

# Crop Report

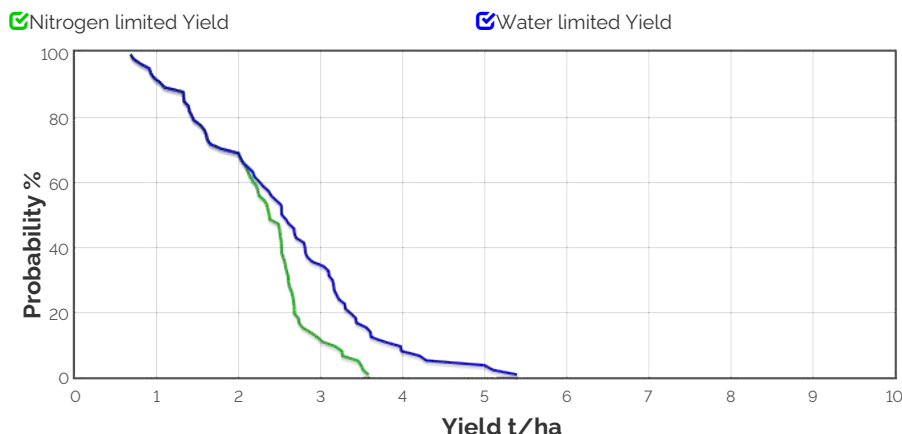
10-Jul-2025

Andrew H Ware:  
Matthews Cootra

Crop: Barley  
Cultivar: Spartacus  
Sowing details: 150 plants/m<sup>2</sup> on 6-Jun  
Expected maturity date: 31-Oct

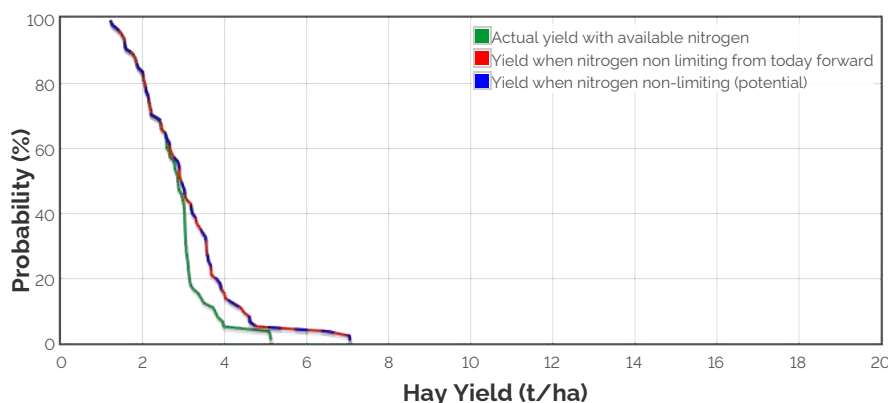
Paddock Details  
Initial conditions date: 1-Apr  
Soil: Sand (Tuckey No366)  
1000 mm max rooting depth  
Stubble: 1500 kg/ha of Wheat  
No till

## Grain Yield Outcome



This graph shows the probability of exceeding a range of yield outcomes this season. It takes into account your pre-season soil moisture, the weather conditions so far, soil N and agronomic inputs. The long term record from your nominated weather station is then used to simulate what would have happened from this date on in each year of the climate record. The yield results are used to produce this graph.

