



Government of South Australia
Adelaide and Mount Lofty Ranges
Natural Resources Management Board



BIGG's Soil Moisture Monitoring Project - *What's been happening lately?*

22 February 2020



Natural Resources
SA Murray-Darling Basin





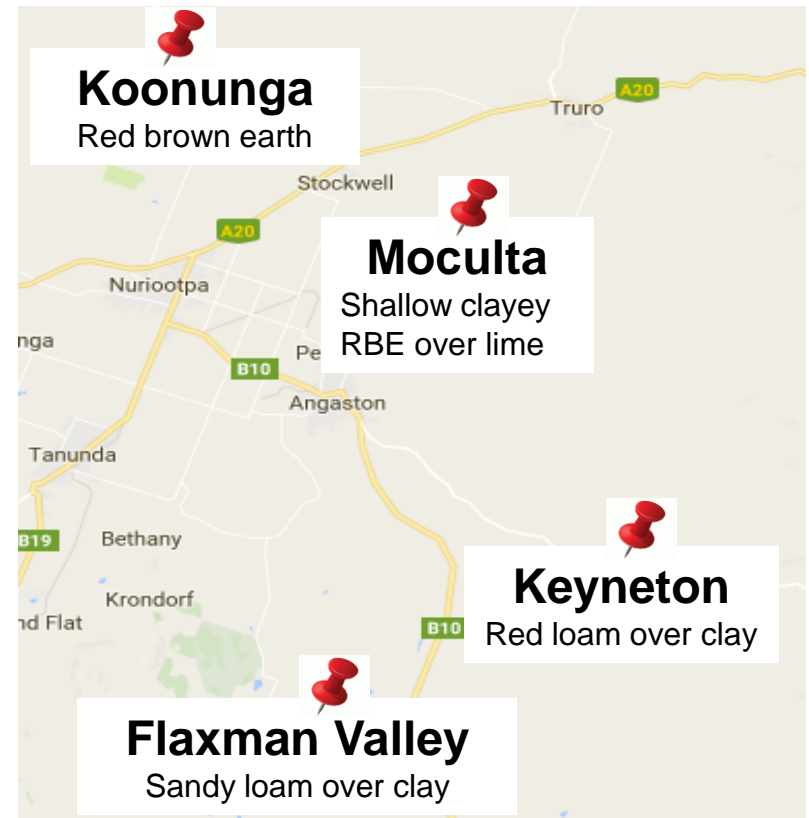
What's been happening lately?

1. Weather station equipment install
2. It rained!
3. Upgrade data webpages



1. Weather station equipment install

Weather stations
established in 2013
& 2019





WEATHER STATION

COCONUT MOVING WINDY
COCONUT STILL CALM
COCONUT WET RAINY
COCONUT DRY SUNNY
COCONUT WHITE SNOW
COCONUT INVISIBLE FOG
COCONUT GONE HURRICANE

Where is it
located?



NDVI

The image shows a meteorological station in a dry, open field under a clear blue sky. A tall silver pole is the central structure, with various sensors attached. At the top is an NDVI sensor. Below it, a horizontal arm holds a solar radiation sensor (a small white dish) and a wind direction sensor (a black cup). Further down, another horizontal arm holds a wind speed sensor (a small white cup) and a temperature/humidity sensor (a black sensor). A rainfall gauge is mounted on the pole. The base of the pole is surrounded by a rusty metal frame with chain-link fencing. A soil moisture sensor is located on the ground near the base of the pole. The background features a line of trees and a clear horizon.

