Fiji Meteorological Service

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Climate Outlook for Hydro-electricity Generation from October to December 2025

Current Conditions

Fiji's Climate

Cool and dry conditions continued to persist going into the month of September with generally fine weather conditions experienced over most places apart from a few brief to occasional showers prevailing over the interior and eastern parts of the larger islands. This could be an indication of the transition from dry and cool months into the wet and humid season.

During the compilation of the bulletin, out of the 17 stations that reported in, 8 stations reported *well below average* rainfall, 7 *below average* and *2* stations recorded *average* rainfall.

Monasavu's total monthly rainfall (until 28th September), was 204mm, which is in the *below average* category (71% of *normal*) when compared against the WMO standard 30-year normal.

The total 3 monthly rainfall recorded during July - 28th September 2025 period, was 674.1mm, which was in the *normal* category (93% of normal), while 2047.8mm (117% of the *normal*) of rainfall was recorded during the past 6 months (April to 28th September), at the station (Figure 1).

El Niño Southern Oscillation (ENSO) Status

ENSO neutral phase continuous to persist, however there is now a slight lean towards La Niña, with a 'Watch' in place. Recently surveyed global climate models show a moderate to high chance of a La Niña developing towards the end of the year.

Equatorial sea surface temperatures (SSTs) are currently *below average* in the central and far eastern Pacific, and *above average* in the Western Pacific.

The Southern Oscillation Index (SOI) for August 2025 was +2.1, with the 5-month running mean of 3.3.

Near average trade winds have been present in the central and the western Pacific Ocean. Cloudiness have been below average.

El Niño-Southern Oscillation and Monasavu Climate Predictions

El-Niño Southern Oscillation Prediction

Recently surveyed global climate models show a leaning towards La Niña in the coming months, however, there is a strong chance of neutral conditions dominating in January.

Minimum & Maximum Air Temperature Predictions - October & October to December 2025:

Day and night time temperatures are both likely to be *above normal* across Viti Levu and Vanua Levu during October, as well as the October to December 2025 period (Figure 4 and 5).

Rainfall Predictions:
Fortnightly: 28th September– 11th October & 5th – 18th October

Rainfall in Viti Levu is likely to be above median during the above period, as well as from 5th – 18th October.

October 2025

There is 75% chance of receiving at least 112mm of rainfall at Nadarivatu station, 75% chance of at least 122mm of rainfall at the Nadarivatu and Monasavu Dams and 75% chance of receiving at least 126mm of rainfall at Wailoa. The confidence in this forecast is *moderate* (Table 1).

October to December 2025

For the October to December 2025 period, there is 75% chance of receiving around 756mm of rainfall at Nadarivatu station, 75% chance of receiving around 790mm of rainfall at Nadarivatu and Monasavu Dams and 75% chance of receiving around 770mm at Wailoa. There is *high* confidence in the generated outlook (Table 1).

Summary

There are chances of some rainfall to be experienced during October, however, not so much as it is likely to be experienced during the Wet Season. Wetter than normal conditions are likely for the October to December 2025 period. Skill confidence is *good* for October, while there is *high* confidence for the October to December 2025 outlook.

