Future Drought Fund Advisory Committee Regional Visit - Victoria
Thursday 29th November 2022
Warren Lloyd – Dried Fruit Farmer and SuniTafe Smart Farm Advisor
Nick Moore - Education Delivery Manager - Primary Industries

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SuniTAFE

SuniTAFE SMART Farm - Cardross

24 Hectares divided into different sections growing:

Best practice methods

- Citrus – Mandarines, Oranges, Tangelos
- Grapes (Dried and Wine)
- Avocados
- Vegetables

Innovation at large

- Almonds
- Olives

Emerging industries

- Dates
- Industrial Hemp

Excellence in Agricultural Education

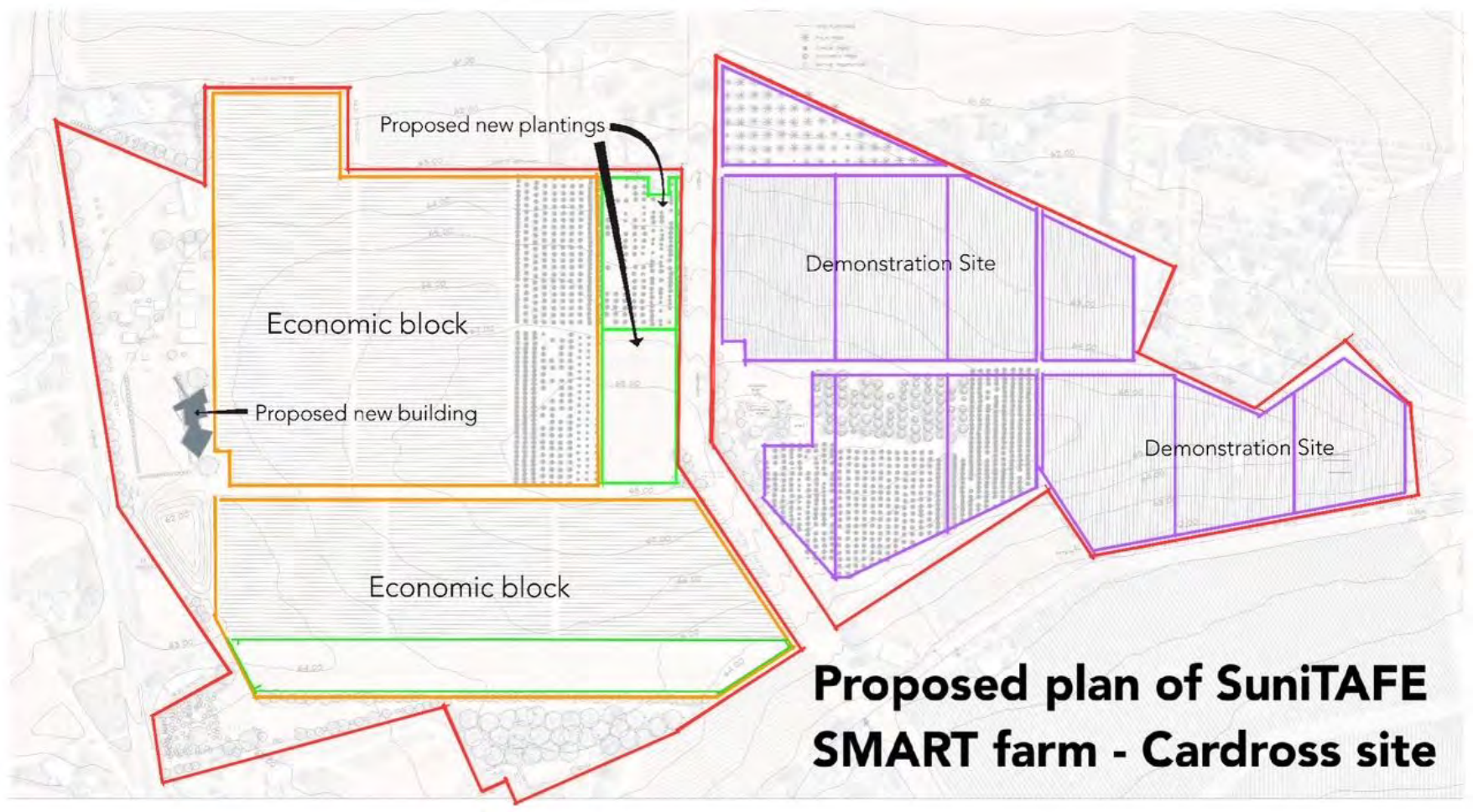
1970 - CSIRO demonstrate new mechanical harvester

