

# Measure to Monitor

(a sub-project of Smarter Irrigation in SA)  
South East, South Australia

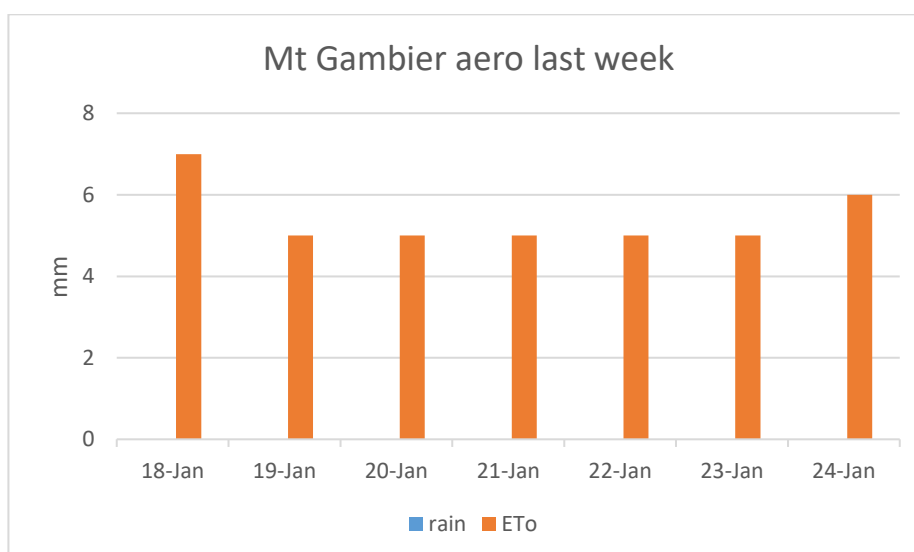
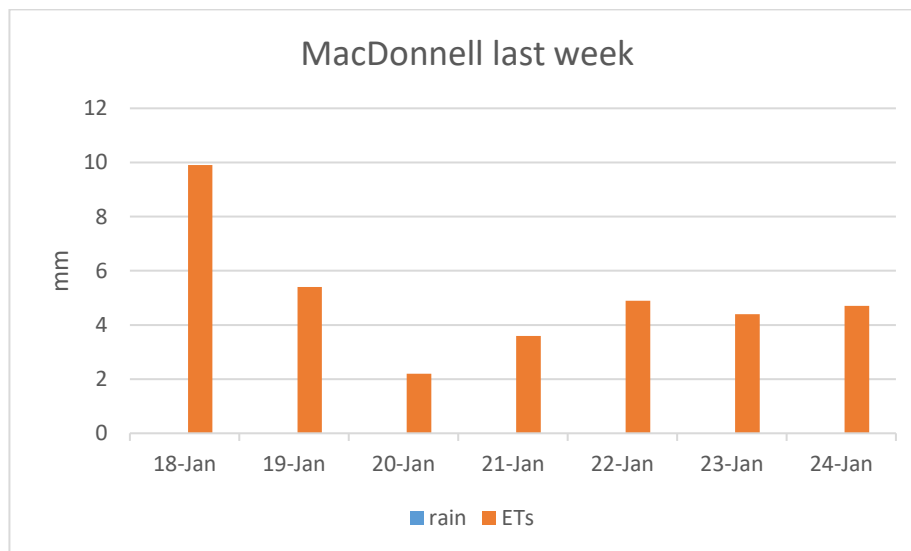
A weekly review of irrigation sensor and pasture growth data to improve irrigation scheduling throughout the year.

