

Debates

- 9215** *Harihar Rajaram*
Debates—Stochastic subsurface hydrology from theory to practice: Introduction (doi 10.1002/2016WR020066)
- 9218** *Olaf A. Cirpka and Albert J. Valocchi*
Debates—Stochastic subsurface hydrology from theory to practice: Does stochastic subsurface hydrology help solving practical problems of contaminant hydrogeology? (doi 10.1002/2016WR019087)
- 9228** *A. Fiori, V. Cvetkovic, G. Dagan, S. Attinger, A. Bellin, P. Dietrich, A. Zech, and G. Teutsch*
Debates—Stochastic subsurface hydrology from theory to practice: The relevance of stochastic subsurface hydrology to practical problems of contaminant transport and remediation. What is characterization and stochastic theory good for? (doi 10.1002/2015WR017525)
- 9235** *Graham E. Fogg and Yong Zhang*
Debates—Stochastic subsurface hydrology from theory to practice: A geologic perspective (doi 10.1002/2016WR019699)
- 9246** *X. Sanchez-Vila and D. Fernández-García*
Debates—Stochastic subsurface hydrology from theory to practice: Why stochastic modeling has not yet permeated into practitioners? (doi 10.1002/2016WR019302)

Review Article

- 9259** *V. F. Bense, T. Read, O. Bour, T. Le Borgne, T. Coleman, S. Krause, A. Chalari, M. Mondanos, F. Ciocca, and J. S. Selker*
Distributed Temperature Sensing as a downhole tool in hydrogeology (doi 10.1002/2016WR018869)

Research Articles

- 9274** *Alain Recking*
A generalized threshold model for computing bed load grain size distribution (doi 10.1002/2016WR018735)
- 9290** *Margarita Saft, Murray C. Peel, Andrew W. Western, and Lu Zhang*
Predicting shifts in rainfall-runoff partitioning during multiyear drought: Roles of dry period and catchment characteristics (doi 10.1002/2016WR019525)
- 9306** *Francisco Núñez-González*
Infiltration of fine sediment mixtures through poorly sorted immobile coarse beds (doi 10.1002/2016WR019395)
- 9325** *Ming-Ming Liu, Yi-Feng Chen, Jia-Min Hong, and Chuang-Bing Zhou*
A generalized non-Darcian radial flow model for constant rate test (doi 10.1002/2016WR018963)
- 9344** *Sachin Pandey and Harihar Rajaram*
Modeling the influence of preferential flow on the spatial variability and time-dependence of mineral weathering rates (doi 10.1002/2016WR019026)
- 9367** *Brian A. Ebel, Francis K. Rengers, and Gregory E. Tucker*
Observed and simulated hydrologic response for a first-order catchment during extreme rainfall 3 years after wildfire disturbance* (doi 10.1002/2016WR019110)
- *This article is part of a Special Section—Disturbance Hydrology
- 9390** *Michael Finkel, Peter Grathwohl, and Olaf A. Cirpka*
A travel time-based approach to model kinetic sorption in highly heterogeneous porous media via reactive hydrofacies (doi 10.1002/2016WR019147)
- 9412** *Bridget R. Scanlon, Zizhan Zhang, Himanshu Save, David N. Wiese, Felix W. Landerer, Di Long, Laurent Longuevergne, and Jianli Chen*
Global evaluation of new GRACE mascon products for hydrologic applications (doi 10.1002/2016WR019494)

- 9430** *Michael W. Toews, Christopher J. Daughney, Fabien J. Cornaton, Uwe Morgenstern, Ryan D. Evison, Bethanna M. Jackson, Karine Petrus, and Doug Mzila*
Numerical simulation of transient groundwater age distributions assisting land and water management in the Middle Wairarapa Valley, New Zealand (doi 10.1002/2016WR019422)
- 9452** *Wen Wang, James A. Smith, Prathap Ramamurthy, Mary Lynn Baeck, Elie Bou-Zeid, and Todd M. Scanlon*
On the correlation of water vapor and CO₂: Application to flux partitioning of evapotranspiration (doi 10.1002/2015WR018161)
- 9470** *Maoya Bassiouni, Richard M. Vogel, and Stacey A. Archfield*
Panel regressions to estimate low-flow response to rainfall variability in ungaged basins (doi 10.1002/2016WR018718)
- 9495** *Martín C. M. Blettler, Mario L. Amsler, Eliana G. Eberle, Ricardo Szupiany, Francisco G. Latosinski, Elie Abrial, Paul J. Oberholster, Luis A. Espinola, Aldo Paira, Ailen Poza, and Alberto Rodrigues Capitulo*
Linking hydro-morphology with invertebrate ecology in diverse morphological units of a large river-floodplain system (doi 10.1002/2016WR019454)
- 9511** *Xiaomang Liu, Changming Liu, and Wilfried Brutsaert*
Regional evaporation estimates in the eastern monsoon region of China: Assessment of a nonlinear formulation of the complementary principle (doi 10.1002/2016WR019340)
- 9522** *Johannes M. Schneider, Dieter Rickenmann, Jens M. Turowski, Bastian Schmid, and James W. Kirchner*
Bed load transport in a very steep mountain stream (Riedbach, Switzerland): Measurement and prediction (doi 10.1002/2016WR019308)
- 9542** *J. Nanteza, C. R. de Linage, B. F. Thomas, and J. S. Famiglietti*
Monitoring groundwater storage changes in complex basement aquifers: An evaluation of the GRACE satellites over East Africa (doi 10.1002/2016WR018846)
- 9565** *Scott K. Hansen, Brian Berkowitz, Velimir V. Vesselinov, Daniel O'Malley, and Satish Karra*
Push-pull tracer tests: Their information content and use for characterizing non-Fickian, mobile-immobile behavior (doi 10.1002/2016WR018769)
- 9586** *Junbong Jang, Zhonghao Sun, and J. Carlos Santamarina*
Capillary pressure across a pore throat in the presence of surfactants (doi 10.1002/2015WR018499)
- 9600** *S. W. Hostetler and J. R. Alder*
Implementation and evaluation of a monthly water balance model over the US on an 800 m grid (doi 10.1002/2016WR018665)
- 9621** *Kory M. Konsoer, Bruce L. Rhoads, James L. Best, Eddy J. Langendoen, Jorge D. Abad, Dan R. Parsons, and Marcelo H. Garcia*
Three-dimensional flow structure and bed morphology in large elongate meander loops with different outer bank roughness characteristics (doi 10.1002/2016WR019040)
- 9642** *Dan Lu, Guannan Zhang, Clayton Webster, and Charlotte Barbier*
An improved multilevel Monte Carlo method for estimating probability distribution functions in stochastic oil reservoir simulations (doi 10.1002/2016WR019475)

Comment

- 9661** *Spyros Beltaos*
Comment on "Estimation of composite hydraulic resistance in ice-covered alluvial streams" by Ghareh Aghaji Zare et al. (doi 10.1002/2016WR019316)

Reply

- 9665** *Soheil Ghareh Aghaji Zare, Stephanie A. Moore, Colin D. Rennie, Ousmane Seidou, Habib Ahmari, and Jarrod Malenchak*
Reply to comment by Spyros Beltaos on "Estimation of composite hydraulic resistance in ice-covered alluvial streams" (doi 10.1002/2016WR019592)