U.S. does a poor job predicting extreme weather

By Michael Behar, New York Times

At 11 o'clock on the night of Sept. 29, the National Hurricane Center in Miami posted an updated prediction for Hurricane Matthew. Using the latest data from a reconnaissance aircraft, the center's computerized models led meteorologists there to conclude, in a post on the center's website, that "only a slight strengthening is forecast during the next 12 to 24 hours." Their prediction proved to be astonishingly amiss: The following day, Matthew exploded from a Category 1 into a Category 5 hurricane, with winds gusting to 160 miles per hour, strong enough to flatten even the sturdiest homes.

This was hardly the first time that United States government forecasters significantly underestimated a storm's potential.

It's a situation that deeply troubles Cliff Mass, a meteorologist and professor of atmospheric sciences at the University of Washington. Mass, who is 64, has become the most widely recognized critic of weather forecasting in the United States — and specifically the National Oceanic and Atmospheric Administration, which manages the National Weather Service and its underling agencies, including the National Centers for Environmental Prediction, where the nation's weather models are run. Mass argues that these models are significantly flawed in comparison with commercial and European alternatives.

William Lapenta, who heads the centers, welcomes the criticism: "His job through his blog is quite honestly to provoke people to respond and hopefully take action," he says. Indeed, Lapenta told me that the National Centers for Environmental Prediction, which directs the National Hurricane

Center, might never have obtained additional funding from Congress to buy new supercomputers had Mass not drawn public attention to the center’s inadequacies in the aftermath of Hurricane Sandy.

Read the whole story