
Contents

Data Fusion Methods for Integrating Data-driven Hydrological Models <i>Linda See</i>	1
A New Paradigm for Groundwater Modeling <i>Shu-Guang Li and Qun Liu</i>	19
Information Fusion using the Kalman Filter based on Karhunen-Loève Decomposition <i>Zhiming Lu, Dongxiao Zhang, and Yan Chen</i>	43
Trajectory-Based Methods for Modeling and Characterization <i>D. W. Vasco</i>	69
The Role of Streamline Models for Dynamic Data Assimilation in Petroleum Engineering and Hydrogeology <i>Akhil Datta-Gupta, Deepak Devegowda, Dayo Oyerinde, and Hao Cheng</i>	105
Information Fusion in Regularized Inversion of Tomographic Pumping Tests <i>Geoffrey C. Bohling</i>	137
Advancing the Use of Satellite Rainfall Datasets for Flood Prediction in Ungauged Basins: The Role of Scale, Hydrologic Process Controls and the Global Precipitation Measurement Mission <i>Faisal Hossain and Nitin Katiyar</i>	163
Integrated Methods for Urban Groundwater Management Considering Subsurface Heterogeneity <i>Jannis Epting, Peter Huggenberger, Christian Regli, Natalie Spoljaric, and Ralph Kirchhofer</i>	183