Solar radiation

Wind direction

Wind speed

Rainfall gauge

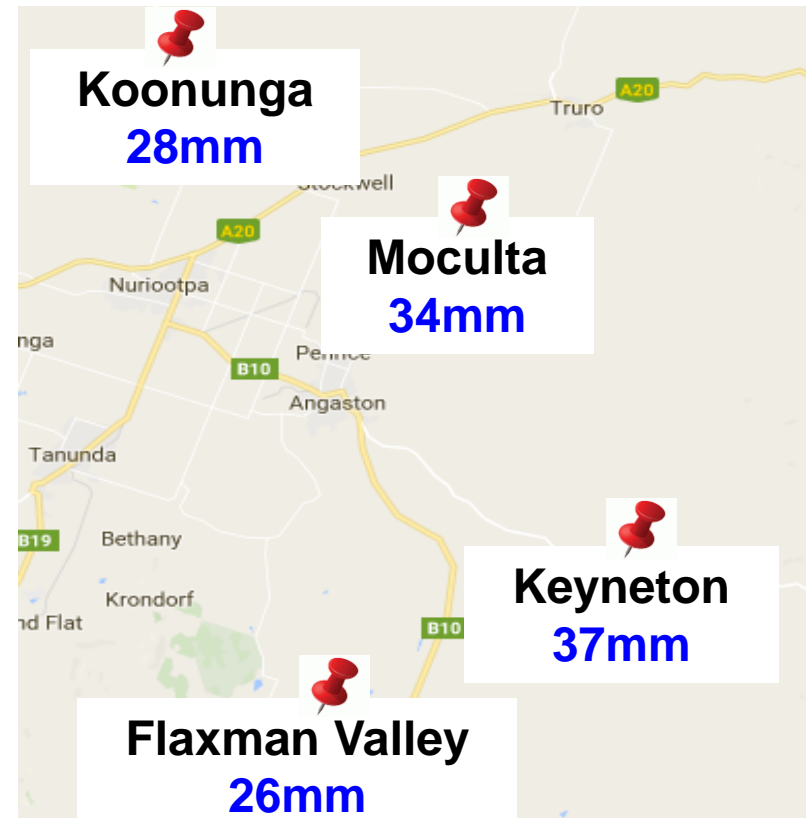
Temp/humidity

Soil moisture



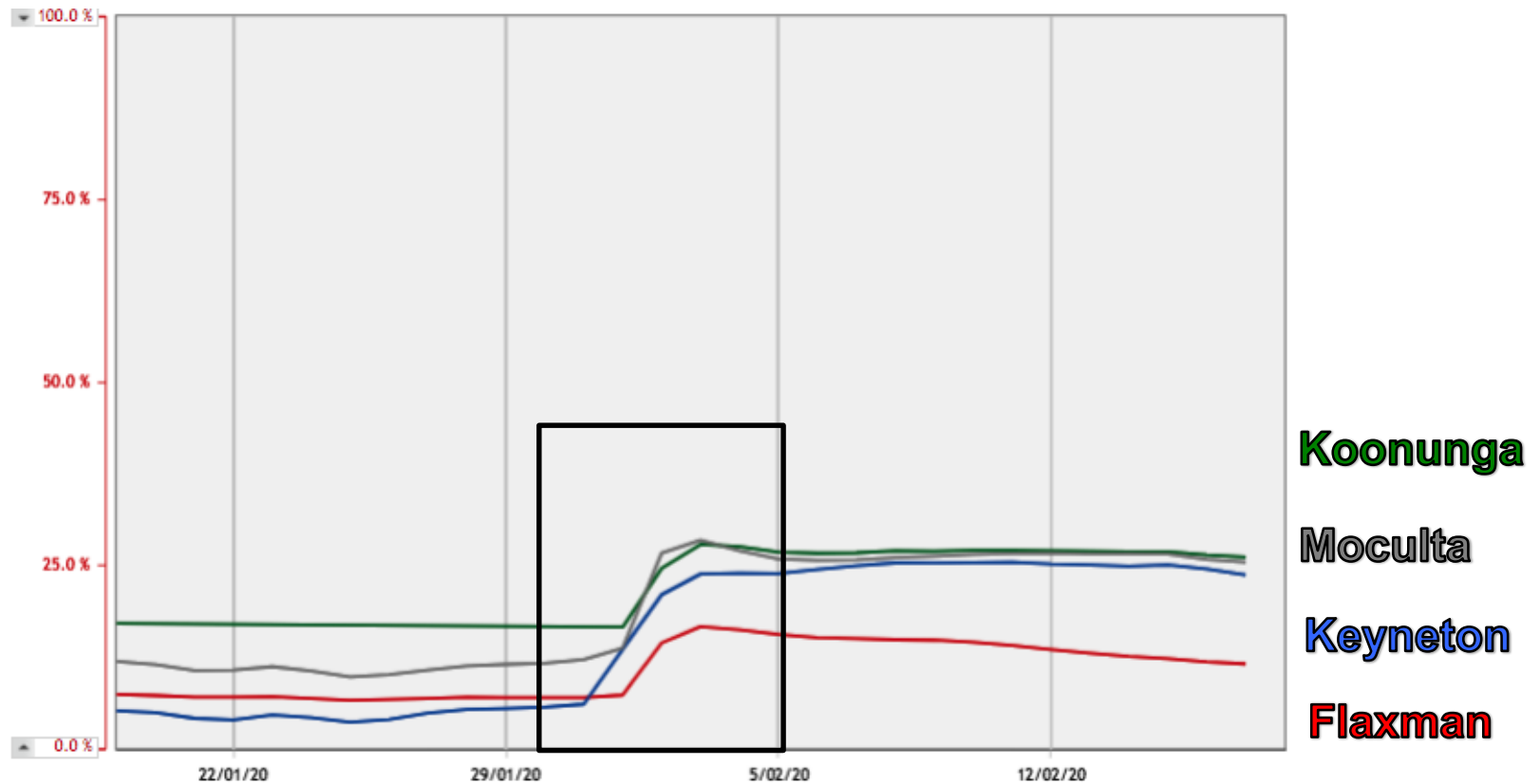
2. It rained!

