Pacific Islands - Online Climate Outlook Forum (OCOF) No. 151

Country: Fiji

TABLE 1: Monthly Rainfall

Station (include data period)	Jan-2020	Feb-2020	Mar-2020				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Western Division							
Penang Mill (1910-2020)	127.5	176.8	447.4	282.6	456.8	376.8	75/111
Lautoka Mill (1900-2020)	114.1	245.6	594.1	228.1	413.5	300.6	106/120
Nadi Airport (1942-2020)	78.2	116.8	785.4	245.6	412.5	319.2	**76/77**
Central Division							
Laucala Bay (Suva) (1942-2020)	157.7	86.4	436.4	297.5	420.4	340.8	55/79
Nausori Airport (1957-2020)	162.1	119.1	716.9	307.6	431.8	358.1	**62/64**
Tokotoko (Navua) (1945-2020)	327.5	94.0	524.2	312.6	438.9	378.4	61/76
Eastern Division							
Lakeba (1950-2020)	121.4	191.2	209.4	212.3	331.8	264.0	22/70
Vunisea (Kadavu) (1931-2020)	132.9	103.6	575.1	228.6	306.4	284.9	**80/84**
Ono-i-Lau (1943-2020)	53.1	35.1	363.7	159.7	294.4	224.0	61/73
Northern Division							
Labasa Airport (1946-2020)	181.3	163.6	298.9	264.1	432.7	331.2	27/64
Savusavu Airfield (1956-2020)	142.9	114.0	101.7	183.5	275.7	229.2	**3/63**
Udu Point	311.7	162.0	294.9	255.4	364.0	301.0	35/73
Rotuma (1912-2020)	281.5	194.8	352.0	275.3	413.0	326.4	59/107

TABLE 2: Three-month Rainfall for January to March 2020

Station	Three-month Total		33%tile	67%tile	Median	Rank	SCOPIC forecast probabilities based on NINO3.4 October-November 2019				Verification: Consistent, Near-consistent, Inconsistent?
	Rainfall (mm)						B-N	N	A-N	LEPS	
Western Division											
Penang Mill (1910-2020)	751.7	Below normal	1040.2	1250.5	1128.6	21/111	**50**	35	15	26	Consistent
Lautoka Mill (1900-2020)	953.8	Normal	860.1	1136.4	1020.3	62/120	**47**	37	16	19	Near-consistent
Nadi Airport (1942-2020)	980.4	Normal	808.6	1129.4	924.2	45/77	**47**	36	17	22	Near-consistent
Central Division											
Laucala Bay (Suva) (1942-2020)	680.5	Below normal	858.6	1071.6	1002.2	12/79	**36**	33	31	-1	Consistent
Nausori Airport (1957-2020)	998.1	Normal	888.2	1077.4	960.9	34/64	**37**	29	34	-1	Near-consistent
Tokotoko (Navua) (1945-2020)	945.7	Normal	911.9	1216.8	1063.1	30/75	36	27	**37**	-1	Near-consistent
Eastern Division											
Lakeba (1950-2020)	522.0	Below normal	659.7	884.8	766.4	11/69	**44**	35	21	14	Consistent
Vunisea (Kadavu) (1931-2020)	811.6	Normal	669.7	876.6	785.9	54/84	**40**	29	31	1	Near-consistent
Ono-i-Lau (1943-2020)	451.9	Below normal	487.2	753.4	619.5	16/71	**39**	33	28	1	Consistent
Northern Division											
Labasa Airport (1947-2020)	643.8	Below normal	963.2	1302.8	1109.2	9/62	**48**	26	26	16	Consistent
Savusavu Airfield (1957-2020)	358.6	Below normal	673.9	857.6	787.0	**1/59**	**42**	30	28	7	Consistent
Udu Point	768.6	Below normal	817.6	1044.7	980.4	20/71	**46**	29	25	13	Consistent
Rotuma (1912-2020)	828.3	Below normal	894.5	1152.1	1037.5	24/107	**44**	38	18	15	Consistent

