | 389.4 | 190.8  | 1                           |
| 3  | 18.2  | 1057   | 18.8  | 16.8  | 433.4  | 92    | 1345.8 | 3500                        |
| 30 | 26    | 3254.1 | 27    | 26    | 1295.5 | 418.3 | 125.5  | 1                           |
| 33 | 26    | 3495   | 27    | 25.7  | 1294.9 | 514.5 | 111.5  | 1                           |
| 34 | 26.6  | 2669.1 | 27.5  | 25.6  | 1342.5 | 110.1 | 202.6  | 1                           |
| 35 | 22.5  | 3011.8 | 23.5  | 21.4  | 1391.3 | 183.2 | 952.4  | 1                           |
| 36 | 22.4  | 1011.7 | 22.8  | 21.8  | 455.6  | 26    | 708.6  | 12                          |
| 37 | 22.2  | 2110.2 | 22.4  | 21.5  | 867.7  | 125.2 | 1006.5 | 16                          |
| 38 | 24.3  | 3247   | 24.7  | 23.9  | 1326.5 | 231.5 | 392.9  | 5.2                         |
| 39 | 28    | 2361.9 | 28    | 27    | 931.3  | 107.4 | 23     | 1.3                         |
| 4  | 27    | 1129.1 | 27    | 26    | 418.4  | 146.5 | 6.9    | 49                          |
| 40 | 23.8  | 2136.3 | 24.2  | 23.6  | 779.4  | 342.3 | 543.2  | 1                           |
| 42 | 27.8  | 434.2  | 28.7  | 26    | 235.4  | 12.4  | 31.1   | 2.7                         |
| 5  | 27    | 1235.6 | 27    | 26    | 448.5  | 154.3 | 15.9   | 32                          |

|           |      |        |      |      |        |       |        |       |
|-----------|------|--------|------|------|--------|-------|--------|-------|
| 51        | 27.3 | 1066.6 | 27.7 | 26.7 | 388.1  | 130.1 | 155.5  | 28.3  |
| 53        | 28   | 1228.7 | 28   | 27   | 420.3  | 160.6 | 0.5    | 26    |
| 6         | 28   | 2189.2 | 29   | 26   | 1183.4 | 40.9  | 43.5   | 1     |
| 63        | 24   | 1837.2 | 24.7 | 22.8 | 825.6  | 169   | 404.1  | 33.3  |
| 64        | 18.9 | 1140.3 | 19.6 | 17.7 | 447    | 118.8 | 1159.8 | 218   |
| 65        | 27   | 1405.5 | 28   | 26   | 505.2  | 113.9 | 6.8    | 25.3  |
| 67        | 25.3 | 1051.6 | 25.8 | 24.3 | 471.2  | 70.2  | 179.4  | 162.2 |
| 68        | 26.4 | 683.3  | 27.2 | 25.2 | 321.5  | 60    | 123.1  | 125.7 |
| 69        | 25   | 1668.5 | 25.9 | 24.9 | 913.9  | 60.5  | 349.4  | 1     |
| 70        | 26.8 | 1630.3 | 27.8 | 26.6 | 912.9  | 35.2  | 88.2   | 1     |
| 71        | 24.6 | 1481   | 25.2 | 23.6 | 575.7  | 132.2 | 291.4  | 23.5  |
| 72        | 18.4 | 1381.3 | 18.9 | 17.3 | 512.9  | 172.1 | 1227.2 | 22.2  |
| 73        | 25.4 | 1397.6 | 26.1 | 24.3 | 621.5  | 126.4 | 173.4  | 44    |
| 75        | 25.5 | 1234.4 | 26.2 | 24.5 | 529.7  | 113.5 | 108.7  | 13.2  |
| 76        | 22.8 | 1101.3 | 23.2 | 21.9 | 435.2  | 70.9  | 619.7  | 14.7  |
| 78        | 24.4 | 1637.4 | 25.1 | 23.2 | 595.9  | 173.7 | 326.8  | 9.3   |
| 81(10-18) | 25   | 2037   | 25.5 | 24.2 | 753.9  | 162.4 | 387.5  | 1.5   |
| 81(19-25) | 22.8 | 2017.6 | 23.2 | 22   | 786.6  | 159.7 | 724.2  | 2     |
| 82(18-24) | 24.1 | 1209.3 | 24.5 | 23.3 | 542.5  | 59.7  | 460.3  | 3.5   |
| 83        | 27.1 | 1287   | 28   | 26.2 | 555    | 41.8  | 87.4   | 14    |
| 86        | 27   | 1251.5 | 28   | 26   | 645.6  | 11.4  | 96.4   | 10    |

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Variables were calculated within a 5 km radius for each primary locality. PL – number of primary locality as appears in Handley [1] and Fig. S1; MAT – mean annual temperature; MAP – mean annual precipitation; MTWQ – mean temperature of the warmest quarter; MTCQ – mean temperature of the coldest quarter; MPWQ –

mean precipitation of the wettest quarter; MPDQ – mean precipitation of the driest quarter; ELE – elevation; HPE – human population density estimate. Climatic variables are based on Geographic Information System layers available at WorldClim ([www.worldclim.org](http://www.worldclim.org)) and on [2]. HPE is based on the Latin America and Caribbean Population Distribution Database for 1960 [3,4] provided by the United Nations Environmental Programme (<http://na.unep.net/siouxfalls/datasets/datalist.php>) [4].

## References

1. Handley CO (1976) Mammals of the Smithsonian Venezuelan project. Brigham Young Univ Sci Bull Biol Ser 20: 1-91.
2. Hijmans RJ, Cameron SE, Parra JL, Jones PG, Jarvis A (2005) Very high resolution interpolated climate surfaces for global land areas. Int J Climatol 25: 1965-1978.
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