

# Climate resilient development in SIDs: Opportunities provided by the Pacific Climate Change Centre

## *Vanuatu capacity building need for climate resilience development*

Vanuatu Meteorology and Geo Hazards Department,  
Ministry of Climate Change

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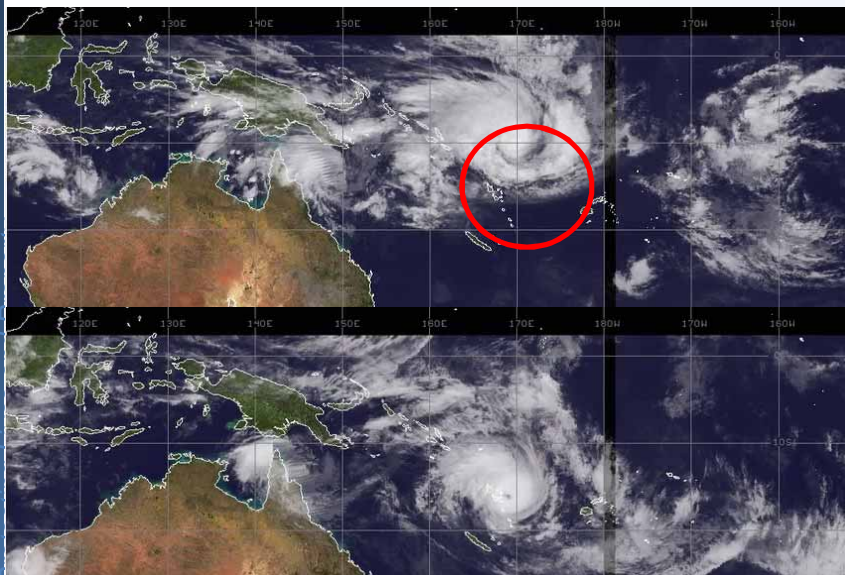


# Presentation outline

- **Vanuatu- Background Information**
- **Role of Vanuatu Meteorology and Geo-Hazards Department (VMGD)**
- **Vanuatu Framework for Climate Services (VFCS)**
- **Vanuatu climate products and services**
- **Communication channels – Using existing networks**
- **Capacity building needs**
- **SPREP role in supporting NMS in the Pacific region**



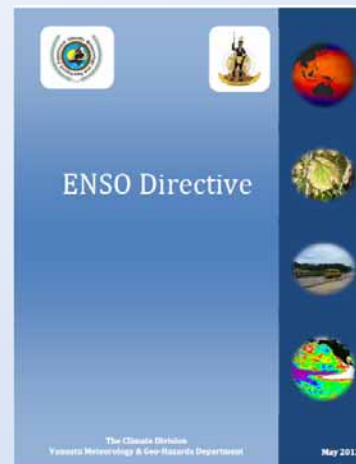
# Vanuatu – Background information



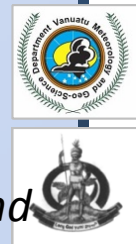
- Rank one on the UN vulnerability risk index
- Hot spot for TC events and experience, ENSO related events couple with Geo-Hazard events such as Tsunami, earthquake, volcanic eruption – TC Pam
- The government is focusing on building resilience among communities – science to action
- 80% person of people live in communities in around 83 islands depending on land and seas for survival
- Weather and climate determine their livelihood



# Role of Vanuatu Meteorology and Geo-Hazards Department (VMGD)



- *Guiding documents*
- *Timely and accurate information to help decision making*
- *Observation/Forecast/climate/climate change/Geo-Hazards/supporting divisions*
- *60 Staff scatter across 8 locations around the country – 84 voluntary officers*
- *However, there are still gaps to address performance to meet needs*
- *VMGD works with government and regional/international organization with donor partners*



# Vanuatu Framework for Climate Services



## Vanuatu Framework for Climate Services



A guidance document for the development and strengthening of climate services so that all Ni-Vanuatu can prepare for and adapt to climate variability and change as a basic human right

July 2016

Financed by Climate Investment Funds through the Asian Development Bank (ADB) Strategic Fund and administered by the Regional Technical Support Mechanism (RTSM) at SPREP

- Data infrastructure
- Data analysis
- Climate data value added products
- Dissemination of information
- USERS
- PROVIDER

***A guidance document for the development and strengthening of climate services so that all Ni-Vanuatu can prepare for and adapt to climate variability and change as a basic human right***



