
# Generalized dynamic linear models: An application to Portugal road accident data

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***Abstract.*** *Road accidents are a serious public health problem worldwide with devastating socio-economic consequences. Despite the enormous efforts made in recent years, the road fatalities values are still unacceptable. Statistics recorded caught the interest of researchers and politicians as a key to better understand the complexity of factors related to road accidents. Thus, there has been considerable research directed towards the development of statistical modeling of road accident data in geographic areas corresponding to organs of public administration or management of transport infrastructure, with the aim of finding models that can serve as reference to the implementation of corrective actions aimed to reduce the number of road accidents.*
*The estimation of the expected number of accidents remains an open problem and there is no method that can be considered optimal. However there is a general reference to the superiority of Bayesian methods.*

*This work focuses on the application of generalized dynamic linear models to Portugal road accident data using R-INLA.*

***Keywords.*** *Bayesian models; Generalized dynamic linear models; Road Safety; INLA.*

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