

Regular Articles

- 2317 *Benjamin J. Henley, Mark A. Thyer, and George Kuczera*
Climate driver informed short-term drought risk evaluation (10.1002/wrcr.20222)
- 2327 *Egill Juliusson and Roland N. Horne*
Characterization of fractured reservoirs using tracer and flow-rate data (10.1002/wrcr.20220)
- 2343 *Ali Ershadi, Matthew F. McCabe, Jason P. Evans, Gregoire Mariethoz, and Dmitri Kavetski*
A Bayesian analysis of sensible heat flux estimation: Quantifying uncertainty in meteorological forcing to improve model prediction (10.1002/wrcr.20231)
- 2359 *Daniel W. Meyer, Hamdi A. Tchelepi, and Patrick Jenny*
A fast simulation method for uncertainty quantification of subsurface flow and transport* (10.1002/wrcr.20240)
- 2380 *Damien Bouffard, Josef Daniel Ackerman, and Leon Boegman*
Factors affecting the development and dynamics of hypoxia in a large shallow stratified lake: Hourly to seasonal patterns (10.1002/wrcr.20241)
- 2395 *Yajun Sun, Mathew G. Wells, Sarah A. Bailey, and Eric J. Anderson*
Physical dispersion and dilution of ballast water discharge in the St. Clair River: Implications for biological invasions (10.1002/wrcr.20201)
- 2408 *Stefan Krause and Theresa Blume*
Impact of seasonal variability and monitoring mode on the adequacy of fiber-optic distributed temperature sensing at aquifer-river interfaces* (10.1002/wrcr.20232)
- 2424 *Yusong Wang, Scott A. Bradford, and Jiří Šimůnek*
Transport and fate of microorganisms in soils with preferential flow under different solution chemistry conditions (10.1002/wrcr.20174)
- 2437 *Augusto C. V. Getirana and Rodrigo C. D. Paiva*
Mapping large-scale river flow hydraulics in the Amazon Basin (10.1002/wrcr.20212)
- 2446 *Kyungsik Chang and George Constantinescu*
Coherent structures in flow over two-dimensional dunes (10.1002/wrcr.20239)
- 2461 *Bin Yong, Liliang Ren, Yang Hong, Jonathan J. Gourley, Yudong Tian, George J. Huffman, Xi Chen, Weiguang Wang, and Yixin Wen*
First evaluation of the climatological calibration algorithm in the real-time TMPA precipitation estimates over two basins at high and low latitudes (10.1002/wrcr.20246)
- 2473 *Elena Abarca, Hanan Karam, Harold F. Hemond, and Charles F. Harvey*
Transient groundwater dynamics in a coastal aquifer: The effects of tides, the lunar cycle, and the beach profile (10.1002/wrcr.20075)
- 2489 *A. Beaudoin and J.-R. de Dreuzy*
Numerical assessment of 3-D macrodispersion in heterogeneous porous media (10.1002/wrcr.20206)
- 2497 *A. Fiori, G. Dagan, I. Jankovic, and A. Zarlenga*
The plume spreading in the MADE transport experiment: Could it be predicted by stochastic models? (10.1002/wrcr.20128)

