

Meteorologists Who Offer Testimony, Not Forecasts

By JOHN ELIGON

After the last of the record-setting rain had fallen in the New York area, those in the business of delivering weather forecasts on television got back to their normal routines, calling for mostly sunny days or the like.

But for forensic meteorologists, who use the science of weather to testify in court about what has already happened, rather than predict what will occur, business could soon see an uptick.

Extreme weather often leads to property damage, which can evolve into legal proceedings.

In cases around the nation, meteorologists have played pivotal roles in determining guilt or innocence, or in establishing monetary damages. In fact, their testimony can be as persuasive as the types of scientific evidence — DNA and fingerprints, for instance — that are considered unimpeachable facts.

“Wherever the data takes us, we just tell the truth,” said Stephen Wistar, a senior forensic meteorologist for AccuWeather, whose experts have provided testimony in hundreds of courtrooms.

Mr. Wistar has testified mostly in civil cases, though he has also been called on in criminal cases, he said. He is asked to testify about things like the frequency of certain weather occurrences, or to provide precise details about conditions including temperatures and wind speeds.

The rarity of particular weather events often becomes an issue in civil cases, Mr. Wistar said. If, for instance, a city’s drainage system was overwhelmed by



RALPH WILSON FOR THE NEW YORK TIMES

Stephen Wistar, a forensic meteorologist, in State College, Pa.

rainfall and it turned out that the amount of precipitation was typical for that city, a litigant could make the case that the city had not properly designed the system. But if the rainfall was of an unprecedented quantity, Mr. Wistar said, the city could argue that

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it could not have anticipated so much rain.

Mr. Wistar, who works out of State College, Pa., said he was representing building owners in two cases in upstate New York and one in Massachusetts in which roofs collapsed because of heavy snowfall in recent years.

In two of those cases, Mr. Wistar said, the snow was more than usual; in the other one it was a typical amount of snowfall.

“Our job is to determine how much the snowpack weighed at the time of collapse,” he said. “If there’s such an extreme amount of snow, it may just be that no one expects a building to be designed to handle that.”

In another case he worked on at least a decade ago, Mr. Wistar said, a man sued the Metropolitan Transportation Authority because a piece of ice broke through his car’s windshield and struck one of his eyes when he was driving over the Triborough Bridge. The man claimed that the ice had come from an icicle that fell from the bridge; the authority said the ice flew off a passing truck.

Based on an eyewitness account that the ice that landed in the car was clear, Mr. Wistar said, he testified that it had to have come from an icicle, because ice from a truck would

have been opaque. Nonetheless, the jury found in favor of the authority, Mr. Wistar said.

The district attorney’s office in Rensselaer County, N.Y., called a meteorologist to testify in the recent murder trial of Michael Mosley, who was accused of bludgeoning two people to death in Troy in 2002. Part of Mr. Mosley’s alibi was that a cut on his hand was not suffered during the killings, but when he was snowboarding with his son.

But Howard Altschule, a meteorologist, testified for the prosecution that at the time Mr. Mosley said he was snowboarding, it was raining and there was no snow.

The district attorney, Richard J. McNally Jr., said prosecutors had planned to rely on weather reports to dispute Mr. Mosley’s account, but Mr. Altschule was able to provide much more detail, drawing on radar maps that allowed him to say precisely where and when rain was falling. Mr. Altschule was also able to explain that light rain was significant enough to melt any snow.

“It was the right proof to put in front of the jury,” Mr. McNally said.

Mr. Mosley was convicted in June of the murders, and his defense lawyer, Terence L. Kindon, credited Mr. Altschule’s testimony.

“He was able to show the jury through radar returns the intensity of precipitation over a very specific area, during a very specific time period,” Mr. Kindon said, adding that he had never had a meteorologist testify in one of his cases. “This was good meteorology.”