Package robKalman — Kalman’s revenge ... or robustness for Kalman Filtering revisited

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Building up on talks on this issue at UseR conferences 2006 and 2008, we report on progress made in the development of package robKalman. Focus of this talk will be

(a) an OOP-layer of S4-classes and -methods on top of the already existing functions which allows for quite flexible “generic” user interfaces

(b) enhanced functionality covering

– (robust) Kalman smoothing
– (robust) estimation of (hyper–)parameters
– IO-robustness, i.e., enhanced tracking features

(c) interfacing functions to other packages providing infrastructure for (multivariate) time series and implementations to state space models and the (classical) Kalman Filter/Smother.

(d) report on some experience with collaborative package development under r-forge

References


http://www.R-project.org

