

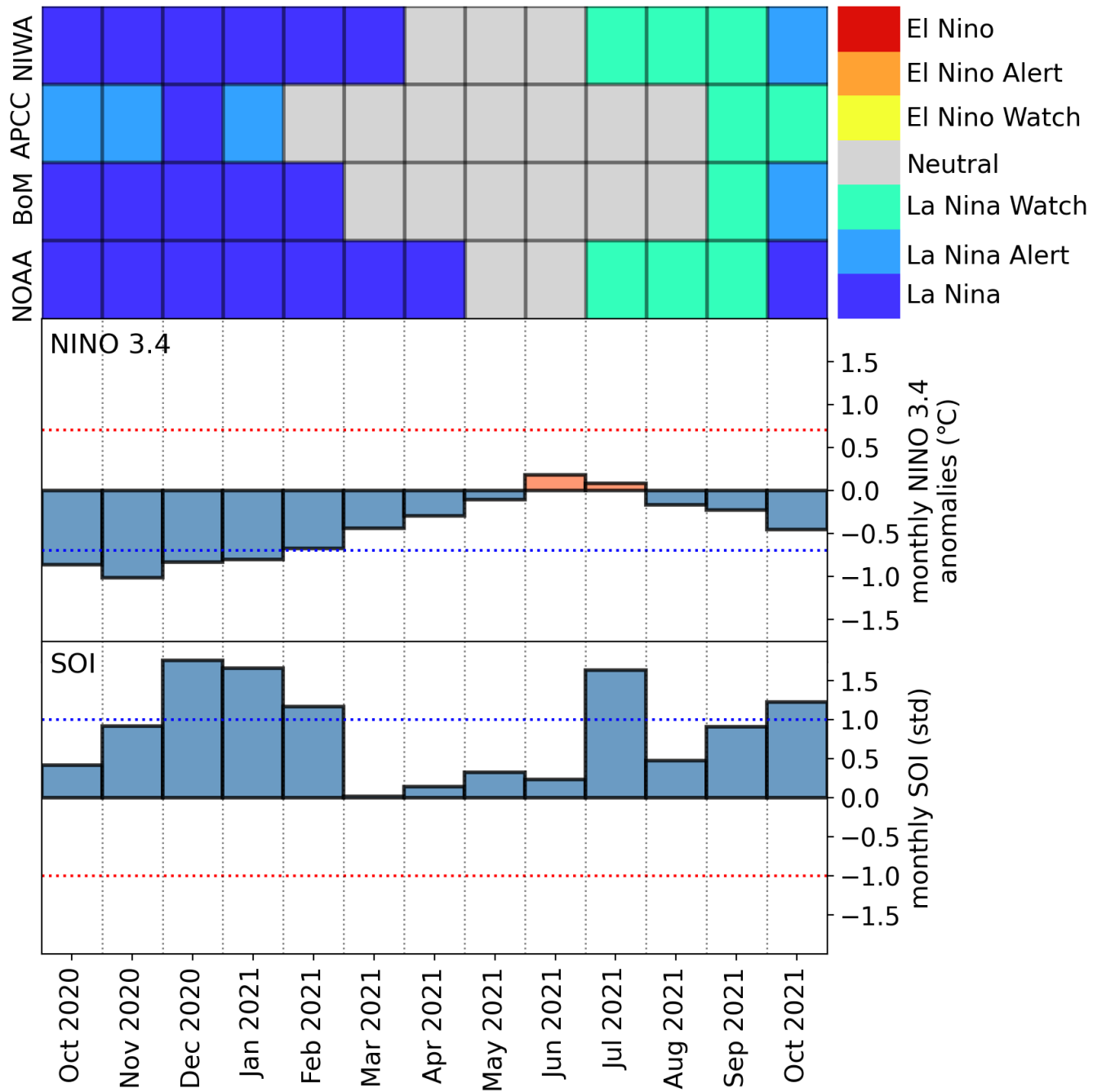
5 things you should know from PICO day 1

Presented by: Ben Noll, NIWA
with thanks to BoM, APCC, SPC, and
SPREP

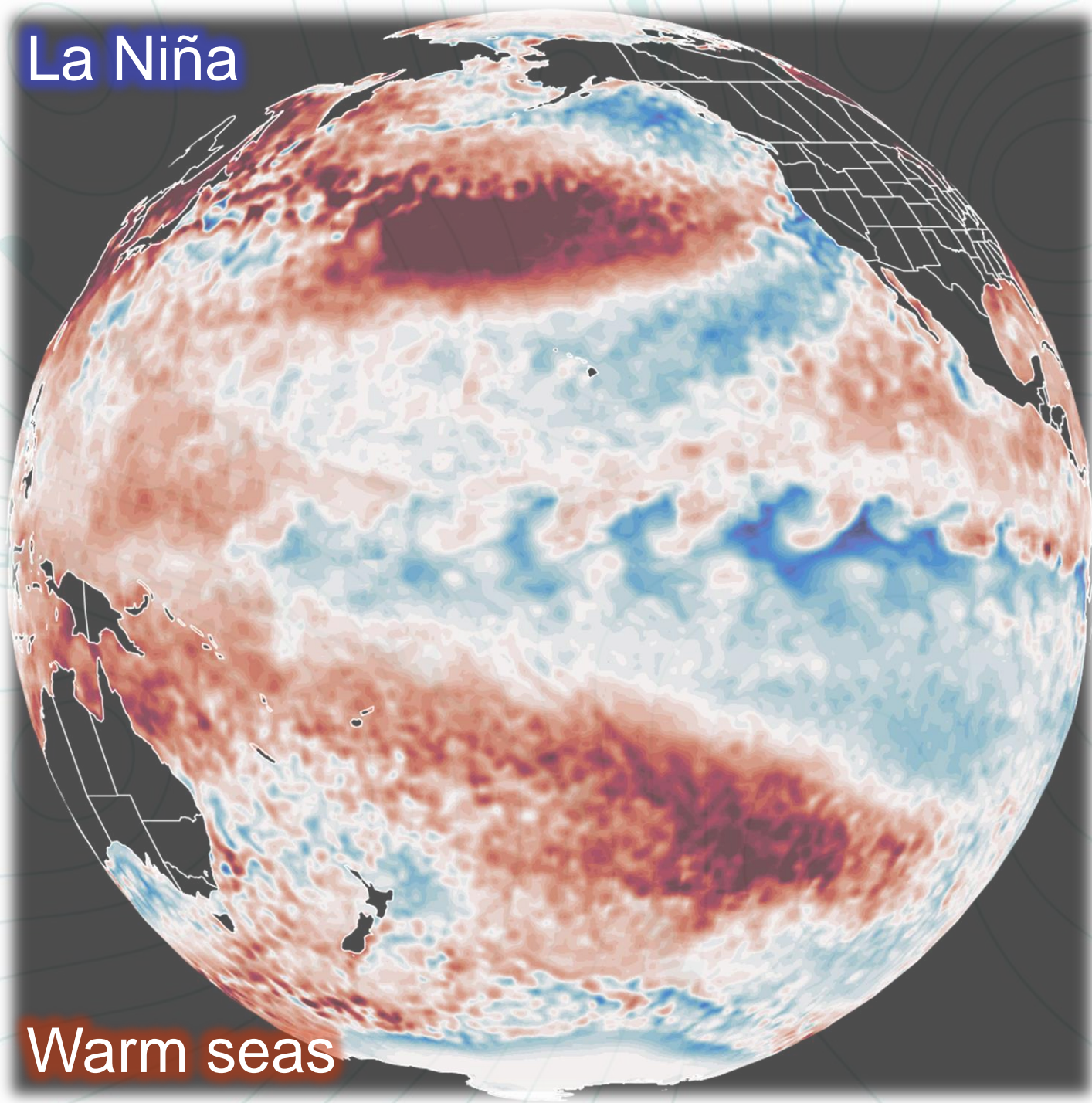
5 things you should know from PICO day 1

