

# Spring/summer outlook for Orchardists

Dale Grey

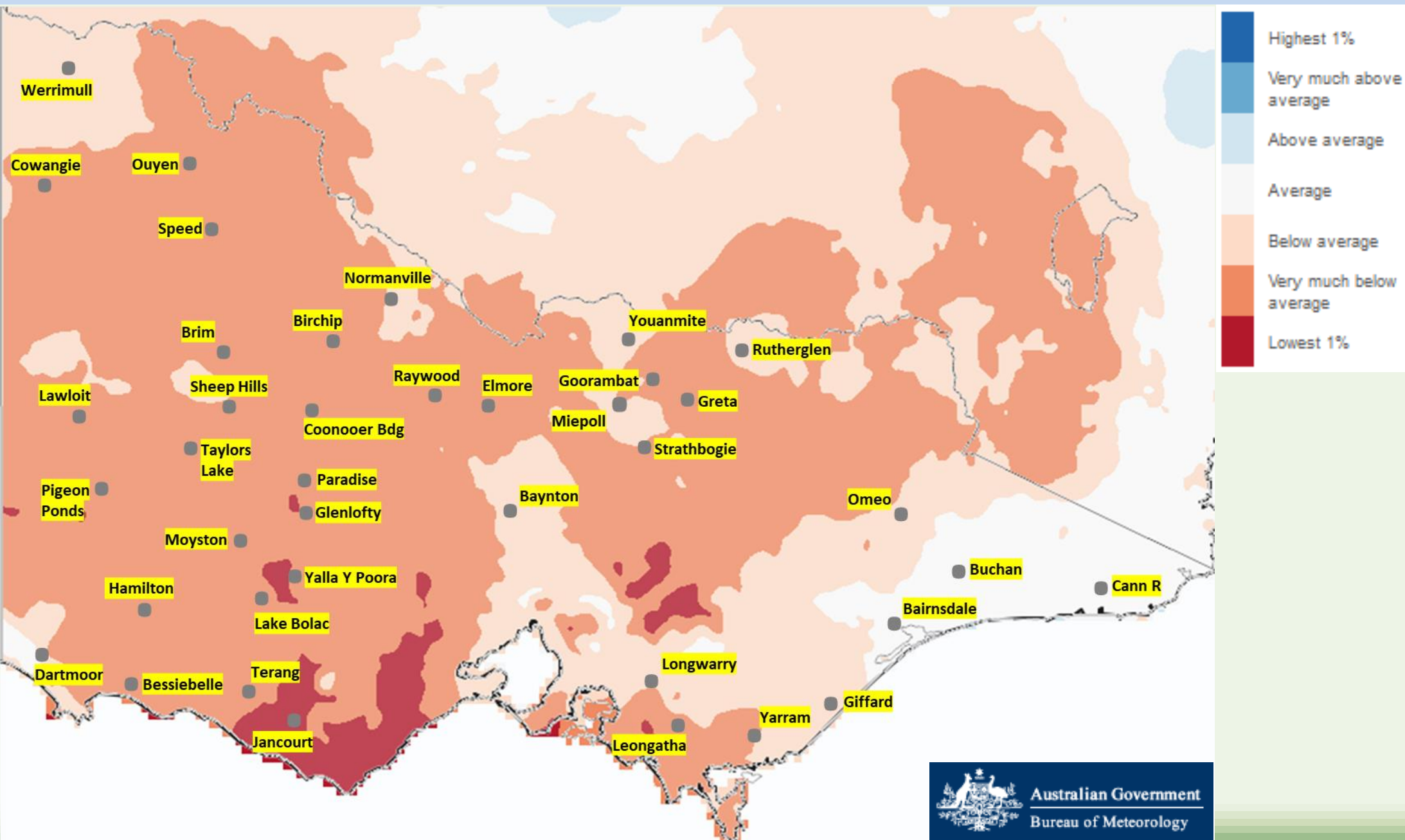
Seasonal Risk Agronomist, Bendigo

22 August 2024

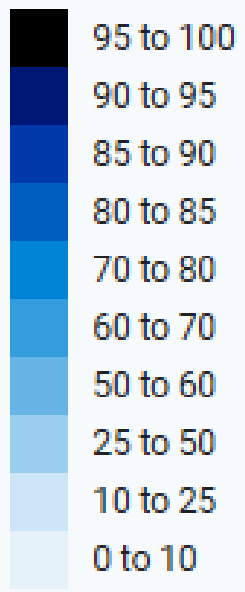
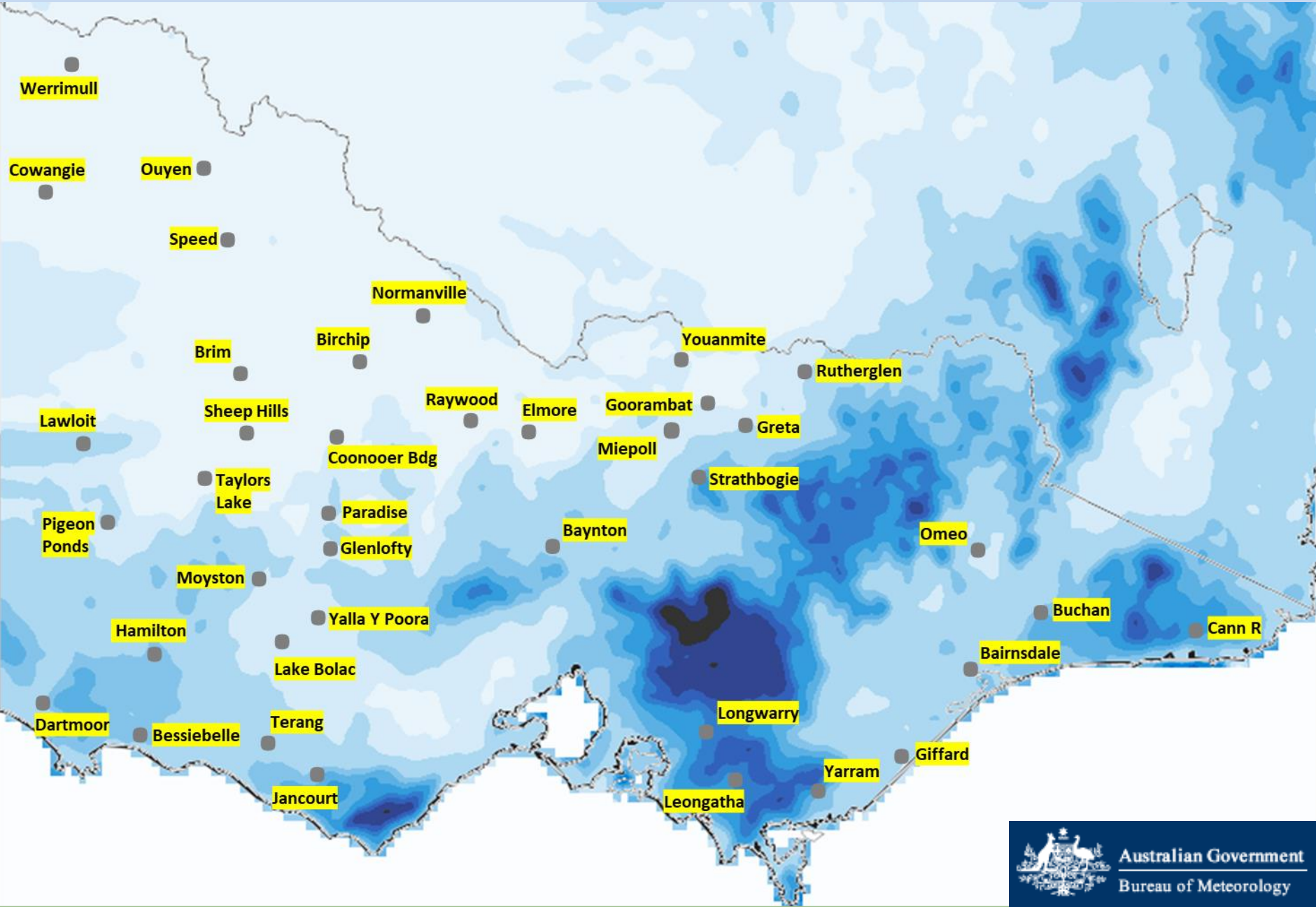
**AGRICULTURE VICTORIA**



