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*Bayesian sequential detection and isolation of an unobservable sudden change.*

Suppose that the characteristics of a stochastic process change suddenly at an unobservable time to one of several alternatives. The problem is to detect simultaneously the change time and change type as quickly as possible after change happens. In a Bayesian decision-theoretic framework, we describe an optimal sequential decision rule and illustrate it on numerical examples. (Received February 26, 2007)