

Supplementary S2

Summary:

Table S1. List of Environmental Variables

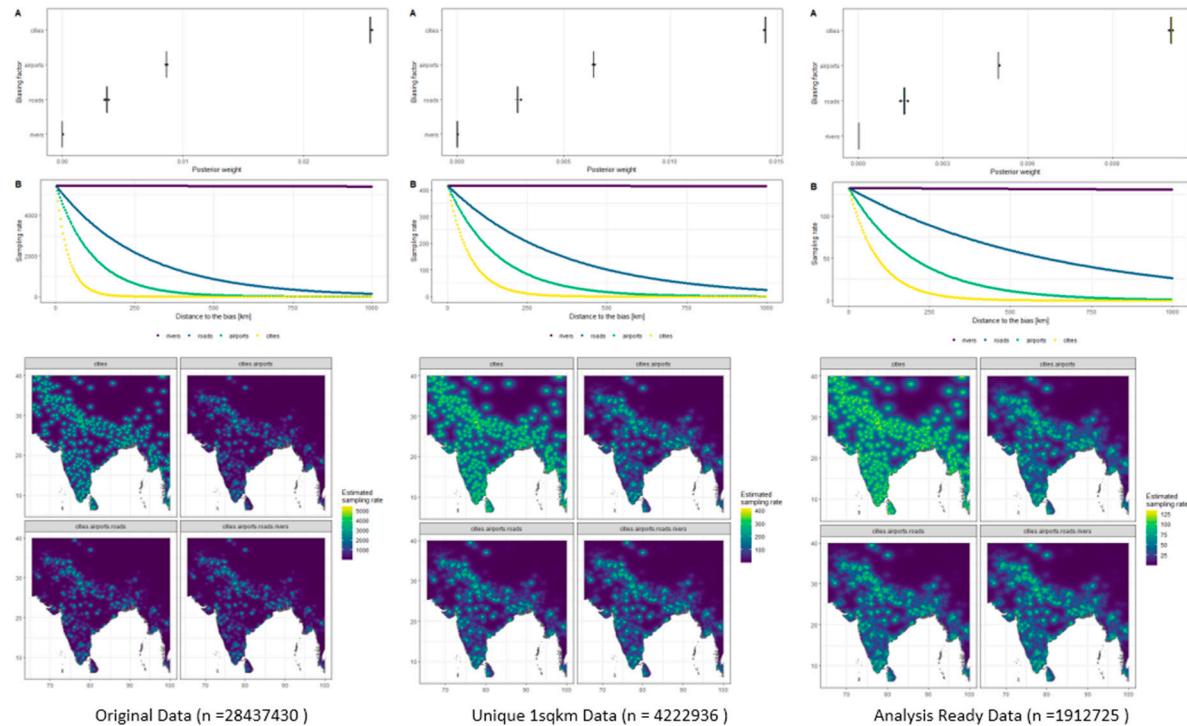
Figure S1. Bias correction results for presence data using sampbias packages.

Table S1. List of Environmental Variables

| Environment Variable | Brief Description | Category | Source |
|----------------------|--|-----------------------|--------|
| BIO1 | Annual Mean Temperature | Bioclimatic Variables | [2] |
| BIO2 | Mean Diurnal Range (Mean of monthly (max temp - min temp)) | Bioclimatic Variables | [2] |
| BIO3 | Isothermality (BIO2/BIO7) ($\times 100$) | Bioclimatic Variables | [2] |
| BIO4 | Temperature Seasonality (standard deviation $\times 100$) | Bioclimatic Variables | [2] |
| BIO5 | Max Temperature of Warmest Month | Bioclimatic Variables | [2] |
| BIO6 | Min Temperature of Coldest Month | Bioclimatic Variables | [2] |
| BIO7 | Temperature Annual Range (BIO5-BIO6) | Bioclimatic Variables | [2] |
| BIO8 | Mean Temperature of Wettest Quarter | Bioclimatic Variables | [2] |
| BIO9 | Mean Temperature of Driest Quarter | Bioclimatic Variables | [2] |
| BIO10 | Mean Temperature of Warmest Quarter | Bioclimatic Variables | [2] |
| BIO11 | Mean Temperature of Coldest Quarter | Bioclimatic Variables | [2] |
| BIO12 | Annual Precipitation | Bioclimatic Variables | [2] |
| BIO13 | Precipitation of Wettest Month | Bioclimatic Variables | [2] |
| BIO14 | Precipitation of Driest Month | Bioclimatic Variables | [2] |
| BIO15 | Precipitation Seasonality (Coefficient of Variation) | Bioclimatic Variables | [2] |
| BIO16 | Precipitation of Wettest Quarter | Bioclimatic Variables | [2] |
| BIO17 | Precipitation of Driest Quarter | Bioclimatic Variables | [2] |
| BIO18 | Precipitation of Warmest Quarter | Bioclimatic Variables | [2] |
| BIO19 | Precipitation of Coldest Quarter | Bioclimatic Variables | [2] |
| er_PETColdestQuarter | mean monthly PET of coldest quarter | EnviREM Variables | [3] |

| | | | |
|----------------------|---|-----------------------|-------------------|
| er_PETDriestQuarter | mean monthly PET of driest quarter | EnviREM Variables | [3] |
| er_PETseasonality | monthly variability in potential evapotranspiration | EnviREM Variables | [3] |
| er_PETWarmestQuarter | mean monthly PET of warmest quarter | EnviREM Variables | [3] |
| er_PETWettestQuarter | mean monthly PET of wettest quarter | EnviREM Variables | [3] |
| ele_Aspect | Aspect | Topographic Variables | Derived using [2] |
| ele_Elevation | Elevation | Topographic Variables | [2] |
| ele_TWI | Topographic wetness index | Topographic Variables | [3] |
| ele_TRI | Terrain roughness index | Topographic Variables | [3] |
| ele_Slope | Slope | Topographic Variables | Derived using [2] |

Figure S1. Bias correction results for presence data using “sambias” packages.



We obtained the following bias weights of cities = $2.551440e-02 \pm 4.130647e-05$, rivers = $8.432725e-06 \pm 3.715149e-06$, and roads = $3.699871e-03 \pm 5.759420e-05$, while for the final analysis-ready data we obtained following bias weights of cities = $1.107066e-02 \pm 2.315558e-05$, rivers = $1.573538e-05 \pm 8.218483e-06$, and roads = $1.618656e-03 \pm 4.402534e-05$ with default settings of “sambias” package. This result indicates that our final analysis-ready data had a lower level of sampling bias compared to the original data.

References:

1. Dinerstein, E.; Olson, D.; Joshi, A.; Vynne, C.; Burgess, N.D.; Wikramanayake, E.; Hahn, N.; Palminteri, S.; Hedao, P.; Noss, R.; et al. An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. *BioScience* **2017**, *67*, 534–545, doi:10.1093/BIOSCI/BIX014.
2. Hijmans, R.J.; Cameron, S.E.; Parra, J.L.; Jones, P.G.; Jarvis, A. Very High Resolution Interpolated Climate Surfaces for Global Land Areas. *International Journal of Climatology* **2005**, *25*, 1965–1978, doi:10.1002/joc.1276.
3. Title, P.O.; Bemmel, J.B. ENVIREM: An Expanded Set of Bioclimatic Variables Improves Ecological Niche Modeling Performance. *In preparation for submission to Methods in Ecology and Evolution* **2016**, *1*–48, doi:10.1101/075200.