# AWO modelled plant available water decile 10-100cm 17 August 2024

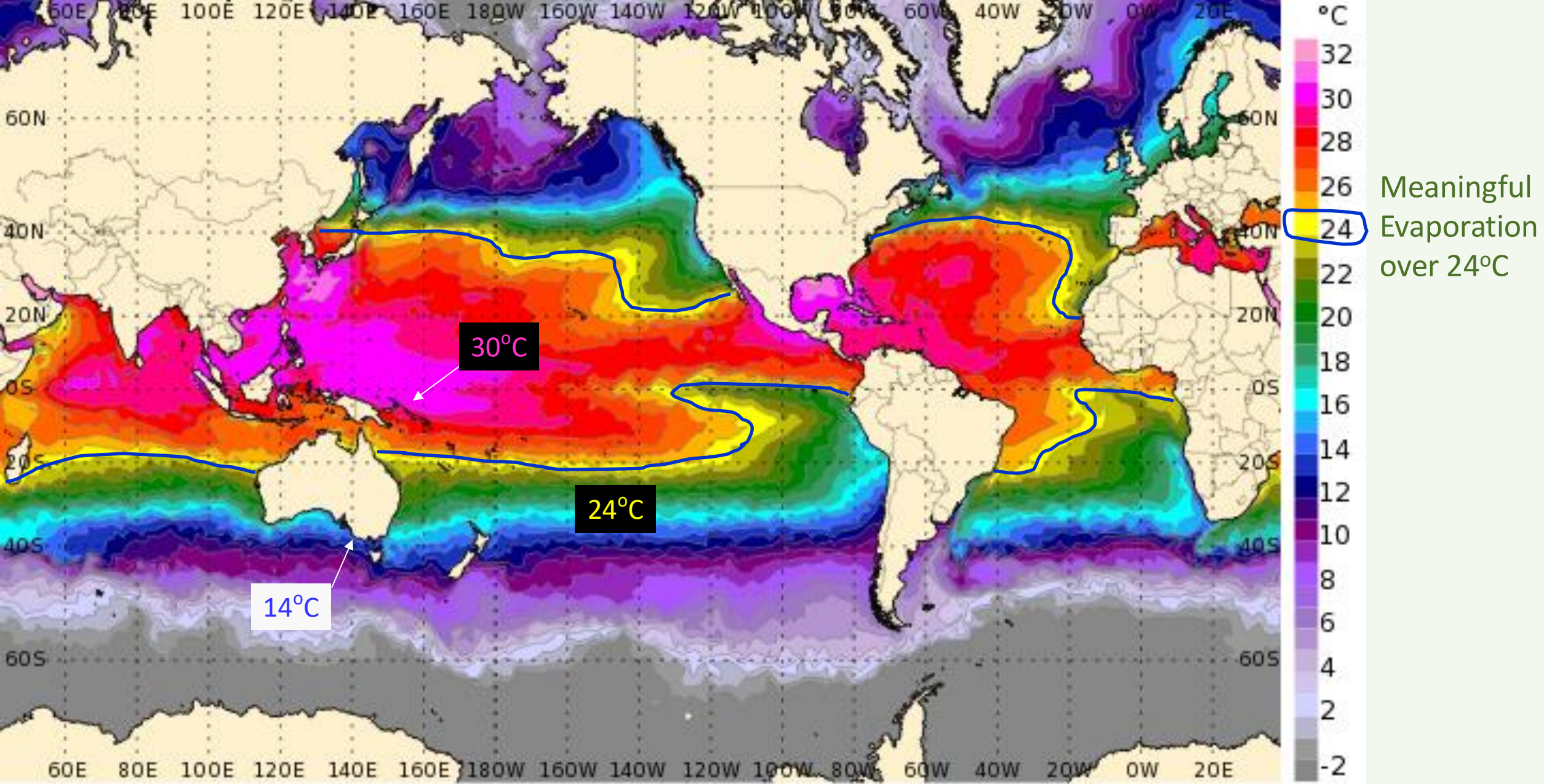


# BoM AWO modelled plant available water % 10-100cm 18 August 2024



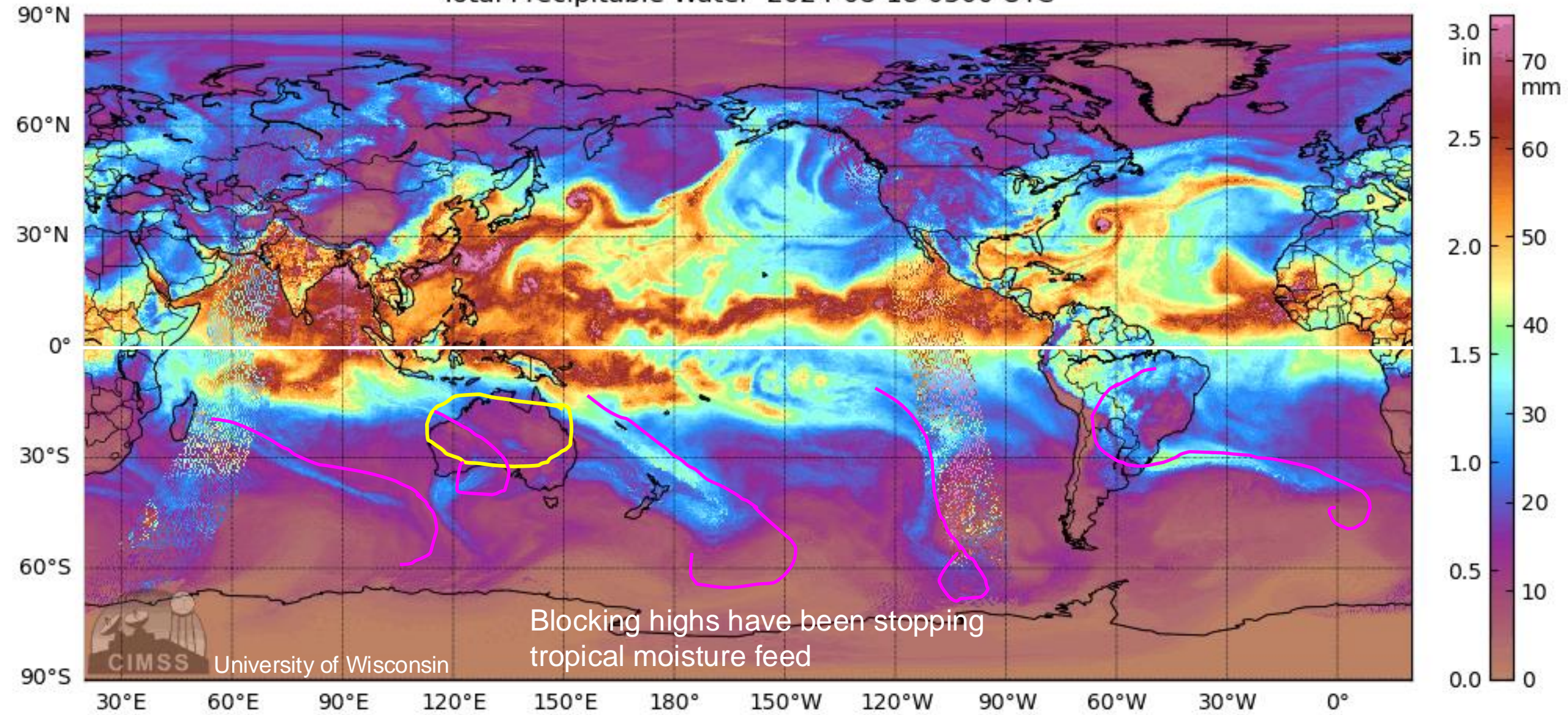
Soil moisture probe newsletters-contact

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[raquel.waller@agriculture.vic.gov.au](mailto:raquel.waller@agriculture.vic.gov.au)



