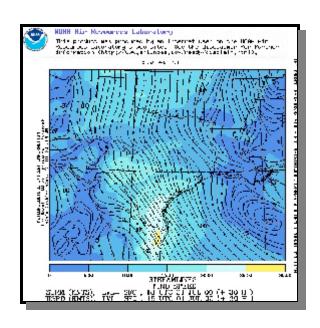
Meteorological Products

hen analyzing dispersion model results it is important to understand the meteorology that was used by the model. **READY**'s meteorological display programs were designed to provide the scientist with the tools necessary to probe the meteorological data. The programs include maps, meteograms, soundings, and cross-sections. These programs can be used on both forecast and archived meteorology.



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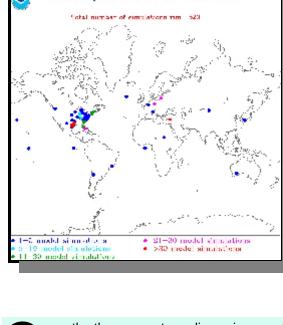


Dispersion Models

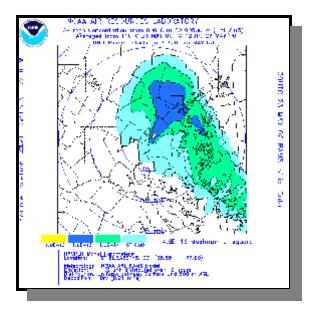
Yesterday's HYSPLII Source Locations

Air Quality Forecasts

n 1997 a worldwide web-based system called the Real-time Environmental Applications and Display sYstem (*READY*) was developed to access and display meteorological data and to run trajectory and dispersion models on the National Oceanic and Atmospheric Administration's (NOAA) Air Resources Laboratory (ARL) web server. This system puts state-of-the-art dispersion models and meteorological display programs generated over many years at ARL into a form that is easy to use by anyone, but its primary focus is for atmospheric scientists.



RL produces several air quality products to assist atmospheric scientists in predicting air quality and to analyze past air pollution episodes. Surface-based ozone forecasts are produced using the HYSPLIT model during the summer months over the eastern United States. In addition, automated forward and backward trajectories are available for specific locations in the eastern United States. When NOAA is asked to support wildfire monitoring, ARL produces smoke forecasts and makes them available on *READY*.



urrently there are two dispersion models available online within *READY*; the HYSPLIT (Hybrid Single-Particle lagrangian Integrated Trajectory) model and the VAFTAD (Volcanic Ash Forecast Transport and Dispersion) model. *READY* users can run both models for any location in the world using forecast and archived gridded meteorological data, which have been retrieved from NOAA's National Centers for Environmental Prediction (NCEP).

