

## 1. IN BRIEF

Typical wet season rainfall pattern was observed across the country, during the month, as generally *above average* to *well above average* rainfall were recorded. Dobeilevu, Vunisea and Savusavu Airfield recorded *well above average* rainfall, which was twice its normal monthly rainfall while, Ono-i-Lau was the lone station with *below average* rainfall.

Overall, out of the 26 rainfall monitoring stations that reported in, in time for the compilation of bulletin, 3 recorded *well above average* rainfall, 18 *above average*, 4 *average*, and 1 station with *below average* rainfall (Table 2, Figures 1-5).

Lomaivuna recorded the highest monthly rainfall of 844.5mm, followed by Monasavu with 787.2mm, Vaturukuka (Labasa) with 757.0mm, Dobeilevu with 742.0mm, RKS Lodoni with 740.5mm and Nadarivatu with 699.0mm (Table 2).

On temperatures, the month's warmest day-time temper-

ature of 37.8°C was observed at RKS Lodoni on the 26<sup>th</sup>, followed by Wainikoro with 37.1°C on the 6<sup>th</sup> and Rarawai Mill (Ba) with 36.0°C on the 2<sup>nd</sup>.

The month's coolest night-time temperature of 17.6°C was recorded at Nadarivatu on the 4<sup>th</sup>, followed by Rarawai Mill (Ba) with 19.0°C on the 10<sup>th</sup> and Monasavu with 19.1°C on the 18<sup>th</sup>.

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

Warmer than normal sea surface temperature anomalies were observed at most parts of the country (Figure 8). *Above normal* sea level anomalies persisted across most of the Fiji Waters during February 2024 (Figure 10).

Flash flooding in low-lying areas and landslide event was reported due to heavy rainfall events (Figure 12a-12l).

## 2. WEATHER PATTERNS

The weather in February was mostly influenced by a series of active troughs of low pressure systems which was associated with Tropical Depression 05F which brought about a lot of heavy rain events together with the moist northerlies, easterlies and the southeast winds.

A trough of low pressure affected the northern and eastern parts of the country with occasional rain and few thunderstorms on the first two days of the month. A southerly wind flow prevailed thereafter on the 3<sup>rd</sup> and turning southeast on the 4<sup>th</sup> with some showers over the interior and eastern parts of the larger islands.

A trough of low pressure affected the country on the 7<sup>th</sup> till the 9<sup>th</sup> with occasional rain, heavy at times and few thunderstorms over the northern, interior and eastern parts of Viti Levu, Vanua Levu and nearby smaller islands, the Yasawa, Lau and Lomaiviti group.

Another trough of low pressure, associated with TD05F affected the country from the west on the 10<sup>th</sup> with heavy rain and thunderstorms. The northerly wind flow continued to persist with TD05 in the vicinity of Fiji thereafter till the 15<sup>th</sup>. This brought occasional to periods of rain with isolated heavy falls over the interior, western and

northern parts of Viti Levu and Vanua Levu, Yasawa, Mamanuca and Lau groups. Tavua was impacted with flooding in the early morning of the 14<sup>th</sup> with isolated heavy rain due to the overnight diurnal intensification of the northerly winds over Fiji.

A series of active troughs of low pressure associated with TD05F continued to affect the country till the 25<sup>th</sup> with occasional to periods of heavy rain and few thunderstorms. A northeast to northwest wind flow prevailed over the group from the 26<sup>th</sup> till the 29<sup>th</sup> as TD05F moved to the west of Fiji. This brought cloudy periods with some showers over the interior, northern and eastern parts of Viti Levu and Vanua Levu, Yasawa, Lomaiviti and the central and northern parts of the Lau group.

Rotuma's weather was mainly affected by a series of troughs of low pressures and the moist easterlies.

### 3. RAINFALL

Average to well above average rainfall was observed across the country during the month. This was mainly due to the presence of series of low pressure systems, tropical disturbances, afternoon showers and thunderstorms, resulting in few episodes of flooding of low lying areas across the country.

Overall, out of the 26 rainfall monitoring stations that reported in, in time for the compilation of bulletin, 3 recorded *well above average* rainfall, 18 *above average*, 4 *average*, and 1 station with *below average* rainfall (Table 2, Figures 1-5).

Dobuilevu, Vunisea and Savusavu Airfield recorded *well above average* rainfall, experiencing twice its normal monthly rainfall. On the other hand, the only exception was Ono-i-Lau, which recorded *below average* rainfall.

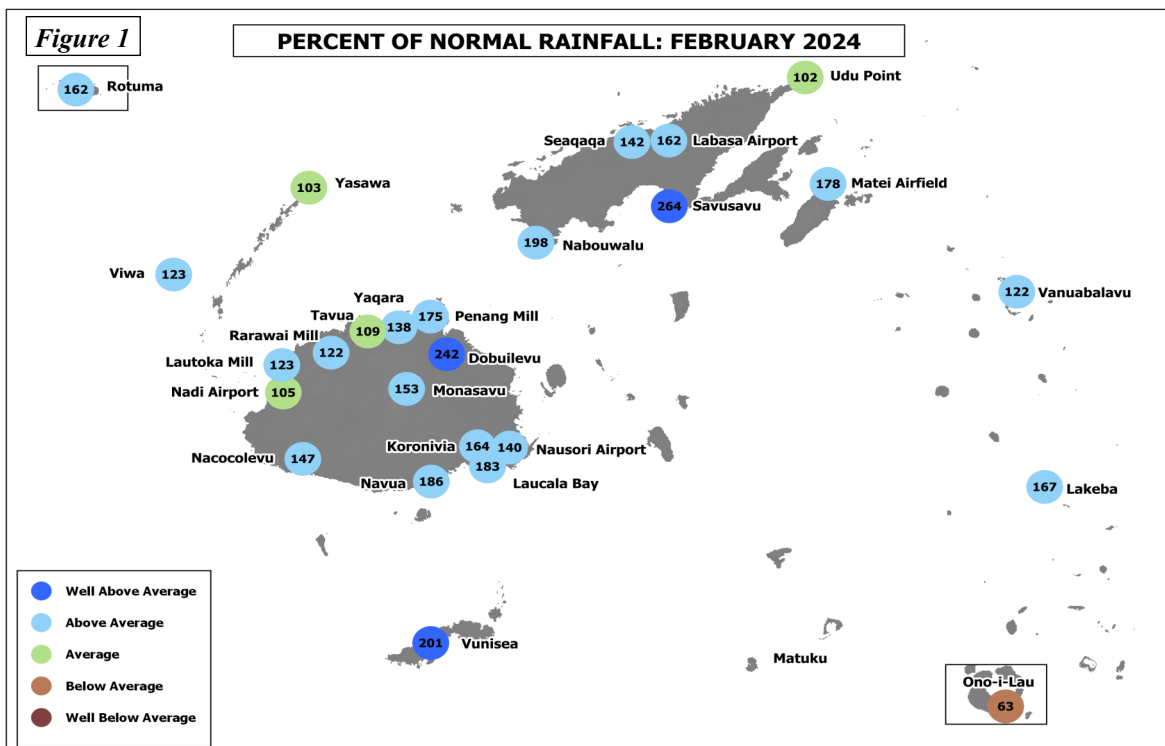
The highest monthly rainfall of 844.5mm was observed at Lomaivuna, followed by Monasavu with 787.2mm, Vaturokuka (Labasa) with 757.0mm, Dobuilevu with 742.0mm, RKS Lodonu with 740.5mm, Nadarivatu with 699.0mm, Labasa Airfield with 621.4mm, Wainikoro with 618.0mm, Penang Mill with 591.3mm, Savusavu Airfield with 578.5mm, Nabouwalu with 572.0mm and Seaqaqa with 538.5mm. On the other hand, Ono-i-Lau recorded the month's lowest total monthly rainfall of 119.7mm, followed by Yasawa-i-Rara with 196.0mm and Momi with 233.0mm. (Table 2).

