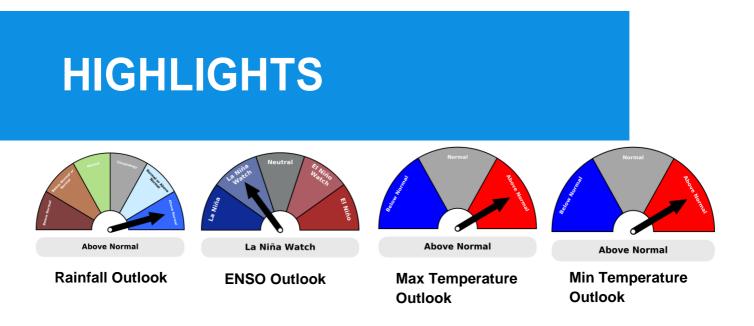
ISSUED: November 29, 2024 NEXT ISSUE: December 31, 2024 VOLUME 18: ISSUE 12



# FIJI CLIMATE OUTLOOK

## DECEMBER 2024; DECEMBER 2024 TO FEBRUARY 2025; MARCH TO MAY 2025

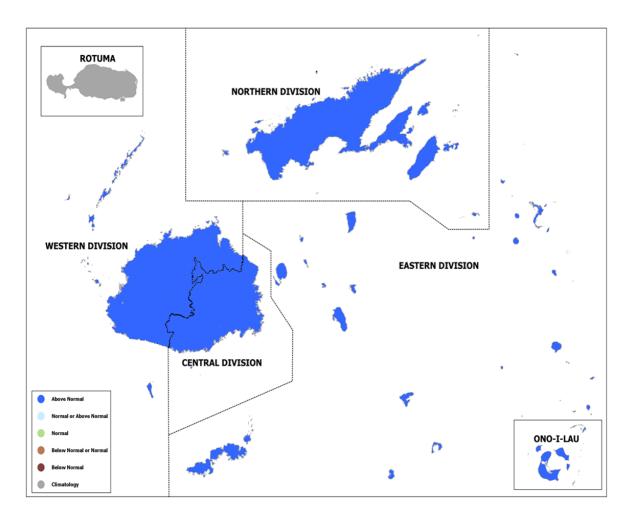
Fiji Meteorological Service



- A La Niña Watch is currently in place, with ENSO indicators showing signs of likely chances of development of a weak La Niña in the coming months.
- During December 2024, *above normal* rainfall is likely across the Fiji Group, while there is little guidance provided for Rotuma, with almost equal chances of *below normal*, *normal* and *above normal* rainfall.
- For December 2024 to February 2025 period, *above normal* rainfall is likely across the Fiji Group, as well as Rotuma.
- During March to May 2025, *normal* or *above normal* rainfall is likely across the Fiji Group, while there is little guidance provided for Rotuma, as there is almost equal chances of *below normal*, *normal* and *above normal* rainfall.
- On December temperatures, both day and night time temperatures are likely to be *above normal* across the Fiji Group.
- For December 2024 to February 2025 period, both day and night time temperatures are likely to be *above normal* across the Fiji Group.
- ENSO-neutral conditions are likely to transition to a weak La Niña state during December 2024 to February 2025 period.
- As Fiji is now into its Wet Season, the country is likely to start experiencing wetter conditions.

# **RAINFALL OUTLOOK**

### **DECEMBER 2024**



Western Division: Above normal rainfall

**Central Division:** Above normal rainfall

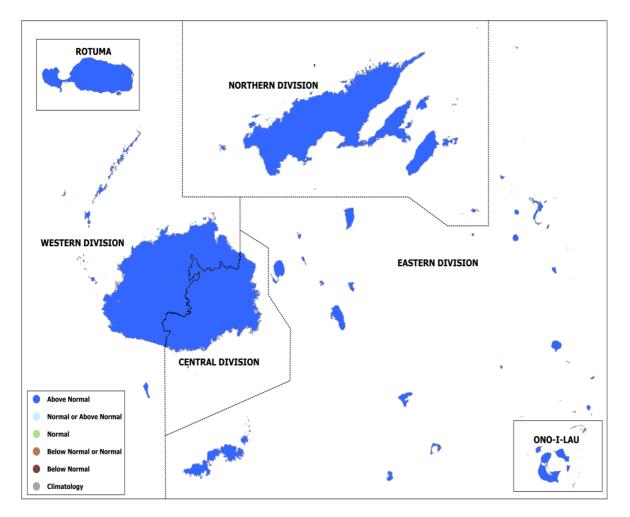
Northern Division: Above normal rainfall