TABLE 3: Seasonal Climate Outlooks using SCOPIC for May to July 2020

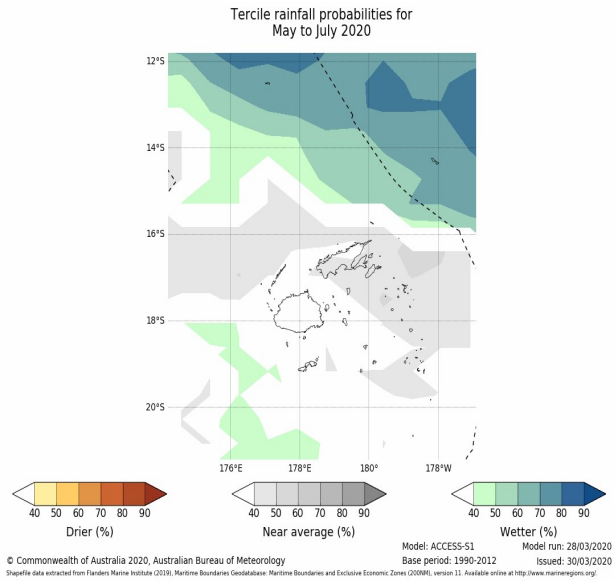
Predictor and Period used: NINO3.4 for February to March 2020

Station	Below Median (prob)	Median Rainfall (mm)	Above Median (prob)		LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division						
Penang Mill (1910-2020)	60	252.8	40		9	61
Lautoka Mill (1900-2020)	70	175.9	30		26	73
Nadi Airport (1942-2020)	62	174.5	38		12	64
Central Division						
Laucala Bay (Suva) (1942-2020)	67	507.8	33		20	64
Nausori Airport (1957-2020)	73	501.4	27		32	75
Tokotoko (Navua) (1945-2020)	61	641.1	39		9	62
Eastern Division						
Lakeba (1950-2020)	62	318.4	38		12	55
Vunisea (Kadavu) (1931-2020)	56	391.3	44		3	59
Ono-i-Lau (1943-2020)	61	312.0	39		10	64
Northern Division						
Labasa Airport (1946-2020)	61	199.0	39		12	62
Savusavu Airfield (1956-2020)	64	364.6	36		18	72
Udu Point	60	367.2	40		8	59
Rotuma (1912-2020)	47	792.6	53		-1	52

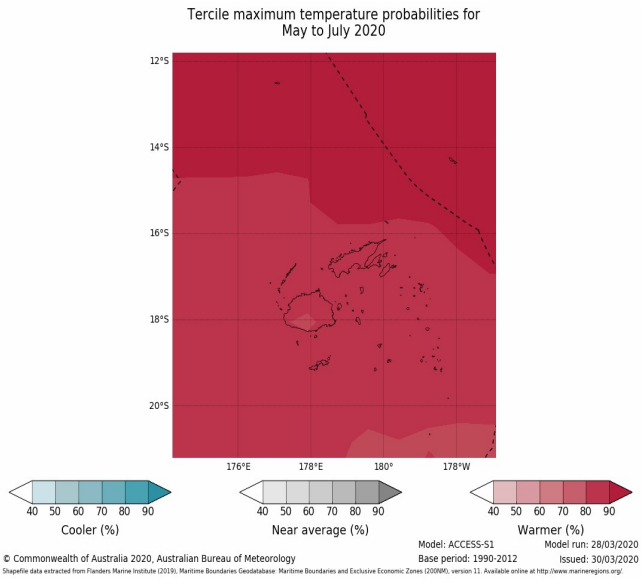
Station	Below Normal (prob)	33%ile Rainfall (mm)	Normal (prob)	67%ile Rainfall (mm)	Above Normal (prob)	LEPS (%) [whole numbers]	Hit-rate (%) [whole numbers]
Western Division							
Penang Mill (1910-2020)	46	165.0	34	301.1	20	14	51
Lautoka Mill (1900-2020)	48	139.7	31	218.2	21	19	47
Nadi Airport (1942-2020)	44	140.4	34	238.7	22	13	47
Central Division							
Laucala Bay (Suva) (1942-2020)	45	444.1	35	614.5	20	15	49
Nausori Airport (1957-2020)	46	427.3	33	580.1	21	20	51
Tokotoko (Navua) (1945-2020)	48	551.8	34	742.9	18	21	52
Eastern Division							
Lakeba (1950-2020)	47	247.0	31	363.6	22	19	49
Vunisea (Kadavu) (1931-2020)	38	339.8	36	450.4	26	2	49
Ono-i-Lau (1943-2020)	44	236.9	34	370.5	22	13	48
Northern Division							
Labasa Airport (1946-2020)	44	153.4	35	262.5	21	14	46
Savusavu Airfield (1956-2020)	44	296.6	33	453.4	23	16	47
Udu Point	41	302.7	31	465.9	28	5	39
Rotuma (1912-2020)	31	689.8	33	877.6	36	-1	38

