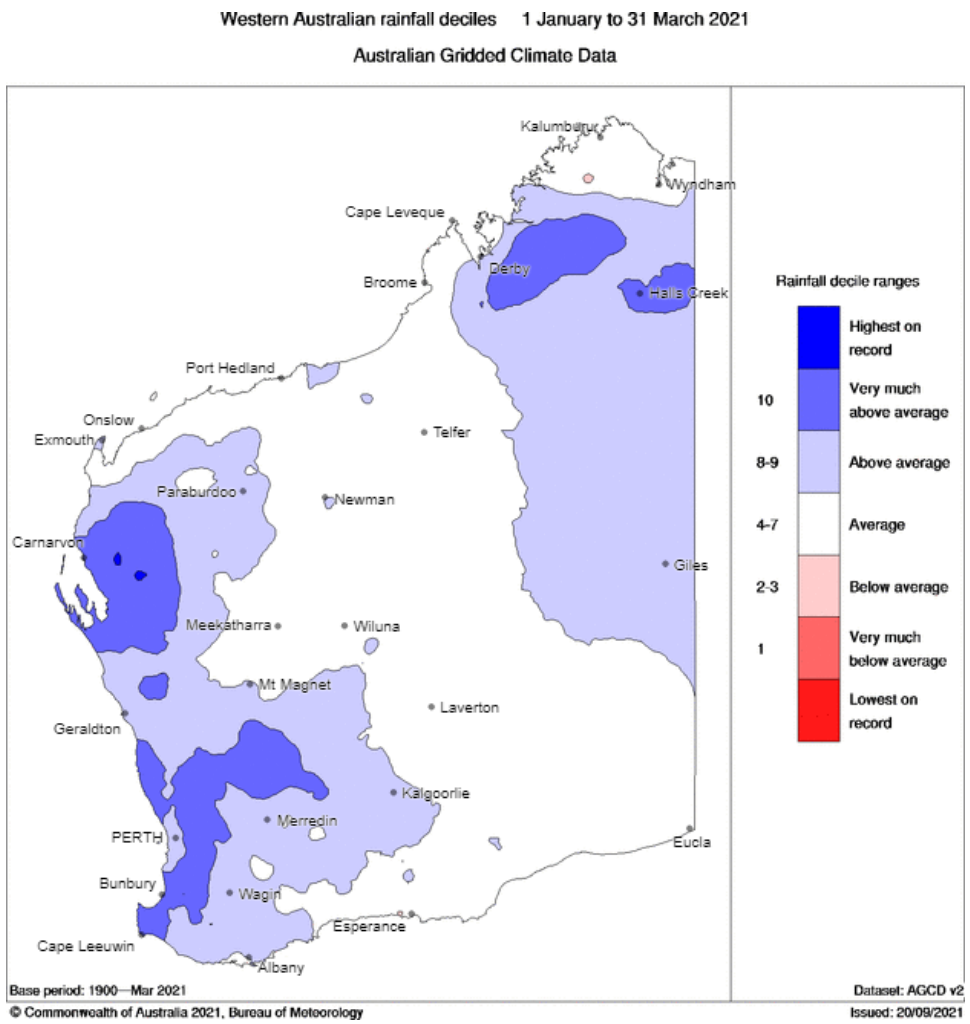
Department of
Primary Industries and Regional Development

