

Measure to Monitor

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

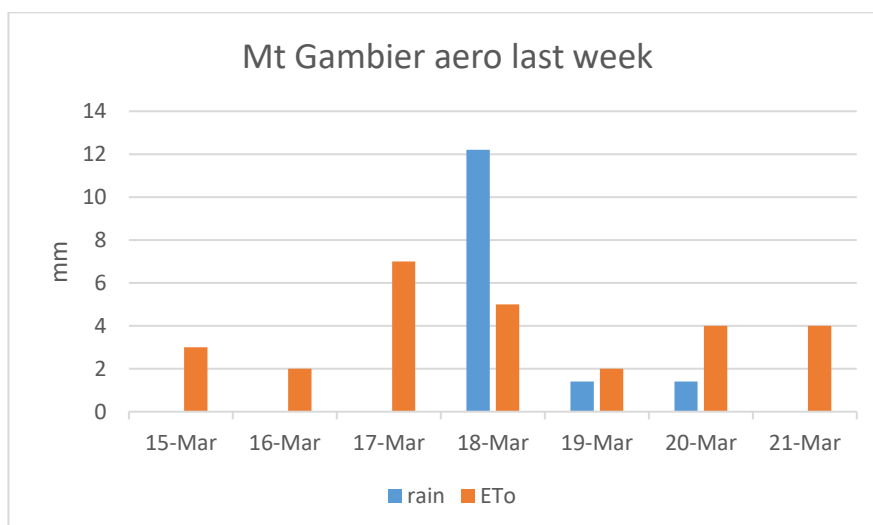
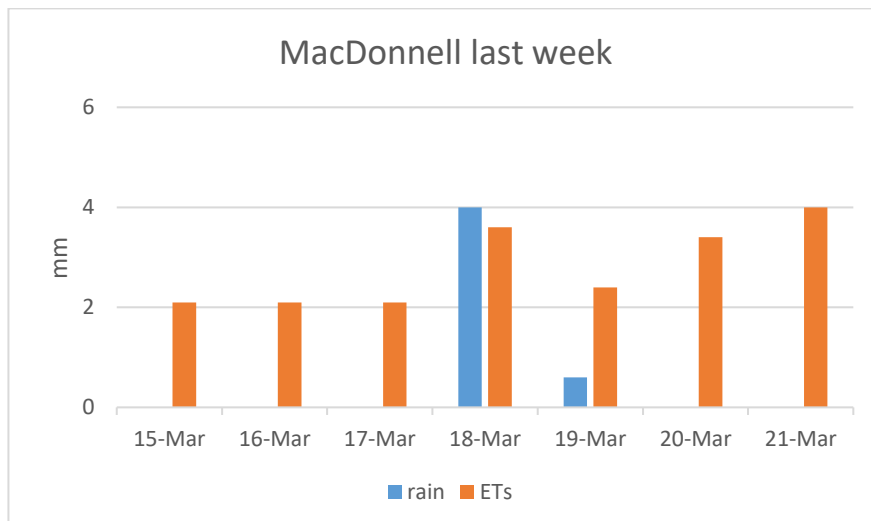
A weekly review of irrigation sensor and pasture growth data to improve irrigation scheduling throughout the year.

22nd March 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	2.8	4.6
Mt Gambier aero	3.9	15.0



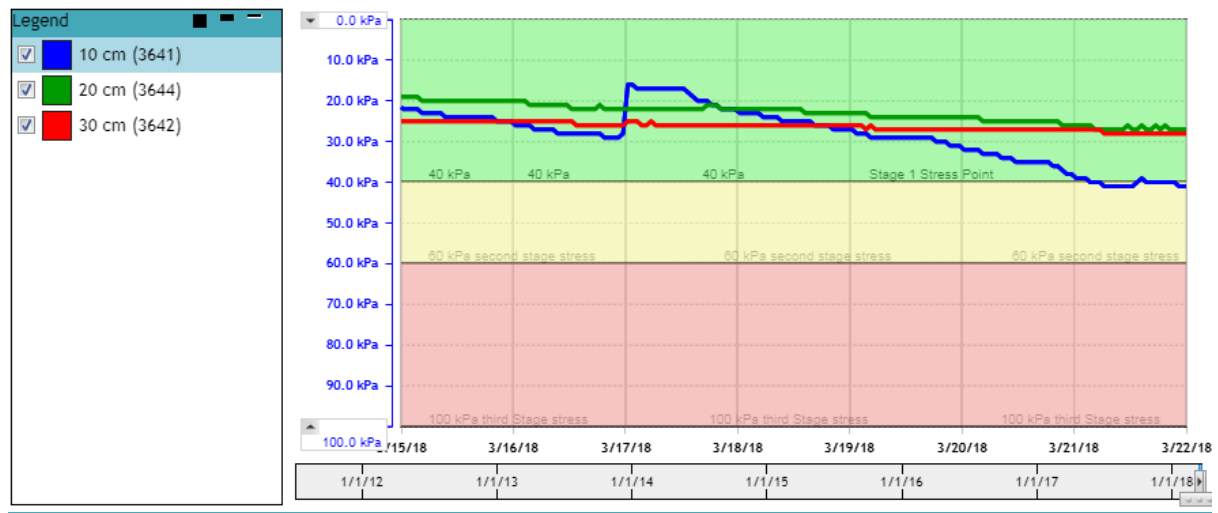
More rain recorded at Mt Gambier last week than at MacDonnell. Yesterday's ET value at MacDonnell was taken from Mt Gambier, as the MacDonnell weather station did not produce ET for yesterday. Caroline and Mingbool weather stations also seem to have problems at the moment.

