

Charles H. “Hank” Dolce

Department of Oceanography and Coastal Sciences
Louisiana State University
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EDUCATION

Ph.D., Coastal Meteorology, Louisiana State University, Baton Rouge, LA

August 2025 - present

Dissertation: In progress

Advisor: Paul W. Miller

M.S., Coastal Meteorology, Louisiana State University, Baton Rouge, LA

August 2023 - May 2025

Thesis: *Identifying Saharan Air Layer Events and their Relationship to Instability and Rainfall Patterns in the Tropical North Atlantic Ocean*

Advisor: Paul W. Miller

B.S., Atmospheric Sciences, Texas A&M University, College Station, TX

August 2019 - May 2023

Major: Meteorology; Minor: Oceanography

RESEARCH AND WORK EXPERIENCE

National Weather Service Student Volunteer

May 2024 - August 2024

NWS LIX, Slidell, LA

Graduate Research Assistant

August 2023 - present

Department of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA

Advisor: Paul W. Miller

NOAA William M. Lapenta Internship

June 2022 - August 2022

Atlantic Oceanographic and Meteorological Laboratory, Physical Oceanography Division, Miami, FL, and virtual

Supervisors: Renellys Perez and Gregory Foltz

Undergraduate Research Assistant

October 2021 - May 2023

Department of Oceanography, Texas A&M University, College Station, TX

Advisor: Henry Potter

FIELD WORK EXPERIENCE

Convective Storms Field Study (CSFS)

May 2023

Texas A&M University, College Station, TX

Study Excursions Abroad in Meteorology (SEA-Met)

May 2022

Caribbean Institute of Meteorology and Hydrology, Barbados

PUBLICATIONS

Dolce, C. H. H., and P. W. Miller, 2025: Systematic identification of Saharan Air Layer events over the tropical North Atlantic Ocean. *Journal of Applied Meteorology and Climatology*, <https://doi.org/10.1175/JAMC-D-24-0232.1>.

MEETINGS

Participant and Presenter: 106th Annual Meeting of the American Meteorological Society, January 24-29, 2026, Houston, TX.

Participant, 20 Years After Katrina: Louisiana's Journey to Resilience, August 29, 2025, Baton Rouge, LA.

Participant, Presenter, and Weather Briefing Host, 105th Annual Meeting of the American Meteorological Society, January 12-17, 2025, New Orleans, LA.

Participant and Presenter: 2024 Annual Meeting of the American Geophysical Union. December 9-13, 2024, Washington, DC.

Presenter: Luquillo LTER Conference. May 29, 2024, virtual.

Participant and Presenter: 22nd Annual American Meteorological Society Student Conference. January 7-8, 2023, Denver, CO.

Participant: 21st Annual American Meteorological Society Student Conference, January 22-23, 2022, Houston, TX.

PRESENTATIONS

- Dolce, C. H. H.**, and P. W. Miller: Systematic Identification of Saharan Air Layer Events Over the Tropical North Atlantic Ocean (Poster). 106th Annual Meeting of the American Meteorological Society. January 24–29, 2026, Houston, TX.
- Johnson, C. P., **C. H. H. Dolce**, E. Torres-Moya, and P. W. Miller: Hurricane Katrina 20 Years Later: Using a High-Resolution WRF Simulation to Highlight the Strengths and Weaknesses of Atlantic Tropical Cyclone Modeling (Poster). 20 Years After Katrina: Louisiana's Journey to Resilience. August 29, 2025, Baton Rouge, LA.
- Dolce, C. H. H.**, and P. W. Miller: Assessing the Influences of the Saharan Air Layer on Atmospheric Instability and Rainfall Patterns in the Tropical North Atlantic Ocean during the Puerto Rican Early Rainfall Season (Oral). 105th Annual Meeting of the American Meteorological Society. January 12–17, 2025, New Orleans, LA.
- Dolce, C. H. H.**, and P. W. Miller: Assessing the Influences of the Saharan Air Layer on Atmospheric Instability and Rainfall Patterns in the Tropical North Atlantic Ocean during the Puerto Rican Early Rainfall Season (Poster). 2024 Annual Meeting of the American Geophysical Union. December 9–13, 2024, Washington, DC.
- Dolce, C. H. H.**: Contextualizing Saharan Dust Transport during LUQ Droughts (Oral). Luquillo LTER Conference. May 29, 2024, virtual.
- Dolce, C. H. H.**, and H. Potter: Oceanic Thermal Influences on Rapid Intensification Phases of Recent Atlantic Hurricanes (Oral). Texas A&M Student Research Week. March 20, 2023, College Station, TX.
- Dolce, C. H. H.**, R. C. Perez, and G. R. Foltz: Examining Upper Ocean Kinetic and Thermal Influences on Winter and Summer Wind Events in the Tropical North Atlantic Ocean in 2022 (Poster). 22nd Annual American Meteorological Society Student Conference. January 7–8, 2023, Denver, CO.

PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU)

Member

August 2024 - present

American Meteorological Society

Member

August 2021 - present

OTHER AFFILIATIONS

Coast and Environment Graduate Organization (CEGO)

Member, Social Chair

September 2023 - present

Coastal Louisiana Chapter of the American Meteorological Society (CLAMS)

Member, Vice President, President

November 2023 - present

Texas Aggie Storm Chasers

Lead Forecaster, Team Lead

November 2021 - May 2023

Texas A&M Student Chapter of the American Meteorological Society (TAMSCAMS)

Member, Historian, Secretary

August 2019 - May 2023

STUDENTS MENTORED

Jackson Baldwin (2025-26)