The highest 24 hour rainfall of 231mm was recorded at RKS Lodonu, followed by both Nabouwalu and Matei

Airfield with 216mm, all on the 16<sup>th</sup>, respectively, Lomaivuna with 206mm on 24<sup>th</sup>, Labasa with 182mm on 11<sup>th</sup>, Koronivia with 177mm on 16<sup>th</sup>, Dobuilevu with 156mm on 20<sup>th</sup>, Nasinu with 146mm, Savusavu Airfield with 144mm, Nausori Airport with 138mm, Laucala Bay (Suva) with 135mm, all on the 16<sup>th</sup>, respectively.

Rotuma and Monasavu recorded the highest number of rain days (rainfall ≥0.1mm) with 27 days, followed by Penang Mill with 26 days, both Vaturokuka (Labasa) and Wainikoro with 25 days, Nacocolevu, Savusavu Airfield, Koronivia, Yaqara, Nadarivatu, RKS Lodonu and Dobuilevu, all with 24 days, and Levuka, Lomaivuna, Korolevu, Saqani and Seaqaqa, all with 23 days. Consequently, Vunisea recorded the least number of rain days with 14 days, followed by Matei Airfield with 17 days, Momi, Ono-i-Lau, Lakeba and Vanuabalavu with 18 days, Nausori Airport and Yasawa-i-Rara with 19 days, Rarawai Mill (Ba), Udu Point, Laucala Bay (Suva) and Nadi Airport, all with 20 days.

Savusavu Airfield recorded its highest daily rainfall of 144.5mm on 16<sup>th</sup>, since observations began in 1956. The highest total monthly rainfall was recorded at Savusavu Airfield, Dobuilevu and RKS Lodonu, since observations began in 1956, 2008 and 2013, respectively (Table 1).



Normal: Long term average from 1981 to 2010  
 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 *above normal* day-time air temperatures were observed at most parts of the country during the month. Out of the 20 climate stations that reported in time for the analysis of data, 13 recorded anomalies  $\geq +0.5^{\circ}\text{C}$ , 6 within  $\pm 0.5^{\circ}\text{C}$ , and 1 with anomaly  $\leq -0.5^{\circ}\text{C}$ .

The warmest days on average were recorded at RKS Lodonu with  $34.7^{\circ}\text{C}$ , followed by Seaqaqa with  $32.9^{\circ}\text{C}$ , Rarawai Mill (Ba) with  $32.8^{\circ}\text{C}$ , Lautoka Mill with  $32.7^{\circ}\text{C}$ , Nadi Airport, Viwa, Wainikoro and Saqani, all with  $32.6^{\circ}\text{C}$ , both Yaqara and Levuka with  $32.4^{\circ}\text{C}$ , Sigatoka with  $32.2^{\circ}\text{C}$ , both Nacocolevu and Nabouwalu with  $32.1^{\circ}\text{C}$ , and Koronivia, Nausori Airport and Penang Mill, all with  $32.0^{\circ}\text{C}$ . Consequently, Nadarivatu recorded the coolest days on average with  $26.2^{\circ}\text{C}$ , followed by Monasavu with  $27.3^{\circ}\text{C}$ , both Ono-i-Lau and Yasawa-i-Rara with  $30.6^{\circ}\text{C}$ , both Vanuabalavu and Rotuma with  $31.0^{\circ}\text{C}$ , Udu Point with  $31.2^{\circ}\text{C}$ , and both Lakeba and Matei Airfield with  $31.3^{\circ}\text{C}$ .

The month's highest day-time temperature of  $37.8^{\circ}\text{C}$  was observed at RKS Lodonu on the 26<sup>th</sup>, followed by Wainikoro with  $37.1^{\circ}\text{C}$  on the 6<sup>th</sup>, Rarawai Mill (Ba) with  $36.0^{\circ}\text{C}$  on the 2<sup>nd</sup>, Levuka with  $35.9^{\circ}\text{C}$  on the 28<sup>th</sup>, Lomaivuna with  $35.2^{\circ}\text{C}$  on the 28<sup>th</sup>, and both Nadi Airport and Savusavu Airfield with  $35.0^{\circ}\text{C}$  on the 3<sup>rd</sup> and 11<sup>th</sup>, respectively. On the other hand, the coolest day-time temperature of  $23.2^{\circ}\text{C}$  was at Nadarivatu on the 20<sup>th</sup>, followed by Monsavu with  $24.6^{\circ}\text{C}$  on the 17<sup>th</sup>, Levuka with  $27.1^{\circ}\text{C}$  on the 16<sup>th</sup>, and Lomaivuna with  $27.2^{\circ}\text{C}$  on the 19<sup>th</sup>.

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

### B. Minimum Night-time Air Temperatures

Generally *above average* night-time temperatures were recorded over most parts of the country during the month. Of the 20 stations, 13 recorded anomalies  $\geq +0.5^{\circ}\text{C}$ , 3 within  $\pm 0.5^{\circ}\text{C}$ , and 4 with anomaly  $\leq -0.5^{\circ}\text{C}$ .

The coolest days on average was at Nadarivatu with  $19.8^{\circ}\text{C}$ , followed by Monasavu with  $21.0^{\circ}\text{C}$ , Lomaivuna with  $22.8^{\circ}\text{C}$ , both Matei Airfield and Korolevu with  $23.2^{\circ}\text{C}$ , Vaturekuka (Labasa) with  $23.5^{\circ}\text{C}$ , both Udu Point and Ono-i-Lau with  $23.6^{\circ}\text{C}$ , Vanuabalavu with  $23.7^{\circ}\text{C}$  and Vunisea with  $24.2^{\circ}\text{C}$ . Consequently, on average, the warmest night-time temperatures were observed at RKS Lodonu with  $26.6^{\circ}\text{C}$ , followed by Viwa with  $26.4^{\circ}\text{C}$ , Levuka with  $25.7^{\circ}\text{C}$ , Laucala Bay (Suva) with  $25.5^{\circ}\text{C}$ , Seaqaqa, Saqani and Nabouwalu, all with  $25.3^{\circ}\text{C}$ , respectively.

The coolest daily night-time temperatures were recorded mostly during the first and last week of the month. The lowest night-time temperature of  $17.6^{\circ}\text{C}$  was recorded at Nadarivatu on the 4<sup>th</sup>, followed by Rarawai Mill (Ba) with  $19.0^{\circ}\text{C}$  on the 10<sup>th</sup>, Monasavu with  $19.1^{\circ}\text{C}$  on the 18<sup>th</sup>, Vunisea with  $19.5^{\circ}\text{C}$  on the 23<sup>rd</sup>, both Matei Airfield and Vanuabalavu with  $20.9^{\circ}\text{C}$  on the 17<sup>th</sup>, respectively, both Lomaivuna and Ono-i-Lau with  $21.4^{\circ}\text{C}$  on the 17<sup>th</sup> and 18<sup>th</sup>, respectively and Korolevu with  $21.5^{\circ}\text{C}$ , on the 10<sup>th</sup>. On the other hand, the warmest night-time temperature of  $27.9^{\circ}\text{C}$  was recorded at RKS Lodonu on the 20<sup>th</sup>, followed by Viwa with  $27.7^{\circ}\text{C}$  on the 29<sup>th</sup>, Levuka with  $27.5^{\circ}\text{C}$  on the 14<sup>th</sup>, and both Momi and Lautoka Mill with  $27.4^{\circ}\text{C}$  on the 13<sup>th</sup> and 14<sup>th</sup>, respectively.

