

Southwest Region

The Southwest Region for more than six years has maintained a Data General Eclipse mini-computer, used almost entirely for archeological and cultural resource programs. In 1983, the Branch of Cultural Data Systems mounted the MOSS geo-based information processing system on the Eclipse. The software system, developed by USFWS and supported by the BLM and USGS is designed to permit the scientific study of biological and environmental data bases using high resolution graphics display. The software is currently under evaluation.

The Chaco Center continues to expand the capabilities of its Chaco PARKMAN data base program and is attempting to add predictive modeling routines to the extensive archeological and environmental graphics system.

A program to three dimensionally model the effects of solstice and other sun and moon declinations on La Fajada Butte petroglyphs has been awarded to IBAR Associates of California. This program will use its base Precision Visual's D13000 core graphics software. Delivery of this system, which will be

mounted on the Region's new 32 bit CPU's, is expected in October 1984.

A fourth program, developed by Valeriana Enterprises and licensed to the Southwest Region, is the UCREATES Fortran Generator System. This system, written for Data General computers, allows inexperienced users to create Fortran source codes and complete working programs simply by answering sets of menu driven questions. New programs have been written using UCREATES for artifact curation, bibliography creation, inventory, stock room accounting, etc.

The San Juan Basin Archeological data base has grown to include data on over 30,000 archeological and cultural sites located in the Four Corners area of New Mexico, Colorado, Utah and Arizona.

In other fields, the Southwest Region expanded its computerization most recently into the realms of office automation and inter-computer networking. In 1983, the Southwest Regional Office procured two Data General MV4000 super mini-computers as the hub of a Regional computer network. The first was installed in February 1984. These are the same type of computers that the U.S. Forest Service is installing in all its installations, nationwide. The two computers will be used with a comprehensive office management software system called CEO. This system includes word and letter processing, document filing and transfer, personnel calendar and office scheduling. The combined Data General systems will be able to handle up to 128 terminals, peripherals and dial-up lines. The two CPU's will be linked using an X.25 packet switching software package called Zodiac. This will permit a user to access either CPU and also allow the addition of other CPU's should the need arise. An RJE80 interface to permit access to IBM Hosts has been included with the system.

Eight of the Southwest Region's parks have purchased comparable Data General Eclipse mini-computers in order to take advantage of mature scientific software developed at Region and elsewhere, and to participate in the planned network. Most of the Region's 36 parks are expected to follow suit, as funds become available.

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