

Benjamin Trabing

Education

- 2018 – 2020 **Ph.D.**, *Atmospheric Science*, Colorado State University, Fort Collins, CO.
2016 – 2018 **M.S.**, *Atmospheric Science*, Colorado State University, Fort Collins, CO.
2012 – 2016 **B.S.**, *Meteorology Cum Laude*, University of Oklahoma, Norman, OK.
Minor in Mathematics

Professional Development

- 2020 – **Research Associate II**, *Cooperative Institute for Research in the Atmosphere*,
Duty Location: National Hurricane Center.
2016 – 2020 **Graduate Research Assistant**, *Colorado State University*.
2015 – 2016 **Intern/Visiting Scientist**, *Cooperative Institute for Research in the Atmosphere*.
2013 – 2016 **Undergraduate Research Assistant**, *National Severe Storms Laboratory / Cooperative
Institute for Mesoscale Meteorological Studies*.

Referred Publications

Trabing, B. C., K. Musgrave, and M. DeMaria, 2021: A Simple Bias and Uncertainty Scheme for Tropical Cyclone Intensity Change Forecasts. *Wea. Forecasting*. (To Be Submitted)

Trabing, B. C. and M. M. Bell, 2021: Observations of Diurnal Variability under the Cirrus Canopy of Typhoon Kong-rey (2018). *Mon. Wea. Rev.* 149, 2945–2964, <https://doi.org/10.1175/MWR-D-20-0327.1>

Trabing, B. C. and M. M. Bell, 2021: The Sensitivity of Eyewall Replacement Cycles to Shortwave Radiation. *J. Geophys. Res: Atmospheres*, 126, e2020JD034016. <https://doi.org/10.1029/2020JD034016>

Sobal, A. H., Sprintall, J., Maloney, E. D., Martin, Z. K., Wang, S., deSzoeke, S., **Trabing, B. C.** and S. A. Rutledge, 2021: Large-scale state and evolution of the atmosphere and ocean during PISTON 2018. *J. Climate.*, 34, 5017–5035, <https://doi.org/10.1175/JCLI-D-20-0517.1>

Trabing, B. C. and M. M. Bell, 2020: Understanding Error Distributions of Hurricane Intensity Forecasts During Rapid Intensity Changes. *Wea. Forecasting* 35, 2219–2234. <https://doi.org/10.1175/WAF-D-19-0253.1>

Trabing, B. C., M. M. Bell, and B. R. Brown, 2019: Impacts of Radiation and Upper-Tropospheric Temperatures on Tropical Cyclone Structure and Intensity. *J. Atmos. Sci.*, 76, 135–153. <https://doi.org/10.1175/JAS-D-18-0165.1>

Trabing, B. C., J. A. Knaff, and K. Musgrave, 2016: Analysis of Hurricanes Using Long-Range Lightning Detection Networks. *Commons@SHAREOK* (Published online at <https://hdl.handle.net/11244.46/70>)

Awards and Scholarships

- 2020 Best Poster, AMS Weather Analysis and Forecasting

- 2019 Herbert Riehl Memorial Award
- 2016 OU Libraries Undergraduate Research Award
- 2015 AMS Vic Ooyama Named Scholarship
- 2014 – 2016 NOAA Ernest F. Hollings Scholar
- 2014 – 2016 Ronald E. McNair Scholar
- 2014 Oklahoma NASA GIS Fellowship

