

# DETECTION OF OUTLIERS IN VLBI TIME SERIES FROM THE BAYESIAN POINT OF VIEW

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## ABSTRACT

Outliers in VLBI time series can have adverse effects on model identification and parameter estimation. Because of this, detection of outliers in VLBI time series is one of the most important steps. The common method to handle outliers is based on a 3 sigma criterion. In literature, there are also some studies to improve outlier detection procedures in VLBI data with robust estimators. The aim of this study is to investigate and develop new methods to handle outlier detection in VLBI time series. The new procedures will be developed from the Bayesian point of view. Gibbs Sampling methods will be applied to VLBI meteorological time series (pressure, temperature, humidity). These new procedures will be compared with currently used outlier detection methods.