

Spring/Summer Climate Update

Dale Grey

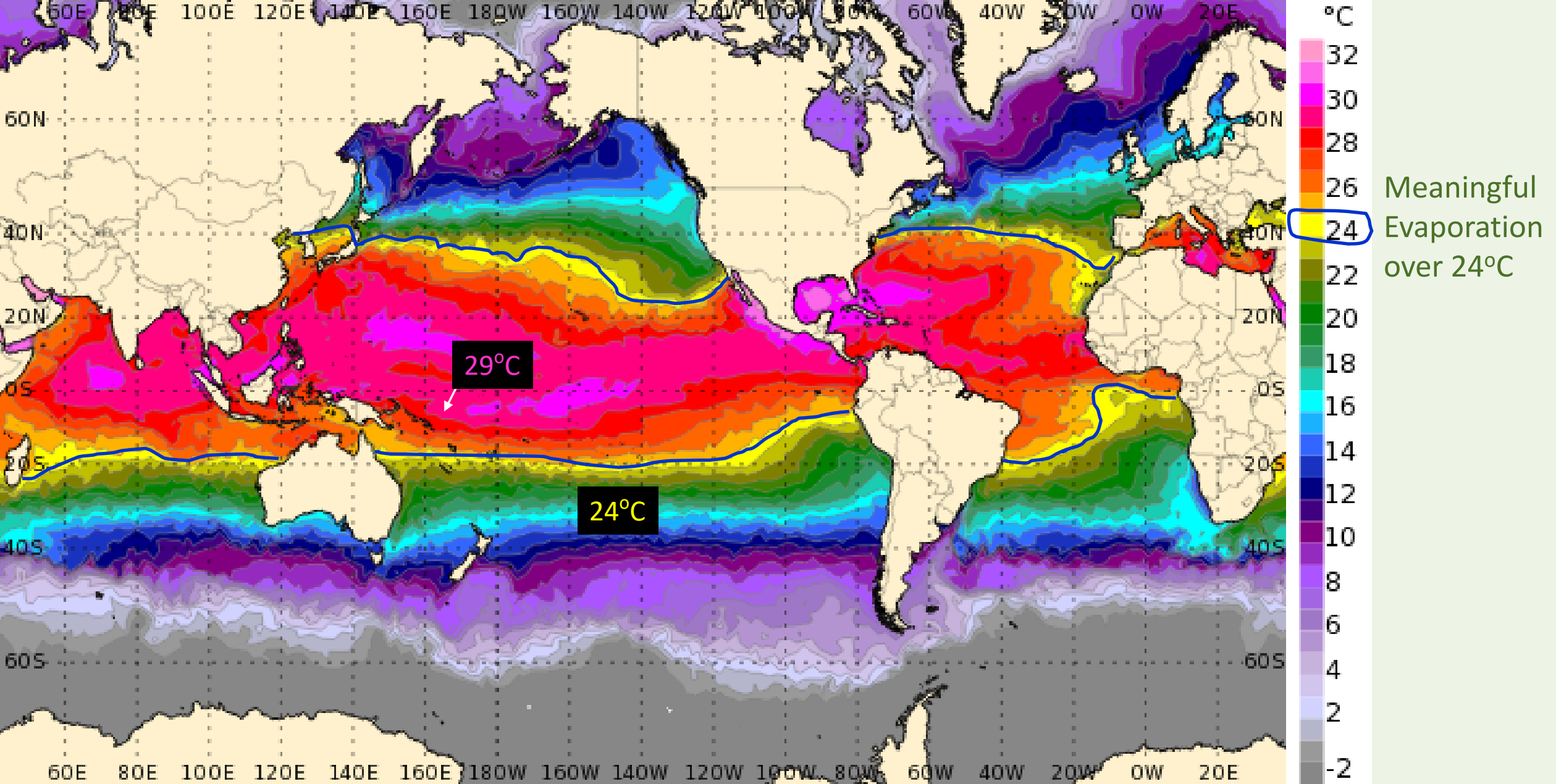
Seasonal Risk Agronomist,
Bendigo

17 September 2026

AGRICULTURE VICTORIA

 @eladyerg

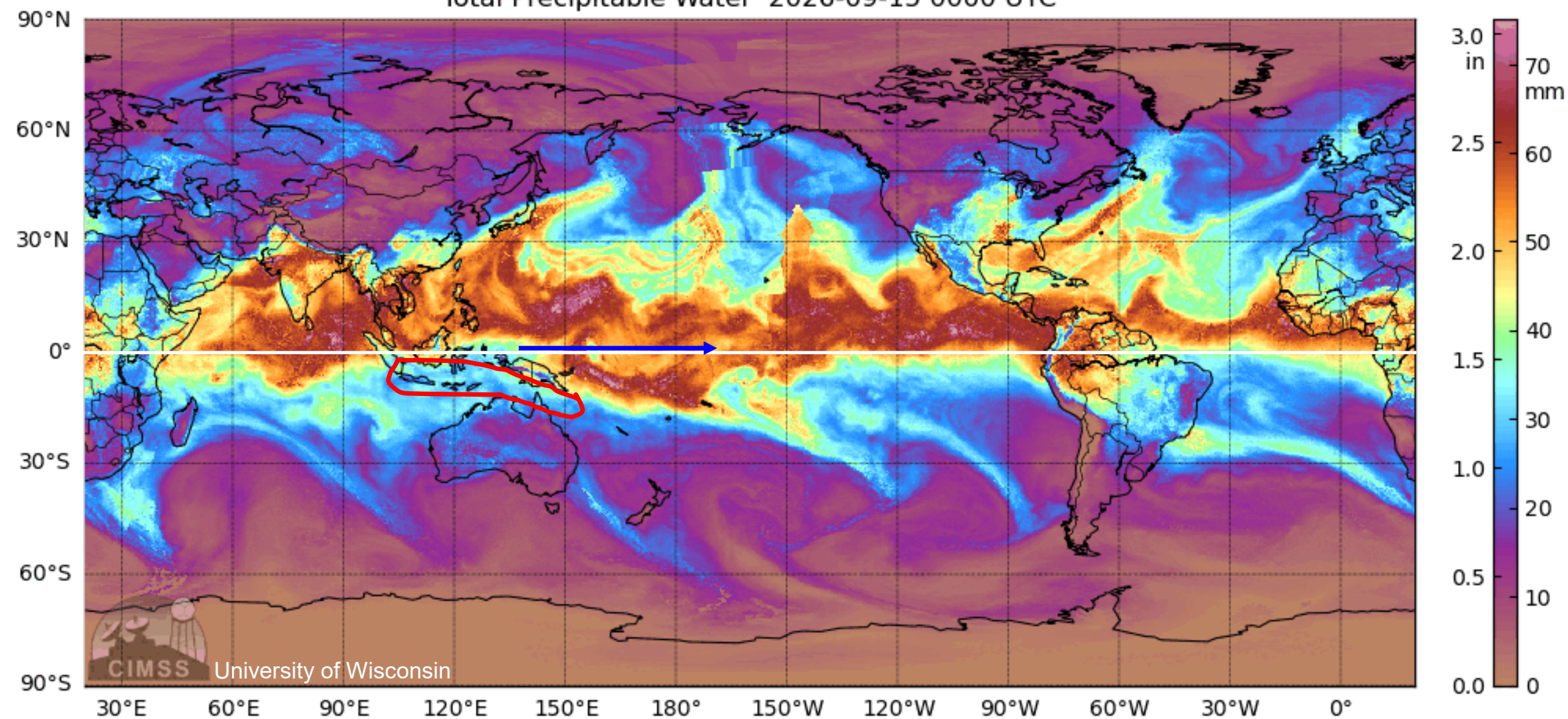




Sea surface temperature (deg C): Daily analysis for **Sun 13 Sep 2026**

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Total Precipitable Water 2026-09-15 0000 UTC



