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## **Outlier Identification and Adjustment for Time Series**

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### *Abstract*

Identification and replacement of erroneous data is of fundamental importance for the quality of statistical surveys/results. If statistical units are continuously sampled over an extended period, time series methods can facilitate this task. Numerous outlier identification and replacement procedures are accessible for this particular purpose, e.g. RegArima-Approaches within the seasonal adjustment procedures in X13-Arima or Tramo/Seats. These algorithms can be used to identify different types of outliers like additive outliers, level shifts, transitory changes, etc. In this presentation an alternative outlier identification procedure is proposed which is based on a nonlinear model estimated with support vector regressions. The focus of this procedure is on additive outliers and it should be applicable for short time series with less than 3 years of observations as well.