1. Record Nr. UNINA9910461837303321

Titolo	Soil hydrology, land use and agriculture [[electronic resource]] : measurement and modelling / / edited by Manoj K. Shukla
Pubbl/distr/stampa	Cambridge, Mass., : CABI, 2011
ISBN	1-283-26774-8 9786613267740 1-84593-877-1
Descrizione fisica	1 online resource (454 p.)
Altri autori (Persone)	ShuklaManoj
Disciplina	631.4/32
Soggetti	Soil moisture - Measurement - Computer simulation Hydrologic models Hydrology Land use - Environmental aspects Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to soil hydrology / Manoj K. Shukla -- Hydrology past, present and future / Biswajit Mukhopadhyay, Vijay P. Singh -- Over-view of existing soil hydrology models / Sanjit K Deb -- Modeling agricultural management systems with APEX / Xiuying Wang, Pushpa Tuppad, Jimmy R. Williams -- Application of WEPP model to hillslopes and small watersheds in the US / Dennis C. Flanagan -- Application of WEPP a distributed hydrological model on some Austria watersheds / Andreas Klik, Khaled Hardan, Hans-Peter Nachtnebel -- Application of the soil and water assessment tool (SWAT) for hydrological modelling in Germany / Martin Volk ... [et al.] -- Spatially distributed hydrologic modeling in Illinois River drainage area in Arkansas using SWAT/ Dharmendra Saraswat, Naresh Pai -- Application of a distributed hydrological model for hydrological modeling in India / A. K. Gosain, Sandhya Rao -- Application of RZWQM for hydrological modeling in Alcalde Basin of northern New Mexico / C. Ochoa, Alexander G. Fernald, Steven J. Guldan -- A comprehensive, physically based model for surface and subsurface hydrology for small catchments / Marco

Bittelli ... [et al.] -- Effects of artificial drainage on water regime and solute transport at different spatial scales / Bernd Lennartz, Manon Janssen, Barbel Tiemeyer -- Effect of land use and soil management on soil properties and processes / Sjoerd W. Duiker -- Land use and agricultural management systems effects on subsurface drain water quality and crop yields / Allah Bakhsh, Ramesh S. Kanwar -- Different types of climatic datasets for hydrological analysis / Max P. Bleiweiss, A. Salim Bawazir -- Climate change and soil hydrology: European perspective / S. Bastola ... [et al.] -- Modeling the impacts of climate change on water balance and agricultural productivity in southern Portugal using SWAT / Joao Pedro Nunes, Julia Seixas -- Soil hydrology, runoff, and soil erosion under future climate change / David Favis-Mortlock, Donal Mullan -- Remote sensing and soil hydrology / Tom Schmugge.

Sommario/riassunto

Agriculture is strongly affected by changes in soil hydrology as well as changes in land use and management practices and the complex interactions between them. This book aims to develop an understanding of these interactions on a watershed scale, using soil hydrology models and addresses the consequences of land use and management changes on agriculture from a research perspective. It includes case studies that illustrate the impact of land use and management on various soil hydrological parameters under different climates and ecosystems. It is suitable for researchers and students in soil sc