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

**TABLE 1. CLIMATE RECORDS ESTABLISHED IN FEBRUARY 2024**

<u>Element</u>	<u>Station</u>	<u>Observed (record)</u>	<u>On</u>	<u>Rank</u>	<u>Previous (record)</u>	<u>Year</u>	<u>Records Began</u>
Daily Rainfall	Savusavu Airfield	144.5mm	16 <sup>th</sup>	New High	141.7mm	1967	1956
Monthly Rainfall	Savusavu Airfield	578.5mm	-	New High	502.2mm	1989	1956
Monthly Rainfall	Dobuilevu	742.0mm	-	New High	561.0mm	2022	2008
Monthly Rainfall	RKS Lodonu	740.5mm		New High	389.5mm	2022	2013

*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 FEBRUARY 2024**

	RAINFALL				AIR TEMPERATURES								SUNSHINE		
	TOTAL	RAIN		MAX. FALL	AVERAGE DAILY				EXTREME				TOTAL	*	
	MM	%	+ DAYS	MM ON	MAX. C	# C	MIN. C	# C	MAX. C	ON C	MIN. C	ON C	HRS	%	
NADI AIRPORT	350.9	105	20	66	24	32.6	1.1	24.7	1.3	35.0	3	23.5	6	138	74
LAUCALA BAY	506.5	183	20	135	16	31.7	0.2	25.5	0.9	34.6	12	24.1	25	116	65
NACOCOLEVU RESEARCH	379.7	147	24	65	15	32.1	0.3	24.4	1.6	34.2	14	22.9	10	139	105
ROTUMA ISLAND	508.3	162	27	76	22	31.0	-0.1	24.8	-0.2	32.6	29	22.4	8	141	96
VIWA ISLAND	269.4	123	21	47	24	32.6	0.6	26.4	1.2	34.2	5	25.3	18		
YASAWA-I-RARA (AWS)	196.0	103	19	72	24	30.6	-1.0	24.7	0.1	32.3	6	23.0	18		
UDU POINT WEATHER	319.0	102	20	59	11	31.2	0.1	23.6	-1.2	32.5	29	22.3	18		
NABOUWALU	572.0	198	21	216	16	32.1	1.0	25.3	0.6	33.5	14	22.0	24		
LABASA AIRFIELD	621.4	162	22	182	11	U/S		24.3	1.8	U/S		22.0	5		
SAVUSAVU AIRFIELD	578.5	264	24	144	16	31.9	1.1	24.7	0.8	35.0	11	23.0	17		
KORONIVIA RESEARCH	474.8	164	24	177	16	32.0	1.1	24.8	1.4	34.4	21	23.5	8		
NAUSORI AIRPORT	407.0	140	19	138	16	32.0	0.9	24.4	0.9	34.7	12	23.1	5		
NAVUA (AWS)	534.5	186	23	123	24	31.8	1.3	24.2	1.3	35.7	12	22.4	10		
MONASAVU HYDRO DAM	787.2	153	27	100	24	27.3	1.2	21.0	1.5	30.0	8	19.1	18		
FSC LAUTOKA MILL	396.0	123	21	58	16	32.7	1.2	25.0	1.1	34.0	29	23.4	6		
FSC RARAWAI MILL	425.8	122	20	77	16	32.8	0.7	24.4	1.7	36.0	2	19.0	10		
<b>FSC PENANG MILL</b>	<b>591.3</b>	<b>175</b>	<b>26</b>	<b>94</b>	<b>2</b>	<b>32.0</b>	<b>0.7</b>	<b>24.9</b>	<b>1.3</b>	<b>33.6</b>	<b>21</b>	<b>23.1</b>	<b>3</b>		
MATEI AIRFIELD	466.9	178	17	216	16	31.3	0.7	23.2	-1.2	32.7	13	20.9	17		
VANUABALAVU	287.5	122	18	69	16	31.0	0.4	23.7	-1.0	33.0	29	20.9	17		
LAKEBA	371.1	167	18	92	14	31.3	0.5	24.6	0.1	34.4	13	23.1	8		
<b>VUNISEA</b>	<b>446.4</b>	<b>201</b>	<b>14</b>	<b>94</b>	<b>14</b>	<b>31.5</b>	<b>0.8</b>	<b>24.2</b>	<b>-0.1</b>	<b>33.6</b>	<b>12</b>	<b>19.5</b>	<b>23</b>		
MATUKU	MISSING OBSERVATIONS														
ONO-I-LAU	119.7	63	18	34	14	30.6	0.1	23.6	-0.9	33.0	29	21.4	18		
YAQARA AWS	401.5	138	24	64	15	32.4		25.2		34.5	9	23.6	5		
<b>LEVUKA AWS</b>	<b>424.5</b>	<b>23</b>	<b>113</b>	<b>16</b>	<b>32.4</b>		<b>25.7</b>			<b>35.9</b>	<b>28</b>	<b>23.4</b>	<b>17</b>		
KEIYASI AWS	361.0		21	94	24	U/S		U/S		U/S		U/S			
<b>LOMAIVUNA AWS</b>	<b>844.5</b>	<b>23</b>	<b>206</b>	<b>24</b>	<b>31.6</b>		<b>22.8</b>			<b>35.2</b>	<b>28</b>	<b>21.4</b>	<b>17</b>		
<b>NADARIVATU AWS</b>	<b>699.0</b>	<b>24</b>	<b>80</b>	<b>20</b>	<b>26.2</b>		<b>19.8</b>			<b>29.9</b>	<b>2</b>	<b>17.6</b>	<b>4</b>		
RKS LODONI AWS	740.5		24	231	16	34.7		26.6		37.8	26	25.1	25		
MOMI AWS	233.0		18	33	16	31.7		25.2		33.9	2	23.6	25		
SIGATOKA AWS	286.5		21	84	14	32.2		24.3		34.6	13	22.3	10		
VATUREKUKA AWS	757.0		25	127	11	31.6		23.5		33.6	28	21.8	5		
KOROLEVU AWS	316.0		23	47	13	31.9		23.2		33.9	11	21.5	10		
WAINIKORO AWS	618.0		25	131	11	32.6		24.3		37.1	6	22.3	5		
SAQANI AWS	394.0		23	89	11	32.6		25.3		34.6	10	23.9	17		
<b>SEAQAQA AWS</b>	<b>538.5</b>	<b>142</b>	<b>23</b>	<b>115</b>	<b>11</b>	<b>32.9</b>		<b>25.3</b>		<b>34.0</b>	<b>2</b>	<b>22.8</b>	<b>5</b>		
DOBUILEVU TB3	742.0	242	24	156	20										
<b>NASINU TB3</b>	<b>475.5</b>	<b>21</b>	<b>146</b>	<b>16</b>											
TAVUA TB3	352.5	109	22	66	21										

