# FIJI METEOROLOGICAL **SERVICE**

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# Fiji Climate Summary November 2025

Services

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### IN BRIEF

Typical wet season rainfall was observed across most. On temperatures, the month's warmest day-time temperparts of the country in November. Rainfall ranged from below average to well above average. Most stations recorded wetter than usual conditions. Penang Mill, Dobuilevu, Ono-i-Lau, Savusavu Airfield, and Matei Airfield received more than twice their normal monthly rainfall. Yasawa-i-Rara and Labasa Airfield recorded more than three times their usual totals, while Vanuabalavu recorded four times its normal rainfall. Rarawai Mill (Ba), Lakeba, and Rotuma received near normal rainfall, while Vunisea was the only station with below normal rainfall.

Overall, out of the 25 rainfall monitoring stations that reported in during the compilation of this bulletin, 8 station reported well above average, 3 average, 13 above average, and 1 below average rainfall (Table 2, Figures 1 -5). November's highest rainfall of 591.5mm was recorded at Levuka, followed by 590.8mm at Labasa Airfield, 578.5mm at Dobuilevu, 536.5mm at Navua, and 532.3mm at Monasavu.

ature of 36.7°C was observed in Momi on the 8<sup>th</sup>, followed by RKS Lodoni with 36.3°C on the 23<sup>rd</sup>, and Rarawai Mill (Ba) with 36.2°C on the 1st. The month's lowest night-time temperature of 13.5°C was recorded at Nadarivatu on the 8<sup>th</sup>, followed by Monasavu with 15.5° C on the 11<sup>th</sup>, Labasa Airfield with 15.9°C on the 25<sup>th</sup>, and Vanuabalavu with 17.4°C on the 9<sup>th</sup>.

At Nadi Airport, Matei Airfield, and Savusavu Airfield, the winds were mostly predominantly southeasterly, while easterly winds were dominant at Nausori Airport (Figure 8).

Above normal sea surface temperature anomalies were recorded across Fiji waters during November (Figure 9). Above normal sea level anomalies persisted across the Fiji Group during November (Figure 11).

Flash flooding was reported in the Central, Northern, and Western Divisions, and a landslide in the Central Division, following heavy and continuous rainfall (Figures 12a –12t). Hail was also recorded in some places (Figures 13a –13d).

# **WEATHER PATTERNS**

November marked the start of Fiji's wet and cyclone season and was characterised by warmer temperatures, high humidity, and frequent rain. The weakening of the subtropical ridge allowed active troughs of low pressure to dominate, resulting in alternating settled and unsettled conditions across the country.

Early in the month, moist easterly winds brought brief showers to windward areas, while leeward regions saw fine mornings and afternoon showers. Very high temperatures were recorded in Ba, reaching 35.9°C on the 1st and 35.8°C on the 2<sup>nd</sup>. A trough developed over the eastern group and later moved westwards, producing significant rainfall, including 93.7mm at Penang and 94.5mm at Navua on the 4th.

From the 6<sup>th</sup> to 12<sup>th</sup>, weak troughs and shifting easterly to northeasterly winds produced occasional showers in the east and settled weather elsewhere. More widespread rain developed on the 8<sup>th</sup> and 9<sup>th</sup> as another trough passed through, giving over 50mm in several western and inland locations. A stronger trough arrived on the 13<sup>th</sup>, causing thunderstorms across the west and then the rest of the

country. Severe thunderstorms on the 15th and 16th brought hail and gusty winds to eastern Viti Levu, with Dobuilevu recording 140.5mm of rain. Although conditions briefly settled, afternoon thunderstorms on the 17<sup>th</sup> again produced hail in Nadarivatu and parts of Cakaudrove.

Heavy rainfall returned on the 19th as another trough developed over the east. This system weakened on the 20<sup>th</sup>, but further trough activity from the 22<sup>nd</sup> to 27<sup>th</sup> brought widespread rain, strong winds in the Northern Division and Lau/Lomaiviti, and flash flooding, especially in Vanua Levu. Exceptional rainfall on the 24th included 206mm at Labasa and 188.5mm at Sagani. By the 27<sup>th</sup>, winds shifted to the east and southeast as the trough slowly weakened and lingered through the 29<sup>th</sup>. On the 30<sup>th</sup>, southeasterly winds brought trade showers to windward areas while leeward regions had fine weather with afternoon showers.

Rotuma experienced changing east to southeast winds and passing low pressure systems, producing a mix of settled and rainy conditions throughout the month.

\*Previously known as the Fiji Islands Weather Summary and Monthly Weather Summary

# 3. RAINFALL

Overall, rainfall activity increased during the month, ranging from below average to well above average. Most stations experienced wetter than usual conditions, with Penang Mill, Dobuilevu, Ono-i-Lau, Savusavu Airfield, and Matei Airfield recording more than twice their normal monthly rainfall. Yasawa-i-Rara and Labasa Airfield recorded more than three times their normal monthly rainfall, while Vanuabalavu recorded four times its normal monthly rainfall. Rarawai Mill (Ba), Lakeba, and Rotuma received near normal rainfall, while Vunisea was the only station that recorded below normal rainfall.

