



# PROVIDING BETTER INFORMATION TO ENABLE BETTER STORM RESPONSE FOR U.S. SECURITY AND PROSPERITY

## THE CHALLENGE

With hurricanes and other large storms happening more frequently and with more intensity, the threat to people and infrastructure has never been greater.

Unfortunately, in disaster planning and response, decision-makers often are forced to make critical choices on a minute-to-minute basis based on incomplete or unreliable information on things such as road conditions, flooding, or the power grid.

This puts officials in the difficult position of having to make key decisions that will affect people's safety and property without a complete picture of the situation.

## THE COLLABORATION

Researchers at the U.S. Department of Energy's Argonne National Laboratory are helping officials from various agencies such as the Federal Emergency Management Agency (FEMA) better anticipate and respond to the effects of a hurricane or large storm.

Using its high-performance computers, Argonne is able to run models that take into account a number of complex and evolving factors and provide reliable information to first responders and utility companies.

Which areas are likely to be affected most? Who will be without power the longest? What's the best way to get to victims?

Armed with real-time, actionable information from Argonne, on-the-ground leaders of federal, state and local agencies can make more informed decisions.

## THE IMPACT

- In April 2018, Argonne supported FEMA in a national-level exercise that included senior leaders from the White House as well as reps from more than 91 federal departments and agencies. The exercise involved a simulation of a Category 4 hurricane hitting the Eastern U.S.
- In September 2018, Argonne assisted in response to Hurricane Florence in the U.S. and Puerto Rico, with a particular focus on the electrical grid and how power outages would affect the larger infrastructure system.

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