Rainfall - early
Feb 2020





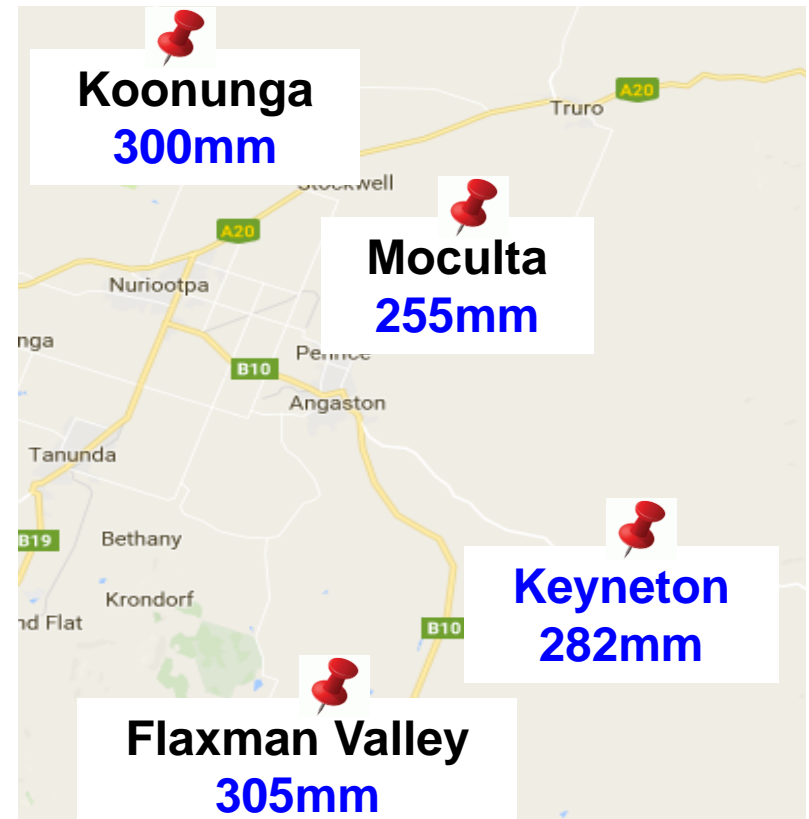
Remaining soil moisture (%): Jan-Feb 2020