Sea surface temperature (deg C): Daily analysis for **Sat 17 Aug 2024**  
(c) Copyright Australian Bureau of Meteorology | **GAMSSA**

# Total Precipitable Water 2024-08-18 0300 UTC

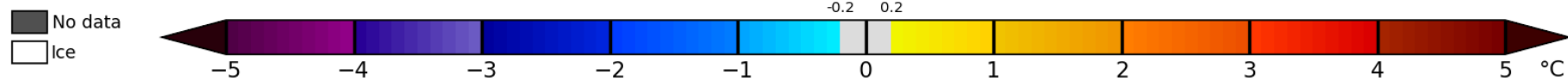
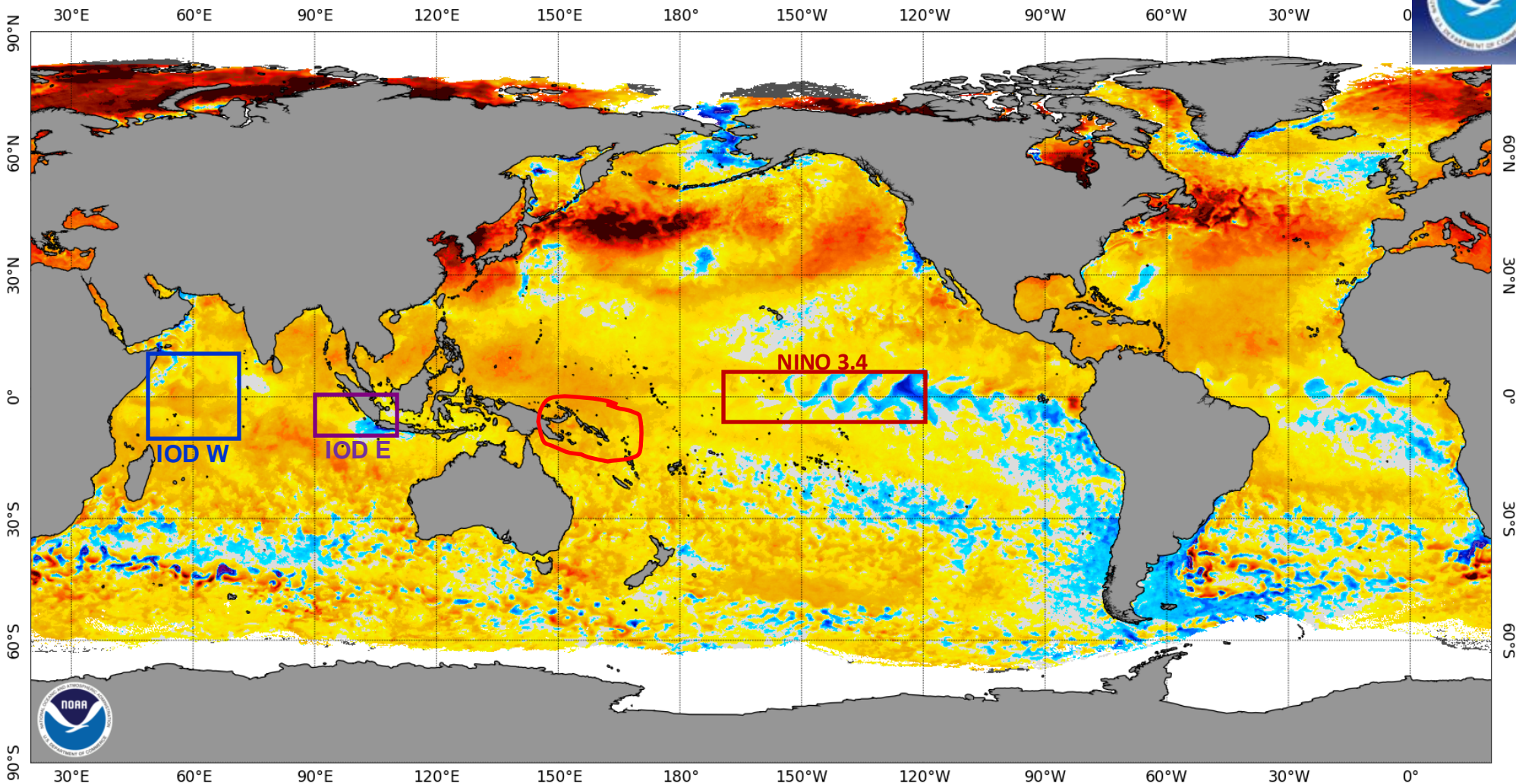


Blocking highs have been stopping tropical moisture feed

Total Precipitable Water  
A measure of how much water is in the air column.



