

Earth Observation for Integrated Water and Basin Management: New Possibilities and Challenges for Adaptation to a Changing Environment

Remote Sensing & Hydrology Symposium 2018

Proceedings of the International Association of Hydrological Sciences (IAHS) Volume 380, 2018

Cordoba, Spain

8-10 May 2018

Editors:

M. P. Gonzalez-Dugo

A. Andreu

M. J. Polo

C. Neale

R. Pimentel

ISBN: 978-1-5108-8294-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

The copyright of any article is retained by the author(s) and distributed under the Creative Commons Attribution 4.0 license. <http://creativecommons.org/licenses/by/4.0/>
Unless otherwise stated, associated published material is distributed under the same license. The original work can be found online at:

<http://www.proc-iahs.net/380/index.html>

Printed by Curran Associates, Inc. (2018)

International Association of Hydrological Sciences
Centre for Ecology and Hydrology
Wallingford, Oxfordshire OX10 8BB
United Kingdom

Phone: 441 491 692 442
Fax: 441 491 692 448

<http://iahs.info/>

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Preface: Earth Observation for Integrated Water and Basin Management: Challenges for Adaptation to a Changing Environment.....	1
<i>María J. Polo, María P. González-Dugo, Christopher Neale</i>	
Joint Editorial: Invigorating Hydrological Research Through Journal Publications	3
<i>Neil Quinn, Günter Blöschl, András Bárdossy, Attilio Castellarin, Martyn Clark, Christophe Cudennec, Demetris Koutsoyiannis, Upmanu Lall, Lubomir Lichner, Juraj Parajka, Christa D. Peters-Lidard, Graham Sander, Hubert Savenije, Keith Smettem, Harry Vereecken, Alberto Viglione, Patrick Willems, Andy Wood, Ross Woods, Chong-Yu Xu, Erwin Zehe</i>	
Monitoring Environmental Supporting Conditions of a Raised Bog Using Remote Sensing Techniques.....	9
<i>Saheba Bhatnagar, Bidisha Ghosh, Shane Regan, Owen Naughton, Paul Johnston, Laurence Gill</i>	
Evapotranspiration and Evaporation/Transpiration Partitioning with Dual Source Energy Balance Models in Agricultural Lands.....	17
<i>Gilles Boulet, Emilie Delogu, Sameh Saadi, Wafa Chebbi, Albert Olioso, Bernard Mougenot, Pascal Fanise, Zohra Lili-Chabaane, Jean-Pierre Lagouarde</i>	
Use of Canopy Coefficients Obtained from Satellite Data to Estimate Evapotranspiration Over High Mountain Mediterranean Watersheds.....	23
<i>Elisabet Carpintero, María P. González-Dugo, Jorge Jódar, Sergio Martos-Rosillo</i>	
Remote Sensing-based Soil Water Balance for Irrigation Water Accounting at the Spanish Iberian Peninsula	29
<i>Jesús Garrido-Rubio, Alfonso Calera Belmonte, Lorena Fraile Enguita, Irene Arellano Alcázar, Mario Belmonte Mancebo, Isidro Campos Rodríguez, Raquel Bravo Rubio</i>	
Effect of the Water Stress on Gross Primary Production Modeling of a Mediterranean Oak Savanna Ecosystem.....	37
<i>Pedro J. Gómez-Giráldez, Elisabet Carpintero, Mario Ramos, Cristina Aguilar, María P. González-Dugo</i>	
Remote Sensing Vegetation Index Methods to Evaluate Changes in Greenness and Evapotranspiration in Riparian Vegetation in Response to the Minutiae 319 Environmental Pulse Flow to Mexico	45
<i>Pamela L. Nagler, Christopher J. Jarchow, Edward P. Glenn</i>	
Assessment of SMADI and SWDI Agricultural Drought Indices using Remotely Sensed Root Zone Soil Moisture	55
<i>Miriam Pablos, Ángel González-Zamora, Nilda Sánchez, José Martínez-Fernández</i>	
Validating Improved-MODIS Products from Spectral Mixture-landsat Snow Cover Maps in a Mountain Region in Southern Spain	67
<i>Rafael Pimentel, Carlo Marín, Ludovica De Gregorio, Mattia Callegari, María J. Pérez-Palazón, Claudia Notarnicola, María J. Polo</i>	
Use of Sentinel 2 – MSI for Water Quality Monitoring at Alqueva Reservoir, Portugal	73
<i>Miguel Potes, Gonçalo Rodrigues, Alexandra Marchā Penha, Maria Helena Novais, Maria João Costa, Rui Salgado, Maria Manuela Morais</i>	
Image Acquisition Effects on Unmanned Air Vehicle Snow Depth Retrievals	81
<i>Ahmet Emre Tekeli, Senayi Dönmez</i>	
Author Index	