

Research Project

Regression models for count data

Project funded by own resources

Project title Regression models for count data

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Organisation / Research unit

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Project start 01.04.2007

Probable end 31.12.2025

Status Active

Regression models for count data are attracting increasing attention in many fields of application, among them health economics, ecological modeling and political science. It has emerged that the classical regression models (Poisson and Negative Binomial) are often not flexible enough in empirical work, hence various generalizations and modifications have been proposed. However, many aspects of these new models are still not well understood. The project investigates properties of generalized count data regression models, with an emphasis on computational aspects. It is planned to also implement various count data tools in the R system for statistical computing.

Keywords Count data, regression, statistical software, statistical algorithms

Financed by

University funds

Add publication

Published results

103016, Zeileis, Achim; Kleiber, Christian; Jackman, Simon, Regression models for count data in R, 1548-7660, Journal of Statistical Software, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

103104, Kleiber, Christian; Zeileis, Achim, Applied Econometrics with R, 2197-5736 ; 978-0-387-77316-2 ; 978-0-387-77318-6, Publication: Authored Book (Verfasser eines eigenständigen Buches)

2359709, Walter, Linda E., Claim incidence models with varying exposure in automobile insurance, 978-90-73592-34-6, Publication: ConferencePaper (Artikel, die in Tagungsbänden erschienen sind)

2821693, Kleiber, Christian; Zeileis, Achim, Visualizing Count Data Regressions Using Rootograms, Publication: Discussion paper / Internet publication

3456558, Walter, Linda, Three Essays on Nonlinear Regression Models in Econometrics and Actuarial Science, Publication: Thesis (Dissertationen, Habilitationen)

3499374, Kleiber, Christian; Zeileis, Achim, Visualizing count data regressions using rootograms, 0003-1305, The American Statistician, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

Add documents**Specify cooperation partners**

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
462451	Kleiber, Chris- tian	Zeileis, Achim, Professor	Universität Innsbruck	01.10.2007	31.12.2035
4615339	Kleiber, Chris- tian	Kosmidis, Ioannis, Reader in Da- ta Science	University of Warwick	01.11.2020	31.12.2023