ETo was fairly consistent at around 3mm/day at MacDonnell and 4 mm/day at Mt Gambier.

What are the irrigation sensors telling us:

Allendale East:

Sensors are performing nicely. Irrigation has been cut back with only one watering last week. The surface sensor has dried down to -40kPa. The other sensor values are starting to drift downwards, although both are still within the desired range.



Mt Schank

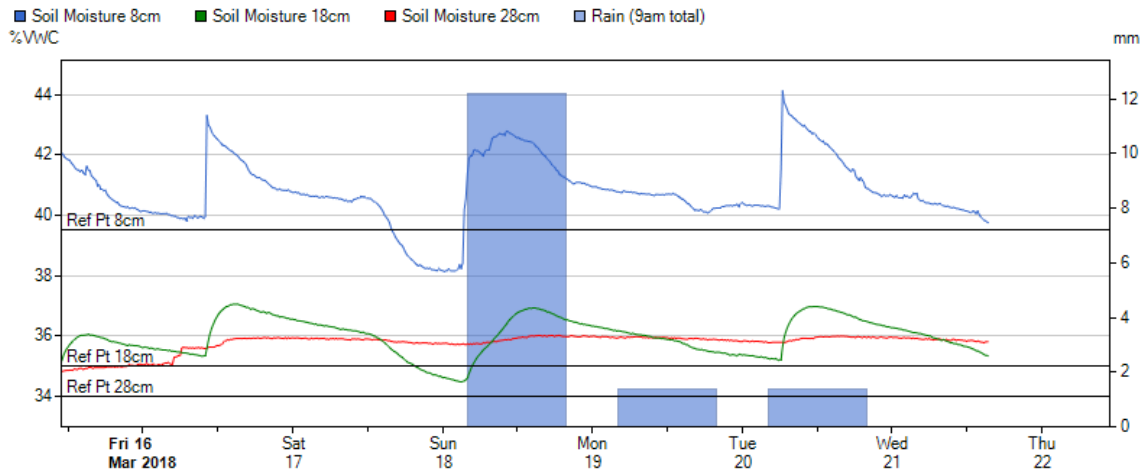
These sensors are still very wet. Possibly due to the pivot parking location, as discussed earlier.



Eight Mile Creek (pivot 6)

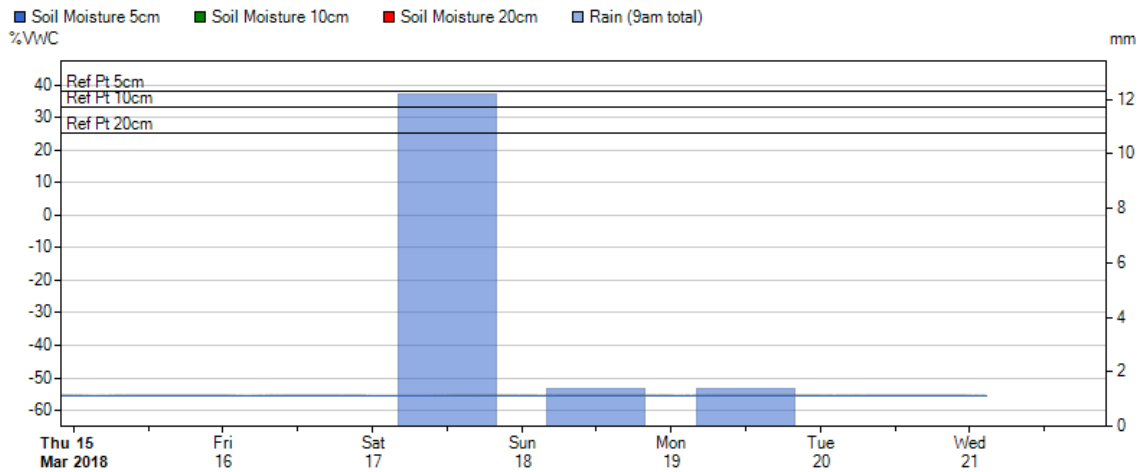
Dry Area

The sensors look to be working well. Three waterings last week (or two waterings and rain on Sunday) have maintained soil moisture. The 12mm of rain displayed on Sun 18th was recorded at Mt Gambier, and is more than the 4mm recorded at MacDonnell.