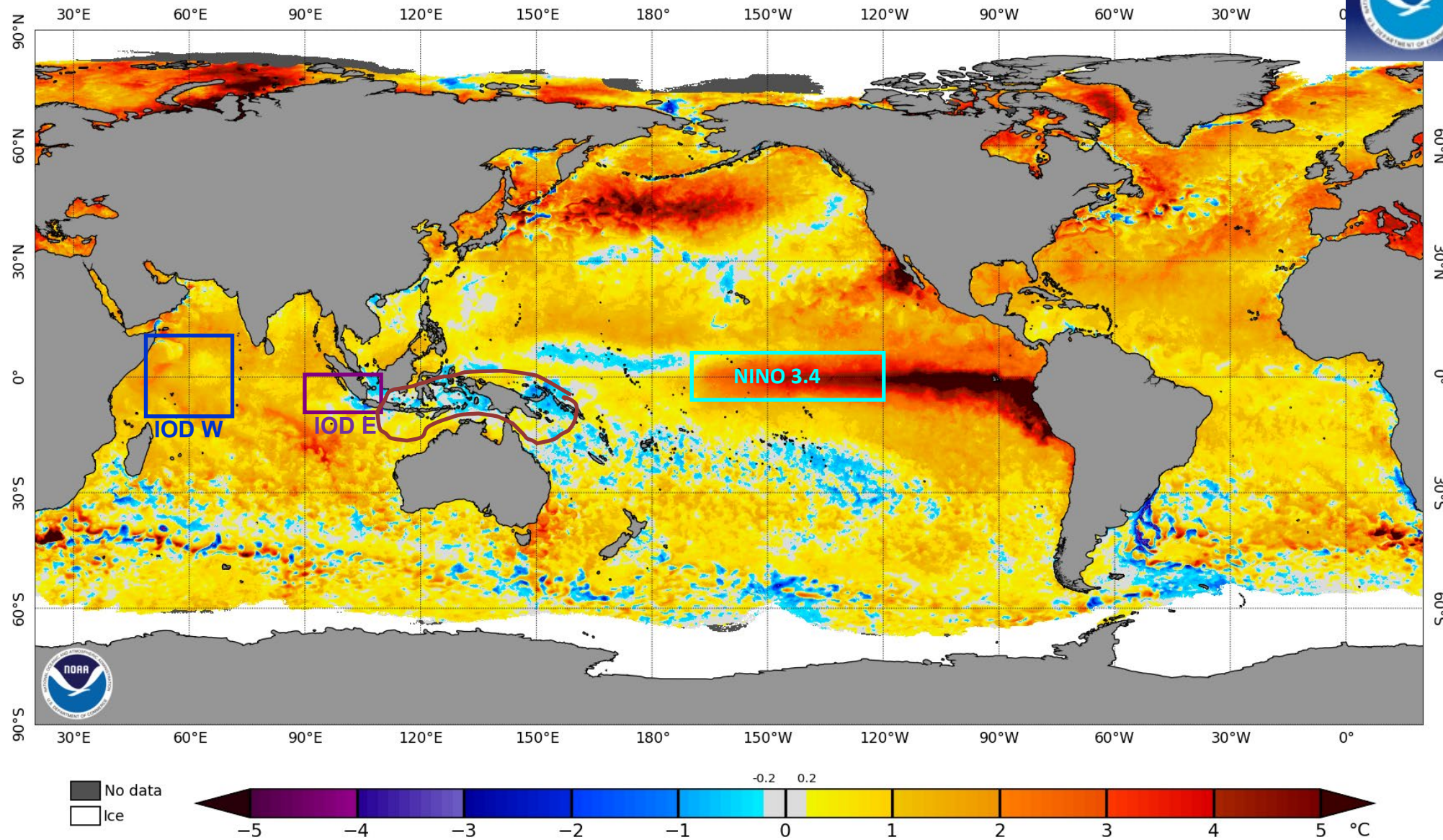
Total Precipitable Water

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



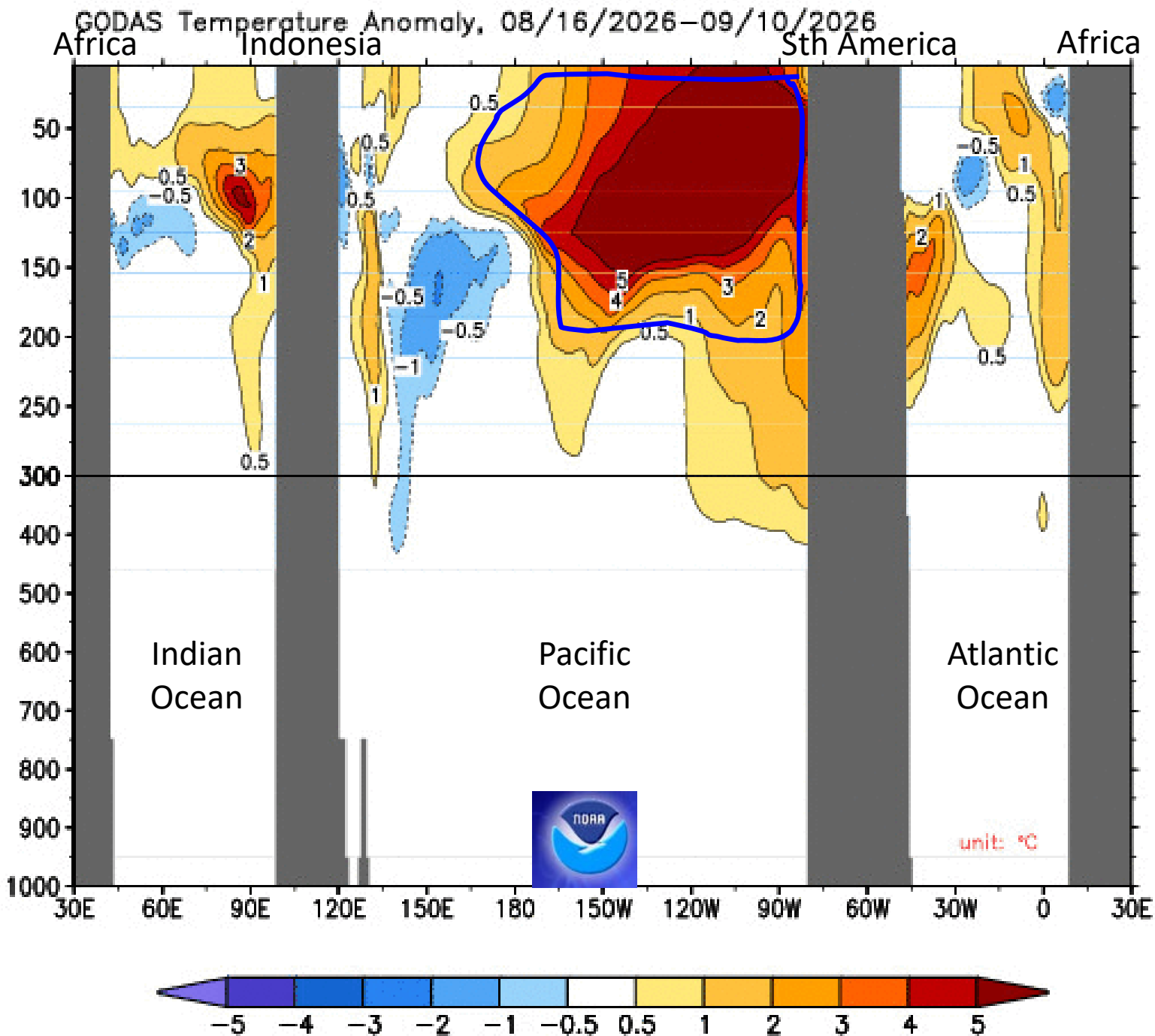
Sea Surface Temperature Anomalies

13 Sept 2026



DMI +0.65°C = “+IOD”

RNINO3.4 +2.51°C or 2.9°C = El Niño



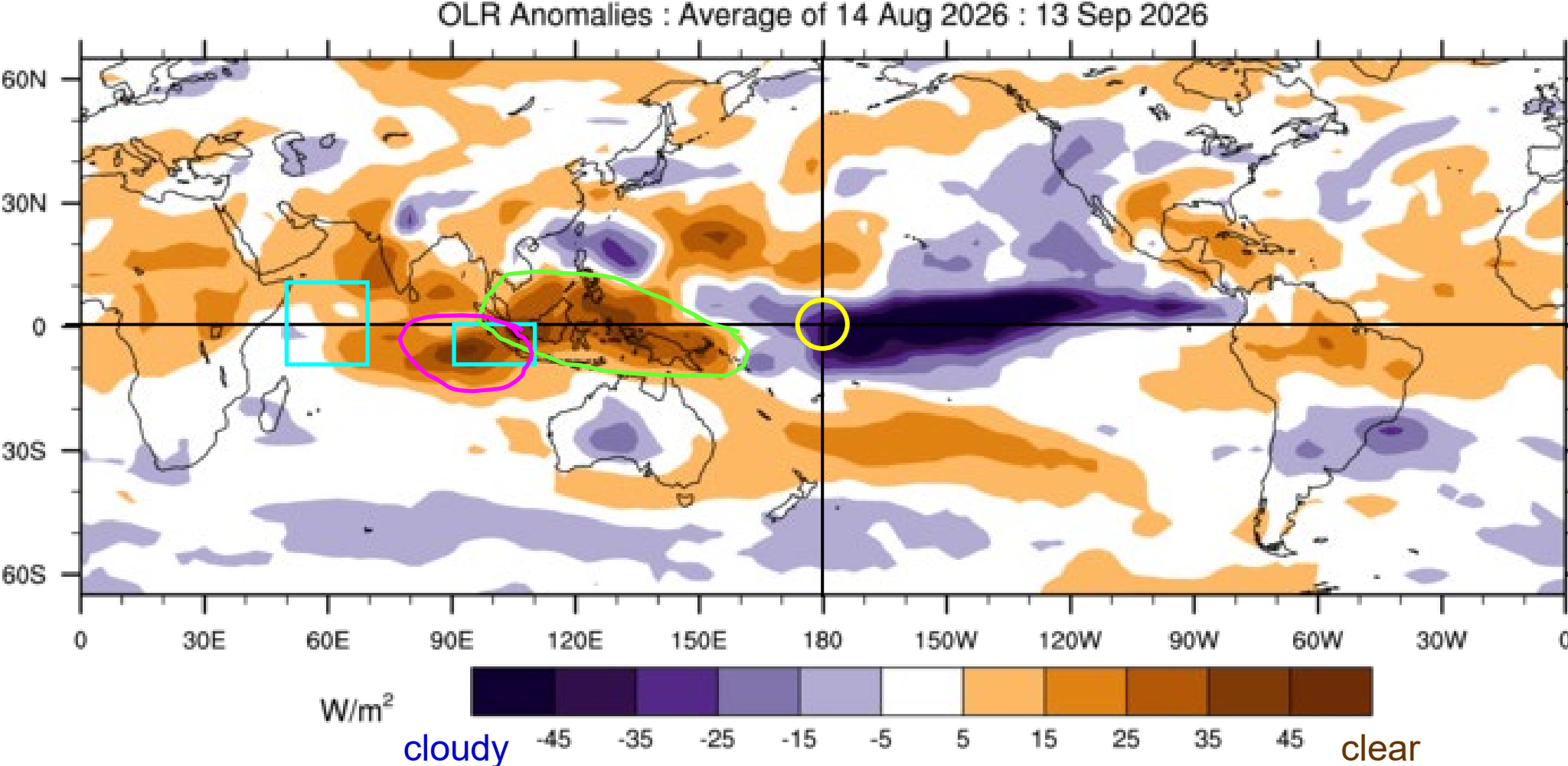
Last 30 day Sub Sea Temperature Anomaly

10 September 2026

Pacific Ocean undersea very warm. Not disappearing fast.

All that heat will come out into the atmosphere at some stage.

Indian Ocean doing nothing.