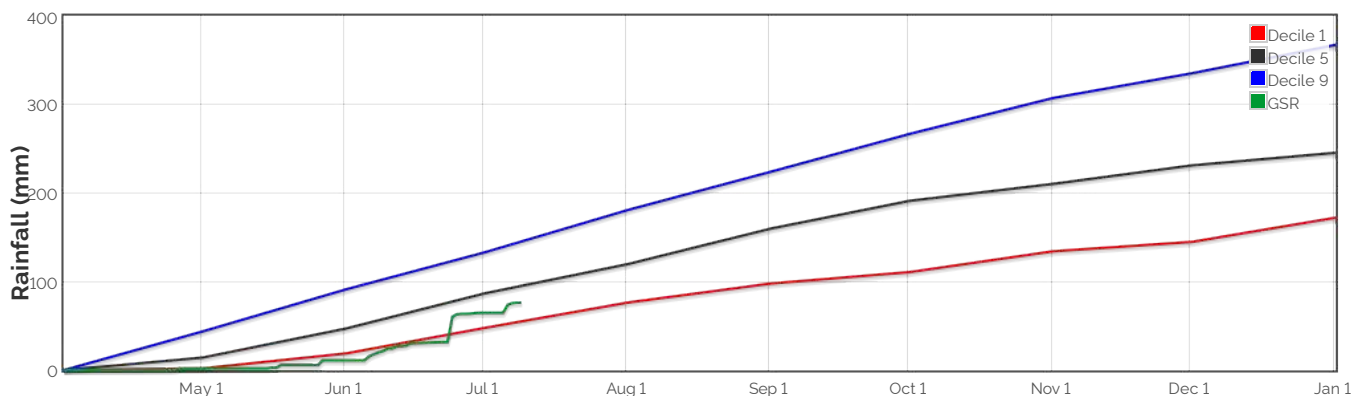
## Hay Yield Outcome



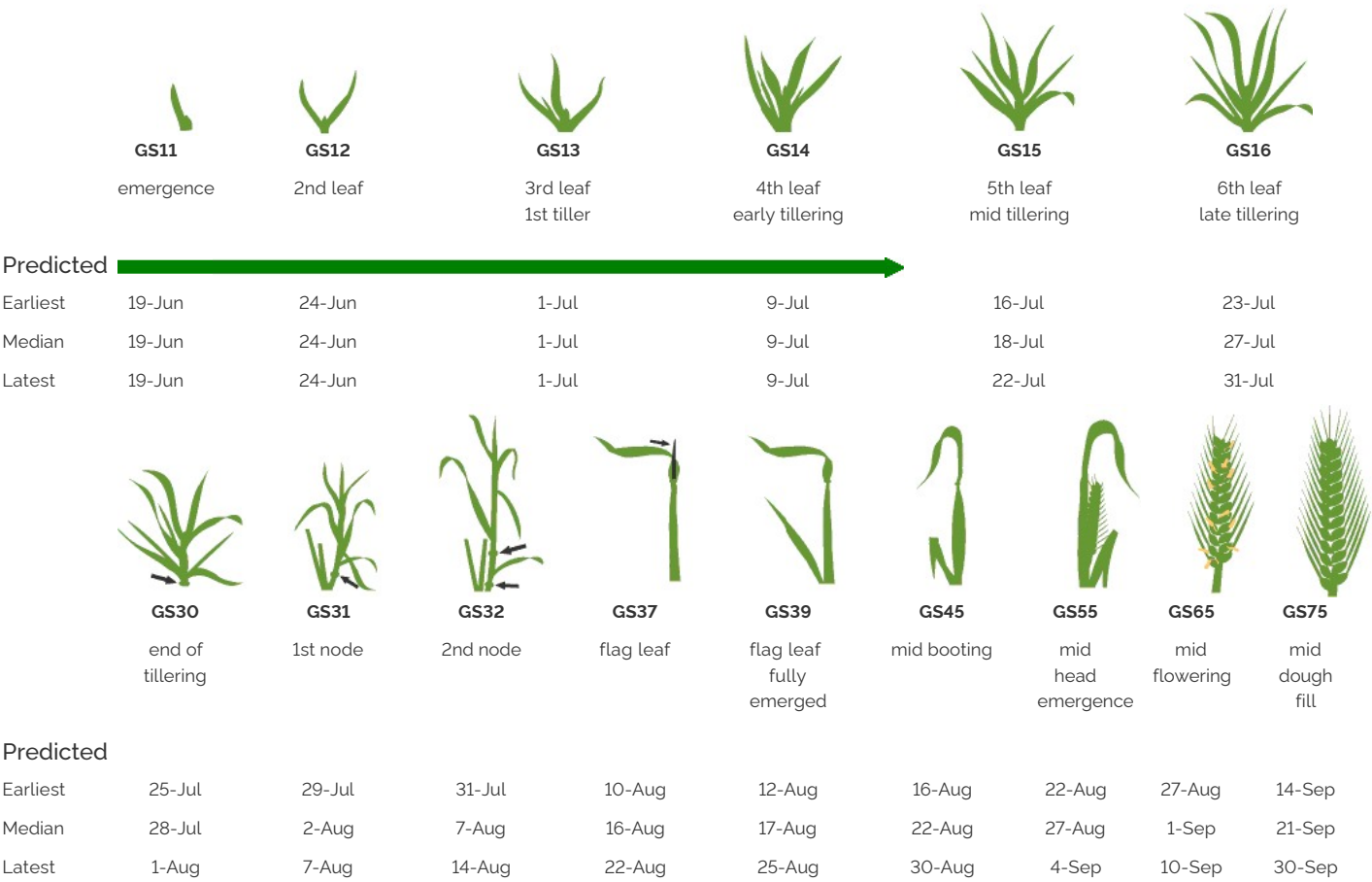
This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2t/ha, hay yield is assumed to be 70% of dry matter, with a moisture content of 13%. When dry matter is between 2 and 12t/ha, hay yield is assumed to be between 70 and 75% of dry matter (sliding scale). When dry matter is above 12t/ha, hay yield is assumed to be between 75 and 80% (sliding scale).

