**The Evolving Role of Humans in Weather Prediction and Communication**

Neil A. Stuart1,

*1 NOAA/National Weather Service, Albany, New York*

A series of webinars and panel discussions were conducted on the topic of the evolving role of humans in weather prediction and communication, in recognition of the 100th anniversary of the founding of the AMS. One main theme that arose was the inevitability that new tools using artificial intelligence will improve data analysis, forecasting, and communication. We discussed what tools are being created, how they are being created, and how the tools will potentially affect various duties for forecasters in multiple sectors of the profession.

Even as artificial intelligence increases automation, we argue that humans will remain a vital part of the forecast process. Additionally, both university training and professional development must be revised to accommodate the evolving forecasting process, including addressing the need for computing and data skills (including artificial intelligence and visualization), probabilistic and ensemble forecasting, decision support, and communication skills. These changing skill sets necessitate that both the U.S. government’s Meteorologist General Schedule-1340 requirements and the AMS standards for a bachelor’s degree need to be revised.

Recommendations will be made for student and forecaster preparation and career planning, highlighting the need for students and forecasters to continue their education and learn new skills throughout their careers. Meteorologists, like all scientists, need to be flexible life-long learners and engaged in the changes to forecast technology in order to best serve the user community. Humans can maintain an essential role in weather prediction and communication some of those roles will be presented.