Pacific Islands - Online Climate Outlook Forum (OCOF) No. 124

Country Name: Fiji
TABLE 1: Monthly Rainfall

Station (include data period)			December 2017				
	October 2017 Total	November 2017 Total	Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking
Western Division							
Penang Mill (1910-2017)	7.1	187.2	**134.1**	149.8	268.7	210.3	31/105
Lautoka Mill (1900-2017)	24.5	131.0	**187.3**	108.1	212.4	150.7	71/118
Nadi Airport (1942-2017)	28.2	138.8	**202.4**	119.1	234.3	181.8	44/76
Viwa (1978 -2017)	40.7	-	**88.6**	89.5	176.0	143.2	13/36
Central Division							
Laucala Bay (Suva) (1942-2017)	150.2	661.5	**411.3**	210.7	325.5	254.3	61/76
Nausori Airport (1957-2017)	126.2	487.4	**340.7**	214.2	320.4	251.8	45/62
Tokotoko (Navua) (1945-2017)	236.5	871.5	**347.9**	220.8	392.5	282.3	41/72
Eastern Division							
Lakeba (1950-2017)	72.6	381.5	**114.2**	135.6	210.1	168.5	19/68
Vunisea (Kadavu) (1931-2017)	-	555.6	**172.4**	107.3	179.2	140.7	52/81
Ono-i-Lau (1943-2017)	131.8	174.6	**124.0**	87.1	174.4	117.8	38/70
Northern Division							
Labasa Airport (1946-2017)	47.0	267.1	**213.0**	144.0	278.7	205.8	31/60
Savusavu Airfield (1956-2017)	80.7	235.5	**197.2**	143.1	241.9	169.6	36/61
Rotuma (1912-2017)	625.1	369.3	**192.0**	242.9	373.8	307.8	19/103

Period: *below normal/normal/above normal

M - Missing

TABLE 2: Three-monthly Rainfall
October to December 2017
Predictors and Period used: NINO3.4 SST Anomalies: July to August 2017

Station	Three-month Total	33%tile Rainfall (mm)	67%tile Rainfall (mm)	Median Rainfall (mm)	Ranking	Forecast probs.* (include LEPS)	Verification* (Consistent, Near-consistent or Inconsistent)
Western Division							
Penang Mill (1910-2017)	328.4	351	576	462	30/103	29:**37**:34 (14.7)	Near-consistent
Lautoka Mill (1900-2017)	342.8	275	448	358	57/118	29:**39**:32 (20.8)	Consistent
Nadi Airport (1942-2017)	369.4	326	487	380	35/75	28:**39**:33 (19.6)	Consistent
Viwa (1978 -2017)	-	244	364	317	-	14:**45**:41 (28.5)	Missing
Central Division							
Laucala Bay (Suva) (1942-2017)	1223.0	539	835	706	70/76	32:**35**:33 (4.6)	Near-Consistent
Nausori Airport (1957-2017)	954.3	559	831	682	45/61	31:**35**:34 (5.8)	Near-Consistent
Tokotoko (Navua) (1945-2017)	1455.9	769	1032	873	68/72	33:**35**:32 (5.7)	Near-Consistent
Eastern Division							
Lakeba, Lau (1950-2017)	568.3	327	532	409	50/68	31:**36**:33 (10.4)	Near-Consistent
Vunisea (Kadavu) (1931-2017)	-	313	506	422	-	34:**36**:30(10.9)	Missing
Ono-i-lau (1943-2017)	430.4	215	411	348	48/70	27:**40**:33 (23.5)	Near-Consistent
Northern Division							
Labasa Airport (1956-2017)	527.1	362	623	485	36/57	25:**41**:34 (23.4)	Consistent
Savusavu Airfield (1956-2017)	513.4	420	622	511	31/60	28:**37**:35 (14.2)	Consistent
Rotuma (1912-2017)	1186.4	818	1054	939	85/102	32:**34**:34 (1.1)	Near-Consistent

Period:* below normal/normal/above normal

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*Forecast is consistent when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is near-consistent when observed and predicted (tercile with the highest probability) differ by only one category (i.e. terciles 1 and 2 or terciles 2 and 3).

Forecast is inconsistent when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

M - Missing

TABLE 3: Seasonal Climate Outlooks using SCOPIC for February to April 2018– Tercile Method

