



Singular spectral analysis and forecasting of hydrological time series

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The Singular Spectral Analysis (SSA) has proven to be successful in separating a time series into a sum of components, such as slowly varying trends, oscillations, and noise. The separated components can thus be easily studied and interpreted. In several cases the series continuation (or forecasting) can be achieved with the aid of the SSA algorithm. In this study, the ability of the SSA technique to extract trends (with different resolutions), oscillatory components (with possible varying amplitudes) and its forecast skill are assessed on some hydrological univariate time series of the Vouga hydrographic basin (Aveiro, Portugal).