



Climate and Oceans Support Program in the Pacific

July 2016 FINAL EDITION

Manager's Message

This year we have seen terrific progress on several important aspects of the transition of COSPPac products and services to the region. Progress on transition has been propelled forward by regional partners, in the interest of ensuring long term sustainability of products. Transition, which has now been the focus of COSPPac for the past two years, has never been done before at this scale and has been an interesting challenge which may well provide a model for others to follow in the future.

Going forward the Pacific Community (SPC) will take the lead on much of the oceans-related products and services, including the ocean portal, production of tide calendars, levelling surveys for the Pacific Sea Level Monitoring network and capacity development and communications support for ocean science.

SPREP will take the lead on many climate-related products and services, including SCOPIC, running the Online Climate Outlook Forum OCOF, the traditional knowledge pilot project and capacity development and communications support for climate science. We will continue to work with these agencies as they bring on board new staff to give them the best possible training and support so that they are set up well to carry on supporting the region in these areas of work into the future.

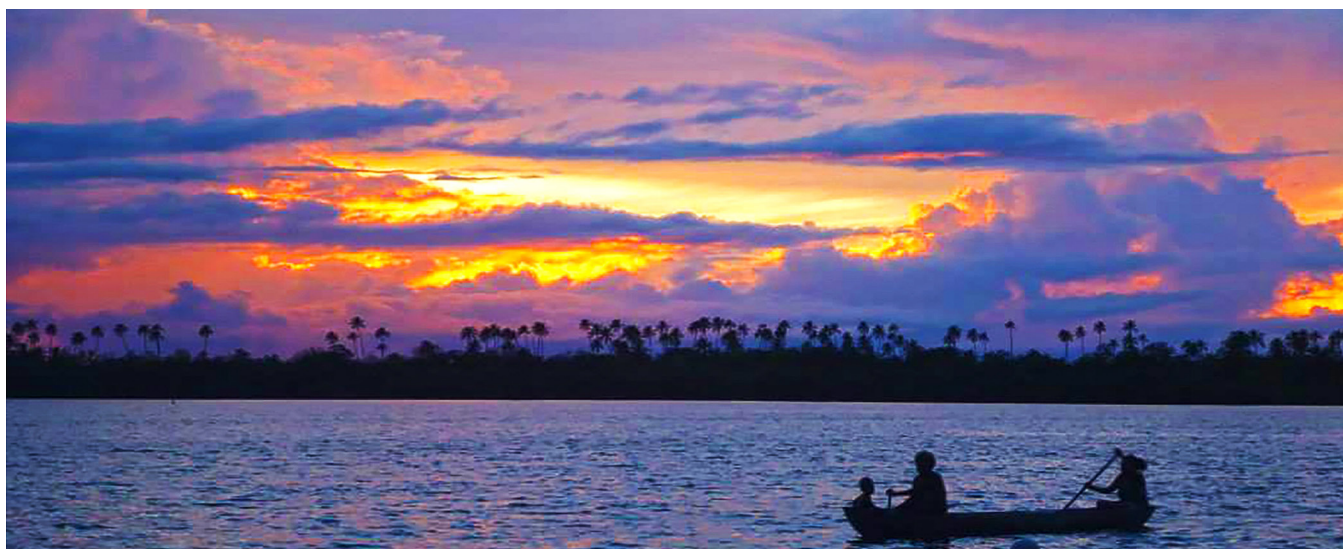
At the last steering committee meeting it was announced that I will be moving back to Fiji. I may still have the opportunity to work on the project in some capacity in the future, but the details of this are still being sorted out. Otherwise I would like to thank all colleagues and partners in the Pacific for their support and friendship since I started working on the Pacific Islands Climate Project.

It has been a challenging year losing staff and seeing them move on, but the team has carried on with delivering an excellent project. I would like to extend my heartfelt acknowledgement to past and present members of the COSPPac team and their hard work over the past years, and commend their efforts in trying to ensure the successful transition of responsibilities to the region.

This will be the last edition of the COSPPac newsletter, but updates will continue to be provided by the Pacific Community and SPREP. And, of course, the COSPPac team is only ever an email away at: cosppac.support@bom.gov.au

Farewell for now,

Janita Pahalad



Paddling home at sunset in the Langa Langa Lagoon, Malaita, Solomon Islands.