Overall, out of the 25 rainfall monitoring stations that reported in during the compilation of this bulletin, 8 stations reported *well above average*, 3 *average*, 13 *above average*, and 1 *below average* rainfall (Table 2, Figures 1-5).

The month's highest rainfall of 591.5mm was recorded at Levuka, followed by 590.8mm at Labasa Airfield, 578.5mm at Dobuilevu, 536.5mm at Navua, 532.3mm at Monasavu, 527.5mm at Vanuabalavu, 508.5mm at Matei Airfield and 459.5mm at Nasinu. On the other hand, Sigatoka recorded the month's lowest total monthly rainfall of 84.5mm, followed by Vunisea with 115.7mm, Tavua with 147.5mm, Yaqara with 148.0mm, Lakeba with 152.8mm, and Rarawai Mill (Ba) with 161.7mm (Table 2).

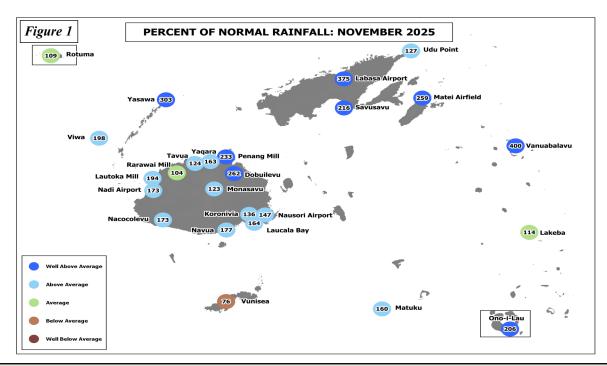
The highest 24-hour rainfall of 209.0mm was recorded at Levuka on the 8<sup>th</sup>, followed by Labasa Airfield with

206.0mm on the 24<sup>th</sup>, Matei Airfield with 188.0mm on the 24<sup>th</sup>, Vanuabalavu with 156.0mm on the 24<sup>th</sup>, Dobuilevu with 141.0mm on the 14<sup>th</sup>, and Savusavu Airfield with 101.0mm on the 24<sup>th</sup>.

Notably, a series of low-pressure troughs forming during the month caused flash flooding at several low-level crossings in the Central Division on the 16<sup>th</sup> and 19<sup>th</sup>, the Western Division on the 24<sup>th</sup> and 26<sup>th</sup>, and the Northern Division on the 25<sup>th</sup>. This led to the closure of crossings, making some areas inaccessible (Figures 12a - 12t).

Monasavu recorded the highest number of rain days (rainfall≥0.1mm) with 29 days, followed by Nausori Airport and Navua both with 25 days, Labasa Airfield, Nasinu, RKS Lodoni and Laucala Bay (Suva) all with 24 days, Levuka and Koronivia both with 23 days, and Savusavu Airfield and Matuku both with 21 days. Consequently, Rarawai Mill (Ba) recorded the least number of rainfall days with 9 days, followed by Lautoka Mill and Yaqara both with 11 days, Tavua with 13 days, Sigatoka, Lakeba, Ono-i-Lau and Momi all with 14 days.

Labasa Airfield and Vanuabalavu recorded their highest daily rainfall of 206.2mm and 155.6mm, respectively, since observations began in 1956 and 1985. Vanuabalavu also recorded its highest monthly rainfall of 527.5mm since observations began in 1985 (Table 1).



Normal: Long term average from 1991 to 2020 Well Below Average: Rainfall less than 40% of normal Below Average: Rainfall between 40 to 79% Rain Day: Rainfall ≥ 0.1mm Average: Rainfall between 80 to 119% Above Average: Rainfall between 120 to 199% Well Above Average: Rainfall greater than or equal to 200% of normal

#### 4. **AIR TEMPERATURES**

#### A. **Maximum Day-time Air Temperatures**

Generally near to above normal day-time tempera- Above to below normal night-time temperatures were time for the analysis of data, 10 recorded anomalies  $\geq +0.5$ °C, 9 recorded anomalies within  $\pm 0.5$ °C and 2 recorded anomalies < -0.5°C.

On average, the warmest days were recorded at RKS Lodoni with 33.6°C, followed by Momi with 33.5°C, Rarawai Mill (Ba) with 32.5°C, Korolevu with 32.2° C, Yasawa-i-Rara and Yaqara both with 31.6°C, and Viwa and Labasa Airfield both with 31.5°C. Consequently, Nadarivatu recorded the coolest days on average with 25.1°C, followed by Monasavu with 25.6°C, Levuka with 23.8°C. Nacocolevu with 27.6°C, Ono-i-Lau with 29.0°C, Airfield with 29.5°C.

The highest day-time temperature of 36.7°C was observed in Momi on the 8<sup>th</sup>, followed by RKS Lodoni with 36.3°C on the 23<sup>rd</sup>, Rarawai Mill (Ba) with 36.2° C on the 1<sup>st</sup>, Korolevu with 34.7°C on the 12<sup>th</sup>, Levuka with 34.5°C on the 14th, and Nacocolevu Yasawa-i-Rara, and Savusavu Airfield all with 34.0°C on the 2<sup>nd</sup>, 7<sup>th</sup> and 23<sup>rd</sup>, respectively.

