

# Fiji Meteorological Service

## Early Action Rainfall Watch (EAR Watch)

The Early Action Rainfall Watch provides the Fiji National Disaster Management Office and the Disaster Management Actors with a brief summary of recent rainfall patterns and the rainfall outlook for the coming months.

### Rainfall Status until November 2023:

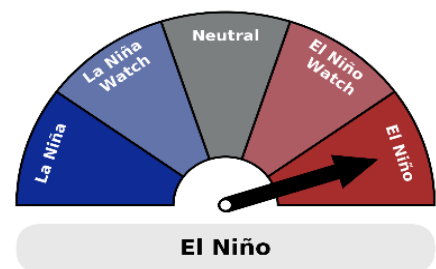
Issued: 12/12/2023

- For 3-month timescale, **Seriously Dry** conditions exist for Udu Point, Taveuni, Qamea, Rabi Island, together with Vanuabalavu and the nearby islands. **Very Dry** conditions exist for Labasa, Seaqaqa, Bua, Nabouwalu, Savusavu, Lakeba, parts of Lomaiviti Group and parts of northern and southern Lau Group. There is **No Extreme** condition in place for the rest of the Fiji Group.
- At 6-month timescale, **Very Wet** conditions exist for Ba and Vatulele. There is **No Extreme** condition in place for the rest of the Fiji Group.
- On the 12-month timescale, **Seriously Dry** conditions exist for parts of Taveuni, **Very Dry** conditions exist for Qamea and Rabi Island, **Seriously Wet** conditions exist for southern Kadavu, **Very Wet** conditions exist for parts of Mamanuca Group, Vatulele, Central Kadavu, Moala and Ono-i-Lau, while there are **No Extreme** conditions in place for the rest of the Fiji Group.

### Rainfall Outlook:

- From 8<sup>th</sup> to 21<sup>st</sup> December, there is a **medium** chance of **Very Dry** conditions across the Western and Central Divisions, Nabouwalu, parts of Bua, Kadavu, parts of Lomaiviti Group, Moala Group, Ono-i-Lau, Rotuma and parts of southern Lau Group. There is a **medium chance** of **Very Wet** conditions for parts of the northern Lau Group, while there are **No Extreme** conditions in place for the rest of the Fiji Group.
- For **December**, there is a **high** chance of **Very Dry** conditions for most of the Western and Central Divisions and southern Kadavu. There is a **medium** chance of **Very Dry** conditions for the rest of the Fiji Group.
- For **December 2023 to February 2024**, there is a **medium** chance of **Very Dry** conditions across the Western, Central and Northern Divisions, Lakeba, Moala Group, Rotuma and parts of northern and southern Lau Group, while there are **No Extreme** conditions in place for the rest of the Fiji Group.

