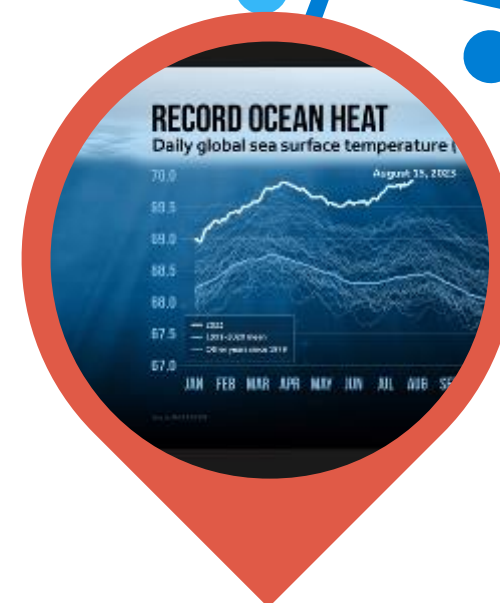
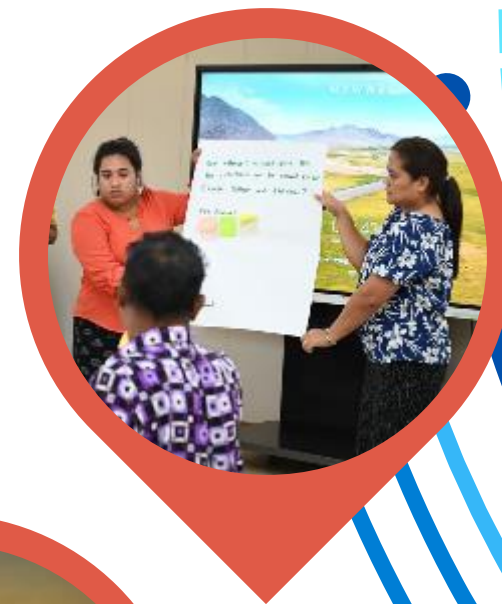


# 16<sup>TH</sup> SESSION OF THE PACIFIC ISLANDS CLIMATE OUTLOOK FORUM

## PICOF-16

23 APRIL, 2025

ONLINE: ZOOM



# LOOKING BACK AT THE 2024 – 2025 SOUTH PACIFIC TROPICAL CYCLONE SEASON

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# Outline

- The 2024 – 2025 TC season outlooks
- The 2024 – 2025 TC season so far
- Summary



PACIFIC REGIONAL  
CLIMATE CENTRE NETWORK



SPREP  
Secretariat of the Pacific Regional  
Environment Programme



Pacific Community  
Communauté  
du Pacifique



COSPPac  
Climate and Ocean Science Programme



NIWA  
Taihoro Nukurangi



The **Southwest Pacific tropical cyclone outlook** issued by New Zealand's National Institute of Water and Atmospheric Research (NIWA) in conjunction with MetService and Pacific meteorological services was issued on **9 October 2024**

