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 February 2024:

Issued: 13/03/2024

- For 3-month timescale, **Very Wet** conditions exist for Gau, Moala and parts of Taveuni. **Very Dry** conditions exist for parts of Rotuma. There is **No Extreme** condition in place for the rest of the Fiji Group.
- At 6-month timescale, **Very Dry** conditions exist for Rotuma. There is **No Extreme** condition in place for the rest of the Fiji Group.
- On the 12-month timescale, there is No Extreme condition in place for whole of Fiji.

Rainfall Outlook:

- From 15th to 28th March, there is a medium chance of Very Dry conditions across Central and Eastern Divisions, and some parts of the Northern Division, Dobuilevu, Monasavu and interior of Viti Levu. There is a medium chance of Very Wet conditions for Rotuma.
- For **March**, there is a **high** chance of **Very Dry** conditions for Vatulele and the southern tip of Kadavu. There is a **medium** chance of **Very Dry** conditions across Western, Central, Northern and Eastern Divisions. There are **No Extreme** conditions in place for Rotuma.
- For March to May 2024, there is a medium chance of Very Dry conditions for Penang, Yaqara, Ba, Lautoka, Nadi, Sigatoka, Mamanuca Group, parts of Yasawa-i-Rara, Seaqaqa, Labasa, Udu Point, Taveuni, Vanuabalavu, Lakeba, Ono-i-Lau and Kadavu. There is medium chance of Very Wet conditions for Rotuma. No Extreme conditions is in place for the rest of the Fiji Group.

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



Time periods and Impacts on the ground

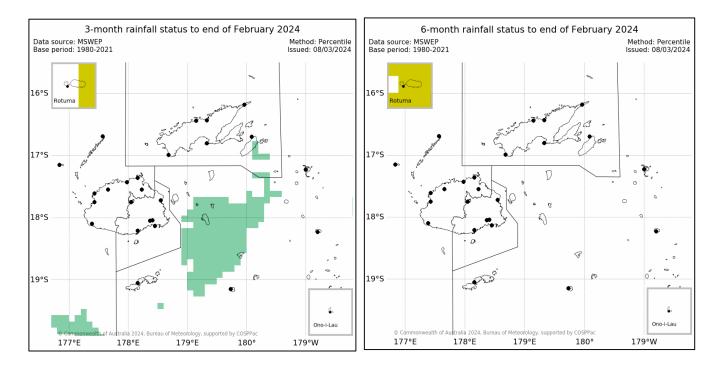
3-months: rainwater tanks, small streams, hand-dug wells, shallow bores, young sugarcane, traditional vegetables (e.g., bele), cabbage, tomatoes, beans, eggplant, okra, tomatoes, watermelon, rice, crops (yam, taro, cassava, pasture)

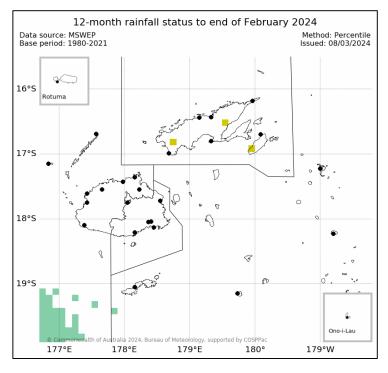
6-months: small rivers, bores, streams/rivers, mature sugarcane, kumala, uvi, hybrid dalo, corn, pineapple, pawpaw, dalo (vuci), tapi, kumala (carrot variety)

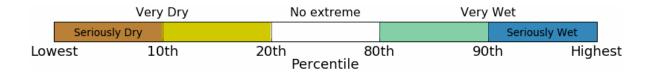
12-months: deep bores/large aquifer system, reservoirs, dams, rivers, tapi, coconuts, breadfruit, mango, kava, banana, vudi, fruit trees (e.g., noni, lemon, orange)

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

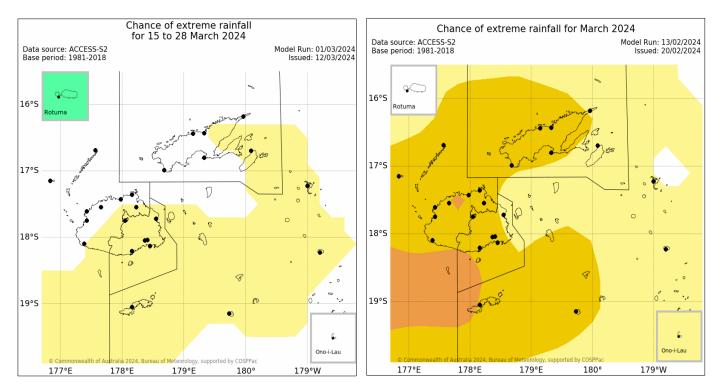
Rainfall monitoring for the last 3-months, 6-months and 12-months

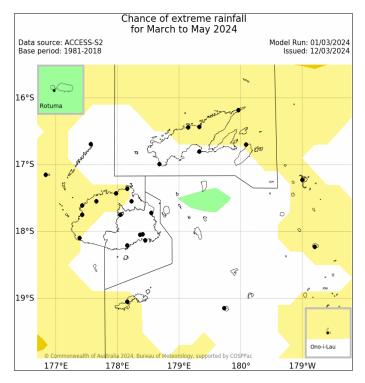


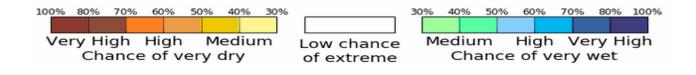




Rainfall Outlooks for 15 – 28 March, March and March to May 2024







Information on the Maps

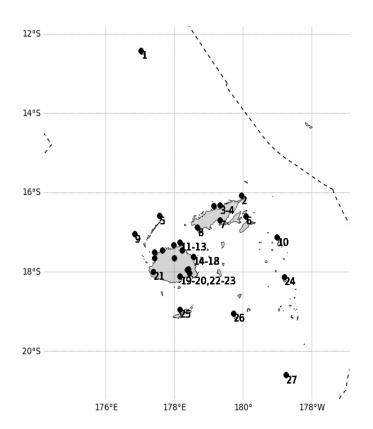
Rainfall Monitoring maps

Fiji's rainfall status is assessed using the MSWEP dataset available via <u>http://www.gloh2o.org/mswep/</u>. 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 20th and 80th 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 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 <u>http://www.bom.gov.au/climate/ahead/about/model/access.shtml</u>.



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. Lodoni 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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