DESCRIPTION

The Wiley Paperback Series makes valuable content more accessible to a new generation of statisticians, mathematicians and scientists.

Sensitivity analysis is used to ascertain how a given model output depends upon the input parameters. This is an important method for checking the quality of a given model, as well as a powerful tool for checking the robustness and reliability of its analysis. The topic is acknowledged as essential for good modelling practice and is an implicit part of any modelling field.

- Offers an accessible introduction to sensitivity analysis.
- Covers all the latest research.
- Illustrates concepts with numerous examples, applications and case studies.
- Includes contributions from the leading researchers active in developing strategies for sensitivity analysis.

The principles of sensitivity analysis are carefully described and suitable methods for approaching many types of problems are given. The book introduces the modeller to the entire casual assessment chain, from data to predictions, whilst explaining the impact of source uncertainties and framing assumptions. A ‘hitch-hikers guide’ is included to allow the more experienced reader to readily access specific applications.
Modellers from a wide range of disciplines, including biostatistics, economics, environmental impact assessment, chemistry and engineering will benefit greatly from the numerous examples and applications.

"Presents many different sensitivity analysis methodologies and demonstrates their usefulness in scientific research." (Zentralblatt MATH)

About the Author

Andrea Saltelli, Joint Research Centre of the European Commission, Ispra, Unit of Applied Statistics and Econometrics. Presently leading the Econometric and Applied Statistics Unit of the Joint Research Centre, lead author Professor Saltelli has published many articles in numerous journals over the last 30 years. He is also the main author and main editor of two previous books (both for Wiley).

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