OBSERVATION STANDARDS

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ABSTRACT

Mr. Dombrowsky began by asking what size of a network do NWS, FAA, DOD, and other agencies need. The answer can vary dramatically but as we move to finer mesh models and needed weather forecasts, the need for mesonets grows. There are currently about 450 mesonets in the U.S. Trying to keep a handle on this number and the additional ones added each year is a difficult task. One way to assist in this task is to establish and follow standards for observing, instrumentation and station siting. Mr. Dombrowsky next discussed how to handle standards, beginning with a definition of standards. Standards or criteria are something that is established by authority, custom, or general consent as a model to measure quantity, weight, extent, value or quality of something, i.e., an observation, instrument, and/or mesonet. Mesonets may be set up with federal, state, local, or private sector authority to meet their needs, and therefore, may not address the same standards. Standards receive little or no enforcement outside of establishing sector authority. This could pose a problem when trying to use the mesonets' observations. In general, standards for observations and instrumentation can and do apply broadly but are frequently not met, in most instances in the extreme ranges of instrument performance. In spite of this, different or non-standard data has value and is used routinely. So the questions become: how do we get acceptance of a set of standards, how do we deal with the various existing standards, and how do we use observations that do not meet the ideal set of standards?

Mr. Dombrowsky summarized by recommending the complementary breakout session address the following issues/topics: definition of observation standards, how to be flexible enough to allow use of observations not meeting standards, whose responsibility is it to quality control the observations, who certifies the mesonets, and how does one gather and monitor metadata.