



Summer Schools in Romania - Training and Learning Experiences

A. Stan-Sion

National Meteorological Administration, Bucharest, Romania (aurora.stan@meteo.inmh.ro)

The National Meteorological Administration in Romania hosted recently two summer schools. The events were very different in approach and topic, but had a common quest: to solve specific, real needs of the trainees.

The first event took place in August 2006 in Constanta, on "Observations and Numerical Weather Prediction of Severe Storms - Flash Floods Forecasting". The event was warmly accepted and supported by the World Meteorological Organization, being designed to provide a forum for exchange of knowledge between South-East Europe forecasters on Severe Weather Forecasting, Mesoscale Processes and Operational Nowcasting (see <http://193.26.129.60/scoaladevara/>). It was developed from the urgent needs of the meteorological services in the region to find solutions to forecasting severe weather events with a regional approach.

Forecasters from several countries in South-eastern Europe joined the school, and Dr. David M. Schultz from the Cooperative Institute for Mesoscale Meteorological Studies, University of Oklahoma, and NOAA/National Severe Storms Laboratory, Norman, Oklahoma, USA, was invited to give lectures on the topic. Participants were invited to present recent flash flood cases from their country and tried to identify local conceptual models and similar synoptic patterns for the events. The lectures were tailored for the expressed needs of the participants, varying from the classic lecturing teaching style when the professor speaks and the students listen, to a very interactive workshop where students speak and the lecturer facilitates the discussions, building solutions together.

The second summer school took place in July 2007, in Iasi, and the topic was on "Boundary Layer Research with Instrumented Aircraft". It was the first summer school

organized by the Education and Training activity of the European Fleet for Airborne Research, an integrated infrastructure initiative of the 6th framework program of the European Commission. The trainees were this time young scientists at postgraduate level and the approach was to blend the academic lectures on "in situ measurements" and their background science, with the field experiment.

The students had full control in designing their own experiment, and the professors gave credit to their assumed responsibility. Among the lecturers, we mention Prof. Manfred Wendisch from Institute for Atmospheric Physics of Mainz, Germany, Prof. Jean-Louis Brenguier, and dr. Irina Sandu from METEO-France, and many others that we will introduce in the presentation. An instrumented ATR 42 aircraft from SAFIRE performed 5 flights with students on board. The operators and pilots supported the design and data collection during the school. Each experiment had briefings and debriefings for the flights, and the "instant" decisions and changes in the experiment, according to the real structure of the atmosphere were justified. Each group made a study and a report, and filled evaluations forms of the whole event. This summer school facilitated the use of very advanced technology by young scientists in Europe, and focused on research in "group" versus individual work.

This presentation shows the challenges of the approaches in learning and training used in these events and shares the conclusions.