**El Niño-Southern Oscillation (ENSO) Status:** Moderate El Niño



### Time periods and Impacts on the ground

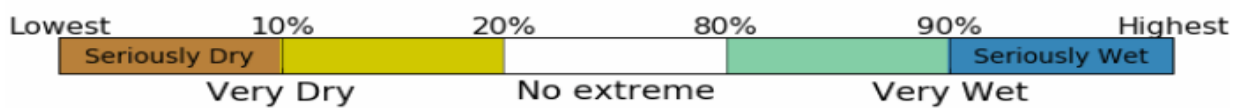
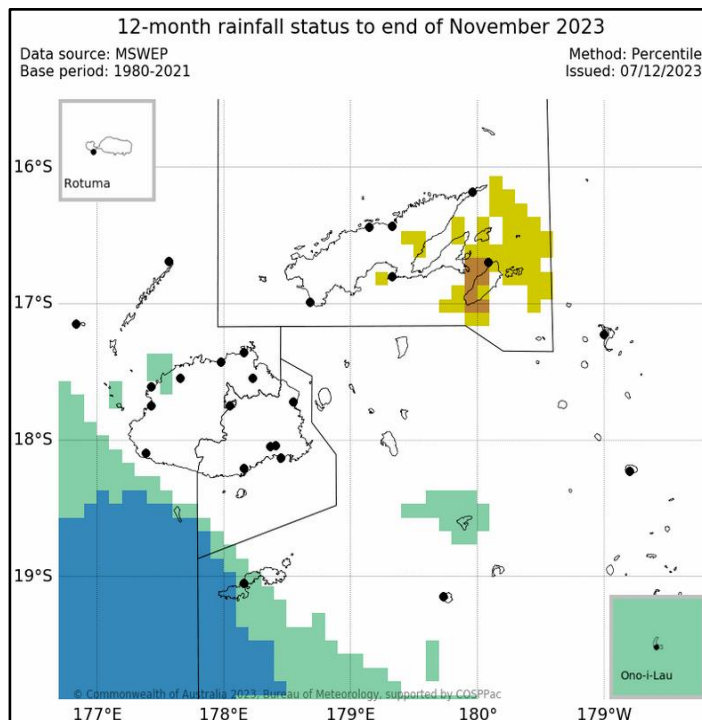
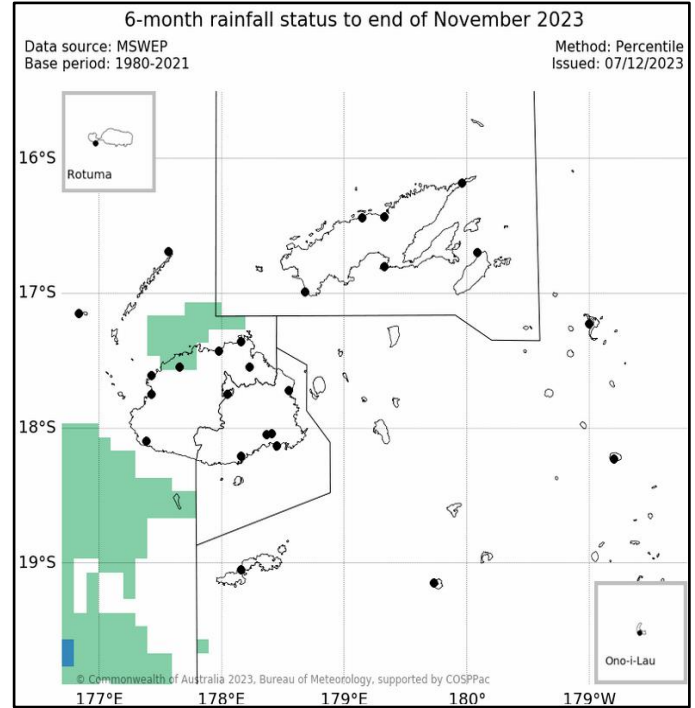
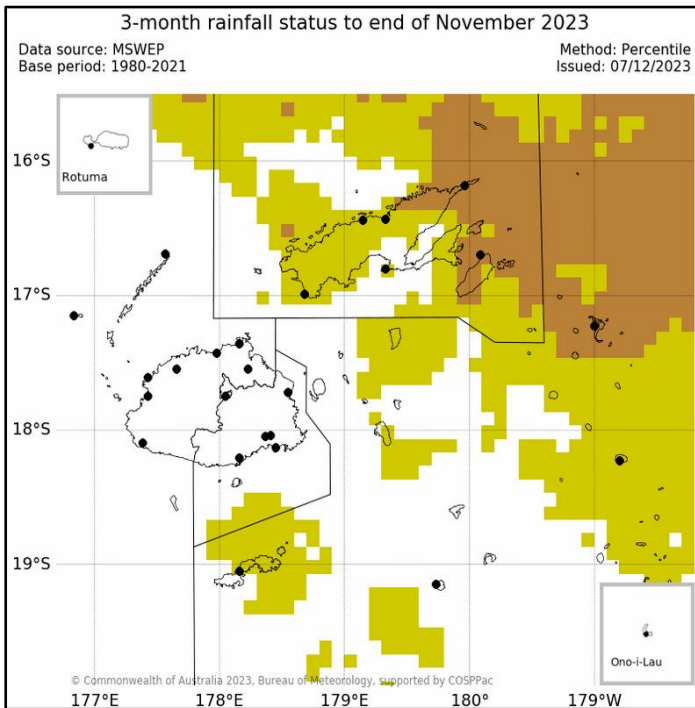
**3-months:** rainwater tanks, small streams, hand-dug wells, shallow bores, young sugarcane, traditional vegetables (e.g., bele), cabbage, tomatoes, beans, eggplant, okra, tomatoes, watermelon, rice, crops (yam, taro, cassava, pasture)

**6-months:** small rivers, bores, streams/rivers, mature sugarcane, kumala, uvi, hybrid dalo, corn, pineapple, pawpaw, dalo (vuci), tapi, kumala (carrot variety)