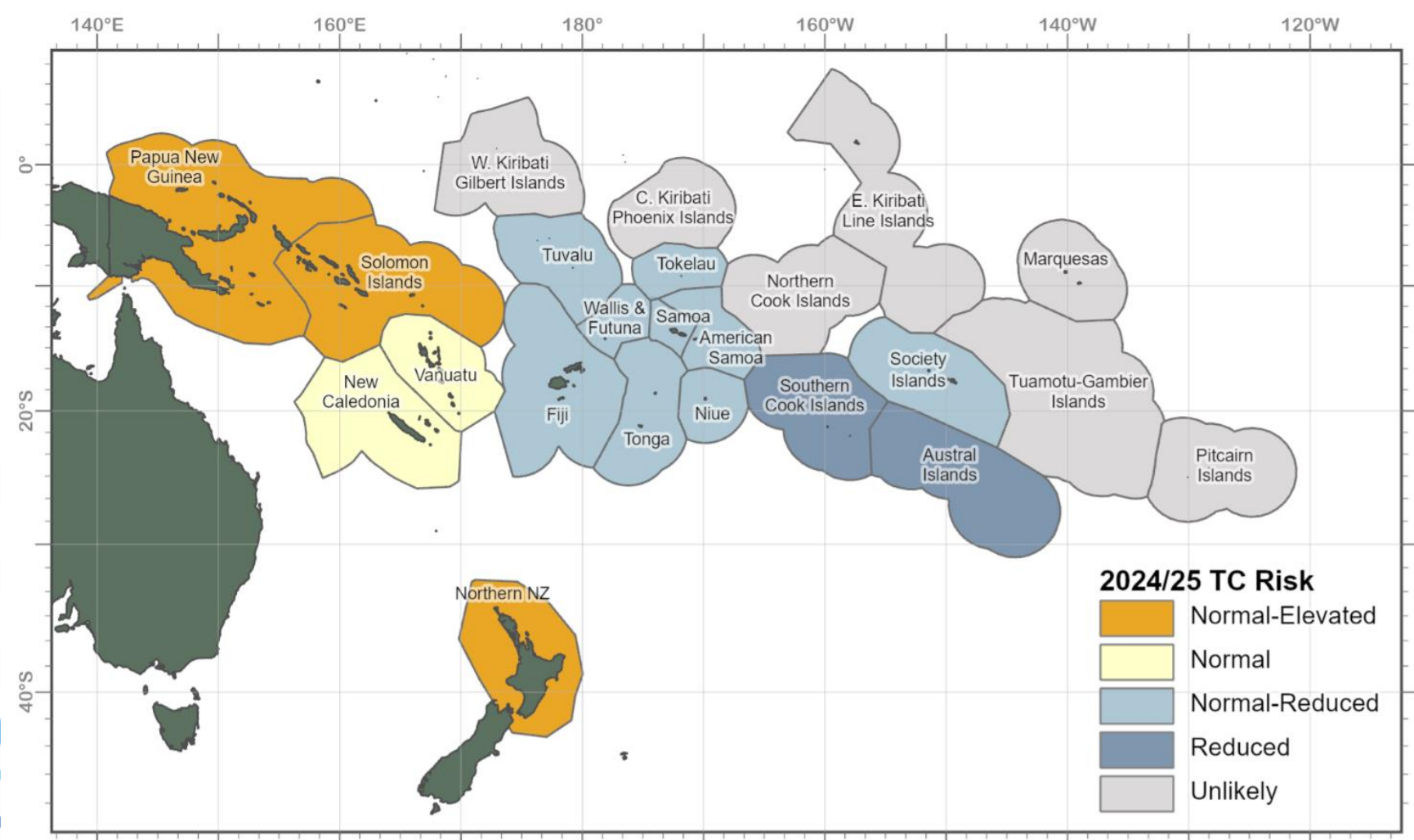


Figure 1: Tropical cyclone risk for the 2024-25 season

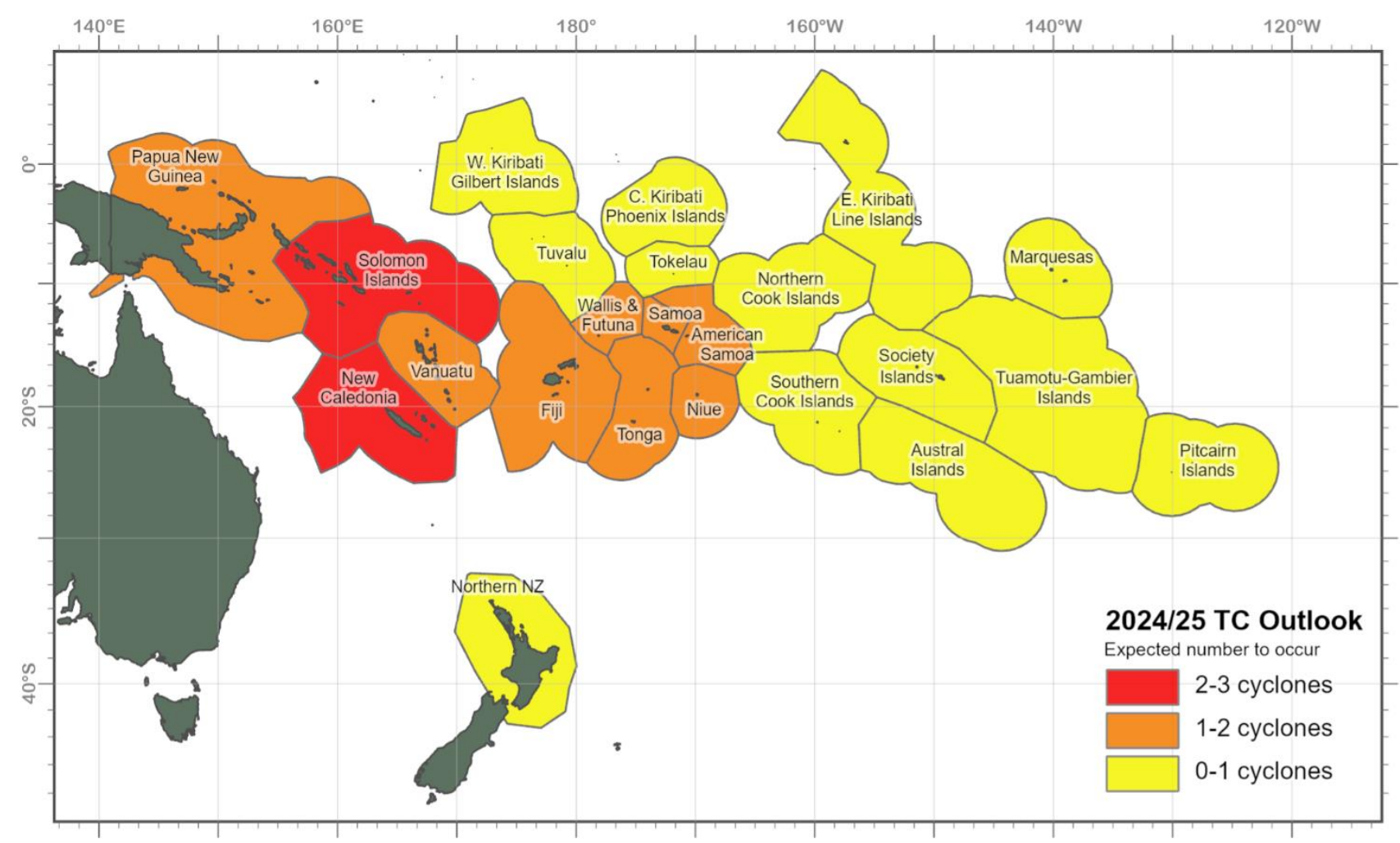


Figure 2: Number of predicted named tropical cyclones interacting with an island group for the 2024-25 season

Overall, **normal to below normal** TC activity  
**6 to 10 named storms** (vs ~ 9 per season for the long-term average)



# TC outlook discussions at the Pacific Islands Climate Outlook Forum (PICOFF)

14-15 October 2024

Presentation by Simon McGree (BoM)

<https://www.pacificmet.net/sites/default/files/inline-files/documents/PICOFF-15%20Session%204iii%20tropical%20cyclones.pdf>