Last 30 Days
Cloud Anomaly

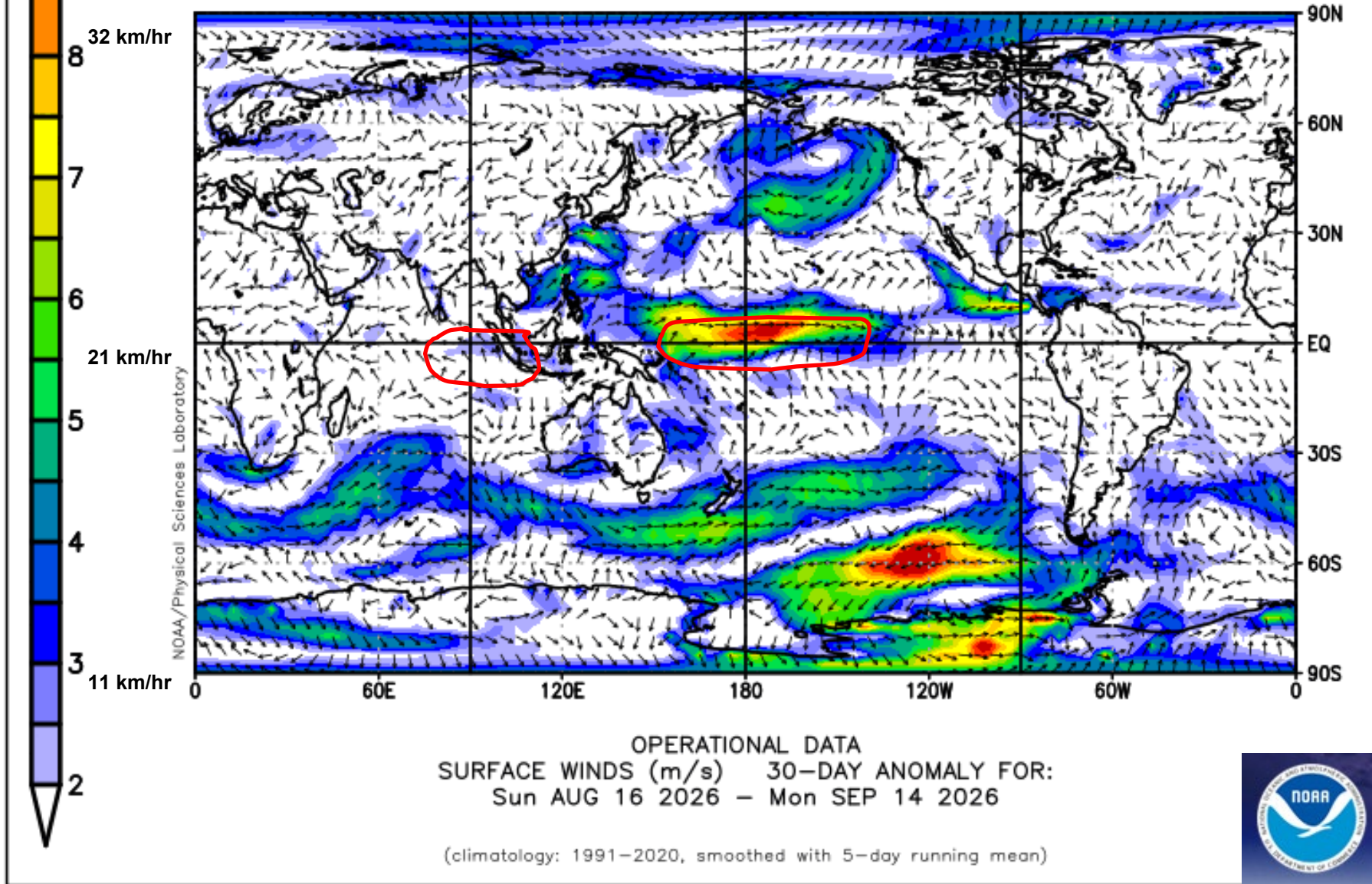
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Junction of Dateline = greater cloud = El Niño
North of Australia less cloud = El Niño
Indian Ocean = lack of cloud over warmer ocean??
Sumatran “eye” developed = +IOD like

Last 30 Days Wind Direction and Speed Anomaly

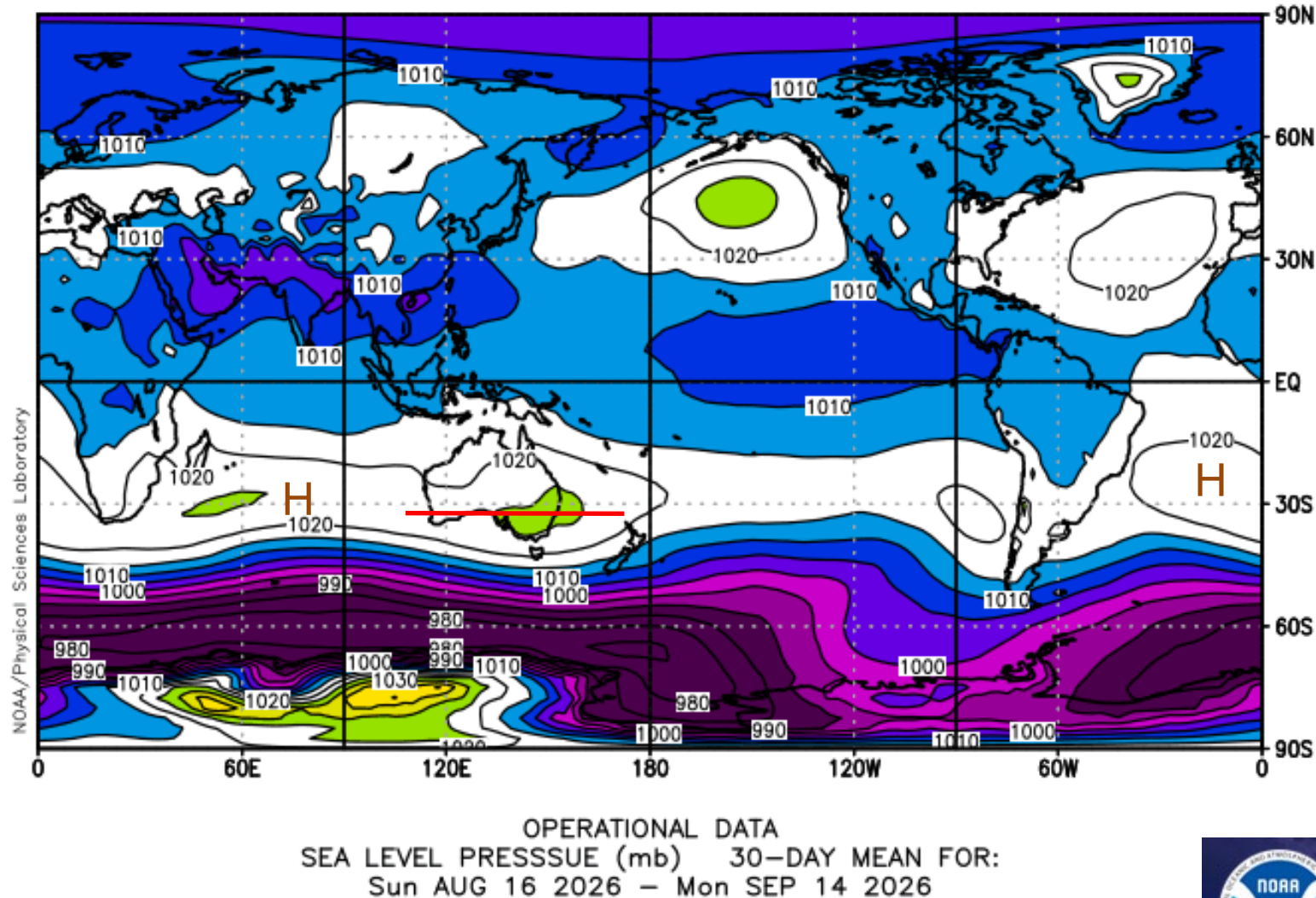
Pacific Ocean stronger westerlies, normally maintained through an El Niño. But also positioned a bit further north

Indian Ocean had a burst of stronger easterly, attempting a +IOD



Last 30 days Air Pressure

Latitude is a normal winter position, letting fronts through particularly south of the Divide, but starting to dominate over Victoria.