- 2508 *Karli J. Ouellette, Caroline de Linage, and James S. Famiglietti*
Estimating snow water equivalent from GPS vertical site-position observations in the western United States (10.1002/wrcr.20173)
- 2519 *Congsheng Fu, Jianyao Chen, Huabo Jiang, and Linyao Dong*
Threshold behavior in a fissured granitic catchment in southern China: 1. Analysis of field monitoring results* (10.1002/wrcr.20191)
- 2536 *Congsheng Fu, Jianyao Chen, Huabo Jiang, and Linyao Dong*
Threshold behavior in a fissured granitic catchment in southern China: 2. Modeling and uncertainty analysis* (10.1002/wrcr.20193)
- 2552 *Chaopeng Shen, Jie Niu, and Mantha S. Phanikumar*
Evaluating controls on coupled hydrologic and vegetation dynamics in a humid continental climate watershed using a subsurface-land surface processes model (10.1002/wrcr.20189)
- 2573 *Kyung Won Chang, Marc A. Hesse, and Jean-Philippe Nicot*
Reduction of lateral pressure propagation due to dissipation into ambient mudrocks during geological carbon dioxide storage (10.1002/wrcr.20197)
- 2589 *Gabriele Chiogna and Alberto Bellin*
Analytical solution for reactive solute transport considering incomplete mixing within a reference elementary volume (10.1002/wrcr.20200)
- 2601 *Di Long and Vijay P. Singh*
Assessing the impact of end-member selection on the accuracy of satellite-based spatial variability models for actual evapotranspiration estimation (10.1002/wrcr.20208)
- 2619 *M. Warscher, U. Strasser, G. Kraller, T. Marke, H. Franz, and H. Kunstmann*
Performance of complex snow cover descriptions in a distributed hydrological model system: A case study for the high Alpine terrain of the Berchtesgaden Alps (10.1002/wrcr.20219)
- 2638 *Scott Farrow and Michael Scott*
Comparing multistate expected damages, option price and cumulative prospect measures for valuing flood protection (10.1002/wrcr.20217)
- 2649 *B. K. Smith, J. A. Smith, M. L. Baeck, G. Villarini, and D. B. Wright*
Spectrum of storm event hydrologic response in urban watersheds (10.1002/wrcr.20223)
- 2664 *Eric Laloy, Bart Rogiers, Jasper A. Vrugt, Dirk Mallants, and Diederik Jacques*
Efficient posterior exploration of a high-dimensional groundwater model from two-stage Markov chain Monte Carlo simulation and polynomial chaos expansion (10.1002/wrcr.20226)
- 2683 *W. L. Hogarth, D. A. Lockington, D. A. Barry, M. B. Parlange, R. Haverkamp, and J.-Y. Parlange*
Infiltration in soils with a saturated surface (10.1002/wrcr.20227)
- 2689 *L. M. Fry, T. S. Hunter, M. S. Phanikumar, V. Fortin, and A. D. Gronewold*
Identifying streamgage networks for maximizing the effectiveness of regional water balance modeling (10.1002/wrcr.20233)
- 2701 *B. Schaefli, A. Rinaldo, and G. Botter*
Analytic probability distributions for snow-dominated streamflow (10.1002/wrcr.20234)
- 2714 *Branko Bijeljic, Peyman Mostaghimi, and Martin J. Blunt*
Insights into non-Fickian solute transport in carbonates (10.1002/wrcr.20238)