## Summary

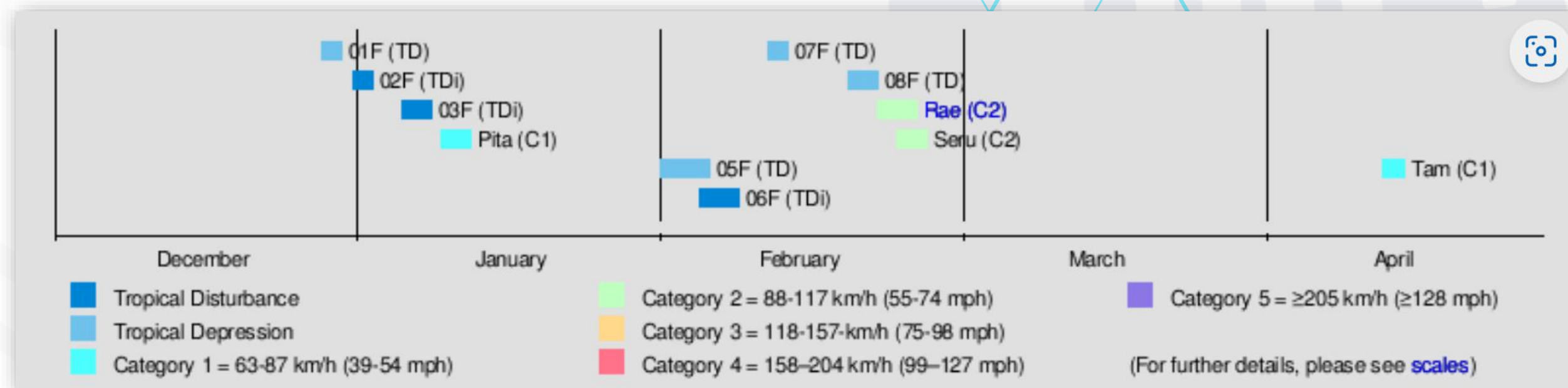
- The official 2024/25 Southwest Pacific tropical cyclone (TC) season begins on 1 November 2024 and will continue until 30 April 2025. TCs have occurred out-of-season in the months of May, June and October;
- TCs are categorised in strength from 1 to 5, with 5 being most intense. TCs that reach category 3 or higher are classified as severe;
- For the coming season normal or above normal TC activity is likely west of and including Vanuatu. East of Vanuatu, normal to below normal TC activity is likely.
- Since the 1981/82 TC season there has been a significant decline in the total numbers of TCs east of Cape York, northern Australia. In the early 1980s the average number of TCs per season was 11. In recent years this has declined to about 7 per season. The average number of severe TCs has declined as well from about 6 per season in the early 1980s to about 3 per season in recent years. These trends are likely to be the better predictor of TC occurrence in the coming season;
- Monitoring multi-week weekly TC outlooks through the season is highly recommended as well as monitoring daily weather forecasts when the chance of TC occurrence is higher than normal;
- It does not take a direct hit or severe TC to cause considerable damage or life-threatening weather. When dangerous weather is forecast, please heed the advice of your local meteorological service, civil defence, or disaster management office.

# The 2024 – 2025 TC season so far

**TC season will officially end 30 April**

However TC can form out of season (although unprecedented beyond June)

TC season so far summarized at [2024–25 South Pacific cyclone season – Wikipedia](#)



Season started abnormally late (Tropical Depression 01F formed in **late December**)

First named storm was **Pita** (Cat 1), on 9 January

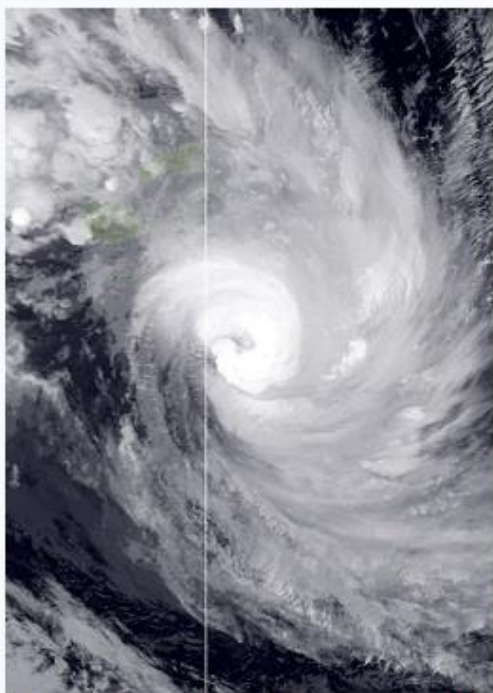
22 February, TC **Rae** (Cat 2)

