

#### J5.4 PACIFIC ISLAND METEOROLOGICAL SERVICE OFFICES WEB SITE DEVELOPMENT: A MODEL FOR COST EFFICIENT IMPLEMENTATION & SUSTAINABILITY--THE CASE OF PAPUA NEW GUINEA

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Pacific Islands (PI) Meteorological Service Offices are using the Internet to improve services to their clients. They are reducing their costs, improving the efficiency of delivering information, and creating a system that is sustainable. The Global Observing Systems Information Center (GOSIC) at the University of Delaware, supported by and in conjunction with the U.S. Global Climate Observing System (GCOS) Program based at the National Climatic Data Center (NCDC), are jointly supporting the development.

PI Meteorological Service Offices provide clients with weather and climate data and information on a daily basis and have traditionally used labor intensive faxing in order to get information to their clients. For these small offices with limited staff, this procedure has been difficult to fund, implement, and sustain. It is more efficient for clients, who have internet capability, to access meteorological information on-line. Products such as color satellite imagery, which cannot be faxed, can now be posted. PI Meteorological Service Offices staffs are creating web pages over the Internet on the PI-GCOS server located at the University of Delaware.

One part-time system administrator keeps the PI-GCOS server running at GOSIC, performs back ups and software updates in support of up to 20 PI Meteorological Service Offices. This provides these offices with a web presence without having to invest in web infrastructure such as a web server, software and a system administrator. The PI Meteorological Service Offices only need to acquire a PC with web design software such as Frontpage® and a connection to the Internet. The staffs are then provided with a log in on the PI-GCOS server and can develop and maintain their web site and become their own web master. GOSIC provides the office staff with training if needed. Presently 8 of the 20 PI Meteorological Service Offices have developed such web sites. The web sites are available at [http://pi-gcos.org/PI\\_Met\\_Services.htm](http://pi-gcos.org/PI_Met_Services.htm).

The Papua New Guinea (PNG) National Weather Service (NWS) is one of the offices developing a web site to serve clients such as newspapers, radio and television stations, local and international aviation and maritime offices, and agricultural agencies to name a few. The PNG NWS transmits valuable weather data and information twice a day to clients by fax and e-mail is most often used as a secondary transmission mode. This has been very costly in staff time dedicated to faxing and e-mailing weather data and information and long distance telephone charges. Posting daily updates on the PNG web site and having it accessed by clients via the Internet would be more cost efficient and sustainable. Like many other meteorological services in the Pacific, the PNG NWS has very limited financial resources and staff is presently working at having a web site fully established. The PNG web site is in development and is available at <http://pi-gcos.org/PNG/default.htm>.

The U.S. GCOS Program Office and NCDC have been very supportive of this capacity building program for PI Meteorological Service Offices, and this effort has become a cornerstone for progressing work in the greater PI-GCOS program in which this idea was initially generated. The greater GOSIC activity was begun under the guidance of Dr. Ferris Webster at the University of Delaware in 1997. The intent of GOSIC was to provide GCOS, and its sister observing systems in the Ocean (GOOS) and Terrestrial (GTOS) domains a data management facility to aid in more easily finding data and information related to these global observing systems. Beginning in October 2006, the GOSIC activity will formally transition to NCDC in Asheville in order to provide a sustainable operational base of operations in which to continue developing and being able to also support the regional (<http://pi-gcos.org>) and national efforts in the Pacific documented in this paper. The authors of this paper consider the work of the GOSIC to be an excellent example of transitioning a research effort that universities are best suited for to the operational effort it has evolved into that is best administered from a center such as NCDC.

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