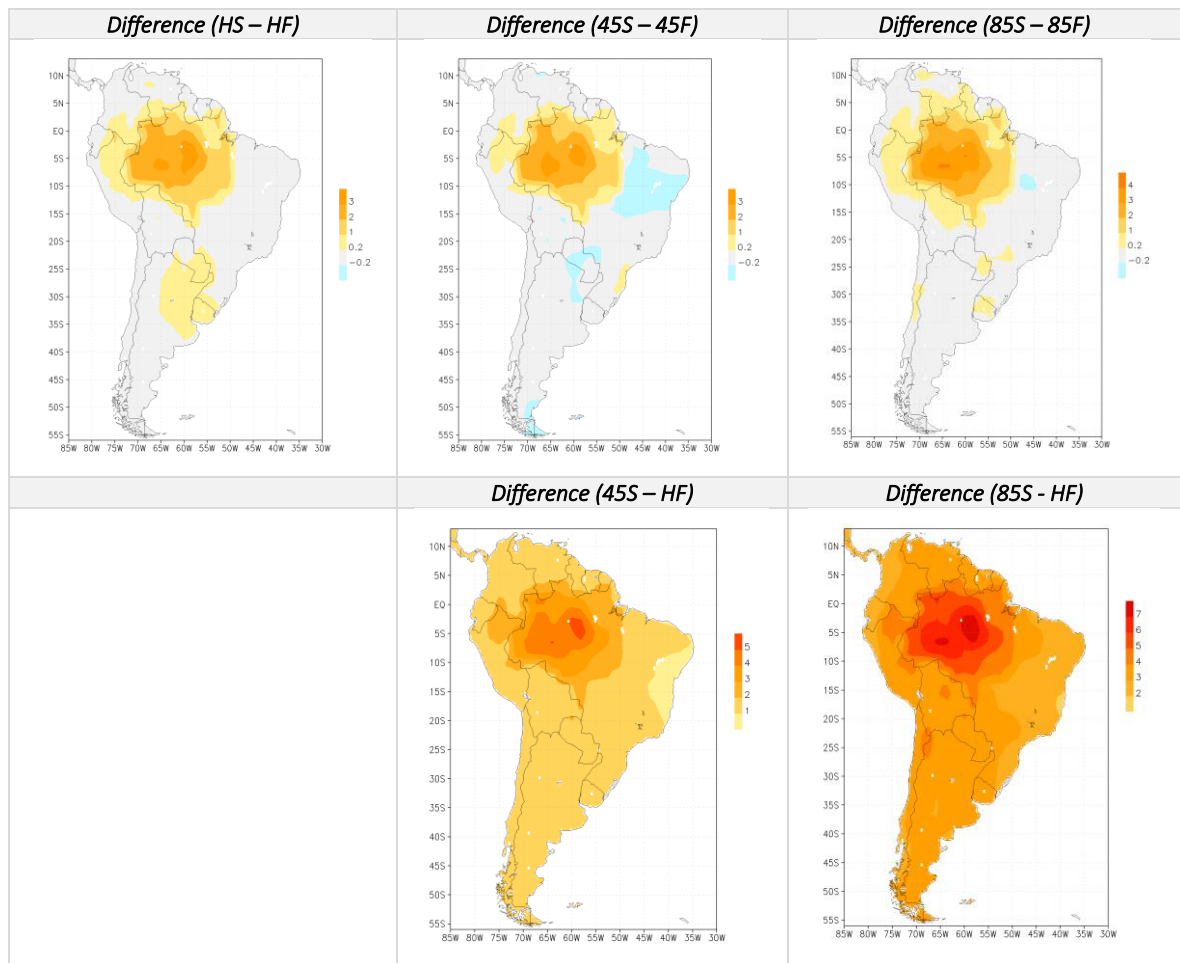
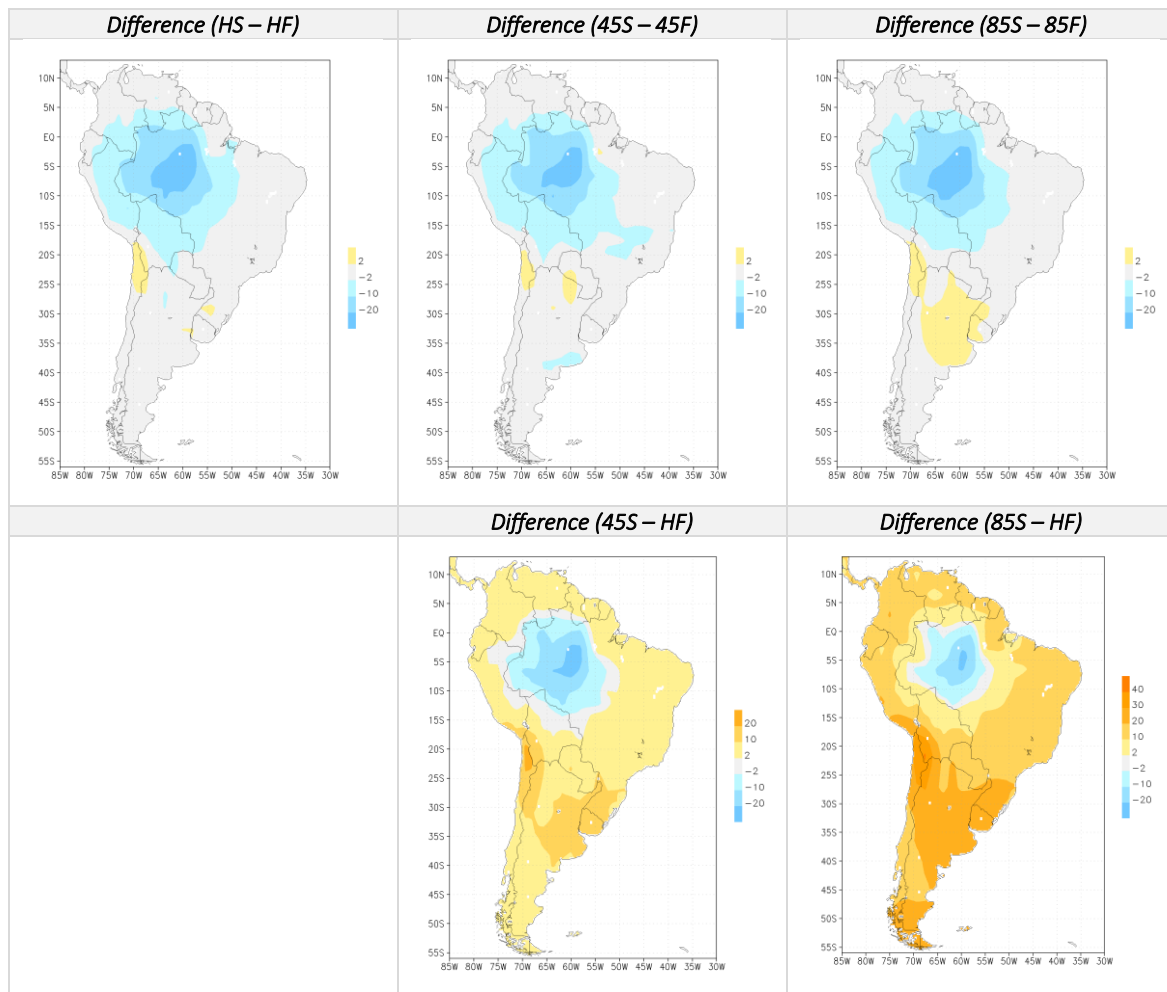


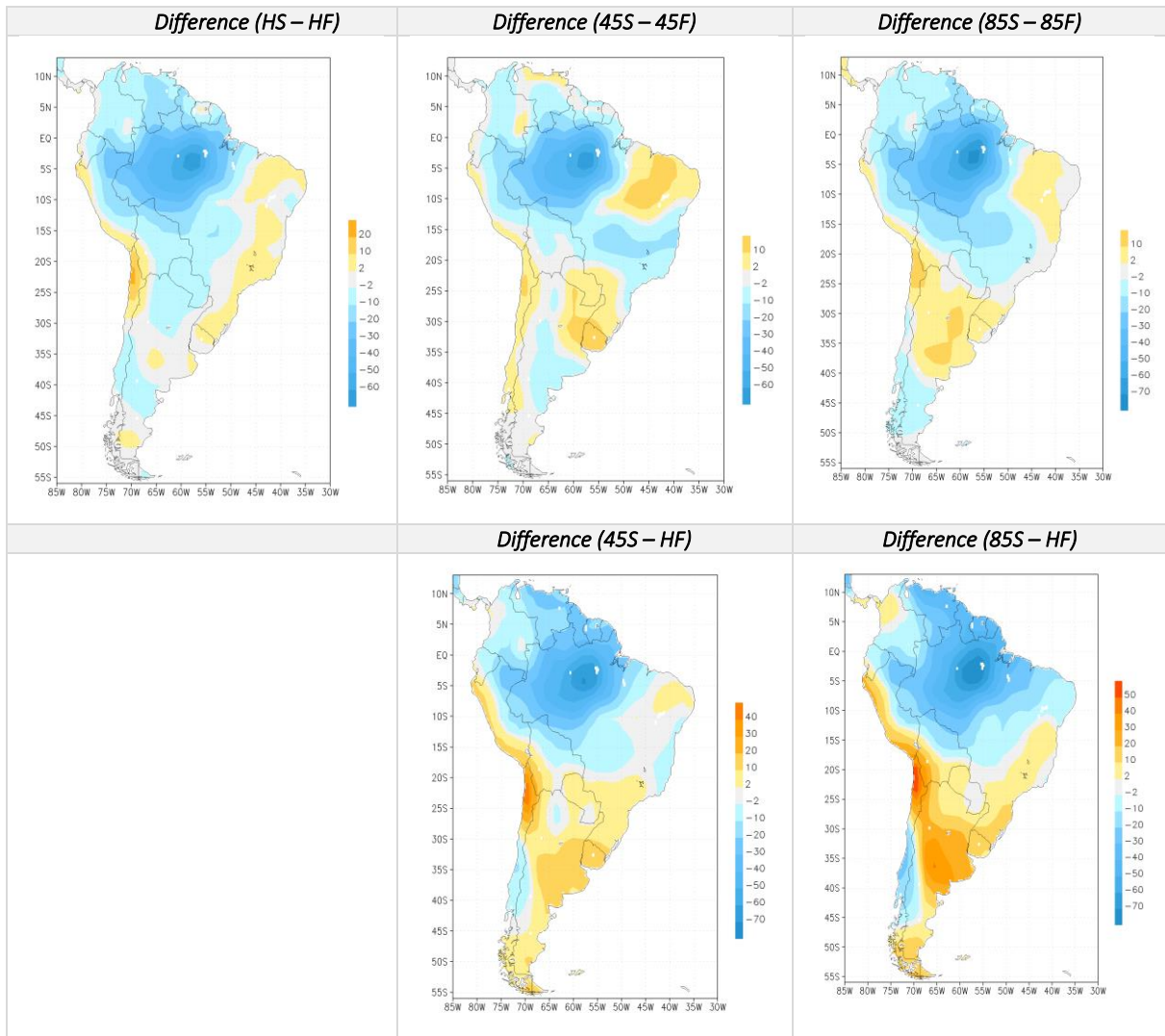