Eastern Division: Above normal rainfall

Rotuma: Almost equal chances of below normal, normal and above normal rainfall

# **RAINFALL OUTLOOK**

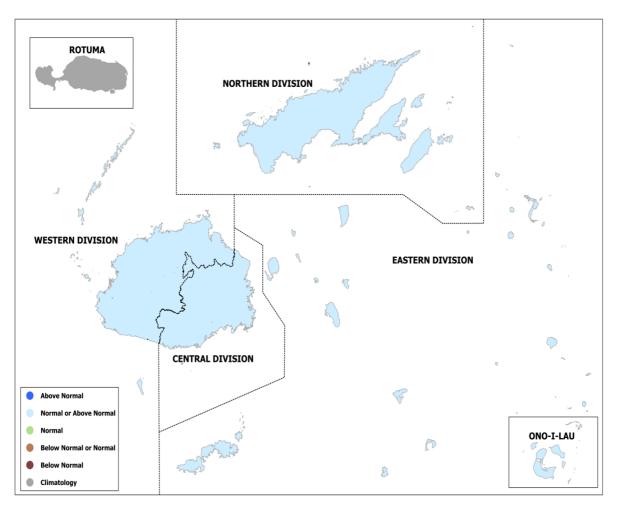
### **DECEMBER 2024 TO FEBRUARY 2025**



Western Division: *Above normal* rainfall Central Division: *Above normal* rainfall Northern Division: *Above normal* rainfall Eastern Division: *Above normal* rainfall Rotuma: *Above normal* rainfall

## **RAINFALL OUTLOOK**

### **MARCH TO MAY 2025**



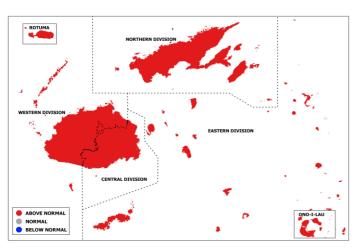
Western Division: Normal or above normal rainfall
Central Division: Normal or above normal rainfall
Northern Division: Normal or above normal rainfall
Eastern Division: Normal or above normal rainfall

Rotuma: Almost equal chances of below normal, normal and above normal rainfall

# AIR TEMPERATURE OUTLOOK

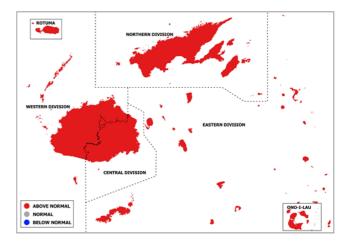
### **DECEMBER 2024**

### **Maximum Temperature**



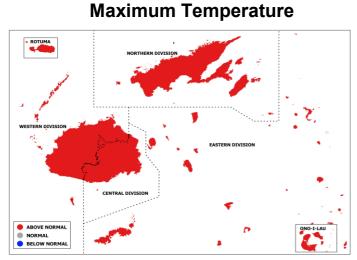
Maximum temperature is likely to be *above normal* across the Fiji Group.

**Minimum Temperature** 



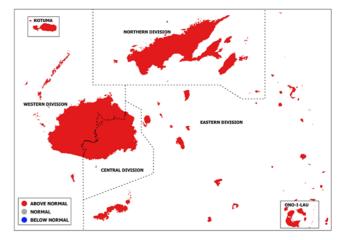
Minimum temperature is likely to be *above normal* across the Fiji Group.

### **DECEMBER 2024 TO FEBRUARY 2025**



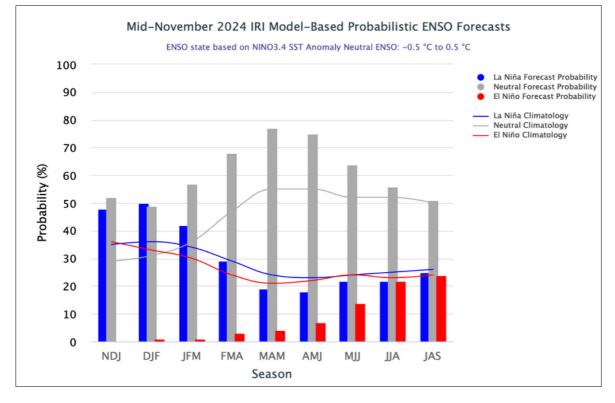
Maximum temperature is likely to be *above normal* across the Fiji Group.

#### **Minimum Temperature**



Minimum temperature is likely to be *above normal* across the Fiji Group.

# EL-NIÑO SOUTHERN OSCILLATION (ENSO)





ENSO-neutral conditions continue to persist in the tropical Pacific Ocean.

Sea surface temperatures in the tropical Pacific are likely to reach or exceed the La Niña threshold in the coming months.

ENSO-neutral conditions are likely to transition to a weak La Niña state during December 2024 to February 2025 period.

As Fiji transitions to borderline La Niña conditions, the country could start experiencing above average rainfall. La Niña generally enhances rainfall in Fiji, particularly during the wet season from November to April.

### **EXPLANATORY NOTES**

#### 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 almost equal chances of receiving below normal, normal and above normal rainfall. Outlook does not favour one extreme; neither below normal nor above normal.

#### El Niño Southern Oscillation (ENSO)

ENSO is the principal driver of the year-to-year variability of Fiji's climate. There are two extreme phases of this phenomenon, *El Niño* and *La Niña*.

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 during the period April to June, attains peak intensity between December to February and decays between 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).

When ENSO is neutral, that is, neither El Niño nor La Niña, 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.

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