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# Fiji Climate Summary December 2024

**ISO 9001:2015 certified Climate Services**

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## 1. IN BRIEF

Weather during December 2024 was influenced by series of low pressure systems, with TD 01F, resulting in wetter than usual conditions experienced at most parts of the country. Nacocolevu (Sigatoka), Nadi Airport, Lautoka Mill, Rarawai Mill (Ba), Tavua, Yaqara, Dobuilevu, and Labasa Airfield recorded more than twice their normal monthly rainfall.

Overall, out of the 26 rainfall monitoring stations that reported in, in time for the compilation of this bulletin, 8 recorded *well above average*, 7 *above average*, 5 *average*, and 6 stations with *below average rainfall* (Table 2, Figures 1-5).

The highest monthly rainfall of 1353.5mm was observed at Nadarivatu, followed by Rarawai Mill (Ba) with 730.1mm, Dobuilevu with 702.0mm, Monasavu with 699.6mm, Labasa Airfield with 563.1mm, Nadi Airport with 520.0mm, Nacocolevu with 513.2mm, Penang Mill-with 479.2mm, and Yaqara with 475.0mm.

On temperatures, the month's warmest day-time temperature of 36.0°C was observed at Viwa on the 21st, followed by Momi with 35.7°C on the 13th, RKS Lodoni with 35.2°C on the 26th, and Korolevu with 34.8°C.

The months lowest night-time temperature of of 13.9°C was recorded at Nadarivatu on the 31st, followed by Monasavu with 17.4°C on the 19th, Vunisea with 19.0°C on the 29th, and Korolevu with 19.3°C on the 31st.

Southeasterly winds were dominant at Nadi Airport, Savusavu Airfield and Matei Airfield, while easterly winds were dominant at Nausori Airport (Figure 7).

Warmer than normal sea surface temperature anomalies were observed across Fiji Waters, during the month. (Figure 8).

Above normal sea level anomalies persisted across most of the Fiji Waters during December (Figure 10).

## 2. WEATHER PATTERNS

Tropical Depression 01F, active troughs of low pressure systems, with southeast wind flows, were the main features during the month.

A trough of low pressure affected the southern and eastern parts of the country with occasional rain on the first two days of the month. Fine weather with isolated afternoon showers and thunderstorms prevailed over the rest of the group.

An easterly wind flow prevailed over the group thereafter on the 3rd bringing occasional showers and few thunderstorms over the interior and eastern parts of the larger islands till the 5th. Fine weather with isolated afternoon showers and thunderstorms prevailed over the rest of the country. A trough of low pressure affected the country from the north on the 6th with occasional rain, heavy at times and few thunderstorms and gradually spread to the rest of the group till the 11th.

A moist east to southeast wind flow dominated the Fiji group thereafter from the 12th till the 17th with mostly fine weather across the country with brief showers over the interior and eastern parts of the larger islands. A weak trough of low pressure with a southwest wind flow affected the country from the southwest on the 18th and gradually moved across the country till the 20th with mostly cloudy periods and isolated showers.

An active trough of low pressure with the associated rain and northwest wind flow followed through from the north later on the 21st and gradually extended to the rest of the country till the 29th.

A cool and dry southerly wind flow prevailed thereafter on the 28th from the southwestern parts of the country with mostly fine weather with brief showers. This weather gradually followed through the trough of low pressure over the northern and eastern parts of Fiji which had occasional rain and thunderstorms with heavy falls.

On the 29th, Tropical Depression TD01F approached the group from the west and gradually moved across the country to the east on the 31st with occasional to periods of rain over most places. TD01F, again caused major flooding over Ba, Rakiraki and Tavua.

A cool and dry southerly wind flow prevailed over the country from the west on the 30th and gradually spread to the rest of the country with mostly fine weather apart from brief showers over the interior and southern parts of the larger islands.

## 3. RAINFALL

Rainfall levels across the country showed considerable variation, fluctuating between *below average* and *well above average*. Majority of the stations experienced wetter than usual conditions, with Nacocolevu, Nadi Airport, Lautoka Mill, Rarawai Mill (Ba), Tavua, Yaqara, Dobuilevu, and Labasa Airfield recording more than twice their normal monthly rainfall.

On the contrary, slightly drier than usual conditions were observed at Navua, Nausori Airport, Matei Airfield, Vunisea, Ono-i-Lau, and Rotuma, while stations such as Monasavu, Koronivia, Laucala Bay (Suva), Udu Point, and Lakeba reported *average* rainfall. Overall, out of the 26 rainfall monitoring stations that reported in, in time for the compilation of this bulletin, 8 recorded *well above average*, 7 *above average*, 5 *average*, and 6 stations with *below average rainfall* (Table 2, Figures 1-5).

The highest monthly rainfall of 1353.5mm was observed at Nadarivatu, followed by 730.1mm at Rarawai Mill (Ba), 702.0mm at Dobuilevu, 699.6mm at Monasavu, 563.1mm at Labasa Airfield, 520.0mm at Nadi Airport, Nacocolevu with 513.2mm, Penang Mill with 479.2mm, Yaqara with 475.0mm, Tavua with 473.0mm, Lautoka Mill with 462.5mm, RKS Lodoni with 418.5mm, and Sigatoka with 407.0mm. On the other hand, Ono-i-Lau recorded the month's lowest total monthly rainfall of 88.3mm, followed by Levuka with 91.5mm, Vunisea with 165.1mm, Lakeba with 190.0mm, and Matuku with 210.3mm (Table 2).

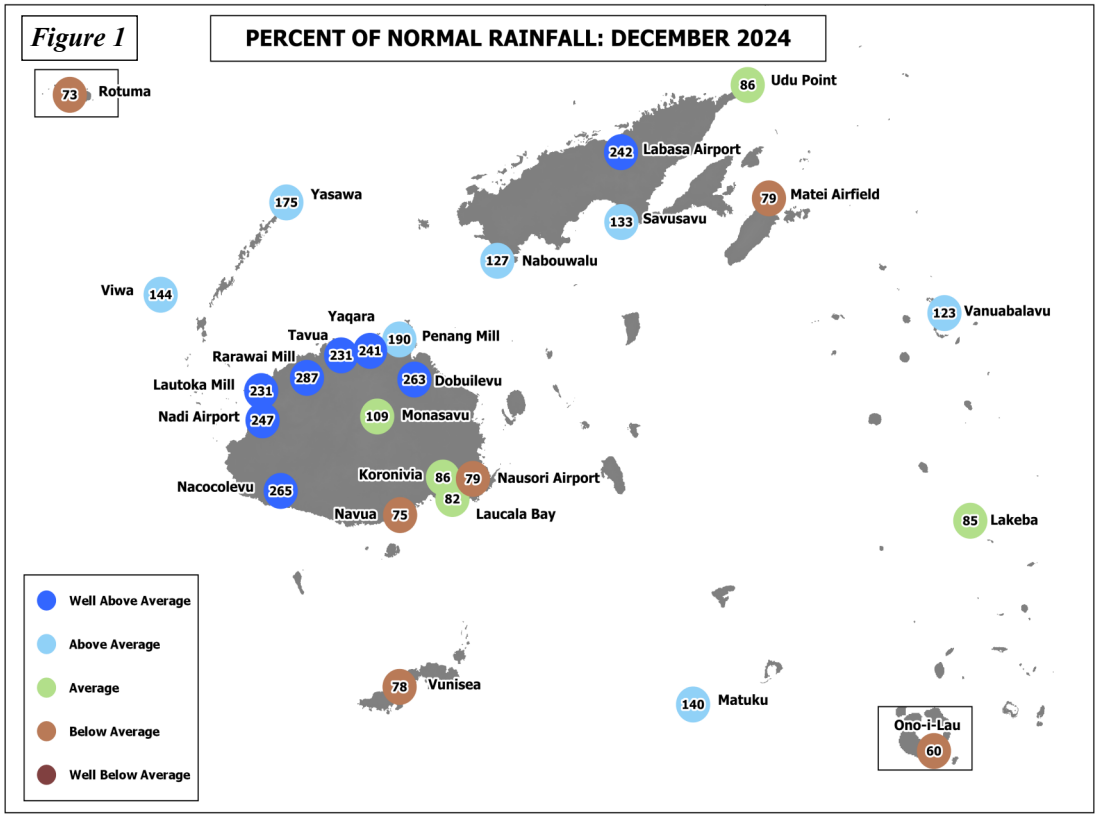
The highest 24-hour rainfall of 267mm was recorded at Nadarivatu on the 26th, followed by Rarawai Mill (Ba) with 161mm on 29th, Penang Mill with 122mm on the 27th, Yaqara with 112mm on the 26th, Lautoka Mill with 105mm on the 24th, Nadi Airport with 95mm on the 23rd, Nabouwalu with 87mm on the 27th, and Monasavu with 84mm on the 25th.

