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Nota di contenuto	Front Matter -- Interdisciplinary Perspectives on Remote Sensing for Monitoring and Predicting Water-Related Hazards / Ke Zhang, Yang Hong, Amir AghaKouchak -- Remote Sensing of Precipitation and Storms. Progress in Satellite Precipitation Products over the Past Two Decades / Guoqiang Tang, Tsechun Wang, Meihong Ma, Wentao Xiong, Feng Lyu, Ziqiang Ma -- Observations of Tornadoes and Their Parent Supercells Using Ground-Based, Mobile Doppler Radars / Howard B Bluestein -- Remote Sensing of Floods and Associated Hazards. Remote Sensing Mapping and Modeling for Flood Hazards in Data-Scarce Areas / Ke Zhang, Zaw Myo Khaing, Zhijia Li -- Multisensor Remote Sensing and the Multidimensional Modeling of Extreme Flood Events / Mengye Chen, Zhi Li, Shang Gao -- A Multisource, Data-Driven, Web-GIS-Based Hydrological Modeling Framework for Flood Forecasting and Prevention / Zhanming Wan, Xianwu Xue, Ke Zhang, Yang Hong, Jonathan J Gourley, Humberto Vergara -- An Ensemble-Based, Remote-Sensing-

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Sommario/riassunto

"Applications of remote sensing technology for monitoring and predicting water-related hazards. Water-related hazards such as floods and droughts have serious impacts on society. Their incidence has increased in recent decades, a trend set to continue with ongoing climate change. Adaptation and mitigation measures require accurate detection, monitoring, and forecasting, much of which comes from remote sensing technologies. Remote Sensing of Water-Related Hazards takes an interdisciplinary approach, presenting recent advances in the available data, sensors, models, and indicators developed for monitoring and prediction. Volume highlights include: Progress in remote sensing of precipitation, storms, and tornados Different techniques for flood mapping, forecasting, and early warning Integrated approach for predicting flood and landslide cascading hazards Satellite monitoring of water cycle variation, water scarcity, and drought conditions Multi-indicator and multi-sensor approaches for quantifying drought impacts The American Geophysical Union promotes discovery in Earth and space science for the benefit of humanity. Its publications disseminate scientific knowledge and provide resources for researchers, students, and professionals" --