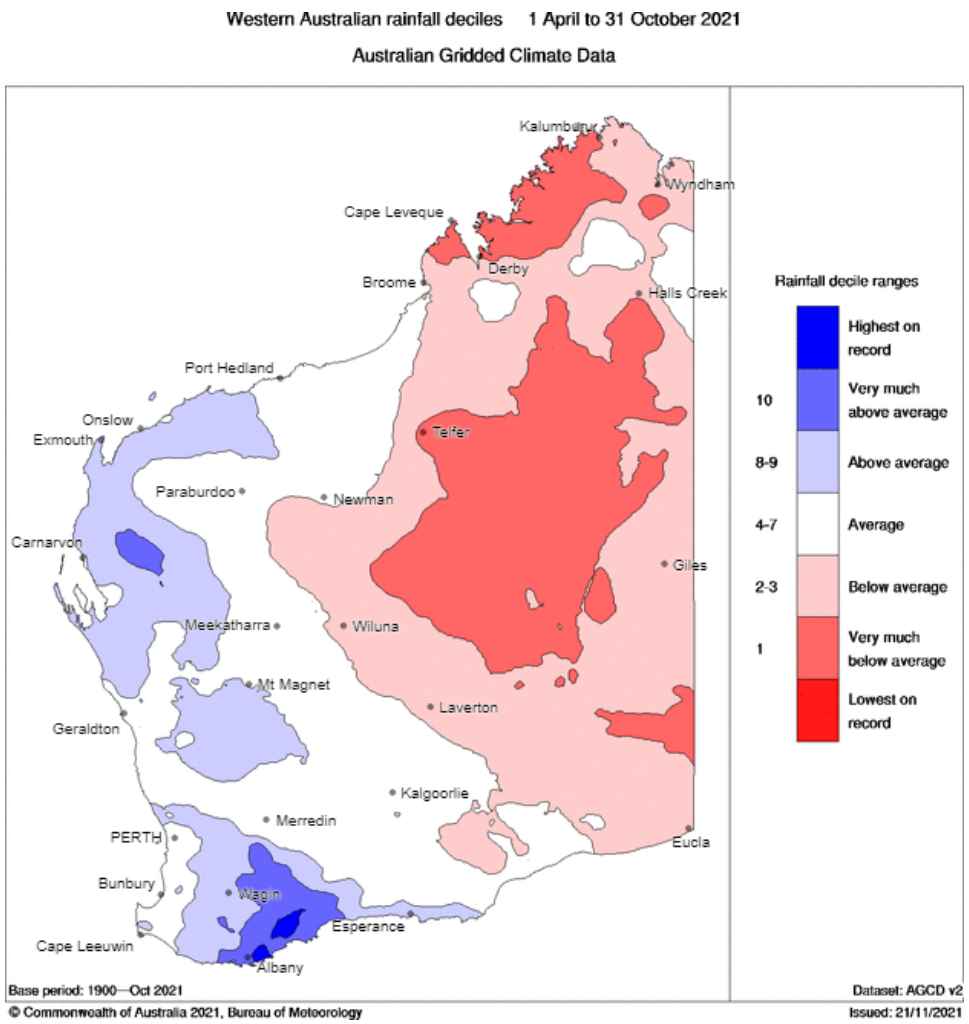
GOVERNMENT OF WESTERN AUSTRALIA

Grains Industry Day 2021

Review of season

Rainfall





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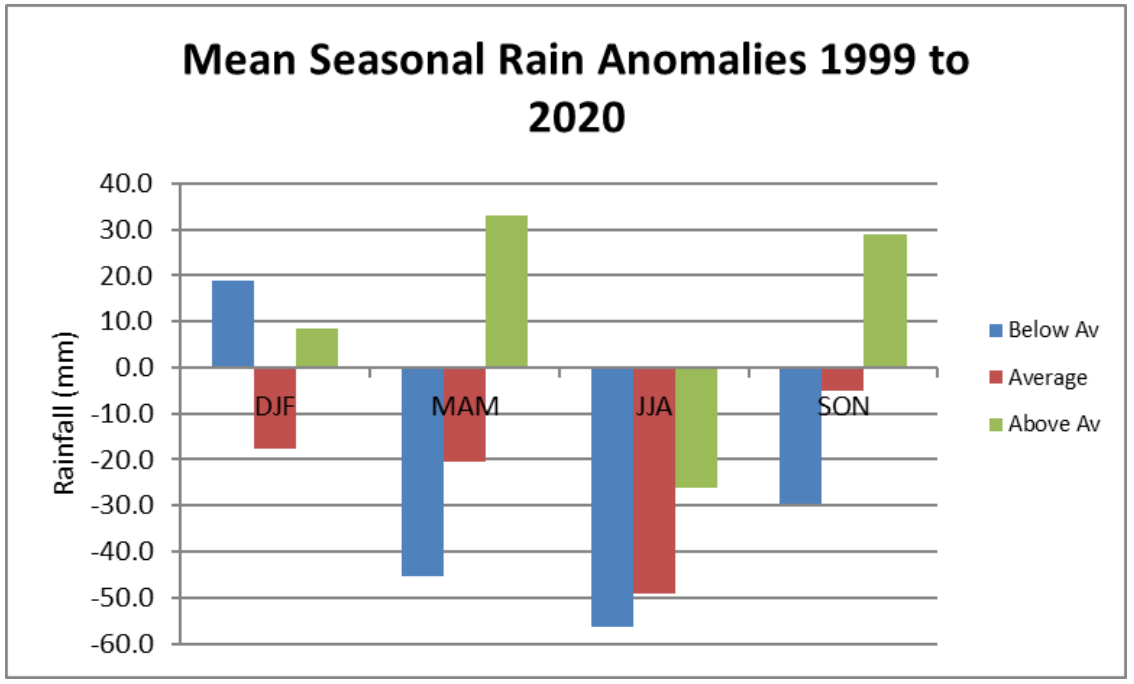
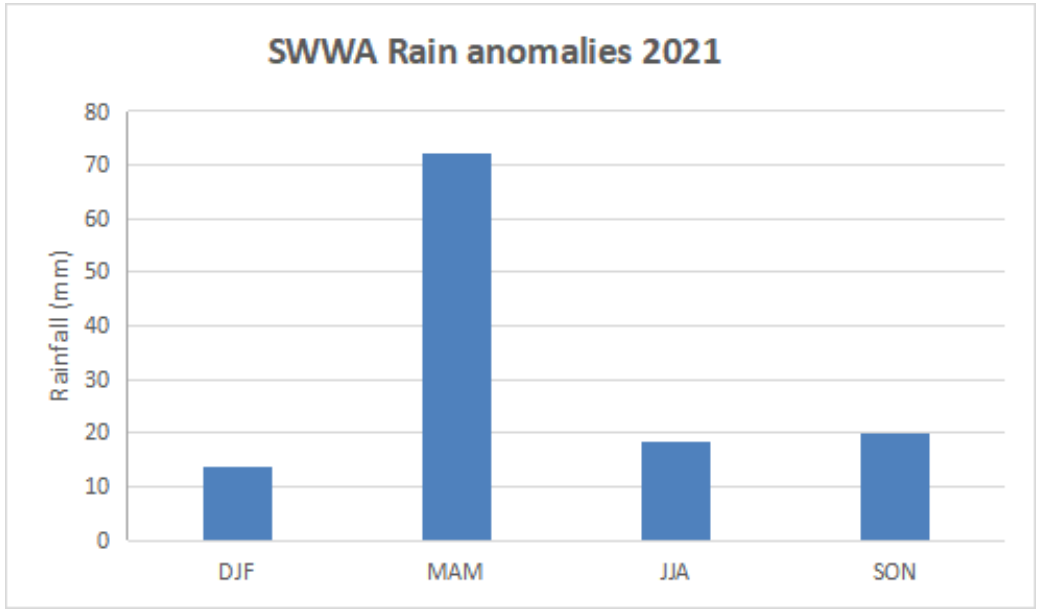
Rainfall pattern