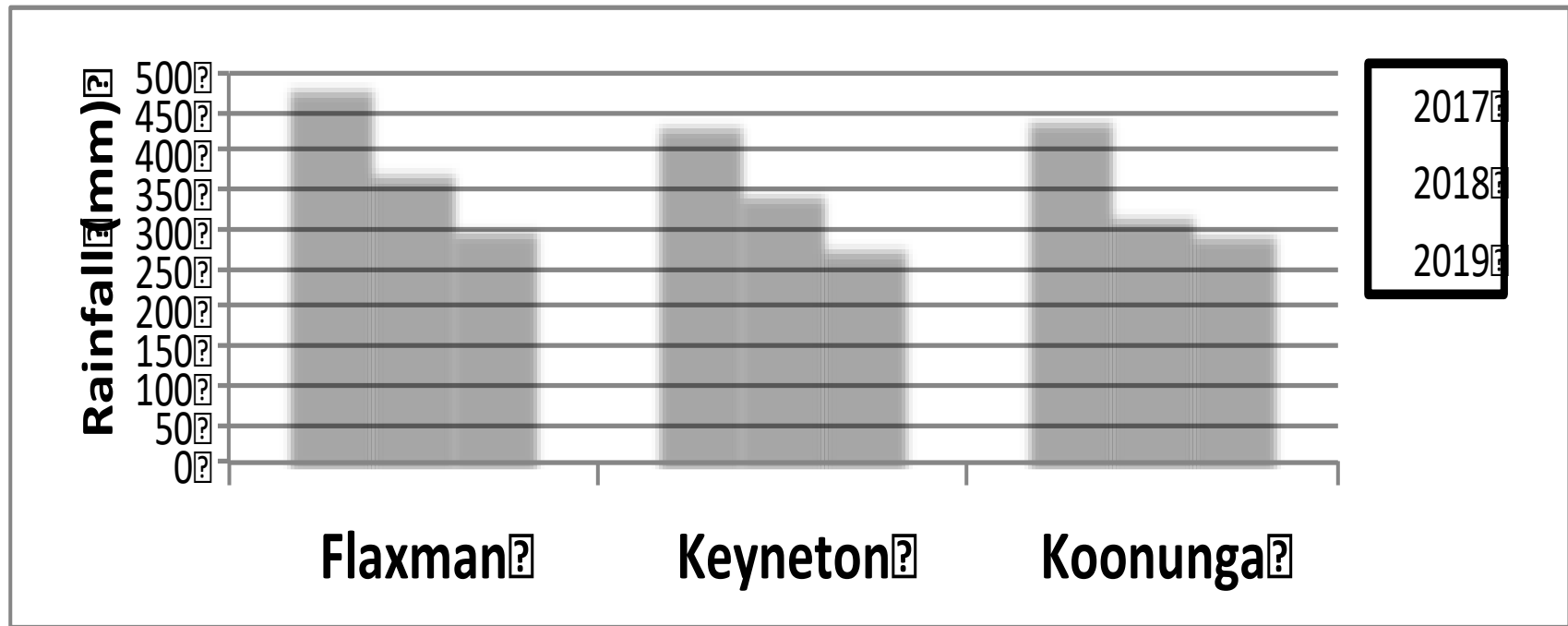
2. It rained!

Rainfall - 2019





Annual rainfall (2017-2019)









3. Upgrade data webpages

- Improve presentation
- Easy access info to explain graphs
- Make mobile friendly

Select Data View

	View Individual Stations (Flaxman Valley, Keyneton, Koonunga, Moculta)	
	Mobile Friendly View (Graphs Only - Flaxman Valley, Keyneton, Koonunga, Moculta)	
	Plant Available Water (PAW)	
	Remaining Soil Moisture	
	Rainfall Summary	
	Fire Danger Index	
	Spray Conditions	
	Dew Point	
	Frost Conditions	
	Solar Radiation	
	NDVI	
	Sheep Chill Index	

External Links

	Technical Support Question?		Log in to addVANTAGE Pro Software
	SA MDB NRM Soil Moisture Network		BOM SA Radar
	Land & Water		Willy Weather
	BOM - MetEye		Metvuw

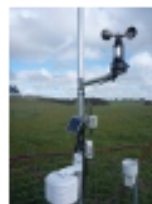
Soil Moisture and Weather



[View Flaxman Valley](#)



[View Keyneton](#)



[View Koonunga](#)

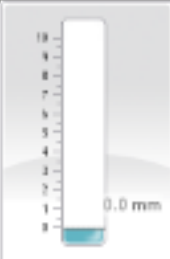
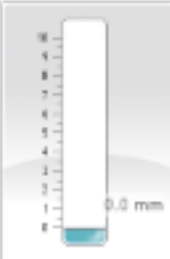
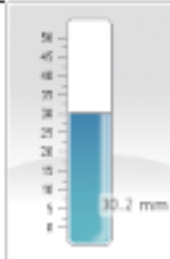
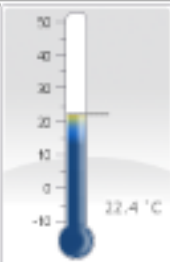



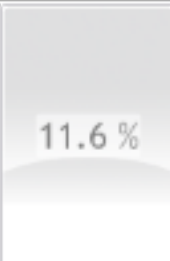
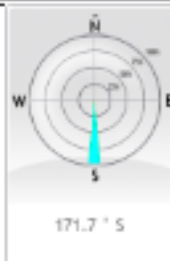












[View Moculta](#)