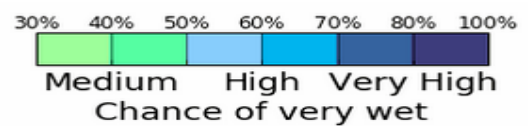
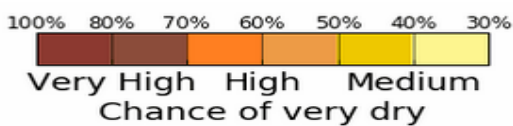
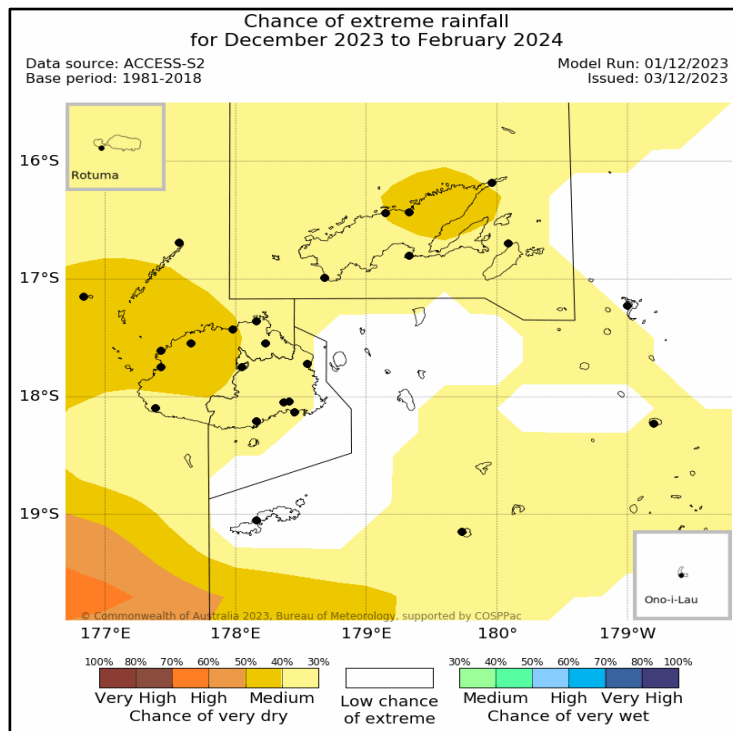
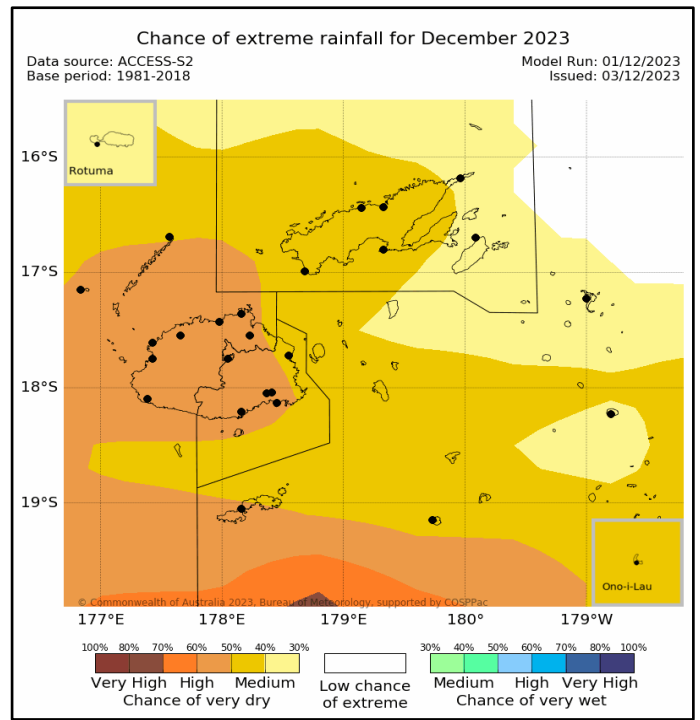
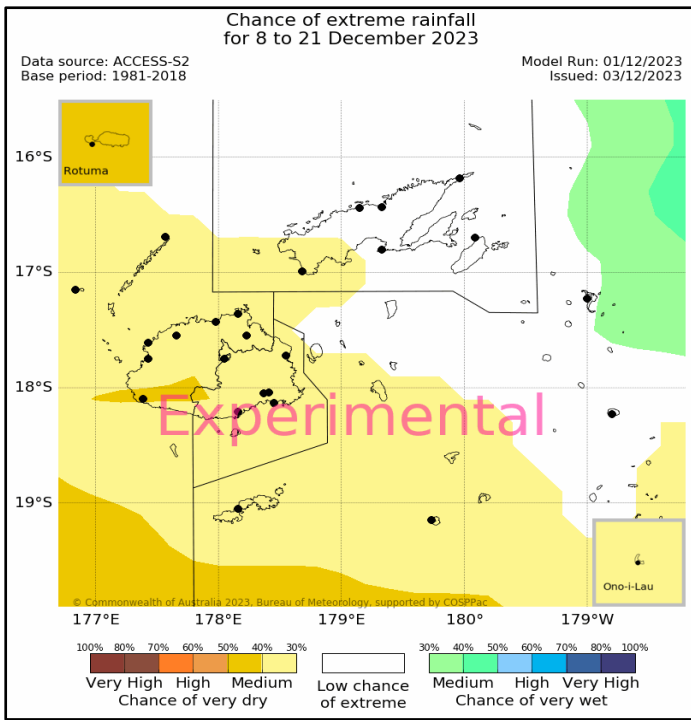
**12-months:** deep bores/large aquifer system, reservoirs, dams, rivers, tapi, coconuts, breadfruit, mango, kava, banana, vudi, fruit trees (e.g., noni, lemon, orange)