The coolest daytime temperature was observed at Nacocolevu with 20.9°C on the 26th, followed by Nadarivatu with 22.0°C on the 26<sup>th</sup>, Monasavu with 22.5°C on the 5<sup>th</sup>, Nadi Airport with 23.8°C on the 23<sup>rd</sup>, Matuku with 24.8°C on the 26<sup>th</sup> and Koronivia with 25.4°C on the 16<sup>th</sup>.

There were no new day-time temperature records established during the month.

#### В. **Minimum Night-time Air Temperatures**

tures were observed across the country during the recorded at majority of the climate stations during Nomonth. Out of the 21 climate stations that reported in vember. For the 21 stations that reported in, 6 recorded anomalies  $\geq +0.5$ °C, 9 recorded anomalies within  $\pm$  $0.5^{\circ}$ C and 6 recorded anomalies  $\leq -0.5^{\circ}$ C.

> The coolest nights on average were at Nadarivatu with 17.2°C, followed by Monasavu with 18.4°C, Vunisea with 20.1°C, Lakeba with 20.4°C, Matei Airfield with 20.6°C, and Vanuabalavu with 20.9°C. Consequently, on average, the warmest nights were observed at RKS Lodoni with 25.5°C, Rotuma with 25.1°C, Momi with 24.9°C, Viwa with 24.2°C, Matuku with 23.9°C, and

Vunisea with 29.2°C, Matuku with 29.4°C, and Matei The month's coolest night time temperature was observed at Nadarivatu on the 8th, with a temperature of 13.5°C, followed by Monasavu with 15.5°C on the 11<sup>th</sup>, Labasa Airfield with 15.9°C on the 25<sup>th</sup>, Vanuabalavu with 17.4°C on the 9<sup>th</sup>, Lakeba and Vunisea both with 18.0°C on the 2<sup>nd</sup> and 6<sup>th</sup>, respectively, and Rarawai Mill (Ba) with 18.3°C on the 5<sup>th</sup>.

> The warmest night-time temperature was recorded at Nausori Airport with 28.9°C on the 4<sup>th</sup>, followed by 28.5°C at RKS Lodoni on the 2<sup>nd</sup>, Momi with 26.6°C on the 21st, Lakeba with 26.1°C on the 24th, and Rotuma, Viwa and Savusavu airfield all with 26.0°C on the 1<sup>st</sup>, 2<sup>nd</sup> and 21<sup>st</sup>, respectively.

> Nausori Airport recorded its highest daily minimum temperature of 28.9°C since observations began in 1956 (Table 1).

