Supplementary Material

Exploring the Added Value of Sub-Daily Bias Correction of High-Resolution Gridded Rainfall Datasets for Rainfall Erosivity Estimation

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Supplementary figures

Figure S1 compares hourly rainfall intensities and single-event R-factor at Ouagadougou over the years 2019 and 2020, which shows that only IMERG, among the raw rainfall products (RPs), reproduces well the distributions of observed values.

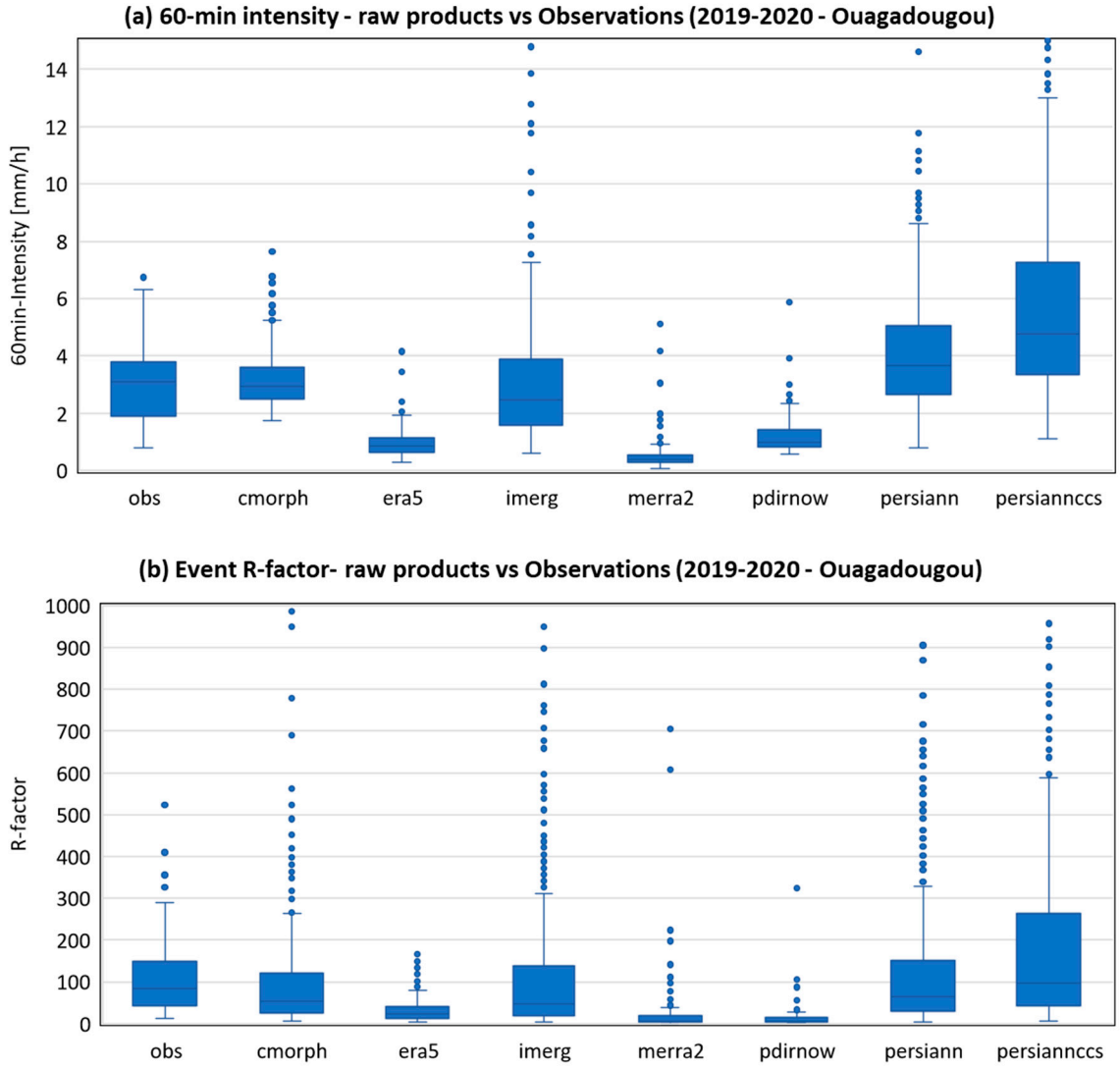

Figure S1. Comparison of observed and simulated rainfall from raw RPs at Ouagadougou for the years 2019 and 2020. (a) 60-minute rainfall intensities. (b) Single event R-factor.