*Note: Allow for uncertainty associated with island size, topography, geology and soil type.*

# Rainfall monitoring for the last 3-months, 6-months and 12-months



# Rainfall Outlooks for 8 – 21 December, December and December 2023 to February 2024



## Information on the Maps

### Rainfall Monitoring maps

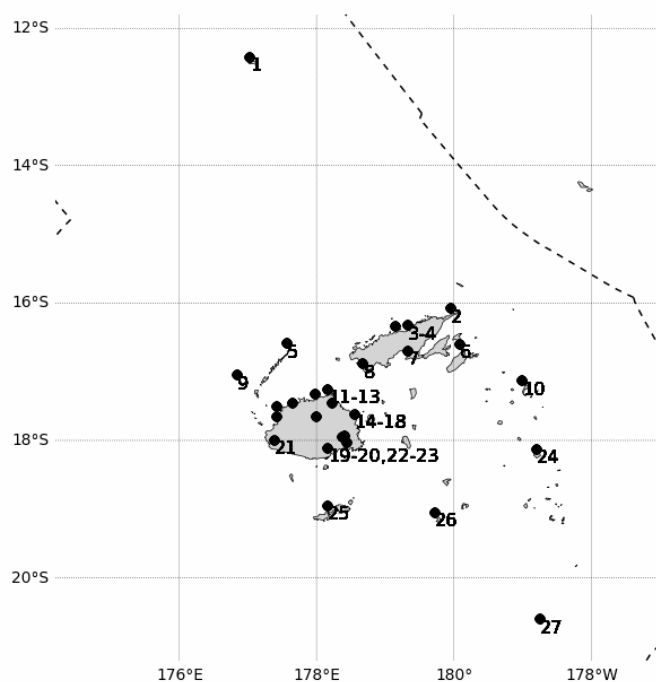
Fiji's rainfall status is assessed using the MSWEP dataset available via <http://www.gloh2o.org/mswep/>. MSWEP is a global precipitation dataset at 0.1° resolution, available from 1979 that combines data from rain gauges, satellite observations and reanalysis. The data is processed and presented in Percentile Index form by the Australian and New Zealand DFAT Climate and Ocean Support Program in the Pacific. 'No Alert' is assigned where rainfall was between the 20<sup>th</sup> and 80<sup>th</sup> percentile for the period in question.

### Forecast for Extreme Rainfall maps

The chance of extremes outlook maps present the likelihood of very wet or very dry conditions. They are displayed by the chance that the outlook will result in rainfall or temperature in the top or bottom 20% of historical observations for the selected outlook period. Where there is white shading it is less likely there will be either very wet or very dry conditions, rainfall is likely to be close to normal in this case. An alert 3 for very dry (very wet) conditions is associated with a very high probability of rainfall being in the lowest (highest) 20% on record. An alert 1 for very dry (very wet) conditions is associated with a moderate/medium chance of rainfall being in the lowest (highest) 20% on record. Confidence in the forecast is greatest for alert 3.

The outlooks have been produced using the Australian Bureau of Meteorology ACCESS-S2 model <http://www.bom.gov.au/climate/ahead/about/model/access.shtml>.

### Fiji Reference Map



Rotuma 1. ,Udu Point 2. ,Labasa 3. ,Seaqaqa 4. ,Yasawai 5. ,Matei 6. ,Savusavu 7. ,Nabouwalu 8. ,Viwa 9.  
Vanuabalavu 10. ,Pengmil 11. ,Yawara 12. ,Dobuilevu 13. ,Rarawai 14. ,Lautmil 15. ,R.K.S. Lodon 16. ,Nadi 17. ,Monasavu 18.  
Nausori 19. ,Koronivia 20. ,Nacocolevu 21. ,Laucala 22. ,Tokotoko 23. ,Lakeba 24. ,Vunisea 25. ,Matuku 26. ,Ono-i-Lau 27.

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