- 1) La Niña thresholds being approached, very warm conditions in the Coral Sea – marine heatwave
- 2) Near or slightly above normal number of tropical cyclones – more active west
- 3) Equatorial countries have a higher chance of below normal rainfall, sub-tropics most likely wetter
- 4) Sea surface heights running 1.5 to 2.5 cm above average, which can contribute to flooding events
- 5) Coral bleaching expected to intensify across some island groups, especially in the west

Pacific Regional Climate Centre ENSO tracker



La Niña

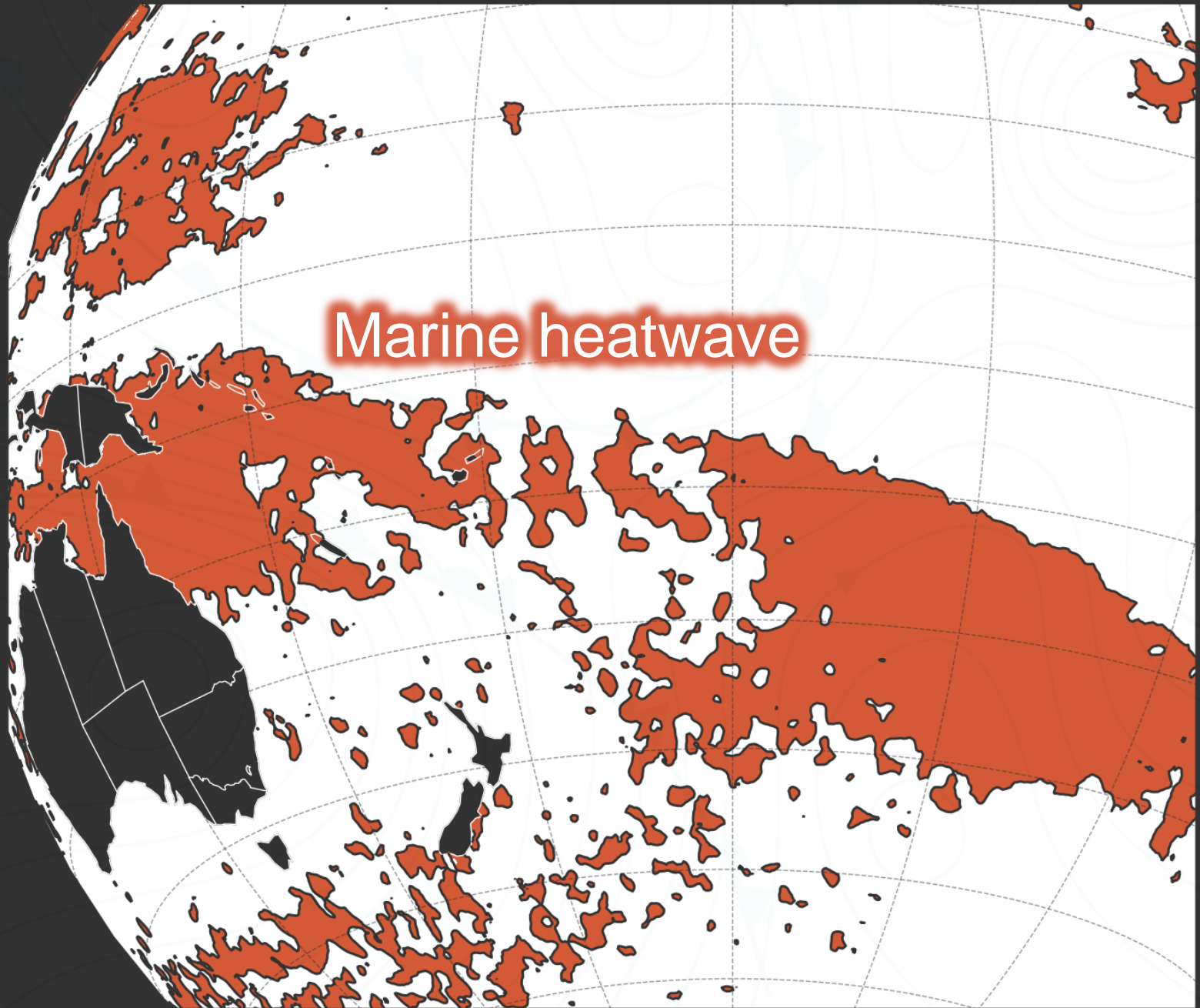


Warm seas

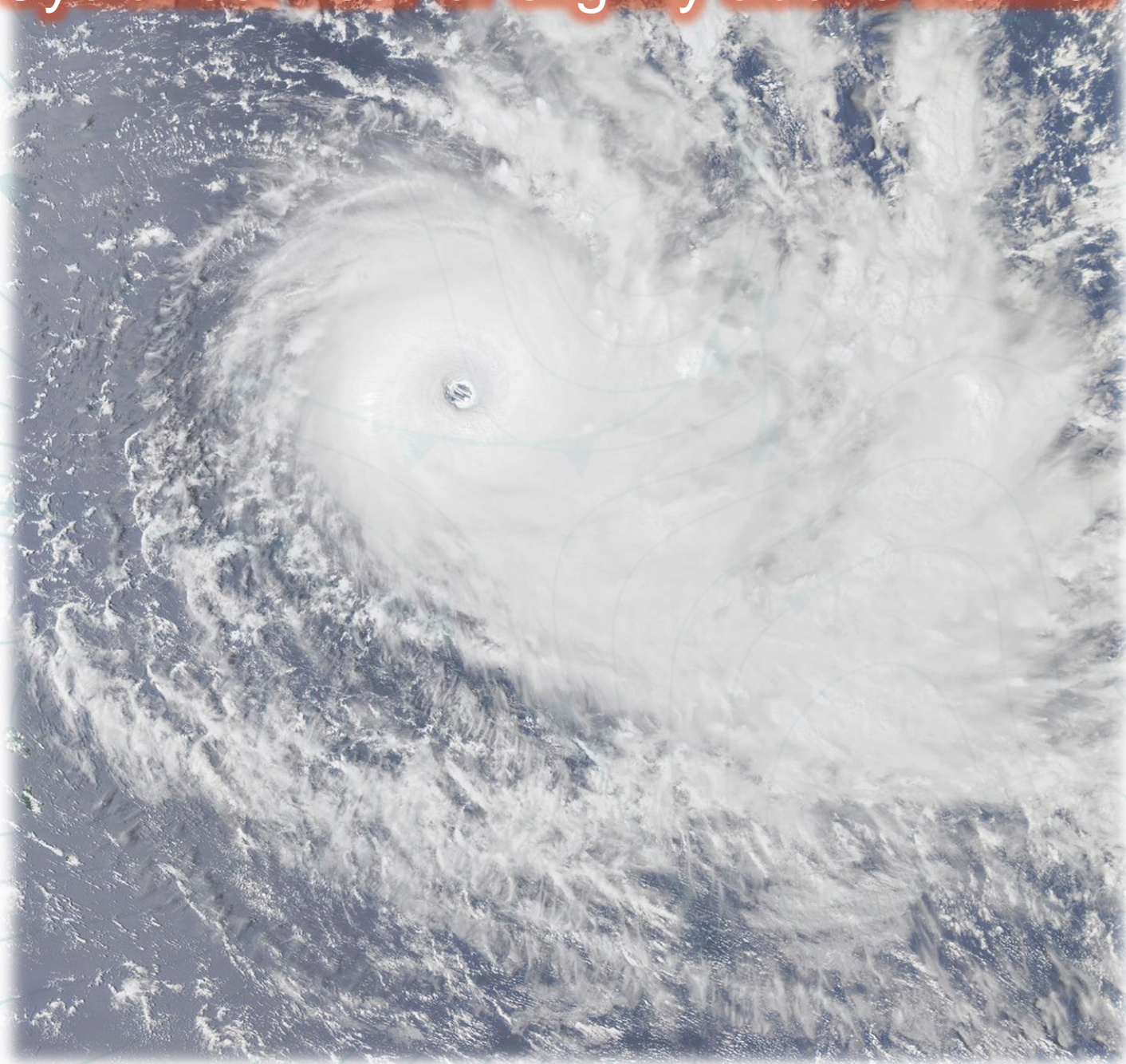
≥90th Percentile SST
NOAA OISSTv2

15-19 Oct 2021

Marine heatwave



Cyclones: near or slightly above normal



2021-22 NIWA cyclone number outlook

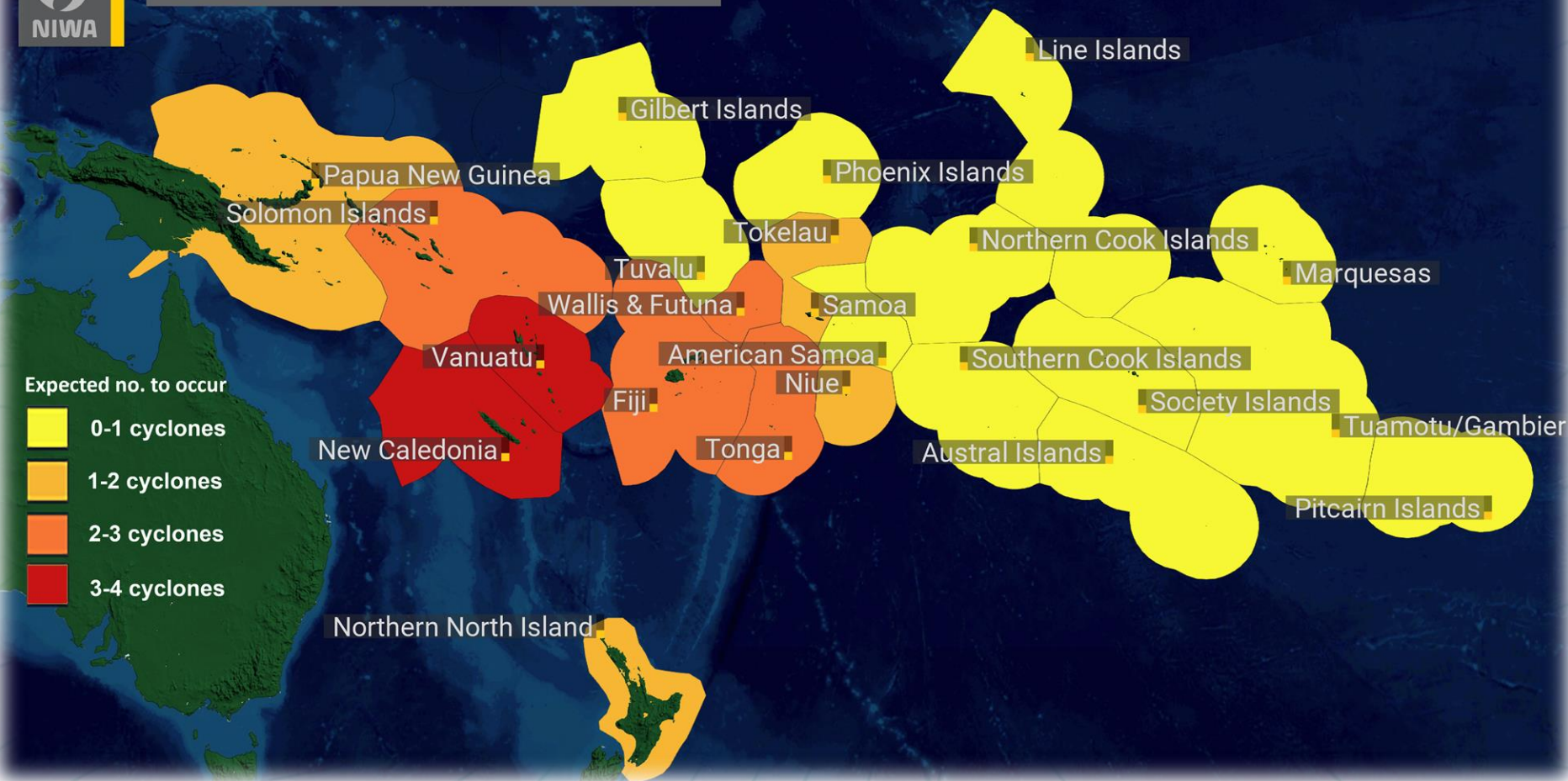
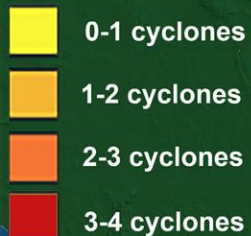
9 to 12 named storms predicted – more active west