Current dry matter: 110.68667420822581kg/ha

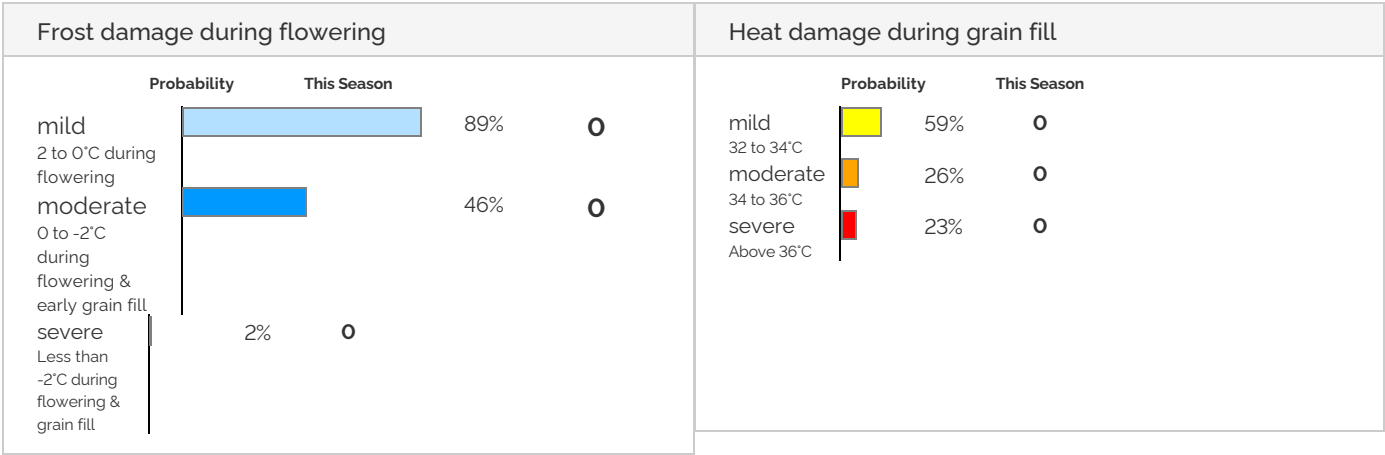
## The Season So Far - Growing Season Rainfall Deciles