Select Conference Presentations

- 2022 Trabling, B. C., K. Musgrave, M. DeMaria, B. C. Zachry, M. J. Brennan, and E. Rappaport: Estimating Landfall Forecast Uncertainty Using the Wind Speed Probability Model. 27th Conference on Probability and Statistics Remote (Oral)
- 2022 Trabling, B. C., K. Musgrave, and M. DeMaria: Examination of Missed Rapid Intensification Forecasts from SHIPS-RII. 12th Conference on Transition of Research to Operations, Remote (Poster)
- 2021 Trabling, B. C., K. Musgrave, and M. DeMaria: Bias Correction for SHIPS and LGEM Intensity Change Distributions. 34th Conference on Hurricanes and Tropical Meteorology, Remote (Poster)
- 2021 Trabling, B. C. and M. M. Bell: The Sensitivity of Eyewall Replacement Cycles to Shortwave Radiation. 34th Conference on Hurricanes and Tropical Meteorology, Remote (Oral)
- 2021 Trabling, B. C., K. Musgrave, and M. DeMaria: Bias Correcting SHIPS and LGEM Intensity Change Distributions. Fourth Special Symposium on Tropical Meteorology and Tropical Cyclones, Remote (Poster)
- 2020 Trabling, B. C. and M. M. Bell: Observations of a Diurnal Pulse within the Cirrus Canopy of Typhoon Kong-rey (2018). Tropical Meteorology and Tropical Cyclones Symposium, Boston, Massachusetts (Poster)
- 2020 Trabling, B. C. and M. M. Bell: Understanding Rapid Intensity Changes in Official Hurricane Intensity Forecast Error Distributions. 30th Conference on Weather Analysis and Forecasting / 26th Conference on Numerical Weather Prediction, Boston, Massachusetts (Poster)
- 2019 Trabling, B. C. and M. M. Bell: How the Sun Impacts Eyewall Replacement Cycles in Simulated Hurricanes. Colorado State University Graduate Showcase, Fort Collins, Colorado (Poster)
- 2019 Trabling, B. C. and M. M. Bell: Observations of a Diurnal Pulse within the Cirrus Canopy of Typhoon Kong-rey (2018). 9th Young Scientist Symposium on Atmospheric Research, Fort Collins, Colorado (Oral)
- 2019 Trabling, B. C. and M. M. Bell: Observations of the Diurnal Variability of near TC Convection during PISTON. Atmospheric Convection and Air-Sea Interactions over the Tropical Oceans Workshop, Boulder, Colorado (Poster)
- 2019 Trabling, B. C. and M. M. Bell: Shortwave Heating Effects on the TC Outer Core. Front Range Tropical Cyclone Workshop, NCAR, Boulder, Colorado (Oral)
- 2018 Trabling, B. C. and M. M. Bell: Understanding Rapid Intensity Changes in Official Hurricane Intensity Forecast Error Distributions. Front Range Tropical Cyclone Workshop, Fort Collins, Colorado (Oral)
- 2018 Trabling, B. C. and M. M. Bell: Understanding Rapid Intensity Changes in Hurricane Forecasts. Colorado State University Graduate Showcase, Fort Collins, Colorado (Poster)
- 2018 Trabling, B. C. and M. M. Bell: Radiative Effects on Idealized Secondary Eyewall Formation. 8th Young Scientist Symposium on Atmospheric Research. Fort Collins, Colorado (Oral)

- 2018 Trabling, B. C. and M. M. Bell: Upper-Tropospheric Temperature and Radiative Impacts in Idealized Hurricanes. 33rd Conference on Hurricanes and Tropical Meteorology. Ponte Vedra, Florida, 12C.4 (Oral)
- 2017 Trabling, B. C. and M. M. Bell: Upper-Tropospheric Temperature Impacts in Idealized Hurricanes. Colorado State University Graduate Showcase, Fort Collins, Colorado (Poster)
- 2017 Trabling, B. C. and M. M. Bell: Upper-Tropospheric Temperature Impacts in Idealized Hurricanes. 18th Cyclone Workshop, Sainte Adele, Quebec (Oral)
- 2016 Trabling, B. C., J. A. Knaff and K. Musgrave: Hurricane Observations Using Long-Range Lightning Detection Networks. Colorado State University Graduate Showcase, Fort Collins, Colorado (Poster)
- 2016 Trabling, B. C. and J. A. Knaff: Analysis of Hurricanes Using Long-Range Lightning Detection Networks. 32nd Conference on Hurricanes and Tropical Meteorology, San Juan, Puerto Rico, 5D.2 (Oral)
- 2015 Trabling, B. C. and J. A. Knaff: Analysis of Hurricane Odile Using Long-Range Lightning Detection Networks. Front Range Tropical Cyclone Workshop, NCAR, Boulder, Colorado (Oral)
- 2015 Trabling, B. C. and D. MacGorman: Lightning Activity in 2014 Atlantic Tropical Cyclones. 40th NWA Annual Meeting, Oklahoma City, Oklahoma (Poster)
- 2014 Trabling, B. C. and D. MacGorman: Lightning Activity in 2014 Atlantic Tropical Cyclones. 29th Annual National Conference for Undergraduate Research, Spokane, Washington (Oral)

Community Engagement

- 2018 – Planning Committee – AMS 30th Weather Analysis and Forecasting / 26th Numerical Weather Prediction Conference
- 2016 – 2018 Volunteer – Colorado Weather Festival
- 2017 Planning Committee – Young Scientist Symposium on Atmospheric Research
- 2016 Volunteer – Oklahoma Safety and Preparedness Week
- 2012 – 2016 Volunteer – National Weather Festival
- 2015 Volunteer – AMS 95th Annual Conference
- 2014 Volunteer – International Conference on Atmospheric Electricity

Computer skills

- Systems Linux, Mac OS, Windows
- Languages Python, Bash, PHP, Fortran
- Editing \LaTeX , Microsoft Office, HTML
- Technical git, WRF, CM1, SBDART, LROSE