Blue: below average wheat production
Brown: average
Green: above average



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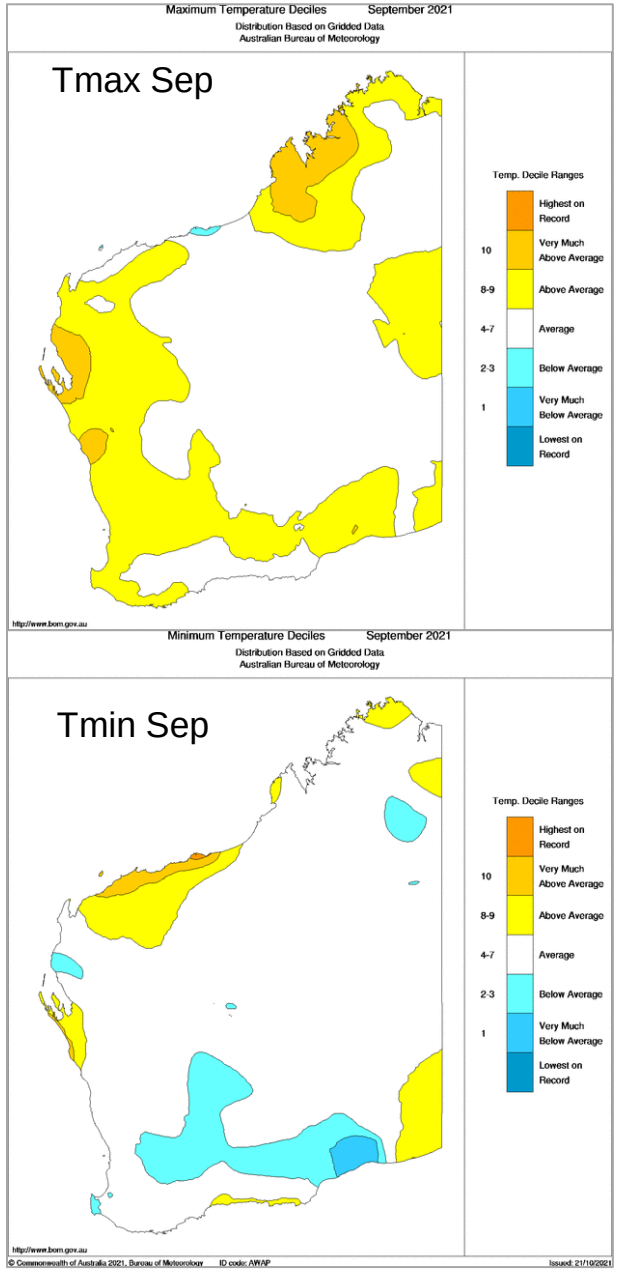
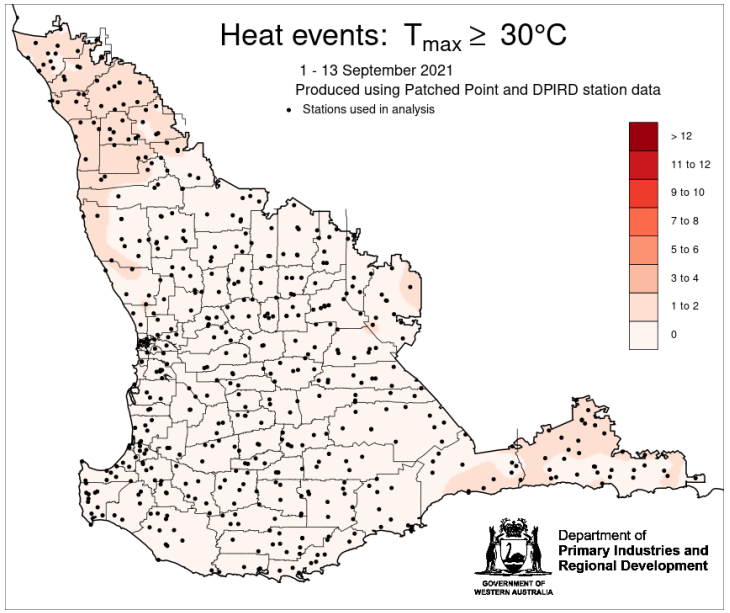
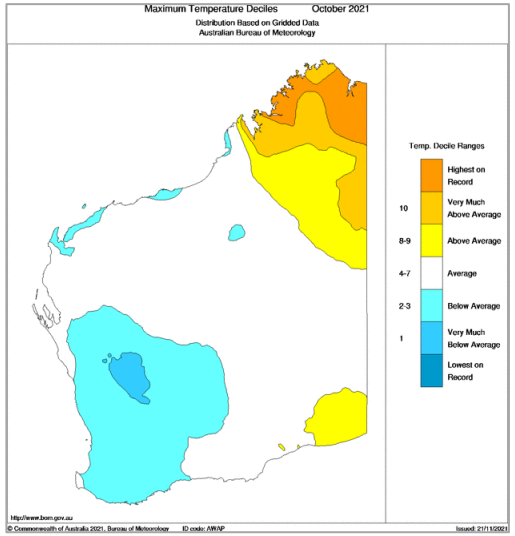
Spring temperatures 2021

