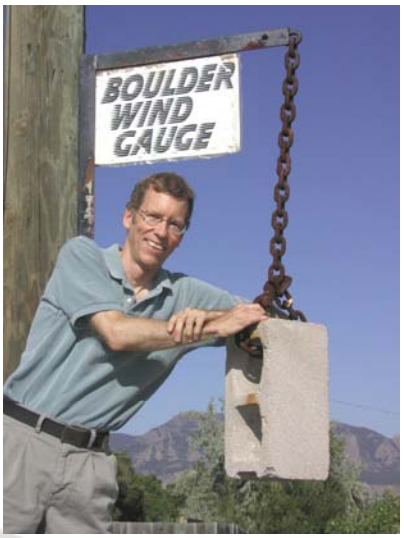
Twisters, Chasers, and Thunderstorms: A Half-Century of Severe Weather Science

Wednesday, March 24, 2010, 7:00 pm
Boulder Public Library
Main Library's Canyon Theater

"Science Serving Society"
NCAR Lecture Series Celebrating NCAR's 50th Anniversary

Bob Henson
National Center for Atmospheric Research



Severe thunderstorms deliver some of the most terrifying and mesmerizing weather on Earth, and the U.S. Great Plains see as much severe weather as any place on the planet. From *The Wizard of Oz* to *Twister* and *Storm Stories*, the American tornado resonates in popular culture and imagination. During the 50 years since NCAR was established, our understanding of severe storms and our ability to warn people about them has expanded greatly. Scientists from NCAR and their university colleagues have been part of key breakthroughs: they've helped to decipher the dynamics that produce tornadoes, the cloud physics that generate deadly lightning and giant hailstones, and the larger patterns that drive storm structure and lead to multiday rounds of heavy weather. NCAR has played a lead role in experiments that bring mobile Doppler radar and other instruments into the path of violent storms to ferret out their secrets. Computer models developed at NCAR and elsewhere can now provide hours of advance notice on what type of thunderstorms a given day might bring. This overview talk will cover what we've learned about severe weather from NCAR and its partnering institutions over the last 50 years. We'll look at how forecasters, theoreticians, computer modelers, and storm chasers have joined forces in a major tornado study, VORTEX2, that will soon enter its second spring. And of course, no presentation on severe weather would be complete without a few dramatic photos!

Robert Henson is at UCAR. He is the editor of *UCAR Magazine* and its accompanying website (ucar.edu/magazine). A native of Oklahoma City, Bob earned his bachelor's degree at Rice University and a master's at the University of Oklahoma, where he studied meteorology and journalism and participated in field experiments on tornadoes and severe weather. In his 30 years of following, photographing, and studying thunderstorms, he has seen more than 35 tornadoes.

Bob has written for *Nature, Discover, Scientific American,* and many other magazines and serves as a contributing editor for *Weatherwise*. He is now working on the third edition of "The Rough Guide to Climate Change" (2006), a finalist for Great Britain's Royal Society Prize for Science Books. Bob has also written "The Rough Guide to Weather" (second edition, 2007) and "Weather on the Air: A History of Broadcast Meteorology," to be released in June by the American Meteorological Society.

This talk is sponsored by the University Corporation for Atmospheric Research (UCAR). This year, UCAR and the National Center for Atmospheric Research (NCAR) are celebrating 50 years of discovery and science in service to society.

For more information, contact Laura Curtis: lcurtis@ucar.edu or 303-497-2106