FIJI METEOROLOGICAL AND HYDROLOGICAL SERVICES

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Climate Outlook for Hydro-electricity Generation from October to December 2026

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Current Conditions

Fiji's Climate

Generally, east to southeasterly winds prevailed over the country, bringing brief showers to the windward side, while fine conditions prevailed elsewhere. A few weak troughs brought periods of showers and overcast conditions. There were also reports of fresh to strong southeasterly winds, which resulted in strong wind warnings and rough seas. Occasional cool nights continue to be experienced during the month.

Of the 19 stations that reported in on time for the preparation of this bulletin, 8 stations reported *well below average* rainfall, 10 *below average* and 1 *above average*.

Monasavu's total monthly rainfall for September, was 124mm, which is in the *below average* category (43% of *normal*) when compared against the WMO standard 30-year normal.

The total 3 monthly rainfall recorded during July to September 2026 period was 576mm, which is in the *below normal* category (79% of normal), while rainfall recorded during the past 6 months (April to September) is classified as *near normal*, at 1907mm (109% of the *normal*) (Figure 1).

El Niño Southern Oscillation (ENSO) Status

A strong El Niño is active in the tropical Pacific Ocean. Global climate models favor the event to continue to strengthen, with likely chances of the event to reach its peak at around November and December 2026. For Fiji, El Niño events are typically associated with drier than normal conditions.

Sea surface temperature (SST) anomalies across the equatorial Pacific have persistently remained *above average* in the eastern Pacific Ocean, while *near normal* to *below normal* SSTs dominate the western Pacific.

Southern Oscillation Index (SOI) latest 30-day average until 29th September, was –21.3, which is well below El Niño threshold.

Trade winds were *below average* across the western and central equatorial Pacific Ocean. Cloudiness was *above average* over Fiji as well as east of the date line along the equator.

Atmospheric and oceanic indicators continue to reflect the ongoing El Niño conditions.

El Niño-Southern Oscillation and Monasavu Climate Predictions

El-Niño Southern Oscillation Prediction

Recent guidance from global climate models favor the intensification of current strong El Niño conditions in the coming months, with the event likely to persist into early 2027.

Minimum & Maximum Air Temperature Predictions - October & October to December 2026

Minimum air temperatures are likely to be *below normal* across the country during October and the October to December 2026 period. Maximum air temperatures are likely to be *below normal* across Viti Levu and Vanua Levu during October. During October to December 2026, *above normal* maximum temperatures are generally likely for Viti Levu, with *near normal* conditions over southern Vanua Levu and *above normal* conditions in some northwestern areas. (Figure 4 and 5).

Rainfall Predictions:
Fortnightly: 3rd – 16th October & 10th – 23rd October

Drier conditions are likely to continue throughout this period.

October 2026

There is 75% chance of receiving at least 50mm of rainfall at Nadarivatu station, 75% chance of at least 53mm of rainfall at Nadarivatu and Monasavu Dams and 75% chance of receiving at least 58mm of rainfall at Wailoa. There is *high* confidence in this forecast (Table 1).

October to December 2026

During the October to December 2026 period, there is 75% chance of receiving at least 274mm of rainfall at Nadarivatu station, 75% chance of receiving around 294mm of rainfall at Nadarivatu and Monasavu Dams and 75% chance of receiving at least 321mm of rainfall at Wailoa. There is *high* confidence in the seasonal outlook (Table 1).

Summary

There is high confidence in the outlook for dry conditions to persist during October, as well as the October to December 2026 period. Fiji tends to experience suppressed rainfall during an onset of El Niño events, especially during the dry season.