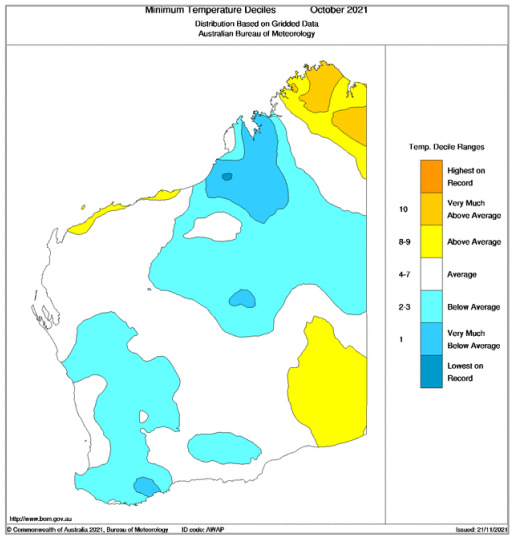
Tmax Oct

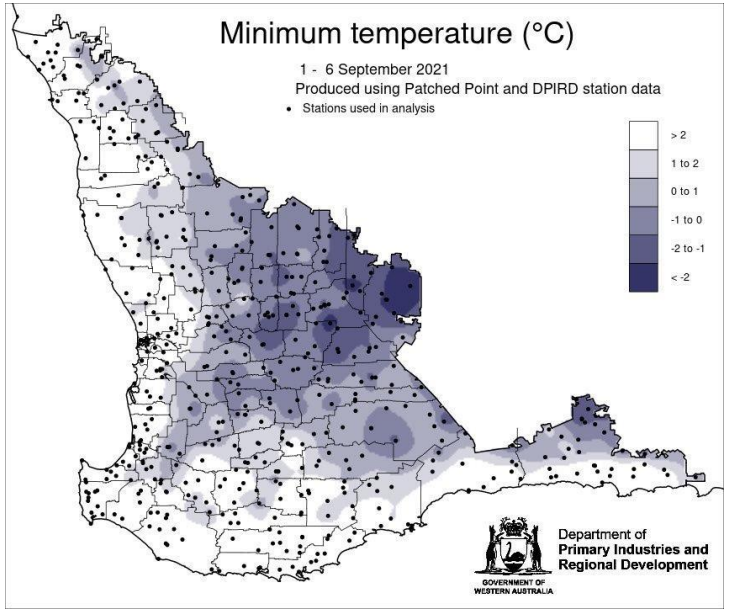
Tmin Oct

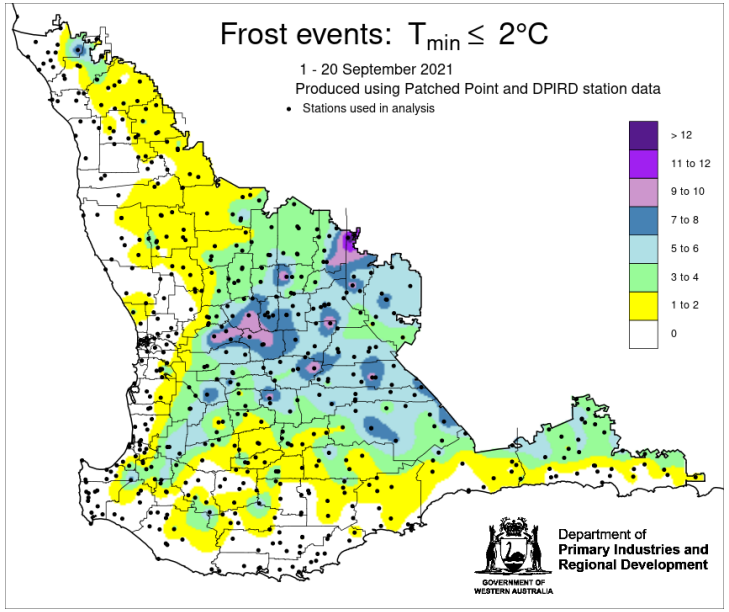












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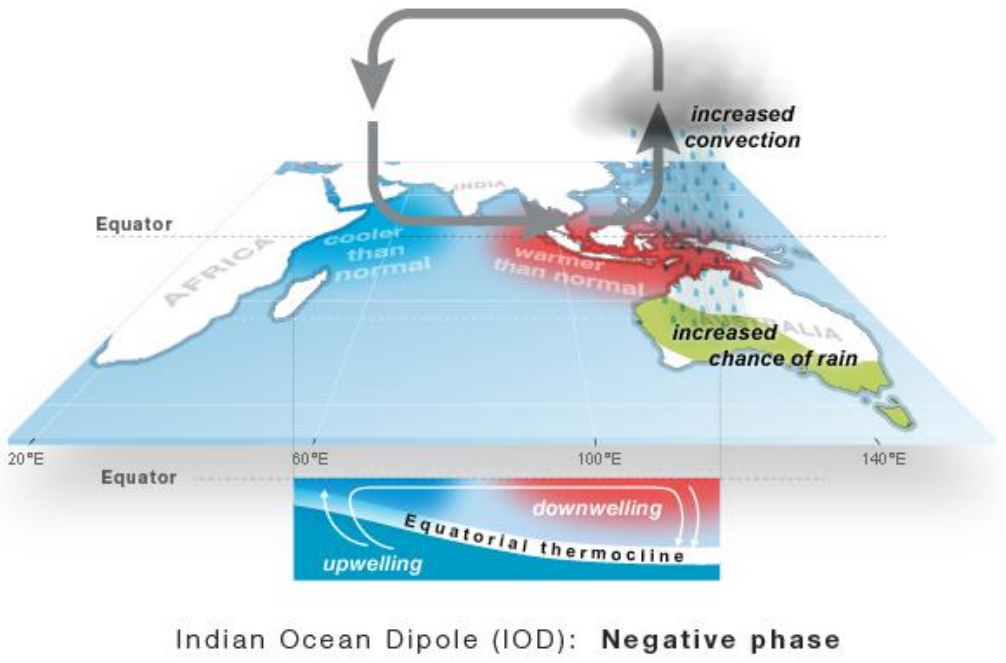
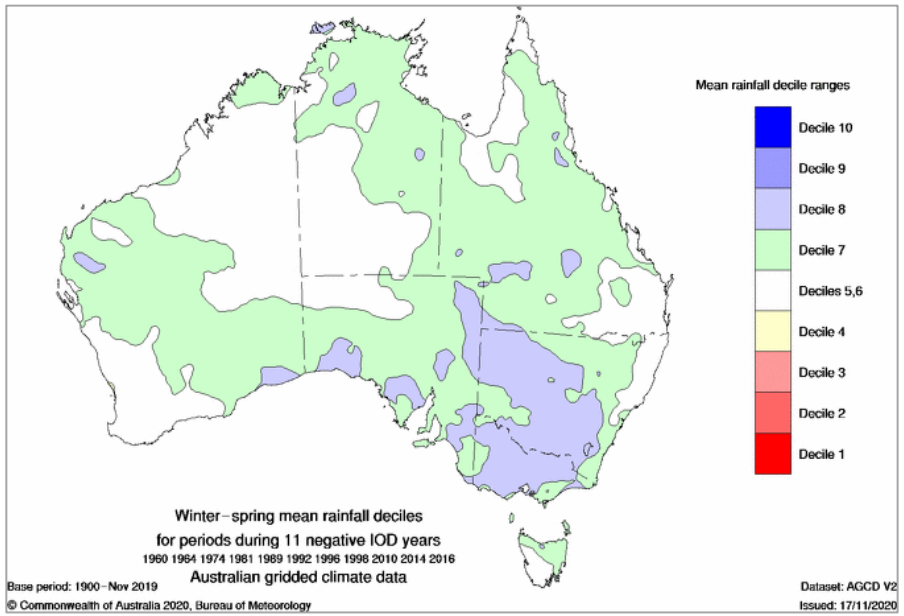
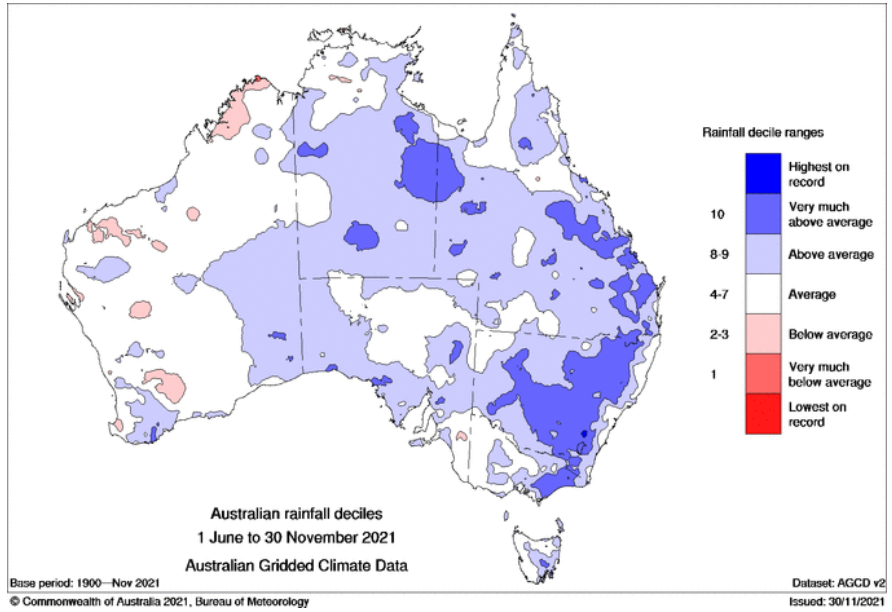
Rainfall and IOD negative