Figure 1

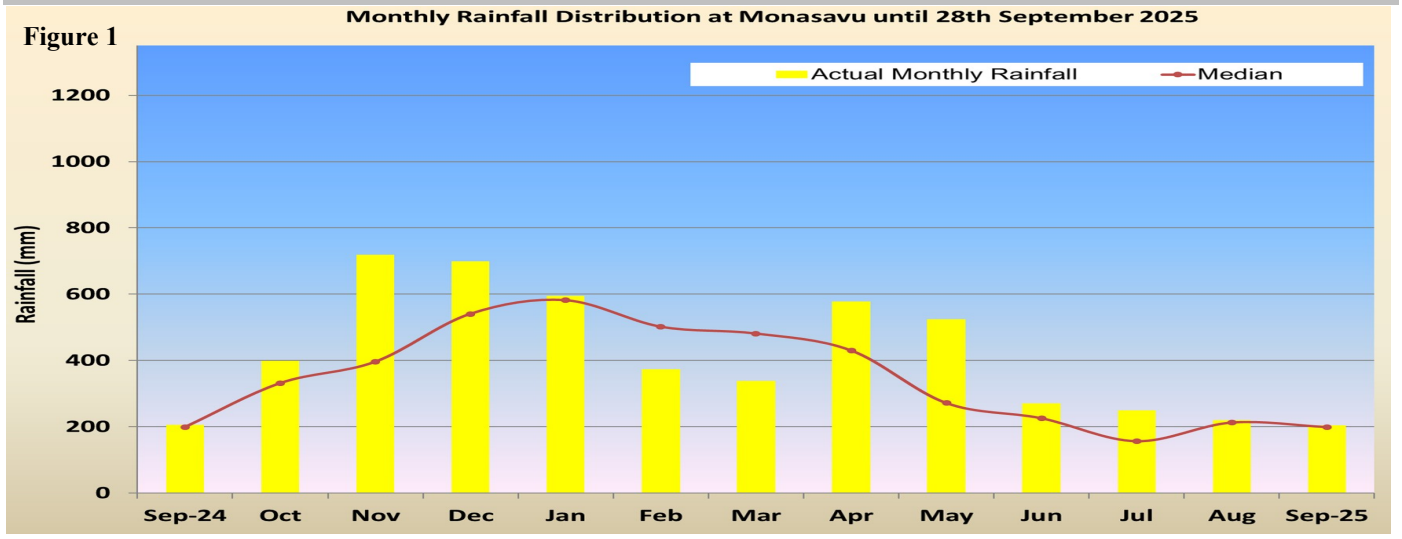


Table 1: Rainfall Outlook: October & October to December 2025

October Outlook				
	25% chance of at least (mm)	**50% chance of at least (mm)**	**75% chance of at least (mm)**	**Forecast Confidence**
Nadarivatu station	292	235	112	Moderate
Nadarivatu Dam	309	247	122	Moderate
Monasavu Dam	309	247	122	Moderate
Wailoa	308	262	126	Moderate
October to December Outlook				
	25% chance of at least (mm)	**50% chance of at least (mm)**	**75% chance of at least (mm)**	**Forecast Confidence**
Nadarivatu station	1127	947	756	High
Nadarivatu Dam	1189	1004	790	High
Monasavu Dam	1189	1004	790	High
Wailoa	1169	982	770	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: 28th September – 11th October & 5th – 18th October

