

<<经典和现代回归分析及其应用>>

图书基本信息

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前言

No single statistical tool has received the attention given to regression analysis in the past 25 years. Both practical data analysts and statistical theorists have contributed to an unprecedented advancement in this important and dynamic topic. Many volumes have been written by statisticians and scientists with the result being that the arsenal of effective regression methods has increased manyfold. My intent for this second edition is to provide a rather substantial increase in material related to classical regression while continuing to introduce relevant new and modern techniques. I have included major supplements in simple linear regression that deal with simultaneous influence, maximum likelihood estimation of parameters, and the plotting of residuals. In multiple regression, new and substantial sections on the use of the general linear hypothesis, indicator variables, the geometry of least squares, and relationship to ANOVA models are added. In addition, all new topics are illustrated with the use of real-life data sets and annotated computer printout. In the area of useful modern techniques, additional types of diagnostic residual plots are developed and illustrated, including component plus residual plots and augmented partial plots. These plots are designed to provide a two-dimensional picture of the role of each regressor in the multiple regression and graphically highlight the need for nonlinearities in the regression model.

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内容概要

本书从ThomsonLearning出版公司引进，本书内容包括：回归分析，简单线性回归模型，多元线性回归模型，最佳模型的标准选择，残差分析，影响诊断，非标准条件、假设和转换，检测及多元共线性，非线性回归，附录A：矩阵代数中的一些概念，附录B：一些处理方法。

本书适用于高等院校统计学专业和理工科各专业本科生和研究生作为教材使用。

通过影印、翻译、编译这批优秀教材的长处，吸取国外出版公司的制作经验，提升我们自编教材的教学资源配套标准，使我国高校教材建设水平上一个新的台阶：与此同时，我们还将尝试组织海外作者和国内作者合编外文版基础课数学教材，并约请国内专家改编部分国外优秀教材，以适应我国实际教学环境。

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