International Women's Day is celebrated every year on the 8th of March.

Pacific women leading the way in climate and meteorology

Did you know that 12% of permanent representatives to the World Meteorological Organisation are women? That is 23 women and 161 men, according to the 2014 database. International Women's Day on the 8th of March was an important occasion where people across the globe celebrated the social, economic, cultural and political achievements of women and made a pledge for gender parity.

Rossy Mitiepo, Acting Director of Niue Meteorological Service, notes that "Meteorology is known to be a male-dominated environment. I'm glad to see the increase of women working in the field of climate and meteorology in the Niue Met Service. We have a shared role in the workplace, but we apply our science knowledge differently in our homes and domestic duties after hours. Men tend to the bush garden on an overcast day with brief showers and women may choose to stay indoors."

Maria Ngemaes, Meteorologist-In-Charge at NOAA in Palau, says "I come from a matriarchal society where I didn't have much of a challenge getting into the field of meteorology. I came to understand as years went by that a country, whether a matriarchal or patriarchal society, has different expectations. We have come a long way. So ladies, let us join hands. We have taken pride in supporting our families and now it is the time that we, women, accept ourselves as being great leaders and support our own countries to make a difference in this world!"

Climate application projects in Solomon Islands and Samoa a great success



Solomon Islands Government representatives at the official launch of their climate-malaria monitoring and early warning system.

Over the past few years COSPPac has worked with partners on two flagship climate application projects: a climate-malaria monitoring and early warning system in Solomon Islands and a water storage outlook tool for the Afulilo Hydropower Scheme in Samoa.

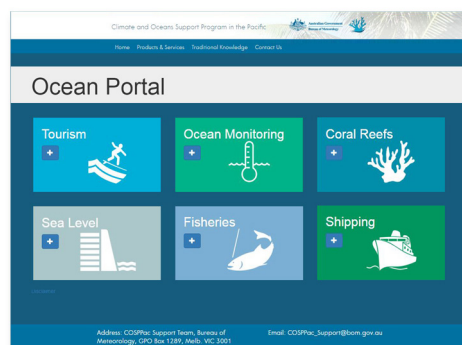
The climate-malaria monitoring and early warning system in Solomon Islands was launched in November 2015. The system was jointly developed by the Bureau of Meteorology, Solomon Islands Meteorological Service and the Solomon Islands National Vector-Borne Disease Control Program. It uses seasonal rainfall forecasts and observed rainfall information to produce customised monthly malaria outlooks. It is now used as part of routine operations to help inform decision making about malaria response and control activities, such as community awareness and bed net distribution.

In Samoa, the water storage outlook tool means that renewable energy supplies are able to be better managed. For example, during the recent El Niño the Samoa Meteorological Division and the Electric Power Corporation were able to put this tool to use to make sure that the country would not suffer from a lack of electricity during a drought situation, by making informed decisions about reserving water and fixing diesel generators.

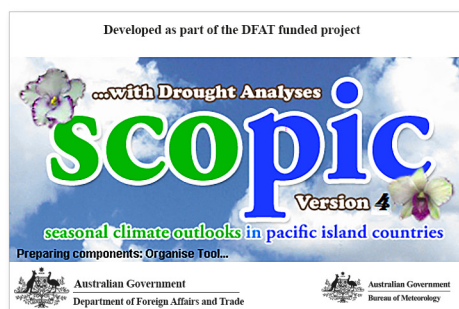
Partner agencies in Solomon Islands and Samoa have now taken on full management of these initiatives. The climate application projects have been a great success and clearly demonstrate the value in how climate information can be used for societal benefit in a range of different sectors.



The COSPPac team and regional partners in Melbourne, 2014.



Development, maintenance and training for the Ocean Portal will be the responsibility of SPC.



Development, maintenance and training for SCOPIC will be the responsibility of SPREP.

What you need to know about the COSPPac transition

The COSPPac steering committee and transition planning subcommittee have been busily planning the transition of COSPPac products and services to be managed by regional organisations going forward. All your favourite things such as the OCOF and the Ocean Portal will continue on into the future, but now they will be managed for the Pacific, by the Pacific, with the Bureau taking a supporting role as necessary.

