

TORNADO ALLEY

DONALD BURGESS



Donald Burgess is a research scientist at the Cooperative Institute for Mesoscale Meteorological Studies at the University of Oklahoma, where he also serves as an Adjunct Professor of Meteorology. He is the chief scientist on one of VORTEX2's mobile radars, as well as a member of the project's steering committee.

Burgess has spent forty-one years studying severe weather. In the nineteen-seventies, he pioneered the concept of “nowcasting,”

making accurate weather forecasts for a very short period of upcoming time, by using radar to direct a research team during a tornado intercept. This discovery introduced, in turn, the frequent use of the tornado vortex signature seen in radar displays.

In the mid-nineties, Burgess served as an informal advisor on the movie *Twister*. His favorite memory from that experience was the afternoon he spent “talking storms” with Bill Paxton, who starred in the action adventure and who also narrates *Tornado Alley*. “Two or three of the things we talked about ended up as lines in the movie,” he says, “and I always wondered, you know, if any of them came from that afternoon.” While Burgess says he enjoyed the film, there were one or two things that rankled him. “This business of being able to chase and stop and go to Aunt Em’s place and eat and have a shower and then go and chase again. I’ve never had that happen,” he says. “Chasing is more difficult than that.”

A lifelong resident of Oklahoma, Burgess began working as a student employee of the National Severe Storms Laboratory in 1970, was promoted to a full-time position in 1972, and continued there in various capacities until 1991. From 1991 to 2000, he managed operations and training in the NEXRAD Operational Support Facility, serving for a year as Acting Director, before returning to the NSSL as a division chief in 2000. He retired in 2003, after thirty-two years of federal service. Prior to his retirement from NSSL, Burgess also served as Director and Chief of Operations at the NEXRAD Radar Operations Center and Chief of National Weather Service Radar Training.

Burgess was a co-editor of “The Tornado: Its Structure, Dynamics, Prediction, and Hazards,” which won the AAP’s Best New Book Award (in the category of Geography and Earth Sciences) in 1994. He is also a Fellow of the American Meteorological Society.

In his spare time, Burgess enjoys trout fishing, photographing interesting weather, and spending time with his wife, Fran, and their three grandchildren.