

Measure to Monitor

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

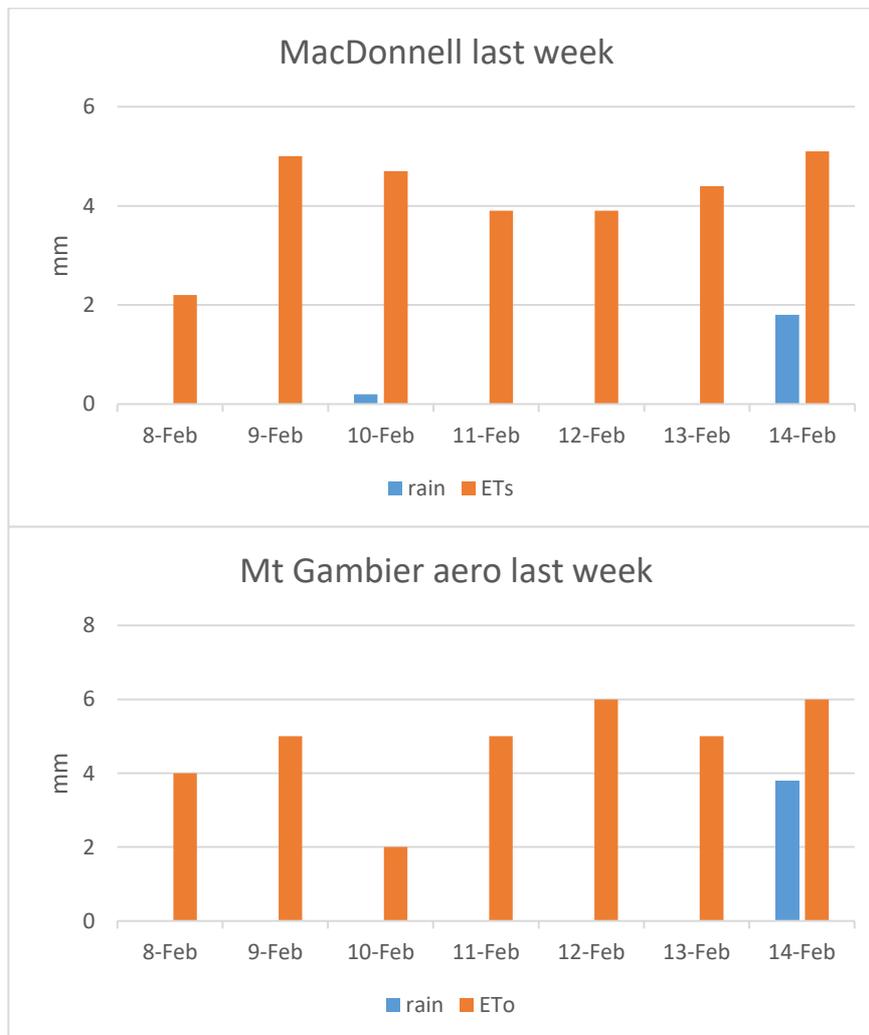
A weekly review of irrigation sensor and pasture growth data to improve irrigation scheduling throughout the year.

15th February 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	4.2	2
Mt Gambier aero	4.7	3.8



Little rain last week. ETo fairly consistent during the week. Average ET of 4.7mm/day at Mt Gambier which was slightly higher than MacDonnell at 4.2mm/day.

What are the irrigation sensors telling us:

Allendale East:

Sensors are producing clean data and tracking nicely - all within the desired moisture range.

