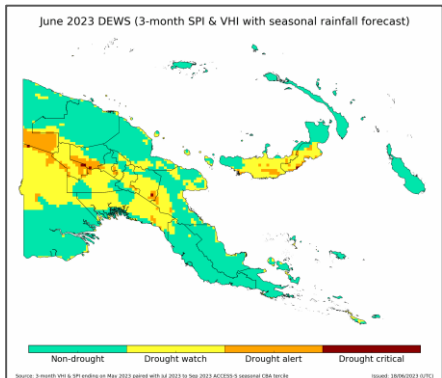


## Key messages

Drought CRITICAL remain in parts of Enga and Southern Highlands provinces. East New Britain is no longer at Drought ALERT, is now at Drought WATCH. West New Britain is at Drought WATCH with high vulnerability and exposure levels. New Ireland and Bougainville are now of Non-Drought status resultant of recent above average rainfall. An El Niño ALERT is now in place indicating a 70% chance of El Niño forming later this year.

## Drought Early Warning Status (DEWS)

Derived from observed 3-month rainfall and vegetation health, along with 3-month forecasted rainfall.



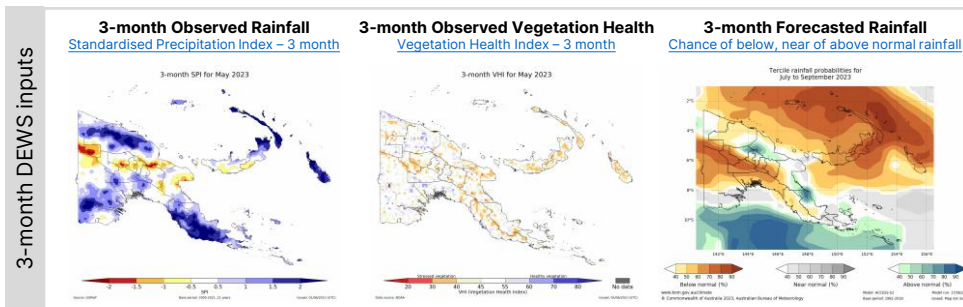
- Drought Critical areas remain in parts of Enga and Southern Highlands provinces.
- Drought conditions persist for East and West New Britain, southern West Sepik and in highland provinces at 3-month timescales.
- New Ireland and Bougainville have received well above average rainfall in recent months – easing drought conditions at 3-month timescales.
- At the [12-month rainfall timescale](#), deficiencies linger for New Ireland and other north-east islands as well as some highland provinces. Long term deficiencies will have different impacts to short term rainfall deficiencies. Low groundwater, brackish wells and reduced streamflow may be some impacts observed at this timescale.

### 3-month timescale provincial summary

(A province's overall status is given by its majority status on the map and is presented in this [summary table](#))

<span style="color: yellow;">●</span> Drought Watch	<span style="color: orange;">●</span> Drought Alert	<span style="color: red;">●</span> Drought Critical
Below average rainfall <b>or</b> Stressed vegetation <b>or</b> Dry forecast	(Below average rainfall <b>or</b> Stressed vegetation) <b>and</b> Dry forecast	Below average rainfall <b>and</b> Stressed vegetation <b>and</b> Dry forecast
Chimbu, East New Britain, Eastern Highlands, Enga, Gulf, Hela, Jiwaka, Southern Highlands, West New Britain, Western Highlands	No provinces	No provinces

click to enlarge



### Links to other timescales:

- [1-month Drought Early Warning Status](#)  
Drought early warning status using 1-month rainfall, 1-month vegetation health and 3-month rainfall forecast.
- [1-month Standardised Precipitation Index](#)  
Rainfall over the last month.
- [1-month Vegetation Health Index](#)  
Vegetation health over the last month.
- [6-month Drought Early Warning Status](#)  
Drought early warning status using 6-month rainfall, 6-month vegetation health and 3-month rainfall forecast.
- [6-month Standardised Precipitation Index](#)  
Rainfall over the last 6 months.
- [6-month Vegetation Health Index](#)  
Vegetation health over the last 6 months.

## Provinces at Risk if Drought Occurs

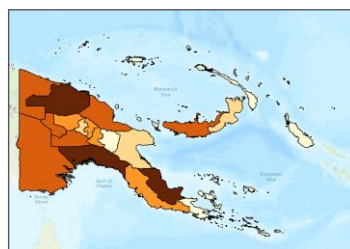
Contextualise drought early warning information with drought risk information.

**Drought risk** is the probability of harmful impacts resulting from interactions between drought hazard, exposure, and vulnerability. Hazard information is given by the Early Warning Status, with drought exposure and vulnerability levels shown in the maps below.

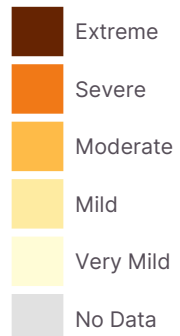
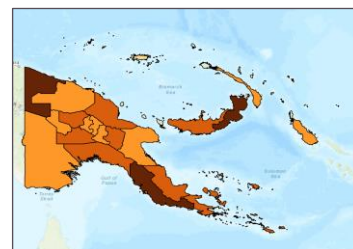
### Provinces of concern:

- **West New Britain** has a majority Drought Watch status and severe exposure and vulnerability levels.
- **Enga and Hela** have a majority Drought Watch status with moderate/severe exposure and vulnerability levels.
- **East New Britain** has a majority Drought Watch status and is mildly exposed to drought impacts; however, it is extremely vulnerable.

**Exposure** - Extent of exposed aspects of the total population and its livelihoods in an area which drought may occur.



**Vulnerability** - Likelihood of exposed factors to suffer negative impacts when drought occurs.



## Climate Context

A summary of the relevant climate drivers affecting PNG over the coming months

- ACCESS-S outlook for July to September forecasts below average to average rainfall in Bougainville, Chimbu, Central, Eastern Highlands, Hela, Gulf, Jiwaka, Southern Highlands, West Sepik, Western and Western Highlands. The rest of the country is forecasted to receive average to above average rainfall.
- An El Niño ALERT is currently in place indicating a 70% chance of El Niño forming later this year. Central and eastern Pacific sea surface temperatures (SSTs) have warmed to El Niño thresholds. Models are indicating a high likelihood of further warming, with SSTs exceeding El Niño thresholds until at least into the beginning of the southern hemisphere summer. Some atmospheric indicators such as the Southern Oscillation Index (SOI) have shifted towards El Niño thresholds. However, wind, cloud and broad-scale pressure patterns indicate the Pacific Ocean and atmosphere are not yet consistently reinforcing each other. This suggests the ocean and atmosphere have yet to become fully coupled, as occurs during El Niño events which last for many months.
- El Niño events typically suppress rainfall across most of PNG, with frost risk increasing in the highlands region due to lower night time temperatures resultant of reduced cloud cover. These impacts are more extreme when El Niño events compound with positive Indian Ocean Dipole (IOD) events, like in 1997 and 2015. The Indian Ocean Dipole (IOD) is currently neutral. Climate models suggest that a positive IOD event may develop during the next three months.
- A weakening Madden-Julian Oscillation (MJO) pulse lies over the Maritime Continent. Most models indicate that the MJO will become weak or indiscernible in the coming days. Some models indicate that the MJO may strengthen over the Eastern Indian Ocean over western Maritime Continent by the second week of June.