Indian Ocean Dipole (IOD): **Negative phase**





Develops around June
Strongest in August – September
Decays November onwards

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Summary

- Growing season rainfall in 2021 was above average for most of the agricultural area, especially the south.
- Rainfall pattern is consistent with a high-production year.
- Late season temperatures have been cool to mild, with reduced heat impact on crops.
- Frosts have occurred, more to the north-east than usual.
- IOD-negative event has almost finished.
- A La Nina event is underway in the Pacific Ocean.
- Summer rain outlooks for WA are mostly neutral, in contrast to eastern Australia.

Ian Foster, DPIRD

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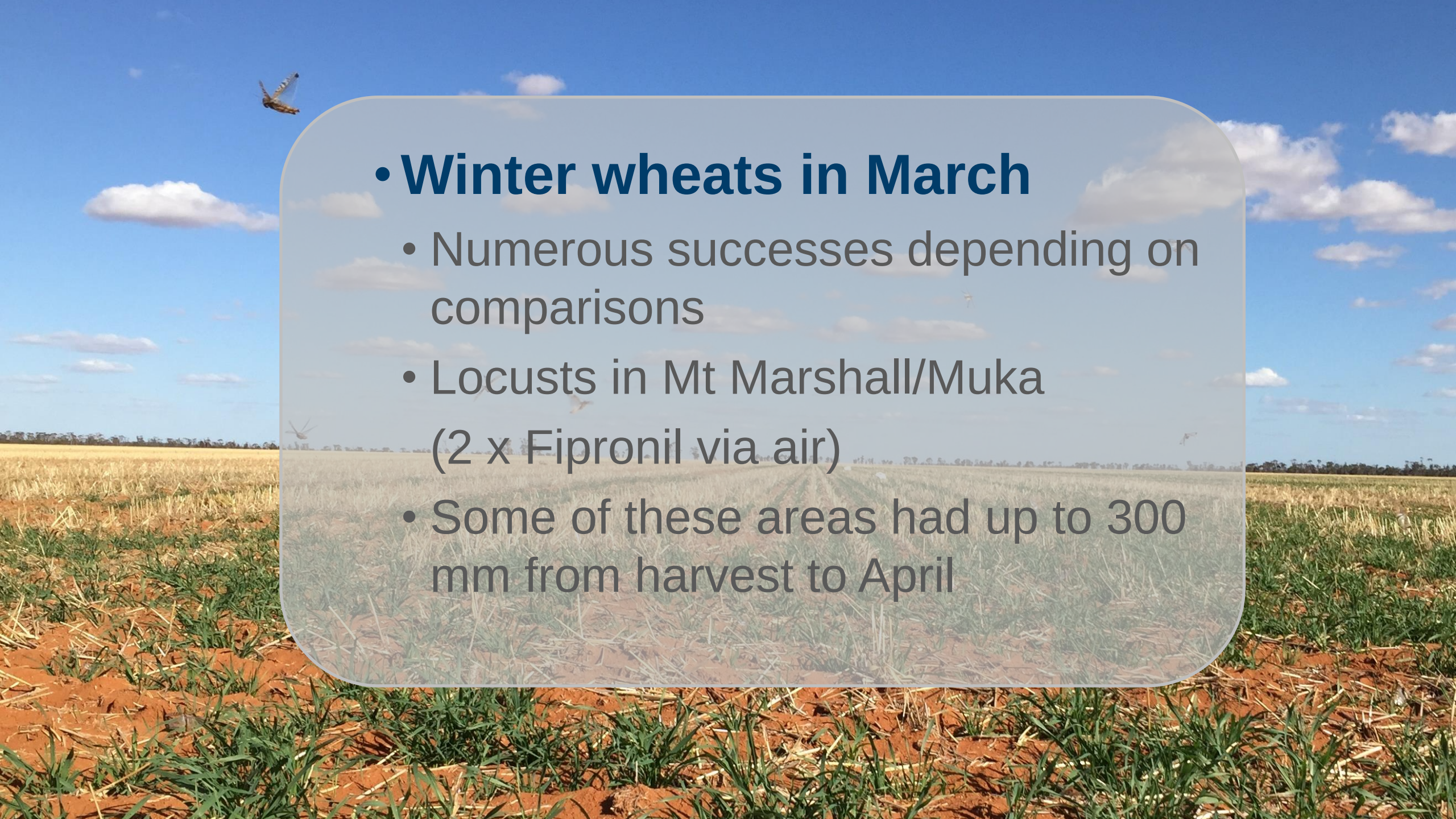
GOVERNMENT OF
WESTERN AUSTRALIA