# Sea Surface Temperature Anomalies 17 August 2024

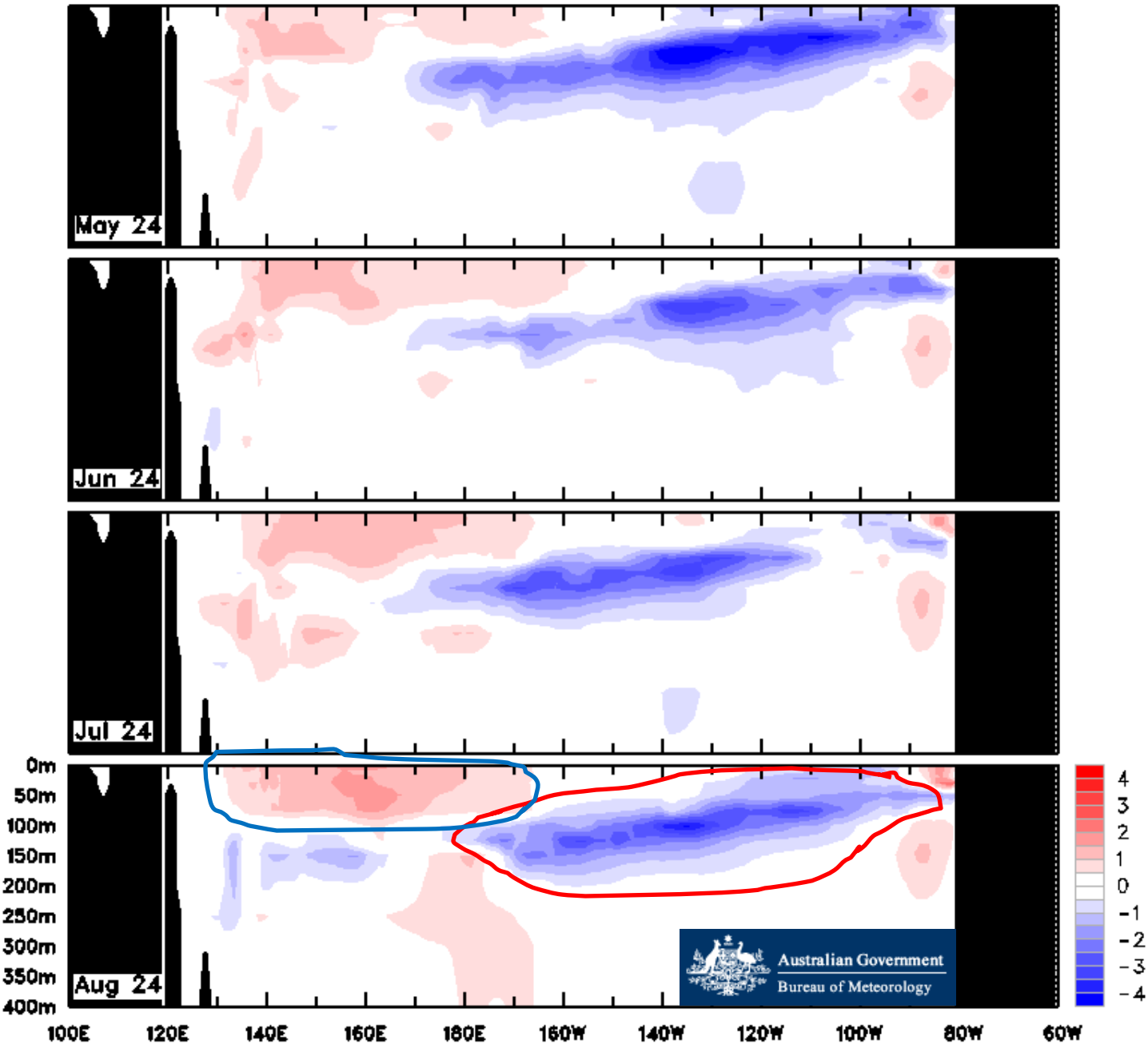


DMI is  $+0.05^{\circ}\text{C}$  = neutral    Very warm Coral Sea    NINO3.4 is  $+0.15^{\circ}\text{C}$  = Normal

