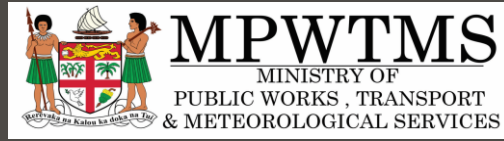


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VOLUME 18: ISSUE 1



# FIJI CLIMATE OUTLOOK

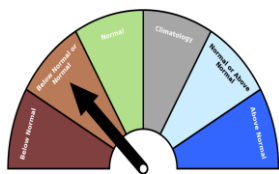
JANUARY 2024;

JANUARY TO MARCH 2024;

APRIL TO JUNE 2024

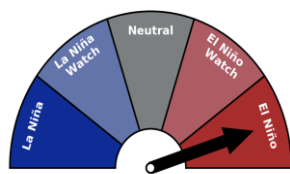
*Fiji Meteorological Service*

# HIGHLIGHTS



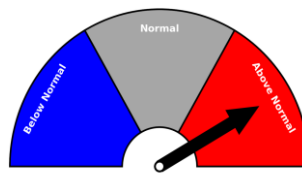
Below Normal or Normal

## Rainfall Outlook



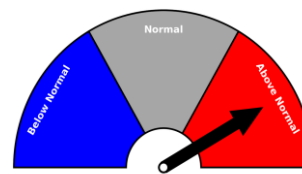
El Niño

## ENSO Outlook



Above Normal

## Max Temperature Outlook



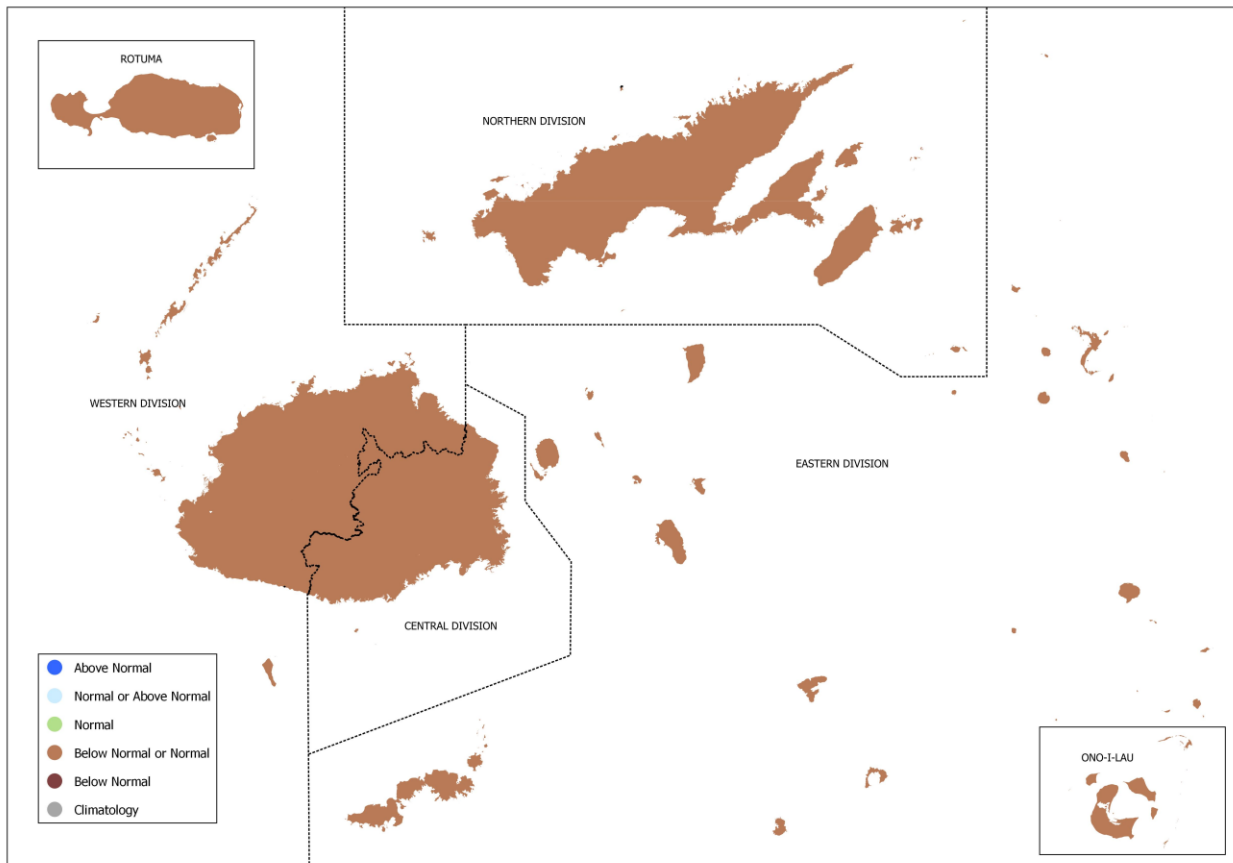
Above Normal

## Min Temperature Outlook

- El-Niño Southern Oscillation (ENSO) is currently in a moderate El Niño state.
- During January 2024, *normal* or *below normal* rainfall is likely for the Fiji Group.
- For January to March 2024 period, *normal* or *below normal* rainfall is likely for the Fiji Group, while *normal* or *above normal* rainfall is likely for Rotuma.
