Abstract:

We perform change-point detection of time series of compositional data from a Bayesian nonparametric perspective. In particular, we build a model to infer change points relying on a model-based clustering approach, considering a combinatorial prior and a multivariate kernel for simplex-supported time-dependent realizations. This extends one of the main state-of-the-art approaches of Bayesian nonparametric change point detection to compositional time series, avoiding mapping the data to real spaces.