- Working farm
- Educational facilities
- Providing local youth with agricultural education for more than 50 years
- Tradition of promoting innovation in horticulture
- SuniTAFE 2019 Victorian and National Training Provider of the Year Awards

Working Farm

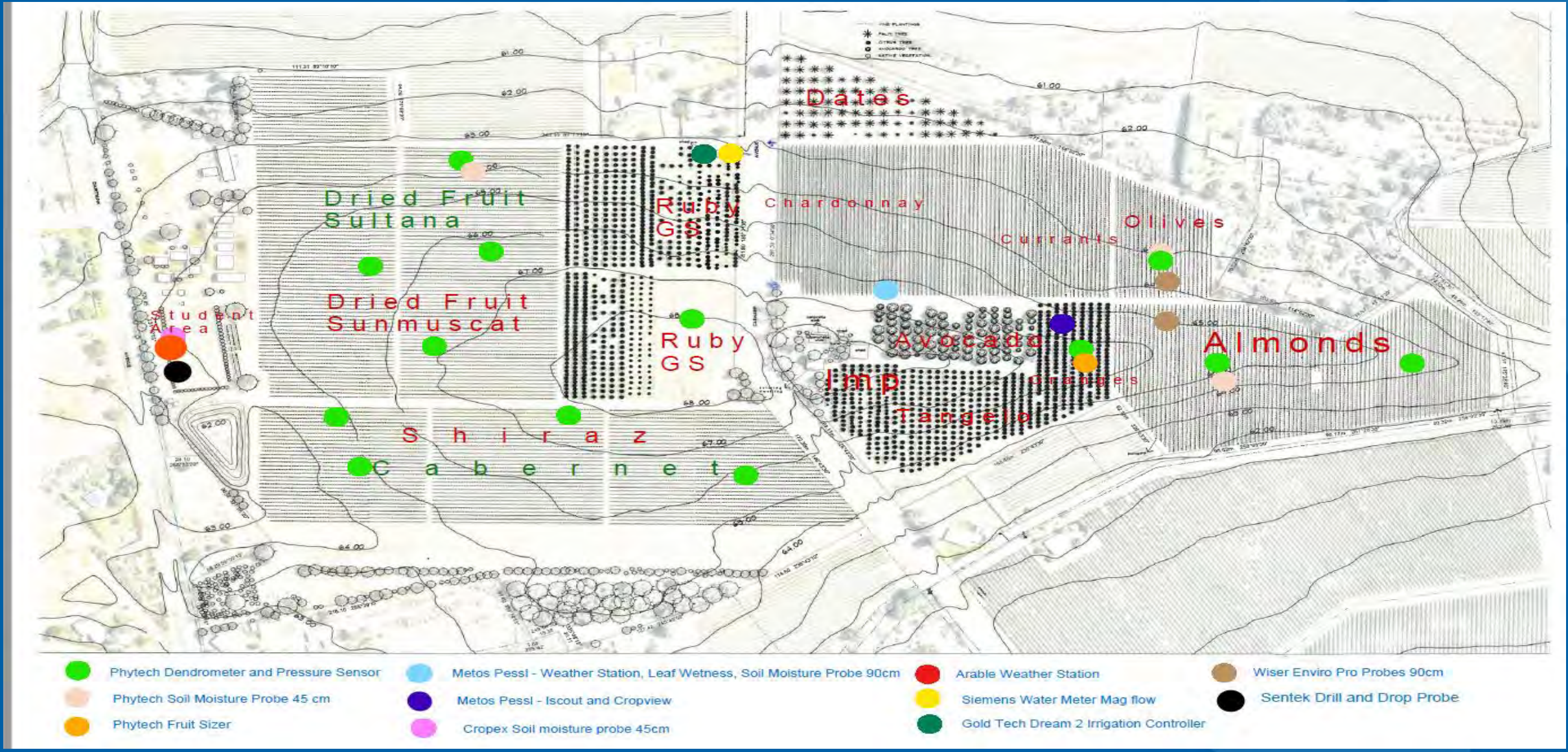
- Traditional Methods
- Existing crops in new ways
- Emerging crops