An active trough of low pressure forming between 21st and 29th brought continuous, torrential heavy rain that caused major flash flooding over the low lying areas, small streams and downstream of major rivers over the country.

Monasavu recorded the highest number of rain days (rainfall ≥0.1mm) with 29 days, followed by RKS Lodoni and Navua both with 24 days, Udu Point with 23 days, Koronivia and Savusavu Airfield both with 22 days, Dobuilevu and Matei Airfield both with 21 days, and Nadarivatu with 20 days. Consequently, Ono-i-Lau, Lakeba, and Matuku recorded the least number of rainfall days with 13 days, followed by Korolevu, Sigatoka, Yaqara, and Rarawai Mill (Ba) all with 14 days, and Levuka and Viwa both with 15 days.

Tavua and Nadarivatu recorded their highest total monthly rainfall of 473.0mm and 1353.5mm, since observations began in 2009 and 2013, at respective stations (Table 1).

*Figure 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

Mostly, *above normal* day-time air temperatures were observed across the country during the month. Out of the 22 climate stations that reported in time for the analysis of data, 15 recorded anomalies ≥+0.5°C, 6 within ±0.5°C and one lone station with anomaly of ≤ -0.5°C.

On average, the warmest days were recorded at RKS Lodoni with 33.7°C, followed by Momi with 32.7°C, Viwa and Labasa Airfield both with 32.5°C, Yaqara with 32.1°C, Yasawa-i-Rara and Korolevu both with 31.8°C, Navua with 31.7°C, and Nadi Airport with 31.6°C. Consequently, Nadarivatu recorded the coolest days on average with 25.8°C, followed by Monasavu with 26.4°C, Vunisea with 29.9°C, Vanuabalavu with 30.3°C, Matuku and Udu Point both with 30.4°C, Ono-i-Lau with 30.5° C, and Matei Airfield with 30.6°C.

The month's highest day-time temperature of 36.0°C was observed at Viwa on the 21st, followed by Momi with 35.7°C on the 13th, RKS Lodoni with 35.2°C on the 26th, Korolevu with 34.8°C on the 20th, Yasawa-i-Rara with 34.6°C on the 20th.
For the coolest day-time temperatures, 22.0°C was observed at Nadarivatu on the 22nd, followed by Monasavu with 22.1°C on the 28th, Koronivia with 26.4°C on the 28th, Nacocolevu with 26.6°C on the 24th, and Vunisea with 26.8°C on the 26th .

Viwa recorded its highest daily maximum temperature of 36.0°C on the 21st, since observations began in 1978 (Table 1).

### B. Minimum Night-time Air Temperatures

Generally, *near normal to above normal* night-time temperatures were recorded at majority of the climate stations during the month. For the 22 stations that reported in, 12 recorded anomalies ≥ +0.5°C, 6 within ± 0.5°C, and 4 with anomalies ≤ -0.5°C.

The coolest nights on average were at Nadarivatu with 18.7°C, followed by Monasavu with 20.0°C, Vunisea with 21.6°C, Vanuabalavu with 22.0°C, Matei Airfield and Korolevu both with 22.2°C, Labasa Airfield and Sigatoka both with 22.7°C, and Lakeba with 22.8°C. Consequently, on average, the warmest night-time temperatures were observed at RKS Lodoni with 25.9°C, Viwa with 25.6°C, Yasawa-i-Rara with 25.0°C, and Udu Point with 24.9°C.

The lowest night-time temperature of 13.9°C was recorded at Nadarivatu on the 31st, followed by Monasavu with 17.4°C on the 19th, Vunisea with 19.0°C on the 29th, and Korolevu with 19.3°C on the 31st.

For the warmest night-time temperatures, 28.8°C was recorded at RKS Lodoni on the 10th, followed by Laucala Bay (Suva), Viwa, and Rotuma, with 26.9°C, on the 10th, 12th and 27th, respectively. Ono-i-Lau recorded 26.4°C on the 22nd, and Yaqara with 26.3°C on the 13th.

Monasavu recorded its new highest average minimum temperature of 20.0°C, since observations began in 1980 (Table 1).

## TABLE 1. CLIMATE RECORDS ESTABLISHED IN DECEMBER 2024

| Element | Station | Observed (record) | On | Rank | Previous (record) | Year | Records Began |
|---|---|---|---|---|---|---|---|
| Monthly Rainfall | Tavua | 473.0mm | - | New High | 466.5mm | 2022 | 2009 |
| Monthly Rainfall | Nadarivatu | 1353.5mm | - | New High | 754.5mm | 2022 | 2013 |
| Daily Maximum Temperature | Viwa | 36.0°C | 21st | New High | 35.7°C | 1996 | 1978 |
| Monthly Mean Minimum Temperature | Monasavu | 20.0°C | - | New High | 19.7°C | 2003 | 1980 |

