

The Environmental Verification and Analysis Center (EVAC) is located at the University of Oklahoma and is a research unit within the College of Geosciences. EVAC's focus is participation in interdisciplinary scientific work related to earth science, with special emphasis on strengthening relationships among environmental scientists and the public. This goal is accomplished through various science and education programs which are global and regional in scope.

## Research

In 2002, EVAC launched a new program to develop a cooperative observer network on Vanuatu. This effort has provided 100 rain gauges to the island nation, and it is the goal to use this information to develop a greater understanding of the temporal and spatial variability of tropical pacific island rainfall.

EVAC's previous endeavor, the expansion of the weather and climate observation networks in the Republic of Kiribati and Niue island, has begun to yield valuable data for the The Surface Reference Data Center (SRDC) mission. The SRDC was established in 1987 to support the Global Precipitation Climatology Project (GPCP), which is a subprogram of the Global Energy and Water Cycle Experiment (GEWEX). The SRDC, through World Wide Web access, provides researchers with samples of gridded, time-space rain gauge measurements over various regions of the globe. The SRDC was originally at the National Climate Data Center (NCDC) in Asheville, North Carolina, and has been recently relocated to EVAC.

The PICONET project, a study of rainfall at a variety of spatial and temporal scales, has been located at Will Rogers World Airport in Oklahoma City since 2001 and includes an expanded number of rain gauges. This information is used to study the variability of high temporal and spatial scales in rainfall. The intention is to apply the results from this project to EVAC's satellite and mesoscale validation efforts.

## Oklahoma Wind Power Initiative

Another important program at EVAC is the Oklahoma Wind Power Initiative (OWPI). OWPI began in July 2000 with a mission to develop wind resource models and products, to provide educational outreach to state officials and citizens, and to track renewable energy policies in other states and the nation.

OWPI has taken the lead on developing three state-wide wind conferences, has been responsible for the formation of the Oklahoma Renewable Energy Council (OREC), and has given presentations at over 75 local town meetings, workshops, and conferences to educate the public about wind energy. In addition, OWPI has developed two wind resource models that give a good representation of where the best wind resources are located in the state.