

Interest Statement
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I have always been interested in the weather and how information about it, such as observations and forecasts, are used on a day-to-day basis. I was raised on a farm in eastern Montana and saw firsthand how the weather affected our daily operations. The jobs that were performed on a given day were directly impacted by the weather conditions. Weather also affected life in the medium to long term as well since seasonal patterns determined things such as when crops could be planted, how easy the calving season was, how much hail insurance should be purchased, and the yields of the crops themselves. In these ways and many others weather information played a large role in my activities. I have always been curious about how others used that information and interested in methods to improve the use of weather information by the general public. In my family and others I still see confusion in interpretation of the data presented so that wrong decisions are sometimes made. For a way of life that is so dependent on the weather it is important to have the best tools available for decision-making along with enough information to make the best use of them.

While my current job doesn't deal with agricultural meteorology I am involved with producing applications for aviation users. My tasks involve developing, upgrading, and supporting algorithms that diagnose and forecast aircraft icing conditions. Pilots, dispatchers, and forecasters use our products as a guide to highlight where icing conditions are expected and assess what level of concern they should have for a particular region. We have questions about how the products are used and how we can make them more easily understood by people who are using them without a meteorology background. Our main problems come from a misunderstanding of the products, which can lead to unintentional misuse and potential accidents. One example of this is a product called icing probability. It gives a percent chance of experiencing icing at a given location. However, it has been calibrated based on our confidence in the data so that the maximum probability declines with forecast length. This results in a twelve-hour forecast that never shows more than a 45% chance of icing. A pilot looking at this and not understanding the product properly might think that by waiting for twelve hours things will improve, only to find that, as the valid time approaches and the data becomes more reliable, the chance for icing significantly increases. Whose fault is this? The blame probably falls on both of our shoulders, but a program like WAS * IS can help to create a bridge between the weather information and a pilot who just wants to know if he or she should fly today or a rancher who is trying to determine whether or not to get calves inside for the night.

By attending this workshop I hope to come away with an improved understanding of how to better integrate the products we distribute with the knowledge of how the general user applies the information. Due to both my background and my current job I know firsthand the gap that can be present between the weather information presented and the knowledge base of the public. I believe that being involved with WAS * IS will present a way for me to deal with this disconnect and will result in the creation of weather products that are more in tune with societal needs.