25 February TC **Seru** (Cat 2)

14 April, TC **Tam** (Cat 1)



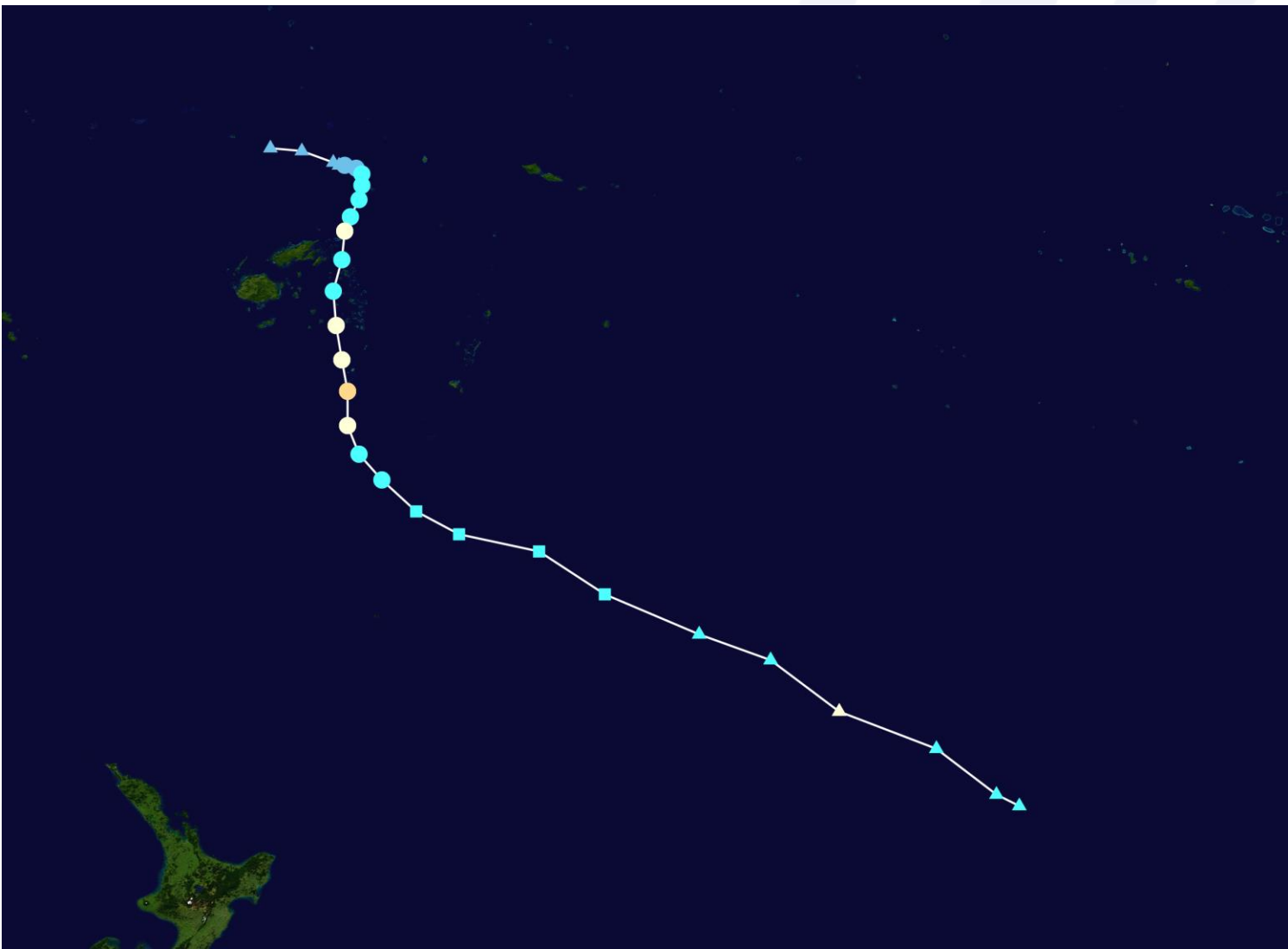
Tropical Cyclone Rae



Cyclone Rae at peak intensity southeast of Fiji on 24 February

Meteorological history	
Formed	22 February 2025
Dissipated	26 February 2025
Category 2 tropical cyclone	
10-minute sustained (FMS)	
Highest winds	110 km/h (70 mph)
Lowest pressure	975 hPa (mbar); 28.79 inHg
Category 2-equivalent tropical cyclone	
1-minute sustained (SSHWS/JTWC)	
Highest winds	165 km/h (105 mph)
Lowest pressure	961 hPa (mbar); 28.38 inHg
Overall effects	
Fatalities	None
Damage	Unknown
Areas affected	Fiji, Wallis and Futuna, Tonga

