

**AUSAID PROJECT  
PACIFIC ISLANDS – CLIMATE PREDICTION PROJECT  
(PI-CPP)**

**“Climate Data Security”**

**Mission to Tuvalu  
18<sup>th</sup> – 30<sup>th</sup> May 2008**

**NAME OF OFFICER:** Kevin Smith, National Climate Centre

**MISSION**

To travel to the Tuvalu Meteorological Service (TMS) to undertake a series of activities associated with Climate Data Rescue, Records Management and Data Management. AusAID through the Pacific Island - Climate Prediction Project (PI-CPP) had agreed to fund visits to four Pacific Region countries (Cook Islands, Niue, Tonga & Tuvalu) to undertake the work listed below. These visits are an extension of the previous Pacific Island - Climate Data Rescue (PI-CDR) and Pacific Island - Building Robust Infrastructure (PI-BRI) projects.

As part of this program, the steps involved are to:

- Conduct an audit of the data holdings of the TMS held as paper records.
- Produce an inventory of climate data records (which exist mostly in paper-based forms);
- Where necessary, take immediate action to secure data in imminent danger of deterioration or loss;
- Provide training to NMS staff in effective records management (thereby contributing to Australia’s capacity-building activities in the Pacific region).
- Install on NMS computers a self-contained Climate Database Management System (ClimSoft), approved by WMO as a system suitable for generic use in developing countries;
- Ingest existing and current NMS meteorological surface data prepared for ClimSoft system.
- Instruct officers of the NMS in the operation and use of the ClimSoft system, and provide hands-on assistance to their staff as they practice the required skills;

**REPORT ON THE MISSION**

Arrived on Funafuti Island on Tuesday 20<sup>th</sup> June. On Wednesday 21<sup>st</sup> June held initial introductions at the Tuvalu Meteorological Office with Mr Niko Iona (Aerology Officer), in the absence of Mr Tauala Katea (Chief Meteorological Officer) who was due back on the Friday 23<sup>rd</sup> after an inter island inspection trip. I gave a short presentation to staff outlining the project and my expected visit outcomes. On his return I held similar discussions with Mr Katea.

The paper record holdings were held in a small storeroom attached to the main office. Plenty of shelving was available for current needs. The records were stored in boxes and well organised by date and station by TMS staff. However, shelf height only allowed for storage of archive boxes placed on their side. The office, including the storeroom was air conditioned.

The earliest daily records were no older than the current electronic holdings. These paper records were sorted where necessary, bundled and tied using the acid free cotton tape and placed into National Archives of Australia quality boxes. These were purchased specifically for this project and sent prior to my arrival. The boxes were labelled after packing using a numbering system consistent (but independent from) other projects of this nature for Pacific Islands countries. The box identification number was entered on an electronic inventory along with a description of the contents of the box. The boxes were then placed back on the shelves.

It is further noted that there is a need to provide some larger archive boxes to accommodate the larger meteorological records (420x320mm) that had been folded in half for storage.

The archiving and the completion of the electronic inventory were accomplished by Monday of the following week.

Climsoft training and implementation was started on the Tuesday 27<sup>th</sup>. The TMS staff had been proactively using Climsoft V1 and so required little encouragement to begin using V2. Data entry has begun from existing electronic sources and new key entry from hand written meteorological logs. Some issues with moving V1 data across to the V2 database still need to be addressed but this can be accomplished with follow-up emails.

Much discussion and demonstration was conducted on different methods of data manipulation using the Climsoft Application and the Access database itself.

### **SUMMARY ASSESSMENT/VALUE OF MISSION**

The main aim was to build a capacity for TMS staff to engage in effective Records and Data Management of both hard copy forms, and electronic ingestion into a Climate database. This visit has successfully accomplished this objective. However, given the lack of appropriately qualified staff and the turnover of staff in the Pacific Island countries, and the advancement in technology and software updates, further training and refresher workshops may be required. It should also be noted of the continuing strong relationship with other projects including SCOPIC (Seasonal Climate Outlook for Pacific Island Countries) and also with PI-GCOS projects.

### **RECOMENDATIONS**

1. Ongoing support by telephone and email offered to the extent that it is within the limitation of our resources.
2. Development of more personalised forms in the Climsoft application specifically for the TMS
3. Provide the TMS with a minimal shipment (25pack) of archive boxes size10, to accommodate meteorological records of size up to 420 x 320mm.
4. Regular training and/or workshops to sure up current skills and for the introduction of new technology, software updates, and any changes in methodologies.