Record Nr. UNINA9910483209703321 Pioneering works on extreme value theory: in honor of Masaaki Sibuya **Titolo** // Nobuaki Hoshino, Shuhei Mano, Takaaki Shimura, editors Pubbl/distr/stampa Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-16-0768-0 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (IX, 134 p. 28 illus., 2 illus. in color.) Collana SpringerBriefs in Statistics Disciplina 519.24 Soggetti Extreme value theory Distribució (Teoria de la probabilitat) Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chap. 1 Estimation of generalized beta distributions (Authors: Sibuya Nota di contenuto and Mano) -- Chap. 2 On Some Resampling Procedures with the Empirical Beta Copula (Kiriliouk, Segers and Tsukahara) -- Chap. 3 Regression Analysis for Imbalanced Binary Data: Multi-Dimensional Case (Sei) -- Chap. 4 An Analysis of Extremes: Semiparametric Efficiency in Regression (Ozeki and Doksum) -- Chap. 5 Future Change in Relationships among Extreme Precipitation Statistics Using "d4PDF" (Tanaka) -- Chap. 6 History and Perspectives of Hydrological Frequency Analysis in Japan (Takara). Sommario/riassunto This book presents the state of the art in extreme value theory, with a collection of articles related to a seminal paper on the bivariate extreme value distribution written by Professor Masaaki Sibuya in 1960. demonstrating various developments of the original idea over the last half-century. Written by active researchers, the unique combination of articles allows readers to gain a sense of the excellence of the field. ranging from theory to practice, and the tradition of theoretical developments motivated by practically important issues such as tsunamis and financial crises. The contributions discuss a range of topics, including the parameter estimation of the generalized beta distribution, resampling with the empirical beta copula, and regression

analysis on imbalanced binary data, as well as the semiparametric estimation of the upper bound of extrema, the long-term analysis of extreme precipitation over Japanese river basins, and various rules of thumb in hydrology.