

Overview of Significant weather and ocean events

PICOF-14

Impacts:

over the last 6months in the Melanesian

countries

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on behalf of the Melanesian countries

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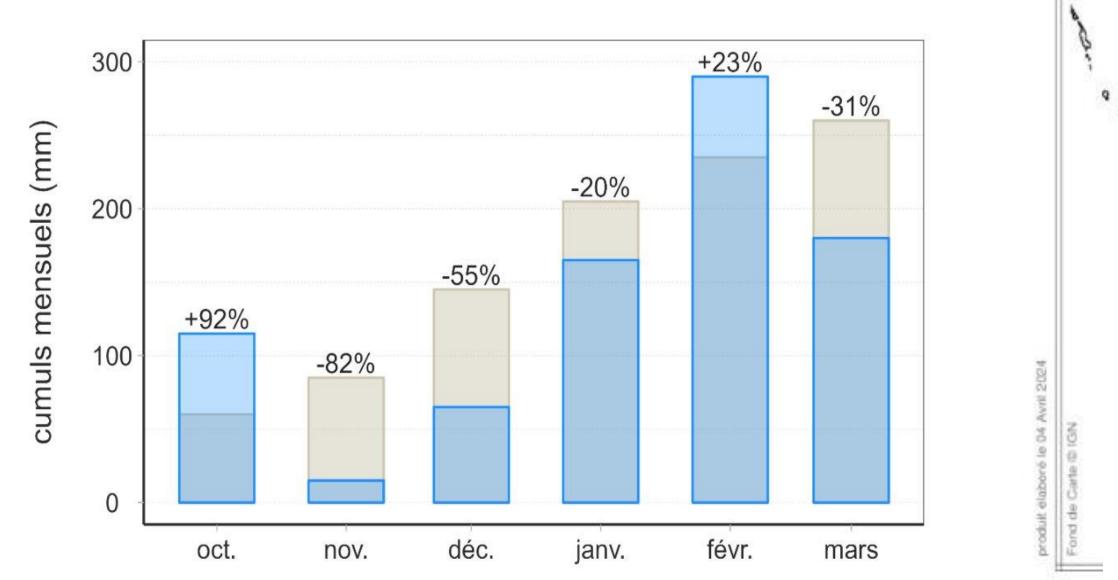








Monthly precipitation over the last 6 months

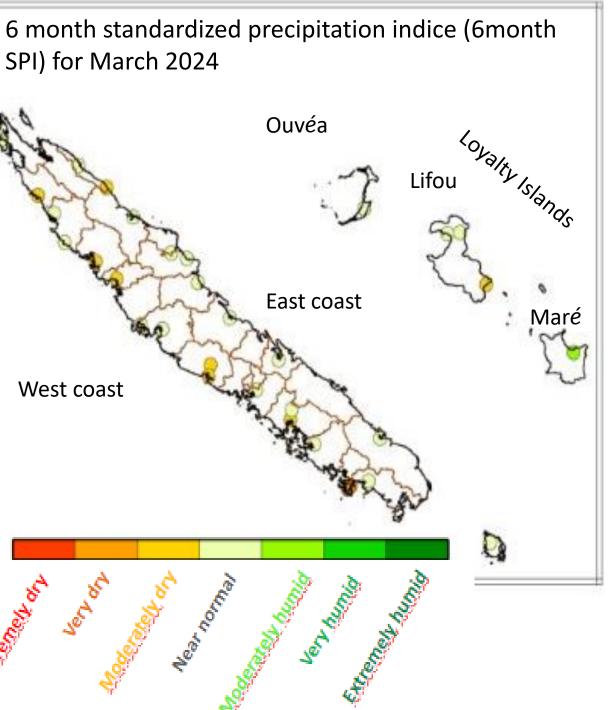


Over the last 6 months, average cumulative rainfall was 720 mm, which is close to normal (8% deficit).