NIWA

EXPECTED NUMBER OF TC'S 2021/22

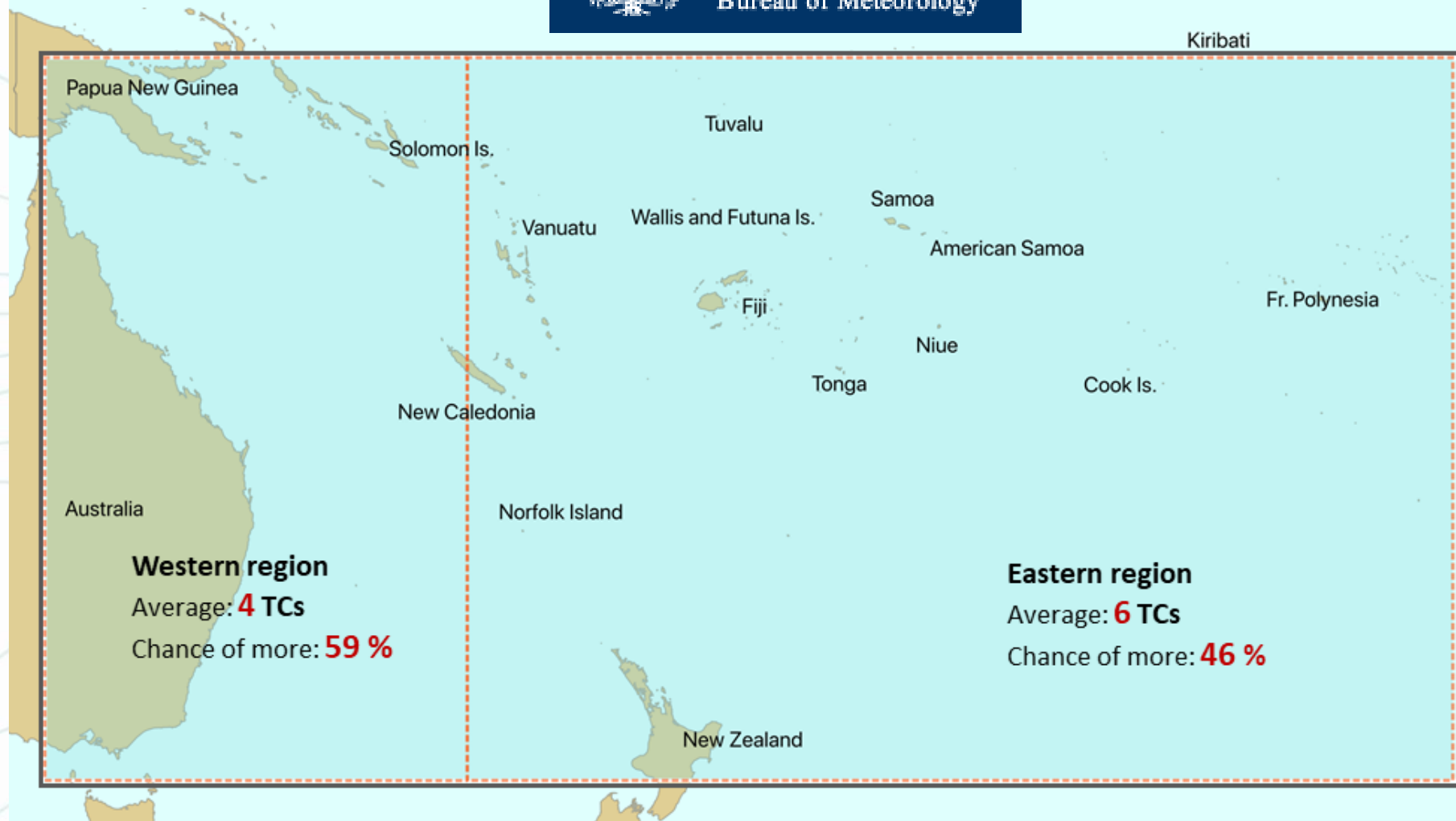
Expected no. to occur





Australian Government

Bureau of Meteorology



Western region

Average: **4** TCs

Chance of more: **59 %**

Eastern region

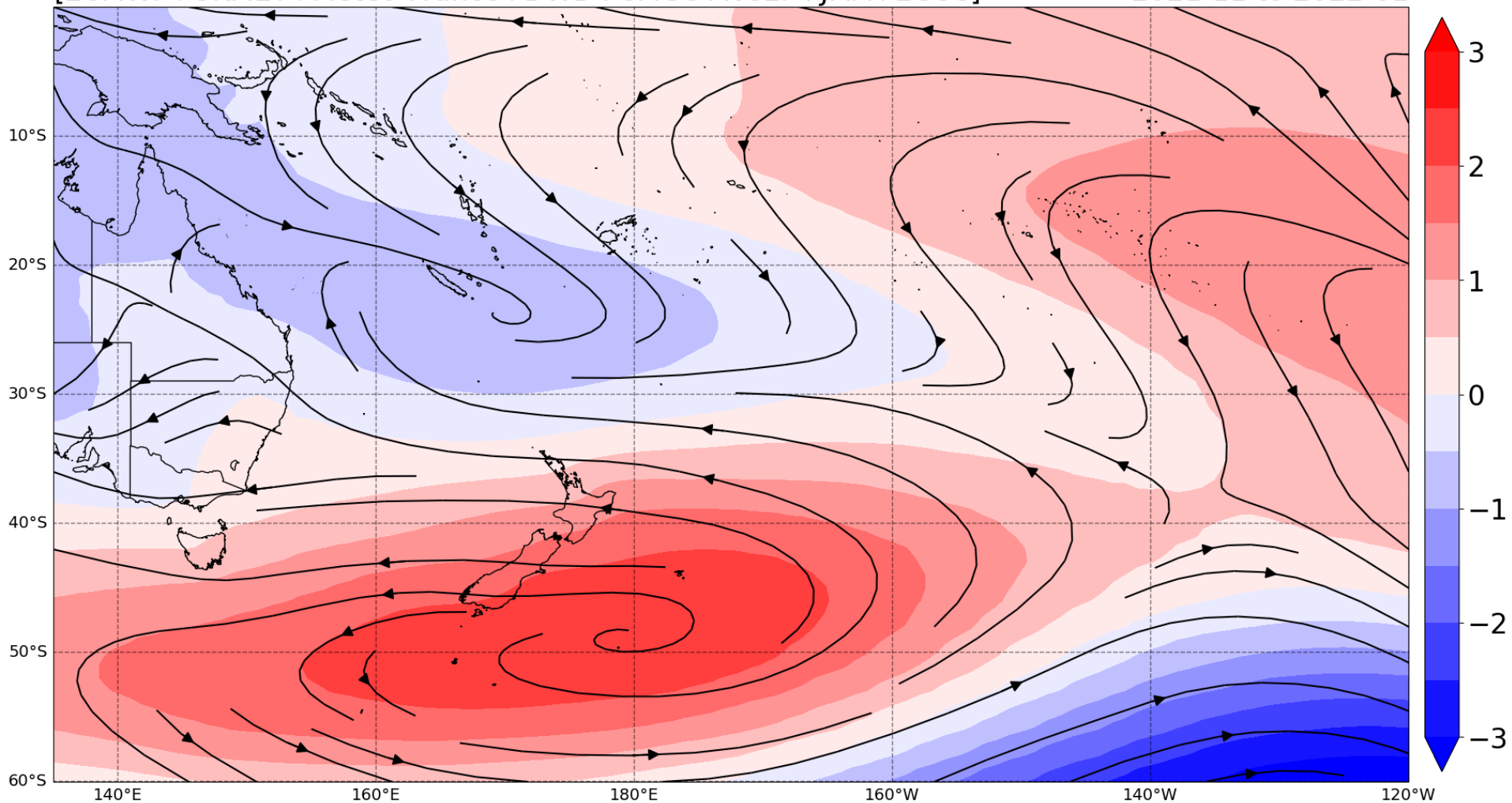
Average: **6** TCs

Chance of more: **46 %**

C3S Mean Sea Level Pressure (hPa) & Air Flow Anomalies

[ECMWF+UKMET+Météo-France+DWD+CMCC+NCEP+JMA+ECCC]