TC Rae (Category 2)



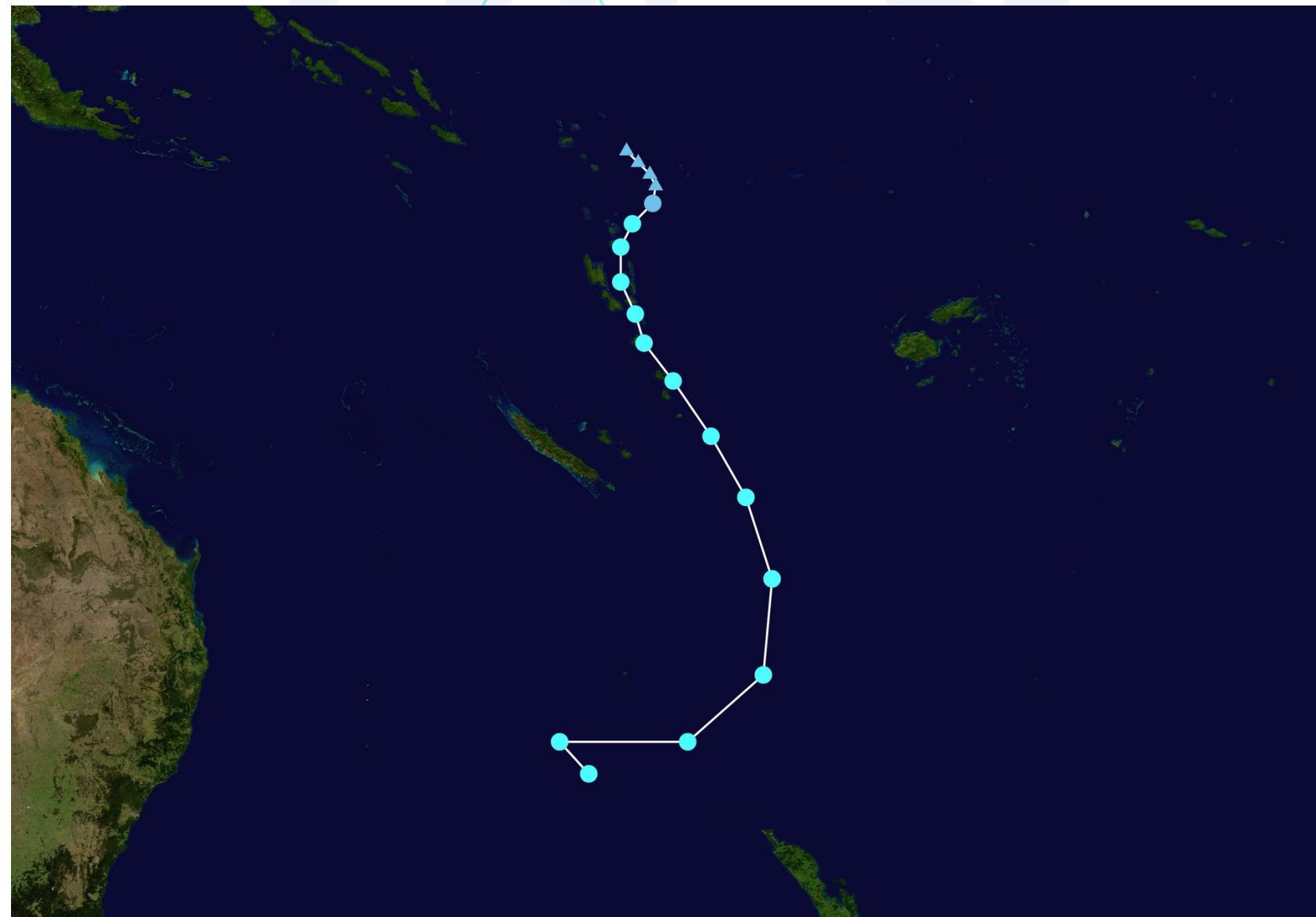
TC Rae caused damage in Fiji (Vanua Levu, Vanua Balavu) from flooding, uprooted trees, ...