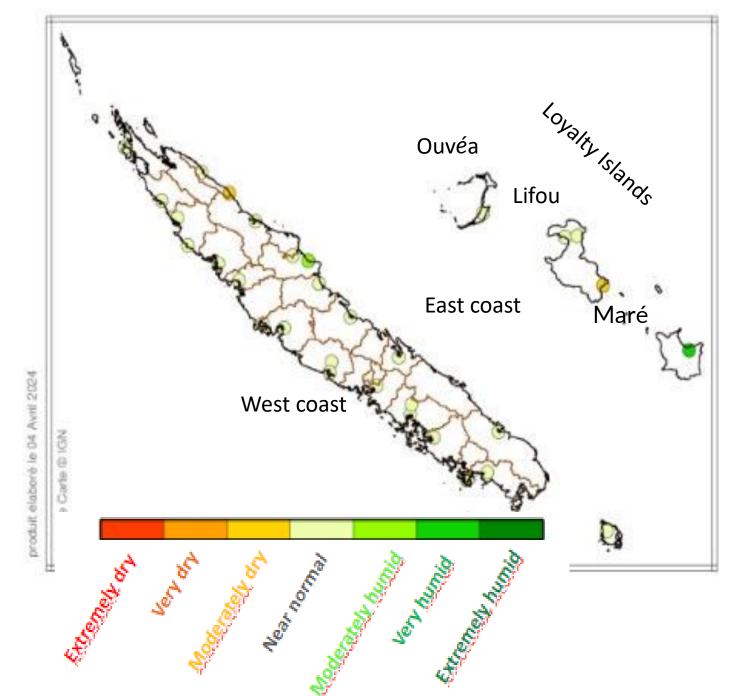
However, monthly rainfall to normal ratios are very heterogeneous, particularly during the first 3 months : while it rained 2 times more than normal in October, it was very dry in November and December.

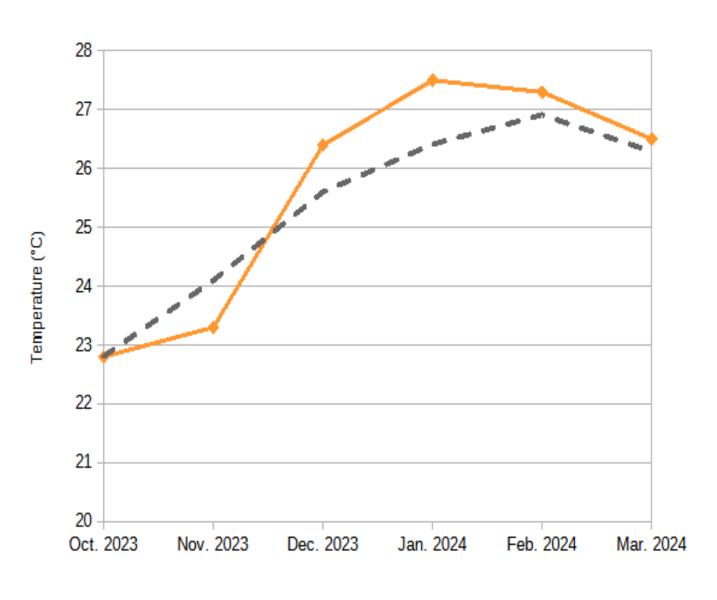
Source: Météo-France New-Caledonia

According to 6m SPI: West Coast- near normal to moderately dry conditions East coast- mostly near normal conditions Loyalty Islands- near normal in Ouvea and Lifou and moderately humid in Mare.



Monthly precipitation over the last 3 months





According to 3-month SPI : Conditions are near normal over most of the country.

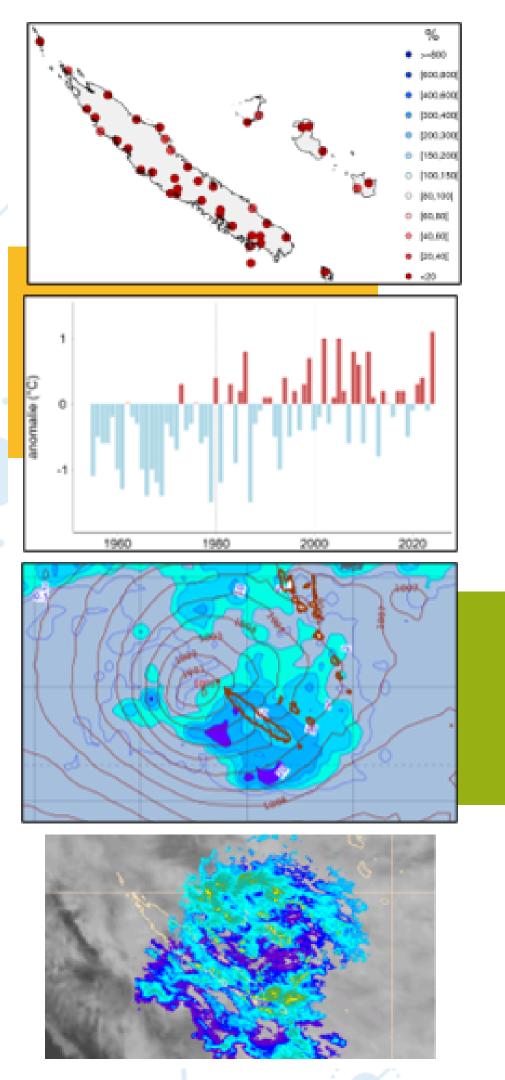
In Maré, conditions are very humid, due to a month of February 2.5 times more rainy than usual. Source: Météo-France New-Caledonia

