



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON **SCIENCE, SPACE, & TECHNOLOGY**

Opening Statement

**Ranking Member Deborah Ross (D-NC)
of the Subcommittee on Environment**

Subcommittee on Environment Hearing
Reauthorizing the Weather Act: Data and Innovation for Predictions

March 28, 2023

Thank you, Chairman Miller, for holding this important hearing on improving weather and climate predictions, and thank you to our panel of witnesses for joining us this morning to share your expertise.

First, my heart goes out to the families who lost their loved ones due to the severe weather storms that occurred across the south over the weekend. Rolling Fork, Mississippi experienced one of the deadliest tornado events ever and communities were devastated across several states.

Weather forecasts help inform decisions made by Americans every day and play an especially critical role in protecting lives and property during extreme weather events. These phenomena are becoming increasingly common, and their severity is magnifying due to climate change. Last year, the U.S. experienced 18 individual weather and climate disasters costing at least one billion dollars each. This makes 2022 tied for the third-highest number of billion-dollar disasters in a calendar year. Ensuring the National Weather Service has the data and tools to provide timely and accurate forecasts is integral to the safety and well-being of Americans.

A key component in advancing weather forecasting and modeling is collaboration among the academic, private, and government sectors of the weather enterprise. Longstanding partnerships between academia and government have been successful in furthering forecasting capabilities, as we will hear from Dr. Bussalachi. Fundamental research carried out by academia is vital to scientific advancement and innovation in weather science. North Carolina's 2nd District, which I represent, is home to one of the strongest collaborative research partnerships between a National Weather Service office and an academic institution. The National Weather Service in Raleigh and North Carolina State University have worked together for decades to improve the understanding of southeast weather phenomena and operational forecasting techniques.

Good data form the backbone of weather forecasting and modeling. As we will hear from several of our panelists today, the private sector is also playing an increasingly important role in contributing to our weather enterprise, in particular by providing additional data. While there are already a wide variety of instruments collecting data around the clock to inform weather

modeling, significant gaps in coverage still exist. Expanding the sources of data for use in the National Weather Service's watches, warnings, and advisories is crucial, and some of that data may come from the private sector. Some companies have already entered into partnerships with NOAA to provide weather data. I look forward to hearing the panelists speak about what is and isn't working well in those partnerships, and recommendations for strengthening public-private partnerships to advance the nation's forecasting capabilities.

Because no great challenge has a simple answer, just adding more data to models is not enough. The accuracy of weather forecasts is directly influenced by the quality, quantity, and variety of data used to inform weather models. Even with a lot of high-quality data available, data assimilation continues to be its own research challenge. Significant research and development of data assimilation is vital for current and future observations. Progress in weather and climate modeling will be dependent on our continued strong support for the National Weather Service and government-academic-private sector partnerships.

Under the threat of increasingly severe weather events and climate change, improving weather forecasting is paramount to protecting the American people. I look forward to hearing from our witnesses today on how Congress can support the improvement of weather forecasting and modeling through innovations in data collection and data assimilation.

I yield back.