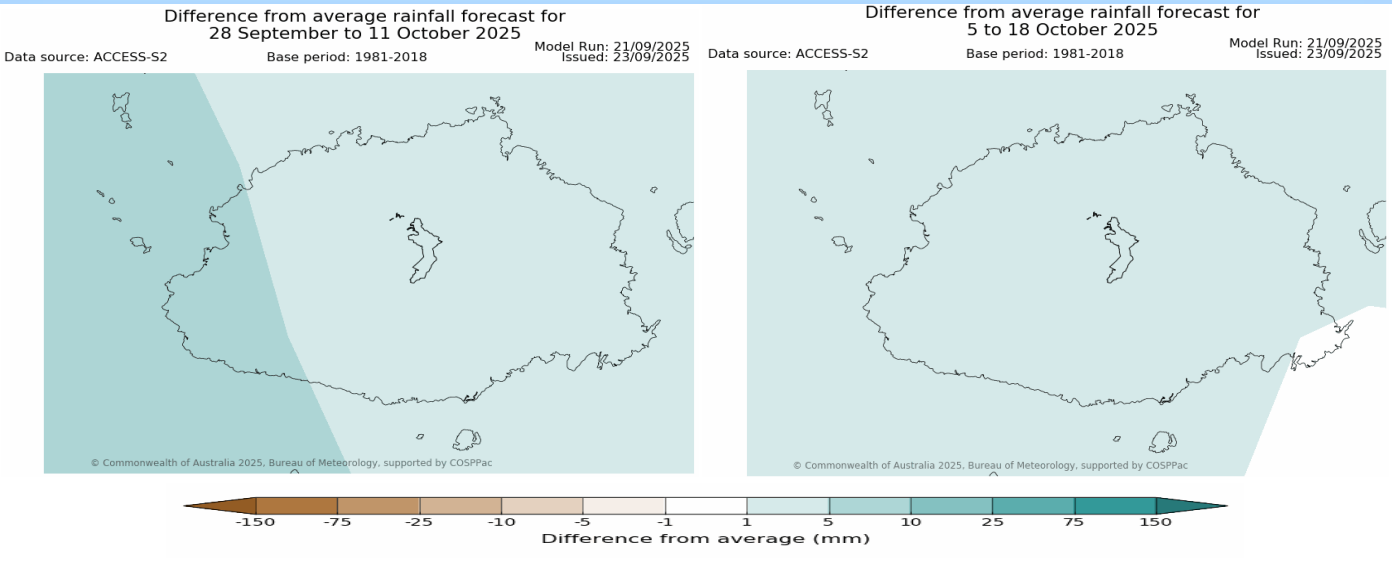


Figure 3: Rainfall Outlook: October & October to December 2025

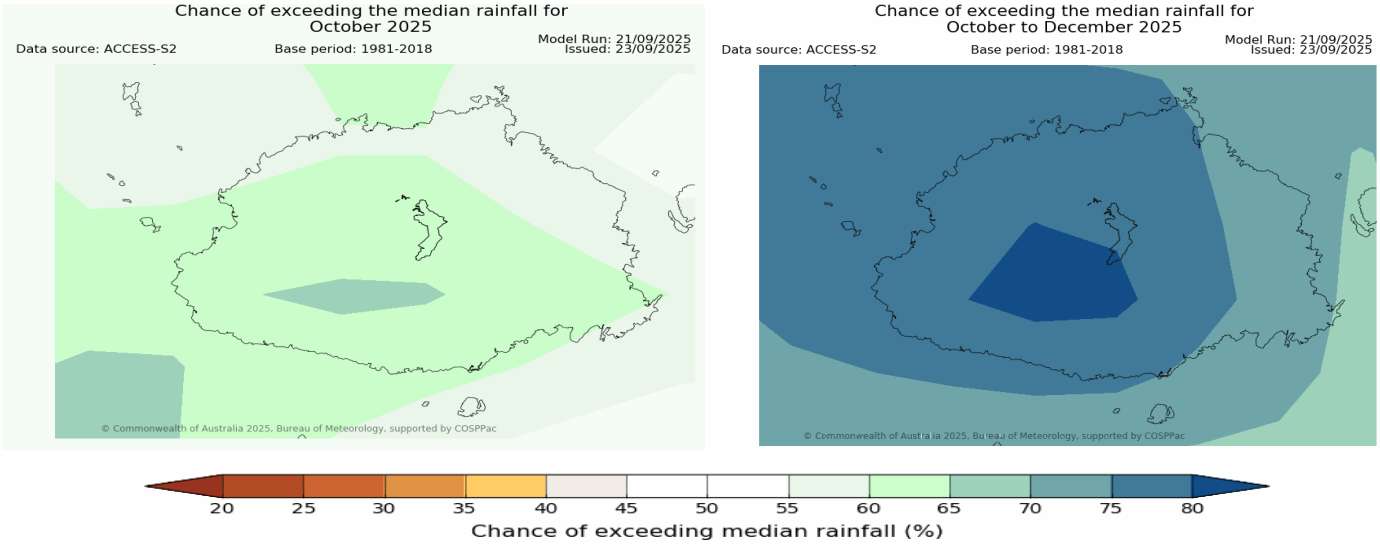
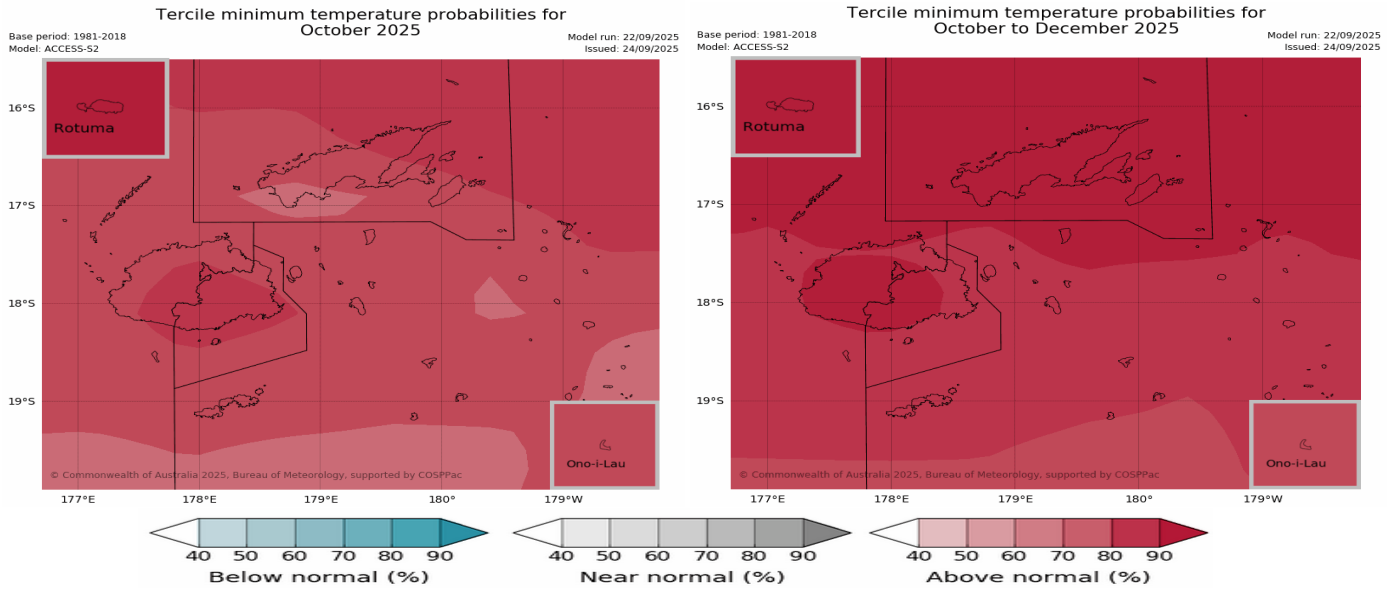
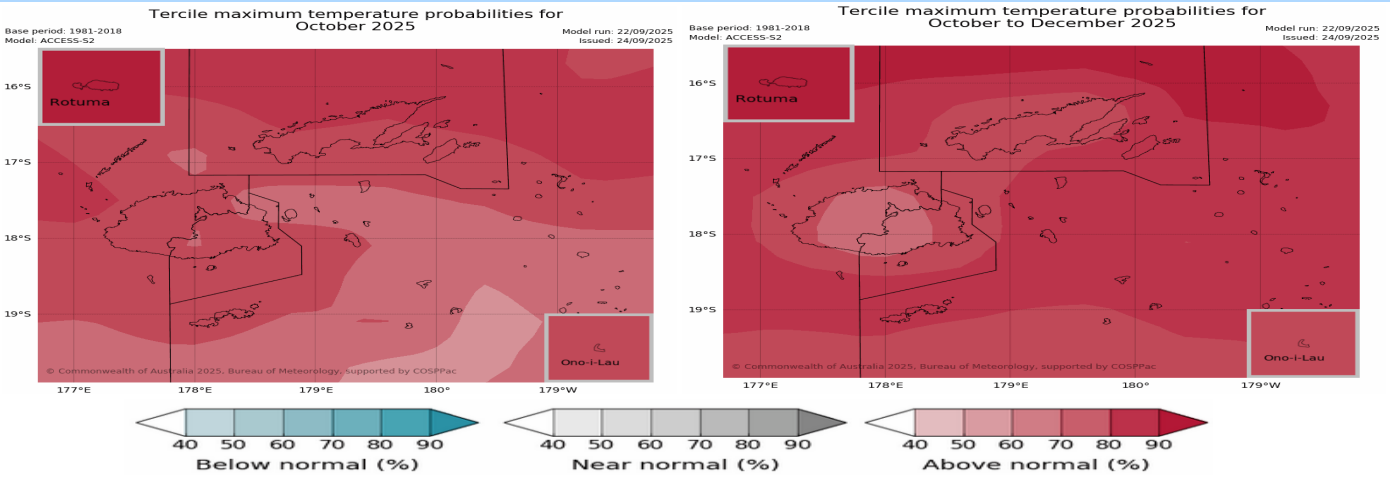


Figure 4: Minimum Air Temperature Predictions: October & October to December 2025



Minimum air temperatures are expected to be *above normal* across Viti Levu and Vanua Levu, during October and October to December 2025 period. *Source: ACCESS-S2 Model.*

Figure 5: Maximum Air Temperature Predictions: October & October to December 2025



Maximum air temperatures are likely to be *above normal* across Viti Levu and Vanua Levu, during October and October to December 2025 period. *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)*

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