Station	Below Normal (prob)	33%ile rainfall (mm)	Normal (prob)	66%ile rainfall (mm)	Above Normal (prob)	LEPS (%)	Hit-rate (%)
Western Division							
Penang Mill (1910-2017)	19	827.4	37	1092.1	**44**	9.9	56.9
Lautoka Mill (1900-2017)	21	681.3	38	934.0	**41**	6.7	46.3
Nadi Airport (1942-2017)	18	662.9	36	910.4	**46**	15.4	50.7
Viwa (1978 -2017)	14	590.5	37	757.2	**49**	15.7	51.4
Central Division							
Laucala Bay (Suva) (1942-2017)	32	869.9	**39**	1061.4	29	-1.3	32.8
Nausori Airport (1957-2017)	**37**	893.8	**35**	1044.3	28	0	39.3
Tokotoko (Navua) (1945-2017)	33	998.8	**39**	1206.6	28	-0.9	35.4
Eastern Division							
Lakeba (1950-2017)	20	643.9	**40**	821.9	**40**	7.7	29.7
Vunisea (Kadavu) (1931-2017)	18	631.3	**40**	827.0	**42**	10.3	50.0
Ono-i-Lau (1943-2017)	27	475.4	32	707.8	**41**	2.1	41.0
Northern Division							
Labasa Airport (1956-2017)	24	815.9	**38**	1142.7	**38**	3.1	41.7
Savusavu Airfield (1956-2017)	26	638.9	**37**	834.5	**37**	1.5	29.3
Rotuma (1912 -2017)	29	897.9	33	1083.3	**38**	0.3	35.8

Seasonal Climate Outlook:

February to April 2018 - Median Table:

Predictors and Period used: NINO3.4 SST Anomalies: November to December 2017

Station	Below Median (prob)	Median rainfall (mm)	Above Median (prob)	LEPS (%)	Hit-rate (%)
Western Division					
Penang Mill (1910-2017)	38	992.8	**62**	9.4	66.2
Lautoka Mill (1900-2017)	39	809.4	**61**	8.4	61.2
Nadi Airport (1942-2017)	39	797.2	**61**	6.9	62.7
Viwa (1978 -2017)	30	691.2	**70**	19.4	65.7
Central Division					
Laucala Bay (Suva) (1942-2017)	50	945.9	50	-1.5	11.9
Nausori Airport (1957-2017)	**55**	960.5	45	0.4	55.7
Tokotoko (Navua) (1945-2017)	**55**	1101.8	45	-0.7	53.8
Eastern Division					
Lakeba (1950-2017)	40	699.4	**60**	6.2	62.5
Vunisea (Kadavu) (1931-2017)	40	734.5	**60**	5.9	60.6
Ono-i-Lau (1943-2017)	40	585.0	**60**	4.6	63.9
Northern Division					
Labasa Airport (1956-2017)	41	1028.0	**59**	4.1	63.3
Savusavu Airfield (1956-2017)	45	697.2	**55**	0	56.9
Rotuma (1912 -2017)	45	1004.8	**55**	0.8	53.7

TABLE 4: Seasonal Climate Outlooks using POAMA2 for February to April 2018

Station	Lower Tercile (prob)	33%ile rainfall (mm)	Middle Tercile (prob)	66%ile rainfall (mm)	Upper Tercile (prob)
Lakeba	24	545	24	757	**52**
Nadi	30	657	21	856	**49**
Nabouwalu	27	735	18	1042	**55**
Udu Point	33	709	18	928	**49**
Vunisea	30	618	21	846	**49**
Suva	30	852	21	983	**49**
Rotuma	18	845	33	1046	**49**

Summary Statements

Rainfall for December 2017:

Majority of the stations recorded *above normal* rainfall in the Central Division, while *normal to below normal* rainfall was recorded at the rest of the stations, including Rotuma.

Accumulated rainfall for October to December 2017 & outlook verification:
Normal to *above normal* rainfall recorded across the country, except for Penang, which recorded *below normal* rainfall.

The rainfall outlooks were near- consistent at seven of the sites, four consistent and two stations had missing observations.

Outlooks for February to April 2018:

1. **SCOPIC:**
   The SCOPIC rainfall outlook for February to April 2018 shows:
   - **Western Divisions***:* the outlook shows *above normal* as the most likely outcome with *normal* the next most likely. *Below normal* is the least likely;
   - **Central Division**: the outlook offers little guidance as the chances of *above-normal, normal* and *below-normal* rainfall are similar;
   - **Eastern Division**: the outlook shows a near- equal likelihood of *normal* and *above normal* rainfall. *Below- normal* is the least likely.
   - **Northern Division**: the outlook shows near-equal likelihood of *above normal* and *normal* rainfall. *Below normal* is the least likely.
   - **Rotuma**: the outlook offers little guidance as the chances of *above normal, normal and below normal* are similar.

   Moderate to high confidence in the Western Division, *low to moderate* confidence in the Eastern and Northern Division and *very low* confidence in the Central Division. *Low* confidence at Rotuma.

2. **POAMA**
   The POAMA outlook shows:
   - *Above normal* rainfall is the favoured outcome across the Fiji Group.

NB: The X LEPS % score has been categorised as follows:
Very Low: X < 0.0   Low: 0 ≤ X < 5   Moderate 5 ≤ X < 10   Good: 10 ≤ X< 15   High: 15≤ X < 25
Very High: 25 ≤X < 35   Exceptional: X ≥ 35