Figure S2 compares hourly rainfall intensities and single-event R-factor at Ouagadougou over the years 2019 and 2020, after the bias-correction of RPs using observations. It shows that bias-correction is skilful at adjusting biases observed in Fig. S1 in almost all the RPs, suggesting that bias-correction is effective for accurate estimation of rainfall erosivity, given that accurate observations are available.

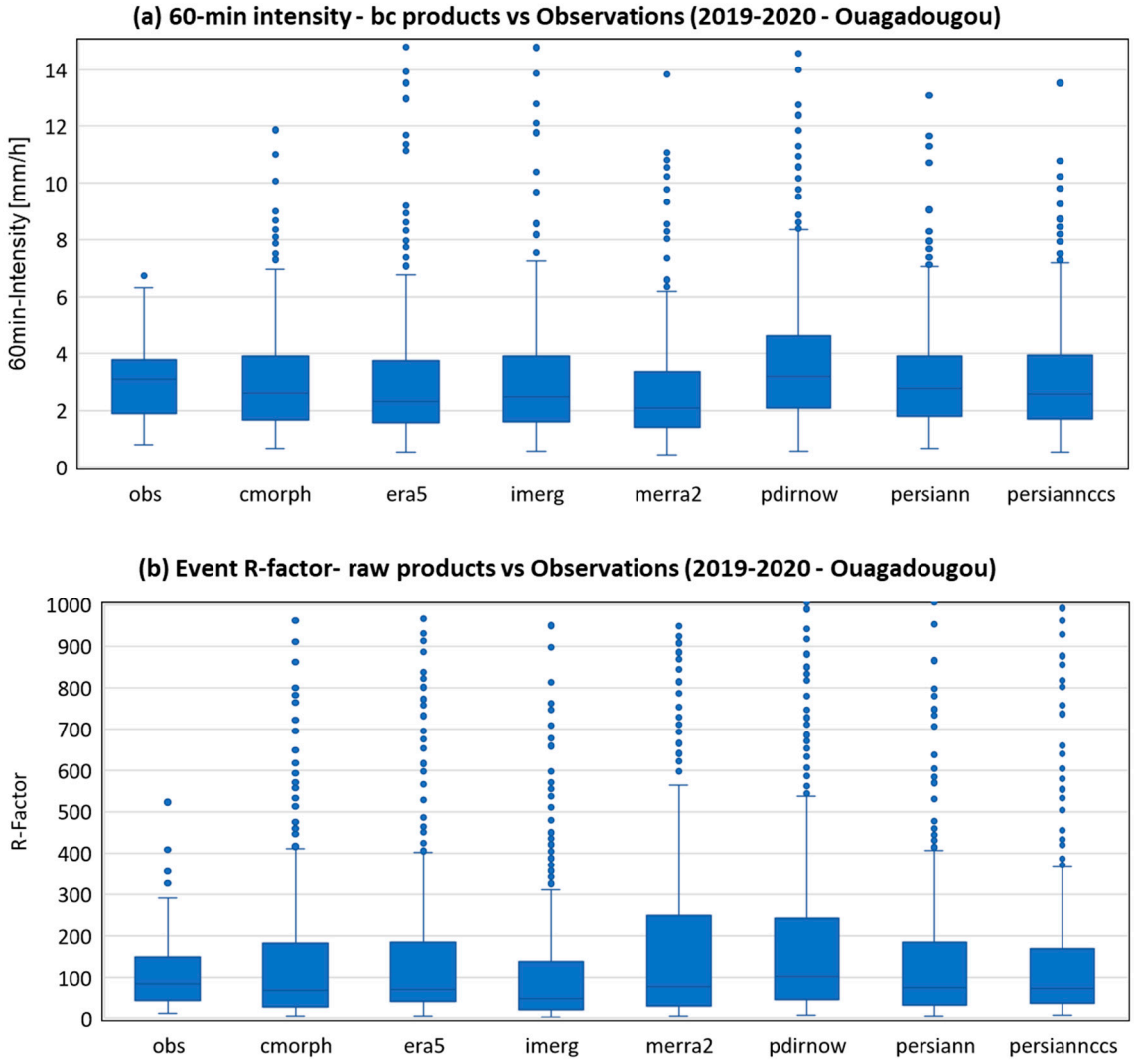

Figure S2. Comparison of observed and simulated rainfall from bias-correction RPs at Ouagadougou for the years 2019 and 2020. (a) 60-minute rainfall intensities. (b) Single event R-factor.