Deforestation and climate change are projected to increase heat stress risk in the Brazilian Amazon



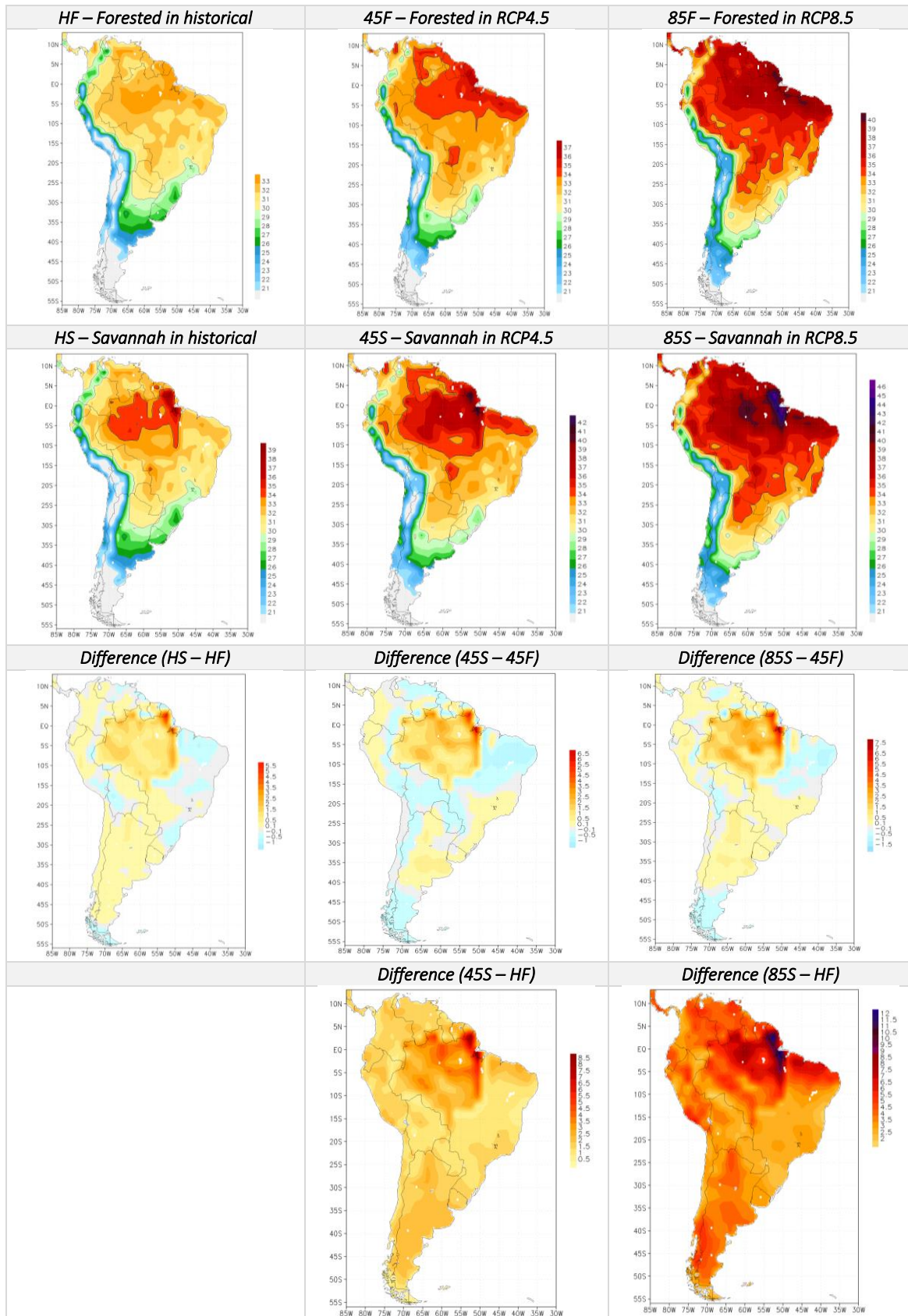
Supplementary Figure 1. Difference of annual mean of air temperature between Amazon rainforest savannization, according with the warming scenarios RCP4.5 and RCP8.5 (2073-2100). Legend: global warming scenarios (Historical – H, RCP4.5 – 45, RCP8.5 – 85) and land use scenarios (Forested – F and Savannah – S).