2021-11 to 2022-01

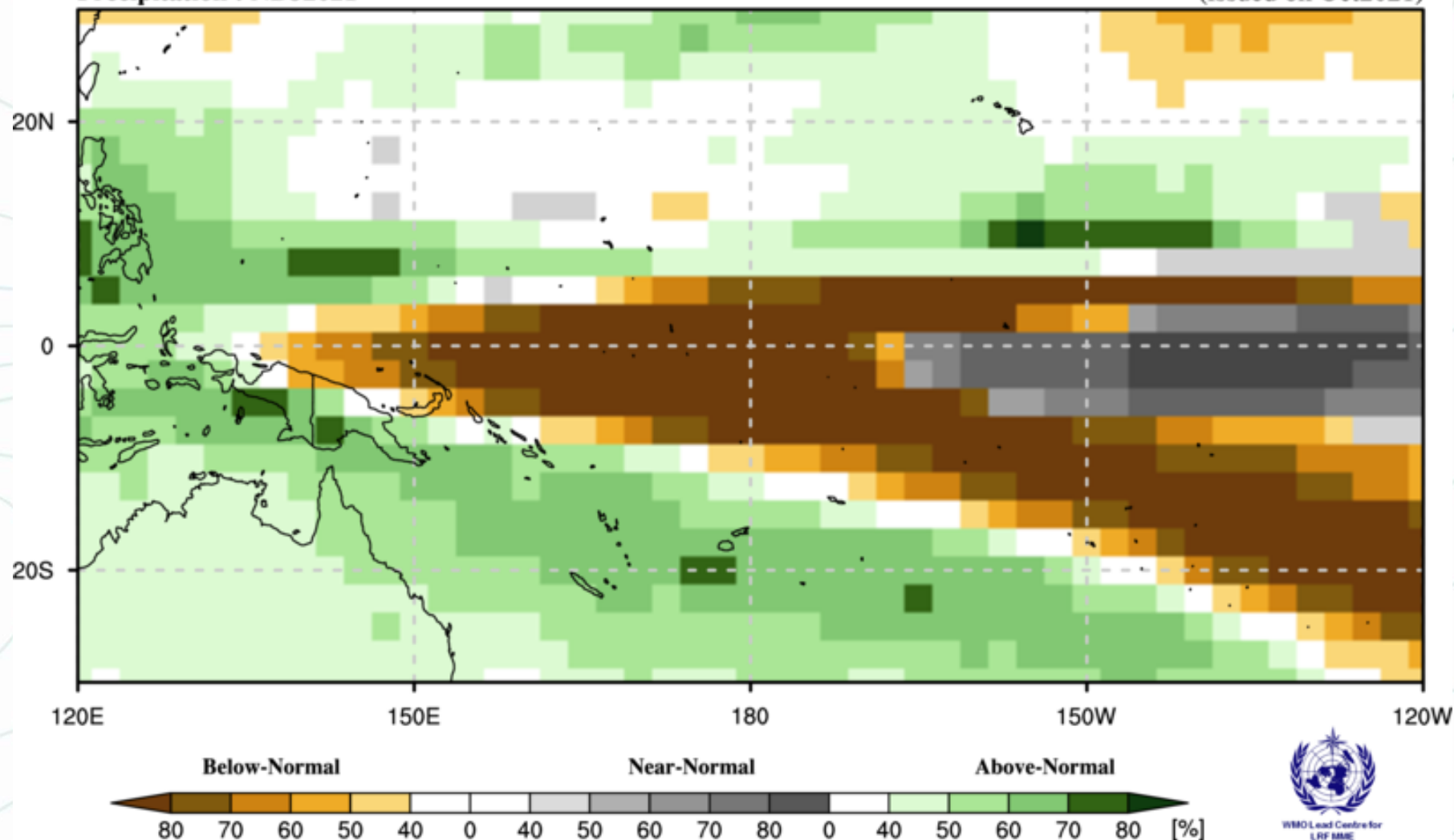


Probabilistic Multi-Model Ensemble Forecast

Beijing,CMCC,CPTEC,ECMWF,Exeter,Melbourne,Montreal,Moscow,Offenbach,Seoul,Tokyo,Toulouse,Washington

Precipitation : NDJ2021

(issued on Oct2021)

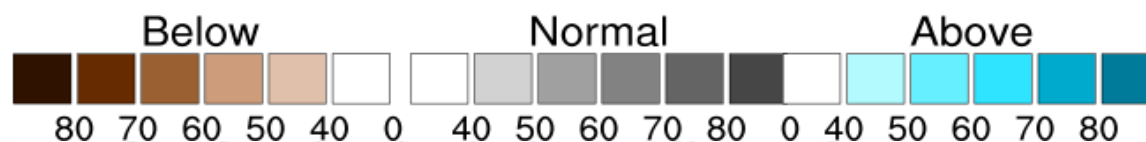
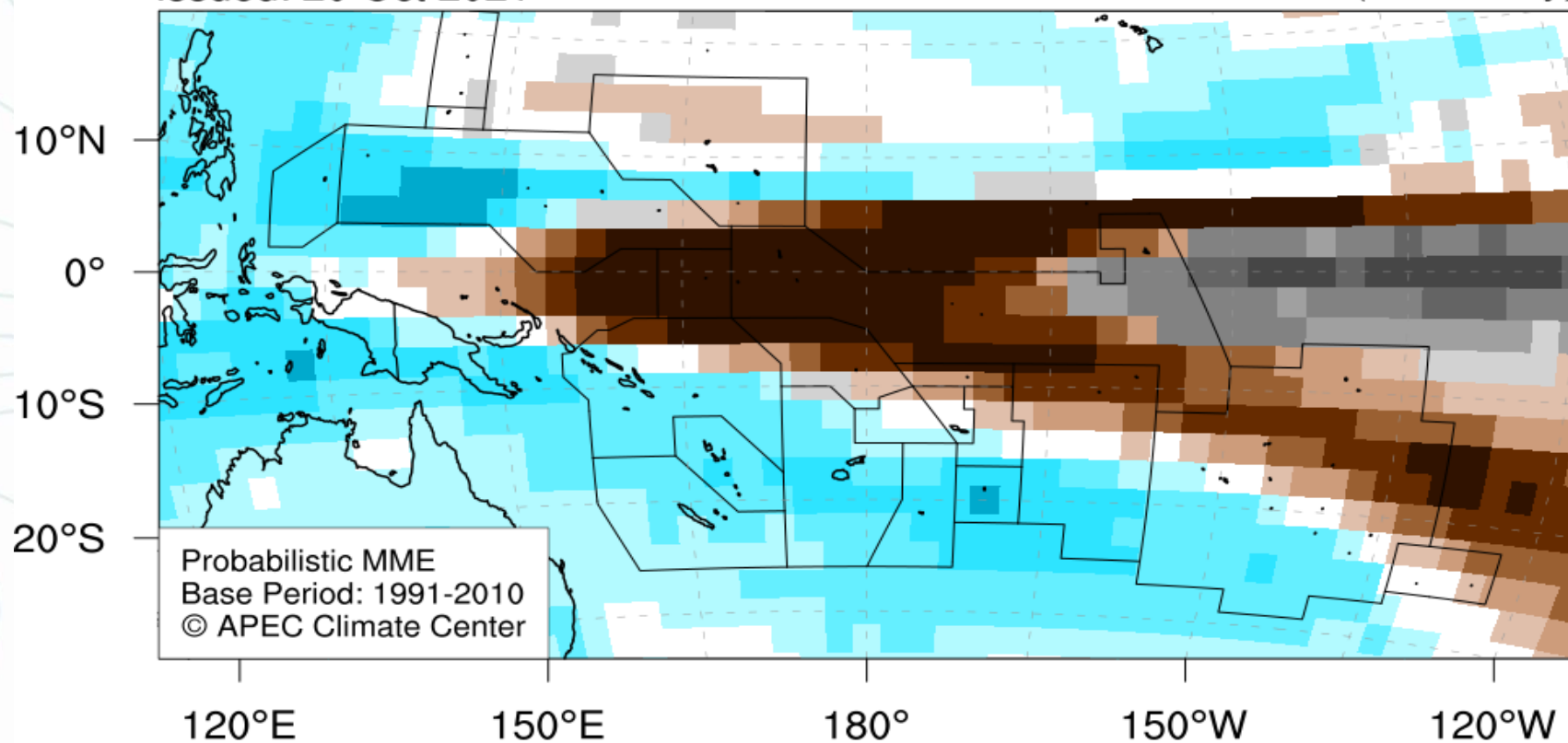


