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## FIJI CLIMATE OUTLOOK

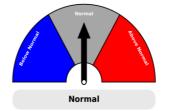
NOVEMBER 2023; NOVEMBER 2023 TO JANUARY 2024; FEBRUARY TO APRIL 2024

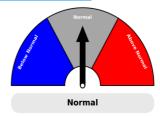
Fiji Meteorological Service

### **HIGHLIGHTS**









**Rainfall Outlook** 

**ENSO Outlook** 

Max Temperature Outlook

Min Temperature Outlook

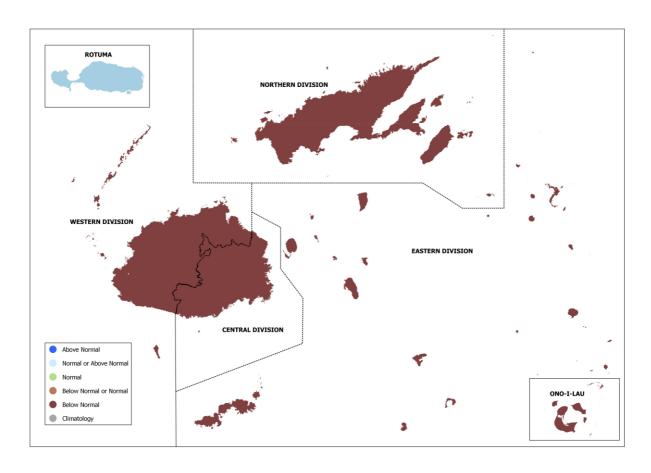
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- El-Niño Southern Oscillation (ENSO) is currently in a moderate El Niño state.
- Rainfall activity is expected to pick up during the wet season in November, but the current El Niño event is likely to suppress the usual rainfall.
- During November 2023, *below normal* rainfall is likely for the Fiji Group. *Near normal* or *above normal* rainfall is likely for Rotuma.
- For November 2023 to January 2024 period, *below normal* rainfall is likely for the Fiji Group. *Near normal* or *above normal* rainfall is likely for Rotuma.
- During February to April 2024, below normal rainfall is likely for the Fiji Group, while near normal or above normal rainfall is likely for Rotuma. However, as we are now in the tropical cyclone season, development of a tropical disturbance or depression, can result in normal or above normal rainfall, during the above mentioned periods.
- During November, maximum temperature is likely to be near normal across most of the Fiji Group, with above normal across Western Division and at Rotuma. Night time temperatures are likely to be near normal over the Fiji Group, with above normal temperatures likely at Rotuma.
- For November 2023 to January 2023, maximum temperature is likely to be above normal
  across most of the Fiji Group, with Rotuma, while near normal temperature is likely across
  the Eastern Division. Night time temperatures are likely to be above normal across the Western
  and Northern Divisions and at Rotuma, while near normal temperatures are likely across the
  Central and Eastern Divisions.
- Overall, the current El Niño event is expected to gradually strengthen through to the December 2023 to February 2024 period.
- Historically, Fiji experiences below normal rainfall during an El Niño event.