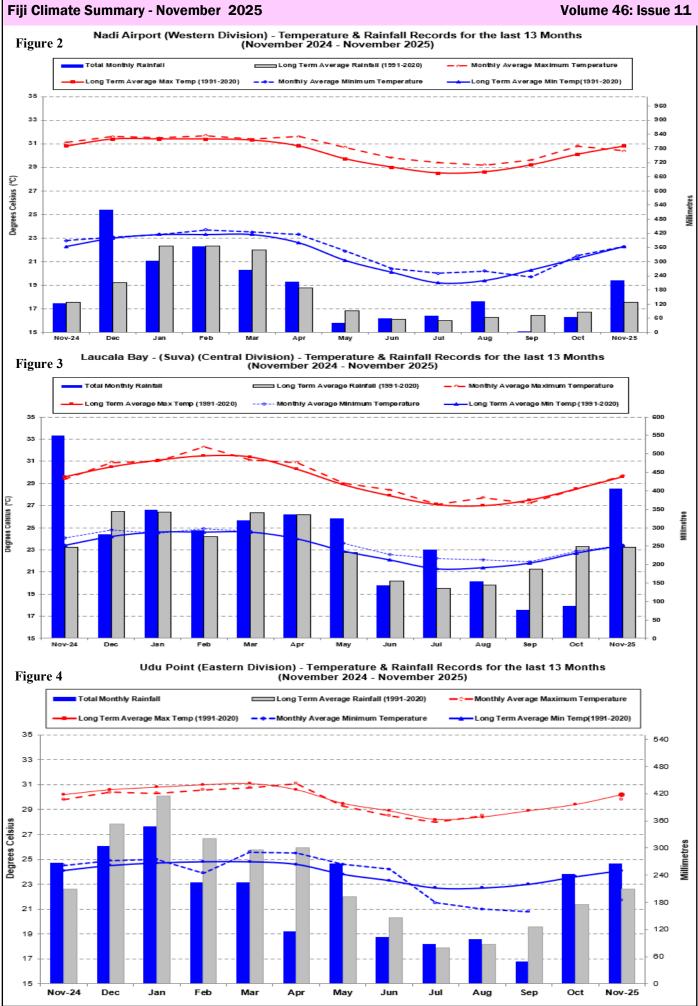
### TABLE 1. CLIMATE RECORDS ESTABLISHED IN NOVEMBER 2025

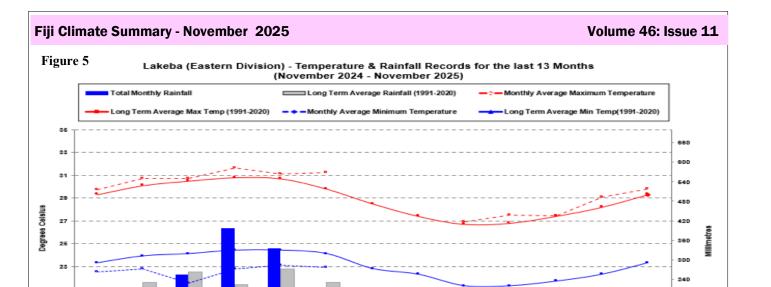
<u>Element</u>	<u>Station</u>	Observed (record)	<u>On</u>	<u>Rank</u>	Previous (record)	<u>Year</u>	Records Began
Daily Maximum Rainfall	Labasa Airfield	206.2mm	24 <sup>th</sup>	New High	153.0mm	1975	1956
Daily Maximum Rainfall	Vanuabalavu	155.6mm	24 <sup>th</sup>	New High	114.2	1996	1985
Monthly Total Rainfall	Vanuabalavu	527.5mm		New High	440.7	1990	1985
Daily Minimum Temperature	Nausori Airport	28.9°C	4 <sup>th</sup>	New High	26.6°C	1976	1956

Note: All comparisons in this summary are with respect to "Climatic Normals". This is defined to be the average climate condition over a 30-year period. Fiji uses 1991-2020 period as its "climatic normal" period.

