

Pacific Islands - Online Climate Outlook Forum (OCOF) No. 152

Country: Fiji

TABLE 1: Monthly Rainfall

| Station (include data period) | Feb-2020 | Mar-2020 | Apr-2020 | | | | | Rank |
|--------------------------------|------------|------------|---------------|---------|---------|--------|--------|------|
| | | | Total (mm) | 33%tile | 67%tile | Median | | |
| | Total (mm) | Total (mm) | Rainfall (mm) | | | | | |
| <i>Western Division</i> | | | | | | | | |
| Penang Mill (1910-2020) | 176.8 | 447.4 | 162.6 | 179.4 | 288.9 | 212.0 | 21/70 | |
| Lautoka Mill (1900-2020) | 245.6 | 594.1 | 237.2 | 123.0 | 239.7 | 157.9 | 88/121 | |
| Nadi Airport (1942-2020) | 116.8 | 785.4 | 177.2 | 112.9 | 211.6 | 151.9 | 44/78 | |
| <i>Central Division</i> | | | | | | | | |
| Laucala Bay (Suva) (1942-2020) | 86.4 | 436.4 | 772.5 | 263.5 | 376.3 | 327.0 | 76/79 | |
| Nausori Airport (1957-2020) | 119.1 | 716.9 | 685.0 | 262.0 | 389.2 | 327.0 | 61/64 | |
| Tokotoko (Navua) (1945-2020) | 94.0 | 524.2 | 1085.2 | 305.5 | 460.0 | 358.4 | 75/76 | |
| <i>Eastern Division</i> | | | | | | | | |
| Lakeba (1950-2020) | 191.2 | 209.4 | 436.0 | 133.0 | 255.4 | 179.1 | 63/68 | |
| Vunisea (Kadavu) (1931-2020) | 103.6 | 575.1 | 505.7 | 162.8 | 277.1 | 238.0 | 80/85 | |
| Ono-i-Lau (1943-2020) | 35.1 | 363.7 | 358.2 | 103.3 | 223.9 | 181.2 | 67/73 | |
| <i>Northern Division</i> | | | | | | | | |
| Labasa Airport (1946-2020) | 163.6 | 298.9 | 163.9 | 145.2 | 286.8 | 240.4 | 24/65 | |
| Savusavu Airfield (1956-2020) | 114.0 | 101.7 | 275.9 | 141.7 | 278.7 | 214.4 | 42/64 | |
| Udu Point | 162.0 | 294.9 | 218.4 | 193.5 | 302.2 | 236.3 | 30/71 | |
| | | | | | | | | |
| Rotuma (1912-2020) | 194.8 | 352.0 | 188.5 | 207.9 | 302.8 | 257.1 | 29/108 | |

