

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 May 2023:

Issued: 09/06/2023

- At 3-month timescale, **Seriously Dry** conditions exist for Udu Point, Taveuni, Vanuabalavu and parts of Nausori Area, **Very Dry** conditions exist for Nabouwalu, Savusavu, Labasa, Seaqaqa, Monasavu, RKS Lodonu, Koronivia, Nausori, Suva, Navua, Beqa, Levuka, Gau and parts of the southern Lau Group, while there is **No Extreme** conditions in place for the rest of the Fiji Group.
- At 6-month timescale, **Seriously Wet** conditions exist for Kadavu, **Very Wet** conditions exist for Vatulele, Moala and Ono-i-Lau, in the Lau Group, **Seriously Dry** conditions exist for northern Savusavu and southern parts of Taveuni, **Very Dry** conditions exist for Rotuma, Savusavu, the rest of Taveuni and parts of Vanuabalavu, while there is **No Extreme** conditions in place for the rest of the Fiji Group.
- At the 12-month timescale, **Seriously Wet** conditions exist for Kadavu, **Very Wet** conditions persists at Vatulele, parts of the Coral Coast, Nacocolevu and Ono-i-Lau, **Seriously Dry** conditions exist for Rotuma, **Very Dry** conditions exist for some parts of Taveuni, while there is **No Extreme** conditions in place for the rest of the Fiji Group.

Rainfall Outlook:

- From 8th to 21st June, there is a **medium** chance of **Very Wet** conditions across the Yasawa and Mamanuca Groups, northern and western half of Viti Levu, Nabouwalu, Savusavu and majority of the Lomaiviti Group.
- For **June**, there is **high** chance of **Very Wet** conditions for Rotuma and Koro Island. There is a **medium** chance of **Very Wet** conditions across most parts of Fiji.
- For **June to August 2023**, there is a **medium** chance of **Very Wet** conditions across most parts of Fiji.

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



Time periods and Impacts on the ground

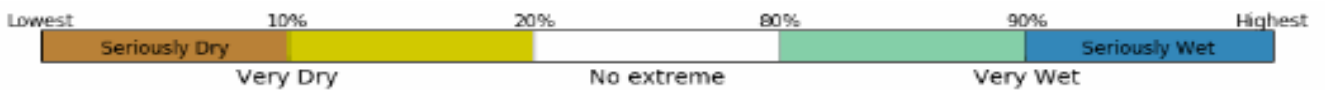
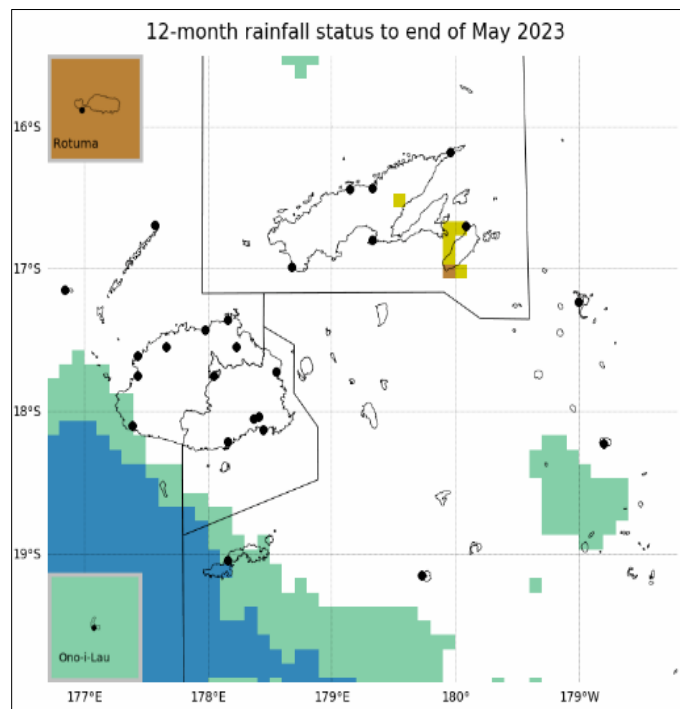
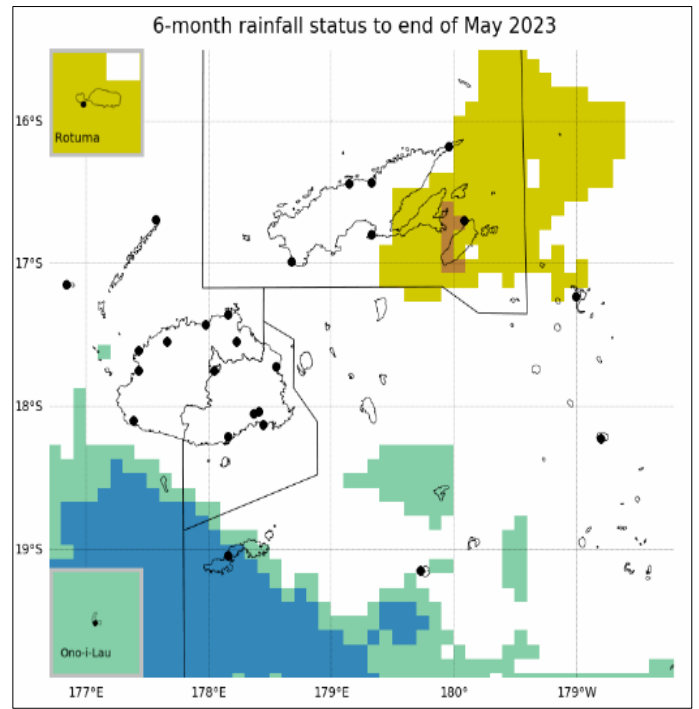
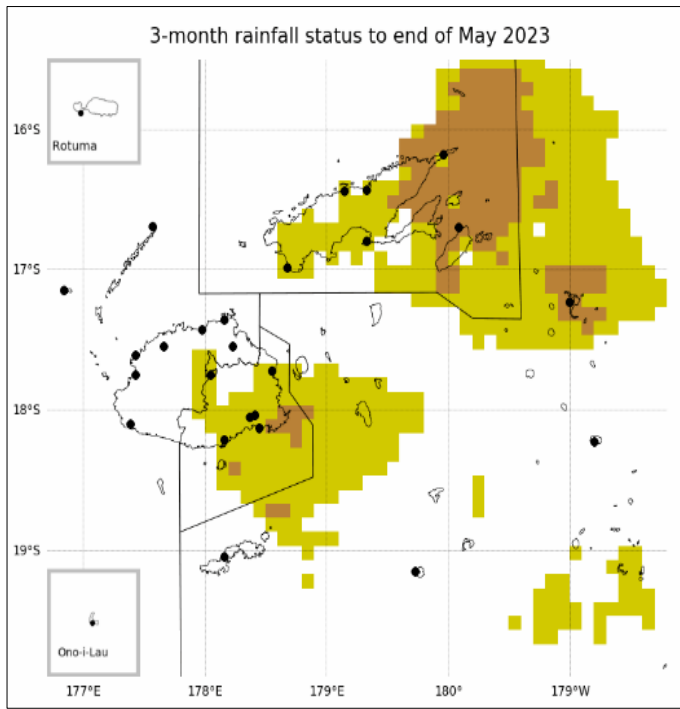
3-months: rainwater tanks, small streams, hand-dug wells, shallow bores, young sugarcane, traditional vegetables (e.g., bele), cabbage, tomatoes, beans, eggplant, okra, tomatoes, watermelon, rice, crops (yam, taro, cassava, pasture)