Figure 1

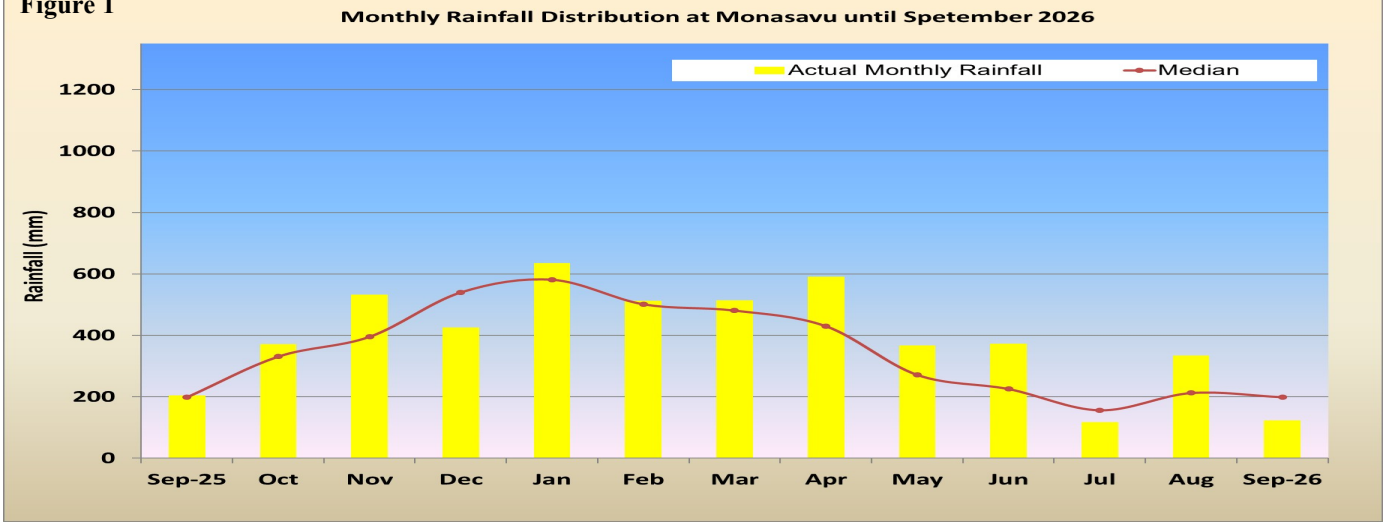


Table 1: Rainfall Outlook: October & October to December 2026

October Outlook				
	25% chance of at least (mm)	**50% chance of at least (mm)**	**75% chance of at least (mm)**	**Forecast Confidence**
Nadarivatu station	134	71	50	High
Nadarivatu Dam	143	73	53	High
Monasavu Dam	143	73	53	High
Wailoa	163	79	58	High
October to December 2026 Outlook				
	25% chance of at least (mm)	**50% chance of at least (mm)**	**75% chance of at least (mm)**	**Forecast Confidence**
Nadarivatu station	363	302	274	High
Nadarivatu Dam	411	331	294	High
Monasavu Dam	411	331	294	High
Wailoa	435	344	321	High

The table above provides 25%, 50% and 75% chances of each station receiving the amount of rainfall mentioned above.

Figure 2: Rainfall Outlook: Fortnightly: 3rd – 16th October & 10th – 23rd October