TABLE 2: Three-month Rainfall for February to April 2020

| Station | Three-month Total | | 33%tile | 67%tile | Median | Rank | SCOPIC forecast probabilities* based on NINO3.4 November-December 2019 | | | | Verification: Consistent, Near-consistent, Inconsistent? |
|--------------------------------|-------------------|--------------|---------|---------|--------|--------|---|----|-----|------|---|
| | Rainfall (mm) | | | | | | B-N | N | A-N | LEPS | |
| <i>Western Division</i> | | | | | | | | | | | |
| Penang Mill (1910-2020) | 786.8 | Below normal | 842.9 | 1143.3 | 1015.1 | 31/110 | 42 | 34 | 24 | 8 | Consistent |
| Lautoka Mill (1900-2020) | 1076.9 | Above normal | 743.8 | 946.8 | 831.1 | 95/120 | 43 | 30 | 27 | 8 | Inconsistent |
| Nadi Airport (1942-2020) | 1079.4 | Above normal | 676.6 | 945.9 | 808.6 | 61/77 | 43 | 37 | 20 | 14 | Inconsistent |
| <i>Central Division</i> | | | | | | | | | | | |
| Laucala Bay (Suva) (1942-2020) | 1295.3 | Above normal | 851.0 | 1055.9 | 938.6 | 66/79 | 35 | 27 | 38 | -1 | Consistent |
| Nausori Airport (1957-2020) | 1521.0 | Above normal | 893.9 | 1045.3 | 960.5 | 61/64 | 30 | 33 | 37 | 1 | Consistent |
| Tokotoko (Navua) (1945-2020) | 1703.4 | Above normal | 999.0 | 1210.9 | 1111.2 | 72/75 | 34 | 28 | 38 | -1 | Consistent |
| <i>Eastern Division</i> | | | | | | | | | | | |
| Lakeba (1950-2020) | 836.6 | Above normal | 649.4 | 824.6 | 708.8 | 48/68 | 42 | 32 | 26 | 9 | Inconsistent |
| Vunisea (Kadavu) (1931-2020) | 1184.4 | Above normal | 645.2 | 835.5 | 755.3 | 81/84 | 43 | 29 | 28 | 9 | Inconsistent |
| Ono-i-Lau (1943-2020) | 757.0 | Above normal | 480.2 | 740.1 | 595.9 | 51/71 | 38 | 33 | 29 | 2 | Inconsistent |
| <i>Northern Division</i> | | | | | | | | | | | |
| Labasa Airport (1947-2020) | 626.4 | Below normal | 798.4 | 1159.2 | 1028.0 | 10/63 | 40 | 31 | 29 | 4 | Consistent |
| Savusavu Airfield (1957-2020) | 491.6 | Below normal | 639.0 | 829.7 | 697.2 | 8/61 | 38 | 31 | 31 | 1 | Consistent |
| Udu Point | 675.3 | Below normal | 782.7 | 1022.7 | 851.6 | 14/71 | 37 | 34 | 29 | 0 | Consistent |
| | | | | | | | | | | | |
| Rotuma (1912-2020) | 735.3 | Below normal | 872.4 | 1075.7 | 995.6 | 17/107 | 36 | 34 | 30 | 0 | Consistent |

TABLE 3: Seasonal Climate Outlooks using SCOPIC for June to August 2020

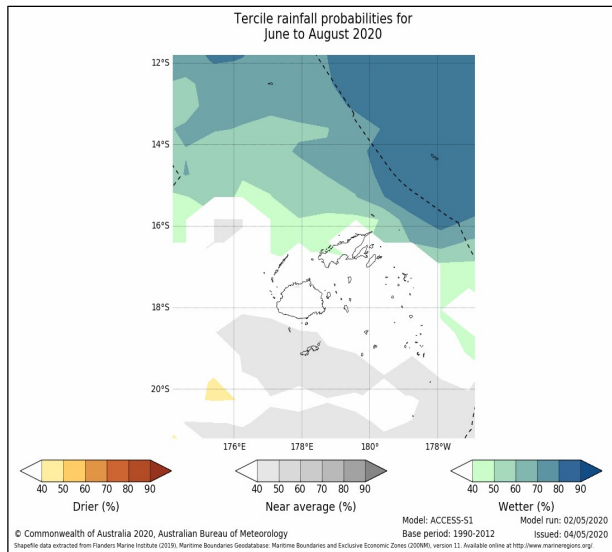
Predictor and Period used: NINO3.4 for March to April 2020