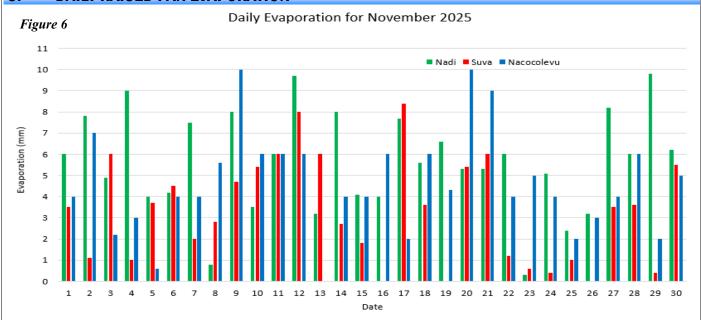
# TABLE 2. DAILY CLIMATE REPORTING SITES: SUMMARY FOR NOVEMBER 2025

```
RAINFALL
                                                                  AIR TEMPERATURES
                                                                                                      SUNSHINE
                                                        AVERAGE DAILY
                        TOTAL
                                   RAIN MAX.
                                                                               EXTREME
                                                                                                 TOTAL
                                 * DAYS FALL
                                                    MAX. # MIN. #
                                                                                    MIN.
                                          MM ON
                                                                               C ON
                         MM
                                  %
                                                                         C
                                                                                         C ON
                                                                                                HRS
                                                                                                        %
NADI AIRPORT
                        219.1 173 15
                                                   30.4 -0.5 22.3
                                                                      0.0 33.2 19 20.3 10
                                                                                                       91
                                                   29.7 0.1 23.4
                                                                      0.0 31.4 19 20.7 18
LAUCALA BAY
                        406.1 164 24
                                           64 16
                                                                                                 134
                                                                                                       84
                        218.7 173 17
                                           34 16
                                                   27.6 -3.1 21.8
                                                                                                 170 117
NACOCOLEVU RESEARC
                                                                       0.9
                                                                           34.0
                                                                                     20.0
                                                               25.1
                               109
                                    20
                                           74 26
                                                   31.1
                                                          0.3
                                                                      0.2
                                                                            33.0 13 23.5
                                                                                           26
                                                                                                 178
ROTUMA ISLAND
                        238.7 198 16
                                                          0.3 24.2 -0.1 33.1
                                           50 18
                                                                                   3 22.4
VIWA ISLAND
                                                   31.5
                        302.7 303 17
265.8 127 16
                                          82 23
75 24
                                                               22.5
                                                                     -1.3 34.0
-2.4 U/S
                                                                                     20.6
19.6
YASAWA-I-RARA
                                                   31.6
                                                          0.9
                                                    U/Š
UDU POINT WEATHER
                                                                             U/S
NABOUWALU
                            OBSERVER ON LEAVE
                        590.8 375 24
390.7 216 21
                                                   31.5
29.7
                                              24
24
                                                         -0.1 22.0
0.4 23.4
                                                                      0.5 \\ 0.4
                                                                           33.8 7 15.9
34.0 23 21.1
                                          206
LABASA AIRFIELD
SAVUSAVU AIRFIELD
                                          101
KORONIVIA RESEARCH
                        337.2 136 23
                                           56 16
                                                   29.8
                                                          0.7
                                                               22.6
                                                                       0.5 31.9
                                                                                 23 19.9
                        350.2 147 25
536.5 177 25
                                                   29.8
                                                                           31.6 12
NAUSORI AIRPORT
                                           76
                                              16
                                                          0.8 22.6
                                                                       0.5
                                                                                     19.8
                                                                                           17
                                           95
                                                   29.8 1.3
                                                                            32.2
NAVUA AWS
                                               4
                                                               21.8
                                                                       0.1
                                                                                  18
                                                                                     18.9
                                                   25.6
                                                          1.2 18.4
                        532.3 123 29
                                           82
                                                                       0.6 27.0 13 15.5
MONASAVU HYDRO DAM
                        253.2 194 11
161.7 104 9
                                                          0.3 22.9
0.5 21.7
FSC LAUTOKA MILL FSC RARAWAI MILL
                                           68
                                               3
