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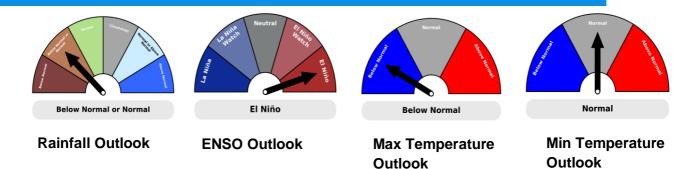


### FIJI CLIMATE OUTLOOK

AUGUST 2023; AUGUST TO OCTOBER 2023; NOVEMBER 2023 TO JANUARY 2024

Fiji Meteorological Service

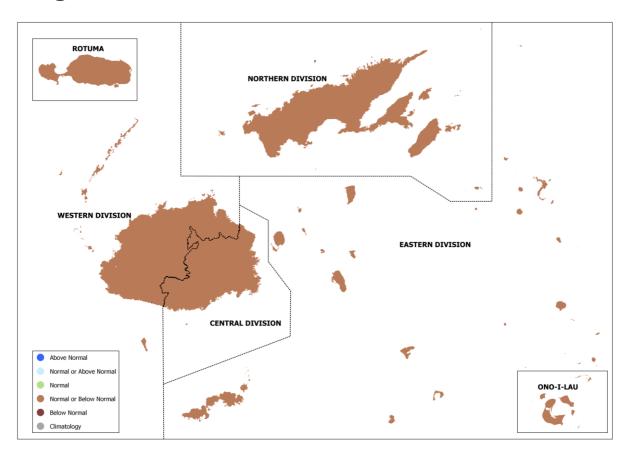
### **HIGHLIGHTS**



- During August 2023, near normal or below normal rainfall is likely for the Fiji Group.
- For August to October period, *near normal* or *below normal* rainfall is likely for the Fiji Group. There is little guidance provided for Rotuma, as there is almost equal chances of *below normal*, *normal* and *above normal* rainfall.
- During November 2023 to January 2024, near normal or below normal rainfall is likely for the Fiji Group. There is little guidance provided for Rotuma, as there is almost equal chances of below normal, normal and above normal rainfall. However, a development of a tropical disturbance or depression, during this period, can result in normal or above normal rainfall.
- For the August period, maximum temperature is likely to be below normal across the
  Western and Central Divisions, near normal for Northern and Eastern Divisions, while
  above normal temperature is likely at Rotuma. Minimum temperature is likely to be
  near normal across the Western, Central and Eastern Divisions, while above normal
  temperatures are likely across the Northern Division and also at Rotuma.
- Maximum temperature is likely to be near normal over the Fiji Group during August to
  October 2023, while above normal temperature is likely at Rotuma. Minimum
  temperature is likely to be near normal across Western, Central and Eastern
  Divisions, while above normal temperatures are likely across the Northern Division
  and at Rotuma.
- El-Niño Southern Oscillation (ENSO) is currently in a weak El Niño state.
- The current El Niño is expected to gradually strengthen through to the December 2023 to February 2024 period.

# **RAINFALL OUTLOOK**

### August 2023



Western Division: Normal or below normal rainfall

Central Division: Normal or below normal rainfall

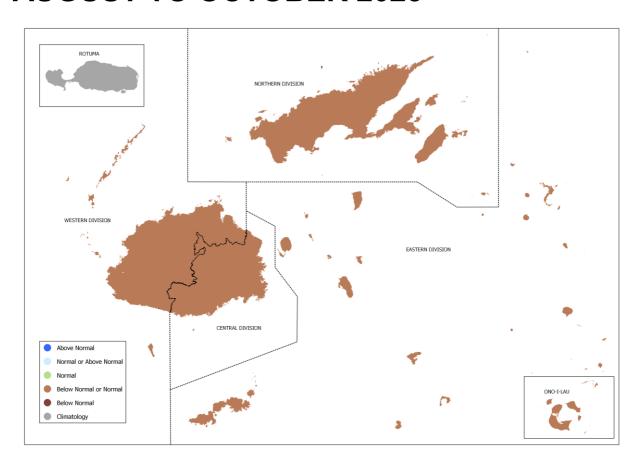
Northern Division: Normal or below normal rainfall