	TEMPERATURE( C)				HUMIDITY	WIND		
	DRY		WET				RH%	VP
	MEAN	(AVERAGE AT 9AM)	KT					
NADI AIRPORT	28.6	28.6	26.0	81	29.3	6.0		
<b>LAUCALA BAY</b>	<b>28.6</b>	<b>28.9</b>	<b>26.4</b>	<b>81</b>	<b>29.8</b>			
NACOCOLEVU RESEARC	28.3	29.4	26.7	81	30.7			
ROTUMA ISLAND	27.9	28.6	27.0	89	29.3			
VIWA ISLAND	29.5	30.1	28.0	85	31.9			
YASAWA-I-RARA AWS	27.7							
UDU POINT WEATHER	27.4	28.9	26.4	83	29.8			
NABOUWALU	28.7	29.5	26.9	82	30.8			
LABASA AIRFIELD	U/S	29.0	26.5	83	30.0	7.3		
SAVUSAVU AIRFIELD	28.3	29.0	26.6	82	30.0	5.4		
KORONIVIA RESEARCH	28.4	28.8	26.8	86	29.6			
NAUSORI AIRPORT	28.2	28.7	26.4	83	29.4	4.8		
MONASAVU HYDRO DAM	24.1	24.0	23.7	97	22.3			
FSC LAUTOKA MILL	28.8	27.9	27.0	93	28.1			
FSC RARAWAI MILL	28.6	28.9	26.4	82	29.8			
<b>FSC PENANG MILL</b>	<b>28.5</b>	<b>28.9</b>	<b>26.6</b>	<b>84</b>	<b>29.8</b>			
MATEI AIRFIELD	27.3	29.1	26.7	83	30.1	6.6		
VANUABALAVU	27.3	28.6	26.3	83	29.3			
LAKEBA	27.9	29.4	26.6	80	30.7			
<b>VUNISEA</b>	<b>27.8</b>	<b>28.7</b>	<b>26.2</b>	<b>82</b>	<b>29.4</b>			
MATUKU	27.7	28.5	25.4	79	29.1			
ONO-I-LAU	27.1	28.6	25.9	81	29.3			

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 (1981-2010). + :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

Nadi Airport (Western Division) - Temperature & Rainfall Records for the last 13 Months (February 2023 - February 2024)

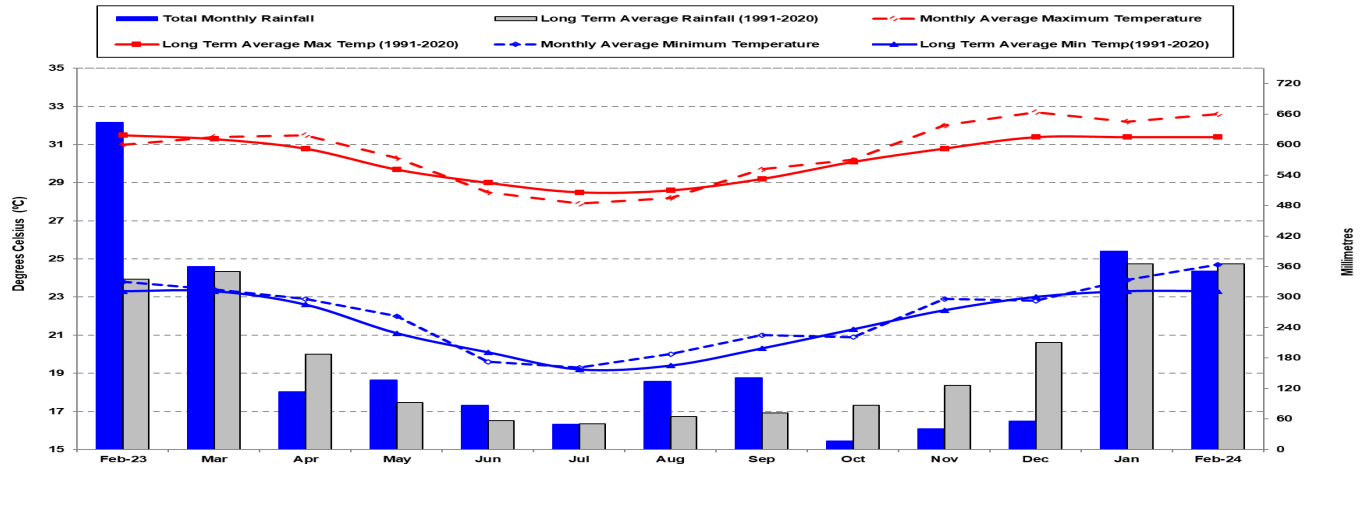


Figure 3

Laucala Bay - (Suva) (Central Division) - Temperature & Rainfall Records for the last 13 Months (February 2023 - February 2024)

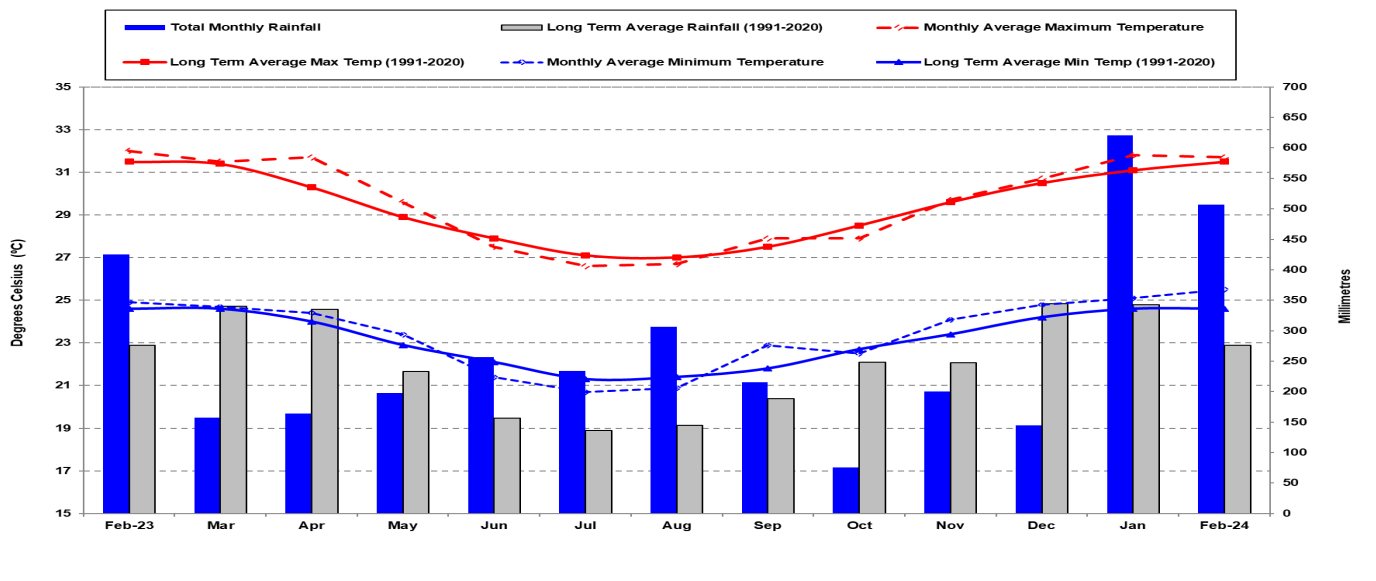


Figure 4

Udu Point (Eastern Division) - Temperature & Rainfall Records for the last 13 Months (February 2023 - February 2024)