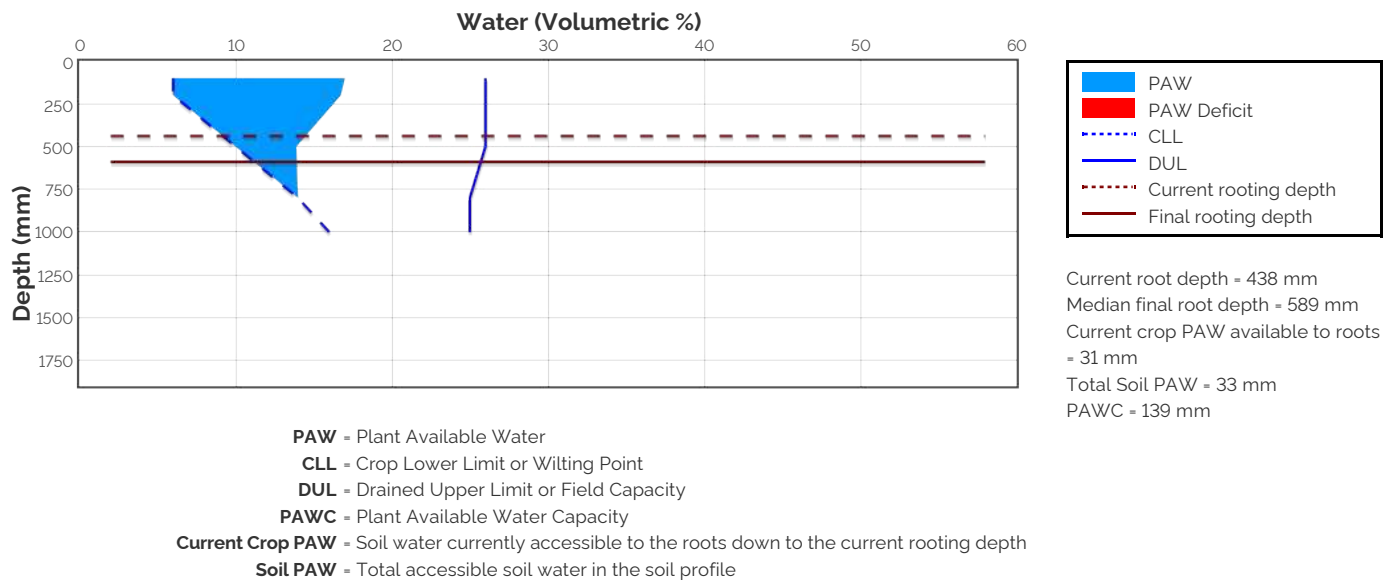
Simulated and Predicted Crop Growth Stage



Probability and Incidence of Frost and Heat Shock



Current Distribution of PAW



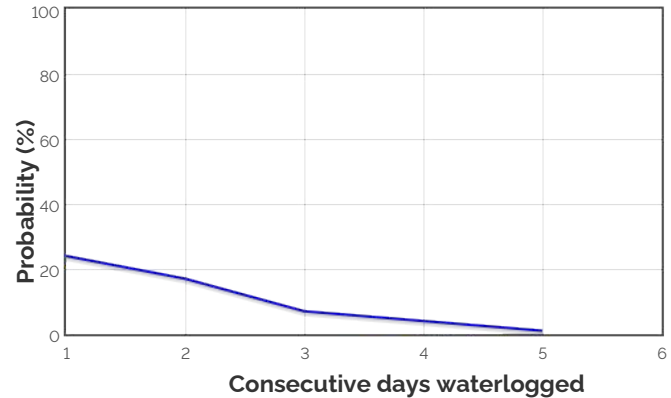
Water Budget

Initial PAW status @ 1-Apr  
Rainfall since 1-Apr  
Irrigations  
Evaporation since 1-Apr  
Transpiration since 1-Apr  
Deep drainage since 1-Apr  
Run-off since 1-Apr

5 mm  
76.4 mm  
  
44 mm  
2 mm  
0 mm  
0 mm  
**33 mm**

Current PAW status:

Probability of Future Waterlogging Events



Nitrogen Budget

Initial N status @ 1-Apr  
N mineralisation since 1-Apr  
N tie up since 1-Apr  
N applications