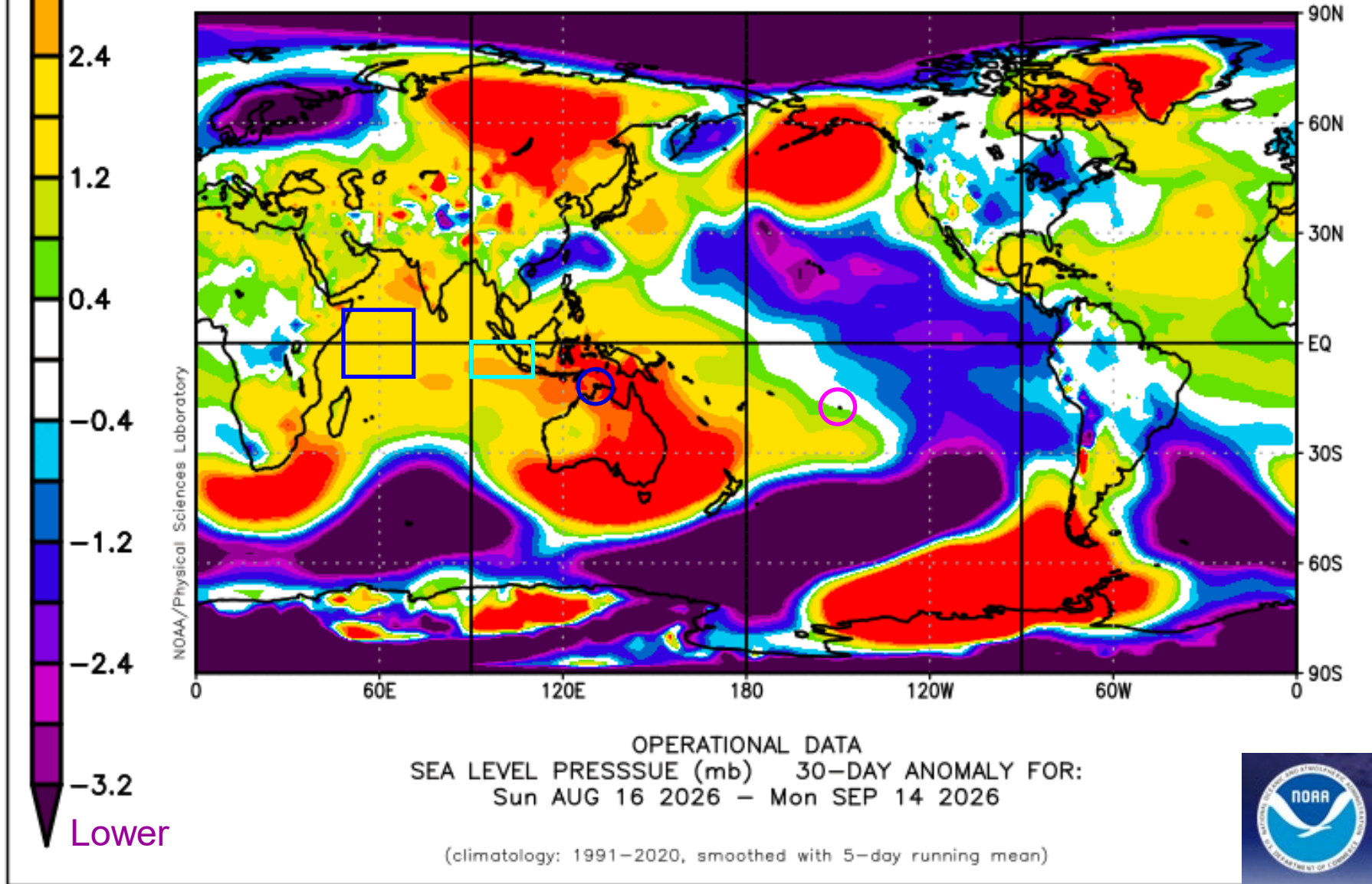


Last 30 days Air Pressure Anomaly

Pressure is higher
over Eastern Australia

Tahiti normal, Darwin
higher SOI = -17.8 = El
Niño

Pressure higher over
the whole of the Indian
Ocean??



In Summary

Pacific El Niño

Sea Surface ✗ / ✓

Ocean Depth ✓

Pressure (SOI) ✓

Winds ✓

Cloud ✓



Montañita, Ecuador

Indian +IOD

Sea Surface ✗ / ✓

Ocean Depth ✗

Pressure ✗ / ✓

Winds ✓

Cloud ✗ / ✓



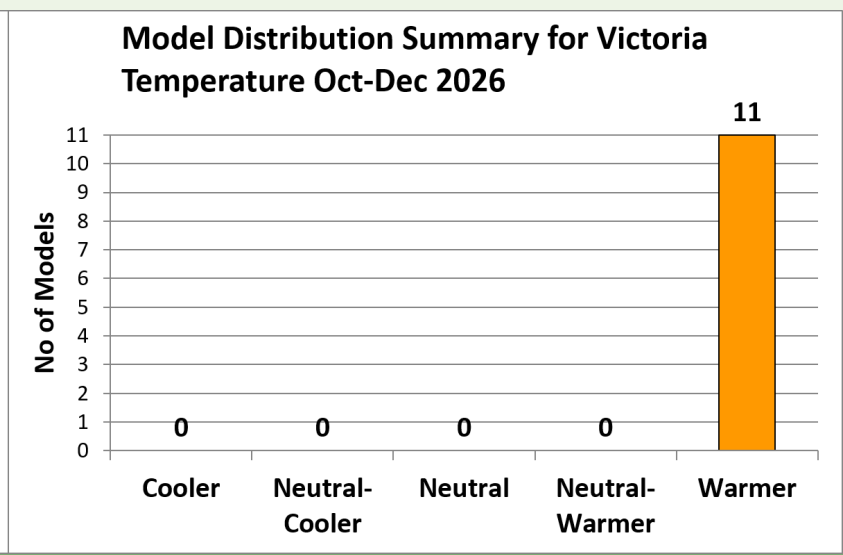
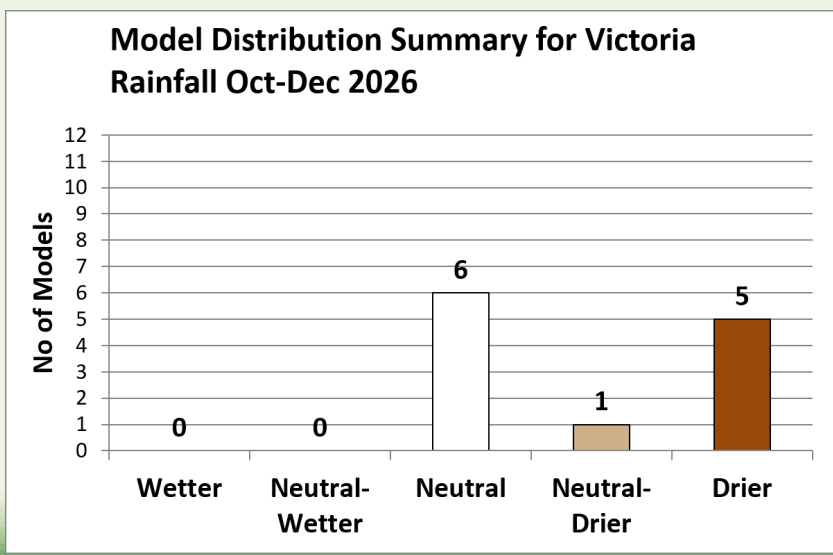
Banyak Isl, Sumatra, Indonesia

Modelled climate and ocean predictions for Victoria from September 2026 run models.

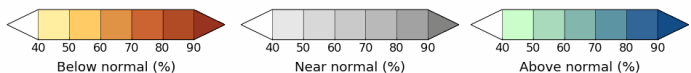
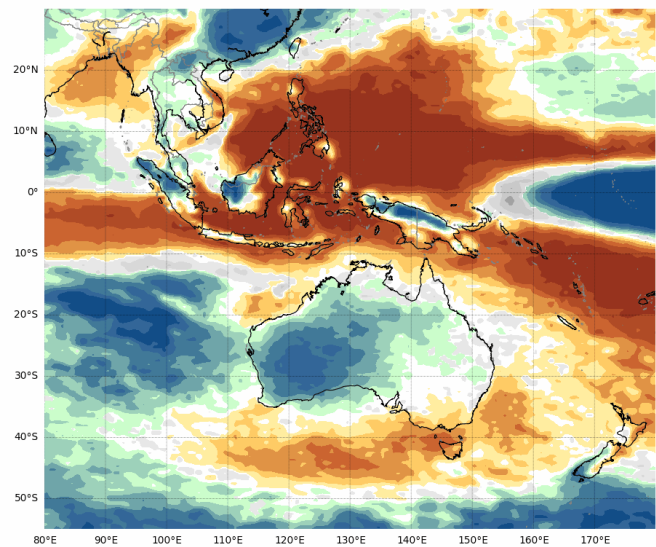
Phenomena	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	CGCM	Ensemble	Ensemble	Ensemble	Statistical
	SEAS5 ECMWF Europe	ACCESS-S BoM Australia	SINTEX-F JAMSTEC Japan	CFSv2 NCEP USA	GEOS-S2S NASA USA	EPS JMA Japan	MME BCC China	GloSea5 UKMO UK	NMME USA	C3S Europe	MME APCC Korea	SOI phase USQ/Qld Australia
Month of Run	Sept	Sept	August	Sept	Sept	Sept	Sept	Sept	Sept	Sept	Sept	August
Forecast months*	OND	OND	SON	OND	OND	OND	OND	OND	OND	OND	OND	SON
Rainfall Skill SON	Moderate	High E/ Medium W	-	Moderate / Low SW	NA	Moderate	Moderate	Moderate	Moderate	-	Moderate	-
Spring Pacific Ocean NINO3.4	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	SOI Negative
Spring Eastern Indian Ocean	Normal (weak +IOD)	Slightly cool (+IOD)	Slightly cool (weak +IOD)	Normal (weak +IOD)	Cool (+IOD)	Normal (weak +IOD)	Slightly cool (weak +IOD)	Normal (weak +IOD)	Normal (weak +IOD)	Normal (weak +IOD)	Normal (weak +IOD)	-
Spring Rainfall	Neutral	Slightly drier, neutral Mallee	Neutral	Neutral, slightly drier Coast	Slightly drier	Slightly drier	Neutral	Slightly drier	Neutral, slightly drier SW	Neutral, slightly drier SW	Neutral N, slightly drier S	Drier, neutral far E Gipps
Spring Temperature	Warmer, neutral NC	Warmer	Warmer	Warmer	Warmer E, slightly warmer W	Warmer	Warmer	Warmer	Warmer	Warmer	Warmer	-

Oct-Dec

Pacific Ocean- Warm (El Niño)
Indian Ocean- Normal (weak +IOD)
Rainfall- Neutral/Drier
Temperature- Warmer



