GLARMA Models and the glarma Package

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In the past 15 years there has been substantial progress made in developing regression models with serial dependence for discrete valued response time series such as arise for modelling Bernoulli, binomial, Poisson or negative binomial counts. In this paper we consider the GLARMA (generalized linear autoregressive moving average) class of models which are a subclass of generalized state space models for non-Gaussian time series described in [2], [1] and [3] for example.

We review the theory and application of GLARMA models for time series of counts with explanatory variables and describe the estimation of these models using the **glarma** R package. Diagnostic and graphical methods are illustrated by several examples.

References

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