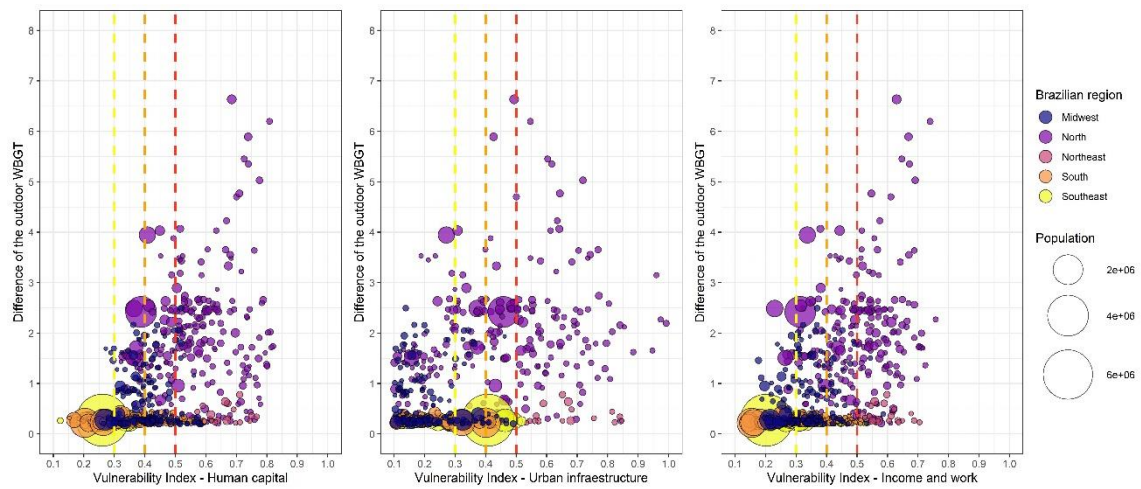
Supplementary Figure 2. Difference percentual of annual mean of humidity between Amazon rainforest savannization, according with the warming scenarios RCP4.5 and RCP 8.5 (2073-2100). Legend: global warming scenarios (Historical – H, RCP4.5 – 45, RCP8.5 – 85) and land use scenarios (Forested – F and Savannah – S).



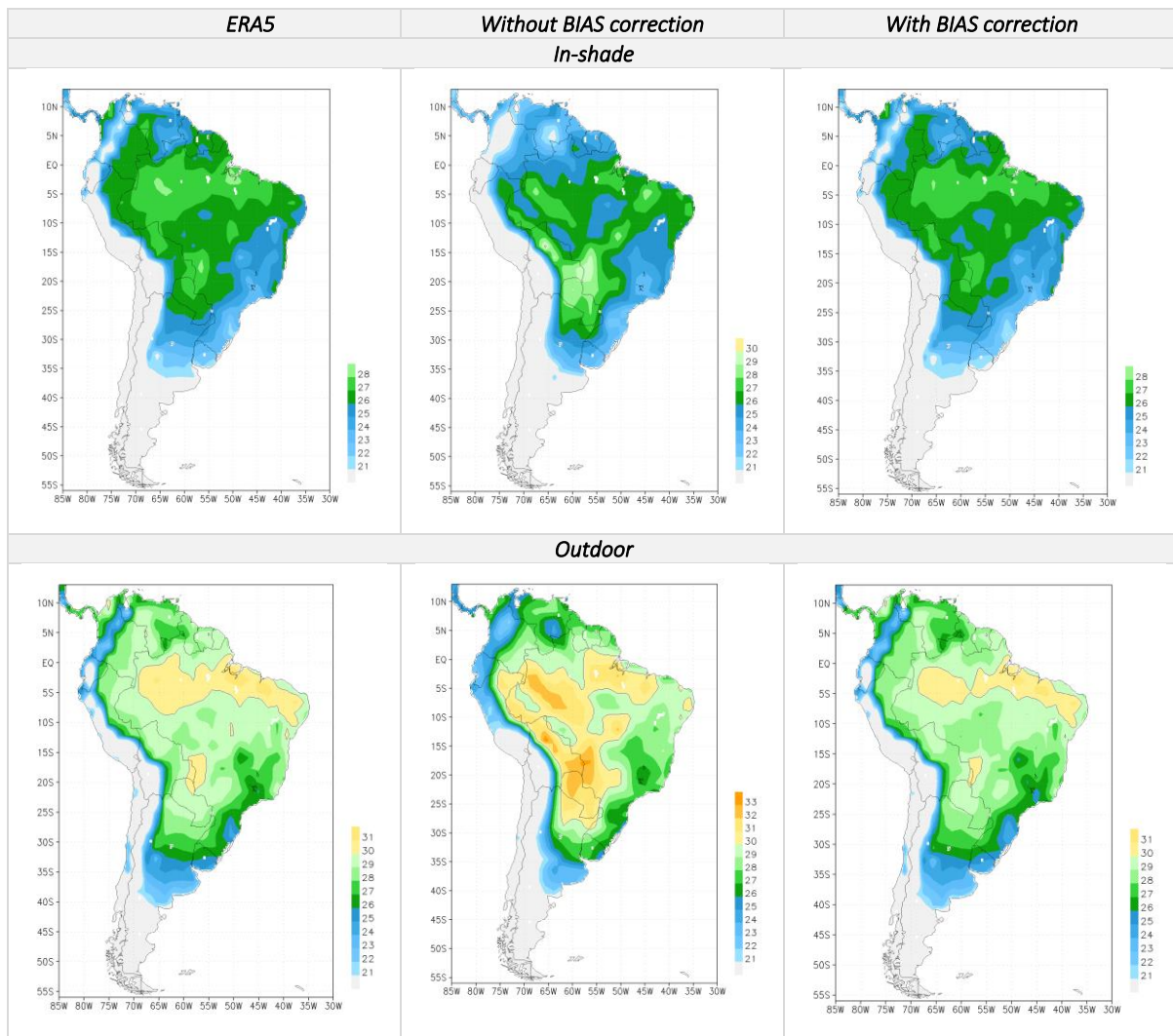
Supplementary Figure 3. Difference percentual of annual mean of precipitation between Amazon rainforest savannization, according with the warming scenarios RCP4.5 and RCP8.5 (2073-2100). Legend: global warming scenarios (Historical – H, RCP4.5 – 45, RCP8.5 – 85) and land use scenarios (Forested – F and Savannah – S).



Supplementary Figure 4. Average daily maxima of the outdoor WBGT (in °C) for the warmest months according to global climate change scenarios for the historical (1980–2010) and RCP4.5 and RCP8.5 (2073–2100) periods, and land use scenarios. Legend: global warming scenarios (Historical – H, RCP4.5 – 45, RCP8.5 – 85) and land use scenarios (Forested – F and Savannah – S).



Supplementary Figure 5. Municipalities impacted by Amazon savannization RCP8.5 global warming scenario (2073–2100), according to the social vulnerability index (SVI) components. Legend: The impacted municipalities were defined as those with a difference between the average daily maximum of the outdoor WBGT in the hottest month (85S – 85F scenarios) higher than 0.2. The SVI was classified: 0.3 to 0.4: moderate vulnerability (dashed yellow line); 0.4 to 0.5: high vulnerability (dashed orange line); greater than 0.5: very high vulnerability (dashed red line). The impacted population comprised 29,648,362 people, of which 42% reside in the northern region, 35% in the southern region, 16% in the southeastern region, and 7% in the midwestern region.



Supplementary Figure 6. In-shade and outdoor WBGT (in °C) average 15 UTC December 1991-2000, for reanalysis ERA5 (left) and forested simulation without BIAS correction (center) and with correction (right).