

# Matthew Holliday

## EDUCATION

M.S., Meteorology and Climatology, Mississippi State University, 2017 — Present

B.S., Meteorology, University of Oklahoma, 2017

B.S., Geographic Information Science, University of Oklahoma, 2017

## RESEARCH EXPERIENCE

2016-17 “Classifying the Environment of Different Wave Cloud Formations in Colorado”

Group research project as part of the Capstone course for the School of Meteorology at the University of Oklahoma to determine environmental triggers for different wave cloud formations from an archive of photographs. Supervised by Dr. Howard Bluestein.

2016-17 “Upward Trend in Dew Points’ Effects on Regional Changes in Tornado Occurrences”

Group research project as part of the Capstone course for the Department of Geography and Environmental Sustainability at the University of Oklahoma to determine the effects that regional dew point trends have had on tornado occurrences across the United States. Supervised by Dr. Scott Greene and Dr. Darren Purcell.

## WORK EXPERIENCE

2018 — *Present* Graduate Teaching Assistant, Mississippi State University – Starkville, MS

- Prepares PowerPoint lectures, quizzes, and assignments
- Teaches weather and climate lab material to around sixty students
- Assists students outside of classroom to aid their understanding of lab-related concepts

2010 — *Present* Founder & Forecaster, Firsthand Weather – Anderson, SC

- Writes medium and long-range forecasts on blog on a weekly basis
- Updates social media pages to disseminate weather information out to the public
- Delivers weekly newsletter to subscribers
- Develops website and mobile applications

2018 NOAA Meteorology Intern, Weather Prediction Center, College Park, MD

- Developed the WPC experimental national forecast chart product using Python, JavaScript, and GIS
- Shadowed meteorologists during high-impact weather events

2017 — 2018 Graduate Research Assistant, Mississippi State University – Starkville, MS

## **CONFERENCE PRESENTATIONS**

Holliday, B. M., and K. M. Wood, 2019: Impacts of Sea Surface Temperature Gradients on Rapid Weakening in the Eastern North Pacific. Poster session to be presented at: 18th Annual Student Conference, 2019 January 5-6, Phoenix, AZ.

Holliday, B. M., and G. W. Carbin, 2019: Using GeoJSON to Efficiently Deliver Geographic Information from the NWS National Forecast Chart. Poster session to be presented at: 99th American Meteorological Society Annual Meeting, 2019 January 6-10, Phoenix, AZ.

Holliday, B. M., and K. M. Wood, 2018: The influence of sea surface temperature gradients on the rapid weakening of tropical cyclones. Poster session presented at: 33<sup>rd</sup> Conference on Hurricanes and Tropical Meteorology, 2018 April 16-20, Ponte Vedra, FL.

Holliday, B. M., and K. M. Wood, 2017: Benefits of GOES-16 ABI observations for hurricanes impacting the southeast U.S. Poster session presented at: 72<sup>nd</sup> Annual SEDAAG Meeting, 2017 November 19-20, Starkville, MS.

Bluestein, H. B., B. M. Holliday, S. Lee, and K. Pope, 2017: The environment of orographic wave clouds in the lee of the Colorado Front Range (and Oklahoma). Oral session presented at: 34<sup>th</sup> International Conference on Alpine Meteorology, 2017 June 18-23, Reykjavik, Iceland.

## **AWARDS**

- Geosciences Centennial Graduate School Fellowship recipient for academic achievements (2017), Mississippi State University
- Dean's List: Spring 2012, Fall 2016, Spring 2017, University of Oklahoma

## **MEMBERSHIPS**

- American Meteorological Society
- SouthEastern Division of the Association of American Geographers

## **COMPUTER SKILLS**

- HTML, CSS, and JavaScript
- Python
- R
- MATLAB
- Swift
- Java
- PHP
- NCL
- ArcMap
- ENVI
- Linux
- Microsoft Office