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Participation in the PROFS Exercise 1985

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I recently participated, for 2 weeks, in the PROFS real-time (RT85) forecast exercise in Boulder, Co. While at PROFS, I had the opportunity to work with an outstanding group of people and get some experience on an excellent interactive display and forecast system. The RT85 exercise was well run and everyone involved was very dedicated and enthusiastic.

RT85 had 2 phases: verification and forecasting. The verification team was responsible for vectoring chase teams to areas favorable for thunderstorm development and logging reports of significant weather. While making their forecast, the forecast team was isolated from outside influence and received data that had been filtered.

The interactive display system consisted of 3 color screens and several CRT's. Screen one displayed the menu of all available products, images and application programs available. The menu made extensive use of windowing and product selection was via a mouse. The remaining two screens were used for data display. If enough versions were present, any product could be animated. The CRT's were used for output for application programs.

The database consisted of SAO's, satellite data, ground-based profiler data, and radar data. Visible and IR satellite images were available at least every 30 minutes, depending upon the display scale. In addition, VAS (VISSR Atmospheric Sounding) was also available in several formats.

The Doppler radar was very impressive. It's images were very clear and updated rapidly. The Doppler display, with its different operating modes and color tables, was an effective tool in predicting severe weather.

I think the application programs were great. One program would use the ground-based profiler information at Denver and update the latest Denver sounding. Another program would plot the Lifted-Index as calculated from VAS satellite data. Still another program would track a thunderstorm or check to see if a mesocyclone had developed in the Doppler velocities.

I thought the RT85 exercise was very informative and gave a glimpse of our generation of computers in the National Weather Service.

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