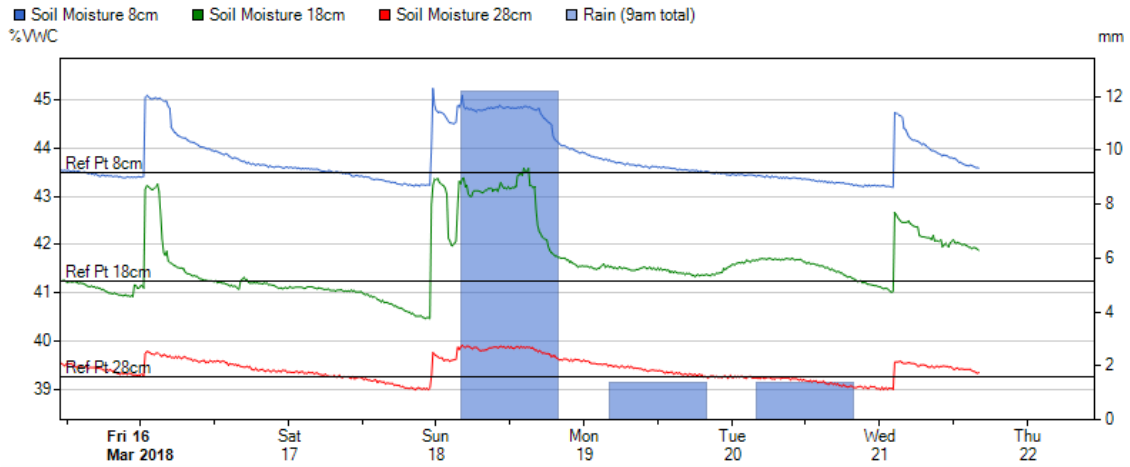
Normal Area

These sensors are still out of action.



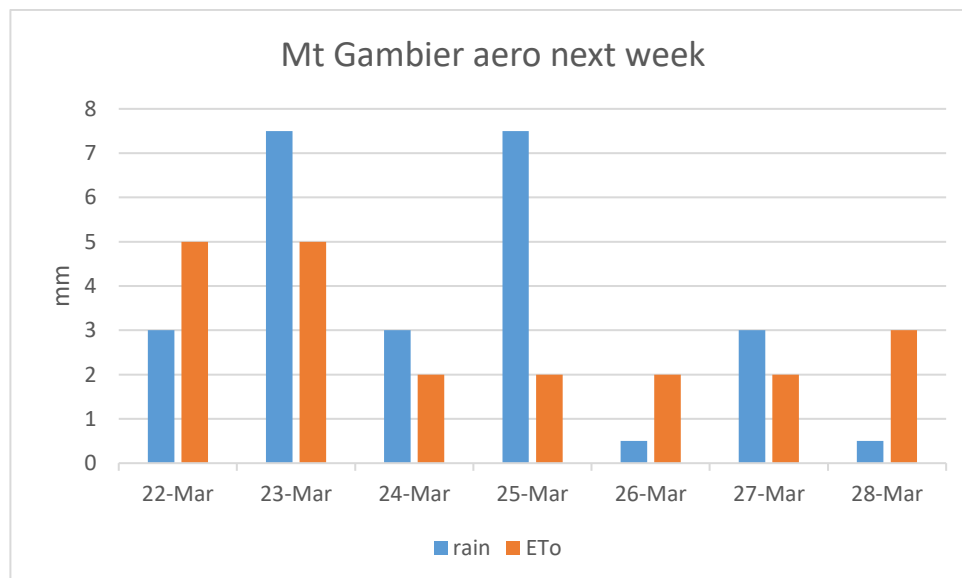
Wet Area

Soil moisture here is tracking in the desired range. The extended peak of soil moisture on Sunday may have been due to rain.



Next 7 days ~ average Evapotranspiration & Rainfall

	ETo (mm/day)	Rainfall (mm)
Mt Gambier aero	3.0	25



Summary for the coming week

Rain for the next few days, and traces through the rest of the week. ET of 0 mm/day was predicted by The Yield for last week. I contacted The Yield through a link in the app and asked about this. The response thanked me for letting them know, that they were aware of the issue, and they expected to have it fixed by today. It looks like they were right, in that the ET prediction is now working again.

Predicted temperatures are in the high 20's until Sunday, then in the high teens and low 20's.

The predicted weekly pasture water use (ET minus rainfall) for the Mt Gambier area in the next week is 4mm. This seems low, but is a simple calculation which includes 25mm of predicted rainfall.

* 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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