# Vanuatu climate products and services



- Rainfall outlook
- Vanuatu Monthly Climate Update
- Vanuatu Monthly Climate Summary
- Vanuatu Annual climate summary
- Data/Awareness/workshops
- Climate Field schools
- Klaod Nasara and toolkit
- Climate briefing
- NCOF – becomes an annual activity
- Future Services

**VANUATU CLIMATE UPDATE**  
Vanuatu Meteorology and Geo-Hazard Department

ISSUED: 10 February 2016

**HIGHLIGHTS**

**RENFOL OUTLOOK**  
Overall (Vanuatu): Below normal rainfall. Some increased long periods of rain.  
Northern Region: Below Normal  
Southern Region: Below Normal

**ENSO WATCH:**  
El Niño is still present, but may not last long. A moderate to strong El Niño event is still possible in 2016.

**Coral reef watch:**  
Coral reef bleaching remains likely. Tropical cyclone damage to coral reefs remains low. Long term coral reef health is still good.

**Drought watch:**  
Long Drought: Sofo, Paka, Lema, Bawafo, Pasi, Vio, V. Komang and Aniwaniw.

**Tropical Cyclone Watch:**  
Tropical Cyclone: 1 storm may form in 2016 in the western Pacific.

**KLAEI MET AOTLUK MAJ 2016 – MEI 2016**

**RENFOL**  
Fokast blong manis Mei  
Kasam Mei 2016

**NOTEN RAUN**  
Long of ground blong yumi long Bauerafeld, Port Vila, Malakpa mo Penama  
Fokast i bas ko long renfol we i low below normal long Sofo, Paka mo Lema.

**OVERALL VANUATU:**  
Yumi sad expectam below normal (renfol) we i mod sepiol long (normal) long of tel manis we tetap lam tru wet long Vanuatu.

**REIN**  
Long of rainis blong yumi long Savi (Shaka mo Tafes) fokast heri bas ko long faldain.

**CONFIDENCE:**  
Moderate-High

**REVERSE TO El Niño:**  
I save mekera se bas erud ren noman i faldain.

**3 MONTHS RENFOL AOTLUK (MAJ 2016 – MEI 2016)\***  
\* Outlook is Model based forecast

Region	Station	Outlook	mm (probability)		
			Below	Normal	Above
NORTH	SOLA	Below Normal	+1344.0 (79%)	-1344.0 -1372.0 (17%)	+1372.0 (24%)
	FERDA	Above Normal	-699.7 (82%)	699.7 - 668.9 (9%)	-668.9 (9%)
	LAAP	Below Normal	-777.2 (89%)	777.2 - 726.8 (19%)	-726.8 (20%)
SOUTH	BAWERFELD	Below Normal	-838.8 (88%)	838.8 - 862.4 (16%)	-862.4 (11%)
	PORT VILA	Below Normal	-694.8 (85%)	694.8 - 828.9 (14%)	-828.9 (14%)
	WHITI				

**VANUATU MONTHLY CLIMATE SUMMARY**  
VANUATU METEOROLOGY AND GEO-HAZARDS

ISSUED: 16 JAN 16

Vanuatu Monthly Climate Summary: December 2015

**El Niño Southern Oscillation Status**

- Strong El Niño conditions continued in December 2015.
- A number of El Niño-Southern Oscillation (ENSO) indicators suggest that the 2015-16 El Niño peaked during the month of December 2015. Tropical Pacific Ocean temperatures suggest this event is one of the top three strongest El Niño events of the past 50 years.
- Strong El Niño continues to dominate the climate of most countries within the Pacific Ocean.

**Significant Climate Drivers: El Niño Southern Oscillation (ENSO), South Pacific Convergence Zone (SPCZ), Madden Julian Oscillation (MJO), Intertropical Convergence Zone (ITCZ).**

- El Niño conditions continued to persist during the month.
- The South Pacific Convergence Zone (SPCZ) was displaced northeast of its normal position, bringing higher than normal rainfall totals for the region from the Solomon Islands eastward. The Inter-Tropical Convergence Zone (ITCZ) was displaced southward of its normal position, suppressing rainfall in parts of the north Pacific.
- A moderate to strong Madden-Julian Oscillation (MJO) event entered the western Pacific in the last week of December, disrupting the dry conditions associated with the displacement of the SPCZ. Convection was enhanced which increased the chances of Tropical Cyclone in the southern Pacific. The MJO also brought the rainfall Vanuatu experienced in the last week of December.
- Tropical cyclone Lisa, the second cyclone of the season, formed in late December and impacted the southern islands of Vanuatu in early January 2016.

