1. Record Nr. UNINA9910557291603321 Autore **Zhou Qiming** Titolo Geo-Spatial Analysis in Hydrology Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, 2020 1 electronic resource (124 p.) Descrizione fisica Soggetti Research & information: general Geography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Sommario/riassunto Geo-spatial analysis has become an essential component of hydrological studies to process and examine geo-spatial data such as hydrological variables (e.g., precipitation and discharge) and basin characteristics (e.g., DEM and land use land cover). The advancement of the data acquisition technique helps accumulate geo-spatial data with more extensive spatial coverage than traditional in-situ observations. The development of geo-spatial analytic methods is beneficial for the processing and analysis of multi-source data in a more efficient and reliable way for a variety of research and practical issues in hydrology. This book is a collection of the articles of a published Special Issue Geo-Spatial Analysis in Hydrology in the journal ISPRS International Journal of Geo-Information. The topics of the articles range from the improvement of geo-spatial analytic methods to the applications of geo-spatial analysis in emerging hydrological issues. The results of these articles show that traditional hydrological/hydraulic models coupled with geo-spatial techniques are a way to make streamflow

> simulations more efficient and reliable for flood-related decision making. Geo-spatial analysis based on more advanced methods and data is a reliable resolution to obtain high-resolution information for

hydrological studies at fine spatial scale.