

## A COMPUTER PROGRAM FOR TEMPORAL RAINFALL DIS-AGGREGATION USING ADJUSTING PROCEDURES

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A simple and generic model that performs disaggregation of daily into hourly rainfall is presented. It combines an existing rainfall simulation model of the Poisson cluster type along with an appropriate technique for modifying the rainfall model output, thus performing disaggregation. Specifically, it uses the Bartlett-Lewis rectangular pulses rainfall model as a background stochastic model for rainfall generation. Repetition is first carried out to derive a synthetic rainfall series, which resembles the given series at the daily scale. This step focusses on the wet/dry pattern and the intensities separately. In a second step, an appropriate adjusting procedure - the proportional adjusting procedure - is applied to make the generated hourly series fully consistent with the given daily series without affecting the stochastic structure implied by the model. The model is implemented in a computer program, named Hyetos, with a user-friendly window-style interface, which provides the user with several options. The model was successfully applied with data sets of several regions, both with dry and wet climates.