Monthly and Seasonal Climate Outlooks using ACCESS-S for May to July 2020

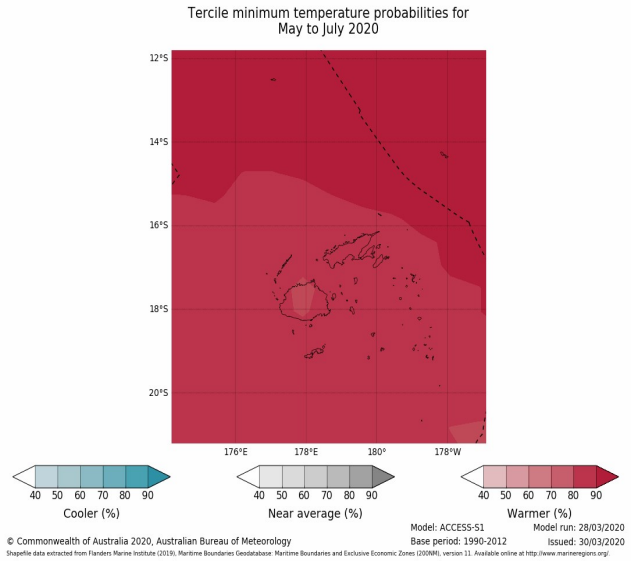
Seasonal Rainfall



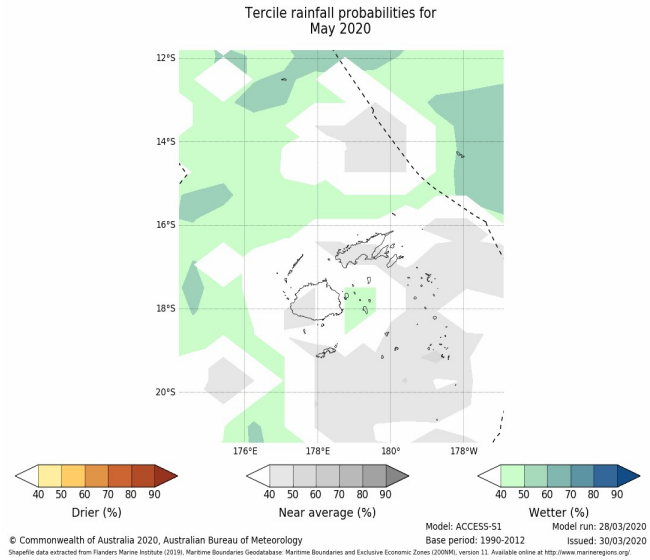
Seasonal maximum temperature



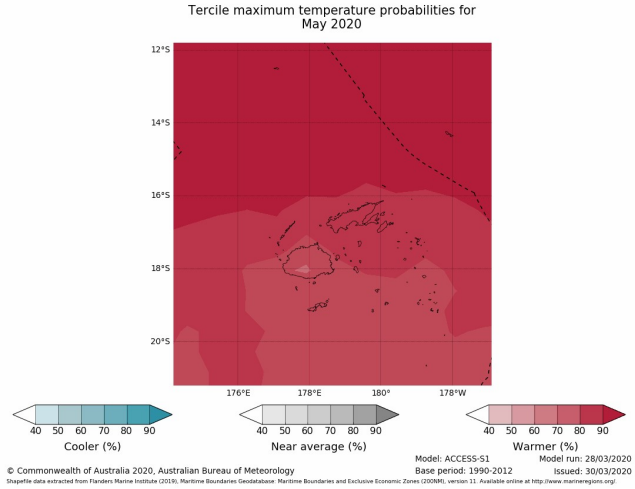
Seasonal minimum temperature



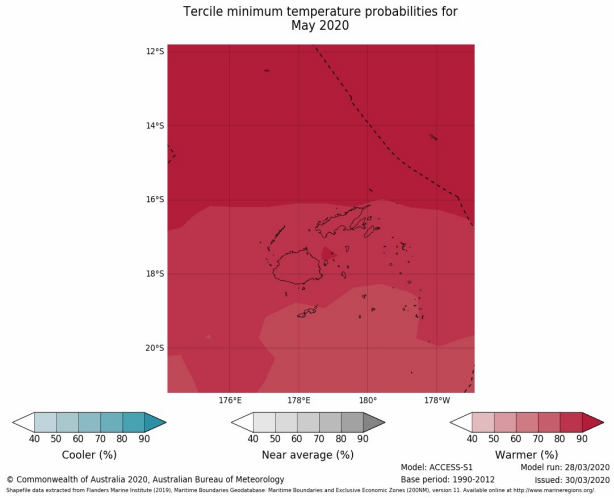
Monthly rainfall



Monthly maximum temperature



Monthly minimum temperature



Summary Statements

Rainfall for March 2020:

Above normal rainfall was recorded across the Central Division, Lautoka Mill and Nadi Airport in the Western Division, and Vunisea and Ono-i-Lau in the Eastern Division. *Near normal* rainfall was received at Labasa Airport and Udu Point in the Northern Division, Penang Mill in the Western Division, and Rotuma. Lakeba (Eastern Division) and Savusavu Airfield (Northern Division) were the only sites to register *below normal* rainfall.

It was the 2nd, 3rd and 5th wettest March on record at Nadi Airport, Nausori Airport and Vunisea, respectively. On the other hand, it was the 3rd driest March on record at Savusavu Airfield.

Accumulated rainfall for January to March 2020, including outlook verification:

Below normal rainfall was recorded across the Northern Division, Penang Mill in the Western Division, Laucala Bay in the Central Division, Lakeba and Ono-i-Lau in the Eastern Division, and Rotuma. *Near normal* rainfall was registered at Lautoka Mill and Nadi Airport in the Western Division, Nausori Airport and Tokotoko in the Central Division, and Vunisea.

It was the driest January to March period on record at Savusavu Airfield.

The rainfall outlooks were 'Consistent' at eight sites and 'Near-Consistent' at five sites.

Outlooks for May to July 2020:

1. **SCOPIC:**

    - **Western, Central, Eastern and Northern Division:** The outlook shows *below normal* rainfall as the most likely outcome, with *near normal* as the next most likely and *above normal* as the least likely.