**25 January 2018**

Brought to you by Nigel Fleming, SARDI, ph (0401) 122 136

## Previous 7 days ~ average Evapotranspiration & Rainfall

	ETo's (mm/day)	Rainfall (mm)
MacDonnell	5.0	0
Mt Gambier aero	5.4	0

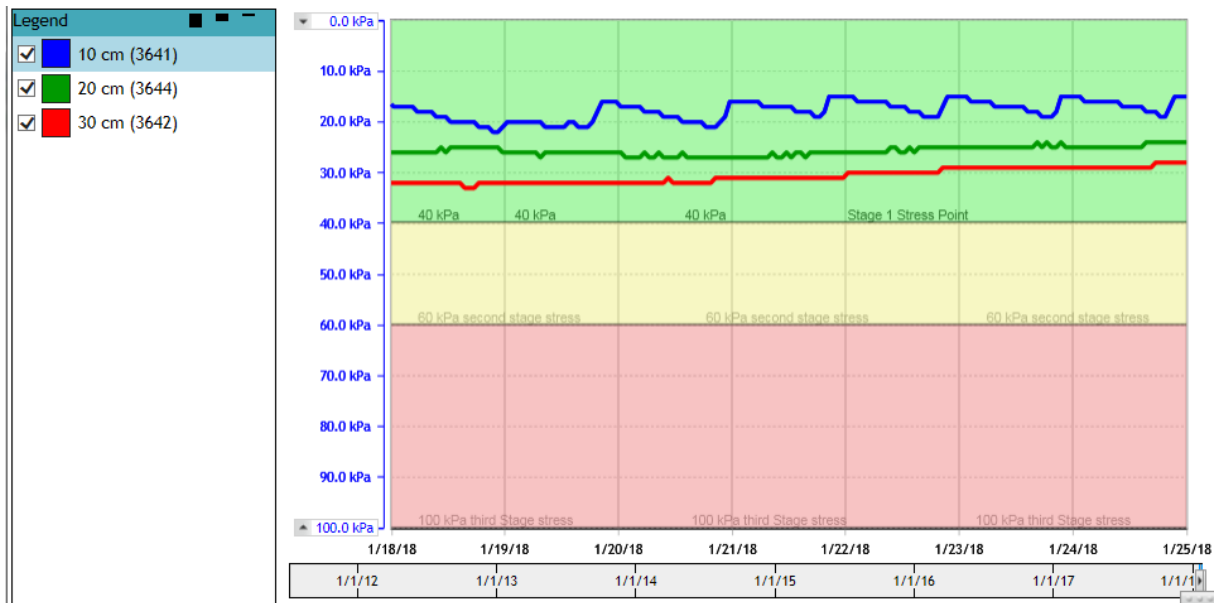


No rain last week. ETo highest on Thursday, then consistent for the rest of the week. On Thursday ET at MacDonnell was slightly higher (9.9mm) than Mt Gambier (7mm). However, ET at MacDonnell then dropped to around 4mm/day whereas Mt Gambier stayed higher at around 5mm/day. This gave the overall average of 5.4mm/day at Mt Gambier which was slightly higher than MacDonnell at 5.0mm/day.

## What are the irrigation sensors telling us:

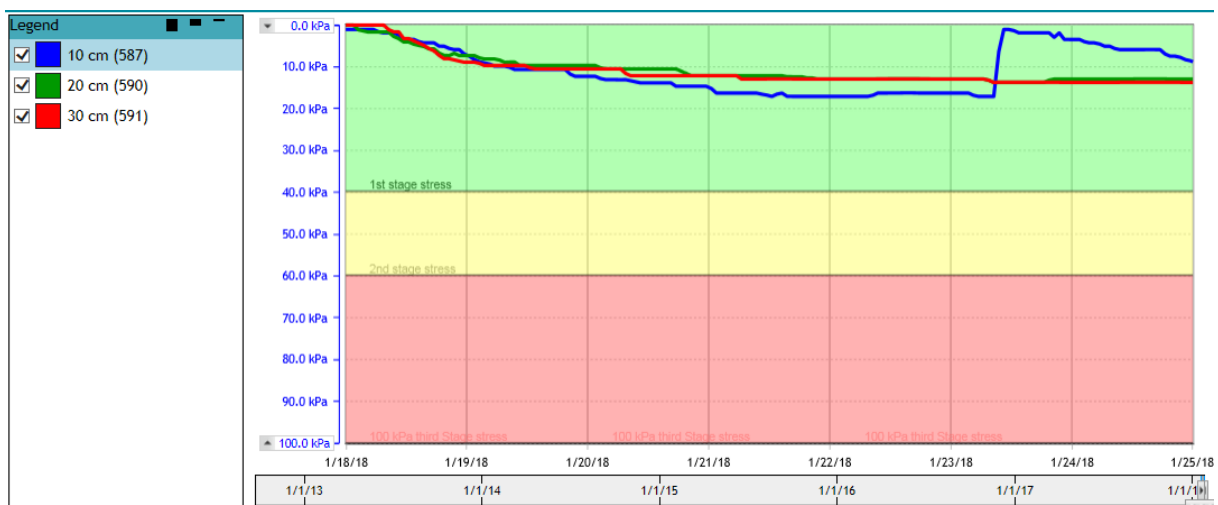
### Allendale East:

Sensors are tracking nicely - all within the desired moisture range.