WMO Lead Centre for
LRF MME

Precipitation for November 2021-January 2022

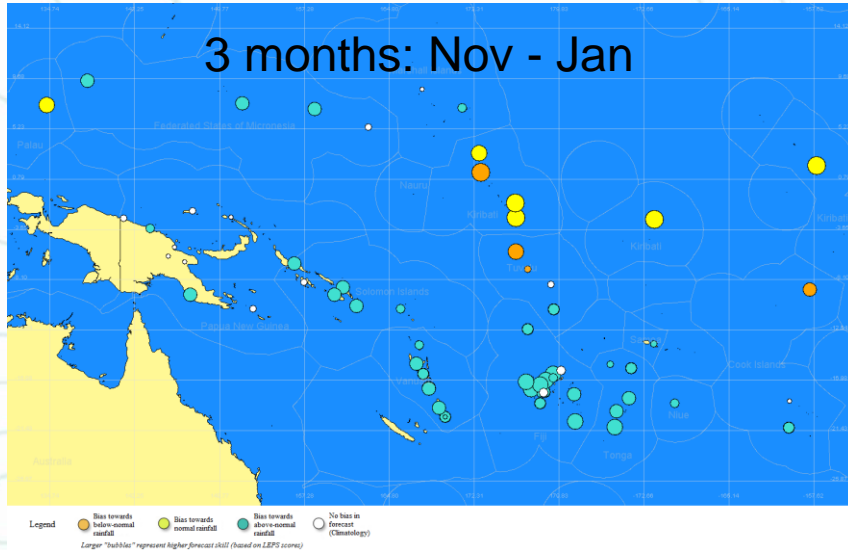
Issued: 20 Oct 2021

Unit: % (Probability)



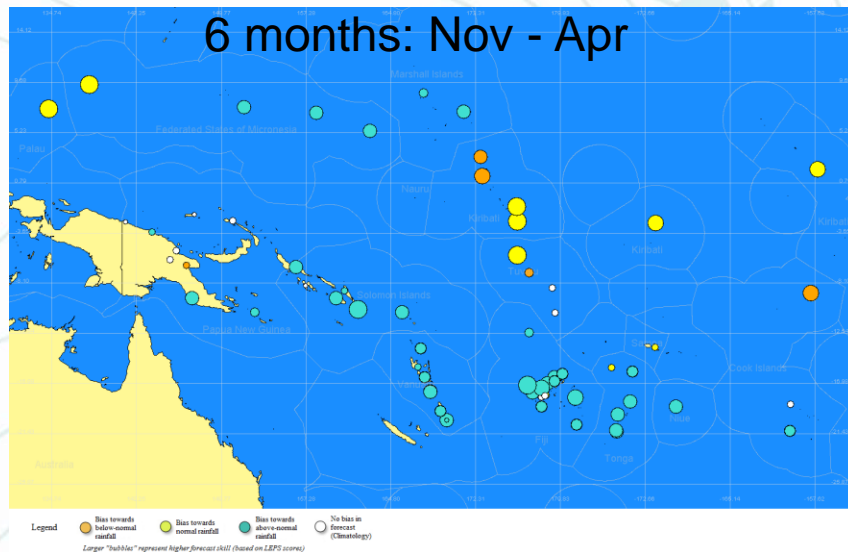
SCOPIC outlook for Nov 2021-Jan 2022

3 months: Nov - Jan



The 3 months forecast is very likely to be above normal rainfall for FSM, Solomon Islands, Vanuatu, Fiji, southern Tuvalu, Tonga, Samoa, Niue and southern Cooks Islands.

