

Laura Alaka

Storm Surge Unit Specialist National Hurricane Center

Laura Alaka is a storm surge specialist in the Storm Surge Unit (SSU) at NOAA's National Hurricane Center (NHC) in Miami, FL.

Laura earned a Bachelor of Science degree in Geography with an Atmospheric Science Certificate at the University of Georgia in 2009, and completed her Master of Science degree in Atmospheric Science at Colorado State University in 2011. Laura's Master Thesis focused on deep convection and its impact on the temperature and composition of the tropical tropopause.

In 2012, Laura started her career at NOAA as a federal contractor to the NESDIS Satellite Analysis Branch (SAB) in College Park, MD. At SAB, Laura used satellite data to generate heavy precipitation, fire/smoke, and marine pollution forecast products for the National Weather Service (NWS). In 2014, Laura moved to Boulder, CO to work at NOAA Earth System Research Laboratories (ESRL), where she developed verification methods to evaluate aviation decision support tools for icing, turbulence, and convection.

Laura began working in the SSU at NHC in 2016 as a federal contractor. Laura's work focused on real-time surge modeling, developing new storm surge forecasting and



visualization tools, and verifying the probabilistic storm surge model (P-Surge). In 2022, she was hired by NOAA as a storm surge specialist in the SSU.

During the hurricane season, Laura works closely with hurricane specialists and weather forecast offices to produce storm surge forecasts preceding and during landfalling tropical cyclone events. She also coordinates with partners at Federal Emergency Management Administration (FEMA) and United States Geological Survey (USGS) to create a post-landfall storm surge analysis and to collect observations for verification. In the off-season, Laura leads the development of new storm surge products and manages transitions from research to operations. She also conducts storm surge product training sessions for emergency managers at FEMA sponsored workshops.

Laura is a member of the American Meteorological Society and has presented her storm surge research at numerous hurricane conferences.



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