2021 Season Overview
with ‘Kwinana East’ bias

Dion Nicol

Pre-seeding

- North-eastern areas with abundant summer-autumn rainfall
- Typically good summer weed control
- Green light for as much canola as can comfortably manage (if seed?)
- Intermittent marginal conditions for sowing canola – other crops? Winter wheat (Mar-Apr), pulses and lupins
- Early sown spring wheats in mid-late April



- **Winter wheats in March**
  - Numerous successes depending on comparisons
  - Locusts in Mt Marshall/Muka (2 x Fipronil via air)
  - Some of these areas had up to 300 mm from harvest to April

Seeding (late April + May)

- In many cases/soils, excellent conditions most of seeding
- Good pre-em results in most paddocks
- Got quite wet early May, slowed most down

Post-seeding

- Wet winter conditions – trafficability
- Nitrogen supply uncertainty
- Price of N
- Supply/use of N was high

Countryman and Farm weekly Sept 21

Frosts cruel growers' yields

Lack of spring rain hampers recovery capacity

CALLY DUPE

Eastern Wheatbelt growers devastated by frost after a promising starts to the season are starting to "come to terms" with the damage and consider their next moves.

Bencubbin, Nungarin and Westonia were some of the worst affected by frosts when temperatures dipped to 0C at the start of September, just weeks out from harvest.

after good rains in May and June.

"If you have a look at the timing of the frosts, no one really did anything wrong, and in lots of ways they did a lot right," he said.

"It is often just rotten bad luck. Farmers were doing their best and it has gone against them this time.

"The way forward is in the decisions they make from now."

at the time, but it might have saved us because any wheat sown before mid-May . . . (was affected)."

Grain Industry Association of WA crop report author Mike Lamond said the worst-hit areas were in a 50km-60km radius of Westonia, north-east of Merredin.

GIWA's September crop report slashed overall crop production in

Frost and dry challenges the finish

By MOLLIE TRACEY

LACK of finishing rainfall in graingrowing regions has been the key pinch for this season's crop, according to independent agronomist Michael Lamond.

"You could say the State is in two halves – the top half, particularly the central area which had really bad frost and was dry and further north was dry, but as you go south they've had a bit of rain, cooler temperatures and things have improved," Mr Lamond said.

Over the past week or so, some light showers were received across the agricultural region, however the majority of the rainfall was closer to the coast and

❒ Farmer Ruth Parkhouse, South Yelbeni, who took this photograph, said her crops were showing great potential but were hindered by lack of rain in spring and some frost.