TC **Tam** was named on **14th April** by the Fiji Meteorological Service. It transitioned into a deep subtropical cyclone on the 16th April and caused severe weather conditions in northern New Zealand

5 deaths caused by hazardous coastal conditions in NSW



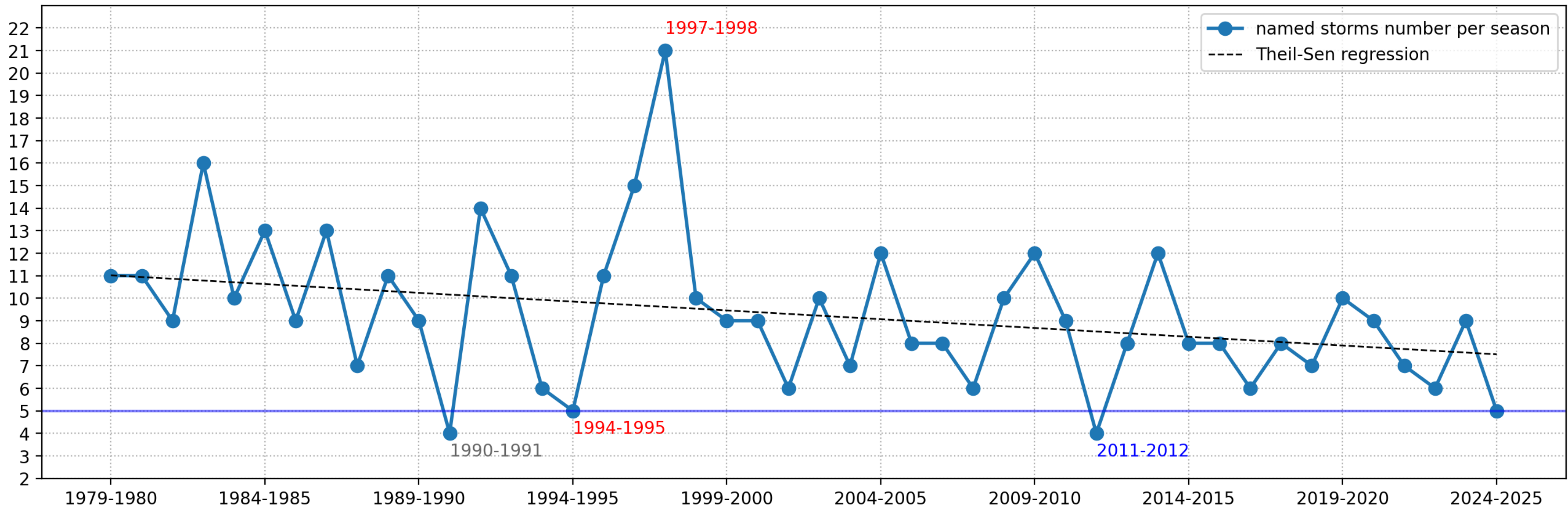
TC Tam (Category 1)