PNG Pacific Ocean Eq Anomaly  $\Delta=0.5^\circ\text{C}$  Ecuador

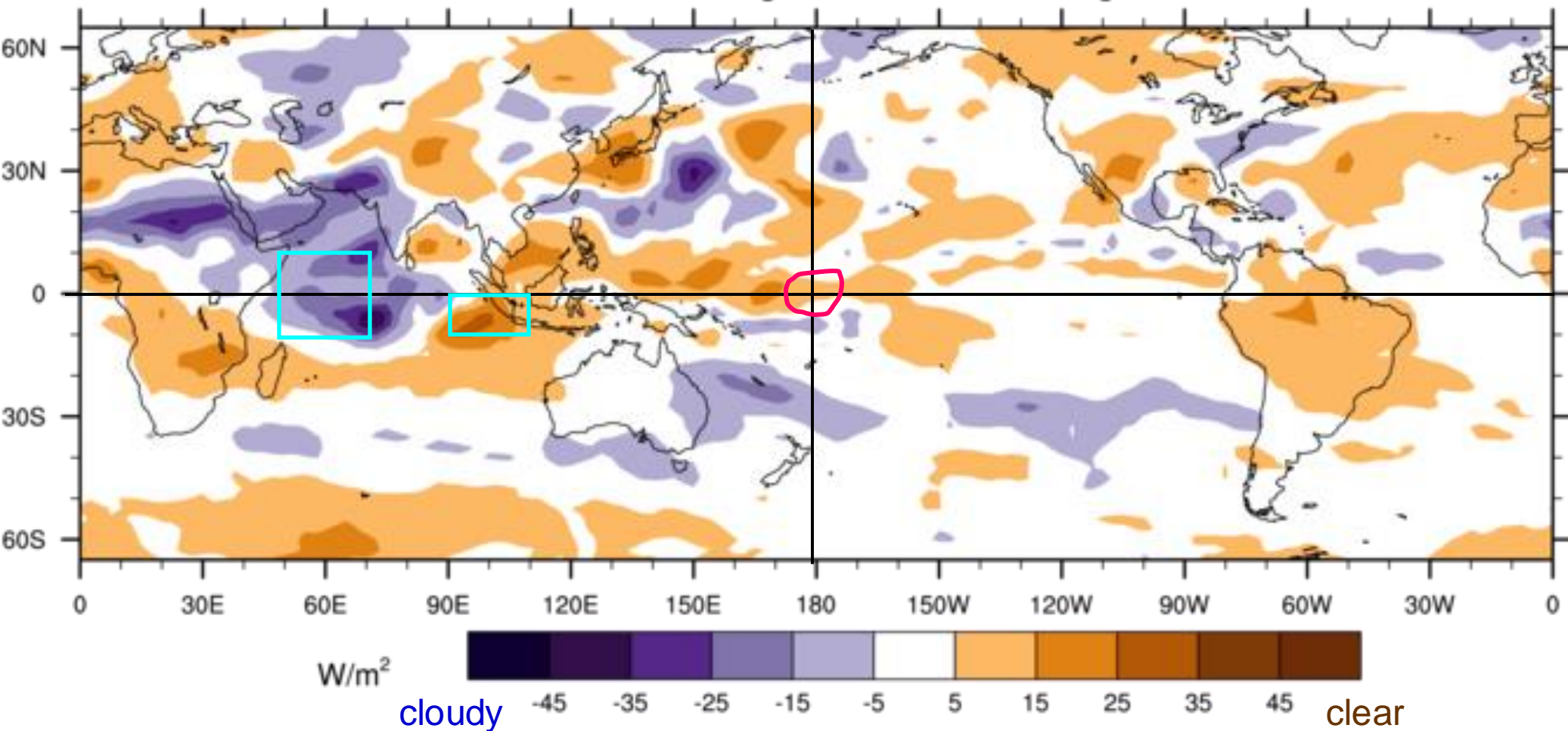
## Pacific Equatorial Deep Sea Anomaly

Cool in the east, warm in the west  
A possible pre-La Niña (wetter) condition



Analysis done Aug 15 22:14

OLR Anomalies : Average of 18 Jul 2024 : 17 Aug 2024



Last 30 Days  
Cloud Anomaly

Junction of Dateline = close to normal

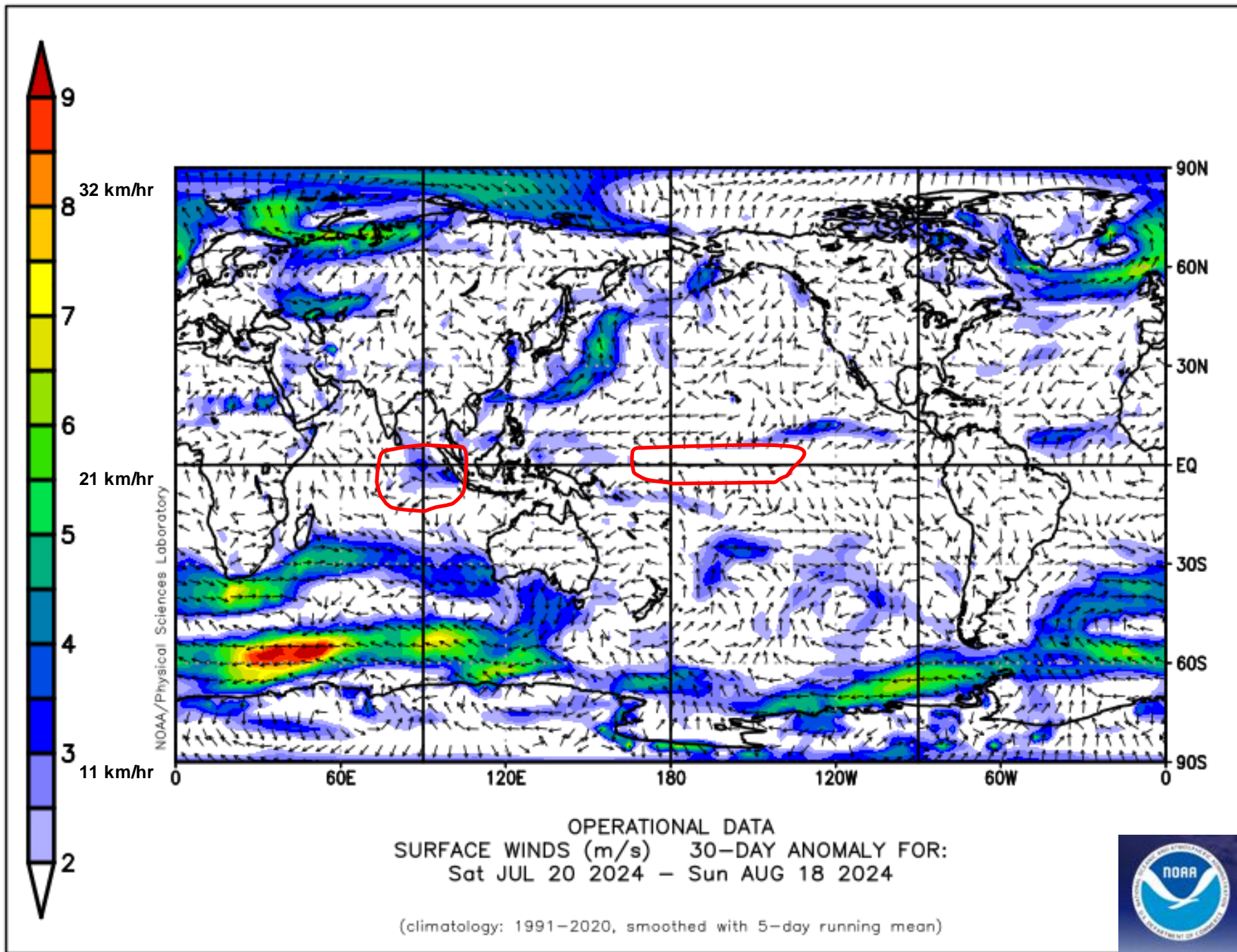
Indian Ocean looks like a +IOD (drier) pattern



# Last 30 Days Wind Direction and Speed Anomaly

Pacific trade winds are normal. Look for stronger easterlies for La Niña.

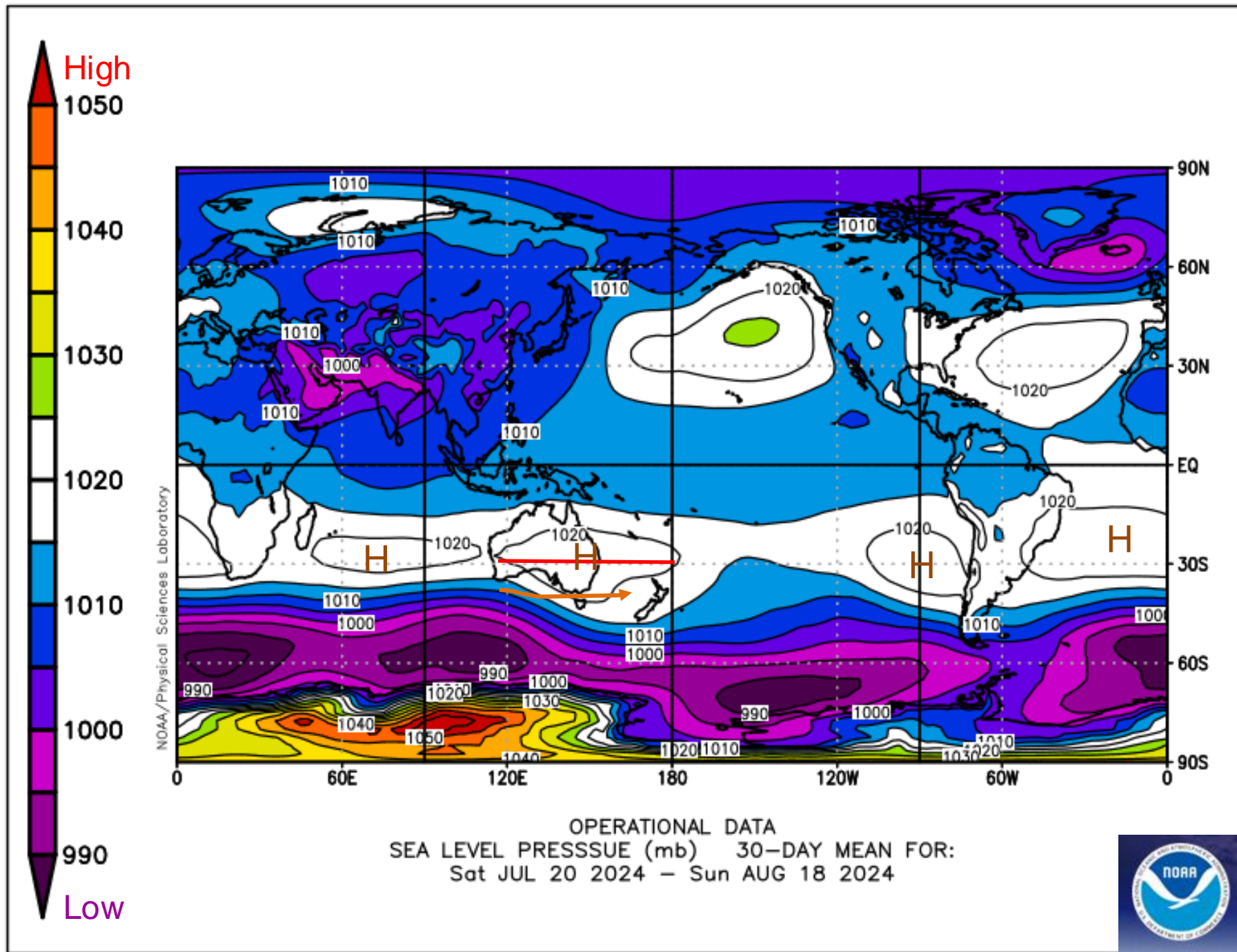
Eastern Indian Ocean winds are strongly easterly, more +IOD like



