# Modeling Count Data

*Joseph M. Hilbe*
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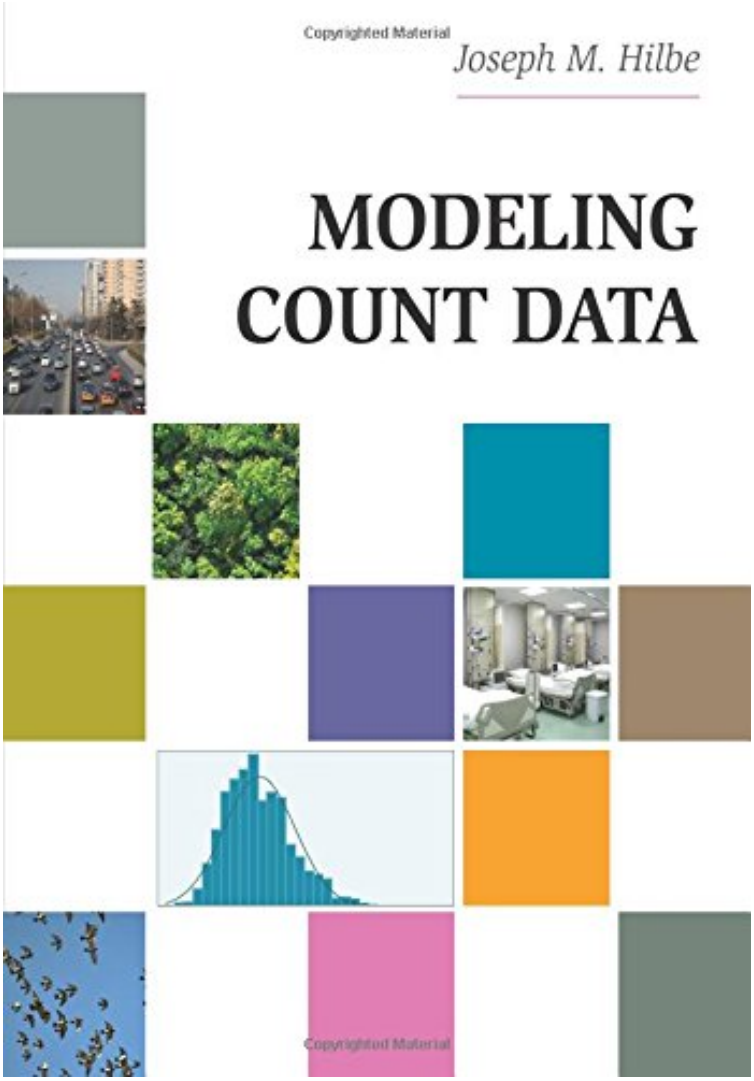




#246137 in Books Joseph M Hilbe 2014-07-21 2014-10-16Original language:EnglishPDF # 1 9.21 x .59 x 6.97l, 1.10 #File Name: 1107611253300 pagesModeling Count Data | File size: 74.Mb

**Joseph M. Hilbe : Modeling Count Data** before purchasing it in order to gage whether or not it would be worth my time, and all praised Modeling Count Data:

4 of 4 people found the following review helpful. Good, practical introductory book to modeling count data !By W. YIPThis is a very good introductory and practical book on how to model count data. The author stays away from mathematics. Instead, he runs different models based on a few data set (using STATA and R) to illustrate what each of the model does and its interpretation. With so many models together, one can compare and contrast the results. It is unlikely that I would have the opportunity to utilize that many kinds of count models. But, having them in one place would help me to choose the right one when the occasion arises. I also like the format of the chapter where the author

puts the essential questions in the front before answering them in the chapter. If I have a similar question later on, I can easily locate the section.Avoiding mathematics has its drawbacks. Sometimes, a few equations elucidate concepts easier than words. For example, I do not understand the description of IRLS in Table 1.7. I think a few equations may help. There are also some simple typos in the book. Hopefully, they will be corrected in the next edition.e.g. On p131, the reference to the equations should be 5.1-5.3 instead of 4.1-4.3.Note that this is not an introductory statistics book. It is introductory to modeling count data. So, you will need background in GLM regression modeling to read this book.0 of 1 people found the following review helpful. Five StarsBy Kindle CustomerGreat resource!0 of 1 people found the following review helpful. Theory and Application ExplainedBy Chris MacintoshGreat introduction and very helpful descriptions of how to use analysis software for the analyses described!

This entry-level text offers clear and concise guidelines on how to select, construct, interpret, and evaluate count data. Written for researchers with little or no background in advanced statistics, the book presents treatments of all major models using numerous tables, insets, and detailed modeling suggestions. It begins by demonstrating the fundamentals of modeling count data, including a thorough presentation of the Poisson model. It then works up to an analysis of the problem of overdispersion and of the negative binomial model, and finally to the many variations that can be made to the base count models. Examples in Stata, R, and SAS code enable readers to adapt models for their own purposes, making the text an ideal resource for researchers working in health, ecology, econometrics, transportation, and other fields.

"This is a first-rate introductory book for modeling count data, a key challenge in applied statistics. Hilbe's experience and affability shine in the text. His careful emphasis on establishing the defensibility of models, for example, in the face of overdispersion, will greatly benefit the beginning statistician. His clear informal explanations of important and complicated statistical principles are invaluable." Andrew Robinson, University of Melbourne"The negative binomial model is the foundation for modern analysis of count data. Joe Hilbe's work collects a vast wealth of technical and practical information for the analyst. The theoretical developments and thoroughly worked applications use realistic data sets and a variety of computer packages. They will provide to the practitioner an indispensable guide for basic single-equation count data regressions and advanced applications with recently developed model extensions and methods." William Greene, New York University"This book is a great introduction to models for the analysis of count data. Using the Poisson GLM as the basis, it covers a wide range of modern extensions of GLMs, and this makes it unique. Potentially complex models (which are often needed when analyzing real data sets) are presented in an understandable way, partly because data sets and software code are provided. I reckon that this volume will be one of the standard GLM reference books for many years to come." Alain F. Zuur, Highland Statistics Ltd"Modeling Count Data is a well-organized entry-level book mainly written for applied researchers with little formal theoretical background in statistics who need to analyse count data ... Thoroughly worked examples with software code, several of them devoted to applying alternative count models to the same data set, provide a basic guide for model selection among competing models. The chapters are well structured, starting with points of discussion and ending with a brief summary. Where required, section themes are summarized. Also, the formula used, abbreviations used and examples used are summarized in tabular form. In brief, it is a remarkable book and can be used as a practical guide for introducing count data analysis." Anoop Chaturvedi, Journal of the Royal Statistical SocietyAbout the AuthorJoseph Hilbe is a solar system ambassador with NASA's Jet Propulsion Laboratory, California Institute of Technology; an Adjunct Professor of Statistics at Arizona State University; an Emeritus Professor at the University of Hawaii; and a statistical modeling instructor for Statistics.com, a web-based continuing-education program in statistics. He is the author of several books on statistical modeling and serves as the coordinating editor for the Cambridge University Press series Predictive Analytics in Action.