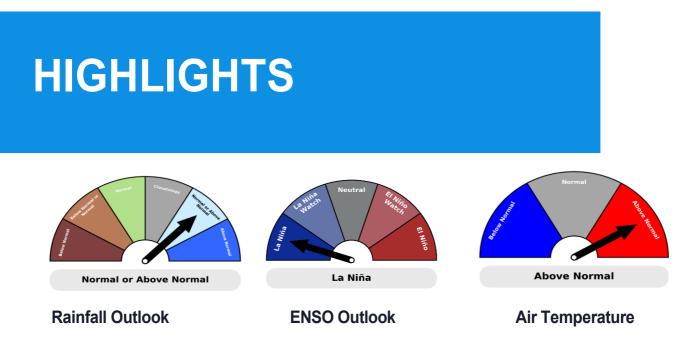
ISSUED: February 27, 2023 NEXT ISSUE: March 31, 2023 VOLUME 17: ISSUE 03



FIJI CLIMATE OUTLOOK

MARCH 2023; MARCH TO MAY 2023; JUNE TO AUGUST 2023

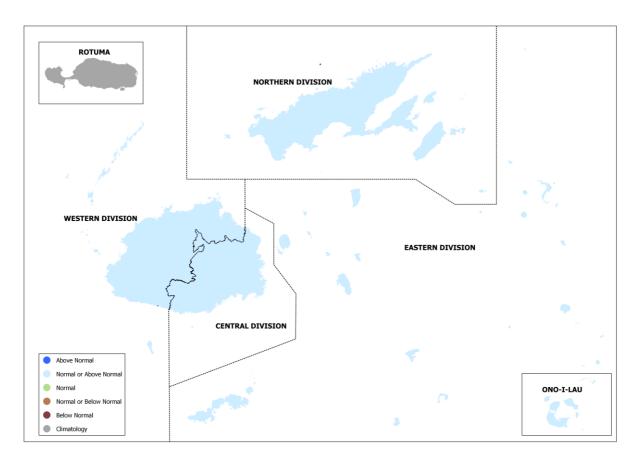
Fiji Meteorological Service



- Rainfall during March 2023 is likely to be *near normal* or *above normal* across the country. There is little guidance for Rotuma with almost equal chances of *below normal, near normal* and *above normal* rainfall.
- For March to May 2023 season, *above normal* rainfall is likely for the Western Division, with *near normal* or *above normal* rainfall expected for the rest of the country. For Rotuma, there is little guidance with almost equal chances of *below normal, near normal* and *above normal* rainfall.
- During June to August 2023 period, there is little guidance for whole of the Fiji Group, with almost equal chances of *below normal*, *near normal* and *above normal* rainfall. *Near normal* or *below normal* rainfall is likely for Rotuma.
- The air temperatures are likely to be *above normal* across the country during, both, March and March to May period.
- A weak La Niña event continues to persist in the tropical Pacific Ocean. Climate models on average suggest a return to ENSO-neutral conditions during March to May 2023.
- Despite the likely easing of La Niña event, its impact on Fiji is likely to continue over the next couple of months due to lag effect.
- Fiji typically experiences above normal rainfall during a La-Niña event, with increasing risk of flooding, especially during the Wet Season.