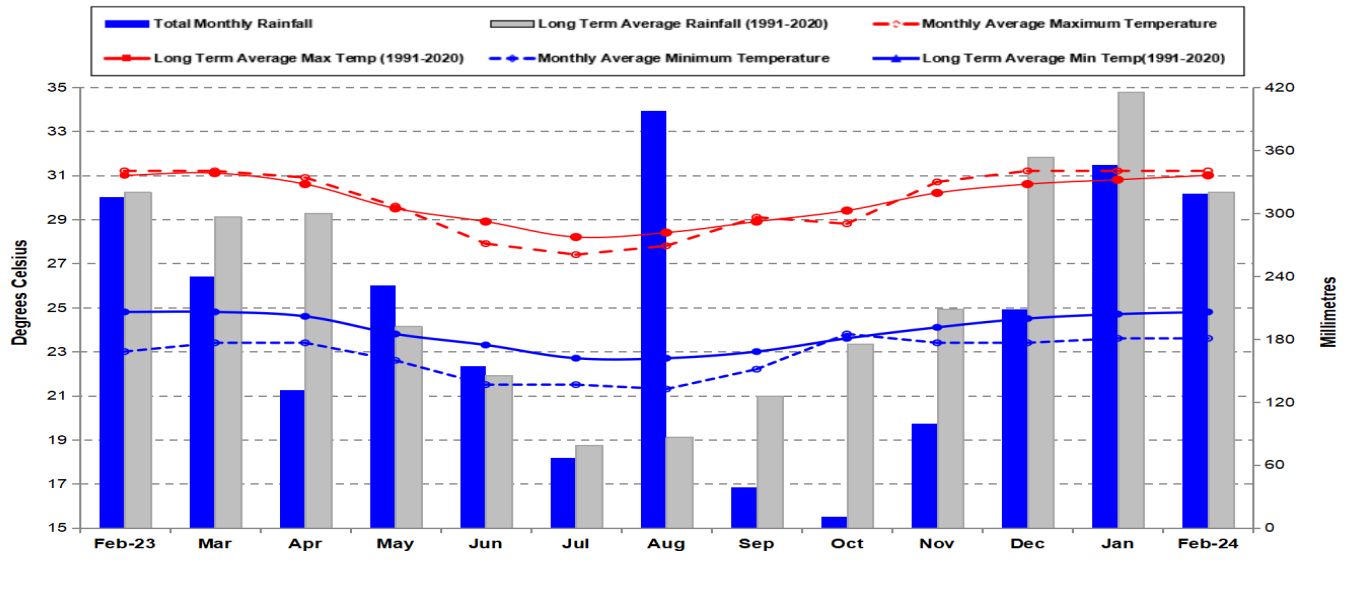
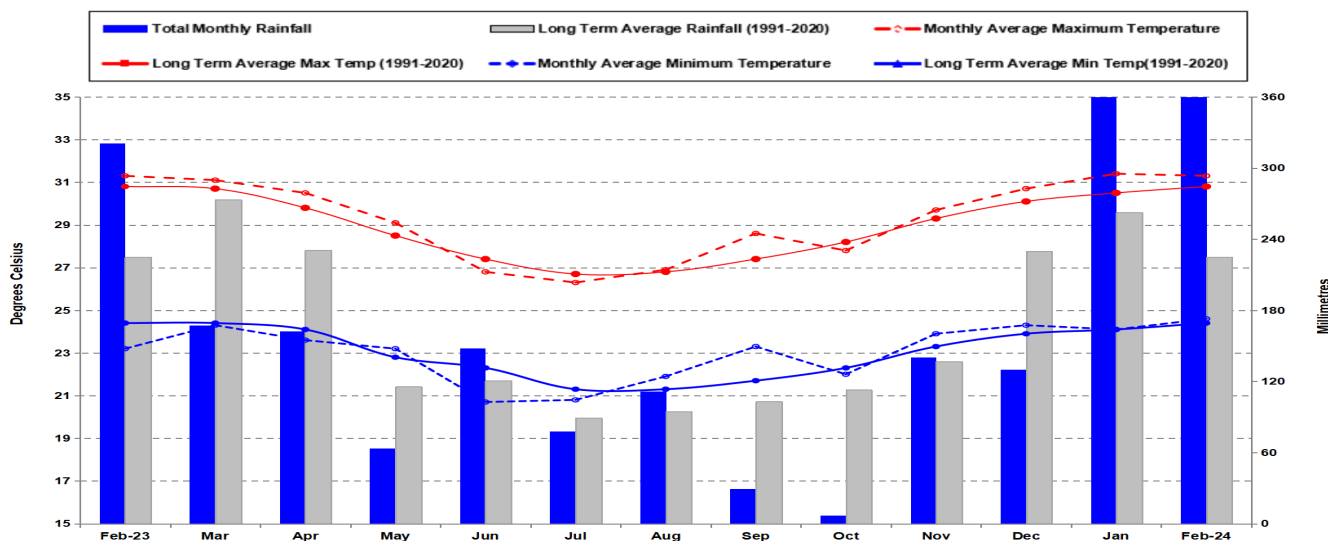


Figure 5

Lakeba (Eastern Division) - Temperature & Rainfall Records for the last 13 Months (February 2023 - February 2024)



### 5. DAILY RAISED PAN EVAPORATION

Daily Evaporation for February 2024

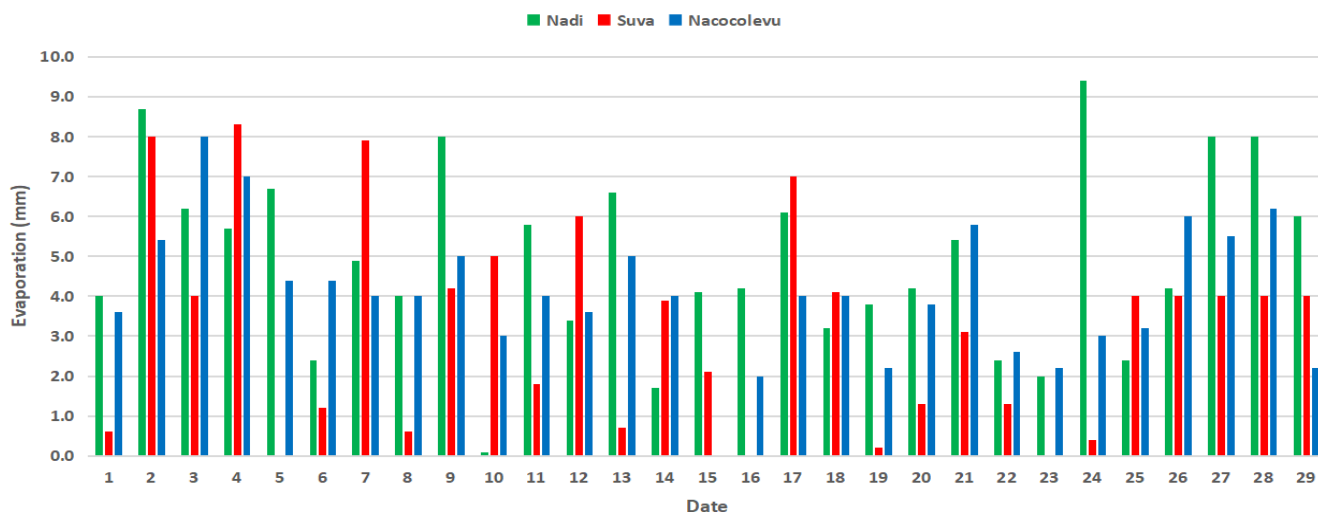


Figure 6: The total monthly raised pan evaporation at Nadi Airport, Laucala Bay (Suva) and Nacocolevu (Sigatoka) were 141.6mm, 91.7mm and 118.1mm, respectively. Nadi’s highest daily evaporation was 9.4mm on the 24<sup>th</sup>, with Suva’s highest daily evaporation of 8.3mm on 4<sup>th</sup>, and Nacocolevu (Sigatoka) recorded its highest of 8.0mm on 3<sup>rd</sup>.