                                                                           33.4
                                                   31.1
                                                                       0.2
                                                                                     21.3
                                                8
                                           53
                                                   32.5
                                                                       0.4
                                                                           36.2
                        343.2 233 16
FSC PENANG MILL
                                           94 23
                                                   30.6
                                                          0.0 23.1
                                                                      0.2
                                                                           32.1
                                                                                   7 20.6 18
                        508.5 259 19
                                         188 24
                                                   29.5
                                                          0.3 20.6 -2.8 31.6 23 18.6
MATEI AIRFIELD
                        527.5 400
                                    17
                                          156 24
                                                   29.7
                                                          0.6
                                                               20.9 -2.8
                                                                            31.1
VANUABALAVU
                                                   29.8
                                              8
LAKEBA
                        152.8 114 14
                                           34
                                                          0.5\ 20.4\ -2.9
                                                                           31.5 13
                                                                                     18.0
                        115.7 76 18
186.7 160 21
                                           28
                                                          0.5
                                                               20.1 -2.5
23.9 0.7
                                              15
                                                   29.2
VUNISEA
                                                                           30.6 29
                                                                                     18.0
                                           40
                                              22
                                                   29.4
                                                                            31.2
                                                                                     22.1
MATUKU
                                                                U/S
                        218.0 206 14
                                           45
                                                                            30.9 13
                                              16
                                                   29.0
                                                          0.7
                                                                                      U/S
ONO-T-LAU
WAINIKORO AWS
                          U/S
                                                    U/S
                                                                 U/S
                                                                             U/S
                                                                                       U/S
                          U/S
                                                    U/S
SAQANI AWS
                                                                 U/S
                                                                             U/S
                                                                                       U/S
                          U/S
                                                    U/S
                                                                U/S
                                                                                       U/S
SEAQAQA AWS
                                                                             U/S
KUBULAU AWS
                          U/S
                                                    U/S
                                                                U/S
                                                                             U/S
                                                                                       U/S
RKS LODONI AWS
                        451.5
                                    24
                                           69 24
                                                   33.6
                                                               25.5
                                                                            36.3 23 23.1
                                                                                             15
                                                                            U/S U/S
34.7 12 19.6
                                                    U/S
                                                                U/S
LOMAIVUNA AWS
                          U/S
                        222.5
                                                               22.4
                                     20
                                           48 26
                                                   32.2
KOROLEVU AWS
                                                   25.1
                                                               17.2
                        414.5
                                                                            27.2
                                                                                   7 13.5
NADARIVATU AWS
                                    18
                                           86 23
                                                                            31.9 22 19.7
                                              23
                                                                                             15
SIGATOKA AWS
                         84.5
                                     14
                                           16
                                                   30.0
                                                                21.6
                                                                            U/S
36.7
                          U/S
KEYASI AWS
                                                    U/S
                                                                U/S
                                                                                       U/S
                                           58 23
                        237.4
                                                               24.9
