A State-Space and Clustering Approach for Analyzing the Water Quality in a River Basin

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Abstract: The aim of this contribution is to apply the state-space models to identify homogeneous groups of water quality monitoring sites based on comparison of temporal dynamics of the concentration of pollutants in the surface water of a river basin. This comparison is performed using the Kullback information, adapting the approach used in Bengtsson and Cavanaugh (2007). The purpose of our study is to identify spatial and temporal patterns.