### 6. SOLAR RADIATION

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



7. WIND SUMMARY

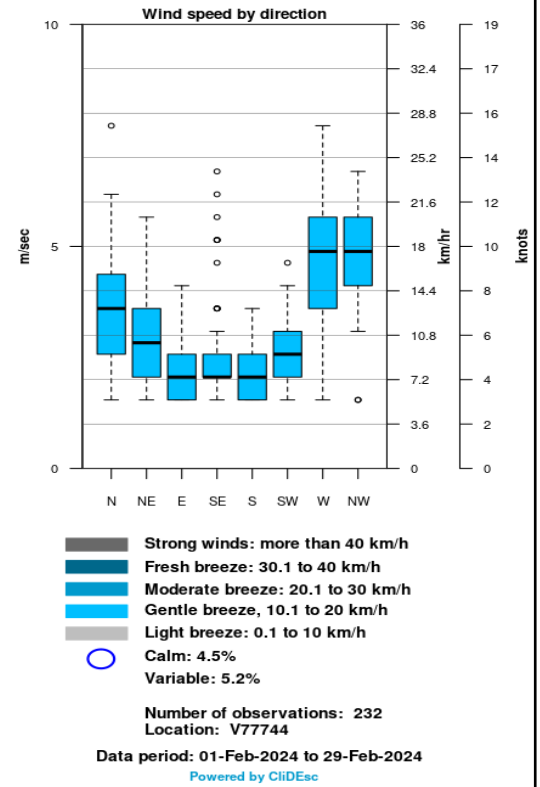
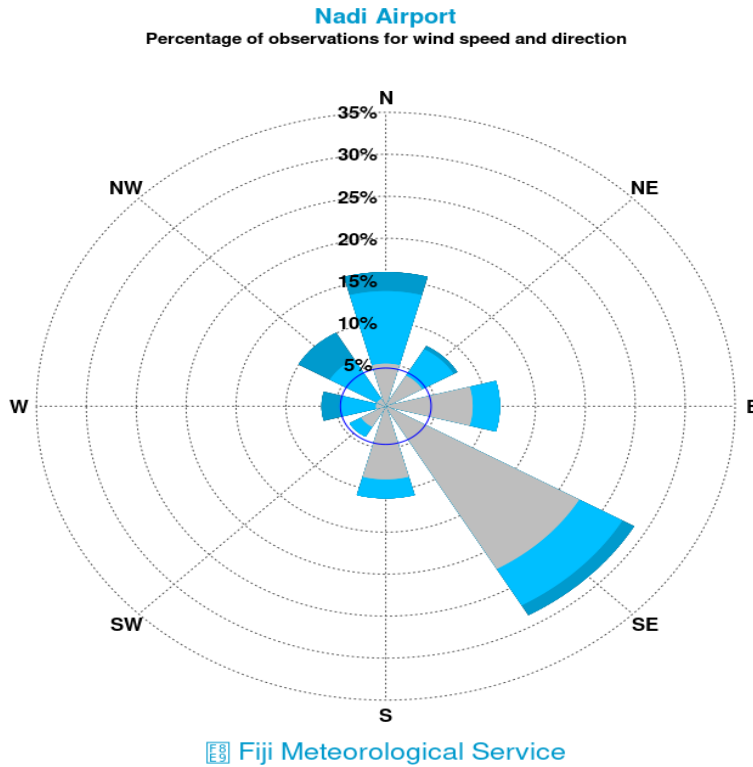


Figure 7a: Looking at Nadi’s 3 hourly observations, southeasterly winds were most dominant during the month, followed by northerly and then easterly winds. Wind strength ranged from light to moderate winds, while 4.5% observations accounted for calm winds.