- 2729 *Albert I. J. M. van Dijk, Jorge L. Peña-Arancibia, Eric F. Wood, Justin Sheffield, and Hylke E. Beck*
Global analysis of seasonal streamflow predictability using an ensemble prediction system and observations from 6192 small catchments worldwide (10.1002/wrcr.20251)
- 2747 *Bong-Chul Seo, Luciana K. Cunha, and Witold F. Krajewski*
Uncertainty in radar-rainfall composite and its impact on hydrologic prediction for the eastern Iowa flood of 2008 (10.1002/wrcr.20244)
- 2765 *Darren L. Ficklin, Iris T. Stewart, and Edwin P. Maurer*
Effects of climate change on stream temperature, dissolved oxygen, and sediment concentration in the Sierra Nevada in California (10.1002/wrcr.20248)
- 2783 *Cédric H. David, Zong-Liang Yang, and James S. Famiglietti*
Quantification of the upstream-to-downstream influence in the Muskingum method and implications for speedup in parallel computations of river flow (10.1002/wrcr.20250)
- 2801 *S. Guillon, M. T. Vu, E. Pili, and P. M. Adler*
Field and numerical determinations of pneumatic flow parameters of unsaturated fractured porous rocks on various scales (10.1002/wrcr.20263)
- 2812 *P.-L. Carpentier, M. Gendreau, and F. Bastin*
Long-term management of a hydroelectric multireservoir system under uncertainty using the progressive hedging algorithm (10.1002/wrcr.20254)
- 2828 *Takuya Ishibashi, Thomas P. McGuire, Noriaki Watanabe, Noriyoshi Tsuchiya, and Derek Elsworth*
Permeability evolution in carbonate fractures: Competing roles of confining stress and fluid pH (10.1002/wrcr.20253)
- 2843 *Andrew C. Wilcox and Patrick B. Shafroth*
Coupled hydrogeomorphic and woody-seedling responses to controlled flood releases in a dryland river (10.1002/wrcr.20256)
- 2861 *Alon Ben-Gal, Hans-Peter Weikard, Syed Hamid Hussain Shah, and Sjoerd E. A. T. M. van der Zee*
A coupled agronomic-economic model to consider allocation of brackish irrigation water (10.1002/wrcr.20258)
- 2872 *Xiaochi Zhou, Erkan Istanbuluoglu, and Enrique R. Vivoni*
Modeling the ecohydrological role of aspect-controlled radiation on tree-grass-shrub coexistence in a semiarid climate (10.1002/wrcr.20259)
- 2896 *Dipankar Dwivedi, Binayak P. Mohanty, and Bruce J. Lesikar*
Estimating *Escherichia coli* loads in streams based on various physical, chemical, and biological factors (10.1002/wrcr.20265)
- 2907 *Andreas Brand, Jörg Lewandowski, Enrico Hamann, and Gunnar Nützmann*
Advection around ventilated U-shaped burrows: A model study* (10.1002/wrcr.20266)
- *This article is part of a Special Section—Advancing Computational Methods in Hydrology**
- 2918 *Paolo Nasta, Jasper A. Vrugt, and Nunzio Romano*
Prediction of the saturated hydraulic conductivity from Brooks and Corey's water retention parameters (10.1002/wrcr.20269)
- 2926 *Erwin Jeremiah, Lucy Marshall, Scott A Sisson, and Ashish Sharma*
Specifying a hierarchical mixture of experts for hydrologic modeling: Gating function variable selection (10.1002/wrcr.20150)
- 2940 *Jérôme Weiss and Pietro Bernardara*
Comparison of local indices for regional frequency analysis with an application to extreme skew surges (10.1002/wrcr.20225)
- 2952 *Lee L. Landkamer, Ronald W. Harvey, Timothy D. Scheibe, and Joseph N. Ryan*
Colloid transport in saturated porous media: Elimination of attachment efficiency in a new colloid transport model (10.1002/wrcr.20195)
- 2966 *W. Paul Miller, Gina M. DeRosa, Subhrendu Gangopadhyay, and Juan B. Valdés*
Predicting regime shifts in flow of the Gunnison River under changing climate conditions (10.1002/wrcr.20215)
- 2975 *Donald O. Rosenberry, Richard W. Sheibley, Stephen E. Cox, Frederic W. Simonds, and David L. Naftz*
Temporal variability of exchange between groundwater and surface water based on high-frequency direct measurements of seepage at the sediment-water interface* (10.1002/wrcr.20198)

- 2987 *Benjamin B. Mirus and Keith Loague*
How runoff begins (and ends): Characterizing hydrologic response at the catchment scale (10.1002/wrcr.20218)
- 3007 *Joaquín Jiménez-Martínez, Laurent Longuevergne, Tanguy Le Borgne, Philippe Davy, Anna Russian, and Olivier Bour*
Temporal and spatial scaling of hydraulic response to recharge in fractured aquifers: Insights from a frequency domain analysis (10.1002/wrcr.20260)
- 3024 *Dennis Lemke, Zijie Liao, Thomas Wöhling, Karsten Osenbrück, and Olaf A. Cirpka*
Concurrent conservative and reactive tracer tests in a stream undergoing hyporheic exchange*† (10.1002/wrcr.20277)

Technical Notes

- 3038 *Tohid Erfani, Ivana Huskova, and Julien J. Harou*
Tracking trade transactions in water resource systems: A node-arc optimization formulation (10.1002/wrcr.20211)
- 3044 *Heejun Suk*
Developing semianalytical solutions for multispecies transport coupled with a sequential first-order reaction network under variable flow velocities and dispersion coefficients (10.1002/wrcr.20230)
- 3049 *Jeffrey S. Olsen and Aleksey S. Telyakovskiy*
Polynomial approximate solutions of a generalized Boussinesq equation* (10.1002/wrcr.20242)
- 3054 *Wilfried Brutsaert*
Use of pan evaporation to estimate terrestrial evaporation trends: The case of the Tibetan Plateau* (10.1002/wrcr.20247)
- 3059 *Uli Maier and Claudius M. Bürger*
An accurate method for transient particle tracking (10.1002/wrcr.20236)
- 3064 *Jun Kong, Cheng-Ji Shen, Pei Xin, Zhiyao Song, Ling Li, D. A. Barry, D.-S. Jeng, F. Stagnitti, D. A. Lockington, and J.-Y. Parlange*
Capillary effect on water table fluctuations in unconfined aquifers* (10.1002/wrcr.20237)