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)

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

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



Data source: MSWEP

Method: Percentile

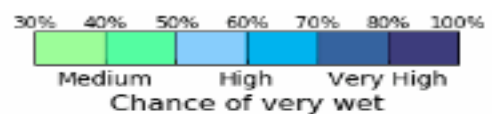
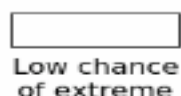
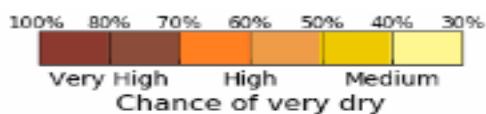
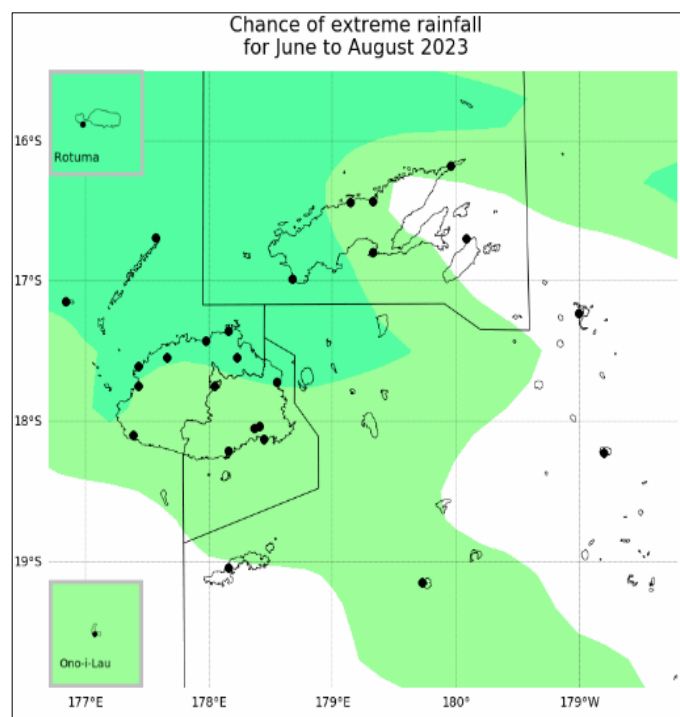
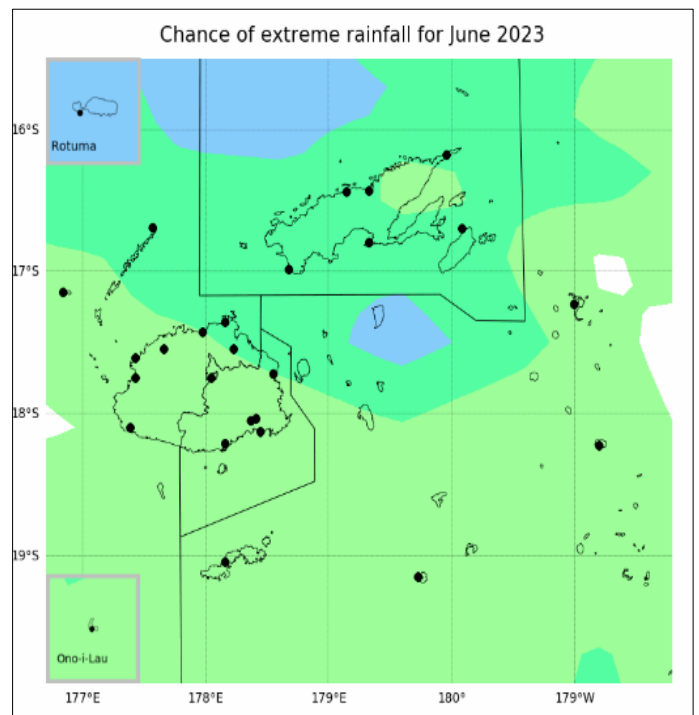
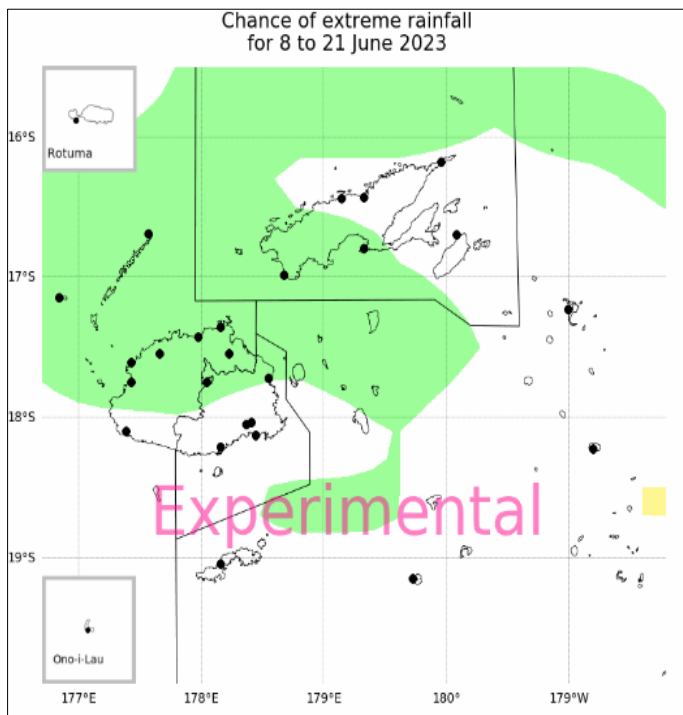
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Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>.

Issued: 07/06/2023

Base period: 1980-2021

Rainfall Outlooks for 8 – 21 June, June and June to August 2023



Data source: ACCESS-S2

Issued: 03/06/2023

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Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <http://www.marinerregions.org/>.

