



Figure 1: Copula-based conceptual framework employed in this study to evaluate biases in CBI and WBGT indices. The framework is illustrated for a representative location in Brazil (Amazon, 5°S and 56.5°W; indicated via X markers in the next figures). Panel (c) shows the bivariate distribution of  $T$  and  $RH$  based on ERA-Interim (grey) and IPSL-CM5A-LR data (black) during 1979-2005. Isolines indicate equal levels of CBI (orange) and WBGT (green). The decomposition of biases from the marginals (a, d) and the copula (b) are illustrated as the discrepancies between the black (IPSL-CM5A-LR model) and grey features (ERA-Interim).