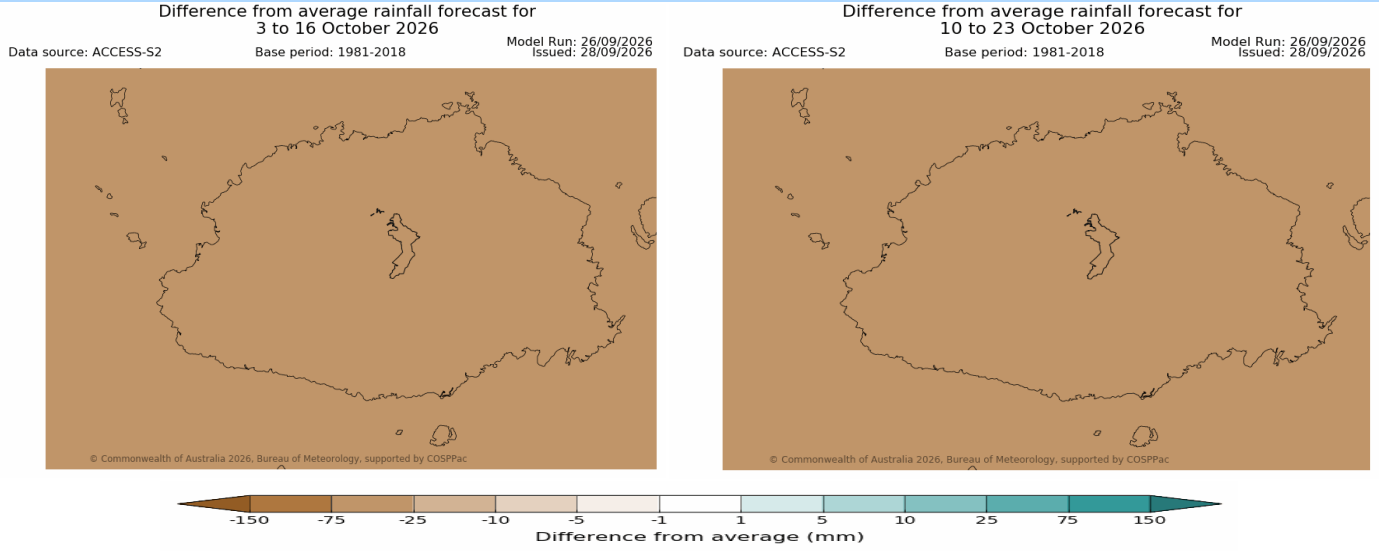


Figure 3: Rainfall Outlook: October & October to December 2026

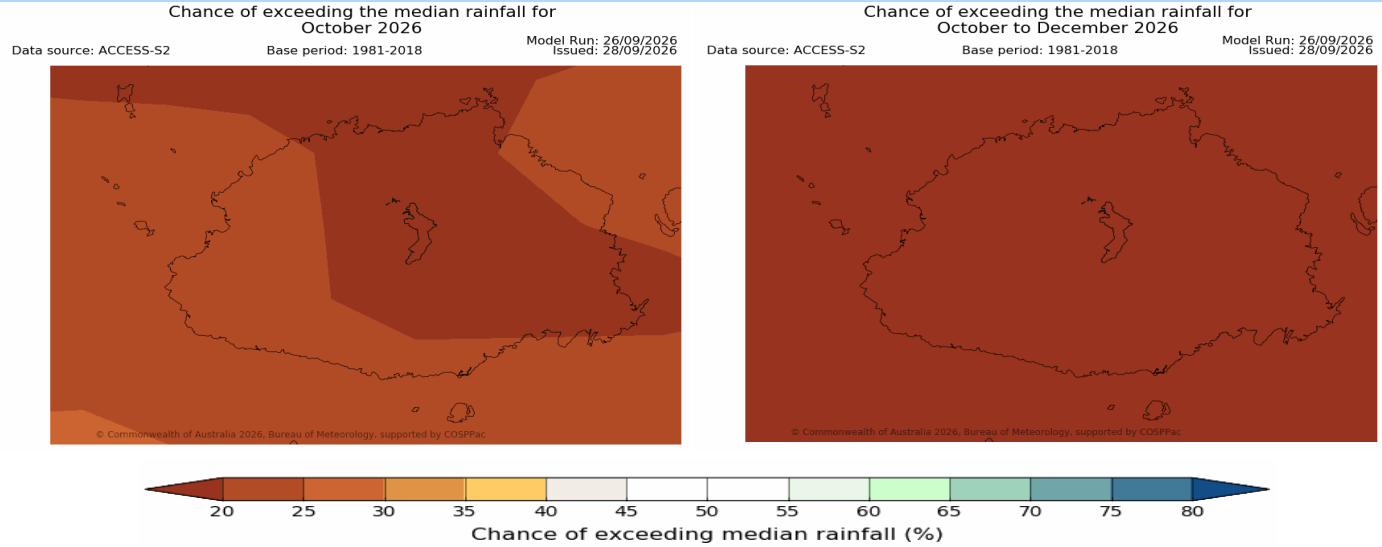