Transition of products and services to the Pacific Community (SPC)

The Pacific Community will be responsible for:

- Ocean Portal development, maintenance and training
- Producing and distributing tide calendars
- Land based levelling surveys for the Pacific tide gauge network
- Providing capacity development and communications support for ocean science and stakeholder engagement

What does that mean?

Think Pacific Community, think oceans. It means the next time you want someone to explain a certain part of the Ocean Portal to you, are looking for some extra copies of your country's tide calendar, would like to run some ocean science training for your met service and stakeholders, or have been asked about the last time a levelling survey was done for your tide gauge, the Pacific Community will be your go-to. They will be running a subregional workshop on oceans and tides in 2016 as well as some in-country training and attachments. The Ocean and Tides Knowledge Unit has taken on extra staff to do this work.

Who do I get in contact with if I need something? Email the Ocean and Tides Knowledge Unit on oceanexperts@spc.int

Transition of products and services to SPREP

SPREP will be responsible for:

- SCOPIC software development, maintenance and training
- Running the Online Climate Outlook Forum
- Running the traditional knowledge pilot project
- Providing capacity development and communications support for climate science and stakeholder engagement

What does that mean?

Think SPREP, think climate. It means that the next time you need a hand filling out your OCOF tables, can't get SCOPIC to work on your computer, are hoping that someone can come to your country to run some climate and communications training, have a query about traditional knowledge collection or want feedback on a media release about the next big climate event, SPREP will be your go-to. SPREP is in the process of hiring extra staff including a climate officer, traditional knowledge officer, IT officer and a capacity development and communication officer to do this work.

Who do I get in contact with if I need something? mail the Pacific Met Desk on pacmetdesk@sprep.org



Staff from the Pacific Community (SPC) and Geoscience Australia undertaking a survey at Lautoka, Fiji.



Poster for World Meteorological Day in Niue.



The official launch of the Niue tide gauge.

Pacific Community takes the lead on geodetic surveys

June marks the successful completion of another COSPPac transition activity. As of July, the responsibility for planning and executing the land-based levelling surveys required for the Pacific Sea Level Monitoring project is being transferred from Geoscience Australia (GA) to the Pacific Community (SPC).

SPC has been building up their geodetic survey team in order to take on these new responsibilities to support the region. Two new staff, Marika Kalouniviti and Veenil Rattan, joined the team in December 2015 and have been training on the job in Cook Islands, Niue, Fiji, Samoa, and Tonga since the beginning of the year. Andrick Lal, who has completed more than 100 surveys with the project since he joined in 2001, is heading the new Geodetic Unit. To provide continuity, Bart Thomas, GA's Project Surveyor, has accompanied the SPC team on all this year's missions and assisted in training the new recruits.

From July forward, GA's role in the project will focus on data analysis, quality control and administrative oversight of the Continuously Operating Reference Stations located in each of the project countries. These stations provide real time location information and are critical for precise sea level monitoring.

Stakeholders gather in Niue for World Meteorological Day

The Niue Meteorology Service celebrated World Meteorological Day in style with a string of highly successful stakeholder engagement activities. Highlights included a radio talk show with quiz questions and spot prizes; a poster competition for primary and secondary schools and a poetry writing competition for high school students, youth and adults. Poems were submitted in both Niuean and English. There was a great turnout at the event on the day, with prize items that were purchased from local stores very happily received. The Niue Island Farmers Association came on board as a partner to help fund some of the prizes and take part in the activities.

This event was made possible with the use of COSPPac flexible funding.

A new tide gauge for Niue

In a huge achievement for the region, Niue's tide gauge was officially launched in November last year. This is the most recent tide gauge to be added to the Australia-funded Pacific tide gauge network and will provide extremely valuable weather and sea level information not only for Niue, but for the broader Pacific region as well.

The state-of-the-art infrastructure makes this tide gauge the most technologically advanced of the 14 gauges in the Australia-funded network. Standing at three metres in height, the structure contains 10 separate instruments that monitor weather, tides, sea level and position. It will provide information in real time directly to the Niue Meteorological Services and key industries such as shipping, fisheries, tourism and planning.

Installation of this tide gauge was made possible through a longstanding and successful partnership between and the Australian Department of Foreign Affairs and Trade, the Australian Bureau of Meteorology and the Pacific Community.

