

The online article is the official version and may contain additional content not available in this print issue. To access the full article, including multimedia, enhanced figures, supporting information, and other nonprinted content, go to <http://wileyonlinelibrary.com/journal/wrcr>.

Research Articles

- 8383** *James C. Bathurst and Andrés Iroumé*
Quantitative generalizations for catchment sediment yield following forest logging
(doi 10.1002/2014WR015711)
- 8403** *John P. Gannon, Scott W. Bailey, and Kevin J. McGuire*
Organizing groundwater regimes and response thresholds by soils: A framework for understanding runoff generation in a headwater catchment (doi 10.1002/2014WR015498)
- 8420** *S. M. Bateni, D. Entekhabi, S. Margulis, F. Castelli, and L. Kergoat*
Coupled estimation of surface heat fluxes and vegetation dynamics from remotely sensed land surface temperature and fraction of photosynthetically active radiation* (doi 10.1002/2013WR014573)
***This article is part of a Special Section—Patterns in Soil-Vegetation-Atmosphere Systems: Monitoring, Modelling and Data Assimilation**
- 8441** *Franziska Moebius and Dani Or*
Pore scale dynamics underlying the motion of drainage fronts in porous media
(doi 10.1002/2014WR015916)
- 8458** *Sergio M. Vicente-Serrano, Cesar Azorin-Molina, Arturo Sanchez-Lorenzo, Jesús Revuelto, Enrique Morán-Tejeda, Juan I. López-Moreno, and Francisco Espejo*
Sensitivity of reference evapotranspiration to changes in meteorological parameters in Spain (1961–2011) (doi 10.1002/2014WR015427)
- 8481** *Liang Xue, Dongxiao Zhang, Alberto Guadagnini, and Shlomo P. Neuman*
Multimodel Bayesian analysis of groundwater data worth (doi 10.1002/2014WR015503)
- 8497** *Bernat Joseph-Duran, Carlos Ocampo-Martinez, and Gabriela Cembrano*
Hybrid modeling and receding horizon control of sewer networks (doi 10.1002/2013WR015119)
- 8515** *David N. Dralle, Gabrielle F.S. Boisramé, and Sally E. Thompson*
Spatially variable water table recharge and the hillslope hydrologic response: Analytical solutions to the linearized hillslope Boussinesq equation (doi 10.1002/2013WR015144)
- 8531** *M. Rahman, M. Sulis, and S. J. Kollet*
The concept of dual-boundary forcing in land surface-subsurface interactions of the terrestrial hydrologic and energy cycles (doi 10.1002/2014WR015738)
- 8549** *P. W. Gerbens-Leenes, L. Xu, G. J. de Vries, and A. Y. Hoekstra*
The blue water footprint and land use of biofuels from algae (doi 10.1002/2014WR015710)
- 8564** *W. L. Hogarth, L. Li, D. A. Lockington, F. Stagnitti, M. B. Parlange, D. A. Barry, T. S. Steenhuis, and J.-Y. Parlange*
Analytical approximation for the recession of a sloping aquifer (doi 10.1002/2014WR016084)
- 8571** *Qiang Dai and Dawei Han*
Exploration of discrepancy between radar and gauge rainfall estimates driven by wind fields
(doi 10.1002/2014WR015794)
- 8589** *Ben Livneh, Jeff S. Deems, Dominik Schneider, Joseph J. Barsugli, and Noah P. Molotch*
Filling in the gaps: Inferring spatially distributed precipitation from gauge observations over complex terrain (doi 10.1002/2014WR015442)
- 8611** *Makoto Higashino and Heinz G. Stefan*
Modeling the effect of rainfall intensity on soil-water nutrient exchange in flooded rice paddies and implications for nitrate fertilizer runoff to the Oita River in Japan (doi 10.1002/2013WR014643)
- 8625** *Gabriel B. Senay, Naga Manohar Velpuri, Stefanie Bohms, Yonas Demissie, and Mekonnen Gebremichael*
Understanding the hydrologic sources and sinks in the Nile Basin using multisource climate and remote sensing data sets (doi 10.1002/2013WR015231)

