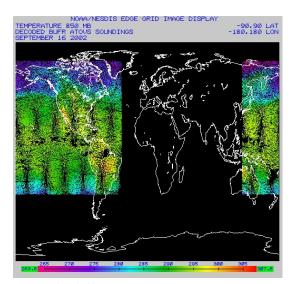
## **AWIPS POES Soundings**

Richard G. Kelley \*
Computer Sciences Corporation, Suitland, Maryland
Vincent Tabor\*
Information Processing Division, NOAA/NESDIS, Suitland, Maryland

## **ABSTRACT**

The National Weather Service (NWS) in conjunction with the NESDIS Information Processing Division of the Office of Satellite Data Processing and Distribution plans to start distributing vertical soundings from polar orbiting environmental satellites as part of the AWIPS system. This distribution is scheduled to begin in February of 2003. Each sounding consists of 40 levels of temperature and humidity. An average of 220,000 - 230,000 soundings will be distributed daily, a one-hundred fold increase over the global radiosonde total of some 2,000 daily observations.



Sample daily AWIPS POES coverage at 850 mb

Soundings will be grouped and distributed based upon nine geographic regions, shown below.



Nine geographic regions

These soundings will be encoded in BUFR (Binary Universal Form for the Representation of meteorological data) and distributed via the NWS Telecommunications Gateway in Silver Spring, MD. The soundings will be packaged in files, each dependent upon geographic region.

Each file will have a header of the format IUTXxx KNES ddhhmm cclc, where:

- IUTX data type
- xx two digit geographical region (01 to 09)
- KNES ICAO indicator for the originating center
- ddhhmm system time message was made
- cclc four character end-of-header string

\*Corresponding authors' addresses: Richard G. Kelley, Computer Sciences Corporation, Rm 3045, FB4 NOAA/NESDIS/IPD, 5200 Auth Rd, Suitland MD 20746-4304. Email Richard.Kelley@noaa.gov, Vincent Tabor, Rm 0312, FB4 NOAA/NESDIS/IPD, 5200 Auth Rd, Suitland MD 20746-4304. Email Vincent.Tabor@noaa.gov