# Last 30 days Air Pressure

Centre of highs at a slightly higher latitude. Letting fronts through.

High centred over us. Blocking pattern for north of the Divide.



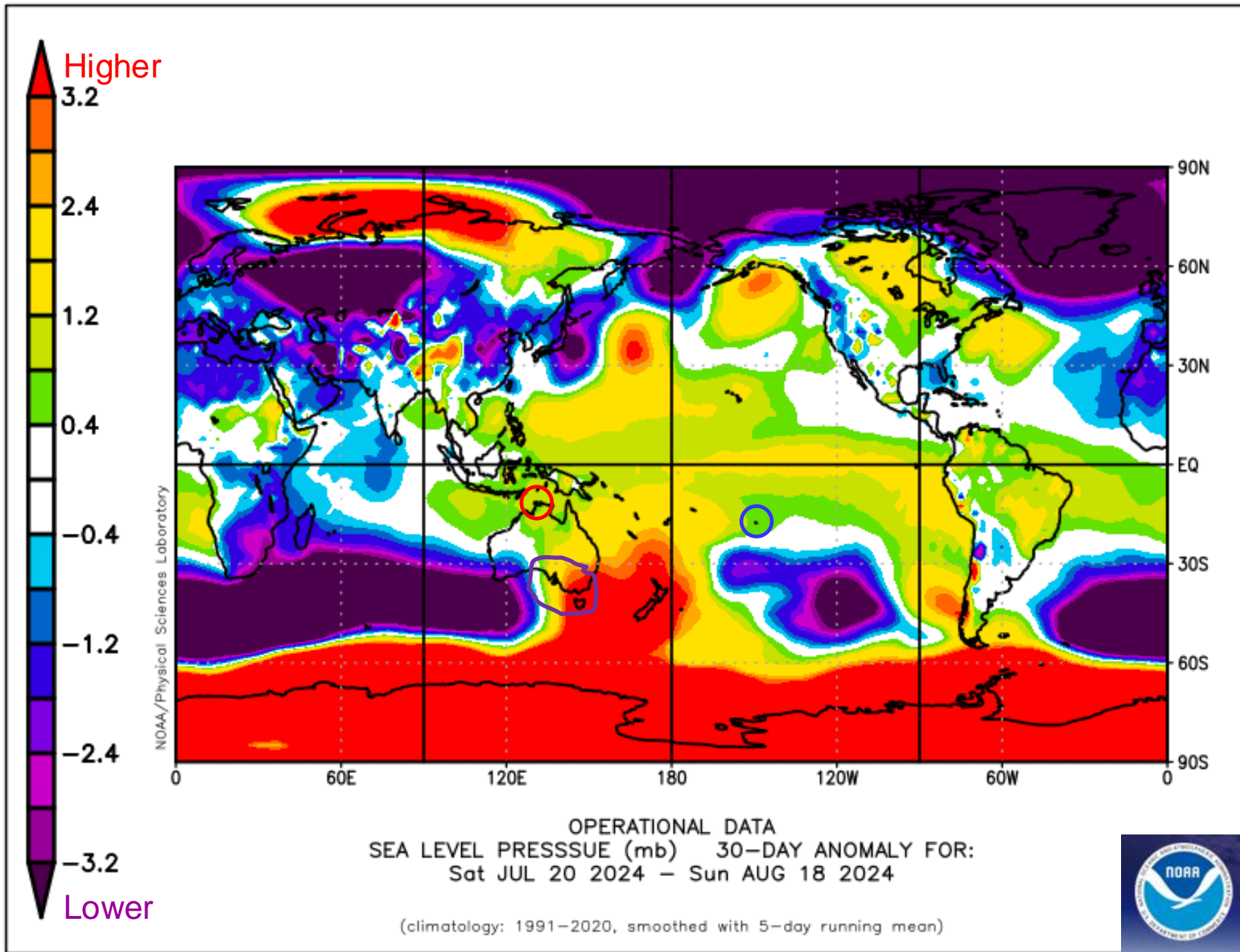
# Last 30 days Air Pressure Anomaly

Pressure higher

Darwin higher, Tahiti  
higher

SOI = -3. = Neutral

Look for a very positive  
SOI and lower  
pressure at Darwin to  
= La Niña



# In Summary

## Indian +IOD?

Sea Surface ~~x~~/✓

Ocean Depth ~~x~~/✓

Pressure ~~x~~

Winds ✓

Cloud ✓

## Pacific La Niña?

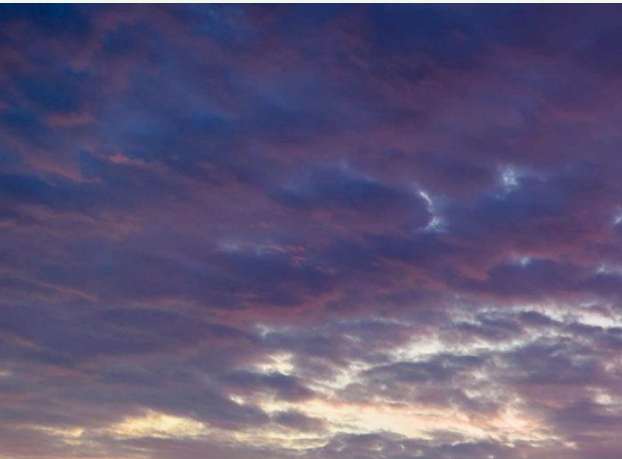
Sea Surface ~~x~~/✓

Ocean Depth ✓

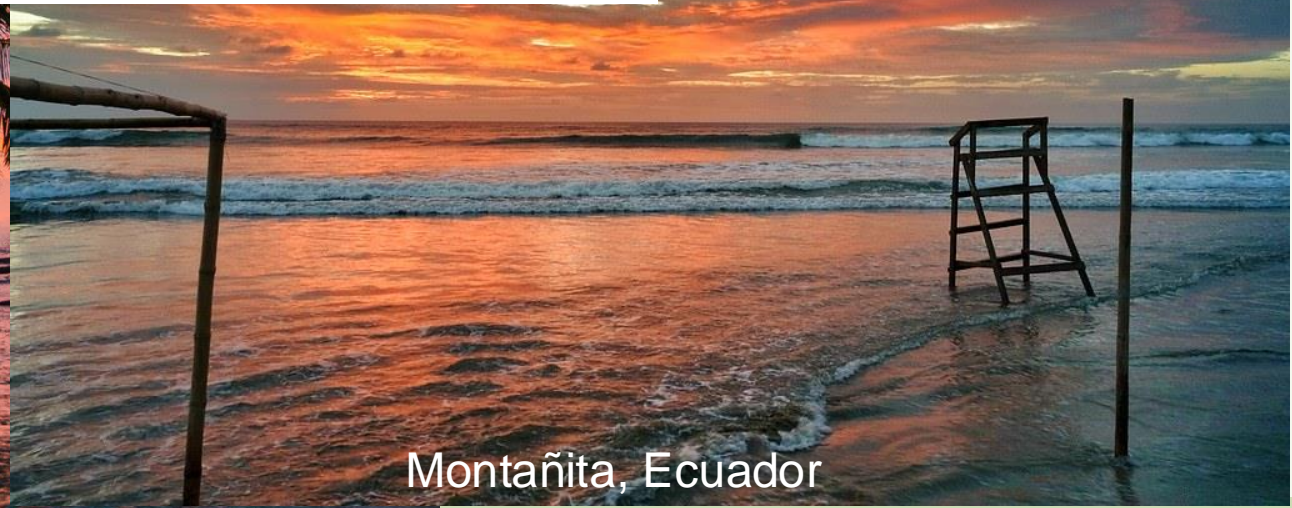
Pressure ~~x~~

Winds ~~x~~

Cloud ~~x~~



Banyak Isl, Sumatra, Indonesia



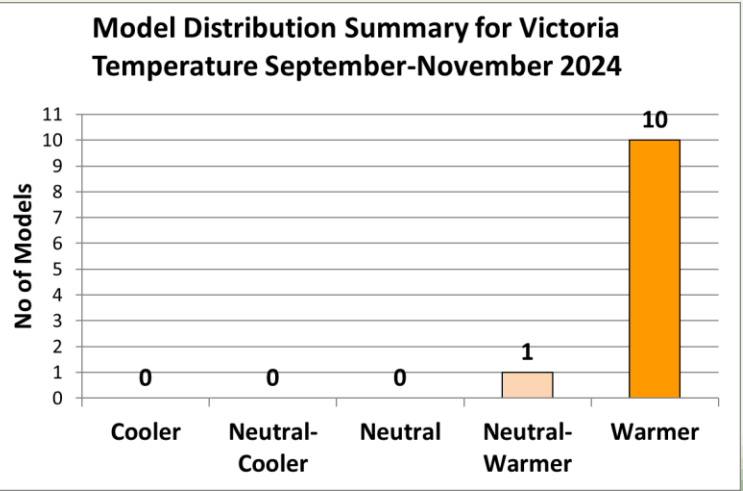
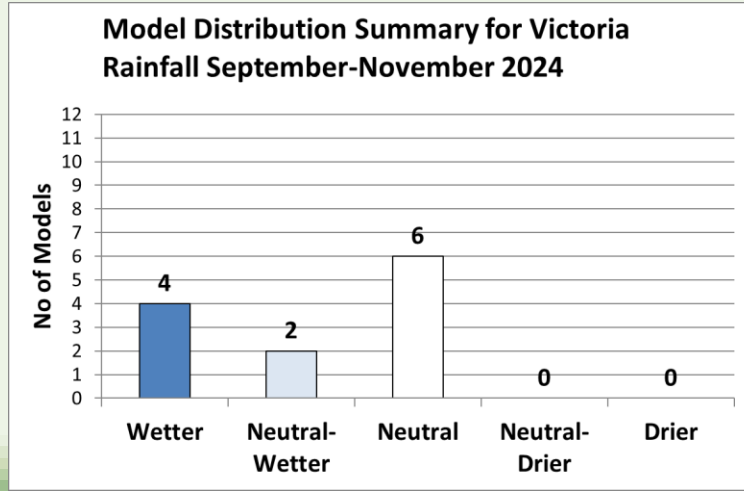
Montañita, Ecuador

# Modelled climate and ocean predictions for Victoria from August 2024 run models.

Phenomena	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	Ensemble	Ensemble	Ensemble	Statistical
	SEAS5 ECMWF Europe	ACCESS-S BoM Australia	SINTEX-F JAMSTEC Japan	CFSv2 NCEP USA	GEOS-S2S NASA USA	EPS JMA Japan	CSM1.1m BCC China	GloSea5 UKMO UK	NMME USA	C3S Europe	MME APCC Korea	SOI phase USQ/Qld Australia