Tercile rainfall probabilities for
October to December 2026

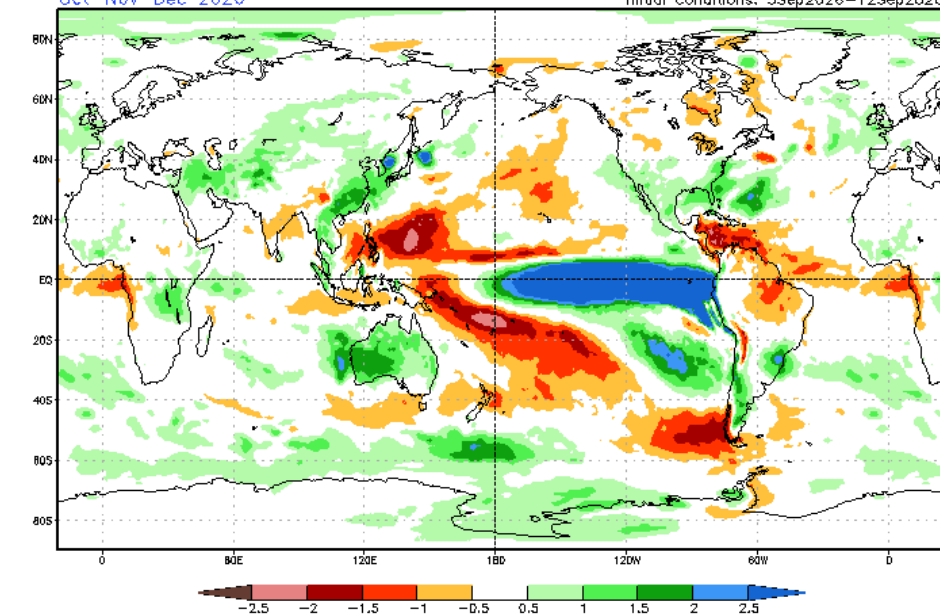


www.bom.gov.au/climate
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Model: ACCESS-S2
Base period: 1981-2018
Model run: 07/09/2026
Issued: 09/09/2026
Boundaries are not considered authoritative

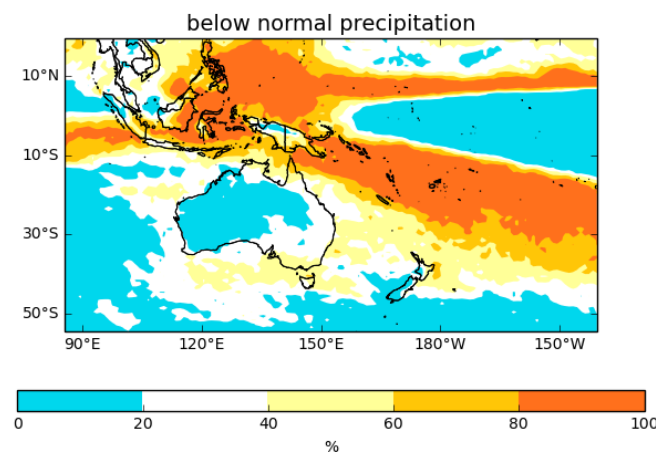
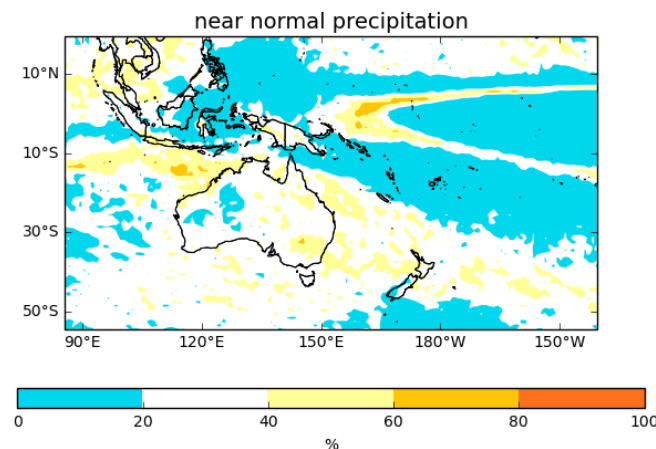
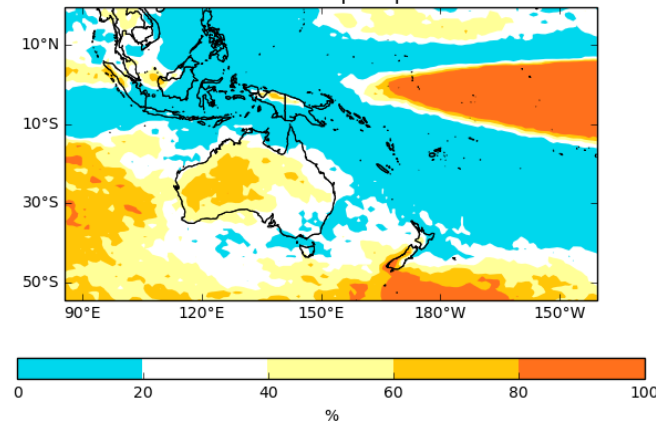
CFSv2 seasonal standardized Prec anomalies

Oct–Nov–Dec 2026

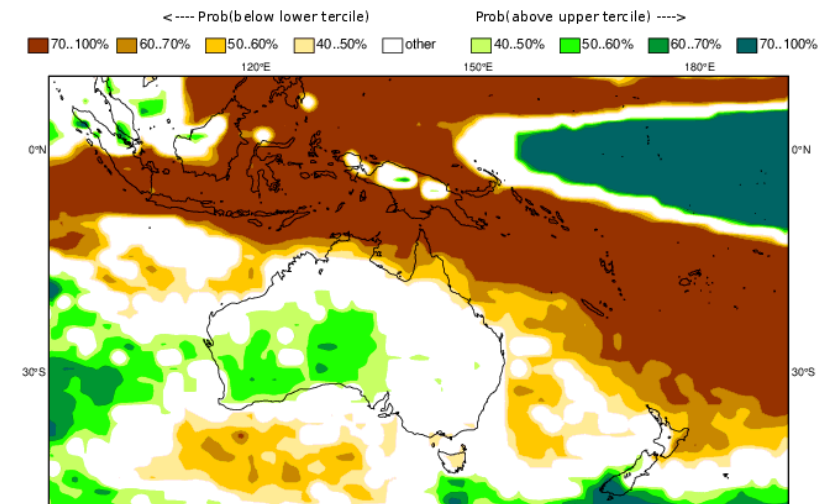
Initial conditions: 3Sep2026–12Sep2026



Probability of tercile categories Oct/Nov/Dec Issued September 2026
above normal precipitation



ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/09/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600

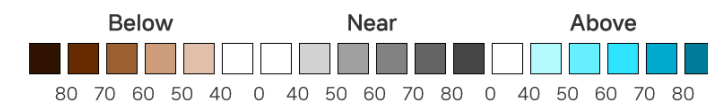
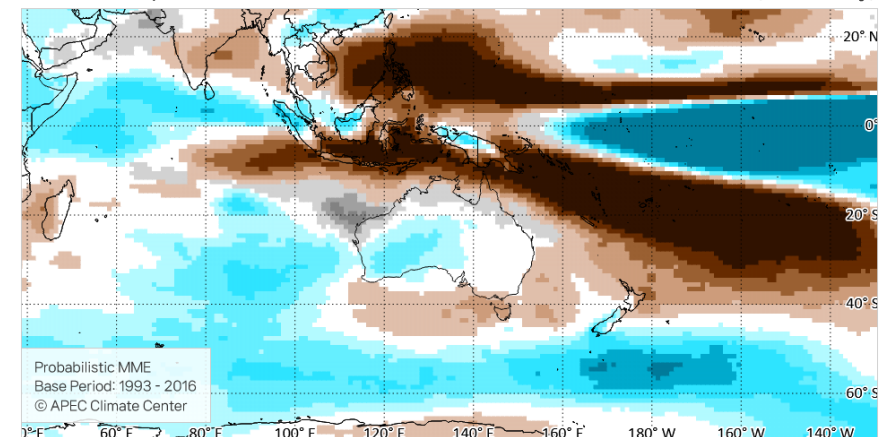


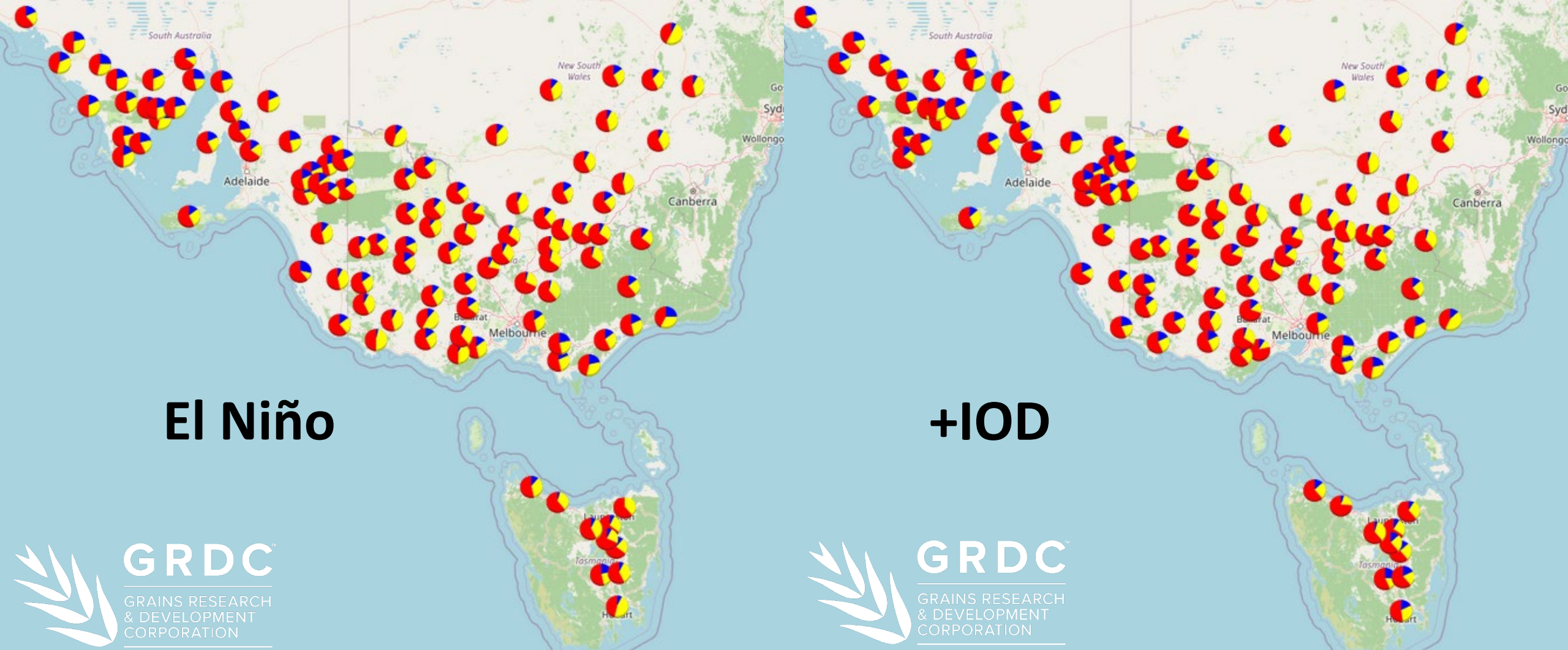
Precipitation for October 2026-December 2026



