CURRICULUM VITAE

Benjamin J. Moore

NOAA/PSL
325 Broadway
Boulder, CO 80305
benjamin.moore@noaa.gov

Education

Ph.D., Atmospheric Science, September 2017
University at Albany, State University of New York, Albany, New York
Thesis: *Rossby wave breaking and widespread extreme precipitation events in the central and eastern United States*
Advisors: Dr. Lance F. Bosart and Dr. Daniel Keyser

M.S., Atmospheric Science, August 2010
University at Albany, State University of New York, Albany, New York
Thesis: *Synoptic-scale environments and dynamical mechanisms associated with predecessor rain events ahead of tropical cyclones*
Advisors: Dr. Lance F. Bosart and Dr. Daniel Keyser

B.S., Atmospheric Science, May 2008
University of Wisconsin, Madison, Wisconsin

Employment

Research Meteorologist, November 2018–present
NOAA Physical Sciences Laboratory, Boulder, Colorado

- Conduct research on the climatology, dynamics, and predictability of midlatitude weather systems and weather extremes affecting the U.S.

Research Associate, November 2017–November 2018
Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, Colorado

- Conducted research on the climatology, dynamics, and predictability of midlatitude weather systems and weather extremes affecting the U.S.

Graduate Research Assistant, August 2013–August 2017
University at Albany, State University of New York, Albany, New York

- Conducted research on dynamics and predictability of extreme precipitation events in the U.S. linked to Rossby wave breaking

Professional Research Assistant, September 2010–August 2013
Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, Colorado

- Conducted research on the climatology, dynamics, and predictability of extreme precipitation events in the U.S.

Graduate Research Assistant, May 2009–August 2010
University at Albany, State University of New York, Albany, New York

- Conducted research on the climatology and dynamics of predecessor rain events associated with landfalling tropical cyclones in the U.S.

Graduate Teaching Assistant, August 2008−May 2010
University at Albany, State University of New York, Albany, New York

- Assisted in instructing undergraduate students on basic concepts in atmospheric science, statistics, and environmental instrumentation.

Other professional activities

Forecasting experiments and field campaigns

NOAA Hydrometeorology Testbed Atmospheric Rivers Retrospective Forecasting Experiment, College Park, Maryland, September 2012

NOAA Hazardous Weather Testbed Spring Experiment, Norman, Oklahoma, June 2011

CalWater field campaign, California, February–March 2011

NOAA Weather Prediction Center Winter Weather Experiment, Camp Springs, Maryland, February 2011

Peer reviewer for journal articles

– *Atmospheric Chemistry and Physics*
– *Bulletin of the American Meteorological Society*
– *Climate Dynamics*
– *Geophysical Research Letters*
– *Journal of Climate*
– *Journal of Geophysical Research–Atmospheres*
– *Journal of Hydrometeorology*
– *Monthly Weather Review*
– *Quarterly Journal of the Royal Meteorological Society*

Professional organization memberships

American Meteorological Society, 2007–present
American Geophysical Union, 2011–present

Publications

Moore, B. J, A. B. White, D. J. Gottas, and P. J. Neiman, 2020: Extreme precipitation events in northern California during winter 2016–17: Multiscale analysis and climatological perspective. *Mon. Wea. Rev.,* **148,** 1049–1074.

Moore, B. J, D. Keyser, and L. F. Bosart, 2019: Linkages between extreme precipitation events in the central and eastern U.S. and Rossby wave breaking. *Mon. Wea. Rev.,* **147,** 3327–3349.

White, A. B., B. J. Moore, D. J. Gottas, and P. J. Neiman, 2019: Winter storm conditions leading to excessive runoff above California's Oroville Dam during January and February 2017. *Bull. Am. Meteor. Soc.*, **100**, 55–70.

Bosart, L. F., B. J. Moore, J. M. Cordeira, and H. M. Archambault, 2017: Interactions of North Pacific tropical, midlatitude, and polar disturbances resulting in linked extreme weather events over North America in October 2007. *Mon. Wea. Rev.*, **145,** 1245–1273.

Neiman, P. J., B. J. Moore, A. B. White, G. A. Wick, J. Aikins, D. L. Jackson, J. R. Spackman, and F. M. Ralph, 2016: An airborne and ground-based study of a long-lived and intense atmospheric river with mesoscale frontal waves impacting California during CalWater-2014. *Mon. Wea. Rev.,* **144,** 1115–1144.

Moore, B. J., T. M. Hamill, E. M. Sukovich, T. Workoff, and F. E. Barthold, 2015: The utility of the NOAA reforecast dataset for quantitative precipitation forecasting over the coastal western United States. *J. Operational Meteor.*, **3** (12), 133–144.