| Station | Below Median (prob) | Median Rainfall (mm) | Above Median (prob) | | LEPS (%) [whole numbers] | Hit-rate (%) [whole numbers] |
|--------------------------------|---------------------|----------------------|---------------------|--|--------------------------|------------------------------|
| Western Division | | | | | | |
| Penang Mill (1910-2020) | 54 | 192.0 | 46 | | -1 | 56 |
| Lautoka Mill (1900-2020) | 62 | 151.2 | 38 | | 4 | 61 |
| Nadi Airport (1942-2020) | 59 | 161.9 | 41 | | 2 | 56 |
| Central Division | | | | | | |
| Laucala Bay (Suva) (1942-2020) | 56 | 436.2 | 44 | | 1 | 53 |
| Nausori Airport (1957-2020) | 62 | 424.6 | 38 | | 4 | 59 |
| Tokotoko (Navua) (1945-2020) | 61 | 563.6 | 39 | | 5 | 54 |
| Eastern Division | | | | | | |
| Lakeba (1950-2020) | 58 | 270.1 | 42 | | 1 | 50 |
| Vunisea (Kadavu) (1931-2020) | 56 | 348.4 | 44 | | 0 | 50 |
| Ono-i-Lau (1943-2020) | 59 | 288.2 | 41 | | 2 | 59 |
| Northern Division | | | | | | |
| Labasa Airport (1946-2020) | 55 | 145.6 | 45 | | 0 | 57 |
| Savusavu Airfield (1956-2020) | 60 | 306.8 | 40 | | 4 | 59 |
| Udu Point | 64 | 308.8 | 36 | | 7 | 58 |
| | | | | | | |
| Rotuma (1912-2020) | 43 | 697.2 | 57 | | 1 | 60 |

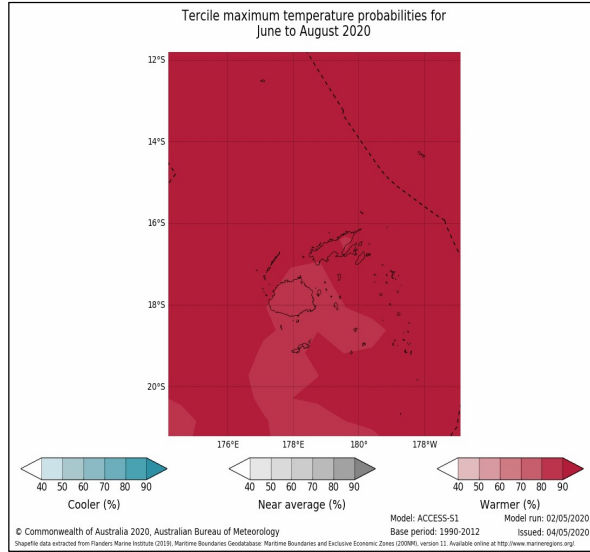
| Station | Below Normal (prob) | 33%ile Rainfall (mm) | Normal (prob) | 67%ile Rainfall (mm) | Above Normal (prob) | LEPS (%) [whole numbers] | Hit-rate (%) [whole numbers] |
|--------------------------------|---------------------|----------------------|---------------|----------------------|---------------------|--------------------------|------------------------------|
| Western Division | | | | | | | |
| Penang Mill (1910-2020) | 40 | 165.9 | 30 | 226.4 | 30 | 0 | 26 |
| Lautoka Mill (1900-2020) | 38 | 113.4 | 36 | 211.8 | 26 | 0 | 37 |
| Nadi Airport (1942-2020) | 43 | 115.5 | 33 | 204.5 | 24 | 3 | 43 |
| Central Division | | | | | | | |
| Laucala Bay (Suva) (1942-2020) | 39 | 365.8 | 36 | 525.9 | 25 | 1 | 39 |
| Nausori Airport (1957-2020) | 44 | 337.5 | 31 | 496.8 | 25 | 4 | 40 |
| Tokotoko (Navua) (1945-2020) | 41 | 474.4 | 37 | 653.1 | 22 | 4 | 38 |
| Eastern Division | | | | | | | |
| Lakeba (1950-2020) | 42 | 187.2 | 37 | 301.0 | 21 | 5 | 38 |
| Vunisea (Kadavu) (1931-2020) | 39 | 277.6 | 31 | 423.1 | 30 | 0 | 19 |
| Ono-i-Lau (1943-2020) | 40 | 250.9 | 33 | 342.4 | 27 | 1 | 37 |
| Northern Division | | | | | | | |
| Labasa Airport (1946-2020) | 39 | 113.0 | 29 | 184.2 | 32 | -1 | 36 |
| Savusavu Airfield (1956-2020) | 45 | 230.5 | 31 | 372.4 | 24 | 6 | 46 |
| Udu Point | 43 | 250.6 | 36 | 388.6 | 21 | 6 | 42 |
| | | | | | | | |
| Rotuma (1912-2020) | 24 | 585.6 | 36 | 818.0 | 40 | 2 | 46 |