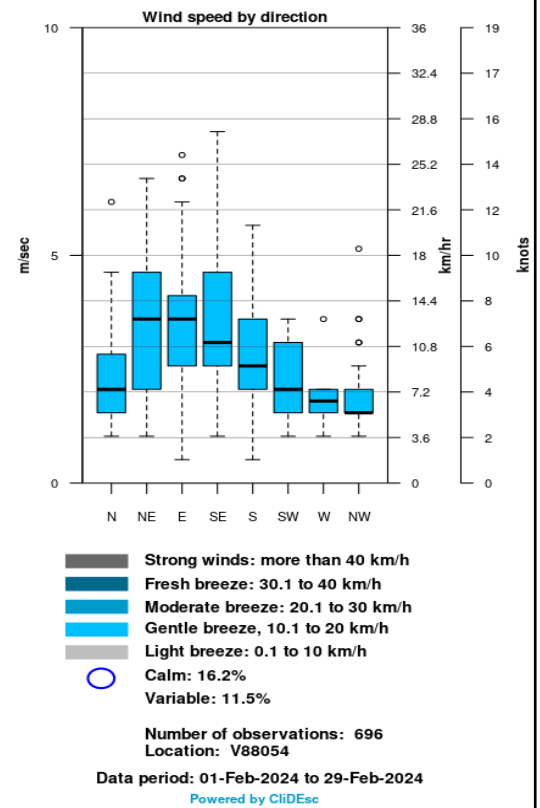
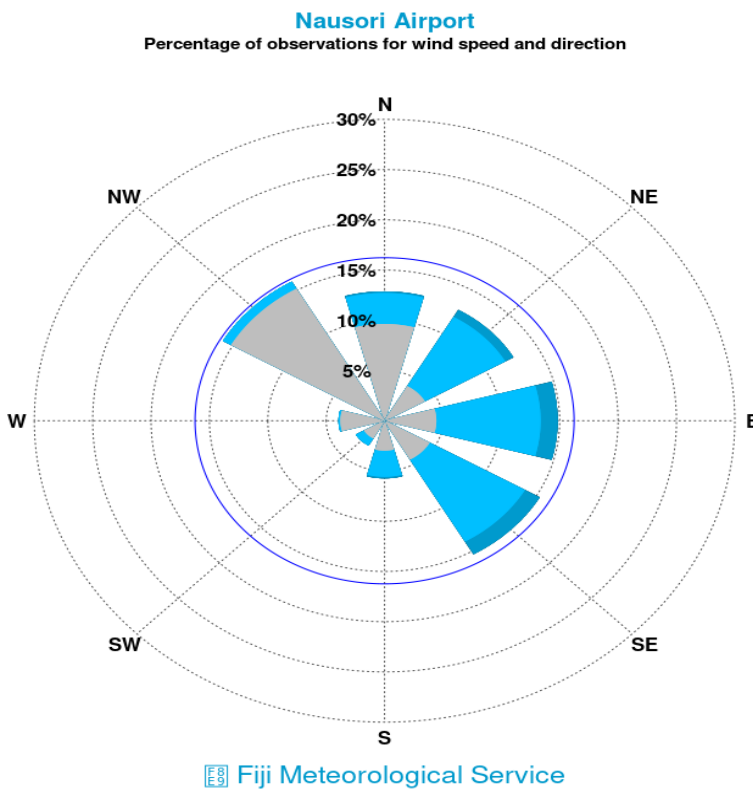
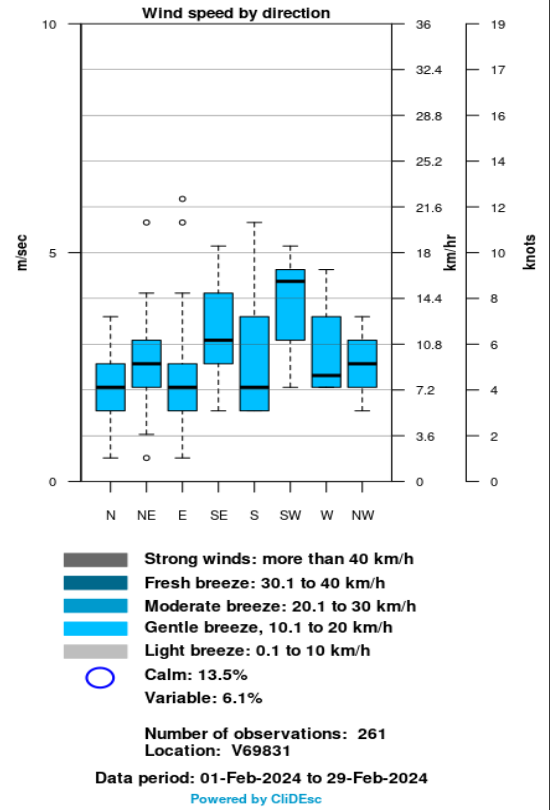
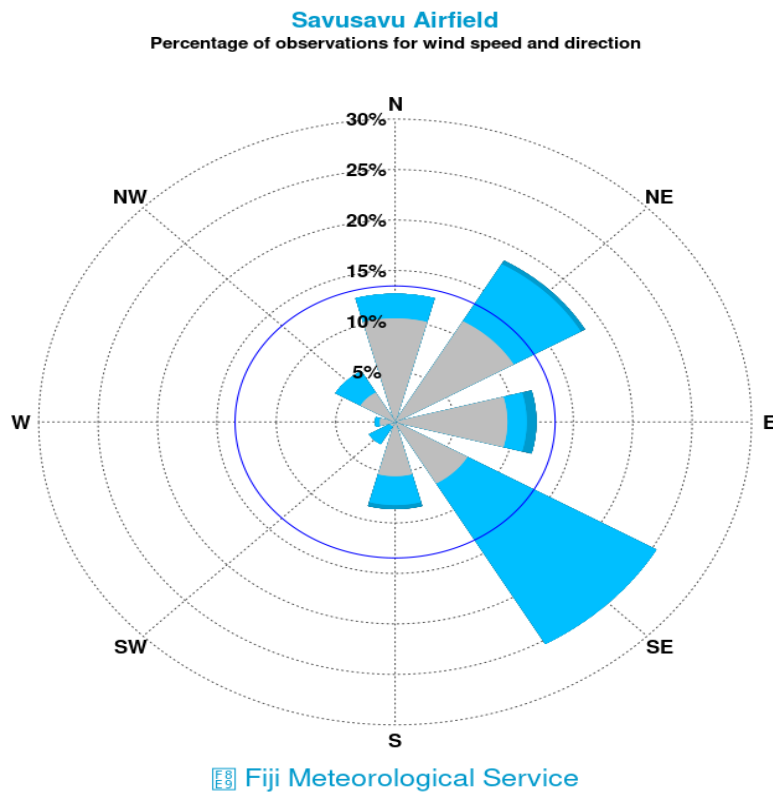
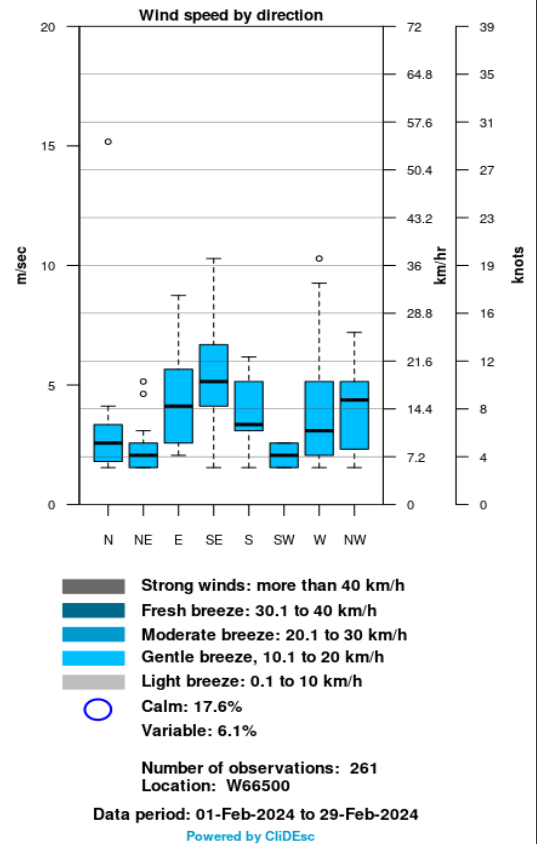
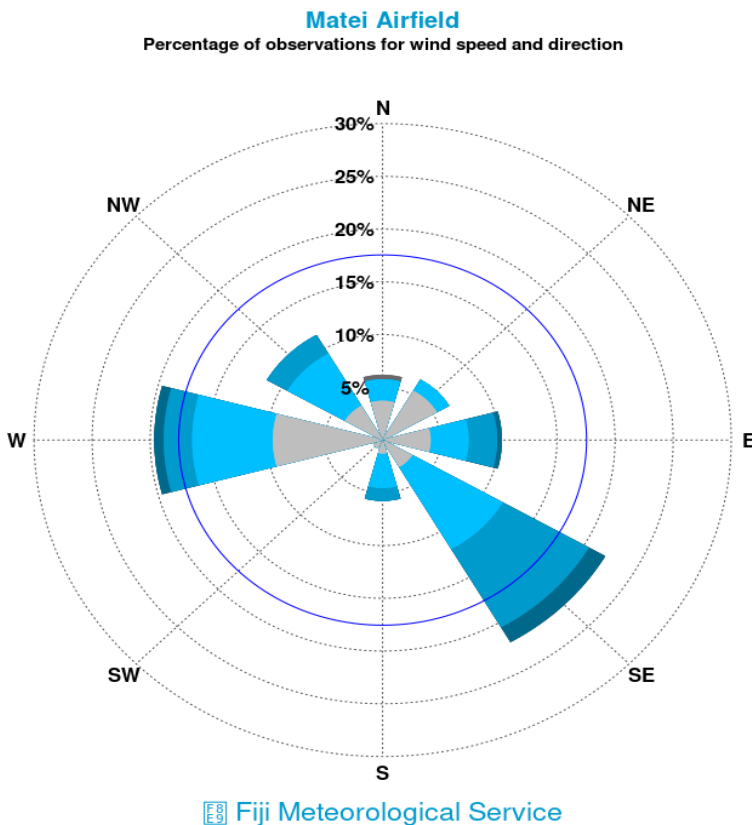


Figure 7b: For Nausori Airport’s hourly wind observations, northwesterly winds were dominant followed by southeasterly and then easterly winds. Wind strength ranged from light to moderate breeze, while 16.2% of observations accounted for calm winds.



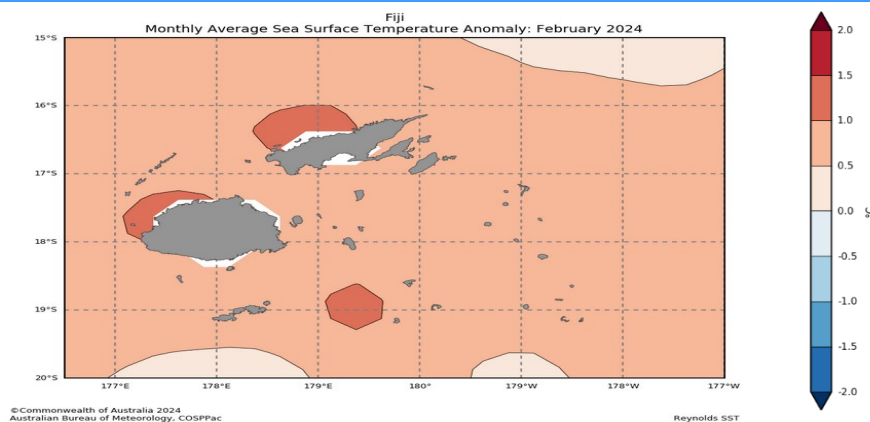
**Figure 7c:** For Savusavu Airfield’s hourly observations (0800hrs to 1600hrs), southeasterly winds were most dominant during the month, followed by northeasterly and then easterly winds. Wind strength ranged from light to moderate breeze, with calm winds observed 13.5% of the time.



**Figure 7d:** For Matei Airfield’s hourly wind observations (0800hrs to 1600hrs), southeasterly winds were dominant followed by westerly and then northwesterly winds. Wind strength ranged from light to fresh breeze, with calm winds observed 17.6% of the time.