[Switch to All Sites View](#)



Rainfall - Information					
Daily Rain Sum since 9:00 am		Previous 7 Days Running Total		30 Day Rain Running Total	
					
Air Temperature		Relative Humidity		Wind Speed AVG	
					
Fire Danger Index 2m		Remaining Soil Moisture		Wind Direction	
					
Graphs: Click on a link to view a graph showing the selected information					
Rainfall Summary			PAW - Current 12 mth		
PAW - Year on Year			Remaining Soil Moisture		
Soil Moisture - Separate			Fire Danger Index		
Spray Conditions			Frost Conditions		
NDVI			Sheep Chill Index		

Flaxman Valley 855112

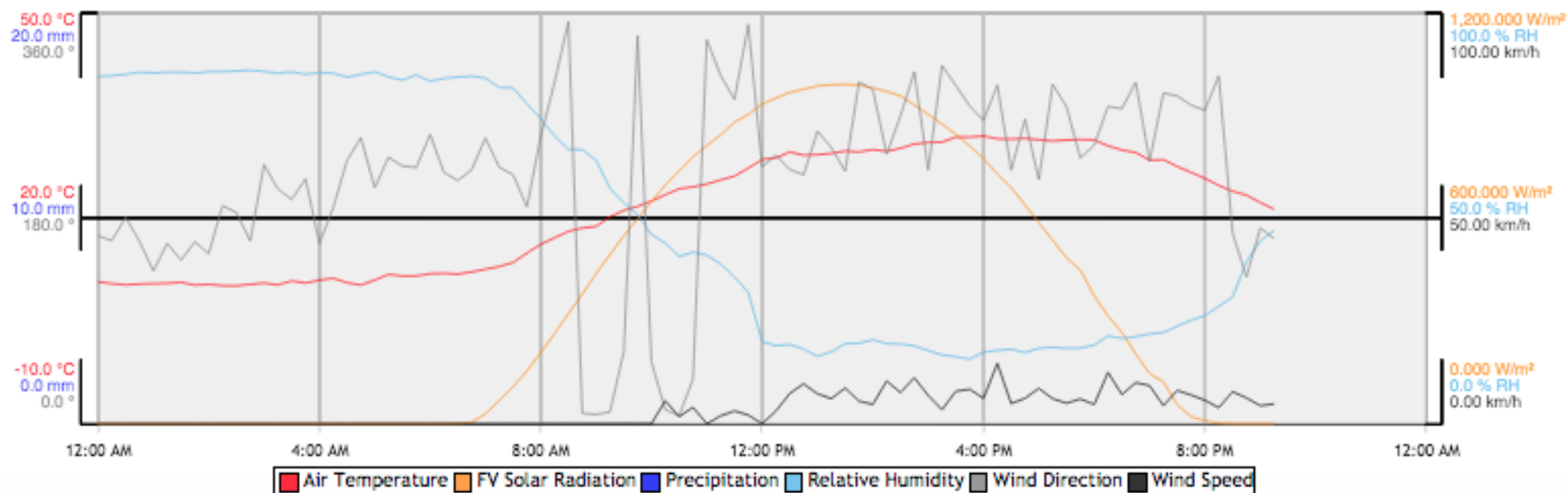
17/02/2020 9:15:00 PM

Overview T Air Rain Solar RH Wind rose Wind speed Prediction

Select View: » Table & Graph Instruments Statistics



	Latest	Today	7 days	Month	Year
AVG (°C)	21.4	21.3	19.2	18.8	19.6
SUM (mm)	0.0	0.0	0.0	22.8	32.8
MAX (W/m ²)	0.000	993.471	1,283.210	1,411.345	1,507.870
AVG (% RH)	47.1	50.4	68.0	65.1	55.4
AVG (km/h)	4.80	3.30	9.05	9.45	9.68





3. Upgrade data webpages

- Link on BIGG homepage: *Live BIGG weather station and soil moisture data*
- Welcome your feedback



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4. *What's happening next*



What's happening next?

- Webinar: Interpreting weather station data to assist farm decision-making
 - Thurs 27th February, 8pm
 - Peter Toome
 - Register!
- Soil pits: BIGG weather station sites
 - Thurs 19th March, 8.30am
- Workshop: 'Managing the Local Climate'
 - Wed 8th April, Mt McKenzie Hall
 - Darren Ray, Peter Toome, Producer case study

