



Stochastic investigation of the correlation structure and probability distribution of the global potential evapotranspiration

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We investigate the second-order dependence structure and marginal probability distribution of the potential evapotranspiration (PET) determined by a recently proposed parametric model at several locations worldwide. The dependence structure is estimated through the climacogram (i.e. variance of the averaged process vs. scale of averaging), which has some advantages over other stochastic metrics (such as autocovariance and power-spectrum). Furthermore, we discuss stochastic similarities and cross-correlations of the PET with the corresponding temperature, dew-point and wind.

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