

Pacific Islands Climate Services Forum – Suva, Fiji

Training Sessions Monday, January 21, 2013

Background: There will be a total of six training sessions, with three concurrent sessions in the morning and a different set of three sessions in the afternoon. The trainees will be assigned into different groups, and each group will attend the sessions in a set order so that everyone has the opportunity to attend each session. The training will be conducted in the ICT Centre, Building A, at the University of the South Pacific and the groups will be divided by room as follows:

- Group 1: Computer lab 13, ICT Centre Building A, Level 3
- Group 2: Computer lab 14, ICT Centre Building A, Level 3
- Group 3: Lab A3 (Professional Lab), ICT Centre Building A, Level 4:

Schedule:

Time	Session	Group	Instructor
09:00 - 10:00	Session A: Accessing large data sets	1	<i>J. Potemra</i>
	Session B: Coral reef watch	2	<i>S. Donner</i>
	Session C: Tropical cyclones	3	<i>N. Fauchereau/H. Diamond</i>
10:15 - 11:15	Session A: Accessing large data sets	2	<i>J. Potemra</i>
	Session B: Coral reef watch	3	<i>S. Donner</i>
	Session C: Tropical cyclones	1	<i>N. Fauchereau/H. Diamond</i>
11:30 - 12:30	Session A: Accessing large data sets	3	<i>J. Potemra</i>
	Session B: Coral reef watch	1	<i>S. Donner</i>
	Session C: Tropical cyclones	2	<i>N. Fauchereau/H. Diamond</i>
12:30 - 13:30	LUNCH		
13:30 - 14:30	Session D: Seasonal forecasting tool	1	<i>J. Pahalad</i>
	Session E: Seasonal forecasting	2	<i>R. McNaught</i>
	Session F: SOPAC tools	3	<i>S. Singh/J. Kruger</i>
14:45 - 15:45	Session D: Seasonal forecasting tool	2	<i>J. Pahalad</i>
	Session E: Seasonal forecasting	3	<i>R. McNaught</i>
	Session F: SOPAC tools	1	<i>S. Singh/J. Kruger</i>
16:00 - 17:00	Session D: Seasonal forecasting tool	3	<i>J. Pahalad</i>
	Session E: Seasonal forecasting	1	<i>R. McNaught</i>
	Session F: SOPAC tools	2	<i>S. Singh/J. Kruger</i>

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Course Descriptions

Session A

Title: Accessing large, climate relevant data sets using web-based tools

Instructor: Jim Potemra, Associate Professor, Hawaii Institute of Geophysics and Planetology (HIGP) at the University of Hawaii

Description: Studies of climate change typically require the analysis of large, global data sets and output from numerical models. These data are difficult to manage do to their size, sometimes ranging up to terabytes (10^{12} bytes). The Asia-Pacific Data Research Center (APDRC) at the University of Hawaii's International Pacific Research Center (IPRC) has been developing web-based tools that provide easy access to climate-relevant data. The site contains both browsing and transport tools, both of which are becoming more common at large data centers. During this session we will explore some of these sites and learn where to find data and how to make use of the data.

Session B

Title: NOAA Coral Reef Watch Satellite Tools for Coral Reefs

Instructor: Simon Donner, University of British Columbia
Britt Parker, NOAA Coral Reef Conservation Program

Description: NOAA Coral Reef Watch uses satellite sea surface temperature (SST) data to provide current reef environmental conditions to quickly identify areas at risk for coral bleaching. Learn what causes coral bleaching, and explore the Coral Reef Watch website and where to find the near-real time SST products, email bleaching alerts, and seasonal outlook and how to use this information.

Session C

Title: Tropical Cyclone Climatology for the Southwest Pacific (with some application for the Northwest Pacific)

Instructor: Howard J. Diamond, Director, World Data Center for Meteorology and U.S. GCOS Program Manager (and PhD Candidate at the University of Auckland)
Training to be given by Nicolas Fauchereau, Climate Scientist, NZ NIWA

Description: The recent development of the South Pacific Enhanced Archive for Tropical Cyclones (SPEARTC) dataset has provided the opportunity to formulate a more complete climatological study of tropical cyclones (TCs) in the southwest Pacific (135°E - 120°W, 0°-25° S) over the warm season period from November through April. We relate the spatial patterns and characteristics of TCs for the 42 year span beginning with the 1969/70 season to various phases of the El Niño Southern Oscillation (ENSO) as expressed by coupling of the ocean and atmosphere. 20th Century Reanalysis data and the Coupled ENSO Index were assessed with SPEArTC to illustrate the genesis area and extratropical transitions (ETT) south of 25° S during opposite ENSO phases. The importance of ENSO activity on regional TC behavior is outlined as is the spatial extent and frequency of TCs and how they undergo ETT. This information will improve the documentation of TC impacts on specific small island nations in the region, and will also show the science behind the annual seasonal TC outlooks for the Southwest Pacific. The techniques to

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be discussed are applicable to other basins, and as such, some information on the climatology of TCs in the Northwest Pacific will also be discussed.

Session D

Title: Seasonal Forecasting Tool

Instructor: Janita Pahalad, Manager, Climate and Oceans Support Program in the Pacific, Australia Bureau of Meteorology

Description: TBD

Session E

Title: 'Paying for predictions' - a serious game for serious fun about a serious topic

Instructor: Rebecca McNaught, Senior Climate Advisor, Red Cross Red Crescent Climate Centre

Description: In this demonstration of the interactive 'Paying for Predictions' game, players will become humanitarian workers, who face changing climate risks. They must make individual and group-based decisions, with consequences. Rich discussions will emerge about the use of seasonal forecasts to prepare for high and low rainfall periods - such as those experienced during El Niño and La Niña events in the Pacific, and there will be winners (chocolate prizes!!).

Session F

Title: SOPAC Tools

Instructor: Jens Kruger, Physical Oceanographer, SOPAC/EU, Oceans and Islands Programme
Training to be given by Sachindra Singh

Description: TBD