- During April to June 2024, there is almost equal chances of *below normal*, *normal* and *above normal* rainfall across the Fiji Group, while *normal* or *above normal* rainfall is likely for Rotuma.
- Notably, January to March is our peak tropical cyclone period, development of a tropical disturbance or depression, can result in *above normal* rainfall, during the above mentioned periods.
- On January 2024 temperatures, both day and night time temperatures are likely to be *above normal* across the Fiji Group.
- For January to March 2024, both maximum and minimum temperatures are likely to be *above normal* across the Fiji Group.
- Overall, the current El Niño has likely reached its peak, with the event likely to continue through the March to May 2024 period.
- Historically, Fiji experiences *below normal* rainfall during an El Niño event.

# RAINFALL OUTLOOK

## JANUARY 2023



**Western Division:** *Normal or below normal* rainfall

**Central Division:** *Normal or below normal* rainfall

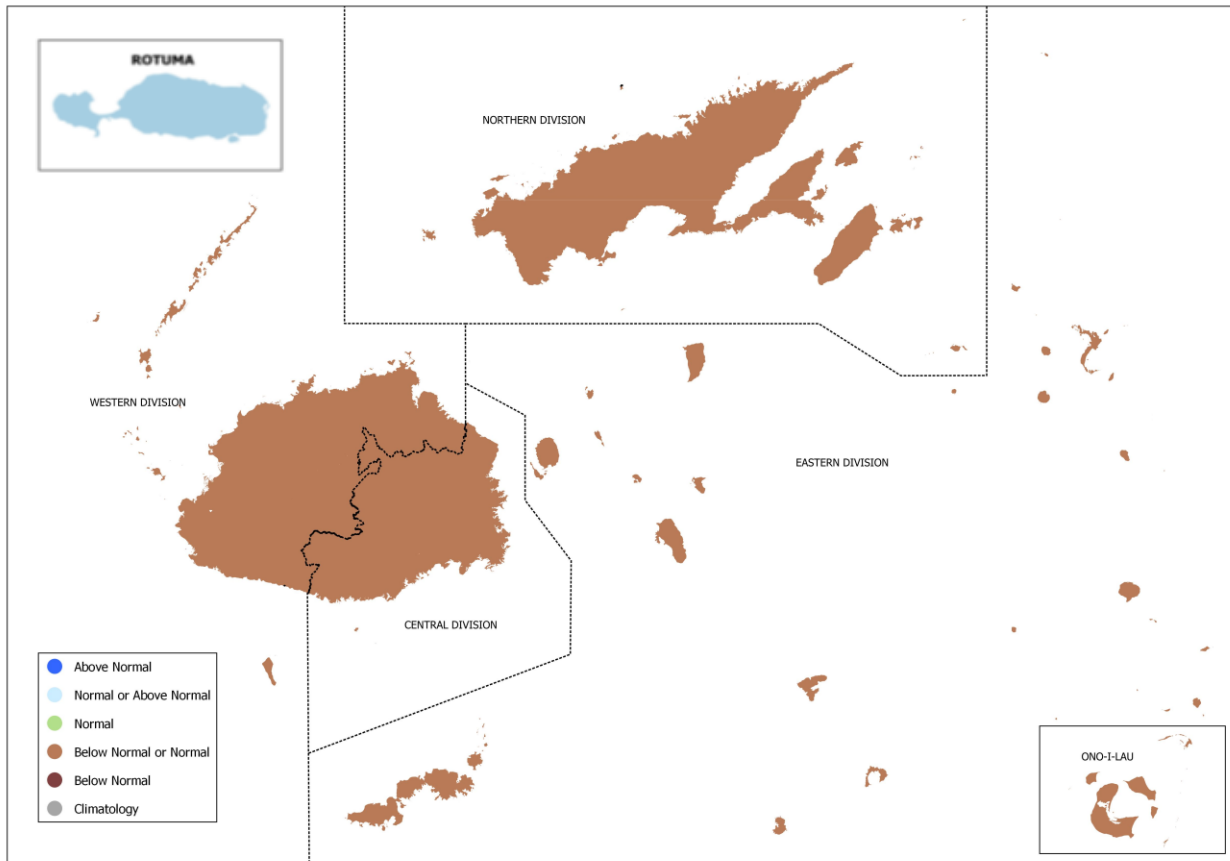
**Northern Division:** *Normal or below normal* rainfall