Here rainfall range for last 30 day ending 31/12/15

CONTACT US  
Call: 6772-3868, Email: cma@met.gov.vu, Visit: www.met.gov.vu



# Communication channels – Using existing networks

THE REPUBLIC OF VANUATU  
**VANUATU METEOROLOGY AND GEO-HAZARD DEPARTMENT**  
 Address: Private Mail Bag 254, Sorlova  
 Telephone: (677) 2466 Fax: (677) 2212  
 Email: Administrator: [admin@meteo.gov.vt](mailto:admin@meteo.gov.vt) Chief: [Chief@meteo.gov.vt](mailto:Chief@meteo.gov.vt)

**CLIMATE DATA REQUEST FORM**  
 (FOR INFORMATION ONLY - NOT FOR USE)

Name (Family): \_\_\_\_\_

ALL Data Requested from this Department is subject to the terms and conditions of the Vanuatu Meteorology and Geo-hazards Department's Data Request Policy. The Department is not responsible for the accuracy of the data provided. The Department is not responsible for the accuracy of the data provided. The Department is not responsible for the accuracy of the data provided.

**Climate Data Requested** (Tick the appropriate box)

**Station for which the Data is Requested** (Tick the appropriate box)

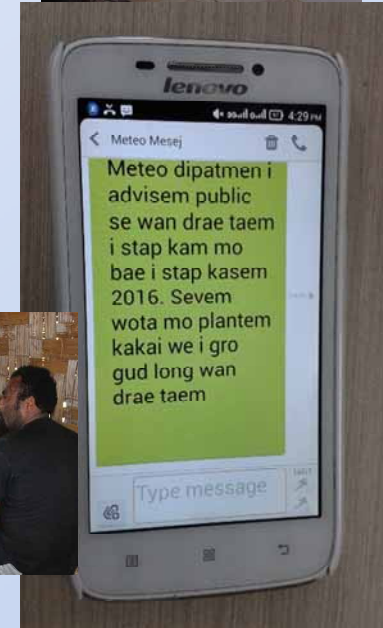
**Specialty of the Requested Data** (Tick the appropriate box)

**Other Information**

**Requester's Contact Details** (Print name)

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 Country: \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_

**Important:** Please note that a reasonable user request is required for each request. We do not accept requests for data that are not in the public domain and which cannot be provided without breaching our privacy policy.



# Capacity building needs



- *CC negotiations*
- *Project proposal*
- *Contributing to IPCC reports*
- *Climate science analysis*
- *Tradition Vs. Science*
- *Climate IT experts on programing for climate software*
- *Development of sectoral climate early warning system and specific sector products*
- *Language barrier – 3 language's*
- *Rural Vs. Urban*
- *National –provincial – Communities- different levels of governance is difficult*
- *Community science – an area need to pursue further*
- *Using of climate related information for decision must be part of planning*





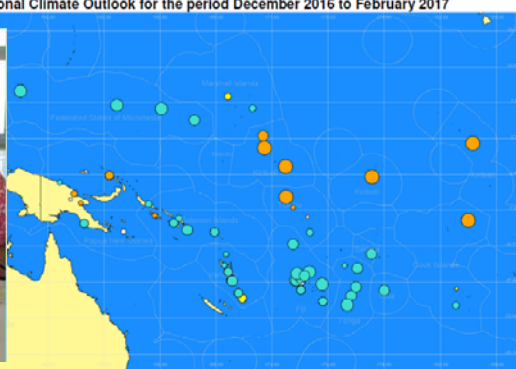
# SPREP role in supporting NMS in the Pacific region



## ➤ Serves as the regional hub for climate change related issues

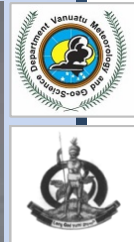
- Region direction on NMS priorities
- Climate science
- Traditional Knowledge
- Regional database
- Transition of projects
- Help to develop Project proposal development
- Funding opportunities -RIE
- Advise on linkages to regional and international framework/plans
- Help develop NMS in the region

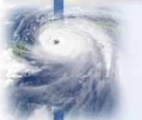
Seasonal Climate Outlook for the period December 2016 to February 2017



Legend  
 ● Bias towards below-normal rainfall  
 ● Bias towards above-normal rainfall  
 ● Bias towards above-normal rainfall  
 ○ No bias in forecast (Climatology)  
 Larger "bubbles" represent higher forecast skill (based on LEPS scores)

These roles will be further strengthened with the establishment of Pacific Climate Change Centre





# Thank you