Issued: 15 Sep 2026

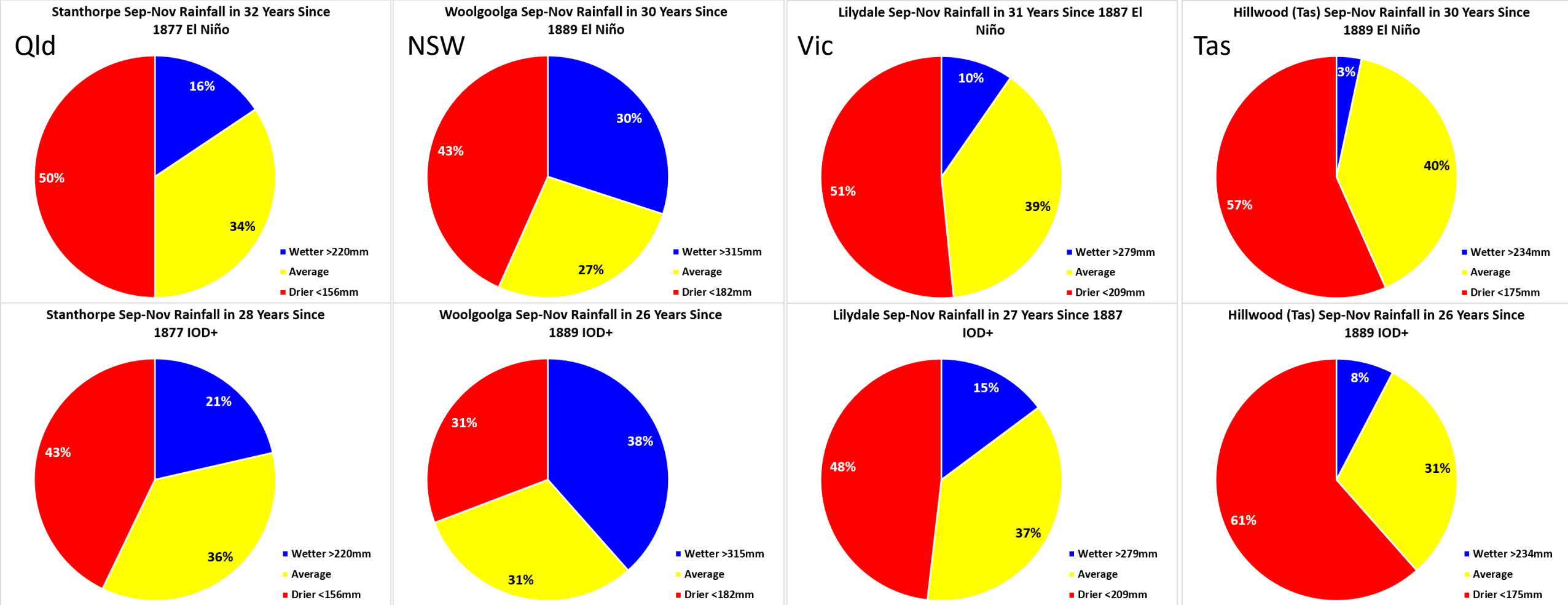
Unit: % (Probability)





Spring Rainfall

From the Local Climate Tool <https://climatetool.forecasts4profit.com.au/>



Spring Rainfall Terciles

El Niño / +IOD years

Modelled climate and ocean predictions for Victoria from September 2026 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	MME BCC China	GloSea5 UKMO UK	NMME USA	C3S Europe	MME APCC Korea	SOI phase USQ/Qld Australia
Month of Run	Sept	Sept	August	Sept	Sept	Sept	Sept	Sept	Sept	Sept	Sept	August
Forecast months*	JFM	DJF	DJF	JFM	JFM	-	JFM	DJF	JFM	DJF	JFM	-
Summer Pacific Ocean NINO3.4	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	-	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	Warm (El Niño)	-
Summer Eastern Indian Ocean	Warm	Normal	Slightly warm	Warm	Warm	-	Slightly warm	Warm	Warm	Warm	Warm	-
Summer Rainfall	Neutral, slightly drier far E	-	Neutral, slightly drier far E	Slightly wetter, neutral far E	Neutral, slightly drier E Gipps	-	Slightly drier	Neutral	Neutral	Neutral	Neutral	-
Summer Temperature	Warmer E, slightly warmer W	-	Warmer	Slightly warmer, warmer Coast	Warmer, slightly warmer far W	-	Slightly warmer	Warmer E, slightly warmer W	Warmer	Slightly warmer W, warmer E	Slightly warmer W, warmer E	-

Jan-Mar

Pacific Ocean-
Indian Ocean-
Rainfall-
Temperature-

Warm (El Niño)
Warm
Mixed
Warmer

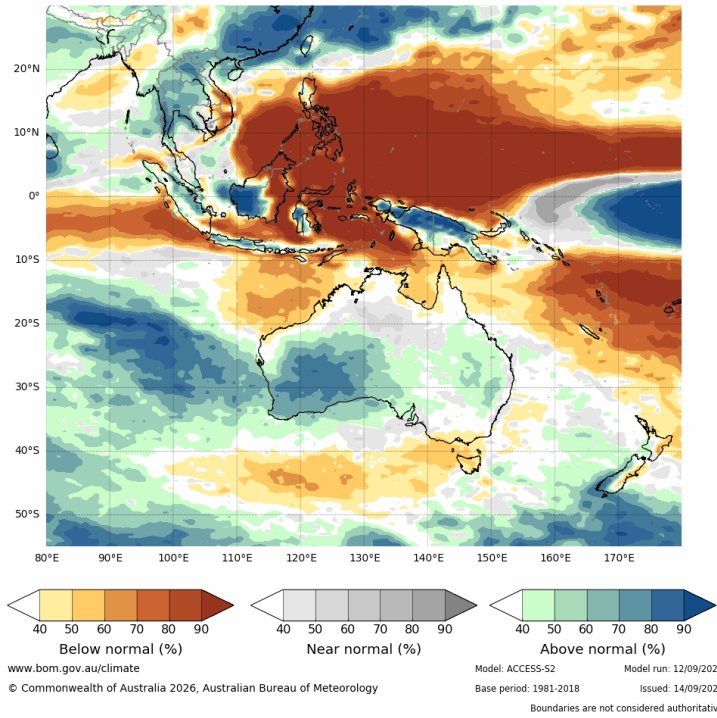
Model Distribution Summary for Victoria Rainfall Jan-Mar 2027

Condition	No of Models
Wetter	1
Neutral-Wetter	0
Neutral	7
Neutral-Drier	0
Drier	1

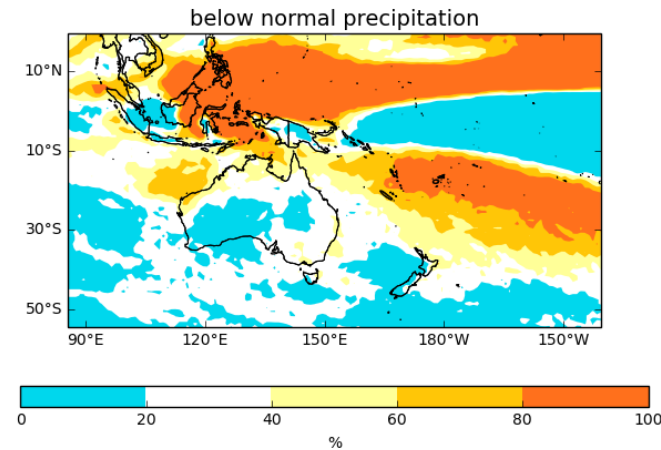
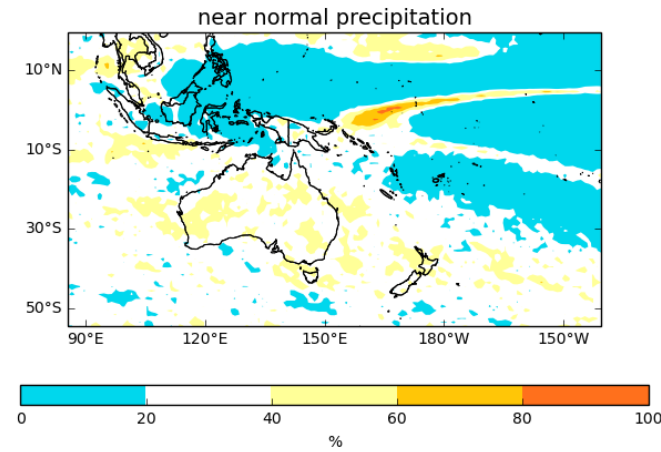
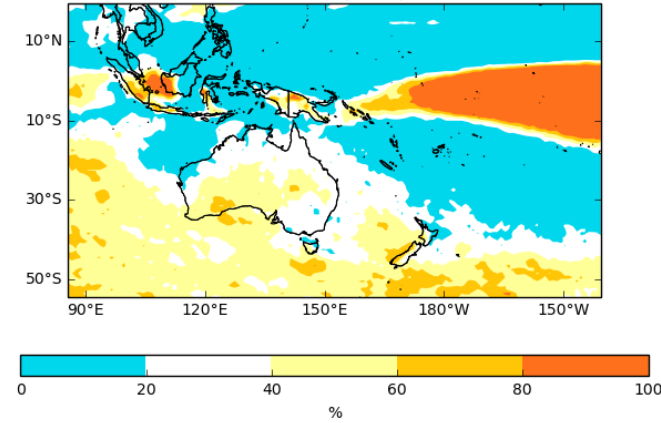
Model Distribution Summary for Victoria Temperature Jan-Mar 2027

