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Neural network model for time series components of lake Uluabat (Turkey) levels

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Spectral analysis of a climatic time series such as lake level can be used to determine relative magnitude of apparent components such as trends, periodicities and auto regression components within. The time series of lake Uluabat levels are analyzed and assumed a simple added model for time series components consisted trend, periodic, autoregressive and random residual components. The combinations of lake Uluabat levels spectral components have been modeled by neural networks technique. The periodic component of the lake levels is the most important component for the neural network model.