

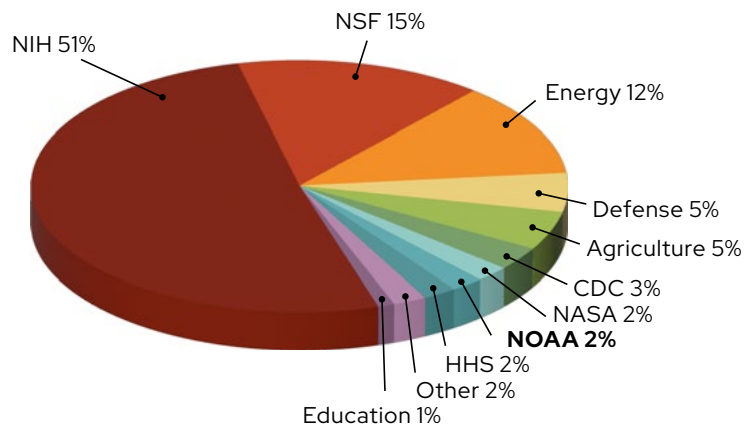


NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION RESEARCH

UW-MADISON: RANKED #8 NATIONALLY WITH \$1.38 BILLION IN ANNUAL RESEARCH EXPENDITURES

The National Oceanic and Atmospheric Administration (NOAA) provides the research foundation for understanding our planet, technological innovation, and scientific advances that improve our lives. NOAA supported research enables better forecasts, earlier warnings for natural disasters, and a greater understanding of the Earth. Their programs combine cutting-edge research and world-class operational facilities to ensure that the U.S. is a resilient, weather-ready, and sustainable nation. At UW-Madison, NOAA funding supports science related to oceans and the atmosphere that enhances the nation's economy, security, and environment.

\$12.7 million
NOAA federal research awards at
UW-Madison in 2021-22



EXAMPLES OF NOAA RESEARCH AT UW-MADISON

Predicting Lightning Strikes

Cooperative Institute for Meteorological Satellite Studies

Using data from NOAA's weather satellites, and in partnership with NOAA scientists, UW-Madison researchers have developed an artificial intelligence model called LightningCast. The model can help predict the likelihood of lightning up to 60 minutes in the future. Lightning is a threat to public safety, especially in the summer months when thunderstorms are more common, and LightningCast can reduce that threat through earlier warnings. [More online.](#)

Better Hurricane Tracking

Cooperative Institute for Meteorological Satellite Studies

UW-Madison researchers are helping understand one of the hardest things to determine in hurricane meteorology—rapid intensification. The well-established, satellite-based Advanced Dvorak Technique for determining tropical cyclone intensity, developed by UW-Madison researchers, recently received an update that included the use of full-resolution images from weather satellites, better identification of the storm eye location and the ability to analyze hurricanes occurring outside of tropical regions. [More online.](#)

WHY UNIVERSITY RESEARCH MATTERS

By supporting NOAA, you support the data and insights about our environment that keep Americans safe, prepared, and prosperous.

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