                                                                                   8
                                                                                     23.3
                                                                                              9
                                     14
                                                   33.5
MOMI AWS
YAQARA AWS
                        148.0 163 11
                                           40 23
                                                   31.6
                                                                23.1
                                                                            33.9
                                                                                   2 20.6
                                                                                              8
                        591.5
                                                                                 14 20.8
LEVUKA AWS
                                     23
                                          209
                                               8
                                                   31.2
                                                                23.8
                                                                            34.5
                        578.5 262 20
DOBUILEVU TB3
                                          141 14
                        459.5 24
147.5 124 13
                                           83
53
                                             16
23
NASINU TB3
TAVUA TB3
                       TEMPERATURE( C) HUMIDITY WIND
                             DRY WET RH% VP
                     MEAN
                               (AVERAGE AT 9AM)
NADI AIRPORT
                       26.3 27.8 23.8
LAUCALA BAY 26.5 27.4 25.0 NACOCOLEVU RESEARC 24.7 27.9 25.5
                                           79 27.3
                                                      6.0
                                           83 28.1
ROTUMA ISLAND
                       28.1 28.8
                                   26.7
                                                      7.5
VIWA ISLAND 27.9 29.2 25.9
YASAWA-I-RARA 27.0 28.7 26.0
UDU POINT WEATHER U/S 27.7 25.0
                                          77 30.3
                                           81 29.4
                                           80 27.8
                       OBSERVER ON LEAVE
NABOUWALU
                       26.7 28.2 25.0
26.5 27.4 24.9
LABASA AIRFIELD
SAVUSAVU AIRFIELD
                                          81 27.3
                                                      6.5
KORONIVIA RESEARCH 26.2 27.1 25.0 NAUSORI AIRPORT 26.2 26.8 24.7
                                           85 26.8
                                           83 26.4
NAVUA (AWS)
                       25.8
MONASAVU HYDRO DAM 22.0 22.1 21.5 96 FSC LAUTOKA MILL 27.0 25.9 25.6 105
                                              19.9
25.0
                                           96
FSC LAUTOKA MILL
FSC RARAWAI MILL
                       27.1 29.4 29.0
                                          97 30.7
FSC PENANG MILL
                       26.9 28.3 25.1
                                           77 28.8
                       25.1 27.7
                                   25.0
                                           80 27.8
MATEI AIRFIELD
                             27.6
                                   24.6
VANUABALAVU
                                           78
                       25.1 28.0 24.9
                                           78 28.3
LAKEBA
                       24.6 25.5 22.0
                                           74 24.4
VUNISEA
                        26.7 26.9
U/S 26.9
                                   24.5
24.5
                                           82
83
                                              26.5
26.5
                       26.7
MATUKU
ONO-I-LAU
MEAN TEMPERATURE IS (MAX+MIN)/2;
                                              WIND IS MEAN SPEED AT 06,12,18,24 HOURS.
$:SOLAR RADIATION CALCULATED FROM SUNSHINE DURATION. #:DEPARTURE FROM LONG-TERM AVERAGES (1991-2020). +:NUMBER OF DAYS WITH 0.1 MM OR MORE RAIN. *:PERCENT OF LONG-TERM AVERAGES.
BLUE FONT: MISSING RECORDS OF LESS THAN OR EQUAL(≤) TO 5 DAYS. U/S: UNSERVICEABLE
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# 5. DAILY RAISED PAN EVAPORATION

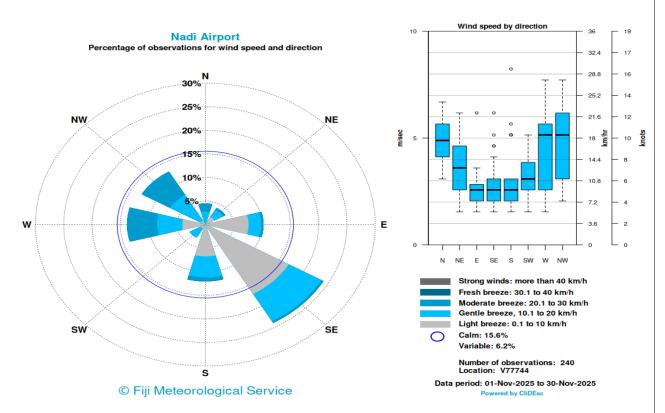


**Figure 6:** The total monthly raised pan evaporation at Nadi Airport, Laucala Bay (Suva) and Nacocolevu (Sigatoka) were 168.4mm, 98.8mm and 138.7mm, respectively. Nadi's highest daily evaporation was 9.8mm on the 29<sup>th</sup> with Suva's highest daily evaporation of 8.4mm on the 17<sup>th</sup>, and Nacocolevu (Sigatoka) recorded its highest of 10.0mm on the 9<sup>th</sup> and 20<sup>th</sup>.

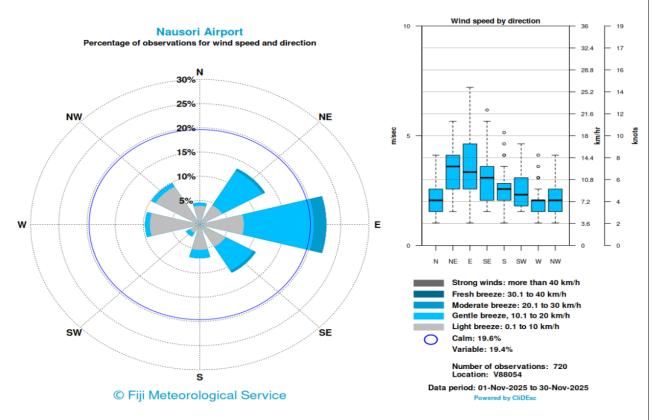
# 6. **SOLAR RADIATION**

The Nadi solar radiation instrument was unserviceable during the month of November 2025.

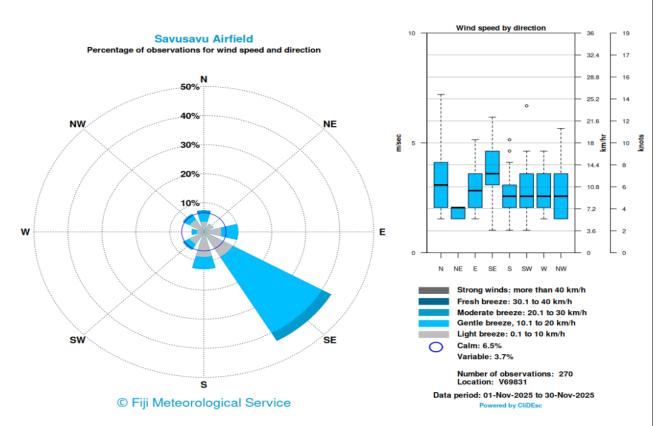
# 7. WIND SUMMARY



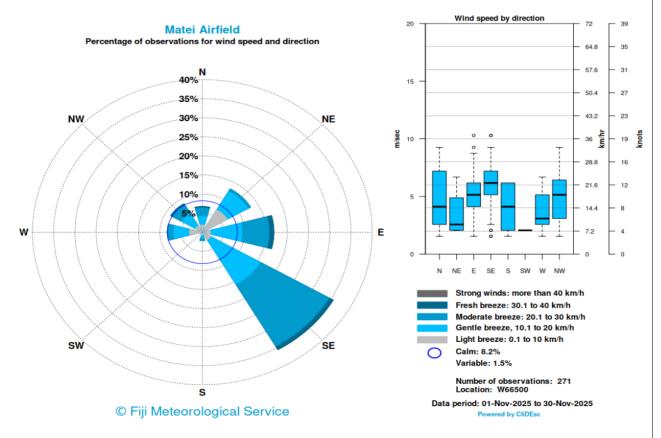
*Figure 8a*: Nadi's 3 hourly observations recorded southeasterly winds as the most dominant winds during the month, followed by westerly and then northwesterly winds. Wind strength ranged from light to moderate breeze, while 15.6% of observations accounted for calm winds.



*Figure 8b*: For Nausori Airport's hourly wind observations, easterly winds were most dominant during the month, followed by northeasterly and then southeasterly winds. Wind strength ranged from light to moderate breeze, while 19.6% of observations accounted for calm winds.

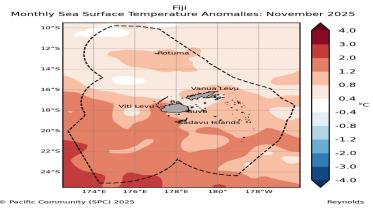


*Figure 8c*: Southeasterly winds were most dominant at Savusavu Airfield, looking at the hourly observations (0800hrs to 1600hrs) recorded during the month, followed by southerly and then easterly winds. Wind strength ranged from light to moderate breeze, with calm winds observed 6.5% of the time.



*Figure 8d:* Matei Airfield's hourly wind observations (0800hrs to 1600hrs) had dominant southeasterly winds followed by easterly and then northeasterly winds. Light breeze to fresh breeze were observed, with calm winds recorded 8.2% of the time.

# 8. SEA SURFACE TEMPERATURE (SST)



#### Figure 9:

Above normal sea surface temperature anomalies were observed across waters in Fiji, with warm anomalies generally ranging from 0.8 to 2.0 °C.

Source: <a href="https://oceanportal.spc.int/explorer">https://oceanportal.spc.int/explorer</a>

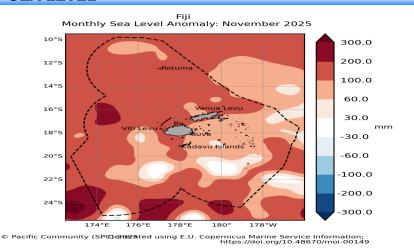
#### 9. **CLOUD COVER** 0 30S 60S 90S 30E 60E 90E 120E 150E 180 150W 120W 30W NOAA/PSL Base Period: 1991-2020 25

# Figure 10:

Above normal cloud cover were present over the Fiji Group during November (Fiji in red circle).

Source: <a href="http://www.esrl.noaa.gov/psd/map/clim/olr.shtml">http://www.esrl.noaa.gov/psd/map/clim/olr.shtml</a>

# 10. SEA LEVEL

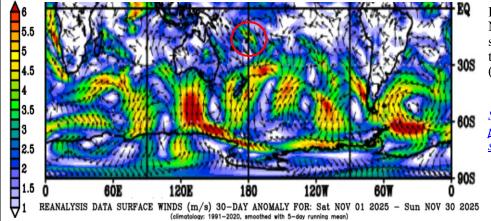


#### Figure 11:

Sea level anomalies were *above* normal across most of the Fiji Group during November.

Source: <a href="https://oceanportal.spc.int/">https://oceanportal.spc.int/</a> explorer