**Eastern Division:** *Normal or below normal* rainfall

**Rotuma:** *Normal or below normal* rainfall

# RAINFALL OUTLOOK

## JANUARY TO MARCH 2024



**Western Division:** *Normal or below normal* rainfall

**Central Division:** *Normal or below normal* rainfall

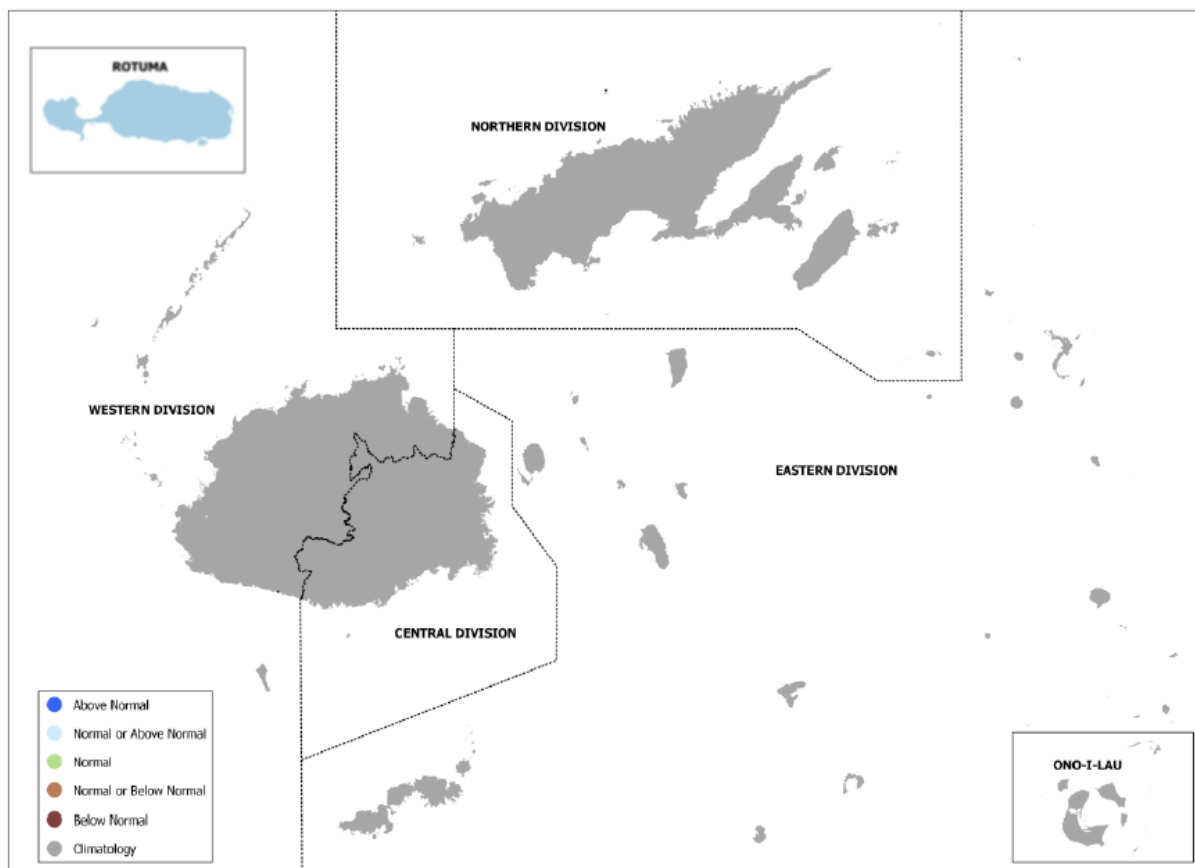
**Northern Division:** *Normal or below normal* rainfall