    - **Rotuma:** The outlook offers little guidance as the chances of *above normal*, *normal* and *below normal* rainfall are similar.

2. **ACCESS-S:**

    Seasonal rainfall (May to July 2020):

    Near average rainfall is favoured in most of the Fiji, with *above average* rainfall likely at Rotuma.

    Seasonal maximum temperature (May to July 2020):

    Above average maximum air temperatures likely across the Fiji region.

    Seasonal minimum temperature (May to July 2020):

    Minimum temperatures are likely to be *above average* across Fiji region.

    Monthly rainfall (May 2020):

    Near average rainfall favoured in most of the Fiji region, with *above average* rainfall likely at Rotuma.

    Monthly maximum and minimum temperatures (May 2020):

    A Warmer than average month is favoured across the Fiji region.

    Monthly minimum temperature (May 2020):

    Minimum air temperatures are likely to be *warmer than average* across the Fiji region.

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

Very Low: $X < 0.0$ Low: $0 \leq X < 5$ Moderate $5 \leq X < 10$ Good: $10 \leq X < 15$ High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

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

Product	Date: March 2020	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	06/03/20	General public	140	106	34
EAR Watch	06/03/20	Humanitarian partners	122	96	26
Climate Outlook for Monasavu	10/03/20	Energy Fiji Limited	13	13	-
Fiji Climate Outlook	12/03/20	General public	124	93	31
Ocean Outlook	18/03/20	Reef Explorer Fiji Limited, Maritime Safety Authority of Fiji, World Wildlife Fund, Wildlife Conservation Society, Ministry of Fisheries and Tourism Sector	36	29	7
ENSO Update	25/03/20	General public	140	106	34
Meteorological Data Request	01/03/20 to 31/03/20	A range of stakeholders	58	49	9
		Total	633	492	141