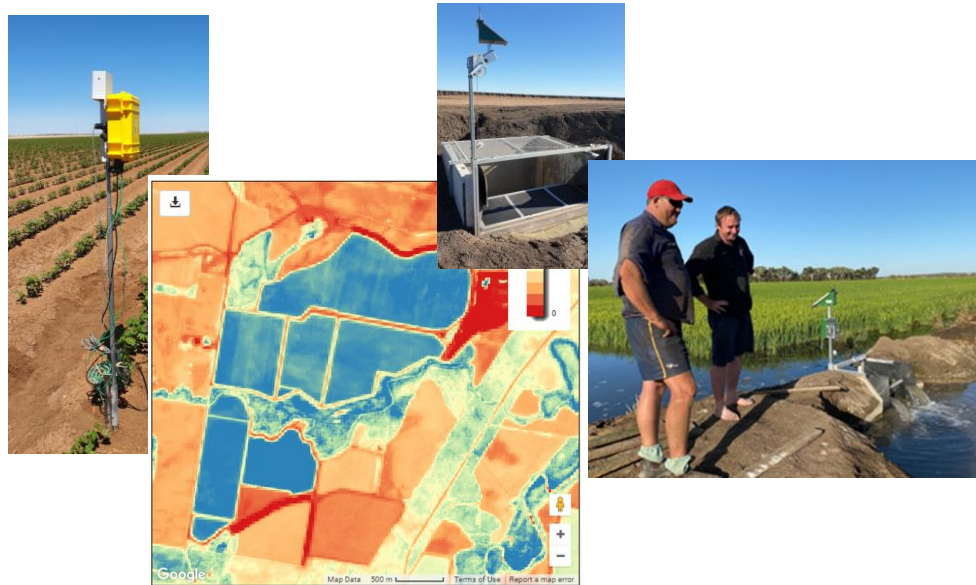




# SMART SENSING & AUTOMATION



**Padman Stops**

**Goanna Ag**

Project Team: John Hornbuckle, Rodrigo Filev Maia  
Carlos Ballester Lurbe, Matt Champness



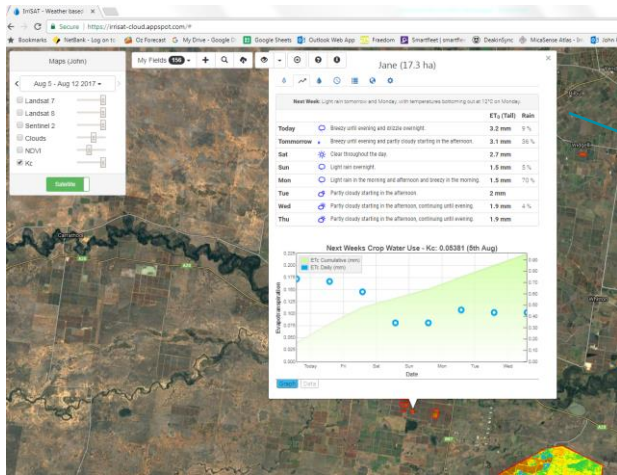
PARTNERS



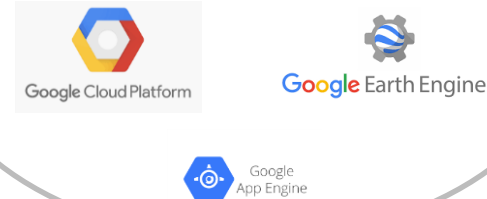
# WHAT IS SMART IRRIGATION CONTROL / AUTOMATION

- This project is aiming for much more than remote irrigation gate control – Automation 2.0
- It is integrating knowledge on maximising water and labour efficiency by providing automated control based on
  - (i) in-field & remote feedback sensors
  - (ii) forecast conditions/events

## 7-14 day forecasts

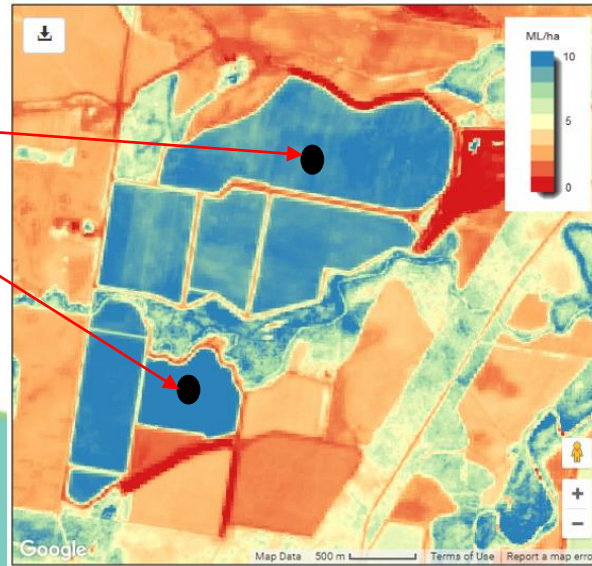


## On-line sensing & automation control



## Real-time sensing of soil, crop & climate

## RS Crop sensing



## Smart control structures (IoT)



**Autowinch Seasonal**

PRODUCTS / AUTOMATION / AUTOWINCH / Autowinch Seasonal



# PROGRESS

- Trail sites established
- Sites used as a test bed for development of sensor and automated control structure integration.
- Full cloud based integration of sensing and automation control structures have been achieved
- Ability to use across Padman, Bruno Altin and MILCast checks
- Range of communication/extension activities undertaken



## SMART SENSING AND AUTOMATION — CRUISE CONTROL FOR YOUR IRRIGATION SYSTEM



John Hornbuckle, Rodrigo Filev Maia and Carlos Ballester  
Centre for Regional and Rural Futures, Deakin University, Griffith, NSW

PHOTO: Irrigation farmers are increasingly considering automation. High labour costs, increased OH&S issues and the high cost of water are driving changes to water management. Getting the most out of automation is critical to ensuring its success. CREDIT: John Hornbuckle

### QUICK TAKE

- Two new projects, led by Deakin University, are looking at the benefits of smart sensing and automation in cotton and rice systems.
- These projects, as part of the Smarter Irrigation for Profit Phase II project, aim to achieve much more than just remote control of irrigation.
- Smart sensing and automation maximise water and labour efficiency by automating control of irrigation and integrating in-field sensors and forecast weather data.
- Industry project partners will ensure that products used in the trial are robust and ready for industry uptake.
- The projects aim to develop low-cost smart-sensing and automation systems for broadcast irrigation.

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Soil moisture forecasting for irrigation recommendation

James Pringle, John Hornbuckle, Carlos Ballester, Luke...



automation — cruise control for your irrigation system

# FURTHER INFORMATION

Deakin University Research – John Hornbuckle 0429 862 920

<https://smarterirrigation.com.au/>

Padman Stops – Grant Oswald 0448 097 308

<https://www.padmanstops.com.au/>

Goanna Ag – Tom Dowling 0428 717 982

<https://www.goannaag.com.au/>