

**University:** Arizona State University

**Name of University Researcher Preparing Report:** Nancy J. Selover, State Climatologist

**NWS Office:** Phoenix WSFO

**Name of NWS Researcher Preparing Report:** Doug Green, SOO

**Type of Project (Partners or Cooperative):** Partners

**Project Title:** A COMET Partners Proposal for Support of the Sixth Southwest Hydrometeorology Symposium, September 27-28, 2011

**UCAR Award No.:** Z11-91823

**Date:** June 29, 2012

## **SECTION 1: PROJECT OBJECTIVES AND ACCOMPLISHMENTS**

1.1 (*To be completed by academic and forecaster partners*) Summarize progress on COMET-funded work during the last six months of the project.

The symposium objective was to generate interaction between the NWS operational meteorologists, community decision makers and stakeholders, and University researchers and students in four main topic areas important to decision support in the Southwest. The topics were climate services, drought, water resources, and severe weather. Each session included an overview of the topic from the national to the local perspective, and three of the four sessions concluded with a panel discussion. The results of the post-conference survey, which is attached, touched on logistics as well as content and presentation. On a rating scale of 5 (5-Excellent, good, acceptable, poor, 1-horrible) We received a good to excellent for variety and choice of topics and speakers; good for time devoted to topics, and usefulness of panel discussions; good to excellent for value of the symposium; and good for having enough time to network. Attendees wished there more time for discussions – with the panels.

1.2 Describe the division of labor between the academic and forecaster partners (i.e., which tasks each partner is responsible for).

ASU and WFO Phoenix equally shared program planning and format, speaker invitations, venue search, and symposium agenda. ASU did the venue arrangements since it was a University site, while WFO Phoenix hosted/managed the symposium website and printed the identification badges. ASU partner printed the program. Both partners edited the call for papers, evaluated the abstracts and settled on the program order and timing.

## **SECTION 2: RELATED ACCOMPLISHMENTS**

2.1 (*To be completed by academic partner*) Please summarize any other work conducted by the University, which was a result of the COMET Outreach Program collaboration, but was

not directly funded by it (for example, seminars at NWS office if these were not part of the original proposal).

The University is establishing a Center for Integrated Solutions to Climate Challenges, and the symposium was a first step in bringing together stakeholders and decision makers at the University. The strength of the ASU – NWS Phoenix (as well as NWS Flagstaff and Tucson offices) relationship for climate services is important to the Center. Some University administrators had an opportunity to see the partnership in action and meet some of our mutual stakeholders. One of our students was able to interact with the NWS personnel and as a result she applied for and was selected to participate in the PSR student mentoring program.

2.2. *(To be completed by forecaster partner)* Please summarize any other work conducted by the NWS, which was a result of your collaboration with the university but was not directly funded by it (for example, seminars given by NWS forecasters at the university).

WFO Phoenix staff members met with a couple of ASU professors to discuss excessive heat, and examine how the NWS could improve its ability to issue more effective heat warnings. This is a complicated issue, especially given the persistent heat that affects the Sonoran Desert each year (mainly May-September). In addition to heat, WFO staff members also exchanged information with colleagues regarding situational awareness tools, social media monitoring, climate services, and recent severe weather events.

### **SECTION 3: SUMMARY OF BENEFITS**

3.1 *(To be completed by academic partner)* Please list the benefits to the University resulting from the collaboration (new understanding of forecasting problems, exposure of students to operational forecasting, access to new observing systems, changes in course offerings, use of NWS personnel as a resource, etc.).

Benefits derived from the symposium included 1) interactions between producers and users of the products and services, 2) a clearinghouse of what products and services are currently provided and where to get them, 3) networking and contacts between the various weather and climate communities, and 4) an opportunity for meteorology/climatology students to learn about the wide variety of climate/met careers in both the government and private sectors. The State Climate Office is a focal point for climate data and services in Arizona. The State Climatologist continually directs people to NWS and other NOAA websites for information, data or climate products, and searches the NOAA web pages for requested products and services. This symposium was an excellent opportunity for identifying gaps in the products and services, as well as learning about climate products offered by other agencies. The University researchers also got an opportunity to hear from the NWS operational personnel about decision support products and services they have developed. While many students are interested in forecasting, few have a good understanding of the decision support and how operational forecasts are used by the public.

3.2 *(To be completed by forecaster partner)* Please list the benefits to the NWS office resulting thus far from the collaboration (promising new forecasting technique, heightened interest in research in the office, better understanding of new observing systems, potential

new hires, use of university personnel as resource, etc.). Please be as specific as possible, particularly in regard to any improvements in forecasting operations resulting from this project ([see examples](#)).

Benefits derived from the symposium included 1) Interaction with attendees from several agencies and universities highlighted the need to address the issue of blowing dust and its impact on motorists and the general public. To that end, WFO Phoenix collaborated with numerous federal/state/local agencies to organize and conduct the 1<sup>st</sup> Southern Arizona Dust Workshop. The workshop took place on 6 March in Casa Grande, AZ, a community that has experienced several multi-vehicle traffic accidents triggered by dense blowing dust. Approximately 60 people attended the workshop. The morning session featured presentations on the dust threat, current detection and warning capabilities, and current response procedures. The afternoon breakout sessions developed short- and long-term actions for addressing the dust issue. This meeting was considered to be quite productive, and many of the short-term action items have already been addressed. 2) Most of the WFO Phoenix staff was able to attend at least a part of the symposium and meet/network with representatives from many of our most important customers (one direct benefit: increased interaction with a number of customers via office Facebook and Twitter accounts), 3) Several WFO Phoenix staff served on the symposium planning committee alongside ASU professors, 4) Several WFO Phoenix staff members had the opportunity to make formal presentations to Symposium attendees, and 5) WFO Phoenix staff members met with several Arizona State University meteorology students to discuss college and career options.

#### **SECTION 4: PRESENTATIONS AND PUBLICATIONS**

4.1. *(To be completed by academic and forecaster partners)* Please provide complete citations using the AMS bibliographic format for each thesis, dissertation, publication or presentation prepared as part of this COMET Outreach project.

None outside the conference. We had a number of students and NWS forecasters present their research as part of the conference. In some cases, especially for the students, this was their first formal presentation to a peer group.

#### **SECTION 5: SUMMARY OF PROBLEMS ENCOUNTERED**

5.1 *(To be completed by academic partner)* Please describe problems encountered on the University side in the last six months and their resolution, if any.

Did not encounter any problems. We had some technical difficulties with the AV on the first day, but they were resolved.

5.2 *(To be completed by forecaster partner)* Please describe problems encountered on the NWS side in the last six months and their resolution, if any.

NWS Phoenix did not encounter any problems.