Eastern Division: Normal or below normal rainfall

Rotuma: Normal or below normal rainfall

## **RAINFALL OUTLOOK**

### **AUGUST TO OCTOBER 2023**



Western Division: Normal or below normal rainfall

Central Division: Normal or below normal rainfall

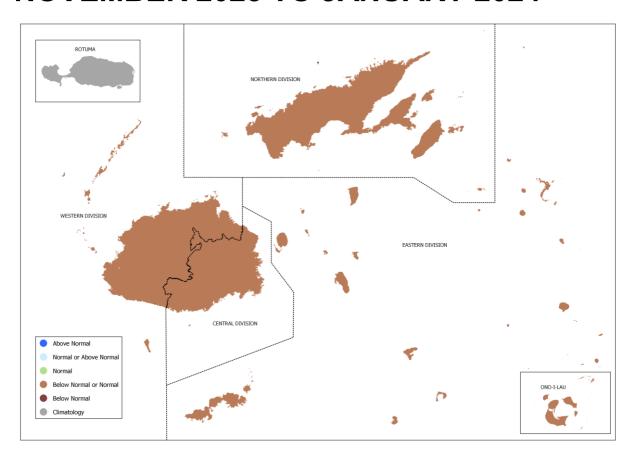
Northern Division: Normal or below normal rainfall

Eastern Division: Normal or below normal rainfall

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

## **RAINFALL OUTLOOK**

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



Western Division: Normal or below normal rainfall

Central Division: Normal or below normal rainfall

Northern Division: Normal or below normal rainfall

Eastern Division: Normal or below normal rainfall

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

# AIR TEMPERATURE OUTLOOK

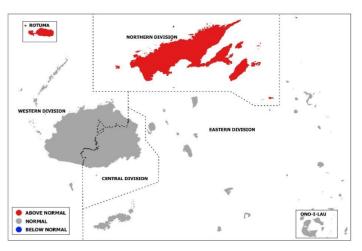
### **AUGUST 2023**

### **Maximum Temperature**

# WESTERN DIVISION CENTRAL DIVISION CENTRAL DIVISION ONG-I-LAU ONG-I-LAU ONG-I-LAU ONG-I-LAU

Maximum temperature is likely to be *below normal* for interior parts of Vitlevu, *near normal* for Northern and Eastern Divisions, while *above normal* temperature is likely at Rotuma during August 2023.

### **Minimum Temperature**



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

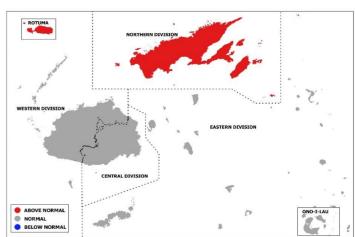
### **AUGUST TO OCTOBER 2023**

### **Maximum Temperature**

# MORTHERN DIVISION EASTERN DIVISION CENTRAL DIVISION ONG-1-LAU ONG-1-LAU BELOW NORMAL BELOW NORMAL

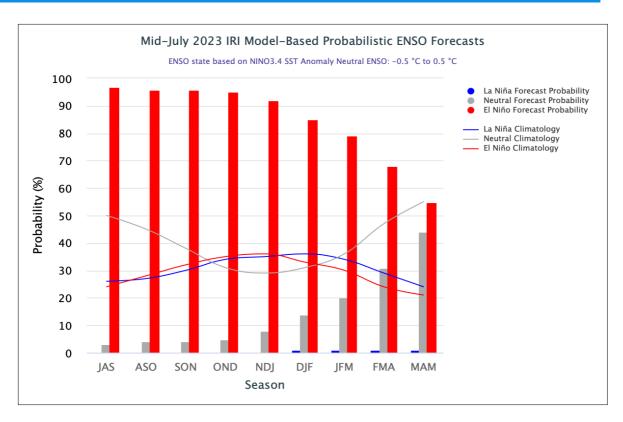
Maximum temperature is likely to be *near* normal over the Fiji Group during August to October 2023, while *above normal* temperature is likely for Rotuma

### **Minimum Temperature**



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

# EL-NIÑO SOUTHERN OSCILLATION (ENSO)



Source: International Research Institute for Climate and Society

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

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.

### **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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