Monthly temperature between October 2023 and March 2024.

Temperature anomaly over the last 6 months : +0,7°C.

Temperature over the last 6 months

Monthly temperature - - Normal



Notable events

November 2023 : the 1st driest November

With an average rainfall of **10 mm (88% deficit)** over the country, November 2023 ranks as the 1st driest November since 1955 in New Caledonia, on a par with November 2019 and 2002.

January 2024 : the 1st hottest January

With an average temperature of 27,5°C (+1.1°C) across the country, January 2024 ranks as the 1st hottest January since 1955 in New Caledonia.

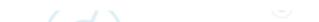
February 2024 : 10 days under the influence of a weak tropical depression TD05f

In Maré :

- → 452 mm in total, equivalent to 2,5 months of rainfall.
- → 281,6 mm in 3 hours : equivalent to 1.5 month's rainfall. Such an intensity of rainfall in 3 hours had never been reached, either at Maré or at any other station in New Caledonia.

Half of March under rainfall

- Continuous rainfall during 19 days.
- More than 700 mm in 19 days in the far south of the main island.



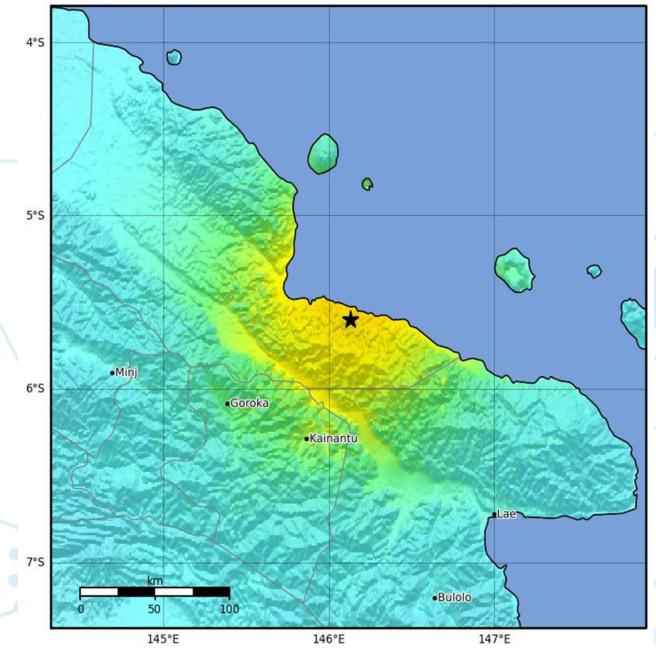
PNG: Madang Earthquake

Source: PNG Met

- Areas affected:
- 28 villages in 9 wards within 10km radius from epicenter
- 3,218 population (m = 1613; f =1605) potentially at high risk within 10 km radius from epicenter
- 126 villages in 30 wards within 30 km radius from epicenter
- 22,617 population (m = 11,499; f =11,118) within 30 km radius from epicenter

Over 48 hours following the 6.7M earthquake in the Rai Coast District of Madang province, and subsequent aftershocks on Saturday 7 October 2023, information is beginning to emerge on its impacts. According to the provincial disaster coordinator's office and IOM there are no casualties reported thus far, however, there are a total of seven persons who have sustained injuries. Of the seven, three have sustained severe injuries which include one male adult, one female adult and one female child. A further four individuals sustained minor injuries.