Monthly and Seasonal Climate Outlooks using ACCESS-S for June to August 2020

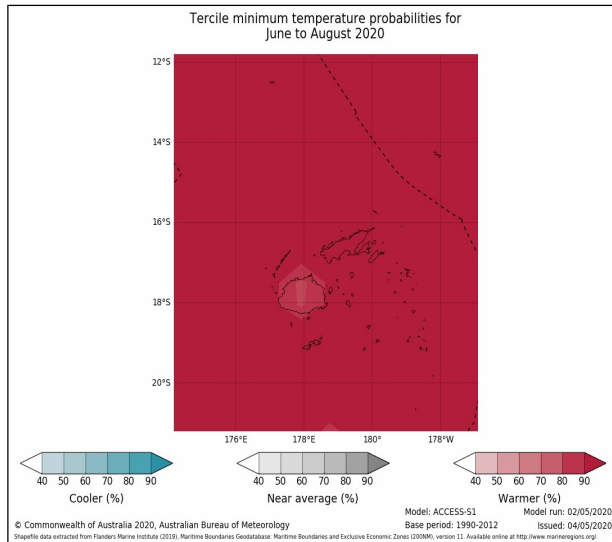
Seasonal Rainfall



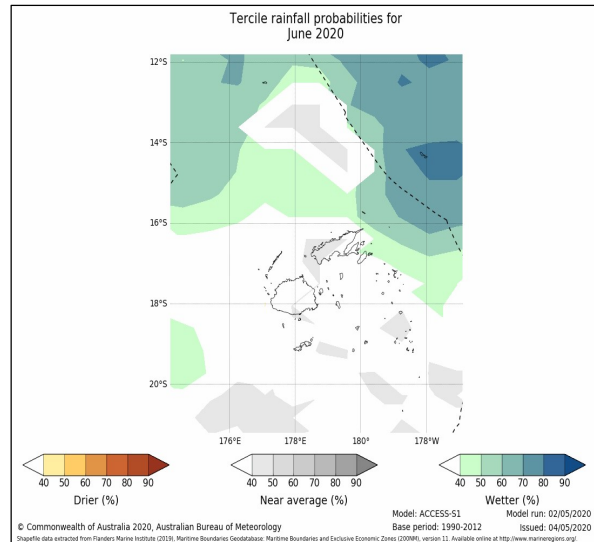
Seasonal maximum temperature



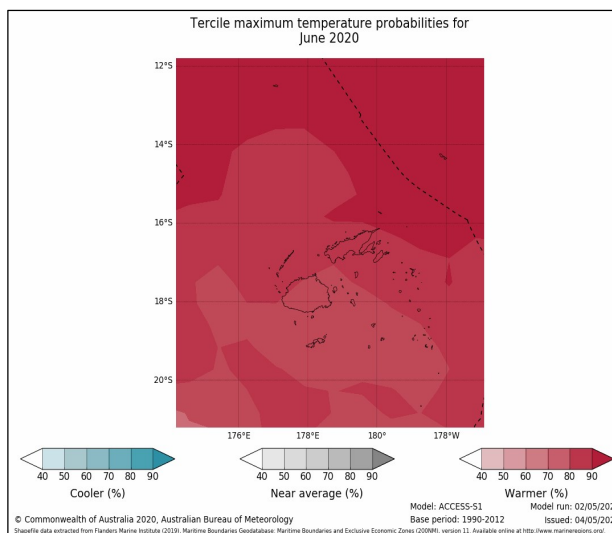
Seasonal minimum temperature



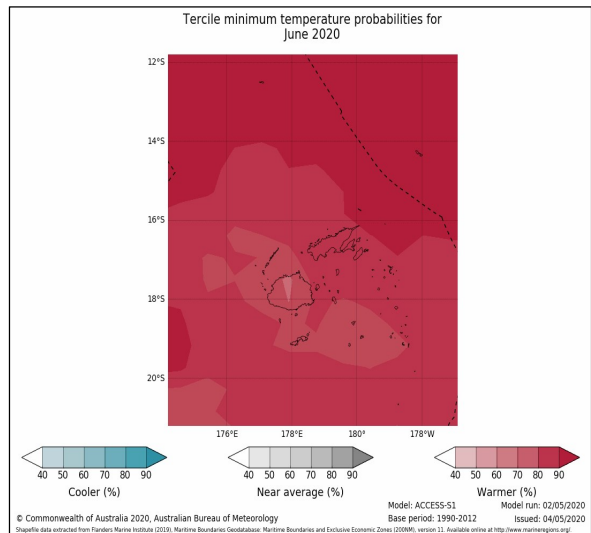
Monthly rainfall



Monthly maximum temperature



Monthly minimum temperature



Summary Statements

Rainfall for April 2020:

Above normal rainfall was recorded across the Central and Eastern Division, *normal* rainfall in the Northern Division and parts of the Western Division, while Penang in the Western Division and Rotuma were the only two stations with *below normal* rainfall.

All stations in the Central and Eastern Division recorded rainfall above 90 percentile. Navua and Nausori recorded the second and fourth wettest April on record.

Accumulated rainfall for February to April 2020, including outlook verification:

Above normal rainfall were recorded across the Central and Eastern Division and parts of the Western Division, while *below normal* rainfall were recorded in the Northern Division, Penang Mill in the Western Division and Rotuma. Nausori, Navua and Vunisea recorded their fourth wettest February to April rainfall on record.

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

Outlooks for June to August 2020:

1. SCOPIC:

- **Western, Central, Eastern and Northern Division (except for Lautoka, Vunisea and Labasa):** The outlook shows *below normal* rainfall as the most likely outcome, with *near normal* as the next most likely and *above normal* as the least likely.
- **Rotuma:** The outlook shows *above normal* as the most likely outcome, with *normal* the next most likely. *Below normal* is the least likely.