Moore, B. J., K. M. Mahoney, E. M. Sukovich, R. Cifelli, and T. M. Hamill, 2015: Climatology and environmental characteristics of extreme precipitation events in the southeastern United States. *Mon. Wea. Rev.,* **143,** 718–741.

Neiman, P. J., G. A. Wick, B. J. Moore, F. M. Ralph, J. R. Spackman, and B. Ward, 2014: An airborne study of an atmospheric river over the subtropical Pacific during WISPAR: Dropsonde budget-box diagnostics, and precipitation impacts in Hawaii and California. *Mon. Wea. Rev.,* **142**, 3199–3223.

Hughes, M., K. M. Mahoney, P. J. Neiman, B. J. Moore, M. Alexander, and F. M. Ralph, 2014: The landfall and inland penetration of a flood-producing atmospheric river in Arizona. Part II: Sensitivity of modeled precipitation to terrain height and atmospheric river orientation. *J. Hydrometeor.,***15**, 1954–1974.

Neiman, P. J., F. M. Ralph, and B. J. Moore, 2014: The regional influence of an intense Sierra barrier jet and landfalling atmospheric river on orographic precipitation in northern California: A case study. *J. Hydrometeor.,***15**, 1419–1439.

Cordeira, J. M., F. M. Ralph, and B. J. Moore, 2013: The development and evolution of two atmospheric rivers in proximity to western North Pacific tropical cyclones in October 2010. *Mon. Wea. Rev.*, **141**, 4234–4255.

Neiman, P. J., M. Hughes, B. J. Moore, F. M. Ralph, and E. M. Sukovich, 2013: Sierra barrier jets, atmospheric rivers, and precipitation characteristics in northern California: A composite perspective based on a network of wind profilers. *Mon. Wea. Rev.*, **141,** 4211–4233.

Moore, B. J., L. F. Bosart, D. Keyser, and M. L. Jurewicz, 2012: Synoptic-scale environments of predecessor rain events occurring east of the Rocky Mountains in association with Atlantic basin tropical cyclones. *Mon. Wea. Rev.*, **141,** 1022–1047.

Kingsmill, D. E., P. J. Neiman, B. J. Moore, M. Hughes, S. E. Yuter, and F. M. Ralph, 2012: Kinematic and thermodynamic structures of Sierra barrier jets and overrunning atmospheric rivers during a land-falling winter storm in northern California. *Mon. Wea. Rev.*, **141,** 2015–2036.

Neiman, P. J., F. M. Ralph, B. J. Moore, M. Hughes, K. M. Mahoney, J. M. Cordeira, and M. D. Dettinger, 2012: The landfall and inland penetration of a flood-producing atmospheric river in Arizona. Part 1: Observed synoptic-scale, orographic, and hydrometeorological characteristics. *J. Hydrometeor.,* **14,** 460–484.

Bosart, L. F., J. M. Cordeira**,** T. J. Galarneau, Jr., B. J. Moore, and H. M. Archambault, 2012: An analysis of multiple predecessor rain events ahead of tropical cyclones Ike and Lowell: 10–15 September 2008. *Mon. Wea. Rev*., **140,** 1081–1107.

Moore, B. J., P. J. Neiman, F. M. Ralph, and F. E. Barthold, 2012: Physical processes associated with heavy flooding rainfall in Nashville, Tennessee, and vicinity during 1–2 May 2010: The role of an atmospheric river and mesoscale convective systems. *Mon. Wea. Rev.*, **140**, 358–378.

Recent conference presentations

Moore, B. J., A. B. White, and D. J. Gottas, 2020: Linkages between extreme precipitation in northern California and atmospheric blocking over the North Pacific. *100th AMS Annual Meeting*, 12–16 January 2020, Boston, MA.

Moore, B. J., A. B. White, and D. J. Gottas, 2019: Dynamics of long-duration extreme precipitation events along the U.S. West Coast. *19th Cyclone Workshop*, 29 September–4 October 2019, Seeon, Germany.

Moore, B. J., P. J. Neiman, A. B. White, and D. J. Gottas, 2018: Large-scale flow regimes associated with long-duration extreme precipitation events in northern California. *American Geophysical Union Fall Meeting*, 10–14 December 2018, Washington, D.C.

Moore, B. J., P. J. Neiman, A. B. White, and D. J. Gottas, 2018: Large-scale dynamics of extreme precipitation events in California during winter 2016–2017. *2018 International Atmospheric Rivers Conference*, 25–28 June 2018, La Jolla, CA.

Moore, B. J., D. Keyser, and L. F. Bosart, 2018: Linkages between Rossby wave breaking and widespread extreme precipitation events in the central United States. *18th Cyclone Workshop,* 1–6 October 2017, Sainte-Adele, Quebec.