***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 DECEMBER 2024

| | RAINFALL | | | | | AIR TEMPERATURES | | | | | | | | SUNSHINE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL | * | RAIN DAYS | + | MAX. FALL MM | ON | AVERAGE DAILY MAX. | # | MIN. | # | EXTREME MAX. | ON | EXTREME MIN. | ON | TOTAL HRS | * % |
| | MM | % | | | | | C | C | C | C | C | | C | | | |
| NADI AIRPORT | 520.0 | 247 | 17 | | 95 | 23 | 31.6 | 0.2 | 23.1 | 0.2 | 34.0 | 6 | 20.2 | 1 | 230 | 107 |
| LAUCALA BAY | 281.8 | 82 | 18 | | 80 | 27 | 30.9 | 0.4 | 24.8 | 0.6 | 32.9 | 20 | 21.9 | 31 | 168 | 95 |
| NACOCOLEVU RESEARC | 513.2 | 265 | 19 | | 82 | 26 | 30.9 | -0.6 | 23.0 | 0.9 | 33.7 | 12 | 20.9 | 16 | 120 | 106 |
| ROTUMA ISLAND | 236.0 | 73 | 17 | | 60 | 10 | 31.5 | 0.5 | 24.7 | -0.3 | 32.9 | 18 | 23.0 | 1 | 211 | 122 |
| VIWA ISLAND | 243.7 | 144 | 15 | | 55 | 24 | 32.5 | 0.7 | 25.6 | 0.7 | 36.0 | 21 | 23.6 | 1 | | |
| YASAWA-I-RARA | 286.6 | 175 | 19 | | 49 | 9 | 31.8 | 0.5 | 25.0 | 0.6 | 34.6 | 20 | 23.1 | 10 | | |
| UDU POINT (AWS) | 304.0 | 86 | 23 | | 65 | 9 | 30.4 | -0.2 | 24.9 | 0.4 | 31.5 | 20 | 21.6 | 1 | | |
| NABOUWALU | 352.7 | 127 | 17 | | 87 | 27 | 31.0 | 0.7 | 24.5 | 0.1 | 33.1 | 23 | 21.0 | 5 | | |
| LABASA AIRFIELD | 563.1 | 242 | 19 | | 65 | 23 | 32.5 | 0.6 | 22.7 | 0.5 | 34.4 | 4 | 20.0 | 16 | | |
| SAVUSAVU AIRFIELD | 262.9 | 133 | 22 | | 42 | 22 | 30.9 | 0.9 | 24.3 | 0.7 | 33.5 | 23 | 22.0 | 1 | | |
| KORONIVIA RESEARCH | 276.0 | 86 | 22 | | 49 | 27 | 31.1 | 1.0 | 23.9 | 1.0 | 33.4 | 18 | 20.6 | 31 | | |
| NAUSORI AIRPORT | 265.8 | 79 | 18 | | 57 | 27 | 31.0 | 1.1 | 23.8 | 0.8 | 32.6 | 21 | 20.6 | 31 | | |
| NAVUA (AWS) | 275.0 | 75 | 24 | | 51 | 27 | 31.7 | 2.2 | 23.2 | 0.6 | 34.3 | 21 | 19.9 | 31 | | |
| MONASAVU HYDRO DAM | 699.6 | 109 | 29 | | 84 | 25 | 26.4 | 1.3 | 20.0 | 1.2 | 29.7 | 18 | 17.4 | 19 | | |
| FSC LAUTOKA MILL | 462.5 | 231 | 16 | | 105 | 24 | 31.5 | 0.1 | 23.7 | 0.4 | 33.9 | 10 | 22.2 | 2 | | |
| FSC RARAWAI MILL | 730.1 | 287 | 14 | | 161 | 29 | U/S | | U/S | | U/S | | U/S | | | |
| FSC PENANG MILL | 479.2 | 190 | 19 | | 122 | 27 | 31.3 | 0.2 | 24.1 | 0.5 | 33.0 | 20 | 21.5 | 18 | | |
| MATEI AIRFIELD | 260.0 | 79 | 21 | | 43 | 22 | 30.6 | 0.7 | 22.2 | -1.9 | 32.3 | 18 | 20.1 | 17 | | |
| VANUABALAVU | 268.2 | 123 | 18 | | 57 | 30 | 30.3 | 0.6 | 22.0 | -2.2 | 32.0 | 21 | 19.8 | 1 | | |
| LAKEBA | 190.0 | 85 | 13 | | 37 | 7 | 30.7 | 0.6 | 22.8 | -1.0 | 32.4 | 20 | 20.0 | 31 | | |
| VUNISEA | 165.1 | 78 | 17 | | 83 | 23 | 29.9 | 0.3 | 21.6 | -2.0 | 31.2 | 8 | 19.0 | 29 | | |
| MATUKU | 210.3 | 140 | 13 | | 70 | 23 | 30.4 | 0.5 | 24.4 | 0.2 | 32.2 | 3 | 22.5 | 31 | | |
| ONO-I-LAU | 88.3 | 60 | 13 | | 43 | 23 | 30.5 | 1.0 | 24.7 | 1.1 | 33.0 | 20 | 22.5 | 30 | | |
| YAQARA AWS | 475.0 | 241 | 14 | | 112 | 26 | 32.1 | | 24.4 | | 34.2 | 5 | 21.4 | 18 | | |
| LEVUKA AWS | 91.5 | | 15 | | 26 | 29 | U/S | | U/S | | U/S | | U/S | | | |
| KEIYASI AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| LOMAIVUNA AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| NADARIVATU AWS | 1353.5 | | 20 | | 267 | 26 | 25.8 | | 18.7 | | 29.2 | 13 | 13.9 | 31 | | |
| RKS LODONI AWS | 418.5 | | 24 | | 58 | 26 | 33.7 | | 25.9 | | 35.2 | 26 | 22.9 | 31 | | |
| MOMI AWS | 347.5 | | 16 | | 81 | 25 | 32.7 | | 23.8 | | 35.7 | 13 | 22.2 | 28 | | |
| SIGATOKA AWS | 407.0 | | 14 | | 83 | 26 | 31.2 | | 22.7 | | 34.0 | 11 | 20.5 | 31 | | |
| VATUREKUKA AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| KOROLEVU AWS | 234.5 | | 14 | | 57 | 26 | 31.8 | | 22.2 | | 34.8 | 20 | 19.3 | 31 | | |
| WAINIKORO AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| SAQANI AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| SEAQAQA AWS | U/S | | | | | | U/S | | U/S | | U/S | | U/S | | | |
| DOBUILEVU TB3 | 702.0 | 263 | 21 | | 77 | 23 | | | | | | | | | | |
| NASINU TB3 | 294.5 | | 19 | | 50 | 27 | | | | | | | | | | |
| TAVUA TB3 | 473.0 | 231 | 16 | | 73 | 27 | | | | | | | | | | |

| | TEMPERATURE( C) | | | HUMIDITY | WIND |
|---|---|---|---|---|---|
| | MEAN | DRY (AVERAGE AT 9AM) | WET (AVERAGE AT 9AM) | RH% (AVERAGE AT 9AM) | VP (AVERAGE AT 9AM) | KT |
| NADI AIRPORT | 27.4 | 28.7 | 25.1 | 74 | 29.4 | 6.9 |
| LAUCALA BAY | 27.9 | 29.0 | 26.1 | 79 | 30.0 | 7.0 |
| NACOCOLEVU RESEARC | 26.9 | 28.9 | 25.8 | 79 | 29.8 | |
| ROTUMA ISLAND | 28.1 | 29.3 | 27.0 | 84 | 30.5 | 2.0 |
| VIWA ISLAND | 29.1 | 30.4 | 26.8 | 76 | 32.5 | |
| YASAWA-I-RARA | 28.4 | 28.9 | 26.7 | 84 | 29.8 | |
| UDU POINT (AWS) | 27.7 | | | | | |
| NABOUWALU | 27.7 | 28.7 | 25.7 | 79 | 29.4 | |
| LABASA AIRFIELD | 27.6 | 29.3 | 25.6 | 74 | 30.5 | 8.8 |
| SAVUSAVU AIRFIELD | 27.6 | 28.3 | 25.7 | 80 | 28.8 | 6.6 |
| KORONIVIA RESEARCH | 27.5 | 28.8 | 25.8 | 79 | 29.6 | |
| NAUSORI AIRPORT | 27.4 | 28.7 | 25.7 | 79 | 29.4 | 5.2 |
| MONASAVU HYDRO DAM | 23.2 | 23.2 | 22.6 | 96 | 21.3 | |
| FSC LAUTOKA MILL | 27.6 | 27.5 | 26.4 | 92 | 27.5 | |
| FSC RARAWAI MILL | U/S | 29.2 | 26.0 | 78 | 30.3 | |
| FSC PENANG MILL | 27.7 | 28.8 | 25.6 | 77 | 29.6 | |
| MATEI AIRFIELD | 26.4 | 28.3 | 25.7 | 81 | 28.8 | 10.6 |
| VANUABALAVU | 26.2 | 28.0 | 25.3 | 81 | 28.3 | |
| LAKEBA | 26.8 | 28.6 | 25.6 | 79 | 29.3 | |
| VUNISEA | 25.7 | 26.2 | 22.9 | 76 | 25.4 | |
| MATUKU | 27.4 | 27.8 | 24.8 | 79 | 27.9 | |
| ONO-I-LAU | 27.6 | 28.4 | 25.4 | 79 | 28.9 | 8.5 |