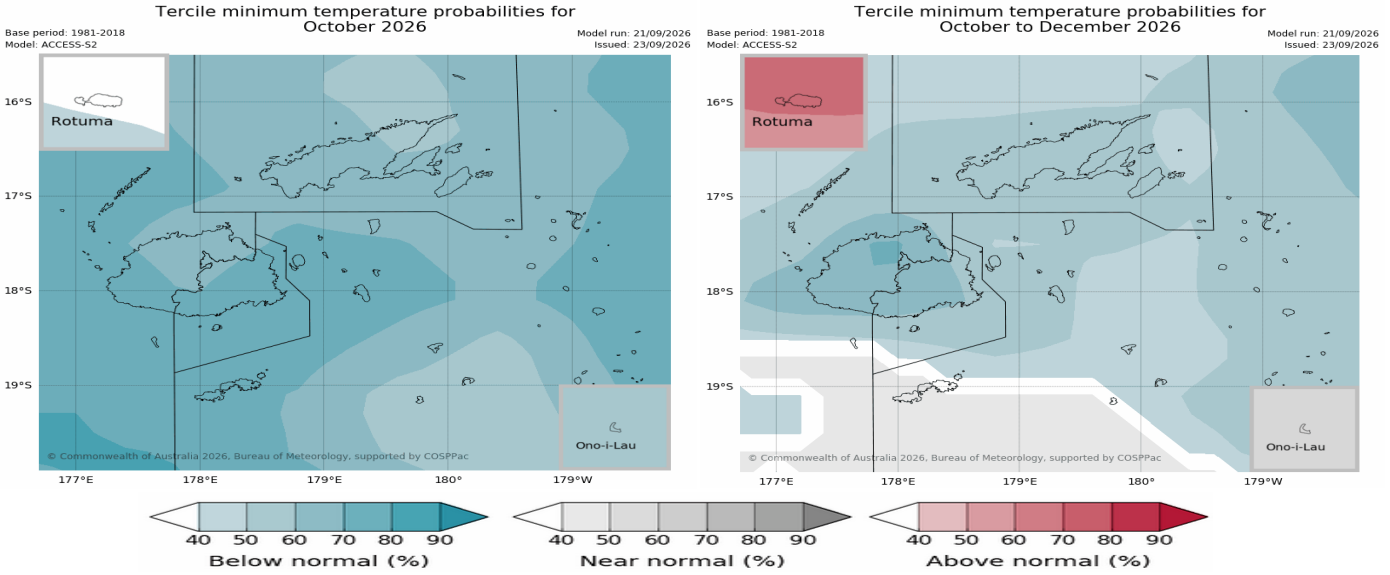
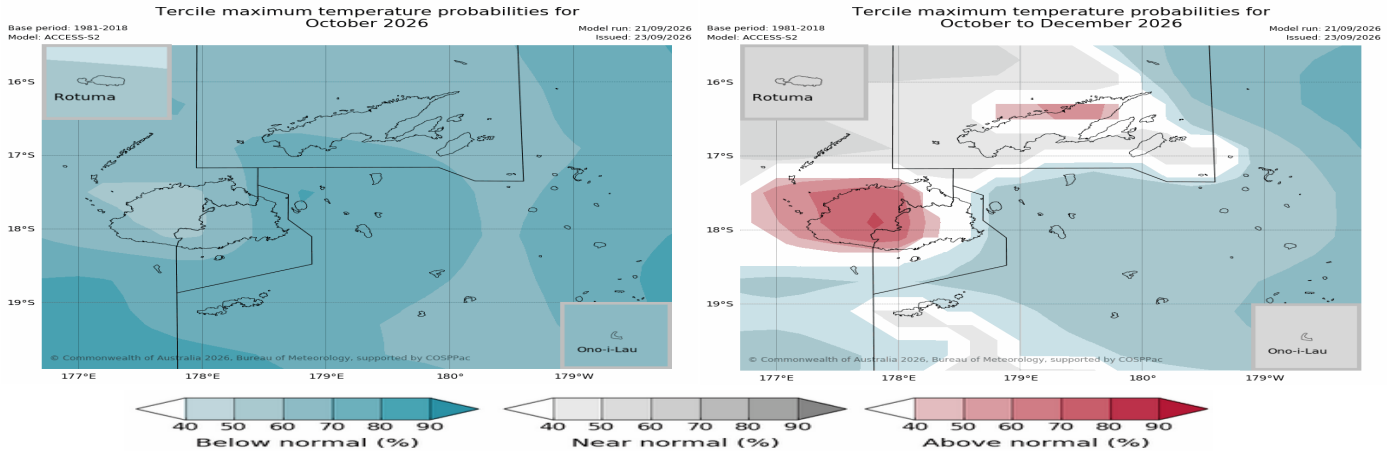


Figure 4: Minimum Air Temperature Predictions: October & October to December 2026