- 8651** *Eun-Soon Im and Elfatih A. B. Eltahir*
Enhancement of rainfall and runoff upstream from irrigation location in a climate model of West Africa
 (doi 10.1002/2014WR015592)
- 8675** *Shugong Wang and Xu Liang*
A parameter estimation framework for Multiscale Kalman Smoother algorithm in precipitation data fusion
 (doi 10.1002/2013WR014942)
- 8694** *Danielle Perrot, Noah P. Molotch, Mark W. Williams, Steven M. Jepsen, and James O. Sickman*
Relationships between stream nitrate concentration and spatially distributed snowmelt in high-elevation catchments of the western U.S. (doi 10.1002/2013WR015243)
- 8714** *Stephan Thober, Juliane Mai, Matthias Zink, and Luis Samaniego*
Stochastic temporal disaggregation of monthly precipitation for regional gridded data sets
 (doi 10.1002/2014WR015930)
- 8736** *Qinzhao Liao and Dongxiao Zhang*
Probabilistic collocation method for strongly nonlinear problems: 2. Transform by displacement
 (doi 10.1002/2014WR016238)
- 8760** *Matthew Andrew, Branko Bijeljic, and Martin J. Blunt*
Pore-by-pore capillary pressure measurements using X-ray microtomography at reservoir conditions: Curvature, snap-off, and remobilization of residual CO₂ (doi 10.1002/2014WR015970)
- 8775** *Mekonnen Gebremichael, Menberu M. Bitew, Feyera A. Hirpa, and Gebrehiwot N. Tesfay*
Accuracy of satellite rainfall estimates in the Blue Nile Basin: Lowland plain versus highland mountain*
 (doi 10.1002/2013WR014500)
- *This article is part of a Special Section—Climate, Hydrology and Water Resources of Eastern Africa**
- 8791** *Alemayehu Midekisa, Gabriel B. Senay, and Michael C. Wimberly*
Multisensor earth observations to characterize wetlands and malaria epidemiology in Ethiopia*
 (doi 10.1002/2014WR015634)
- *This article is part of a Special Section—Hydroepidemiology: A pathway to link hydrology and climate with human health**
- 8807** *Michael C. Sukop and Kevin J. Cunningham*
Lattice Boltzmann methods applied to large-scale three-dimensional virtual cores constructed from digital optical borehole images of the karst carbonate Biscayne aquifer in southeastern Florida
 (doi 10.1002/2014WR015465)
- 8826** *Kristin E. Reardon, Fabián A. Bombardelli, Patricio A. Moreno-Casas, Francisco J. Rueda, and S. Geoffrey Schladow*
Wind-driven nearshore sediment resuspension in a deep lake during winter (doi 10.1002/2014WR015396)
- 8845** *Scott Jasechko, S. Jean Birks, Tom Gleeson, Yoshihide Wada, Peter J. Fawcett, Zachary D. Sharp, Jeffrey J. McDonnell, and Jeffrey M. Welker*
The pronounced seasonality of global groundwater recharge (doi 10.1002/2014WR015809)
- 8868** *Carles Ferrer-Boix and Marwan A. Hassan*
Influence of the sediment supply texture on morphological adjustments in gravel-bed rivers
 (doi 10.1002/2013WR015117)
- 8891** *V. Couvreur, J. Vanderborght, X. Draye, and M. Javaux*
Dynamic aspects of soil water availability for isohydric plants: Focus on root hydraulic resistances
 (doi 10.1002/2014WR015608)
- 8907** *Markus A. Schnorbus and Alex J. Cannon*
Statistical emulation of streamflow projections from a distributed hydrological model: Application to CMIP3 and CMIP5 climate projections for British Columbia, Canada (doi 10.1002/2014WR015279)
- 8927** *Shuai Zhang, Huilin Gao, and Bibi S. Naz*
Monitoring reservoir storage in South Asia from multisatellite remote sensing
 (doi 10.1002/2014WR015829)
- 8944** *Sarah Whateley, Scott Steinschneider, and Casey Brown*
A climate change range-based method for estimating robustness for water resources supply
 (doi 10.1002/2014WR015956)
- 8962** *Marc-Etienne Ridler, Henrik Madsen, Simon Stisen, Simone Bircher, and Rasmus Fensholt*
Assimilation of SMOS-derived soil moisture in a fully integrated hydrological and soil-vegetation-atmosphere transfer model in Western Denmark (doi 10.1002/2014WR015392)

- 8982 *Alla Yurova, Mikhail Tolstykh, Mats Nilsson, and Andrey Sirin*
Parameterization of mires in a numerical weather prediction model* (doi 10.1002/2013WR014624)
***This article is part of a Special Section—Patterns in Soil-Vegetation-Atmosphere Systems: Monitoring, Modelling and Data Assimilation**
- 8997 *Carles Ferrer-Boix, Juan P. Martín-Vide, and Gary Parker*
Channel evolution after dam removal in a poorly sorted sediment mixture: Experiments and numerical model (doi 10.1002/2014WR015550)
- 9020 *Mansoureh Norouzi Rad and Nima Shokri*
Effects of grain angularity on NaCl precipitation in porous media during evaporation (doi 10.1002/2014WR016125)
- 9031 *Richard J. Cooper, Tobias Krueger, Kevin M. Hiscock, and Barry G. Rawlins*
Sensitivity of fluvial sediment source apportionment to mixing model assumptions: A Bayesian model comparison (doi 10.1002/2014WR016194)
- 9048 *Erich T. Hester, Katie I. Young, and Mark A. Widdowson*
Controls on mixing-dependent denitrification in hyporheic zones induced by riverbed dunes: A steady state modeling study (doi 10.1002/2014WR015424)
- 9067 *Zoë T. Bainbridge, Stephen E. Lewis, Scott G. Smithers, Petra M. Kuhnert, Brent L. Henderson, and Jon E. Brodie*
Fine-suspended sediment and water budgets for a large, seasonally dry tropical catchment: Burdekin River catchment, Queensland, Australia (doi 10.1002/2013WR014386)
- 9088 *Carrie M. Vuyovich, Jennifer M. Jacobs, and Steven F. Daly*
Comparison of passive microwave and modeled estimates of total watershed SWE in the continental United States (doi 10.1002/2013WR014734)
- 9103 *Kone T., Golfier F., Orgogozo L., Oltéan C., Lefèvre E., Block J. C., and Buès M. A.*
Impact of biofilm-induced heterogeneities on solute transport in porous media (doi 10.1002/2013WR015213)

Comment and Reply

- 9120 *James W. Roy and Serban Danielescu*
Comment on "Assessing invertebrate assemblages in the subsurface zone of stream sediments (0–15 cm deep) using a hyporheic sampler" by Dole-Olivier et al. (doi 10.1002/2014WR015571)
- 9124 *M.-J. Dole-Olivier, Diana M. P. Galassi, and Pierre Marmonier*
Reply to comment by James W. Roy and Serban Danielescu on "Assessing invertebrate assemblages in the subsurface zone of stream sediments (0–15 cm deep) using a hyporheic sampler" (doi 10.1002/2014WR015843)