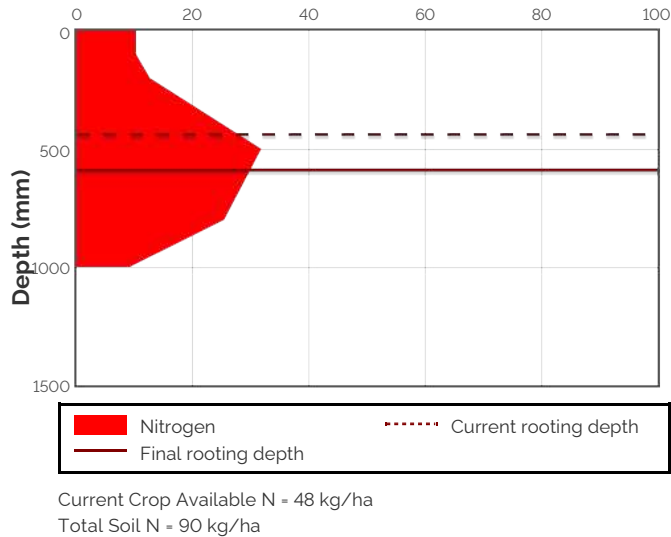
78 kg/ha  
45 kg/ha  
0 kg/ha  
  
7-May : 28 kg/ha  
7 kg/ha  
0 kg/ha  
0 kg/ha  
**90 kg/ha**

Total N in plant  
De-nitrification since 1-Apr  
Leaching since 1-Apr

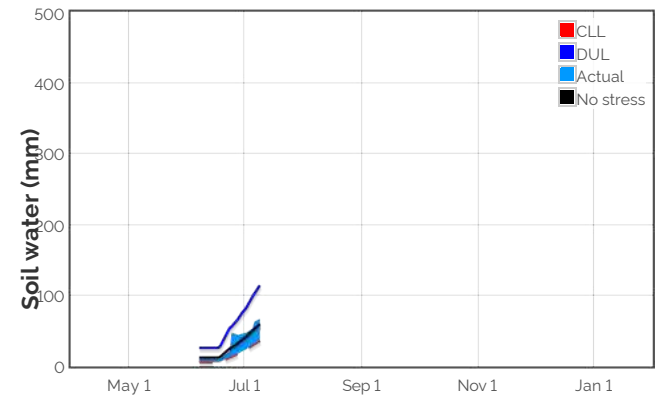
Current N status:

Median N mineralisation to maturity = 47.9380036584282 kg/ha  
Median N tie up to maturity = 0 kg/ha

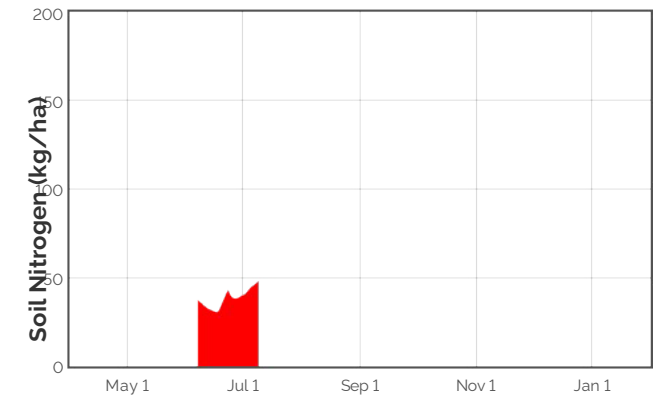
Current distribution of soil nitrogen (kg/ha)



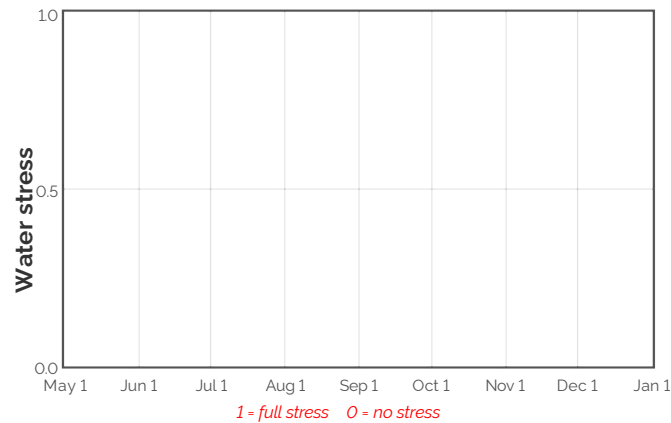
Availability of Water to Growing Roots



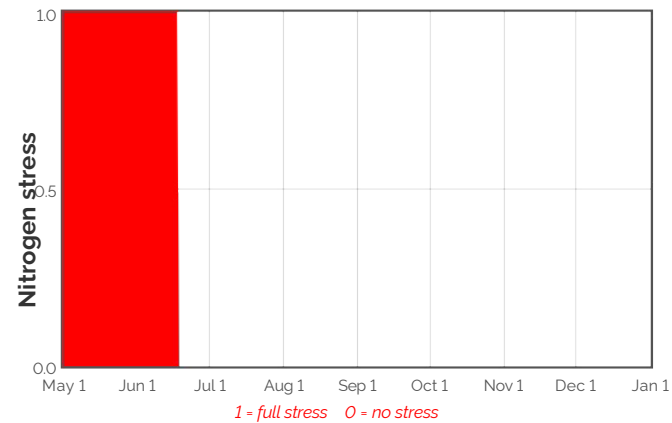
Availability of Soil Nitrogen to Growing Roots