SuniTAFE farm divided into two distinct areas



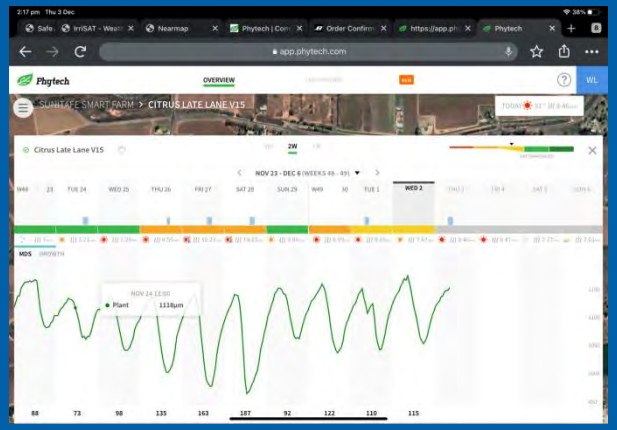
1. Economic block – comprising best practice dried fruit, wine grapes and Citrus
2. Demonstration site – divided into hectare lots for individual research projects

Demonstration Site



Sensors and IoT

Dendrometers



Weather stations

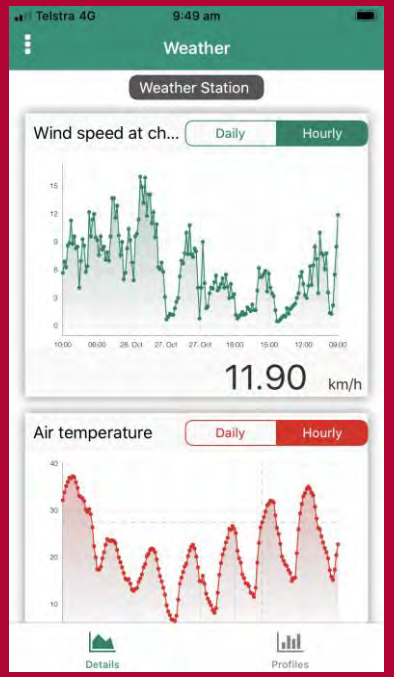
Soil moisture probes

SenTek Drill and Drop

- For short-term use, such as the monitoring of vegetable crops, due to the fast and easy install and extraction techniques
- Moisture, salinity and temperature sensors at every 10 cm (4 inches) depth
- Buriable to any depth
- Sends data via Bluetooth to phone

METOS ANZ

Leaf wetness sensor

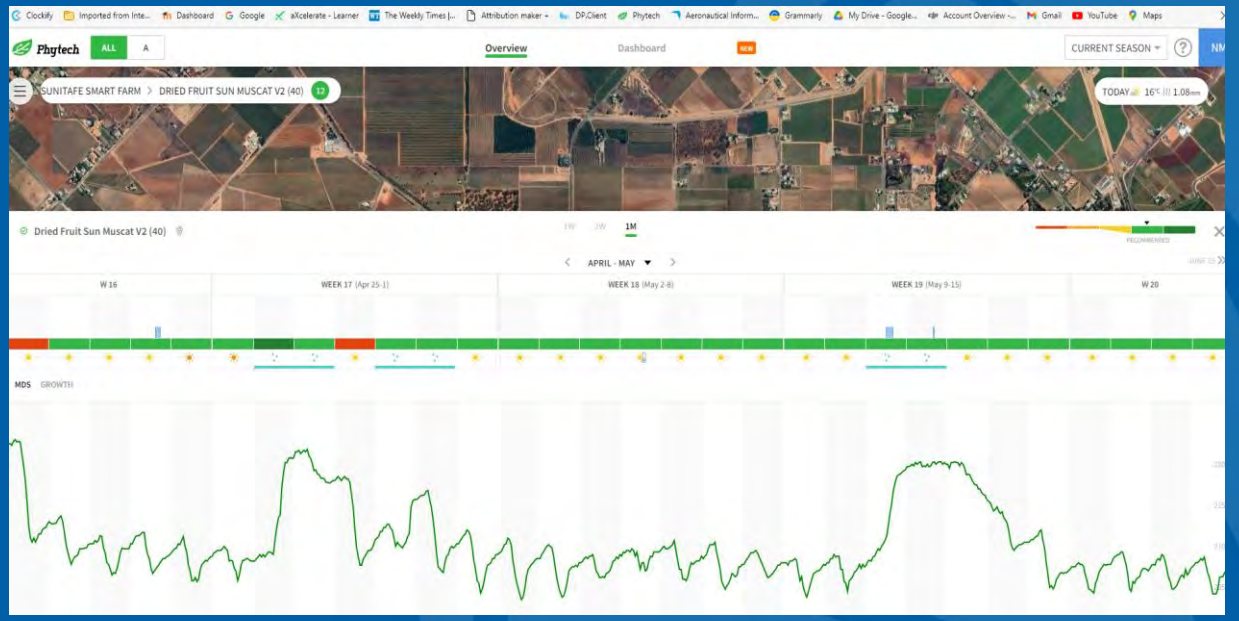


- Weather Station
- Leaf wetness
- Soil moisture
- Crop View Camera
- Pest View Camera