Model Run: 01/06/2023

Base period: 1981-2018

Information on the Maps

Rainfall Monitoring maps

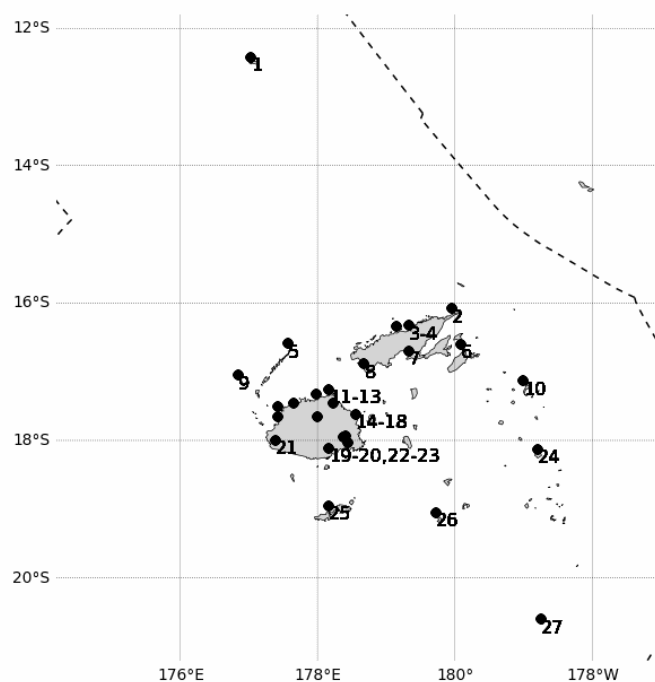
Fiji's rainfall status is assessed using the MSWEP dataset available via <http://www.gloh2o.org/mswep/>. MSWEP is a global precipitation dataset at 0.1° resolution, available from 1979 that combines data from rain gauges, satellite observations and reanalysis. The data is processed and presented in Percentile 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 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 <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. Lodonu 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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