- **Lautoka:** The outlook shows a near-equal likelihood of below normal and normal rainfall. Above normal is the least likely
- **Vunisea and Labasa:** The outlook offers little guidance as the chances of above normal, normal and below normal are similar

2. ACCESS-S:

Seasonal rainfall (June to August 2020):

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

Seasonal maximum and Minimum temperature (June to August 2020):

Warmer than average maximum and minimum air temperatures likely across the Fiji region.

Monthly rainfall (June 2020):

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

Monthly maximum and minimum temperatures (June 2020):

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

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

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

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

| Product | Date: April 2020 | Stakeholder | Total Number of Participants | Number of male | Number of female |
|--------------------------------|------------------------|---|---------------------------------|-------------------|---------------------|
| Fiji Climate Summary | 07/04/20 | General public | 140 | 106 | 34 |
| EAR Watch | 07/04/20 | Humanitarian partners | 122 | 96 | 26 |
| Climate Outlook for Monasavu | 09/04/20 | Energy Fiji Limited | 13 | 13 | - |
| Fiji Climate Outlook | 15/04/20 | General public | 124 | 93 | 31 |
| Ocean Outlook | 16/04/20 | Reef Explorer Fiji Limited, Maritime Safety Authority of Fiji, World Wildlife Fund, Wildlife Conservation Society, Ministry of Fisheries and Tourism Sector | 36 | 29 | 7 |
| Fiji Sugarcane Climate Outlook | 24/04/20 | Sugar Industry stakeholders | 77 | 60 | 17 |
| Meteorological Data Request | 01/04/20 to 30/04/20 | A range of stakeholders | 41 | 31 | 10 |
| Total | | | 553 | 428 | 125 |