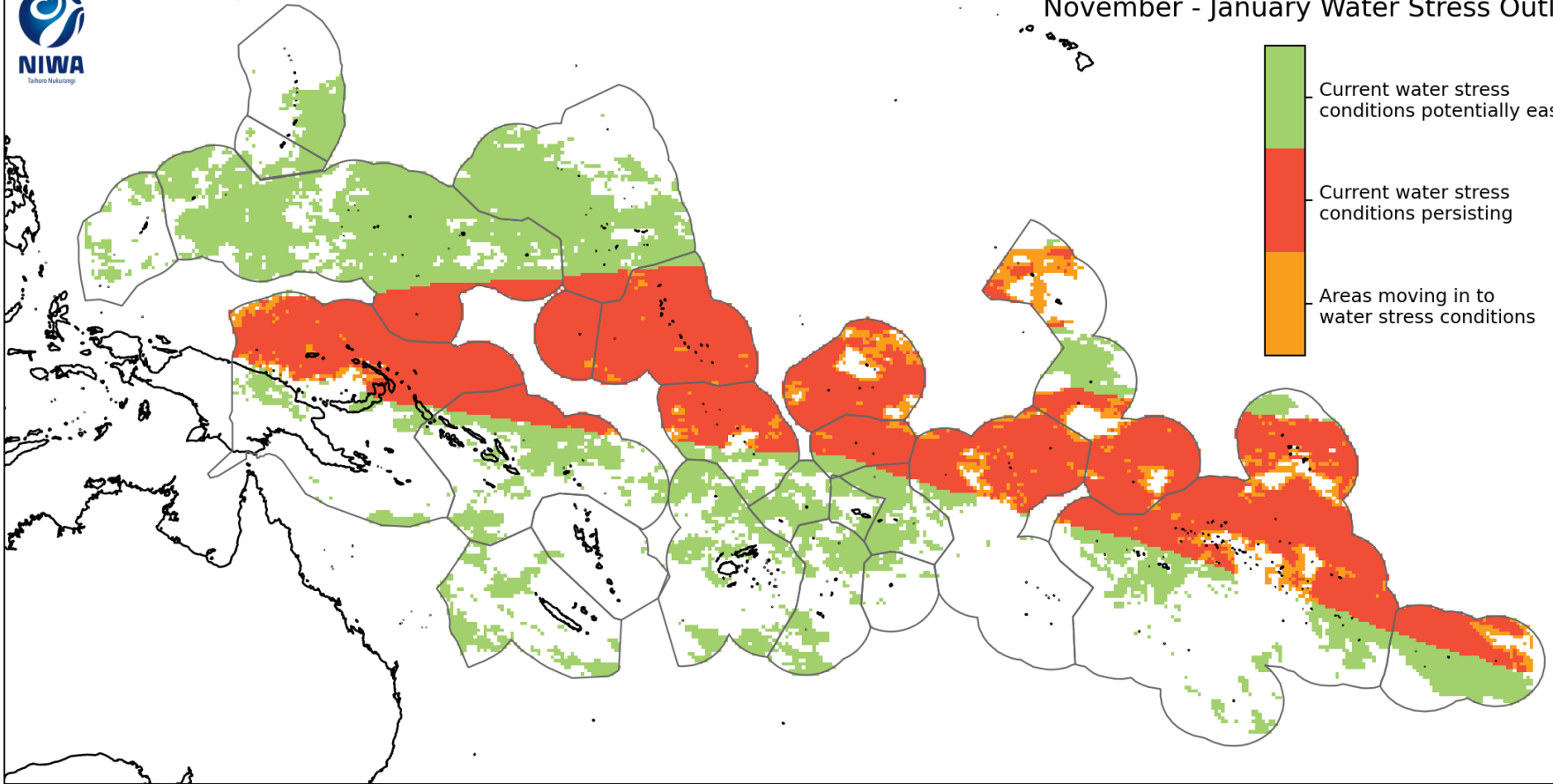
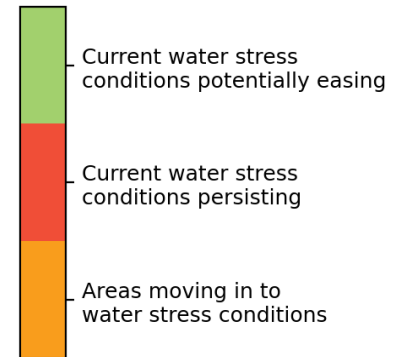
6 months: Nov - Apr



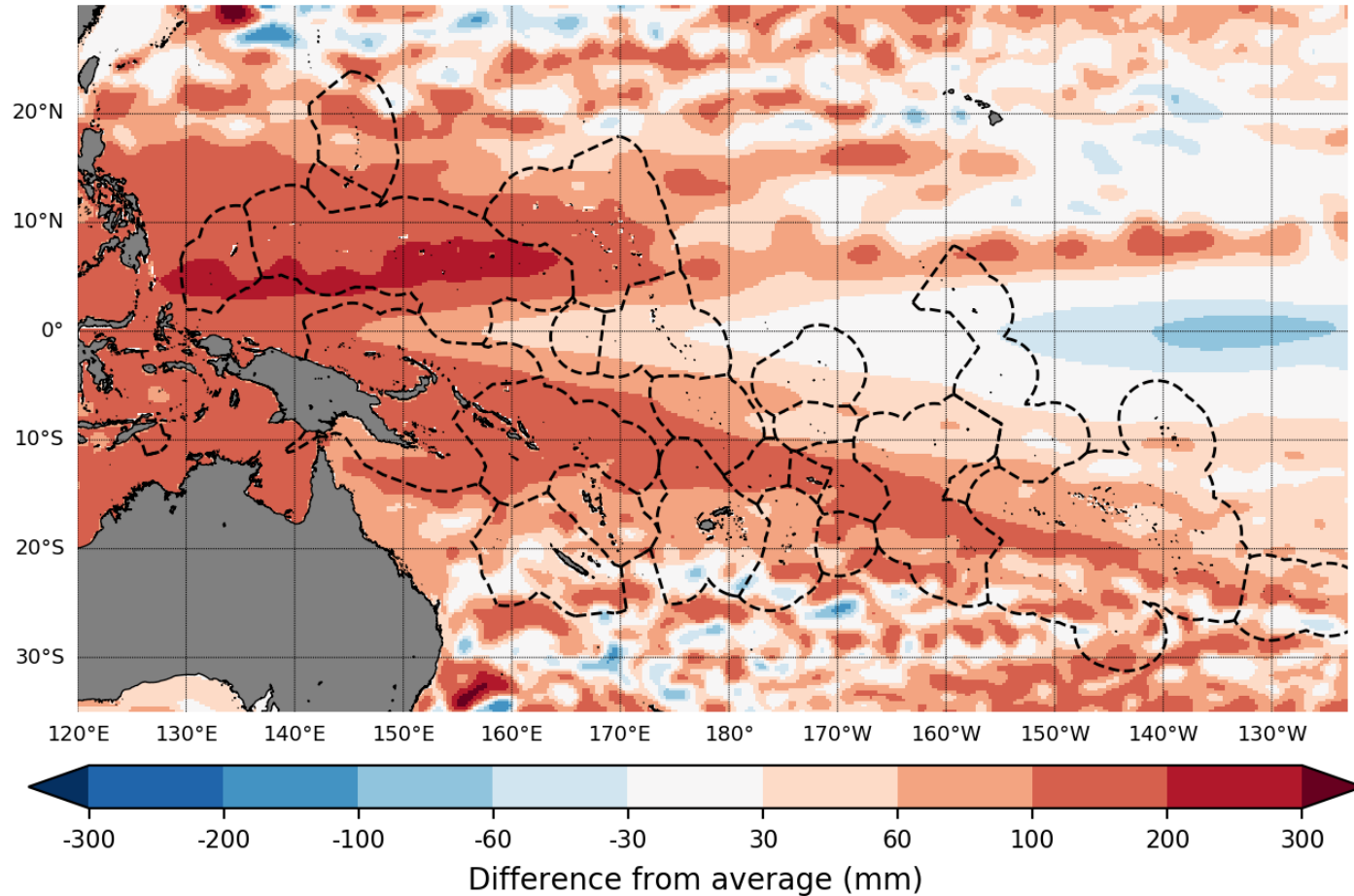
Below normal rainfall is very likely for western Kiribati, northern Tuvalu and northern Cook Islands.