# 11. WIND ANOMALIES



### Figure 12:

North westerly winds were observed over the Fiji Group during the month (base period: 1991-2020) (Fiji in red circle).

Source: <a href="https://www.esrl.noaa.gov/psd/map/images/rnl/">https://www.esrl.noaa.gov/psd/map/images/rnl/</a> sfcwnd 30b.rnl.html

# 12. FLASH FLOODING: 16th, 19th, 24th, 25th and 26th

Heavy and continuous rainfall caused flash flooding on several roads and in residential areas in the Central Division on the 16<sup>th</sup> and 19<sup>th</sup>. Similar conditions were reported in the Western Division on the 24<sup>th</sup>, where several roads and crossings were flooded. In the Northern Division, heavy rain on the 25<sup>th</sup> led to widespread flooding of roads, crossings, and low-lying flood-prone areas. The rain on the 16<sup>th</sup> also triggered a landslide at Batiniwai Settlement in Caubati. Flash flooding was also observed at the Nadi Bus Stand on the 26<sup>th</sup>. These events caused the closure of multiple low-level crossings and left some areas inaccessible.



Figure 12a: Surface flooding in the Central Division, Suva on the 16<sup>th</sup>. Source: Fiji One News



Figure 12b: Flooded residential area in the Central Division, Suva on the 16<sup>th</sup>. Source: Fiji One News.



Figure 12c: Surface flooding in the Central Division, Suva on the 16<sup>th</sup>. Source: Fiii One News.



Figure 12d: Flooding at Lobau Village in Navua on the 16<sup>th</sup>. Source: Fijivillage.



Figure 12e: Flooded home on Omkar Road, Narere on the 16<sup>th</sup>. Source: FBC News.



Figure 12f: Landslide at Batiniwai Settlement in Caubati on the 16<sup>th</sup>. Source: Fijivillage.



Figure 12g: Flooding at Railagi Road Bridge on the 19<sup>th</sup>. Source: Fiji One News



Figure 12h: Flooding at Valelevu Roundabout on the 19<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12i: Flooding on Karsanji Road on the 19<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12j: Arolevu Crossing, Nadi, Western Division on the 24<sup>th</sup>. Source: Fiji Roads Authority



Figure 12k: Raviravi Crossing, Navidamu, Macuata on the 24<sup>th</sup>. Source: Fiji Roads Authority



Figure 121: Rewasa Crossing, Rakiraki, Western Division on the 24<sup>th</sup>. Source: Fiji Roads Authority



Figure 12m: Fooding at Qeleni Bridge, Taveuni on the 25<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12n: Boca Loop Road, Bulileka, Labasa on the 25<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12o: Homes in Block 10, Naodamu, Labasa on the 25<sup>th</sup>. Source: Fiji Times..



Figure 12p: Nasasa, Daku Labasa on the 25<sup>th</sup>. Source: Radio Fiji Two



Figure 12q: Vunivesi Village, Savusavu on the 25<sup>th</sup>. Source: Viti FM



Figure 12r: Qelemumu Crossing, Wainikoro, Labasa on the 25<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12s: Nacula Village, Labasa on the 25<sup>th</sup>. Source: Fijivillage



Figure 12t: Nadi Bus Stand on the 26<sup>th</sup>. Source: Sikandar Baadshah

# 13. HAILSTORM EVENTS

On 16<sup>th</sup> November, a brief hailstorm occurred in Koronivia, Nausori, early in the morning. The hail began around 1 a.m. and lasted approximately 15 minutes, surprising residents and adding to ongoing unusual weather conditions. The following day, 17<sup>th</sup> November, a more severe hailstorm affected multiple areas during a severe thunderstorm warning. In Nadarivatu, heavy hail fell accompanied by strong winds and rain, with footage captured at Navai village. In the interior of Vanua Levu, communities including Nabunicibi and Vaturova in Cakaudrove reported ice pellets during short, intense bursts of severe weather. Meanwhile, residents of Nawairuku in Nalawa, Ra, witnessed a hailstorm for the first time, with hailstones striking roofs in the early evening.

Hail is a form of precipitation consisting of solid ice that forms inside thunderstorm. The phenomenon is not common in the tropics because the freezing level is higher as compared to the mid-latitude. So ice particles would melt into rain on its way down because of warm temperature towards the surface.

Meanwhile, on recent events where hail has been observed around the country, it resulted from the presence of active or severe thunderstorms cell which developed from pre-existing moisture content in the atmosphere, good surface heating resulting in warm air forced to rise on mountains/hills or on other local effect.

Ultimately, as warm air rises, it transfers heat from the surface of the earth to the upper levels of the atmosphere. The water vapor it contains begins to cool, releases the heat, condenses and forms cloud through persistent thunderstorms up-draft into extremely cold mid-level in the atmosphere and freeze.

Therefore, this would lead to the lowering of the freezing level which is susceptible for hailstone formation when liquid below freezing collects around a solid object such as dust particle or another hailstone.

Hail falls to the earth when it becomes too heavy for an updraft to keep it up. So on areas along elevated regions and nearby regions where severe thunderstorms were observed, the occurrence of hail would be imminent as the surrounding temperature is not warm enough to melt the ice.



Figure 13a: Hail storm in Koronivia, Nausori on the 16<sup>th</sup>. Source: Fiji Times



Figure 13b: Hail storm accompanied by strong winds and rain in Navai, Nadarivatu on the 17<sup>th</sup>. Source: Fiji Times



Figure 13c: Hail storm in Nawairuku in Nalawa, Ra on the 17<sup>th</sup>. Source: Gold FM Fiji



Figure 13d: Hailstorm ice collected in Cakaudrove on the 17<sup>th</sup>. Source: Fiji Times

# **EXPLANATORY NOTES**

**Anomalies** - denote the departure of an element (rainfall, temperature, sea surface temperature, cloud cover, sea level and wind) from its long-period average value for a particular location.

**Trough** - an elongated area of low atmospheric pressure that is associated with a cyclone, or low. Sometimes referred to as a 'trough of low pressure'.

Rain - Liquid precipitation in the form of water droplets. Rain falls from dense, continuous clouds, called 'stratiform' clouds.

**Shower** - precipitation from individual clouds, often characterised by the sudden beginning or ending. Showers fall from 'lumpy looking', 'cauliflower' clouds, called 'cumuloform' clouds.

**Trade Winds** - the trade winds are the east to southeasterly winds (in the Southern Hemisphere) which affect tropical and subtropical regions.

**High pressure systems** or anticyclones are atmospheric circulations that rotate anti-clockwise in the Southern Hemisphere. Anticyclones are areas of higher pressure and are generally associated with lighter winds and fine and settled conditions.

**Low pressure systems** or mid-latitude cyclones are atmospheric circulations that rotate clockwise in the Southern Hemisphere (anti-clockwise in the Northern Hemisphere). Cyclones are areas of lower pressure and generally associated with stronger winds, unsettled conditions, cloudiness and rainfall.

Sea Surface Temperature (SST) - the temperature of the water's surface. It is usually measured using buoys, ship data, and satellites.