Accessible on Mobile phone

Phytech

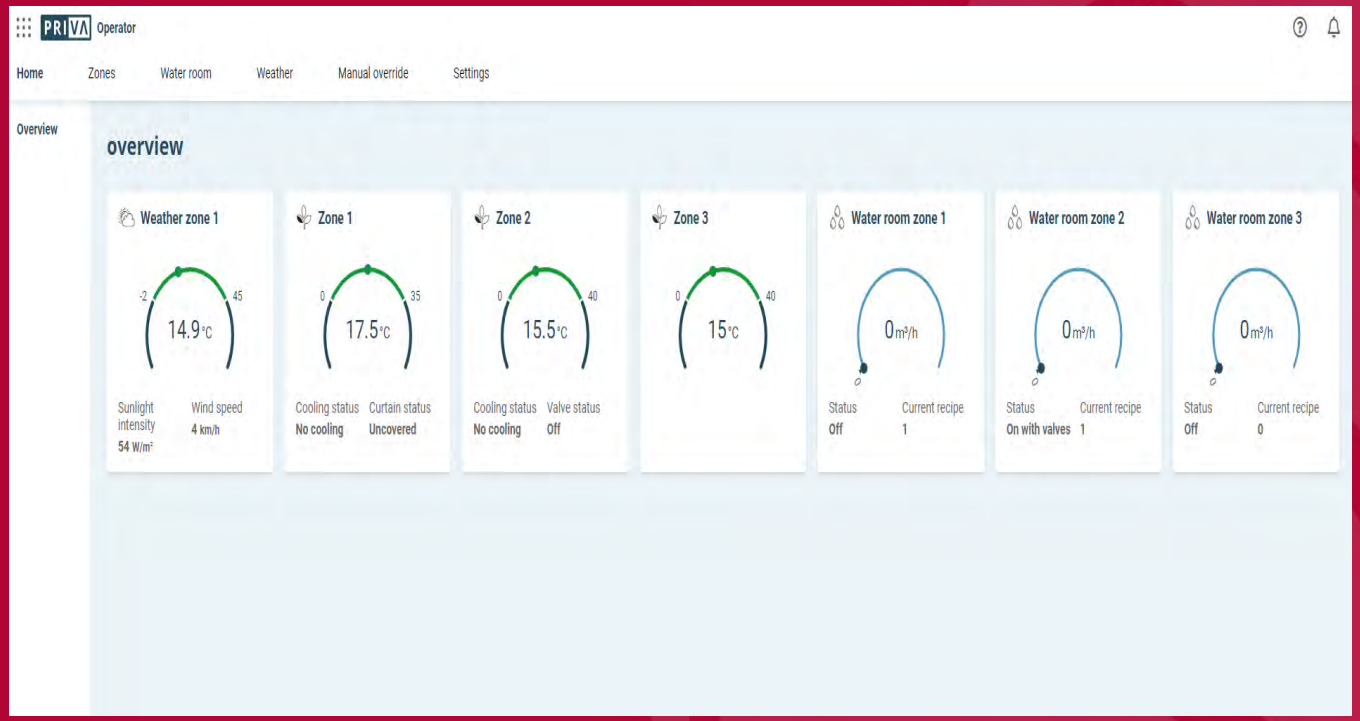
- First Real Commercial Dendrometer
- Pressure sensors
- Soil Moisture
- Easy-to-use platform
- Subscription based
- Company owns the information
- Weather prediction



Phytech

Priva Operator System

- Full Irrigation control
- Weather control
- Weather monitoring
- Soil Moisture monitoring
- Easy to use Platform



Priva - Operator

Crop X – Farm Management Platform

- Same method as capacitance probe
- Easy to Install
- Platform allow good
- Uses cellular signal
- Subscription based
- Company owns information
- Weather prediction

CropxWeb

Drone Technology

- 45 minute flight time
- 8km range
- Mapping program – prescribed map on computer and controls flight path
- Multi-spectrum camera –
  - NDVI (Normalised Difference Vegetation Index)
  - Infra red, pick up growth irregularities

SuniTAFE SMART Farm

Excellence in Agricultural Education - Promoting Innovation - Building Partnerships

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