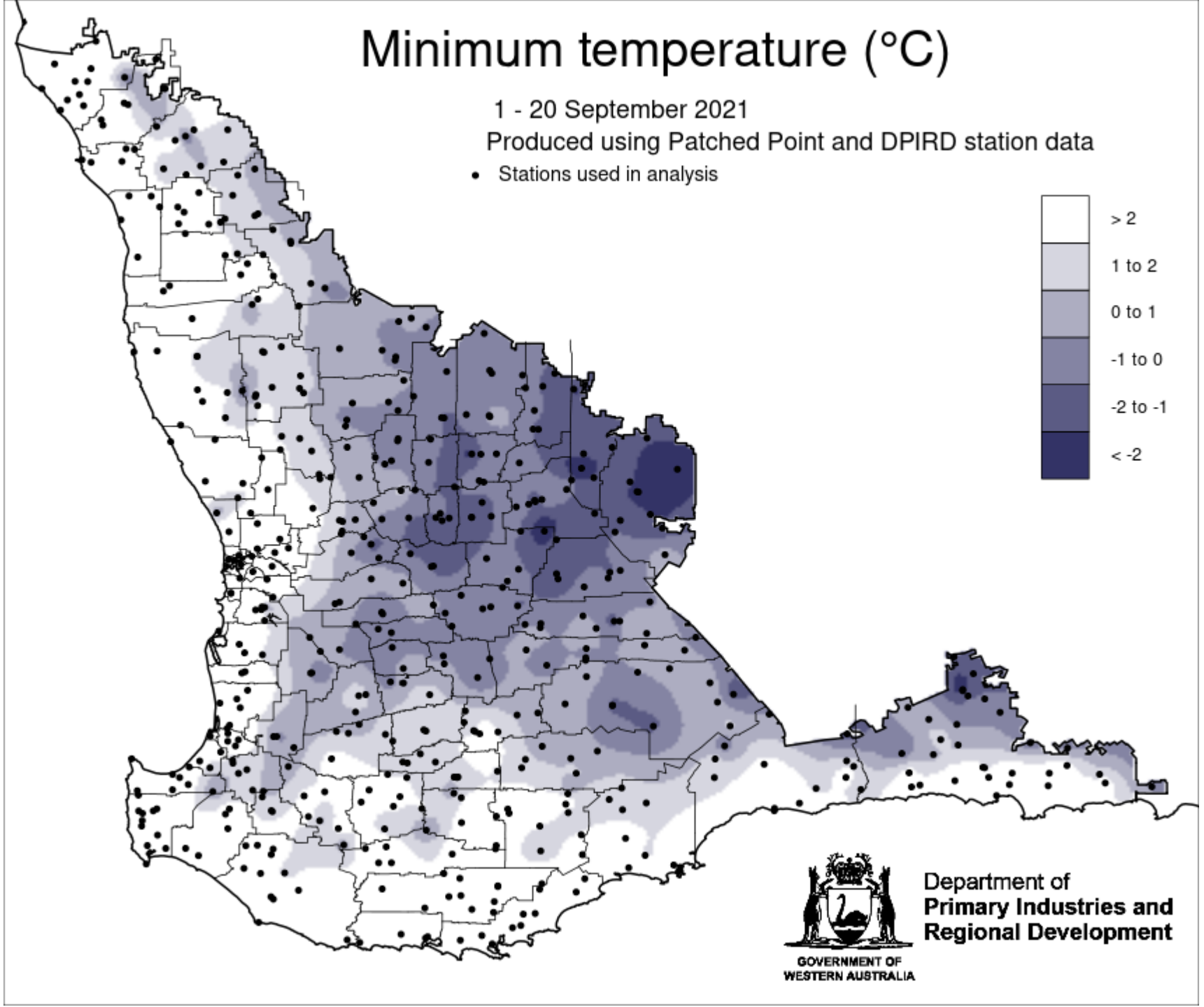
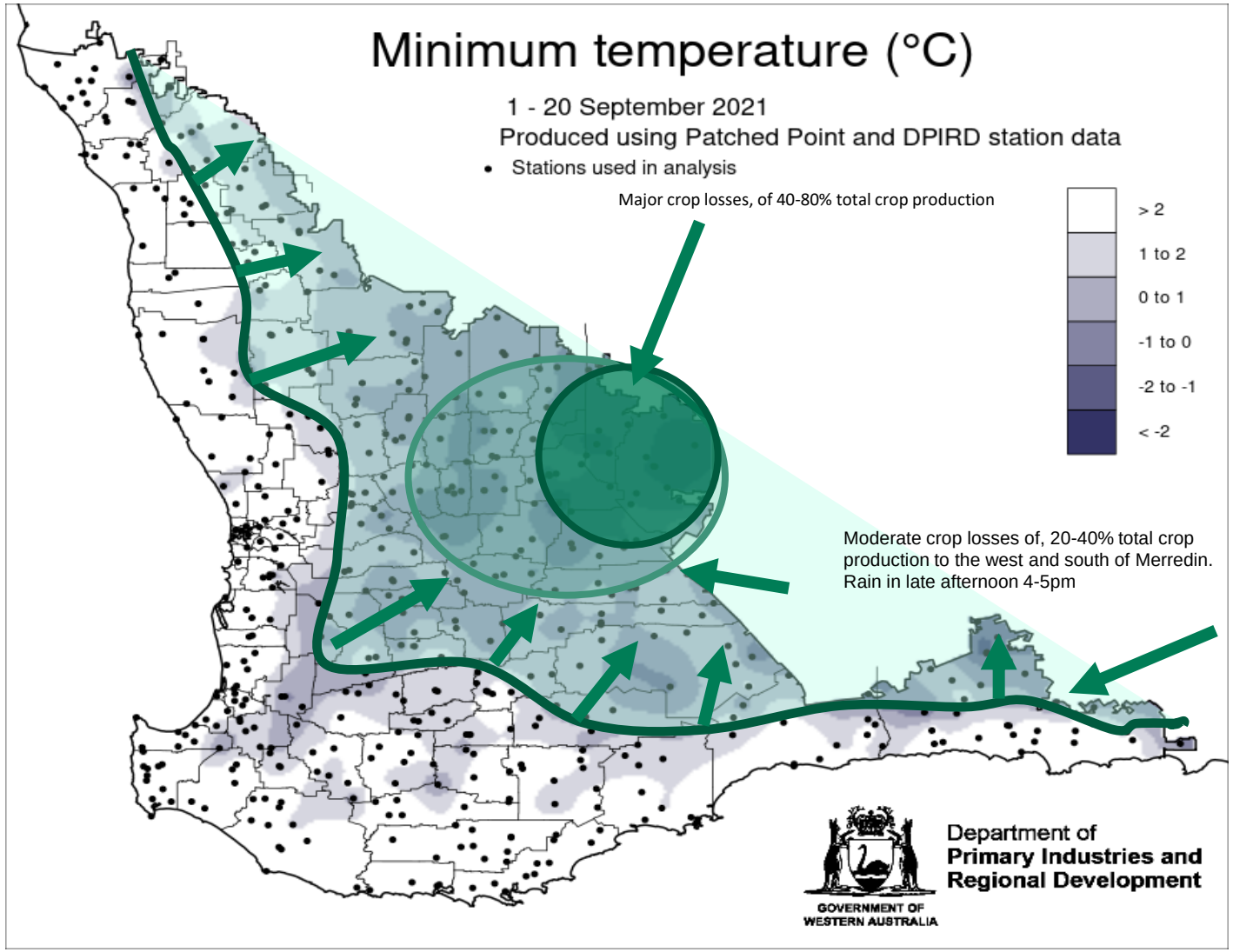
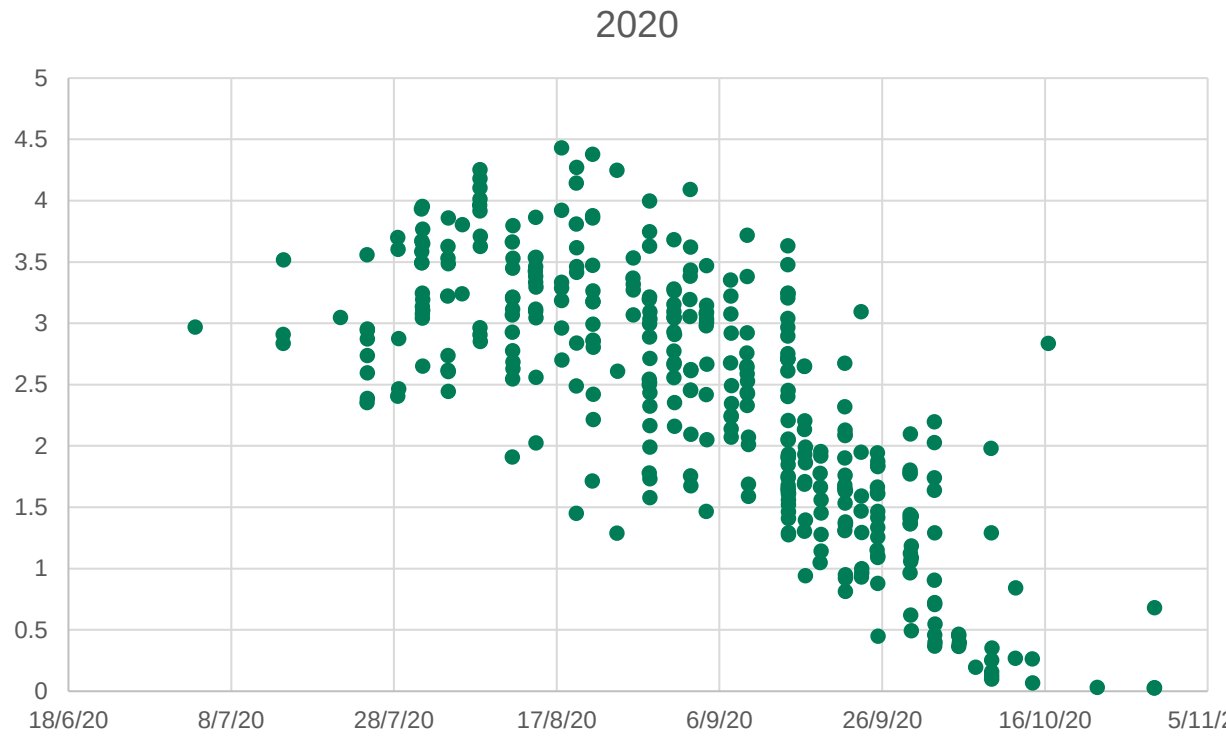