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

**Figure 2**

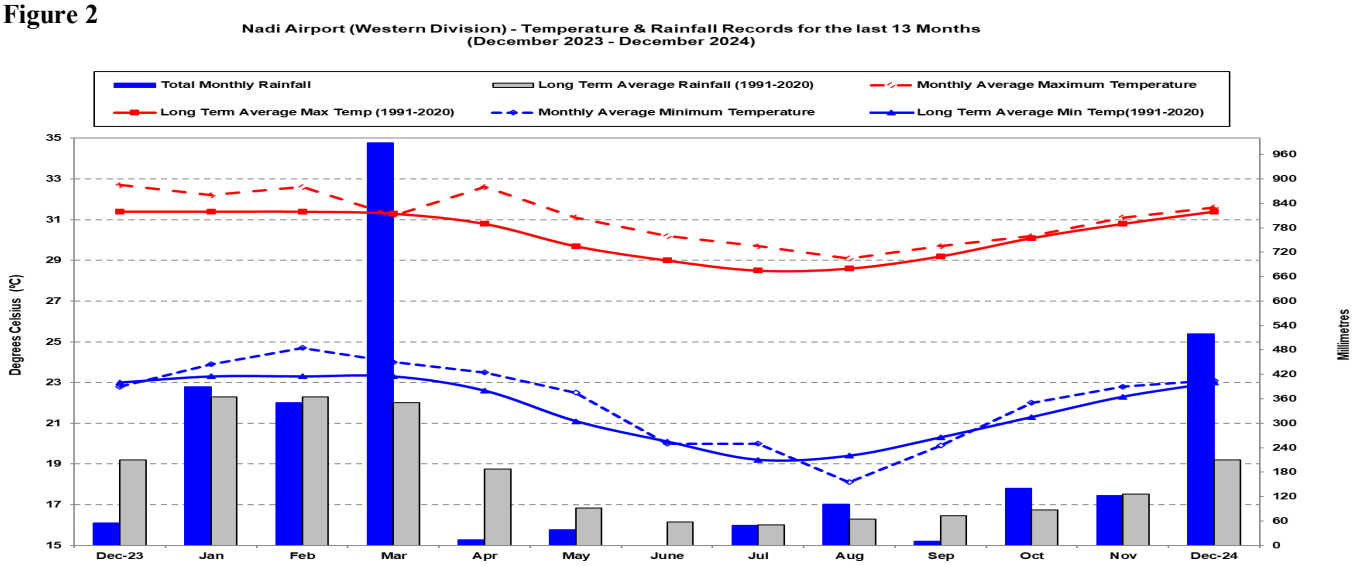



**Figure 3**

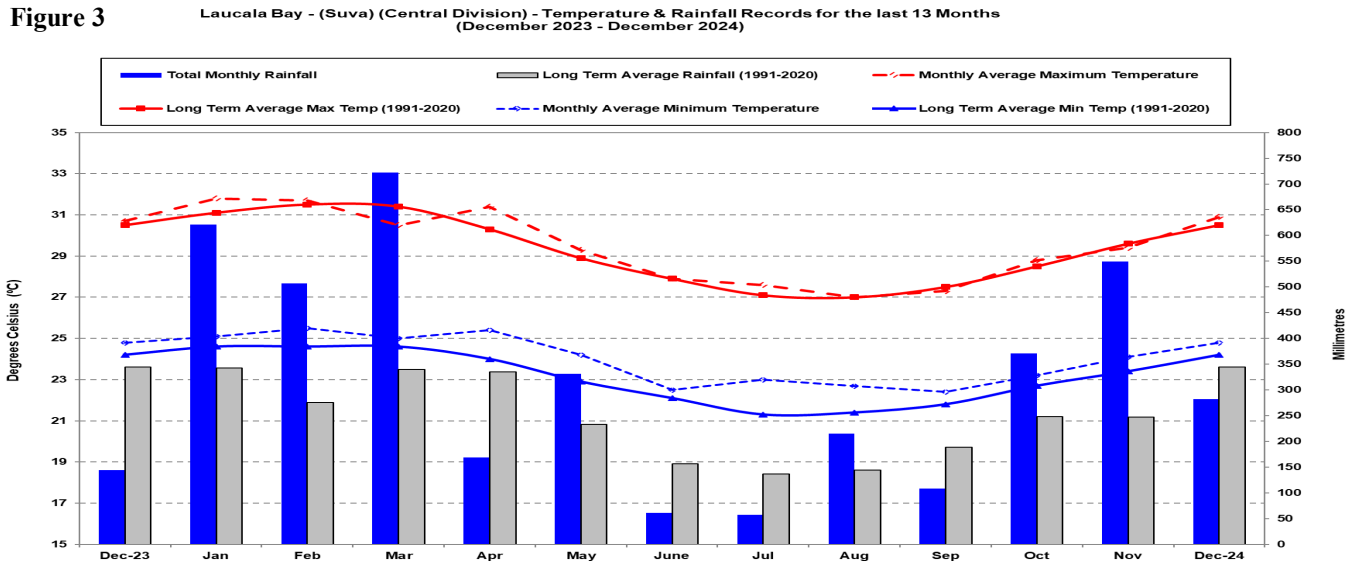



**Figure 4**

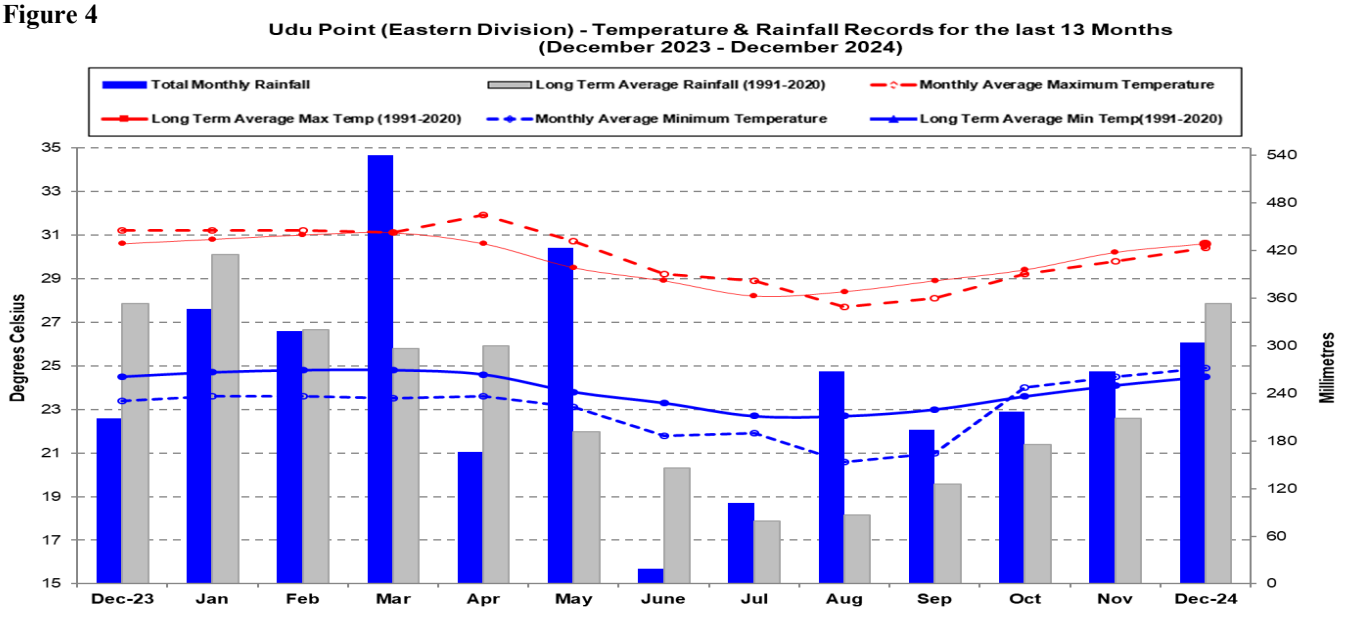
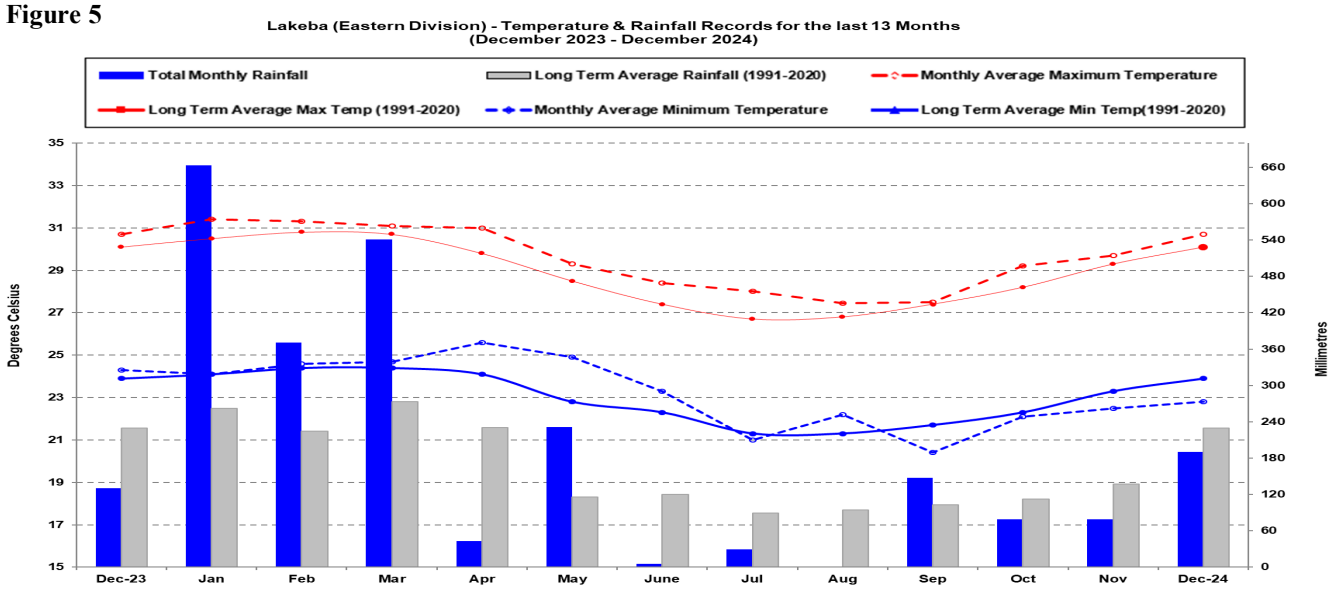


**Figure 5**




## 5. DAILY RAISED PAN EVAPORATION

*Figure 6*

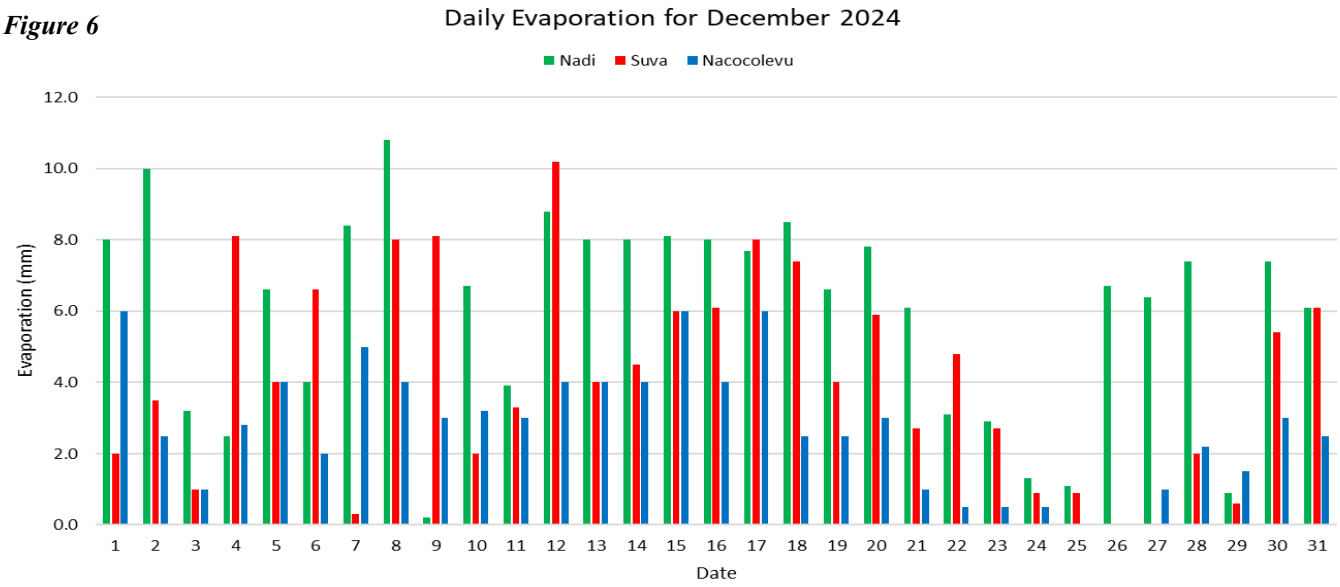



**Figure 6:** The total monthly raised pan evaporation at Nadi Airport, Laucala Bay (Suva) and Nacocolevu (Sigatoka) were 196.0mm, 139.3mm and 91.2mm, respectively. Nadi's highest daily evaporation was 10.8mm on the 8th with Suva's highest daily evaporation of 10.2mm on the 12th, and Nacocolevu (Sigatoka) recorded its highest of 6.0mm on the 1st, 15th, and 17th.