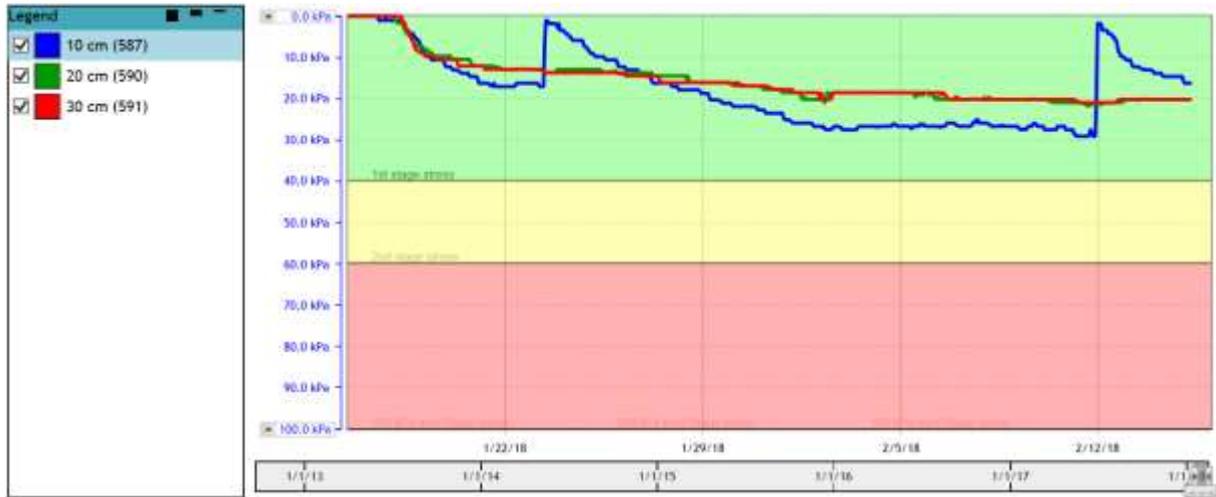


Mt Schank

The sensors are tracking as per usual, except that there was a shift in the 10cm readings.



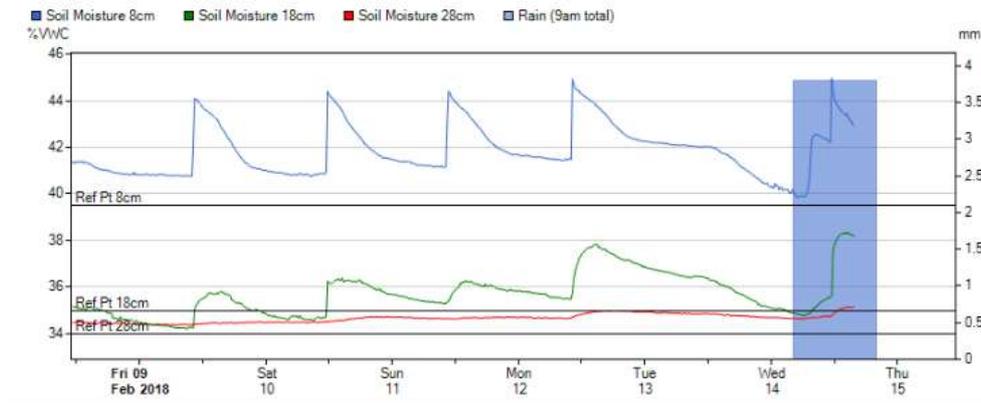
This has happened occasionally over the last couple of months (see chart below from 13th January to current). Not sure at present what this means.



Eight Mile Creek (pivot 6)

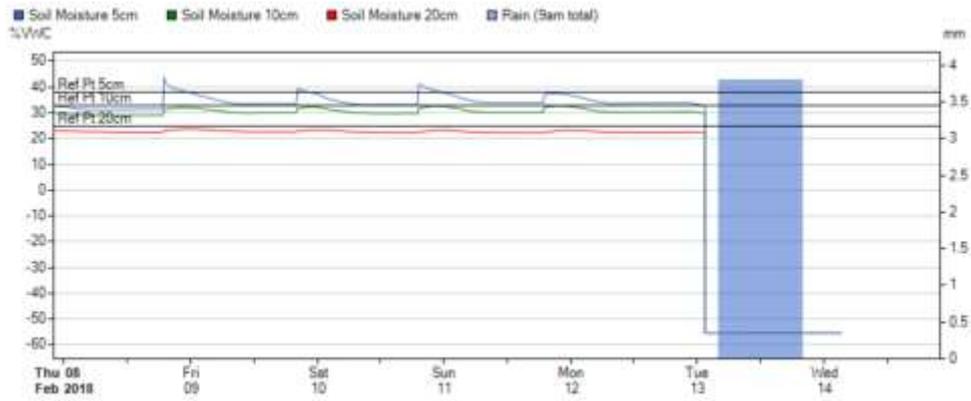
Dry Area

Data looks good. Slight increase in water content over the week at all depths, corrected by skipping irrigation on Tuesday. Close and careful management of soil moisture at this site.