Condition	No of Models
Cooler	0
Neutral-Cooler	0
Neutral	0
Neutral-Warmer	0
Warmer	9

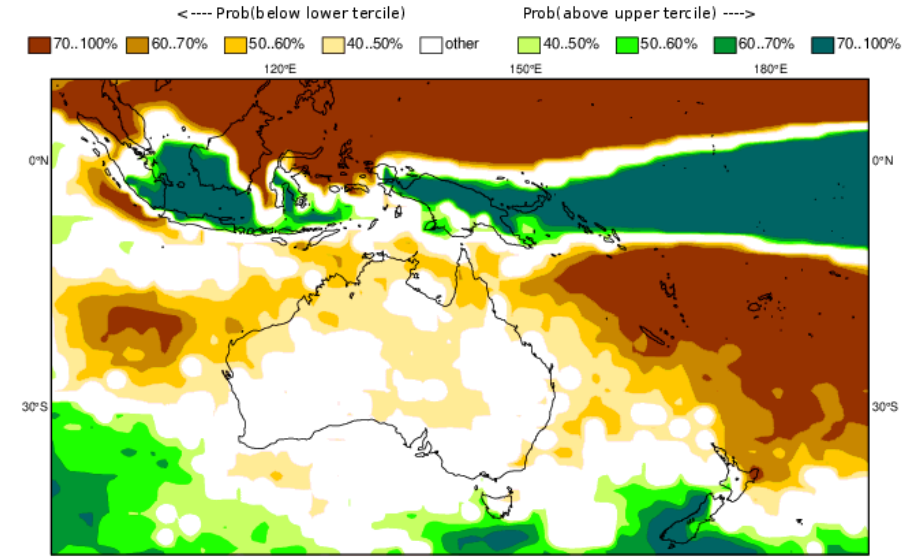
Tercile rainfall probabilities for
November 2026 to January 2027



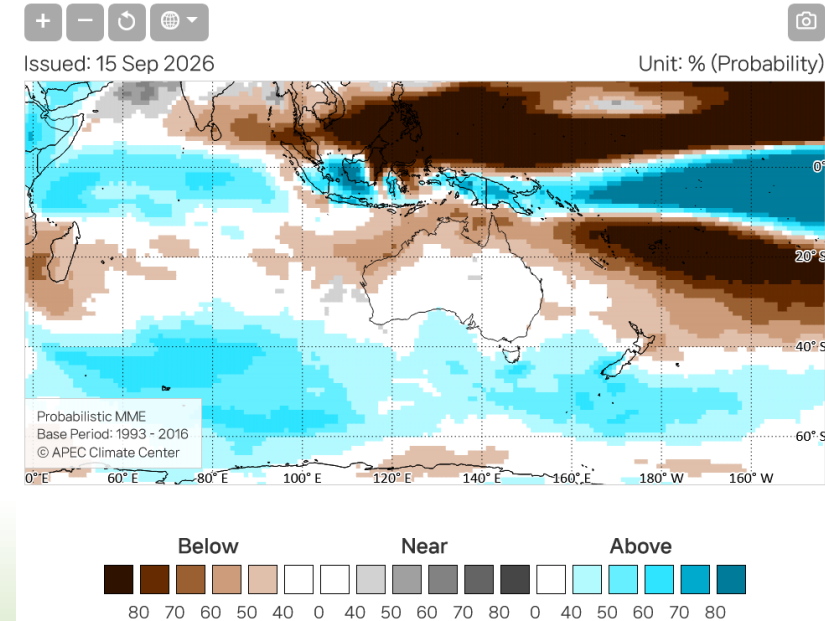
Probability of tercile categories Dec/Jan/Feb Issued September 2026
above normal precipitation

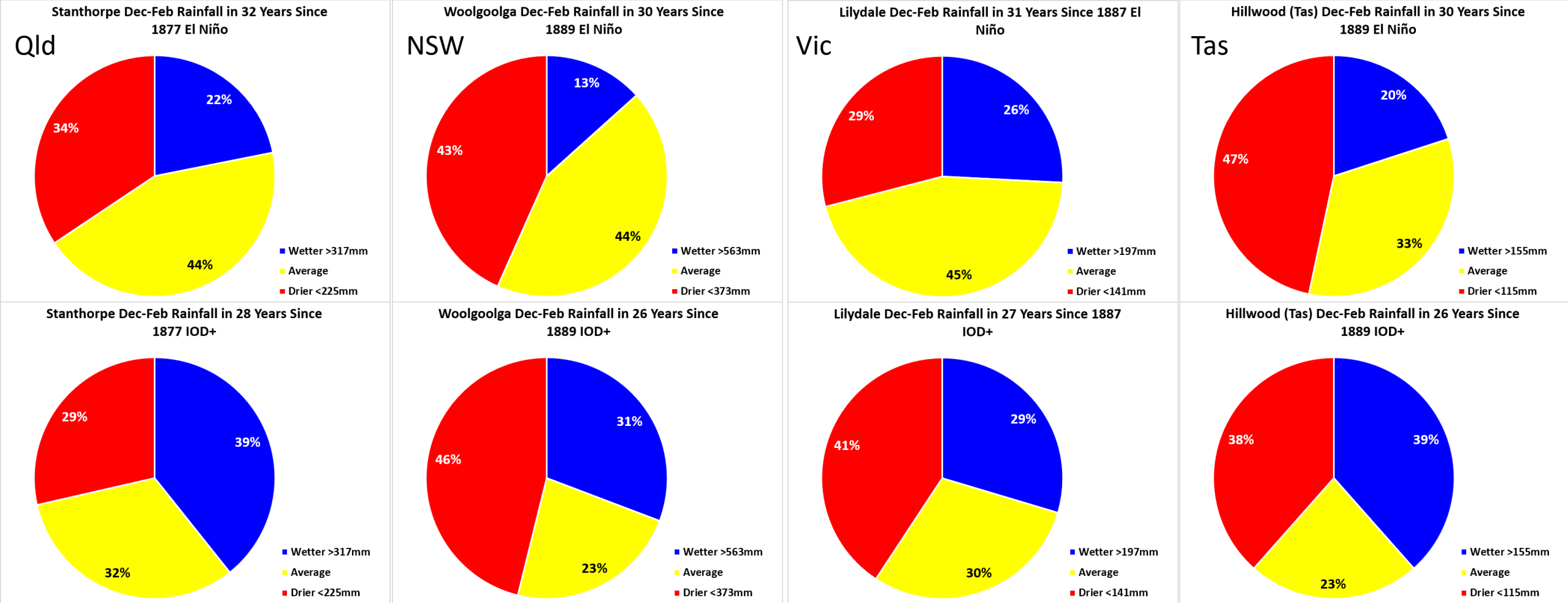


ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/09/26, climate period is 1993-2016
Ensemble size = 51, climate size = 600



Precipitation for January 2027-March 2027





Summer Rainfall Terciles

El Niño / +IOD years

Stanthorpe (Qld) 193mm avg

Year	Sep	Oct	Nov	Total	Decile	El Niño	IOD+
1972	33	238	78	349	10	Super	
1997	89	97	145	331	10	Super	
1946	114	54	83	251	8	1	1
1969	65	122	60	247	8	1	0
2023	28	19	180	227	7	1	1
1977	25	96	84	205	6	1	0
2006	43	14	130	187	5	1	1
1896	40	39	104	183	5	1	1
1902	24	58	101	183	5	1	1
2015	19	42	114	175	5	Super	
1993	39	106	28	173	5	1	0
1982	47	78	43	168	4	Super	
1941	3	34	127	164	4	1	0
1877	39	65	59	163	4	1	0
2009	21	46	91	158	4	1	0
1913	63	77	16	156	4	1	1
1994	11	65	76	152	3	1	1
1951	24	40	86	150	3	1	0
1911	41	67	41	149	3	1	0
1987	15	98	35	148	3	1	0
1905	7	89	49	145	3	1	0
1914	26	62	54	142	3	1	0
1963	6	27	106	139	2	1	1
1925	13	15	107	135	2	1	0
1965	60	32	35	127	2	1	0
1940	28	30	56	114	2	1	0
1888	27	36	37	100	2	1	0
1899	41	35	22	98	2	1	0
2002	12	31	30	73	1	1	0
1991	6	16	42	64	1	1	0
1957	5	32	11	48	1	1	1
1919	5	18	12	35	1	1	1

Decile 1

Decile 2

El Niño years

Lilydale (Vic) 239mm avg

Year	Sep	Oct	Nov	Total	Decile	El Niño	IOD+
1957	148	103	138	389	10	1	1
1993	166	98	108	372	9	1	0
2009	155	65	70	290	7	1	0
1913	49	77	147	273	7	1	1
1946	92	95	80	267	6	1	1
1905	109	102	42	253	6	1	0
1969	137	46	68	251	6	1	0
1899	51	122	69	242	6	1	0
1963	104	79	46	229	5	1	1
1991	146	40	37	223	4	1	0
1994	84	51	88	223	4	1	1
1987	58	63	98	219	4	1	0
1951	61	82	74	217	4	1	0
2023	41	129	47	217	4	1	1
1941	95	76	38	209	3	1	0
1972	57	64	77	198	3	Super	1
1997	69	45	84	198	3	Super	1
1902	109	52	29	190	2	1	1
1965	61	28	98	187	2	1	0
1940	76	29	77	182	2	1	0
1982	81	60	36	177	2	Super	1
1919	68	54	38	160	1	1	1
1896	64	33	45	142	1	1	1
1914	53	6	81	140	1	1	0
1911	59	50	29	138	1	1	0
1888	39	59	33	131	1	1	0
2002	52	56	23	131	1	1	0
1977	55	36	39	130	1	1	0
2006	44	14	56	114	1	1	1
1925	51	29	28	108	1	1	0
2015	43	19	45	107	1	Super	1