RAINFALL OUTLOOK

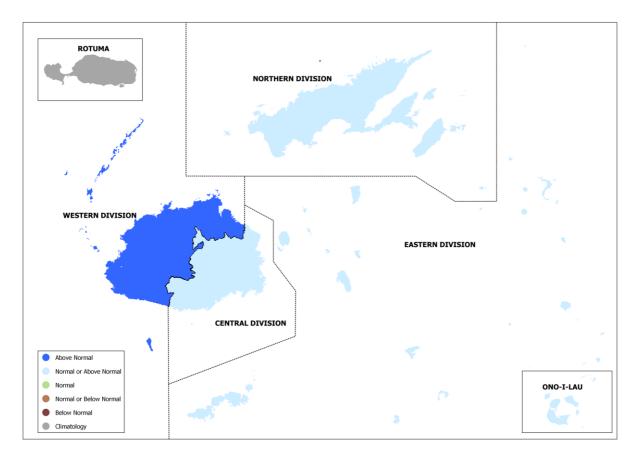
MARCH 2023



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

RAINFALL OUTLOOK

MARCH TO MAY 2023



Western Division: Above normal rainfall

Central Division: Normal or above normal rainfall

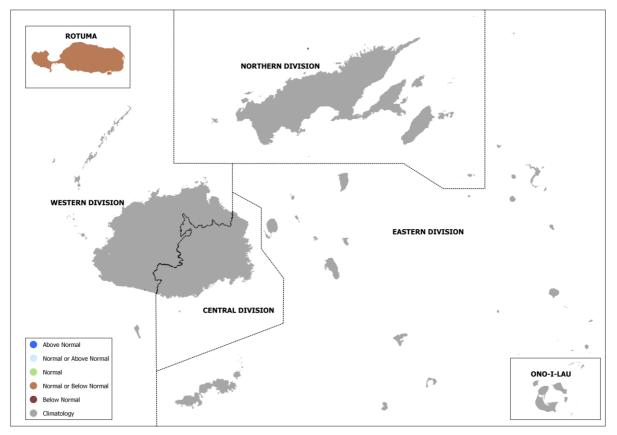
Northern Division: Normal or above normal rainfall

Eastern Division: Normal or above normal rainfall

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

RAINFALL OUTLOOK

JUNE TO AUGUST 2023



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

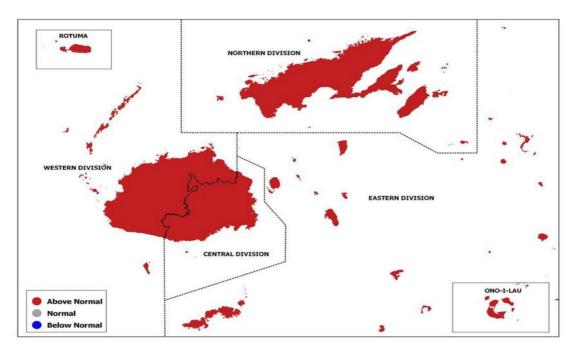
Northern Division: Almost equal chances of *below normal*, *normal* and *above normal* rainfall

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

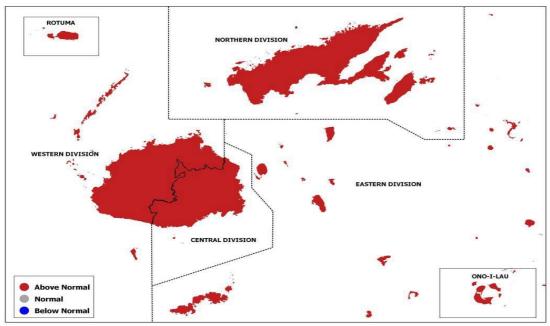
Rotuma: Normal or below normal rainfall

AIR TEMPERATURE OUTLOOKS

MARCH 2023

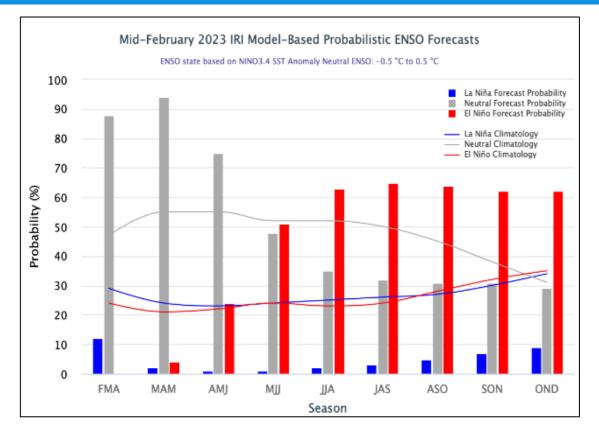


MARCH TO MAY 2023



Above normal air temperatures are likely over the Fiji Group during March 2023, and as well as the March to May 2023 season.

EL-NIÑO SOUTHERN OSCILLATION (ENSO)



Source: International Research Institute for Climate and Society

A weak La Niña event continues to persist in the tropical Pacific Ocean. Most of the recently surveyed climate models on average suggest a return to neutral conditions during March to May 2023 period.

Despite the easing of La Niña conditions, its impact on Fiji's climate is likely to continue over the next couple of months due to lag effect.

Fiji usually experiences above normal rainfall during a La Niña event, with increasing risk of flooding, especially during the wet season; 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 equal chances of receiving below normal, normal and above normal rainfall.

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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