## 6. SOLAR RADIATION

The Nadi solar radiation instrument was unserviceable during the month of December 2024.

## 7. WIND SUMMARY

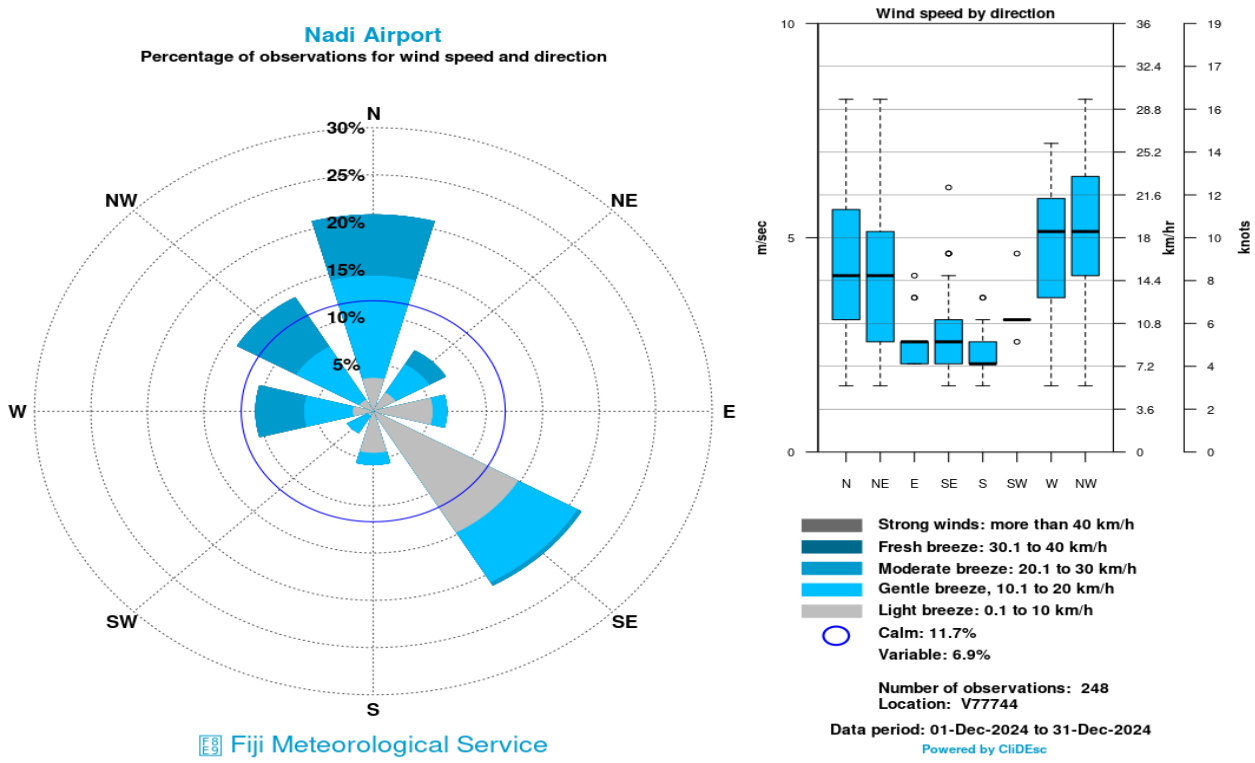



***Figure 7a***: Looking at Nadi's 3 hourly observations, southeasterly winds were most dominant during the month, followed by northerly and then northwesterly winds. Wind strength ranged from light to moderate breeze, while 11.7% observations accounted for calm winds.

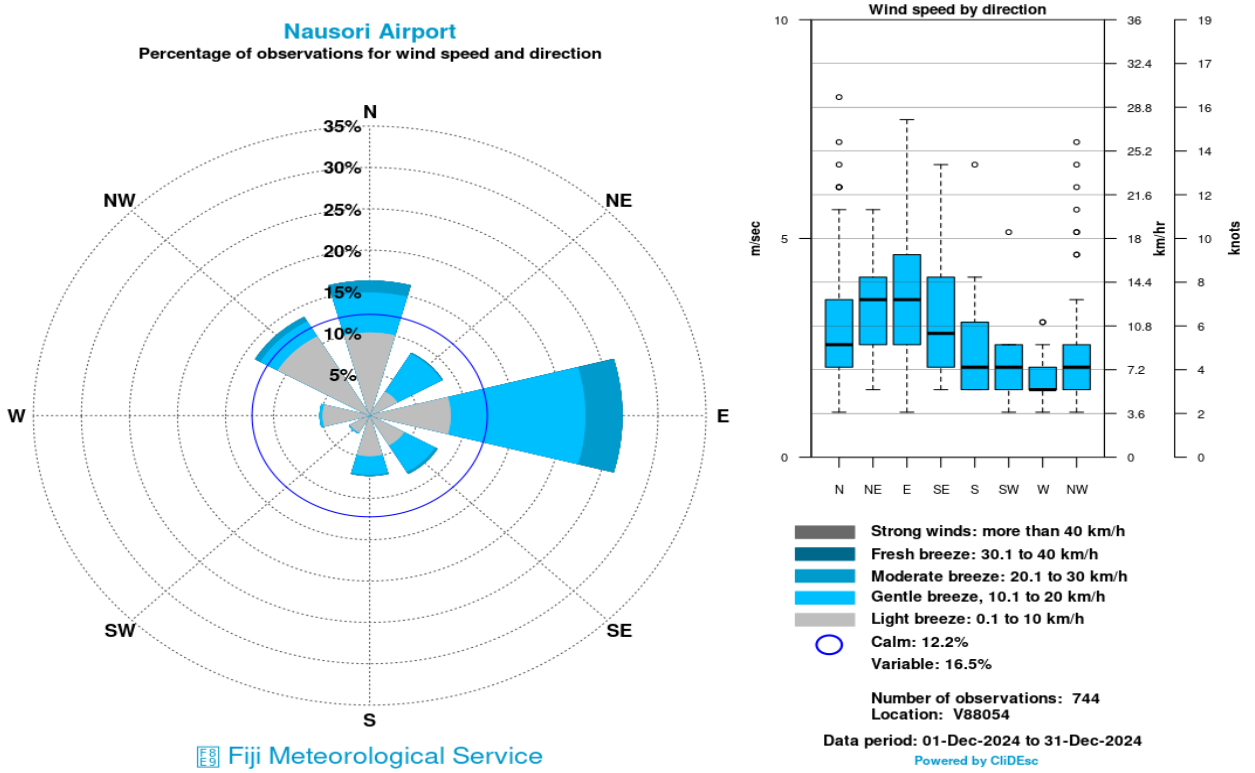



***Figure 7b***: For Nausori Airport's hourly wind observations, easterly winds were most dominant during the month, followed by northerly and then northwesterly winds. Wind strength ranged from light to moderate breeze, while 12.2% observations accounted for calm winds.