Month of Run	August	August	July	August	August	August	August	August	August	August	August	August
Forecast months*	SON	SON	ASO	SON	SON	SON	SON	SON	SON	SON	SON	SON
Rainfall Skill SON	Moderate	High	-	Moderate	Moderate	Moderate	-	Moderate	Moderate	-	-	-
Spring Pacific Ocean NINO3.4	Slightly cool	Slightly cool	Slightly cool (weak La Niña Modoki)	Cool (La Niña Modoki)	Cool (La Niña Modoki)	Cool (weak La Niña Modoki)	Cool (La Niña)	Cool (La Niña Modoki)	Cool (La Niña Modoki)	Cool (weak La Niña Modoki)	Slightly cool (weak La Niña Modoki)	SOI neutral
Spring Eastern Indian Ocean	Slightly warm	Slightly cool (+IOD)	Slightly warm	Slightly warm	Slightly cool (weak +IOD)	Slightly warm	Slightly cool (weak +IOD)	Slightly warm	Slightly warm	Slightly warm	Slightly warm	-
Spring Rainfall	Slightly wetter W, neutral E	Neutral	Neutral	Slightly wetter N, neutral S	Neutral	Average/wetter far W	Slightly wetter	Slightly wetter	Slightly wetter	Slightly wetter, neutral S Coast	Neutral	Neutral
Spring Temperature	Slightly warmer	Warmer	Slightly warmer	Slightly warmer S, neutral N	Warmer	Warmer	Warmer S, slightly warmer N	Warmer, slightly warmer Cent, Alps	Slightly warmer, warmer Gipps	Warmer, slightly warmer Alps	Slightly warmer	-

