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 March 2024:

Issued: 15/04/2024

- For 3-month timescale, **Seriously Wet** conditions exist for most parts of the country. **Very Wet** Conditions exist for parts of the Yasawa Group and Ono-i-Lau, while there are **No Extreme** conditions in place for Rotuma.
- At the 6-month timescale, Seriously Wet conditions exist for southern Kadavu, Moala, and parts of the Lomaiviti Group. Very Wet conditions exist for northern Kadavu, Matuku, Lakeba, as well as parts of the southern Lau Group, while Very Dry conditions exist for Rotuma. There are no Extreme conditions in place for the rest of the Fiji Group.
- On the 12-month timescale, Seriously Wet conditions exist southern Kadavu, Moala, and parts of Lomaiviti Group, Very Wet conditions exist for Ba, interior of Viti Levu, Nausori, Vatulele, northern Kadavu, Matuku and parts of southern Lau Group.

Rainfall Outlook:

- From 15th to 28th April, there is a high chance of Very Dry conditions in the interior of Viti Levu and parts of southern Lau Group, medium chance of Very Dry conditions across Northern Division, most parts of Western and Central and Eastern Divisions.
- For April, there is a high chance of Very Dry conditions for Ba, Lautoka, Nadi and Sigatoka, Mamanuca Group, medium chance of Very Dry condition across Central Division, Rakiraki, Tavua, Yasawa Group and Viwa, most parts of the Northern and Central Divisions, high chance of Very Wet conditions for Rotuma. There is No Extreme conditions in place for rest for the Fiji Group.
- For April to June 2024, there is a high chance of Very Dry conditions for Nadi, Sigatoka, Vatulele, Labasa, Seaqaqa and northern Taveuni, Vanuabalavu, Lakeba and Ono-i-Lau. There is medium chance of Very Dry conditions across Central Division, Rakiraki to Ba corridor, Kadavu, Lomaiviti group, Moala Group, Nabouwalu, Savusavu, Udu Point and southern tip of Taveuni. There is medium chance of Very Wet conditions for Rotuma.

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



Time periods and Impacts on the ground

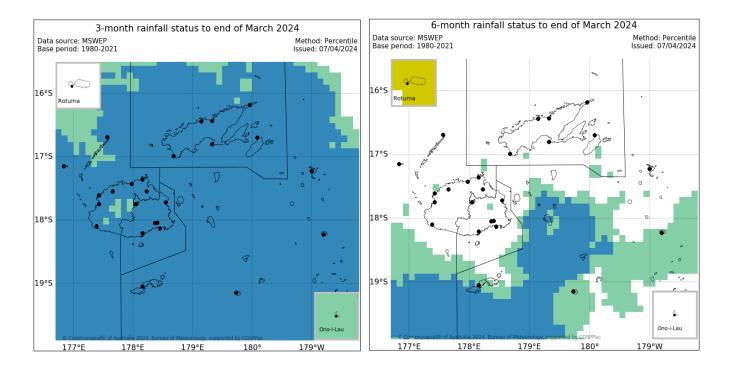
3-months: rainwater tanks, small streams, hand-dug wells, shallow bores, young sugarcane, traditional vegetables (e.g., bele), cabbage, tomatoes, beans, eggplant, okra, tomatoes, watermelon, rice, crops (yam, taro, cassava, pasture)

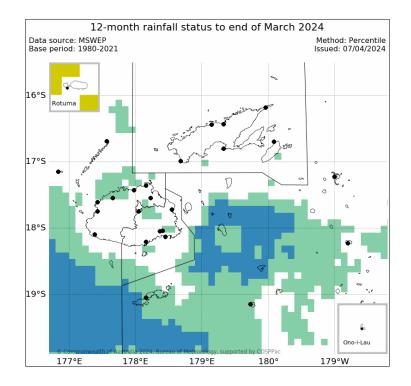
6-months: small rivers, bores, streams/rivers, mature sugarcane, kumala, uvi, hybrid dalo, corn, pineapple, pawpaw, dalo (vuci), tapi, kumala (carrot variety)

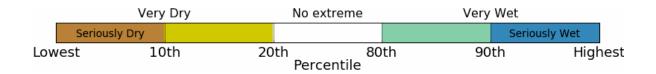
12-months: deep bores/large aquifer system, reservoirs, dams, rivers, tapi, coconuts, breadfruit, mango, kava, banana, vudi, fruit trees (e.g., noni, lemon, orange)

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

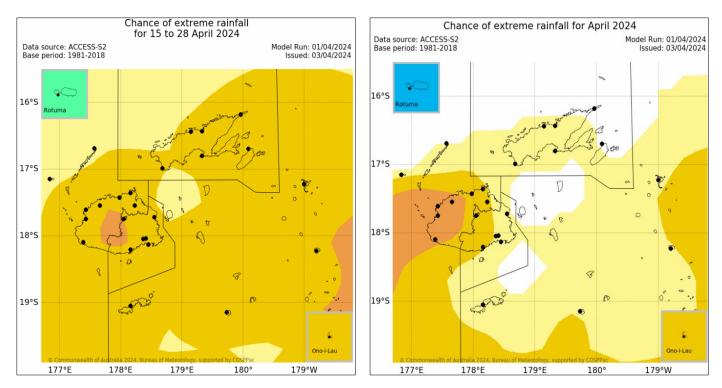
Rainfall monitoring for the last 3-months, 6-months and 12-months

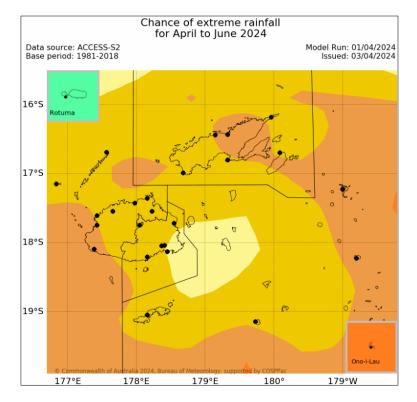


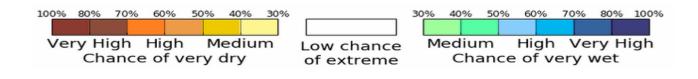




Rainfall Outlooks for 15 – 28 April, April and April to June 2024







Information on the Maps

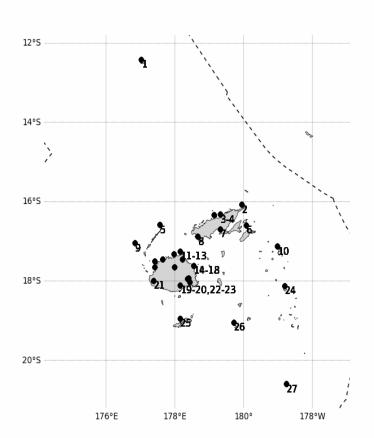
Rainfall Monitoring maps

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 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.

For further information, contact; The Director, Fiji Meteorological Service Private Mail Bag NAP0351, Nadi Airport, Fiji, Phone: 6724888, Fax: 6720430 Website: <u>http://www.met.gov.fi</u>, Email: <u>climate@met.gov.fi</u>