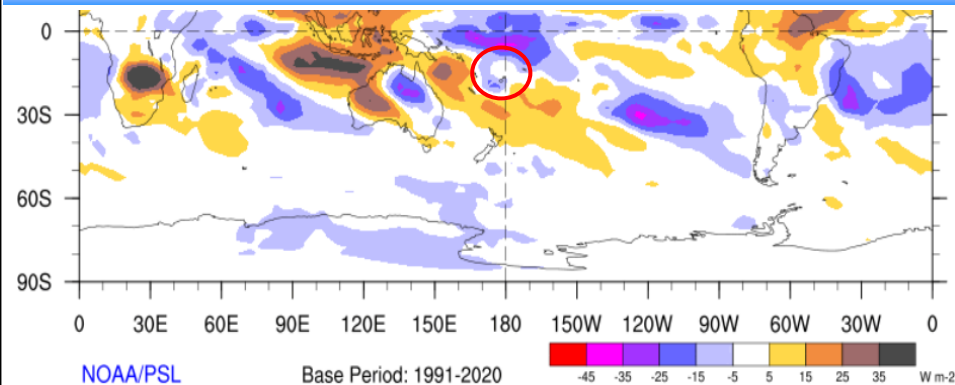
### 8. SEA SURFACE TEMPERATURE (SST)



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

Source: <http://oceanportal.spc.int/portal/app.html#climate>

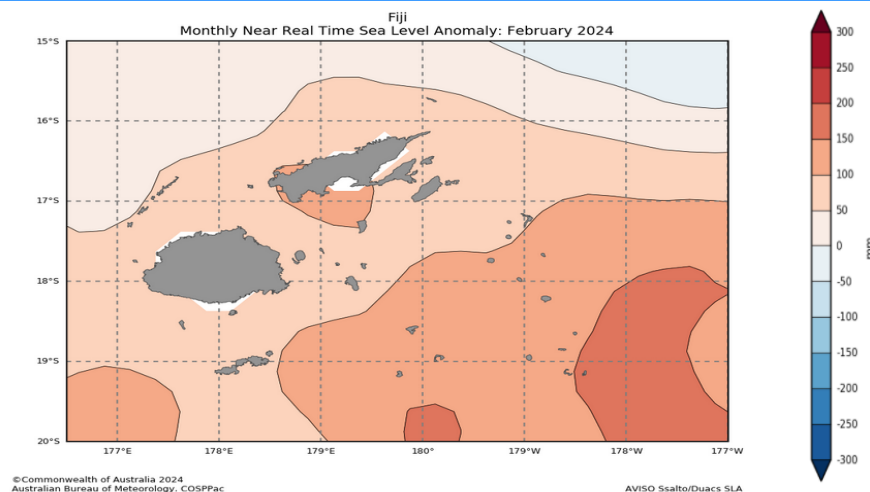
### 9. CLOUD COVER



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

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

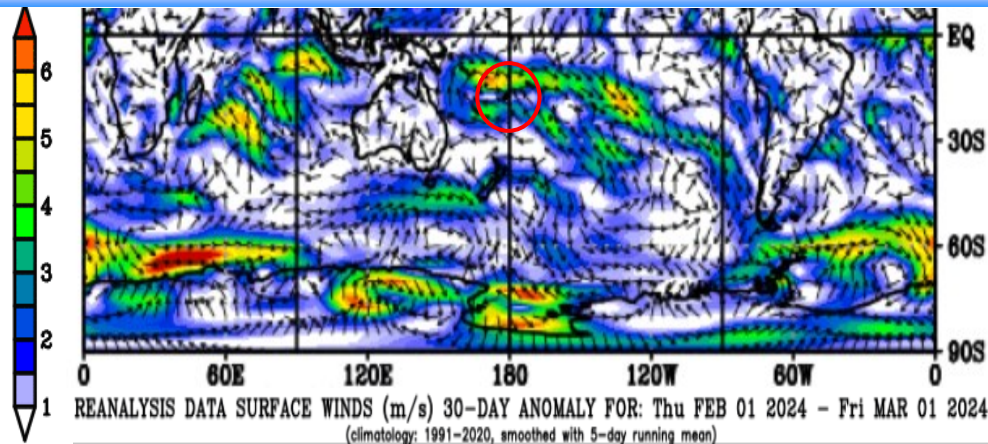
### 10. SEA LEVEL



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

Source: <http://oceanportal.spc.int/portal/app.html#sealevel>

### 11. WIND ANOMALIES



**Figure 11:** Westerly wind anomalies 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](https://www.esrl.noaa.gov/psd/map/images/rnl/sfcwnd_30b.rnl.html)

**12. FLASH FLOODING: 12<sup>th</sup>, 17<sup>th</sup>, 20<sup>th</sup>, 22<sup>nd</sup> and 24<sup>th</sup>**

Heavy rainfall led to flooding in the Northern Division on the 12<sup>th</sup>. The significant 24 hour rainfall recorded at Labasa was 182.1mm, Seaqaqa with 114.5mm and Wainikoro with 130.5mm on the 11<sup>th</sup>. Flash flooding of low-lying areas occurred across the Central and Western Division on the 17<sup>th</sup>, 20<sup>th</sup>, 22<sup>nd</sup> and 24<sup>th</sup>, respectively. Flash flooding resulted in road closures and inaccessibility in these areas, with a landslide reported at Kings Road at Vi-wa, past Korovou on the 25<sup>th</sup>, as a consequence of continuous heavy rain.



Figure 12a: Bulileka Road at Urata/Boca Junction on the 12<sup>th</sup>. Source: Fiji Roads Authority.

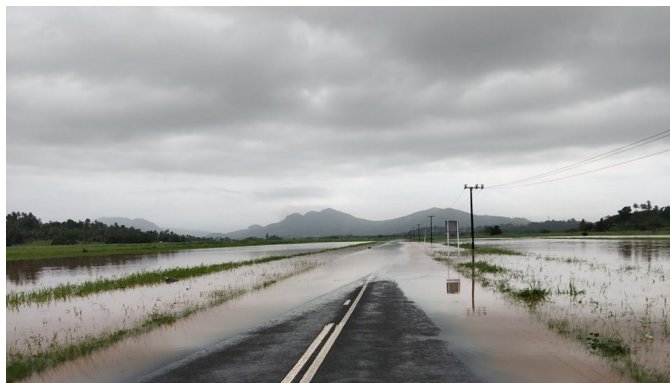


Figure 12b: Wainikoro Rd, Labasa on the 12<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12c: Flooded Waidina River, Naitasiri on the 17<sup>th</sup>. Source: National Disaster Management Office.



Figure 12d: Flooded waters in Nausori on the 17<sup>th</sup>. Source: National Disaster Management Office.



Figure 12e: Toge Road, Ba on the 20<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12f: Balata Flat in Tavua underwater on the 22<sup>nd</sup>. Source: Fiji Roads Authority.





Figure 12g: Toge Crossing (Nacaci) in Ba underwater on the 22<sup>nd</sup>. Source: Fiji Roads Authority.



Figure 12h: Narara Road, Rakiraki on the 22<sup>nd</sup>. Source: Fiji Roads Authority.



Figure 12i: Waima bridge underwater in Naitasiri on the 24<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12j: Katudrau crossing in Rakiraki on the 24<sup>th</sup>. Source: Fiji Roads Authority.



Figure 12k: Waila crossing underwater in Nausori on the 24<sup>th</sup>. Source: National Disaster Management Office.



Figure 12l: Landslip on Kings Road at Viwa, past Korovou on the 25<sup>th</sup>. Source: Fiji Roads Authority

## 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.