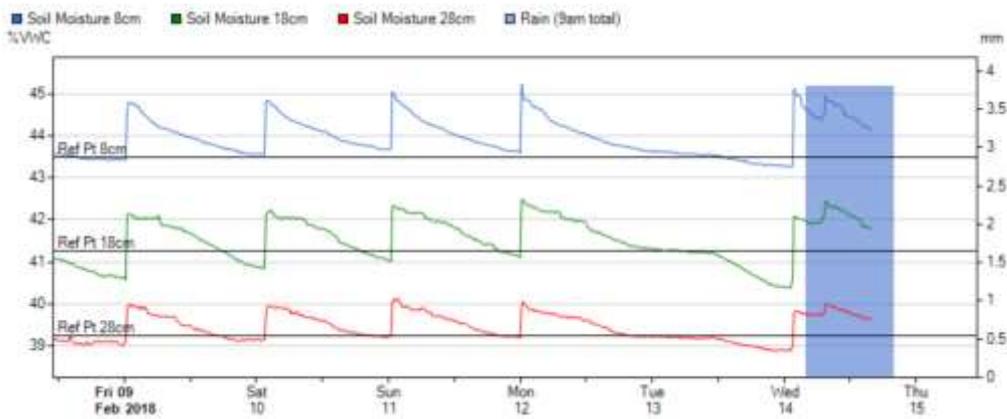
Normal Area

Communication problems from last week were initially resolved, but failure of all sensors around midnight on Monday. Modem antenna problems or physical damage to sensors? - stood on by cow or similar?



Wet Area

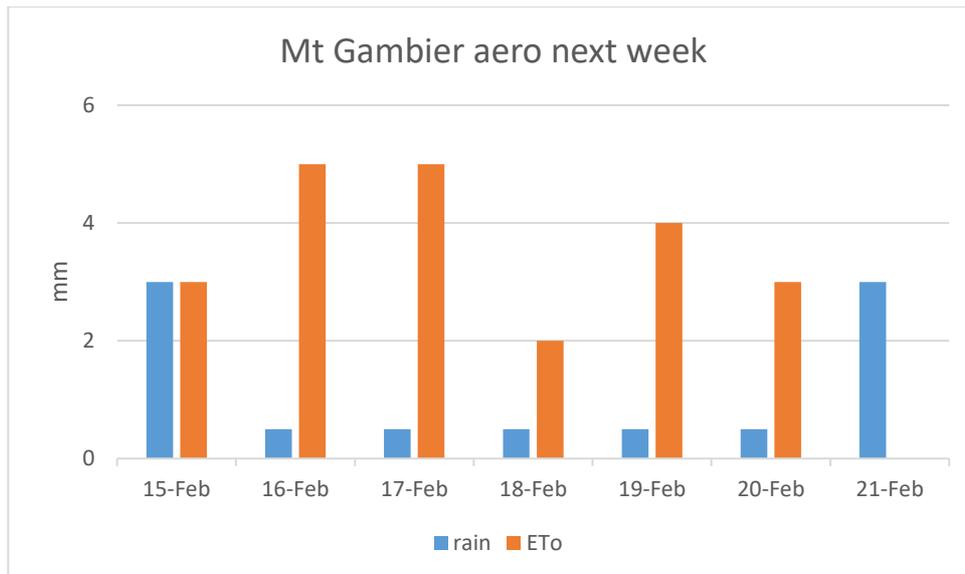
Tracking the same as last week.



Next 7 days ~ average Evapotranspiration & Rainfall

	ETo (mm/day)	Rainfall (mm)
Mt Gambier aero	3.1	8.5

Traces of rain predicted for the coming week. Temperatures gradually increasing from low 20's today up to 34° next Tuesday, then a slight drop. Predicted ET between 2 and 5mm/day. However, there is a predicted ET of 0mm/day next Wednesday. This is theoretically possible, but I am not sure I believe it at this stage – may be a glitch in the app.



Summary for the coming week

Temperatures gradually rising over the next week, traces of rain forecast.

Irrigators needed to have applied on average 29mm 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 14mm (including the zero figure for next Wednesday).

* 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.

The Smarter Irrigation for Profit project is supported by funding from the Australian Government Department of Agriculture and Water Resources as part of its Rural Research and Development for Profit Program, DairySA and Dairy Australia.