



TEXAS TECH UNIVERSITY

Wind Science and Engineering Research Center

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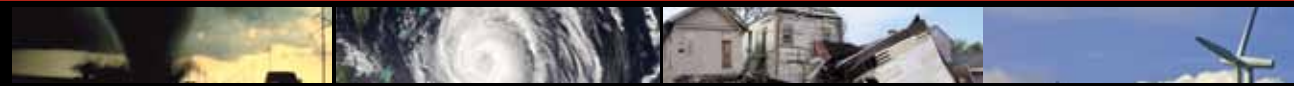
Outreach Activities

WindWISE Everything *wind.*



(L-R)
Drs. Andy Swift,
John Schroeder and
Jamie Chapman
enjoy a laugh at their
farewell/welcome.

SUMMER 2010 WindWISE The newsletter of Wind Science and Engineering Research Center. Edited by Liz Inskip-Paulk and designed by Copy Craft Printers



Wind Energy Experts Speak at Local Green Conference



(L-R) Rick Walker, research associate at WISE and Jon Ulmer assistant professor (AG COMM) prepare to talk on a panel at the 2ND Annual "Spring into Green" Conference in April of this year. Both Walker and Ulmer were covering the possible future of the growth of the wind energy industry.

NSSA Conference News



James Waller (Secretary) and Tom Bennett (President) with Dr. Ernst Kiesling (Executive Director) in the background listen to other members during a business meeting at the recent NSSA Conference earlier this summer.

Congratulations to the following WISE students who have or will have completed their studies by the end of the summer.

- Frank Lombardo
Spring 2010
- Kirsten Orwig
Spring 2010
- Tanya Brown
August 2010
- Ian Giammanco
August 2010

A Message from Incoming Director of WISE, Dr. John Schroeder:

As many of you have heard by now, I have accepted the position to serve as the new Director of the Wind Science and Engineering (WISE) Research Center at Texas Tech University. I will take over for Dr. Andrew Swift, who is moving on to University College to focus on the Texas Wind Energy Institute. He leaves WISE well positioned for success, and we thank him for his outstanding service.

For those of you who do not know much about me, I have spent the majority of my career bridging the gap between the atmospheric science and engineering communities in an area best described as wind science. I'm a firm believer in the phrase "you can learn a lot by looking," so I have spent my career building measurement technologies to make unique atmospheric observations, and then analyzing the collected information to extract new information about the structure of near-surface wind flow.

I have always enjoyed field work in thunderstorms and hurricanes, because there are a myriad of logistical concerns to consider. A heightened level of

planning is required to execute an experimental plan in a design-level wind event, and you simply cannot afford to miss an opportunity as you may not get another one for many years. In my opinion, WISE has an opportunity to significantly and positively impact society through innovative research, education and outreach focused on all things wind, and I am excited to have a chance to help realize this potential.

WISE has always been an inclusive, multidisciplinary center with faculty and students from various disciplines crossing boundaries to collaborate. This culture is not easy to establish within the confines of a university, and WISE has been doing it for 40 years! If longevity is any indication, WISE has been doing some things right! I am excited to serve as the new Director of this unique research center that has contributed so much throughout its history to Texas Tech University, Texas and the nation. I look forward to working with the outstanding faculty, students and staff of WISE to make a difference.



40th Anniversary of WISE a Success

The Wind Engineering and Research Center (WISE) recently celebrated the 40th anniversary of its founding, and also commemorated the 40th anniversary of the Lubbock tornado which was a catalyst to the formation of WISE. In collaboration with the City of Lubbock, the commemoration was recognized at an official City Council meeting where representatives of WISE received a proclamation from the City of Lubbock.

The celebration of the WISE Center's 40th birthday took on a festive atmosphere as more than 100 alumni, former faculty and present day students joined together to mark the occasion. It was also the tenth anniversary for the West Texas Mesonet and landowners who have joined with Texas Tech to make this project possible were invited to the celebration as well.

This anniversary was one of the few times that the members of the original Founders' Circle got together to reminisce about the earlier times and where the center is heading for the future.



The original WISE Founders' Circle: (L-R) Drs. Kishor Mehta, Scott Norville, Jim McDonald, Richard Peterson, Ernst Kiesling, and Don Haragan. Missing is Dr. Joe Minor who was unable to attend the event.

VORTEX-2 project returns home successfully

Nearly 20 faculty and graduate students from TTU plus five undergraduates from the University of Michigan embarked on a 6-week project which is the largest tornado field study in the history of weather research. Texas Tech's Project MOBILE was part of a multi-institution VORTEX-2 program. VORTEX stands for the Verification of the Origins of Rotation of Tornadoes Experiment and is the most comprehensive field project dedicated to understanding tornado genesis since its predecessor VORTEX-1 which took place in the early 90's. For VORTEX-2, more than 100 scientists and over 40 science and support vehicles participated in this unique fully nomadic field program. The official website reports that the project was sponsored by the National Science Foundation (NSF) and the National Oceanic and Atmospheric Administration (NOAA) who both contributed more than \$10 million towards the project. Additionally, there were international participants from Italy, Netherlands, United Kingdom, Germany, Australia, and Canada. The whole project was completely nomadic (i.e. had no home base) and traveled from state to state following severe weather outbreaks through the Plains. TTU's Dr. Chris Weiss (center of photo, striped shirt) was Co-PI for the project. Additionally, an IMAX film crew followed the TIV (tornado intercept vehicle) made famous on the Discovery Channel, and expect to have a documentary film about the tornado study coming out in the near future. Keep an eye out for listings in your area.



Members of the Texas Tech Vortex-2 team, along with co-collaborators from the University of Michigan, pose in front of one of the Ka-Band Trucks for a portrait upon their return to the Hub City.

Kirsten Orwig – Dissertation title: Examining Strong Winds from a Time-Varying Perspective

Franklin Lombardo – Dissertation title: Analysis and Interpretation of Non-Stationary Wind Flow and its Effects on a Bluff Body

Run on the Wind Camp a Success for the Second Year



Participants in the 2nd Annual Run on the Wind camp get a guided tour around the American Wind Power Museum to learn the history of the wind energy industry.

Severe Weather Awareness Day a Success at Science Spectrum



Candyce Cyreck helps a young participant learn some scientific principles the fun way at the Severe Weather Awareness Day, co-sponsored by State Farm Insurance.

Professor awarded recognition for developing Weather Challenge for students

Dr. Chris Weiss received recognition for his role in developing a nationwide weather forecasting competition for college students interested in atmospheric sciences. According to the WxChallenge official website, Dr. Weiss, along with other board members, was recognized by the American Meteorological Society (AMS) for developing "a new paradigm for the nation's weather forecasting enterprise based on a voluntary grass-roots effort, with impressive national impact through its use in curricula at scores of universities." The challenge asks students and faculty to forecast the maximum and minimum temperatures, precipitation, and maximum wind speeds for select U.S. cities over a ten-week period, competing against other students at other schools for the title of top weather forecaster in North America. For more information, please check out the website: <http://wxchallenge.com/index.php>. Congratulations!



(L-R) WxChallenge Advisory Board members Mike Voss, Brad Illston, Dr. Jess Basara, and Dr. Chris Weiss.