Pre-Testing Trainees in Forecaster Training Workshops

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An important component in developing training for forecasters is an awareness of the knowledge level of the trainees. Forecasting convective storms is complex and challenging, but there are two elements that form a basis for doing so: (1) basic understanding of the physical processes associated with convective storms, and (2) familiarity with the structure of the atmosphere as a function of space and time. During the period 1987-2001, the National Weather Service in the USA initiated a training program for Flash Flood Forecasting following a series of major flash flood disasters that were poorly forecast.

The developers of the training - Dr. Robert A. Maddox and Dr. Charles F. Chappell - and they felt the need to learn what the forecasters understood (or misunderstood) about convective storms in order to develop useful training. In developing and teaching a training course for Severe Thunderstorm Forecasting in Europe, in collaboration with the European Severe Storms Laboratory, the author has administered a pre-test similar to that developed for the Flash Flood Forecasting course. Over the course of several years, it has become apparent that most of the same knowledge gaps and misunderstandings that were widespread in the National Weather Service were also found to be present in many European forecasters. Thus, it seems that training in basic concepts of convective storms and their associated environments is necessary for entry-level forecastings. Results of the pre-testing will be presented and recommendations offered.