### Mt Schank

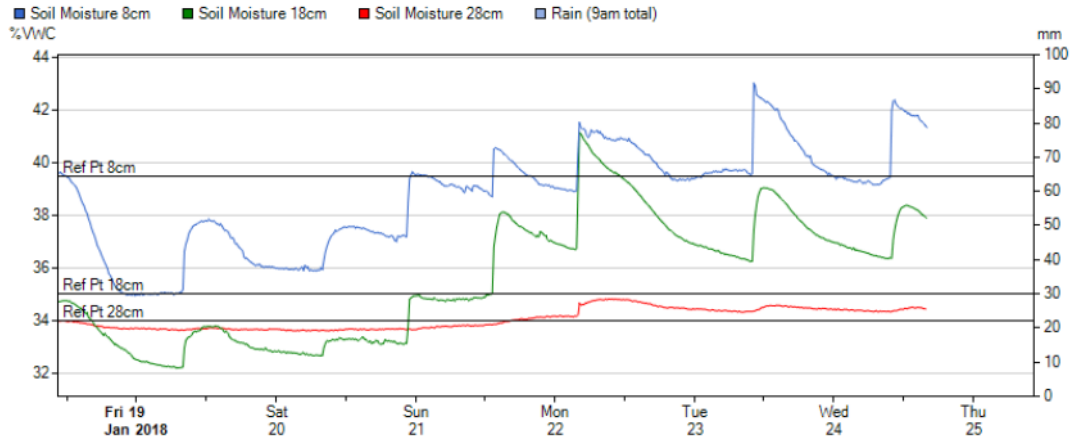
The sensors are tracking similarly to last week.



## Eight Mile Creek (pivot 6)

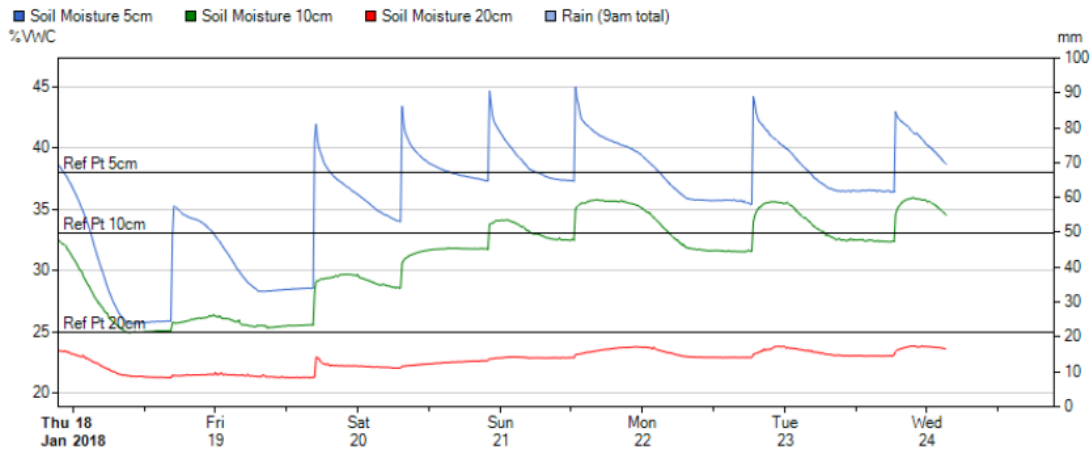
### Dry Area

Data looks good. Soil became drier than usual after the hot day on Thursday. Looks like the pivot ran continuously over the weekend. Combined with daily irrigation during the week this gradually recovered the soil moisture levels.