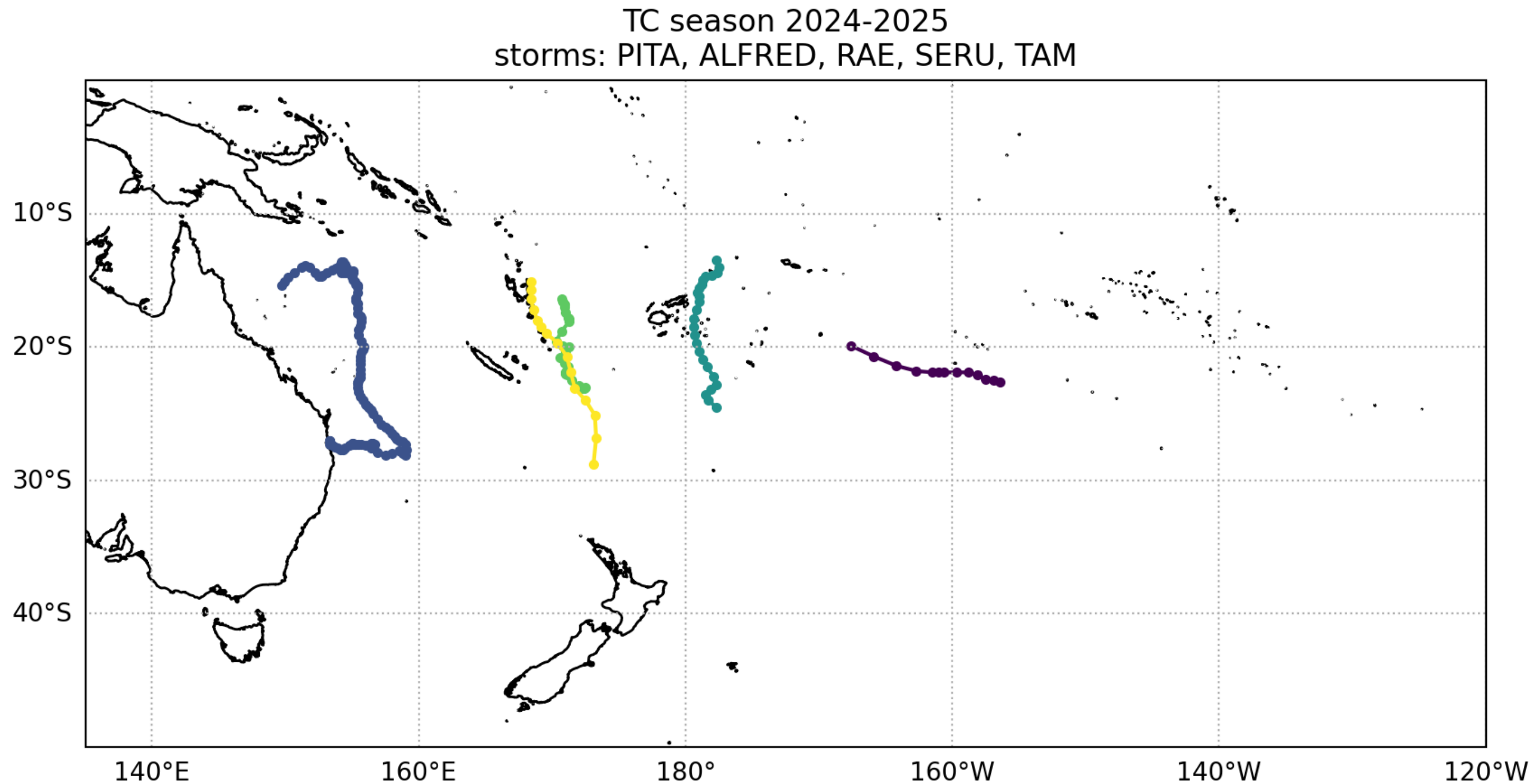
- With only a week to go, the 2024 – 2025 TC season is likely to be classified as remarkably **inactive**

IBTRACS South Pacific Basin, 1979-1980 to 2024-2025  
number of named storms



\* **NOTE:** IBTRACS SP basin includes the Coral Sea, named storms include TC Alfred

- With only a few weeks to go, the 2024 – 2025 TC season is likely to be classified as remarkably **inactive**





# Summary

- With only a few weeks to go, the 2024 – 2025 TC season is likely to be classified as remarkably **inactive**
- Only **11 disturbances overall**, and **5 named storms** (*Alfred*, Pita, Rae, Seru, Tam)
- Impacts include TC **Rae** affected **Fiji**, causing significant flooding, and 5 deaths by drowning in **NSW** caused by TC **Tam**
- Lower than normal TC activity in the central Pacific tends to be associated with La Nina conditions
- The current TC season is therefore consistent with this pattern
- Indications for below normal TC activity were given in the TC outlooks issued early October 2024

# THANK YOU!

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