

Journal of Hydrometeorology

The JOURNAL OF HYDROMETEOROLOGY (*JHM*) publishes research on modeling, observing, and forecasting processes related to fluxes and storage of water and energy, including interactions with the boundary layer and lower atmosphere, and processes related to precipitation, radiation, and other meteorological inputs.

Chief Editor

WADE T. CROW

USDA-ARS Hydrology and Remote Sensing Laboratory

Editors

KONSTANTINOS M. ANDREADIS
University of
Massachusetts Amherst

CRAIG R. FERGUSON
University at Albany, State
University of New York

VIVIANA MAGGIONI
George Mason University

MATTHEW RODELL
NASA Goddard Space
Flight Center

FRANCINA DOMINGUEZ
University of Illinois at
Urbana-Champaign

L. RUBY LEUNG
Pacific Northwest
National Laboratory

YU ZHANG
The University of Texas at Arlington

Associate Editors

ALI S. AKANDA
University of Rhode Island

ALI BEHRANGI
The University of Arizona

TIM BELLERBY
University of Hull

SYLVAIN BIANCAMARIA
LEGOS, CNES/CNRS/IRD/
Université Paul Sabatier Toulouse III

MICHAEL BOSILOVICH
NASA Goddard Space Flight Center

XIADONG CHEN
Pacific Northwest National Laboratory

GABRIËLLE DE LANNOY
KU Leuven

STEPHEN J. DÉRY
University of Northern British Columbia

MICHAEL DURAND
The Ohio State University

ARDESHIR EBTEHAJ
University of Minnesota Twin Cities

RENATO FRASSON
NASA Jet Propulsion Laboratory

STEPHEN GOOD
Oregon State University

ETHAN GUTMANN
National Center for Atmospheric Research

GEORGE J. HUFFMAN
NASA Goddard Space Flight Center

MIMI HUGHES
NOAA/Oceanic and Atmospheric
Research/Physical Sciences Laboratory

JIMING JIN
Yangtze University

PIERRE KIRSTETTER
University of Oklahoma and NOAA/National
Severe Storms Laboratory

MUKESH KUMAR
University of Alabama

SUJAY V. KUMAR
NASA Goddard Space Flight Center

DONGYUE LI
University of California, Los Angeles

LIFENG LUO
Michigan State University

KAIGHN A. MCCOLL
Harvard University

DANIEL J. MCEVOY
Desert Research Institute, Western Regional
Climate Center

VELJKO PETKOVIĆ
ESSIC/University of Maryland

YOU CUN QI
Institute of Geographic Sciences and Natural
Resources Research, Chinese Academy of
Sciences and University of Chinese
Academy of Sciences

MARK RALEIGH
Oregon State University

RAFAEL ROSOLEM
University of Bristol

SHRADDHANAND SHUKLA
University of California, Santa Barbara

SUSAN STEELE-DUNNE
Delft University of Technology

JACKSON TAN
University of Maryland Baltimore County
and NASA Goddard Space Flight Center

QIUHONG TANG
Institute of Geographic Sciences and Natural
Resources Research, Chinese Academy of
Sciences

NATTHACHET TANGDAMRONGSUB
ESSIC, University of Maryland

ALI TOKAY
University of Maryland, Baltimore County

REMKO UIJLENHOET
Delft University of Technology

GUILING WANG
University of Connecticut

DOMINIK WISSER
Food and Agriculture Organization of the
United Nations (FAO)

HUAN WU
Sun Yat-sen University

BIN YONG
Hohai University

YALEI YOU
University of North Carolina, Wilmington

BENJAMIN ZAITCHIK
The Johns Hopkins University

Editorial Staff

AMS Lead Technical Editor for JHM

HOLLIS E. BAGUSKAS

AMS Lead Copy Editor for JHM

NICOLE E. RIETMANN

Peer Review Staff

ERIN GUMBEL (Assistant to Dr. Crow)

DJ ARRUDA

CRISTINA BARLETTA

TIFFANY BISCHOFF

HAYLEY CHARNEY

ANDREA HERBST

AMS Scientific and Technical Journals Staff

Director of Publications
GWENDOLYN WHITTAKER

*Publications Billing and
AMS Office Manager*
CAITLIN GARRISON

Senior Production Assistants
DANIELLE M. JOYCE
WALTON REA

Managing Copy Editor
JESSICA A. LAPOINTE

*Senior Manager for Publishing
Operations*

MICHAEL A. FRIEDMAN

Production Manager
SHEILA F. GAFVERT

Production Assistants

KATIE QUIRK

ABBY WOODWARD

Managing Technical Editor

MARK E. FERNAU

Senior Technical Editors

HOLLIS E. BAGUSKAS

RICHARD R. BRANDT

Senior Copy Editors

KRISTIN GILBERT

RAMESH PILLAY

NICOLE E. RIETMANN

ANDREA L. SCHEIN

© Copyright 2022 American Meteorological Society (AMS). For permission to reuse any portion of this work, please contact permissions@ametsoc.org. Any use of material in this work that is determined to be "fair use" under Section 107 of the U.S. Copyright Act (17 U.S. Code § 107) or that satisfies the conditions specified in Section 108 of the U.S. Copyright Act (17 USC § 108) does not require AMS's permission. Reproduction, systematic reproduction, posting in electronic form, such as on a website or in a searchable database, or other uses of this material, except as exempted by the above statement, require written permission or a license from AMS. All AMS journals and monograph publications are registered with the Copyright Clearance Center (<https://www.copyright.com>). Additional details are provided in the AMS Copyright Policy statement, available on the AMS website (<https://www.ametsoc.org/PUBSCopyrightPolicy>).

The JOURNAL OF HYDROMETEOROLOGY (ISSN 1525-755X) is published monthly by the American Meteorological Society at 45 Beacon Street, Boston, MA 02108-3693. Subscription rates for this and other AMS titles are available online at <https://www.ametsoc.org/index.cfm/ams/publications/subscription-information>. For information on becoming an AMS member and/or subscribing to the Society's journals, visit the AMS website: <https://www.ametsoc.org>. Subscription orders, claims for missing numbers, changes of address, and other business correspondence should be sent to amsinfo@ametsoc.org (or to the American Meteorological Society, 45 Beacon Street, Boston, MA 02108-3693). Periodical postage paid at Boston, MA, and at additional mailing offices. POSTMASTER: Send address changes to the *Journal of Hydrometeorology*, American Meteorological Society, 45 Beacon Street, Boston, MA 02108-3693.