

When I first heard about the WAS*IS movement and program it instantly peaked my interest. I have always had a strong interest in how the social sciences integrate into meteorology. I've had that interest build over the years with my work experience that has been well entrenched in educating the public in the environmental sciences as well as learning from the public the challenges facing meteorologists in communicating accurate alerts and forecasts.

In my first job after completing my meteorological grad school course requirements at the University of Maryland I started working in television working at the NBC affiliate in Washington DC. I started as an assistant meteorologist. I moved up to meteorologist and weather producer in the next few years. And eventually I became the Weather Department manager and fill-in on-air meteorologist.

Thrown in during that time our station applied for and received a multi-year, multi-million dollar grant from NASA to showcase and visualize space and science data through the Internet and over the broadcast airwaves. This was during the very early formative period of the Web (1995-2000), so I got started on the ground floor of a world changing technological event.

This experience allowed me to see the public's hunger for environmental science information. It also allowed me to interact extensively with the public in regards to their understanding of the information and forecasts they were consuming.

Unfortunately, this was not a good realization. I learned that consumers were generally confused, uninformed and uneducated when it came to understanding this information. Over time I found it was the teachers – the meteorologists, scientists, etc. – who were at fault. The communicators were not communicating or educating.

Over these 12 years I spent hours listening to the public's perception to sort out where the failings occurred. I generated several surveys to consumers to analyze forecast perception which helped me design new forecast graphics. Over the same time I worked hard to produce graphics and forecasts that were more understandable to the average person – leaving less for interpretation.

The NASA grant allowed me to be the web manager for the first television weather web site on the Internet – WeatherNet4. We were pioneers in designing new interfaces on-line to allow the user to get forecast, radar and satellite information. We also used the television media to educate the public on the Internet and the space and science information and content available to them.

Being on the cutting edge of the Internet and being well entrenched in television gave me a unique insight into the issues and misconceptions relating to the consuming of weather information. Television and the Internet are the top two places users find weather information and weather information ranks consistently as the top one or to reasons people even use the Internet or watch TV.

I used this experience to move on to WeatherBug in 2000 to help the company move into the Internet age of product development. This experience helped me develop educational and consumer content that was user friendly. It also helped me to continue to learn that the changing technology opens more doors and new tools to communicate accurate, precise forecast and technological information. The latest of which includes GIS applications and services which will now require a whole new phase of learning and educating for the developers and the consumers.

Research, education, technological advancements and new applications are all part of the advancement of the meteorological sciences and they are generally useless without social analysis on how new technology can and should be used to the greatest benefit. Combining a wide range of knowledge in these fields can only help this task and benefit everyone. I think my background and experience is tailored exactly for this type of interaction.

Mark Hoekzema
WeatherBug
Chief Meteorologist
Director of Meteorological Operations