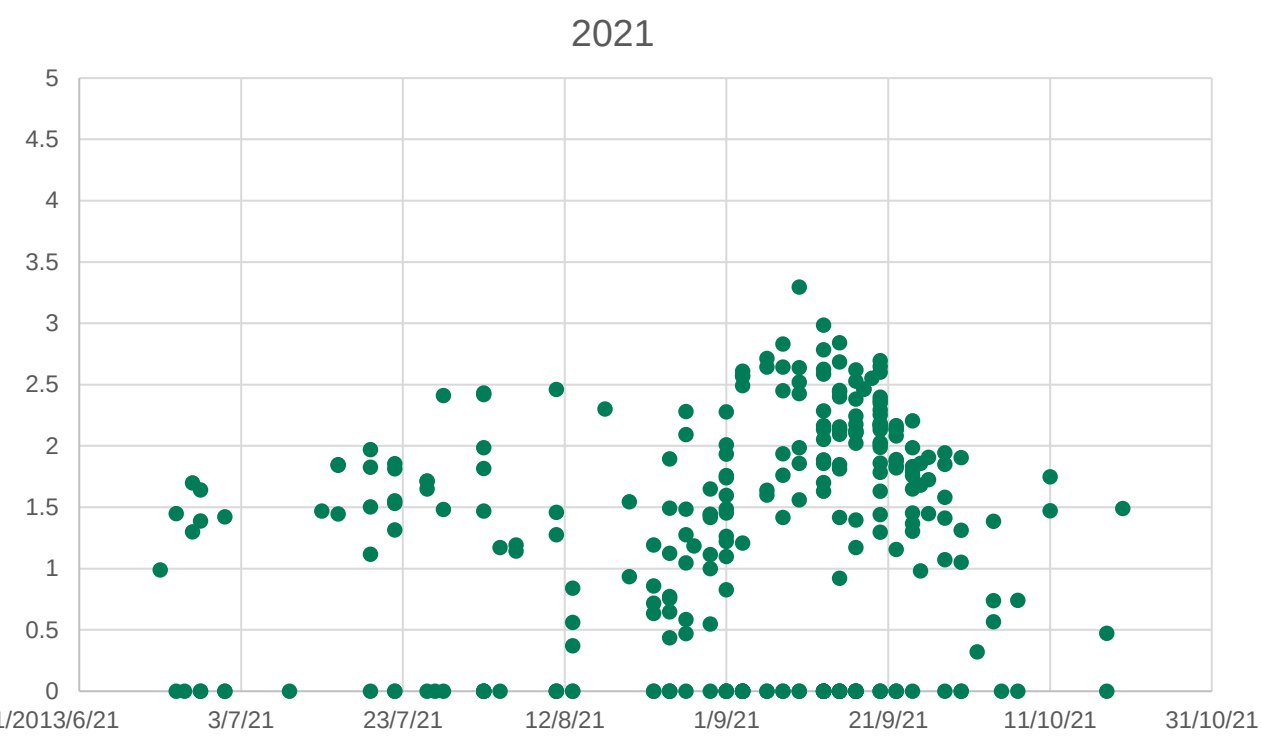
Figure 1. 1-20th September 2021 lowest minimum temperatures



Minor crop loss (<30%) damage east and north of the line through the northern, central, great southern and south coastal wheatbelt from Yuna in the N to Beaumont E of Salmon Gums. The reports of frost damage are of <20-30% of total crop loss and 10% above what those areas normally experience.

Optimal flowering period 2020 vs 2021 at Merredin





When the frost occurred and optimum flowering times (when can they occur?)

What factors mattered most – location, topography, crop type + sowing time

Hay - Limitations of crop salvaging competitiveness in WA. Long term, do we need to address this?

Difficulty in predicting degree of loss.

Novel issues for Kwinana East in 2021

- Russian wheat aphid
- Mites on wet crops more than normal for area
- ‘Physiological yellowing’ in wheat severe
- Mice???
- Some stripe rust when most crops had senesced

What worked and what didn’t?

Prices greatly help

- Canola performed very well with season overall
- Other crops – lupins typically high biomass, yields varied but mostly good
- Chickpeas sterility and reduced flowering before moisture stress increased – some disappointments
- Barley with frosted grains and low hectolitre weight
- Oats? – Lack of oaten hay markets, but still reports of good yields despite some stressed crops at the end
- Wheat – highest potential hit hardest, still looking at well above average yields for majority