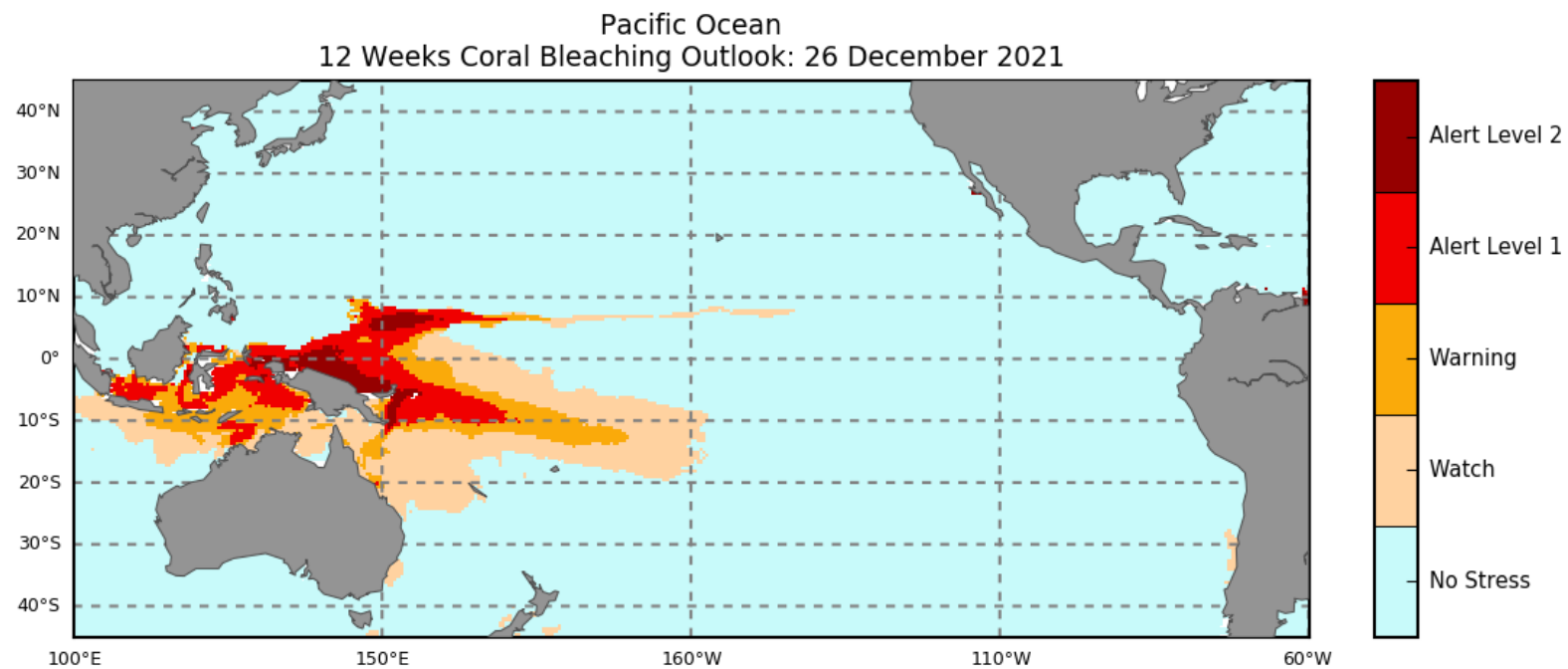
6 months –Similar rainfall pattern exist

November - January Water Stress Outlook



Difference from average sea surface height forecast for
October 2021 to December 2021

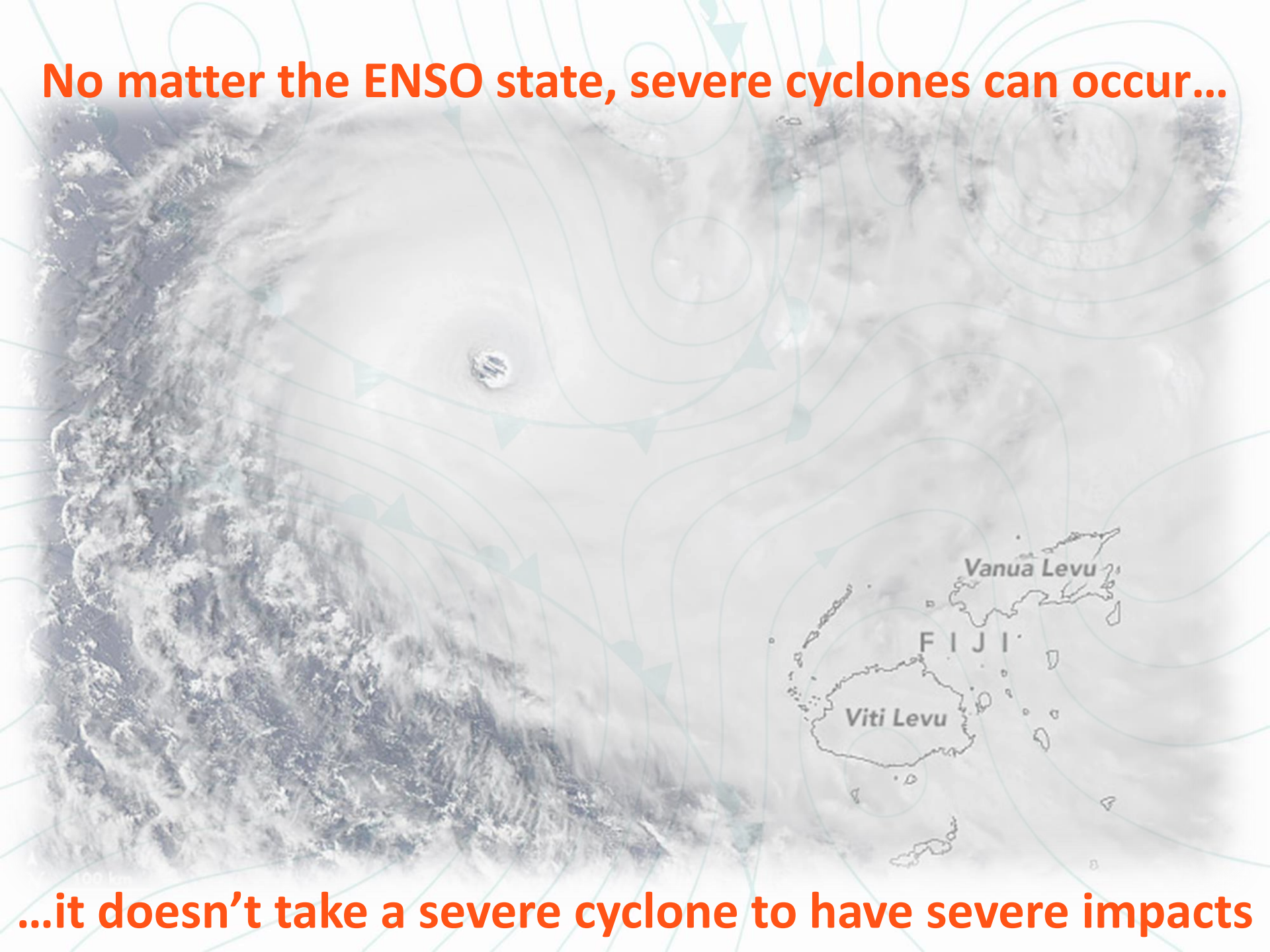




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Geoscience Energy and Maritime Division, COSPPac SPP

NOAA Coral Reef Watch

No matter the ENSO state, severe cyclones can occur...



...it doesn't take a severe cyclone to have severe impacts

An aerial photograph of a river flowing over a rocky landscape. A large waterfall cascades into a pool of water. The surrounding area is covered in green vegetation and rocks. The image is overlaid with a decorative pattern of green wavy lines and arrows, suggesting a flow or movement. The text "Kia ora / thank you" is centered in the middle of the image in a bold, orange font.

Kia ora / thank you