## Jonathan Martinez, Ph.D.

## Research Scientist (CIRA) National Hurricane Center

Jonathan Martinez, Ph.D., is a Research Scientist with the Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University. Dr. Martinez works under the Hurricane Forecast Improvement Program (HFIP) at the National Hurricane Center (NHC) as a Model Diagnostician and Applications Developer. In his role, Dr. Martinez in coordinates with forecasters the Hurricane Specialist Unit (HSU) and Meteorologists in the Technology and Science Branch (TSB) to evaluate, verify, and document the performance of model predictions for tropical cyclone track, intensity, and structure.

In addition to providing comprehensive model evaluation support for NHC, Dr. Martinez provides developmental and maintenance support for the operational HFIP Corrected Consensus Approach (HCCA) forecast aid. Furthermore, Dr. Martinez contributes to applications development for ingesting post-processed model output into the Advanced Weather Interactive Processing System (AWIPS). Dr. Martinez is also a Co-Investigator on a research project with colleagues from the National Aeronautics and Space Administration (NASA) Short-term Research Prediction and Transition (SPoRT) branch investigating the relationship between lightning flash characteristics in the tropical cyclone eyewall and intensity change.



Dr. Martinez earned a Bachelor of Science (B.S.) in Meteorology from Florida State University in 2014; a Master of Science in Meteorology from the University of Hawaii at Manoa in 2016; and a Doctorate in Philosophy (Ph.D.) in Atmospheric Science from the Colorado State University in 2020. Prior to joining the CIRA/NHC team, he worked as a Postdoctoral Research Scientist at the National Center for Atmospheric Research through the Advanced Study Program. Dr. Martinez has an extensive background specializing in the research of tropical cyclone genesis, rapid intensification, and expansion. His research approach synthesizes observations-ranging from aircraft in-situ measurements, dropsondes, and both airborne and ground-based Doppler radar-and high-resolution numerical simulations.

Dr. Martinez enjoys collaboratively innovating with colleagues to address complex scientific research questions and computational problems. In 2021, he was awarded the Max A. Eaton Prize at the 34th American Meteorological Society and has authored several research manuscripts.

February 2024