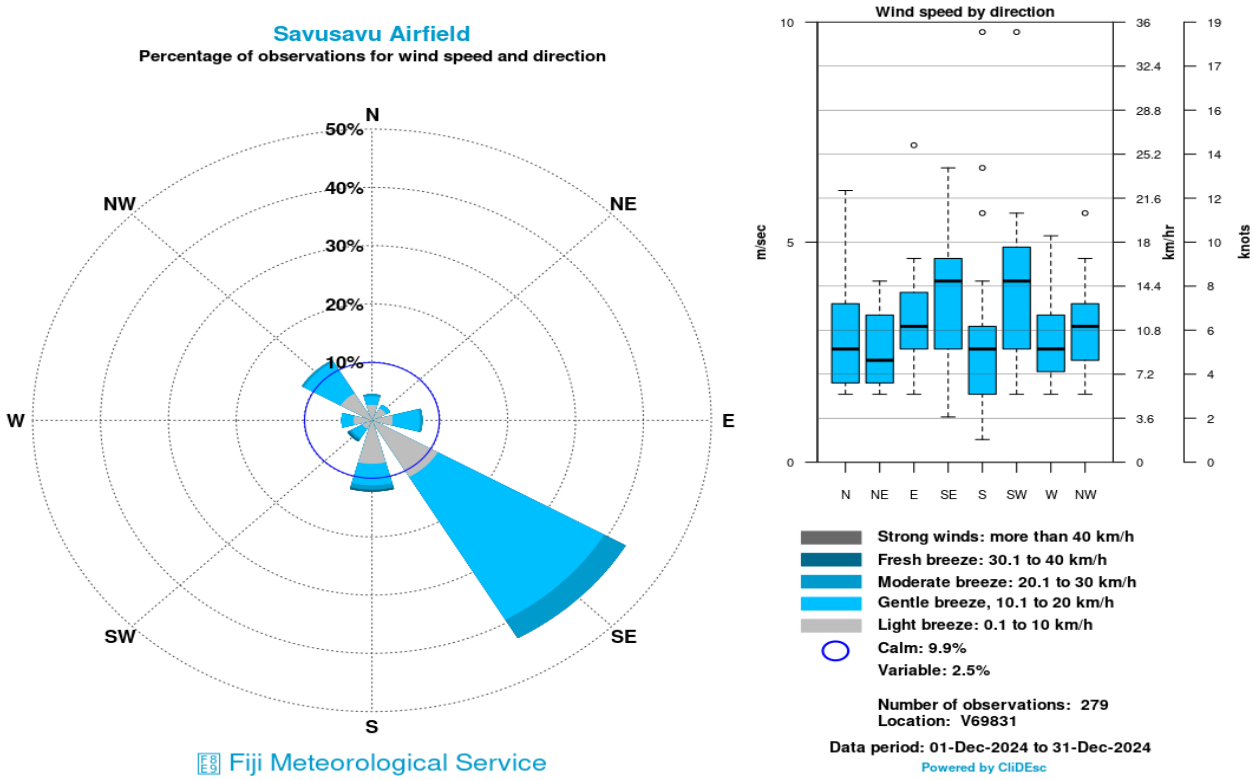



***Figure 7c***: For Savusavu Airfield's hourly observations (0800hrs to 1600hrs), southeasterly winds were most dominant during the month, followed by northwesterly and then southerly winds. Wind strength ranged from light to moderate breeze, with calm winds observed 9.9% of the time.

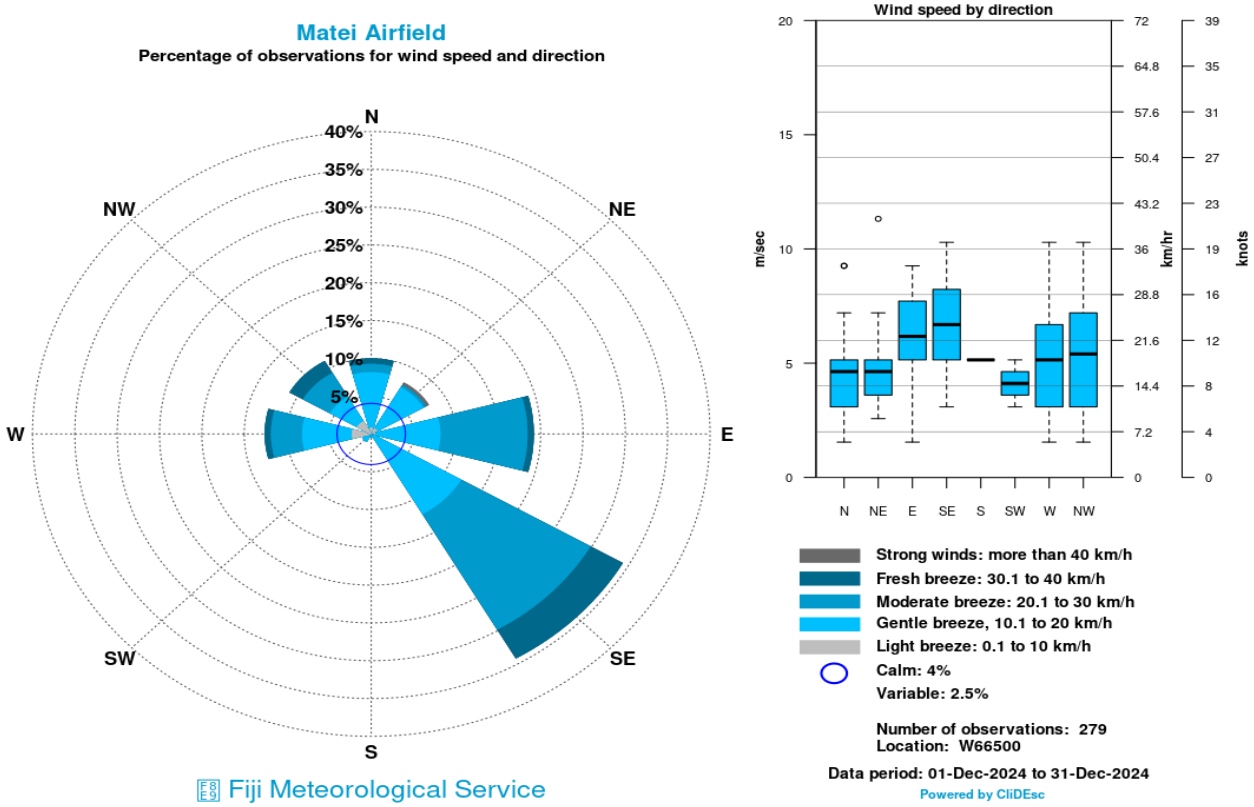



***Figure 7d:*** For Matei Airfield's hourly wind observations (0800hrs to 1600hrs), southeasterly winds were dominant followed by easterly and then westerly winds. Wind strength ranged from light to fresh breeze, with calm winds observed 4.0% of the time.