**Eastern Division:** *Normal or below normal* rainfall

**Rotuma:** *Normal or above normal* rainfall

# RAINFALL OUTLOOK

## APRIL TO JUNE 2024



**Western Division:** Almost equal chances of *below normal*, *normal* and *above normal* rainfall

**Central Division:** Almost equal chances of *below normal*, *normal* and *above normal* rainfall

**Northern Division:** Almost equal chances of *below normal*, *normal* and *above normal* rainfall

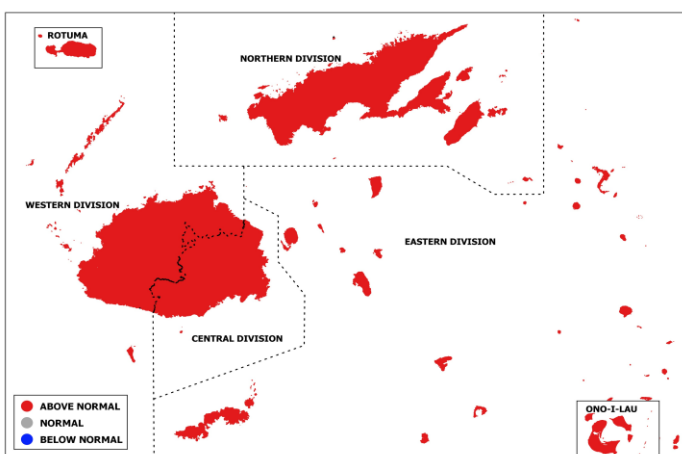
**Eastern Division:** Almost equal chances of *below normal*, *normal* and *above normal* rainfall