FIJI CLIMATE OUTLOOK

# **RAINFALL OUTLOOK**

#### **NOVEMBER 2023**



Western Division: Below normal rainfall

Central Division: Below normal rainfall

Northern Division: Below normal rainfall

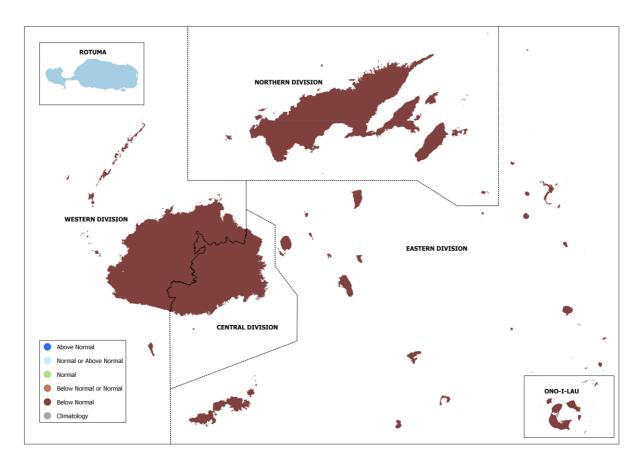
Eastern Division: Below normal rainfall

Rotuma: Normal or above normal rainfall

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# **RAINFALL OUTLOOK**

#### **NOVEMBER 2023 TO JANUARY 2024**



Western Division: Below normal rainfall

Central Division: Below normal rainfall

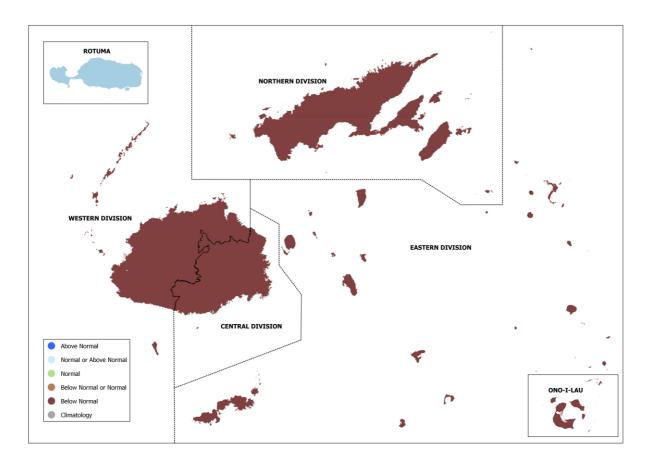
Northern Division: Below normal rainfall

Eastern Division: Below normal rainfall

Rotuma: Normal or above normal rainfall

# **RAINFALL OUTLOOK**

#### **FEBRUARY TO MARCH 2024**



Western Division: Below normal rainfall

Central Division: Below normal rainfall

Northern Division: Below normal rainfall

Eastern Division: Below normal rainfall

Rotuma: Normal or above normal rainfall

# AIR TEMPERATURE OUTLOOK

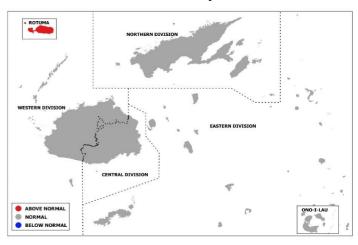
#### **NOVEMBER 2023**

#### **Maximum Temperature**

# MESTERN DIVISION EASTERN DIVISION CENTRAL DIVISION ONO-I-LAU ONO-I-LAU ONO-I-LAU

Maximum temperature is likely to be *near normal* across Central, Northern and Eastern Divisions, with *above normal* across Western Division and at Rotuma.

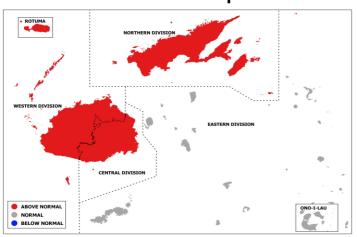
#### **Minimum Temperature**



Minimum temperature is likely to be *near* normal over the Fiji Group, with above normal temperatures likely at Rotuma.

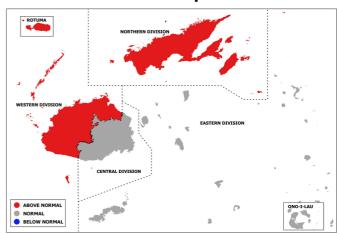
#### **NOVEMBER 2023 TO JANUARY 2024**

#### **Maximum Temperature**



Maximum temperature is likely to be *above normal* across the Western, Central and Northern Divisions and at Rotuma, while *near normal* temperature is likely across the Eastern Division.

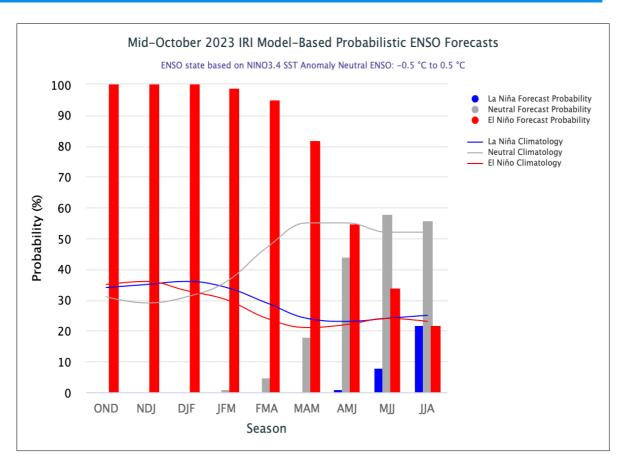
#### **Minimum Temperature**



Minimum temperature is likely to be *above normal* across the Western and Northern Divisions and at Rotuma, while *near normal* temperature is likely across the Central and Eastern Divisions.

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# EL-NIÑO SOUTHERN OSCILLATION (ENSO)



Source: International Research Institute for Climate and Society

El-Niño Southern Oscillation (ENSO) is currently in a moderate El-Niño state.

Sea surface temperatures (SSTs) are further likely to warm and remain above El Niño thresholds until at least the end of the year.

The current El Niño is expected to gradually strengthen through to the December 2023 to February 2024 period.

Fiji usually experiences below normal rainfall during an El Niño event.

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#### **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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