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Title: A recent approach incorporating external forces to predict nonstationary processes

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Abstract:

Recent work has addressed the proper characterization of non-stationarity using weather and climate $data\hat{A}\pounds\hat{A}$ —the essential cause of non-stationarity is the time-dependent changes in the external forces. We investigate a novel technique that reconstructs the observed time series and incorporates driving forces. To appraise its effectiveness, some prediction experiments were carried out using the data generated from some known classical dynamical models and a climate model with multiple external forces. Experimental results indicate that this technique is able to improve the prediction skill effectively. End