



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

Opening Statement

**Chair Lizzie Fletcher (D-TX)  
of the Subcommittee on Environment**

Subcommittee on Environment Hearing:  
*A Task of EPIC Proportions: Reclaiming U.S. Leadership in Weather Modeling  
and Prediction*

Wednesday, November 20, 2019

Good afternoon, and welcome to the Subcommittee on Environment's hearing entitled "A Task of EPIC Proportions: Reclaiming U.S. Leadership in Weather Modeling and Prediction." I would like to thank all of our witnesses for being here today to discuss the current state and future of the Earth Prediction Innovation Center, or EPIC, and its role in improving U.S. weather forecasting capabilities.

As we've previously discussed in this Subcommittee, Americans depend on the data and services provided by the National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service every day. Much of these data are utilized in the weather products offered by private companies, such as weather apps on our cell phones or local news forecasts. Earlier this Congress, in this Subcommittee's hearing on the NOAA Fiscal Year 2020 Proposed Budget, we heard from Dr. Jacobs that the U.S. is not currently the global leader in weather forecasting. Considering how important weather forecasting is to all Americans, this is extremely concerning.

A devastating display of this was in 2012, when the U.S. model failed to predict Hurricane Sandy's sharp left turn and landfall over the East Coast. The European model got it right, demonstrating to the nation that U.S. weather forecasting abilities were far behind those of Europe. As we've discussed in this Committee, severe storms like Sandy are increasing in frequency and intensity due to climate change, making accurate forecasts even more critical.

A major difference between the U.S. and the European systems is that in Europe, the entire weather community contributes to a single model. In the U.S., the public, private, and academic sectors operate in isolation from each other, each working on their own weather prediction research and contributing to their own models. Even within the federal government, multiple agencies work on their own models in an uncoordinated way, and resources and expertise are fragmented. As a result, the U.S. Air Force abandoned the U.S. global weather model in 2015, preferring the United Kingdom's Unified Model. It is of the utmost importance that the U.S. weather community immediately act to catch up with its European counterpart.

Congress recognized the need to better leverage the skills and expertise across the public, private, and academic sectors of the U.S. weather community to create a single global model that is stronger than any of the individual models. The National Integrated Drought Information System Reauthorization Act, which was signed into law in January 2019, directed NOAA to establish the Earth Prediction Innovation Center, or EPIC. EPIC is tasked with creating a collaborative, community-driven global weather research modeling system. The system will be publicly accessible, allowing those outside of NOAA to access and contribute to a community-developed model.

On top of improvements to global weather prediction, EPIC could also serve as a vehicle to improve other, specialized modeling systems, such as rainfall and flooding prediction. This has implications for places like my district, Texas's 7th Congressional District in Houston, that has been experiencing increasingly frequent and intense precipitation events in recent years. Leveraging the capabilities of the community to improve precipitation modeling could provide my constituents, and others who live in flood-prone areas, more precise information about the timing and intensity of forecasted rainfall, thus protecting lives and property. I know all of our constituents look to the Weather Service as the national authority in issuing life-saving forecasts, watches, and warnings. While EPIC is intended to leverage the expertise of the non-federal weather community, the provision of official watches, warnings, and forecasts should remain with the National Weather Service.

At today's hearing, I look forward to a discussion with our distinguished panel of experts from across the U.S. weather community about how EPIC will combine each sector's expertise to bolster U.S. modeling. Since EPIC is still in its infancy, this hearing will provide a timely opportunity to discuss the future of its organization, management, and governance and examine each sector's vision and short and long-term goals for EPIC.

I cannot overstate the importance of improving U.S. modeling and prediction capabilities. EPIC represents what some experts in the weather community have called America's last chance to get this right and reclaim our leadership in global weather prediction. I look forward to today's discussion about how EPIC is going to accomplish this.

Thank you.