**Supplementary Table 1.** Names of climatic variables tested as predictors and how they were calculated.

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| **Code** | **Name** | **Equation** | **Reference** |
| Bio1 | Annual Mean Temperature | $$\frac{\sum\_{1}^{12}Tas}{12}$$

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 | Donnell and Ignizio 2012 |
| Bio2 | Annual Mean Diurnal Range | $$\frac{\sum\_{1}^{12}(Tmax -Tmin)}{12}$$

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 | Donnell and Ignizio 2012 |
| Bio3 | Isothermality | $$\frac{Bio 2}{Bio 7} x 100$$

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 | Donnell and Ignizio 2012 |
| Bio4 | Temperature Seasonality | $ SD\{Tas1…Tas12$}

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 | Donnell and Ignizio 2012 |
| Bio5 | Maximum Temperature of the Warmest Month | $ max\{Tmax1…Tmax12$}

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 | Donnell and Ignizio 2012 |
| Bio6 | Minimum Temperature of the Coldest Month | $ min\{Tmin1…Tmin12$}

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 | Donnell and Ignizio 2012 |
| Bio7 | Annual Temperature Range | $$ Bio 5 -Bio 6$$

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 | Donnell and Ignizio 2012 |
| Bio8 |

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| Mean Temperature of the Wettest Quarter |

 | The maximum of 12 consecutive quarters' precipitation are first calculated then:$$\frac{\sum\_{1}^{3}Tas}{3}$$ | Donnell and Ignizio 2012 |
| Bio9 | Mean Temperature of the Driest Quarter | The minimum of 12 consecutive quarters' precipitation are first calculated then:$$\frac{\sum\_{1}^{3}Tas}{3}$$ | Donnell and Ignizio 2012 |
| Bio10 | Mean Temperature of the Warmest Quarter | The maximum of 12 consecutive quarters' mean temperature are first calculated then:$$\frac{\sum\_{1}^{3}Tas}{3}$$ | Donnell and Ignizio 2012 |
| Bio11 | Mean Temperature of the Coldest Quarter | The minimum of 12 consecutive quarters' mean temperature are first calculated then:$$\frac{\sum\_{1}^{3}Tas}{3}$$$$\genfrac{}{}{0pt}{}{\sum\_{1}^{12}Precip}{}$$ | Donnell and Ignizio 2012 |
| Bio12 | Annual Precipitation |  | Donnell and Ignizio 2012 |
| Bio13 | Precipitation of the Wettest Month | $ max\{Precip1…Precip12$} | Donnell and Ignizio 2012 |
| BIo14 | Precipitation of the Driest Month | $ min\{Precip1…Precip12$} | Donnell and Ignizio 2012 |
| Bio15 | Precipitation Seasonality (Coefficient of Variation) | $\frac{SD\{Precip1…Precip12\}}{1+Bio 12/12}$ X 100

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 | Donnell and Ignizio 2012 |
| Bio16 | Precipitation of the Wettest Quarter | The maximum of 12 consecutive quarters' precipitation | Donnell and Ignizio 2012 |
| Bio17 | Precipitation of the Driest Quarter | The minimum of 12 consecutive quarters' precipitation | Donnell and Ignizio 2012 |
| Bio18 |

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| Precipitation of the Warmest Quarter |

 | The maximum of 12 consecutive quarters' mean temperature are first calculated then:$$\frac{\sum\_{1}^{3}Precip}{3}$$ | Donnell and Ignizio 2012 |
| Bio19 | Precipitation of the Coldest Quarter | The minimum of 12 consecutive quarters' mean temperature are first calculated then:$$\frac{\sum\_{1}^{3}Precip}{3}$$ | Donnell and Ignizio 2012 |
| PET | Potential Evapotranspiration | $16 X \left(\frac{10Tas}{I}\right)^{a}X\frac{N}{12}X\frac{d}{30}$ \*\* | Thorntwaite 1948, however, R function thornthwaite() from SPEI package 1.7 was used |
| arid | Aridity Index | $$\frac{Precip}{PET} $$

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 | Tsakiris and Vanelis 2005 |
| sst | Sea Surface Temperature | Mean of all month’s SST | Data taken directly from source |
| tas | Mean monthly temperature | Mean of all months | Data taken directly from source |
| precip | Mean monthly precipitation | Mean of all month’s precipitation | Data taken directly from source |