Minimum air temperatures are expected to be *below normal* across Viti Levu and Vanua Levu during October and October to December 2026 period. *Source: ACCESS-S2 Model.*

Figure 5: Maximum Air Temperature Predictions: October & October to December 2026



Maximum air temperatures are likely to be *below normal* across Viti Levu and Vanua Levu during October. During October to December 2026, *above normal* maximum temperatures are generally likely for Viti Levu and *near normal* for southern Vanua Levu and *above normal* in some north west regions of the island. *Source: ACCESS-S2 Model.*

Explanatory Notes

Climate Outlook for Hydro-electricity Generation is produced to provide advisories to Energy Fiji Limited (EFL). It aims to provide advanced warning on climate abnormalities for planning on economic generation mix and hydro-storage optimization.

Climate (Rainfall/Air Temperature) Outlook

Above normal – indicates that the rainfall/temperature value lies in the highest third of observation recorded in the standard 30 year normal period.

Near normal – indicates that the rainfall/temperature value lies in the middle third of observation recorded in the standard 30 year normal period.

Below normal – indicates that the rainfall/temperature value lies in the lowest third of observation recorded in the standard 30 year normal period.
Climatology – means that there are equal chances of receiving below normal, normal and above normal rainfall.

Median – rainfall value which marks the level dividing the ranked data set in half, that is, the midpoint of the ordered (lowest to highest) monthly or yearly rainfall totals.

Above Median – rainfall value that lies above the median value.

Below Median – rainfall value that lies below the median value.

El Niño Southern Oscillation (ENSO)

ENSO is the principal driver of the year-to-year variability of Fiji's climate. There are three phases of this phenomenon, ***El Niño, La Niña*** and ***Neutral*** conditions. El Niño or La Niña events are a natural part of the global climate system and usually recur after every 2 to 7 years. It normally develops around April to June, attains peak intensity between December to February and usually starts to decay around April to June period the following year. While most events last for a year, some have persisted for up to 2 years. It should be also noted that no two El Niño or La Niña events are the same. Different events have different impacts, but most exhibit some common climate characteristics.

Usually there is a lag effect on Fiji's climate with ENSO events, that is, once an El Niño or La Niña event is established in the tropical Pacific, it may take 2-6 months before its impact is seen on Fiji. Similarly, once an event finishes, it can take 2 -6 months for climate to normalise.

El Niño events are associated with warming of the central and eastern tropical Pacific. El Niño events usually result in reduction of Fiji's rainfall. Often the whole of Fiji is affected in varying degrees and it is quite unusual for one part of the country to experience a prolonged dry spell, while the other is in a wet spell. The relationship and level of rainfall suppression is greater in the Dry Zone than in the Wet Zone. It is the suppression of rainfall during the Cool/Dry Season (May to October) that is normally of most concern. A reduction in Cool/Dry Season rainfall in the Dry Zone results in little or no rainfall until the next Wet Season. While usually the strength of an ENSO event is proportional to its impact on Fiji, at times weak event can also have a significant impact.

La Niña events are associated with cooling of the central and eastern tropical Pacific. Usually La Niña results in wetter than normal conditions for Fiji, occasionally leading to flooding during the Warm/Wet Season (November to April).

During **Neutral** condition, neither El Niño nor La Niña is present, it has little effect on global climate, meaning other climate influences are more likely to dominate.

Lag effects – means that there is a delay in a change of some aspect of climate due to influence of other factors that is acting slowly.

Climate bulletins that can be viewed together with this bulletin include:

1) *Fiji Climate Summary at https://www.met.gov.fj/index.php?page=FijiClimateSummary (issued monthly)*
2) *Fiji Climate Outlook at https://www.met.gov.fj/index.php?page=ClimateOutlook* **(issued monthly)**

This information is prepared as soon as ENSO, climate and oceanographic data is received from recording stations around Fiji and Meteorological Agencies around the world. While every effort is made to verify observational data, Fiji Meteorological Service does not guarantee the accuracy and reliability of the analyses presented, and accepts no liability for any losses incurred through the use of this information and its contents. The information may be freely disseminated provided the source is acknowledged. For further clarification and expert advice, please contact the Fiji Meteorological Service HQ, Namaka, Nadi.

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