Welcome, Niue, to the Pacific tide gauge network!

Celebrating the 100th Online Climate Outlook Forum



The 100th Online Climate Outlook Forum was commemorated by events throughout the Pacific region.

The Online Climate Outlook Forum (OCO100) is an example of an accomplishment that started with the decision to try. It has been a sustained and successful relationship between the Pacific National Meteorological Services (NMS) and the Australian Bureau of Meteorology. Beginning in 2007 it is still going strong with the 100th teleconference held in January 2016.

Originally designed to mentor early career climatologists from the South Pacific, the monthly discussion and exchange of information includes the state of El Niño–Southern Oscillation (ENSO), past rainfall, and outlooks for the upcoming season. The forum gives climatologists an opportunity to meet each other, gives experience presenting climate information in an informal setting and builds knowledge through discussion. In fact, eight of the ten participating climatologists from the first OCOF are still working in the field.

The OCOF has evolved over time to include an extensive ocean discussion as part of the ENSO update, as well as sharing information about local impacts from each ENSO event. Impacts such as water shortages and crop failures that were experienced as the 2015 El Niño took hold can highlight similar issues faced between countries, while Kiribati has reminded us that El Niño is not synonymous with drought instead experiencing flooding and water borne disease.

While patience is often required trying to connect twelve countries together, the high attendance proves it is well worth getting the collective climate brains of the Pacific together every month for the great discussions that follow.

Subregional oceans and tides workshop makes a splash



Field trip to the Honiara tide gauge during the subregional workshop on oceans and tides.

Excitement was high as a group of delegates from Fiji, Papua New Guinea, Samoa, Tonga, Vanuatu, and Solomon Islands took part in a subregional workshop on oceans and tides in Honiara last November. Ocean science, tools and services to stakeholders were the topics of the week, with workshop participants channelling their energy into a range of hands-on activities and strategy sessions.

The workshop crew used the COSPPac Ocean Portal to look at the influence of the 2015/16 El Niño event on the sea level and temperature of the ocean in the South West Pacific, which was found to have an impact on the health of coral reefs and the location of tuna fisheries. They also looked at maritime incidents, such as the sinking of the MV Solfish in Solomon Islands in May 2012, to understand what oceanic processes contributed to the event and how we can use forecasts to anticipate future events and aid in search and rescue.

Presenters from the Pacific Community (SPC) showcased their Wave Atlas, which can be used to find out information about the wave climate at specific locations throughout the Pacific. Workshop participants connected the dots between science and stakeholders by creating an ocean services strategy, outlining priority service areas: food security, safety at sea, protecting property and infrastructure, increasing prosperity and conservation for future generations.

This event was co-hosted by the Solomon Islands Meteorological Service, COSPPac and SPC. SPC will lead a second subregional workshop later this year.

Partners drive the traditional knowledge project forward

The traditional knowledge (TK) pilot project has progressed in leaps and bounds over the past few years, with each of the four countries making stellar progress on preserving valuable weather and climate information to complement scientific methods of forecasting.

In Vanuatu, Albert Willy, the new TK Officer has hit the ground running with many hours spent listening and archiving historical TK at the cultural centre and visiting rainfall observers around Efate to establish a TK monitoring system.

In Solomon Islands, the focus has been on visiting communities at the three pilot sites. Trips to the Weather Coast, Malaita and the Russel Islands have delivered a wealth of new TK data that has been entered into their TK database and helped to develop strong links with communities.

In Niue, the Met service has worked with Tāoga Niue to collate TK archival material, conduct TK surveys with communities and enter it all into their TK database.

In Samoa, consultation between SPREP and the Met Service is underway to establish a partnership for ongoing TK data collection and monitoring in Samoa and across the Pacific region.

This project has been a wonderful avenue for meteorological services to engage with communities, listen to their knowledge, and hear about their information needs – ultimately leading to more effective two-way communication of weather and climate information. Responsibility for looking after the traditional knowledge component of COSPPac will rest with SPREP going forward, but COSPPac's TK scientist Roan Plotz will be on hand over the next 12 months to support countries and help train the new TK officer at SPREP.



Visiting a traditional knowledge pilot site in Malaita, Solomon Islands (photo by Solomon Islands Meteorological Service).



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