

9.8 THE NWS/COMET® CASE STUDY LIBRARY AS A RESOURCE FOR EDUCATION, RESEARCH, AND TRAINING.

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1. INTRODUCTION

The Case Study Library developed by the National Weather Service (NWS) and the Cooperative Program for Operational Meteorology, Education and Training (COMET) provides meteorological datasets for research and training development. Funded by the NWS, this project is a collaborative venture between the NWS, the COMET Program, Unidata, and the Joint Office for Science Support (JOSS). The diverse events included in the library provide a wealth of data for development of both online and classroom based training exercises.

2. OVERVIEW OF CASE STUDY LIBRARY

The NWS/COMET Case Study Library provides access to comprehensive meteorological data sets in common formats. Data are available free of charge for FTP download through the Cooperative Distributed Interactive Atmospheric Catalog (CODIAC) system. The cases included in the NWS/COMET Case Study Library represent challenging forecasting events of classical weather phenomena in addition to local effects on weather systems. Regional examples of summer-time convection and winter storms have been incorporated to provide wide geographical coverage within the library. Supplemental products provided for each case include weather summaries, sample graphics, supplemental data, and laboratory exercises.

More recent cases included in the library are Tropical Storm Allison (June 6, 2001), the costliest tropical storm in U.S. history, and the Seattle Snowstorm (February 16, 2001) a case that provides an example of an arctic front interacting with complex terrain. Additional diverse phenomena, included in recent additions, are radar indicated bow-echoes over Iowa (June 29-30, 1998) and their associated tornados, derechos, and other severe weather. Rounding out the new additions is the Terrain-Locked Convection flooding event in New Jersey (August 11-13, 2000).

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3. FUTURE ENHANCEMENTS

Continued enhancements are planned for the Case Study Library. As visualization software becomes more widely available for level II radar data, that data will be included with the suite of other data products currently available. In addition to this higher resolution radar data, plans are to include Rapid Scan Operation high-resolution satellite imagery when available. We continue to explore other model output, both on continental and regional scales, as well as meso-net data when applicable. All these data enhancements will provide the foundation for richer and more useful case studies.

Along with broader data holdings, plans include an increase in the number of exercises and expert consultation and analysis of the events. This will allow greater ease of use and more robust curriculum for educators and operational forecasting trainers. With the onset of new data delivery mediums, the COMET Case Study Library will soon be offering the entire case study on compact discs (CD's) as well as the existing 8mm tapes.

4. SUMMARY

The COMET Case Study Library continues to offer complete and robust data sets covering a wide assortment of meteorological phenomena. These data holdings are accessible via the Internet for free download or ordering, and will continue to offer and expand the educational metadata associated with each case. This hopefully will make these case studies an even more valuable resource for research, education, and training. The library is a community effort, and we strongly encourage any data offerings for future cases, or exercises that compliment or go with existing case studies. It is through this community vehicle that The Library can grow and attain its largest contribution possible to the education, research, and forecast training environments.

5. ACKNOWLEDGEMENTS

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6. WORLD WIDE WEB LINKS

Case Study Access Page:

www.joss.ucar.edu/cometCases/

NWS/COMET Case Study Library:

www.comet.ucar.edu/resources/cases

CODIAC Homepage:

www.joss.ucar.edu/codiac

Example Exercises:

www.comet.ucar.edu/resources/tutorial

7. REFERENCES

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