## 8. SEA SURFACE TEMPERATURE (SST)

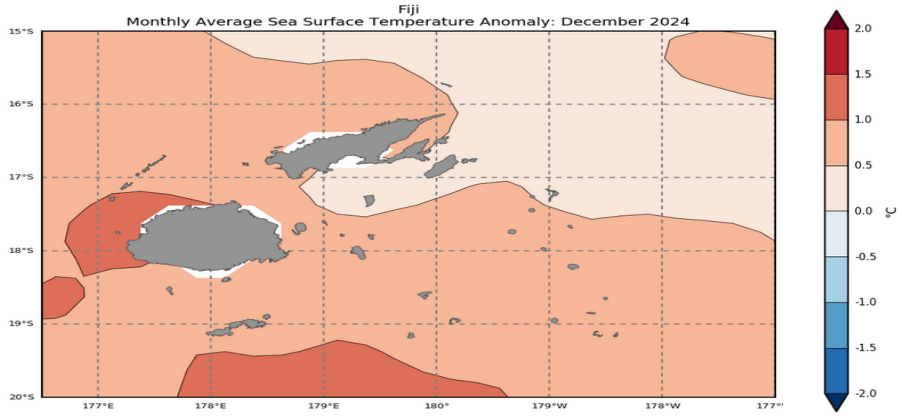



**Figure 8:**
Warmer than normal sea surface temperature anomalies were observed across most of the Fiji Waters, with anomalies 1.0-1.5°C observed west of Viti Levu.

*Source: https://oceanportal.spc.int/portal/app.html#climate*

## 9. CLOUD COVER

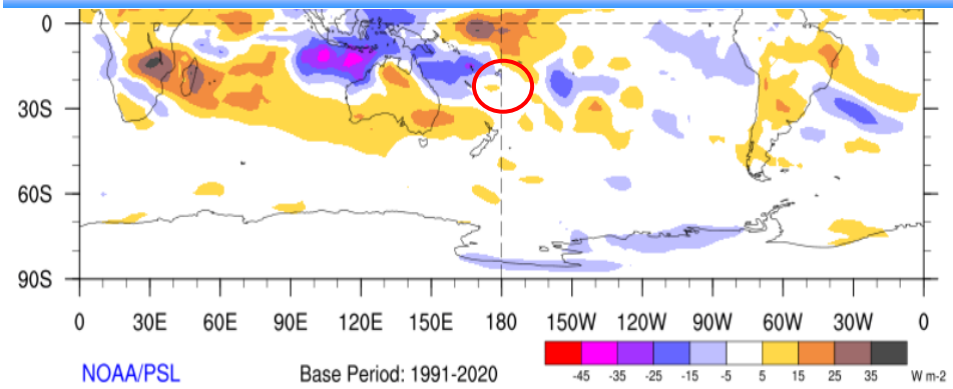



**Figure 9:**
*Above normal* cloud cover was present over the Fiji Group during December (*Fiji in red circle).*

*Source: http://www.esrl.noaa.gov/psd/map/clim/olr.shtml*

## 10. SEA LEVEL

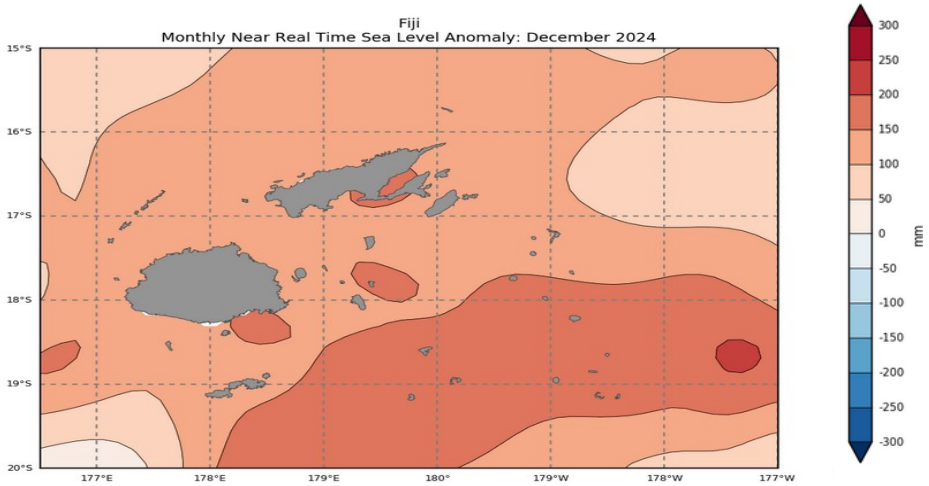



**Figure 10:**
*Above normal* sea level anomalies persisted across most of the Fiji Waters during December.

*Source: https://oceanportal.spc.int/portal/app.html#sealevel*

## 11. WIND ANOMALIES

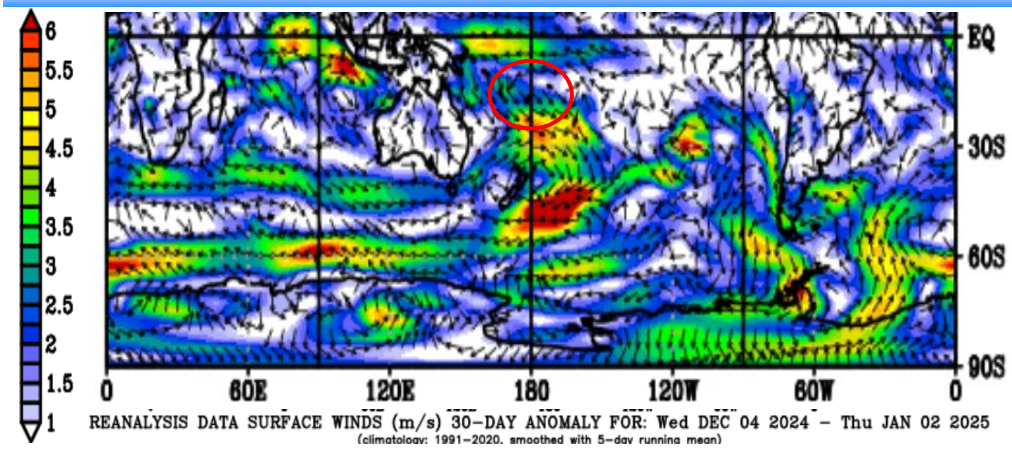



**Figure 11:**

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

*Source: https://www.esrl.noaa.gov/psd/map/images/rnl/sfcwnd_30b.rnl.html*

## 12. FLASH FLOODING: 24th to 28th.

Continuous torrential heavy rainfall led to flash floods at low-level crossings in low lying areas across the Western Division from the 24th to 28th. Flash flooding led to the closure of several low-level crossings, essential businesses and made some areas inaccessible for transportation. Some areas in the Western Division experienced water cuts and power failure due to continuous flooding.

*Figure 12a: Flooding in parts of Ba town on the 27th. Source: The Fiji Times.*

*Figure 12b: Narara crossing flooding on the 24th. Source: Fiji Roads Authority.*

*Figure 12c: Flooding and blockage of Emuri crossing, Nadroga, on the 25th. Source: Fiji Roads Authority.*

*Figure 12d: Vaivai crossing on the 24th. Source: Fiji Roads Authority.*

*Figure 12e: Lovu Seaside, Lautoka, flooding on the 28th. Source: The Fiji Times.*

*Figure 12f: Naqoro flats, Rakiraki, flooding on the 27th. Source: FijiVillage.*

*Figure 12g: Flooding of Nadi town on the 25th. Source: Fiji Police Force.*

*Figure 12h: Zailav crossing on the 27th. Source: FijiVillage*

*Figure 12i:* Submerged Toge crossing *on the 28h. Source: The 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.