Decile 1

Decile 2

Hillwood (Tas) 217mm avg

Year	Sep	Oct	Nov	Total	Decile	El Niño	IOD+
1899	90	81	65	236	7	1	0
2002	118	81	25	224	6	1	0
2009	92	46	79	217	6	1	0
1963	100	64	52	216	5	1	1
1993	68	64	76	208	5	1	0
1905	83	85	35	203	5	1	0
1913	90	55	52	197	5	1	1
1969	70	48	74	192	5	1	0
1941	69	67	55	191	5	1	0
1957	70	51	63	184	4	1	1
1997	112	31	37	180	4	Super	1
1965	103	22	53	178	4	1	0
1951	44	47	86	177	4	1	0
1925	62	81	11	154	3	1	0
1977	24	48	75	147	2	1	0
1902	86	21	30	137	2	1	1
1994	15	44	75	134	2	1	1
1987	21	42	69	132	2	1	0
1991	60	18	54	132	2	1	0
1919	62	55	14	131	2	1	1
1982	74	24	18	116	1	Super	1
1972	36	21	54	111	1	Super	1
1946	32	21	45	98	1	1	1
1911	59	33	3	95	1	1	0
1940	39	20	34	93	1	1	0
2023	28	44	21	93	1	1	1
1896	25	45	20	90	1	1	1
2006	61	7	16	84	1	1	1
2015	31	1	48	80	1	Super	1
1914	18	5	43	66	1	1	0

Decile 1

Decile 2

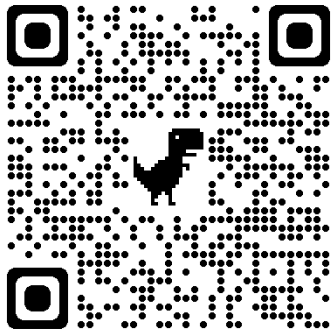
In a Berry Bowl



- **A strong El Niño exists, but it doesn't = dryness**
- **A +IOD is trying to form, early days**
- **Drier and warmer spring predictions from models**
- **History says stronger chance of drier in spring**
- **Variable rainfall and warmer summer predictions**
- **History says plan for anything in summer**



60cm Murray Cod, Eppalock, Vic
August 2026
photo credit R Mitchell



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My Rain Gauge is Busted

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THE FAST BREAKAn update on seasonal climate drivers and outlooks

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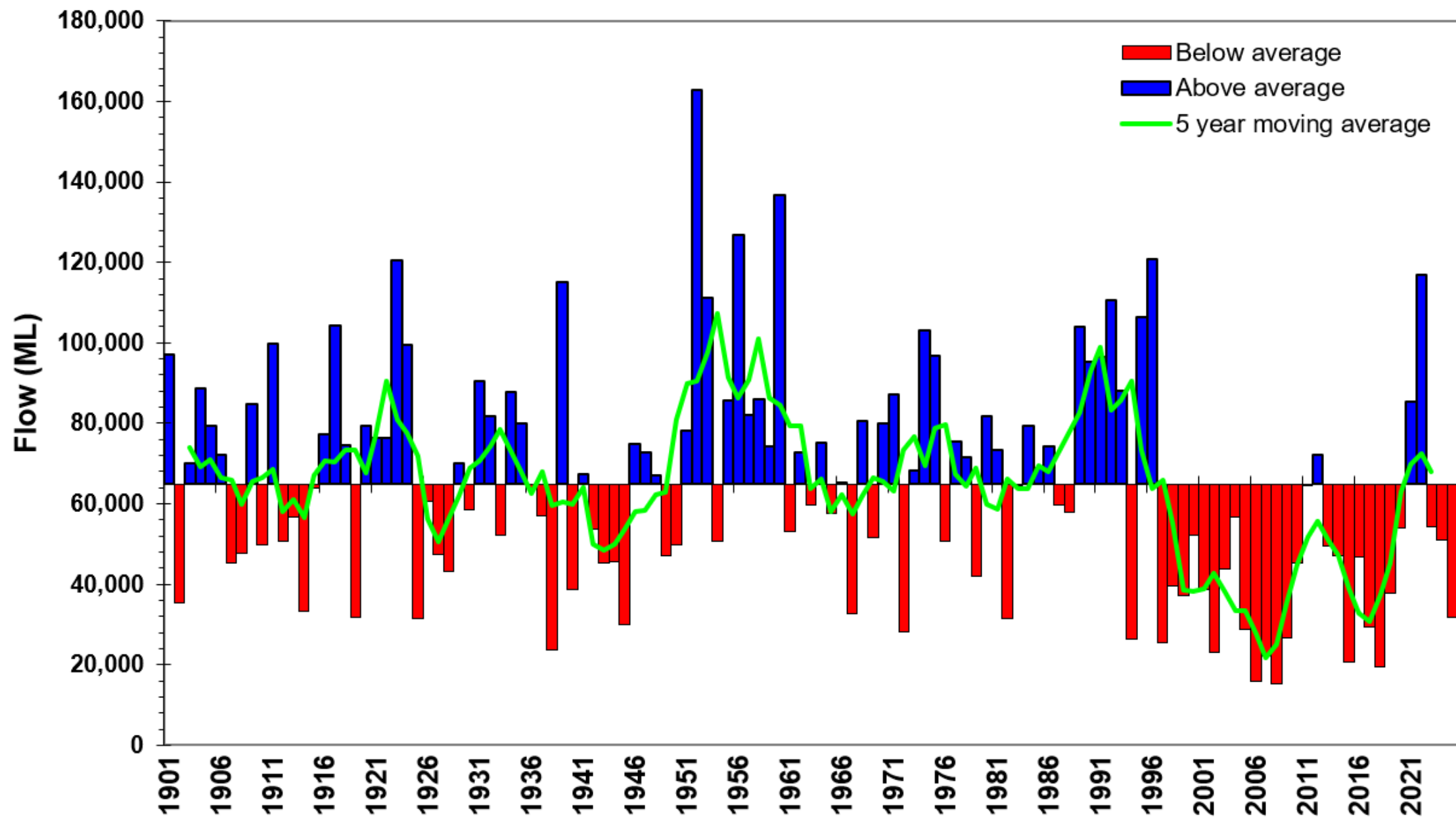
THE VERY FAST BREAKAn update on seasonal climate drivers and outlooks

Our climate update YouTube

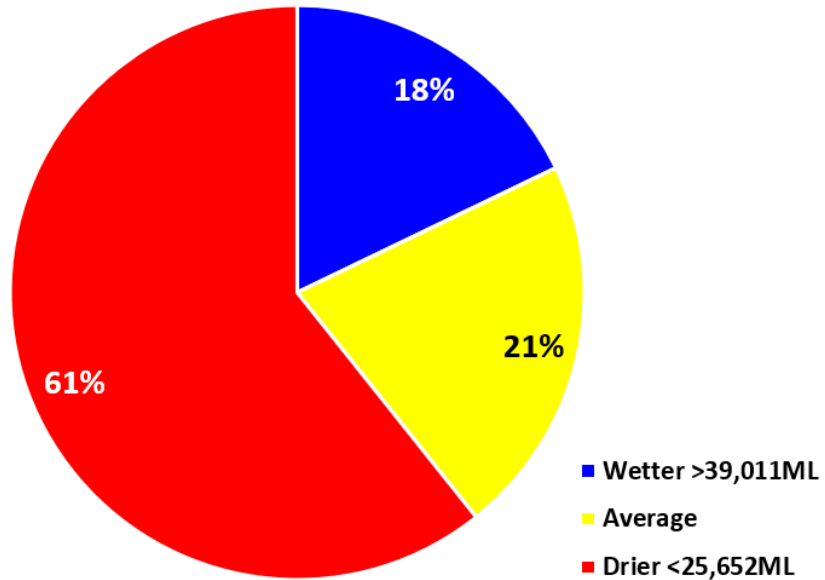


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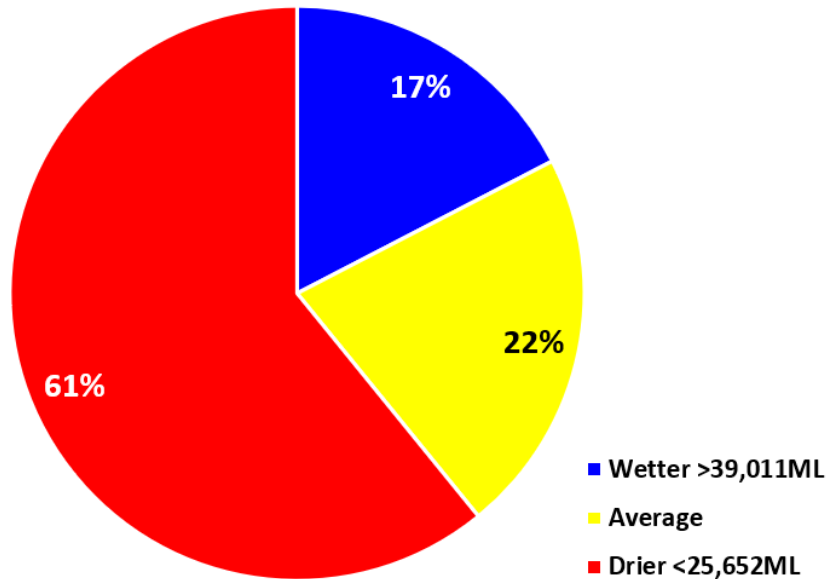
June-November flow Woori Yallock Crk



Woori Yallock Crk Sep-Nov Flow in 28 Years Since
1901 El Niño



Woori Yallock Crk Sep-Nov Flow in 23 Years Since
1901 IOD+



Spring Rainfall Terciles

El Niño / +IOD years