Water Stress



Nitrogen Stress



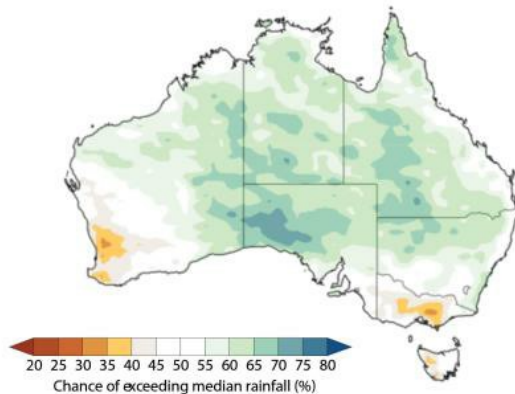
Brief periods of mild to moderate stress do not necessarily lead to reduced yield. To see the likely impacts of additional nitrogen fertiliser rates use the Nitrogen and Nitrogen Profit reports.

Median projected crop performance and requirements for the next 10 days assuming no rain and no added fertiliser

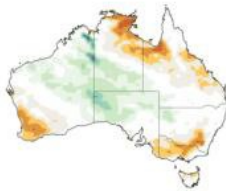
Date	Growth Stage	Evap. (mm)	Water use (mm)	N use (kg/ha)	Water avail. to roots above stress threshold (mm)	Water avail. to roots above CLL (mm)	N avail. to roots (kg/ha)	MineralisationN (kg/ha)	N tie up (kg/ha)
11-Jul	14.3	1.5	0.2	-0.5	6.0	30.1	48.8	0.2	0.0
12-Jul	14.4	1.1	0.2	-0.5	4.8	29.7	49.8	0.2	0.0
13-Jul	14.5	0.7	0.2	-0.5	3.5	29.2	50.9	0.2	0.0
14-Jul	14.6	0.5	0.2	-0.5	2.7	29.0	51.7	0.2	0.0
15-Jul	14.7	0.4	0.2	-0.5	1.8	28.4	52.2	0.3	0.0
16-Jul	14.9	0.4	0.3	-0.5	1.2	27.7	51.9	0.3	0.0
17-Jul	15.0	0.4	0.3	-0.5	0.5	27.2	51.2	0.3	0.0
18-Jul	15.1	0.3	0.3	-0.9	-0.1	26.5	50.1	0.3	0.0
19-Jul	15.2	0.3	0.3	-0.8	-0.7	25.8	49.4	0.3	0.0
20-Jul	15.3	0.3	0.3	-0.8	-1.4	25.3	48.5	0.3	0.0

The water available to roots above the stress threshold is the amount of PAW (mm) above one third of the total water holding capacity of this soil. If the water values are below this stress threshold the water available to roots above the stress threshold will be negative.

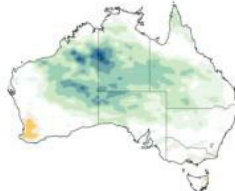
3 MONTH RAINFALL OUTLOOK FOR  
JULY TO SEPTEMBER



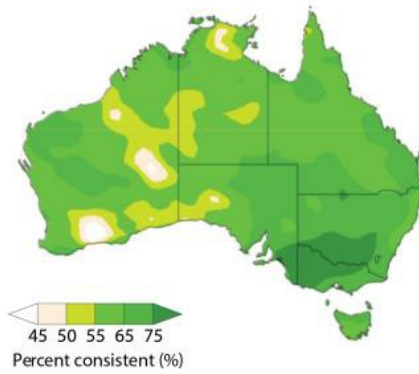
JULY  
RAINFALL OUTLOOK



AUGUST  
RAINFALL OUTLOOK



PAST ACCURACY FOR  
JULY TO SEPTEMBER



PAST ACCURACY FOR  
JULY



PAST ACCURACY FOR  
AUGUST

