Scientific Applications

The Earth Data Analysis Center contributes to and participates in many scientific research and applied science programs in New Mexico. These run the gamut from aggregation of environmental observations from sensor networks, to the acquisition of remote sensing data in support of modeling and decision support, to the management and generation and delivery of dust forecast data to New Mexico's public health community.

Three projects highlighted here illustrate EDAC's work in the area of applied scientific development.

Public Health Applications in Remote Sensing (PHAiRS)

The PHAiRS project was funded by NASA to develop, in collaboration with researchers at the University of Arizona, a regional dust forecasting system that could deliver historic and current dust estimates to the public health community for the greater Southwestern US.

Multiple Clients

Open Standards

Application

Modeling

System

Environmental Background **PUBLIC HEALTH** Information Public Data Server Discovery Provider Data Data Delivery Provider Data Mapping Application Provider Server

Environmental Public Health Tracking System (EPHT)

Output

Storage

Server

EDAC has contributed to the NM DOH's EPHT development efforts first through the development of a system prototype and currently through the development and deployment of the operational system. The goal of the project has been to develop an online environmental public health resource that makes health-related environmental information and health statistics available to a wide range of user groups.



Experimental Program to Stimulate Competitive Research (EPSCoR)

NSF's EPSCoR program is designed to increase the competitiveness of designated states for Federal grant awards. EDAC has contributed to New Mexico's previous and current EPSCoR program through the development and maintenance of cyberinfrastructure in support of hydrologic and climate change research in the Middle Rio Grande and northern mountain regions.

