Pacific Islands - Online Climate Outlook Forum (OCOF) No. 147

Country: Vanuatu

TABLE 1: Monthly Rainfall

	Sep-	Oct-2019	Nov-2019				
Station (include data period)	2019		Total (mm)	33%tile		Median	Rank
	Total (mm)	Total (mm)		Rainfa	Rainfall (mm)		Natik
Northern Region							
Sola (1971-2019)	274.9	395.7		300.7	487.5	419.4	
Pekoa (1971-2019)	54.9	90.4	183.1	117.7	214.5	177.8	26/49
Lamap (1961-2019)	95.5	74.0	124.5	90.4	146.5	115.0	34/59
		South	ern Region				
Bauerfield (1972-2019)	108.1	76.8	50.8	103.8	178.6	130.3	10/47
Port Vila (1953-2019)	115.0	40.5	36.0	74.2	153.6	116.6	9/67
Whitegrass (1972-2019)	83.4	3.4	0.5	31.9	84.8	49.7	1/49
Aneityum (1952-2019)	179.2	826.5	20.8	59.0	147.9	107.5	2/68

TABLE 2: Three-month Rainfall for September to November 2019

Station	Three-n	nonth Total	33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 June-July 2019				Verification: Consistent, Near- consistent, Inconsistent?
		Rai	Kank	B-N	N	A-N	LEPS				
				No	rthern Regio	on					
Sola (1971-2019)			871.1	1146.8	1019.2		48	25	27	8	
Pekoa (1971-2019)	328.4	Below normal	328.7	520.7	434.9	17/49	60	29	11	26	Consistent
Lamap (1961-2019)	294.0	Normal	268.6	406.8	333.4	22/59	50	34	16	11	Near- consistent
				Sou	ıthern Regio	on					
Bauerfield (1972-2019)	235.7	Normal	232.6	437.0	319.4	17/47	52	31	17	19	Near- consistent
Port Vila (1953-2019)	191.5	Below normal	236.2	393.7	303.6	18/67	60	25	15	20	Consistent
Whitegrass (1972-2019)	87.3	Below normal	117.2	214.4	149.2	12/47	55	39	6	28	Consistent
Aneityum (1952-2019)	1026.5	Above normal	263.4	425.0	340.6	68/68	62	24	14	24	Inconsistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for January to March 2020 Predictor and Period used: NINO3.4 for October to November 2019

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]	
		Noi	rthern Regio	n			
Sola (1971-2019)	54	1120.0	46		0	61	
Pekoa (1971-2019)	52	803.9	48		-2	53	
Lamap (1961-2019)	60	697.5	40		8	64	
	Southern Region						
Bauerfield (1972-2019)	61	939.4	39		12	70	
Port Vila (1953-2019)	59	862.5	41		6	69	
Whitegrass (1972-2019)	61	541.5	39		9	63	
Aneityum (1952-2019)	56	845.2	44		1	63	

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
		Nor	thern Regio	n			
Sola (1971-2019)	40	1004.4	33	1220.2	27	3	44
Pekoa (1971-2019)	40	733.5	25	971.1	35	1	49
Lamap (1961-2019)	41	641.6	34	804.6	25	8	48
		Sou	thern Regio	n			
Bauerfield (1972-2019)	41	788.5	30	1022.9	29	7	43
Port Vila (1953-2019)	45	751.9	33	990.0	22	13	54
Whitegrass (1972-2019)	40	492.6	32	670.1	28	5	38
Aneityum (1952-2019)	40	732.4	34	975.0	26	4	46

TABLE 4: Seasonal Climate Outlooks using POAMA2 for January to March 2020

Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)			
	Northern Region							
Sola	39	907.0	39	1142.0	22			
Pekoa	39	731.0	25	955.0	36			
Lamap	39	623.0	25	722.0	36			
	Southern Region							
Bauerfield	24	798.0	30	1021.0	46			
Port Vila	24	736.0	30	932.0	46			
Whitegrass	25	433.0	39	661.0	36			
Aneityum	24	715.0	33	975.0	43			

Summary Statements

Rainfall for November 2019:

Rainfall was normal at Pekoa and Lamap, and below normal at Bauerfield, Port Vila, Whitegrass and Aneityum. Whitegrass recorded its driest November in 49 years, and Aneityum recorded its second driest November in 68 years.

Unfortunately rainfall for Sola was not available for November.

Accumulated rainfall for September to November 2019, including outlook verification:

Accumulated rainfall for Pekoa, Port Vila and Whitegrass was below normal, normal at Lamap and Bauerfield, and above normal at Aneityum. Aneityum recorded the highest rainfall for this three months period in record for the past 68 years.

Outlook verification was consistent at three sites, near-consistent at two sites, and inconsistent at one site.

Outlooks for January to March 2020:

1. SCOPIC:

For all stations, the outlook for January to March 2020 shows below normal as the most likely outcome, with normal the next most likely. Above normal is the least likely. Confidence is high to very high.

2. POAMA:

The outlook for Bauerfield, Port Vila and Aneityum shows above normal as the most likely outcome, with normal the next most likely and below normal the least likely.

At Sola the outlook shows a near-equal chance of below normal or normal rainfall, with above normal the least likely.

At Pekoa and Lamap, the outlook is mixed with near-equal chances of below normal and above normal rainfall; normal is the least likely.

At Whitegrass, the outlook indicates a near-equal chance of normal or above normal rainfall, with below normal the least likely.

NB: The X LEPS % score has been categorised as follows:

 $\mbox{Very Low: } X < 0.0 \mbox{ Low: } 0 \le X < 5 \mbox{ Moderate } 5 \le X < 10 \mbox{ Good: } 10 \le X < 15 \mbox{ High: } 15 \le X < 25 \mbox{ High: } 15 \le$

Very High: $25 \le X < 35$ Exceptional: $X \ge 35$

 Table: 5 Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders

Product	Date: November 2019	Stakeholder	Total Number of Participants	Number of male	Number of female
Vanuatu Climate Update	28 th	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), Others.	206	104	102
EAR Watch	28th	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), Others.	206	104	102
Vanuatu Ocean Outlook	28th	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), Others.	206	104	102
	Total	22 Stakeholders	206 Participants + General Public	104 Male stakeholder participants	102 female stakeholder participants