Macroseismic Intensity Map USGS ShakeMap: 56 km SE of Madang, Madang, PG Oct 07, 2023 08:34:26 UTC M6.7 S5.60 E146.13 Depth: 53.5km ID:us6000ldqd



INTENSITY	1	11-111	IV	V	VI	VII	VIII	DX.	X4+
PGV(cm/s)	<0.0215	0.135	1.41	4.65	9.64	20	41.4	85.8	>178
	<0.0464			6.2	11.5	21.5	40.1	74.7	>139
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme

Version 2: Processed 2023-10-07T10:35:56Z

★ Epicenter



FLOODING EVENTS

Source: PNG Met

Flooding at Marasin Bridge, EHP



Helpless onlookers watch as Marasin Bridge swept away by floods

Brief description of graphic









Waghi river bursts causing extensive flooding to nearby villages and roads

Source: Kasis Inape courtesy of FB





Flooding near Bureta Bridge in Ovalau, Eastern Division on 13th November, 2023. Source: **National Disaster Management Office**



Flash flooding in Wainadoi, Navua, Central Division on 28th November, 2023. Source: Fijivillage

FLOODING EVENTS

Source: Fiji Met



Vehicle queued up at Galoa Bridge in Northern Division due to flash flooding on 18th December, 2023. Source: National **Disaster Management Office**



Waidina River (Naitasiri) broke its bank. Source: National Disaster Management Office.

Flash flooding in Vatuwaqa, Central Division on 20th January, 2024. Source: National Disaster Management Office.

Nadi Town flooded Source: National **Disaster Management Office.**





Landslide at Vataleka in Wailoku, Central Division on 15th November, 2023. Source: **National Disaster Management Office**



Landslide along Queens after Nakorovou in Central Division on 18th December, 2023. Source: Fiji Roads Authority

LANDSLIDE EVENTS

Source: Fiji & Solomon Met



Landslide at Kula Street in Samabula, Central Division on 20th January, 2024. Source: National Disaster Management



Dilkusha in March, 2024. Disaster Management Office

Landslide along Nausori, Central Division on 19th Source: National



Pic 7: Tamboko bridge, 31/02/24. PC: Danny Rasile



Sea Swells



Pic 3, 4 & 5: Coastal flooding impacts on road and Lobo community, East Malaita on 22/01/2024

Impact of High Swells on the 20th -24th of January 2024





Pic 6 & 7: Impact on Manhuki Road, Makira, 22/01/2024



Pic 8: Impact on Suúmoli Wharf approach, Ulawa



TC Mal impact on Fiji

Fallen trees near Wainibokasi Road, Central Division on 15th November, 2023. Source: Fiji Roads Authority

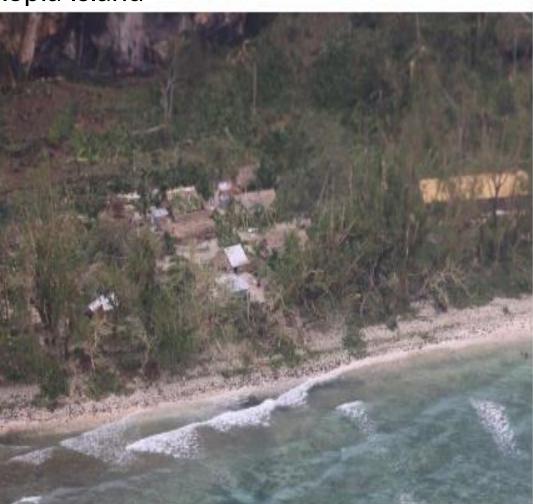
TC Mal impact on Fiji

Fallen trees blocking access. Source: Fiji Roads Authority





Figure 5: Observation on Tikopia Island as of 24 October 2023. Photo Credit: RAAF



Annex 3. Impact Photos received by the NEOC



Corona Market inundated by flood waters from the Tenaru River, Source: NERT



Landslide at Kuratidalo Village, Small Ngella causing damage to a dwelling house and kitchen. Source: P-DOC CIP



Landslide at Sagana Village. Source: Fredrick Dotho



Coastal storm surge at DC Park. Source: NERT



Dwelling house destroyed by the landslide at Kuratidalo Village, Small Ngella, Source: P-DOC CIP



Landslide at Sagana Village. Source: Fredrick Dotho

Cyclone Lola



Summary

Add key points which will be included in the PICOF outcomes statement

- \checkmark This year's El Niño event is quite extraordinary from the previous events.
- \checkmark Instead of severe shortages of water and droughts, the country was experiencing unprecedented severe droughts and landslides across the highlands, similar to anticipated impacts during La Niña events.
- ✓ PNG experienced a 7.0 magnitude earthquakes also caused havoc to Madang, Sepik and parts of the highlands. The country is now struggling with providing disaster relief to the worst affected areas.









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