



Prediction of Dobroudja Precipitations Using Wavelet Analysis

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In this study, the temporal characteristics of precipitations evolutions are investigated for the region of Dobroudja, Romania. The current work presents the results for the forecasting the rainfalls in some of the Dobroudja cities, using the wavelet analysis, which have recently attracted great interest. Since rainfall time series present high non-linearity and non-stationarity, using only some neural networks models, one can not cope with these aspects. Our model is based on wavelets decompositions for the entire series, or for the subseries in which the initial series are split after the break points determination. A comparison between our model, the one based on the neural network, and the multiplicative one is provided.