

Classifying daily streamflow time series by AR metric

Marcella Corduas¹

¹ Dipartimento di Scienze Statistiche, Università di Napoli Federico II, Via L. Rodinò 22, 80138 Napoli, Italy, e-mail: corduas@unina.it

Abstract: In this article the problem of river flow time series clustering is discussed. The comparison of time series is set in a hypothesis testing framework. In particular, the Autoregressive metric is considered and an extension to stationary *ARFIMA* processes is discussed. The clustering technique is illustrated by an empirical example concerning unregulated streamflow series observed in the main basins in the state of Oregon.

Keywords: Time series Clustering; Autoregressive Metric; ARFIMA Models