## Sept-Nov

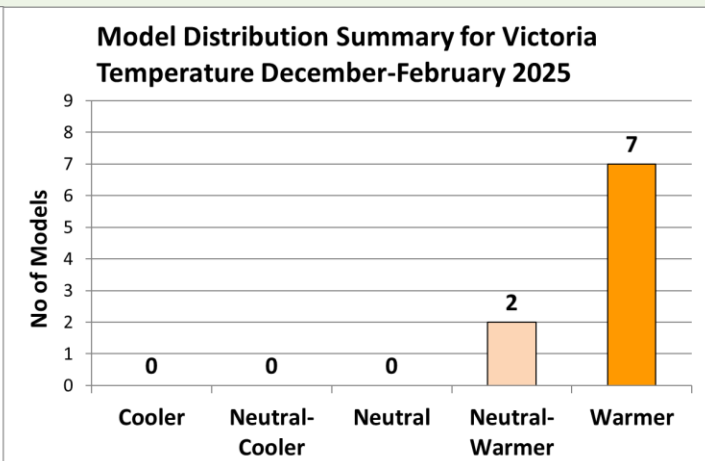
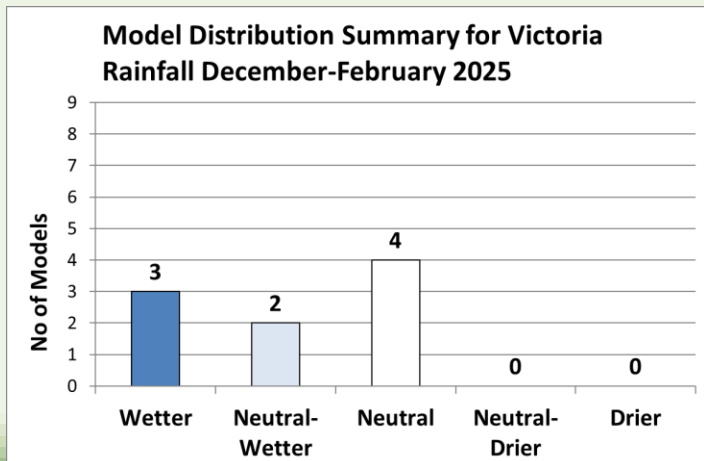
Pacific Ocean- Cool (La Niña Modoki)  
 Indian Ocean- slightly warm/mixed  
 Rainfall- Wetter / Neutral  
 Temperature- Warmer



# Modelled climate and ocean predictions for Victoria from August 2024 run models.

Phenomena	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	Ensemble	Ensemble	Ensemble	Statistical
	SEAS5 ECMWF Europe	ACCESS-S BoM Australia	SINTEX-F JAMSTEC Japan	CFSv2 NCEP USA	GEOS-S2S NASA USA	EPS JMA Japan	CSM1.1m BCC China	GloSea5 UKMO UK	NMME USA	C3S Europe	MME APCC Korea	SOI phase USQ/Qld Australia
Month of Run	August	August	July	August	August	August	August	August	August	August	August	August
Forecast months*	DJF	NDJ	NDJ	DJF	DJF	-	DJF	NDJ	DJF	NDJ	DJF	-
Summer Pacific Ocean NINO3.4	Slightly cool	Normal	Slightly cool (weak La Niña Modoki)	Slightly cool (weak La Niña Modoki)	Cool (La Niña Modoki)	-	Normal	Cool (La Niña Modoki)	Cool (La Niña Modoki)	Cool (La Niña Modoki)	Slightly cool (weak La Niña Modoki)	-
Summer Eastern Indian Ocean	Slightly warm	Slightly warm	Slightly warm (weak -IOD)	Slightly warm	Slightly warm	-	Slightly warm	Slightly warm	Slightly warm	Slightly warm	Slightly warm	-
Summer Rainfall	Slightly wetter, neutral SW	-	Neutral	Neutral, slightly wetter far E	Slightly wetter E, neutral W	-	Slightly wetter E, neutral W	Slightly wetter	Slightly wetter	Neutral, slightly wetter far E	Neutral	-
Summer Temperature	Slightly warmer	-	Slightly warmer	Slightly warmer S, neutral N	Slightly warmer	-	Slightly warmer W, neutral E	Warmer W, slightly warmer E	Slightly warmer	Warmer W, slightly warmer E	Slightly warmer	-

**Dec-Feb**  
 Pacific Ocean- Cool (La Niña Modoki)  
 Indian Ocean- Slightly warm  
 Rainfall- Wetter (Wetter East) / Neutral  
 Temperature- Warmer



# In a Nutshell



- Caution needed, contradictory indicators
- Possible La Niña but will be late forming, if it all.
- Indian Ocean pattern confused, warmer or +IOD.
- Pressure patterns not playing ball for last 5 months.
- Rainfall split between wetter/neutral with likely warmer temperatures for the next 3 months.
- Confidence low of wetter unless something changes.





San Lorenzo Beach, Ecuador

That's all Folks

My Rain Gauge is Busted

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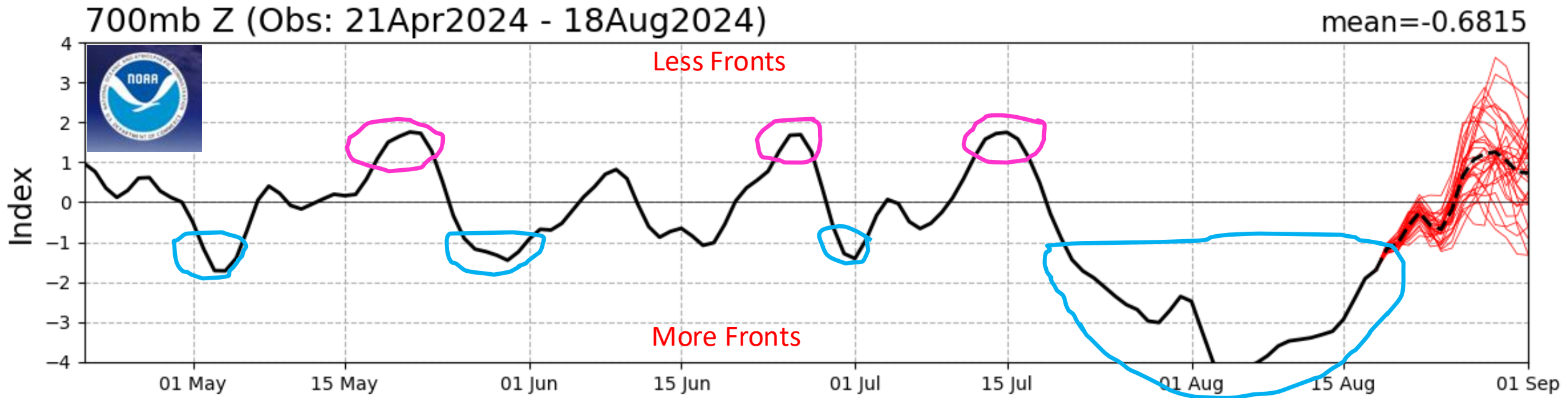
Palm Beach, Solomon Islands

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# Southern Annular Mode



The Southern Annular Mode (SAM) had been strongly negative. Usually increased frontal activity in southern Vic.

Next 14 day predictions: both have a moderate burst, both BoM and NOAA return to neutral then a weak positive burst.