**Rotuma:** *Normal or above normal* rainfall

# AIR TEMPERATURE OUTLOOK

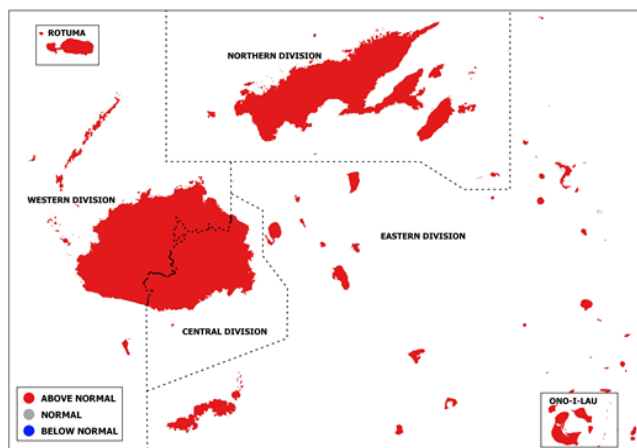
**JANUARY 2024**

**Maximum Temperature**



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

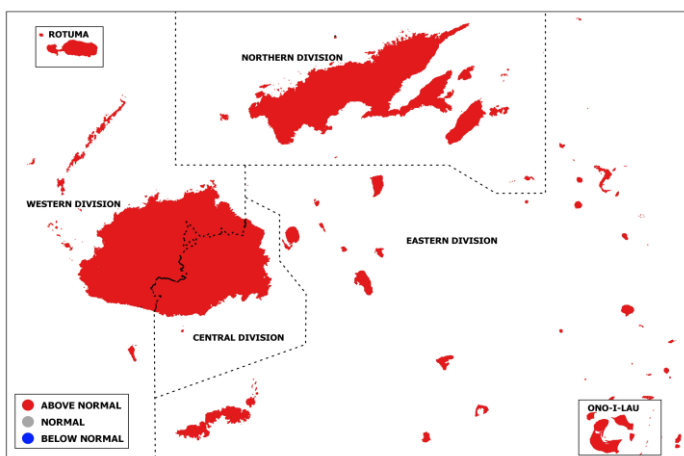
**Minimum Temperature**



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

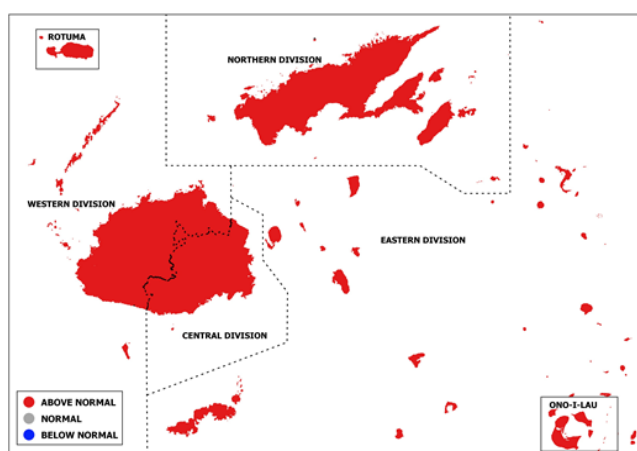
**JANUARY TO MARCH 2024**

**Maximum Temperature**



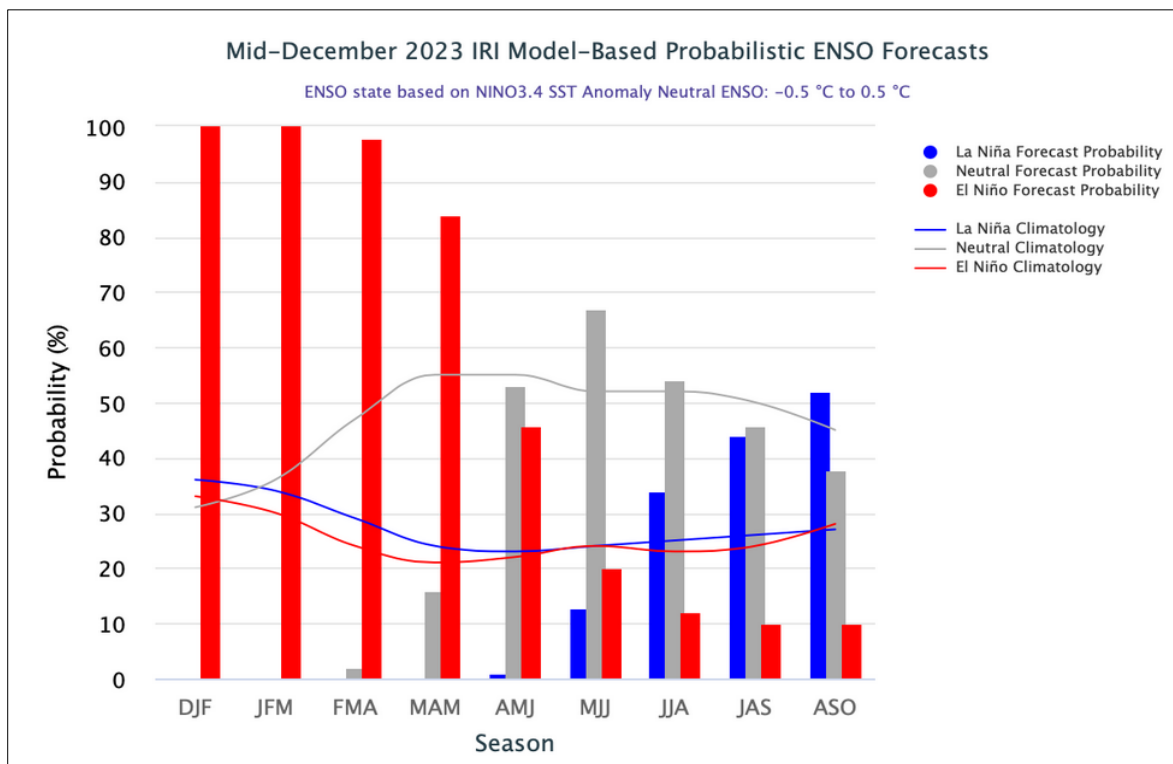
Maximum temperature is likely to be *above normal* across the Fiji Group.

**Minimum Temperature**



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

# 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 expected to remain above El Niño thresholds until at least March 2024.

The current El Niño has likely reached its peak, with the event likely to continue through the March to May 2024 period.

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

## 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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