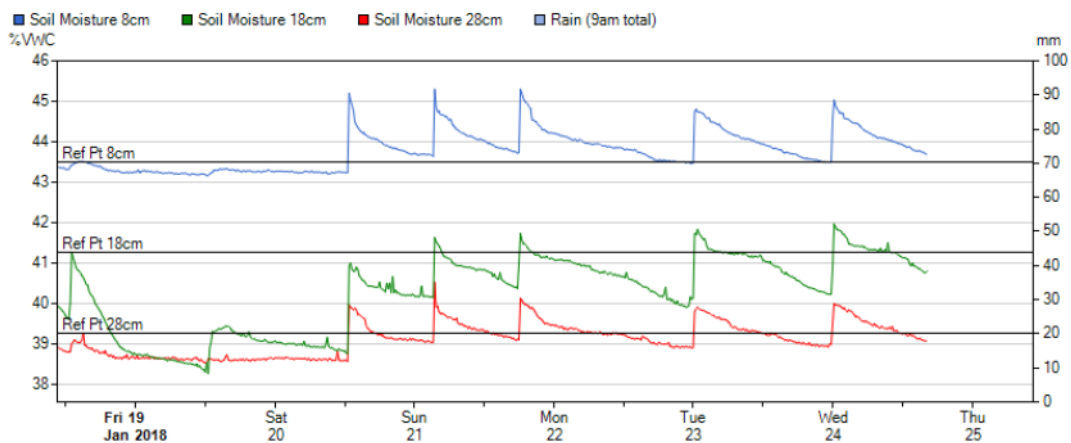
### Normal Area

Similar trend to the Dry area - dry for a start then recovering as the pivot caught up again.



### Wet Area

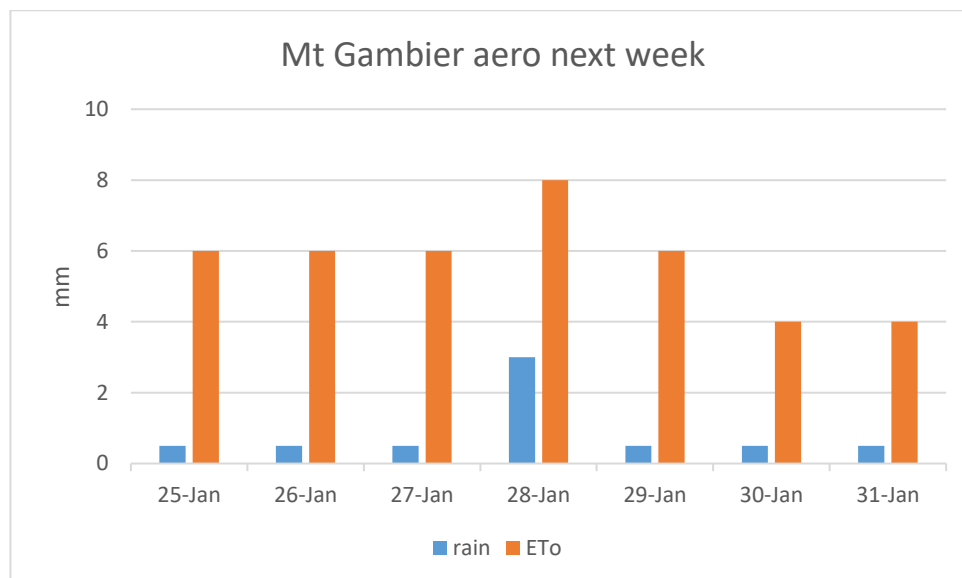
Drier than usual for a start. Moisture levels seemed to recover very quickly – possibly still getting seepage from other areas? There is a suggestion from the Wildeye supplier that the noise (scratchy look) in the data could be caused by interference from the electric fence, as all sensors are directly under the fence. In that case it is not really a problem – just cosmetic as the sensors seem to be reading what we would expect.



## Next 7 days ~ average Evapotranspiration & Rainfall

	ETo (mm/day)	Rainfall (mm)
Mt Gambier aero	5.7	6

Traces of rain predicted for the coming week. Temperatures climbing to a predicted 40° on Sunday, then low 20's. Predicted ET around 6mm/day, then a maximum of 8mm on Sunday and dropping back to 4mm/day.



### Summary for the coming week

Increasing temperatures until Sunday (max of 40°), then cool. Maximum ET of 8mm/day on Sunday. Traces of rain during the week.

Irrigators needed to have applied on average 44mm of irrigation water for last week.

The predicted weekly pasture water use (ET minus rainfall) for the Mt Gambier area in the next week is 34mm

\* These figures are approximate and do not take into account rainfall on farm\*

The intention of this service is not for the information to be used in isolation when making decisions about irrigation scheduling. ETo provides a relatively objective estimate of plant water use and provides another handy 'tool in the irrigation scheduling tool box.' Information in this email is only a guide and should only be used in conjunction with other tools including updated weather information.

For improved accuracy, the collection and use of individual farm rainfall measurements is advised.

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