Hort Innovation

Australian Horticulture Tree Crop Mapping

Lucy Noble, Head of Industry Insights

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Section 01

Crop Mapping

Crop Mapping at a glance

>160,000

Approximate **hectares of horticulture** mapped on the **Australian Tree Crop Map** in August 2024.

$2.6 billion

Total production value of Australian horticulture mapped.

16 per cent

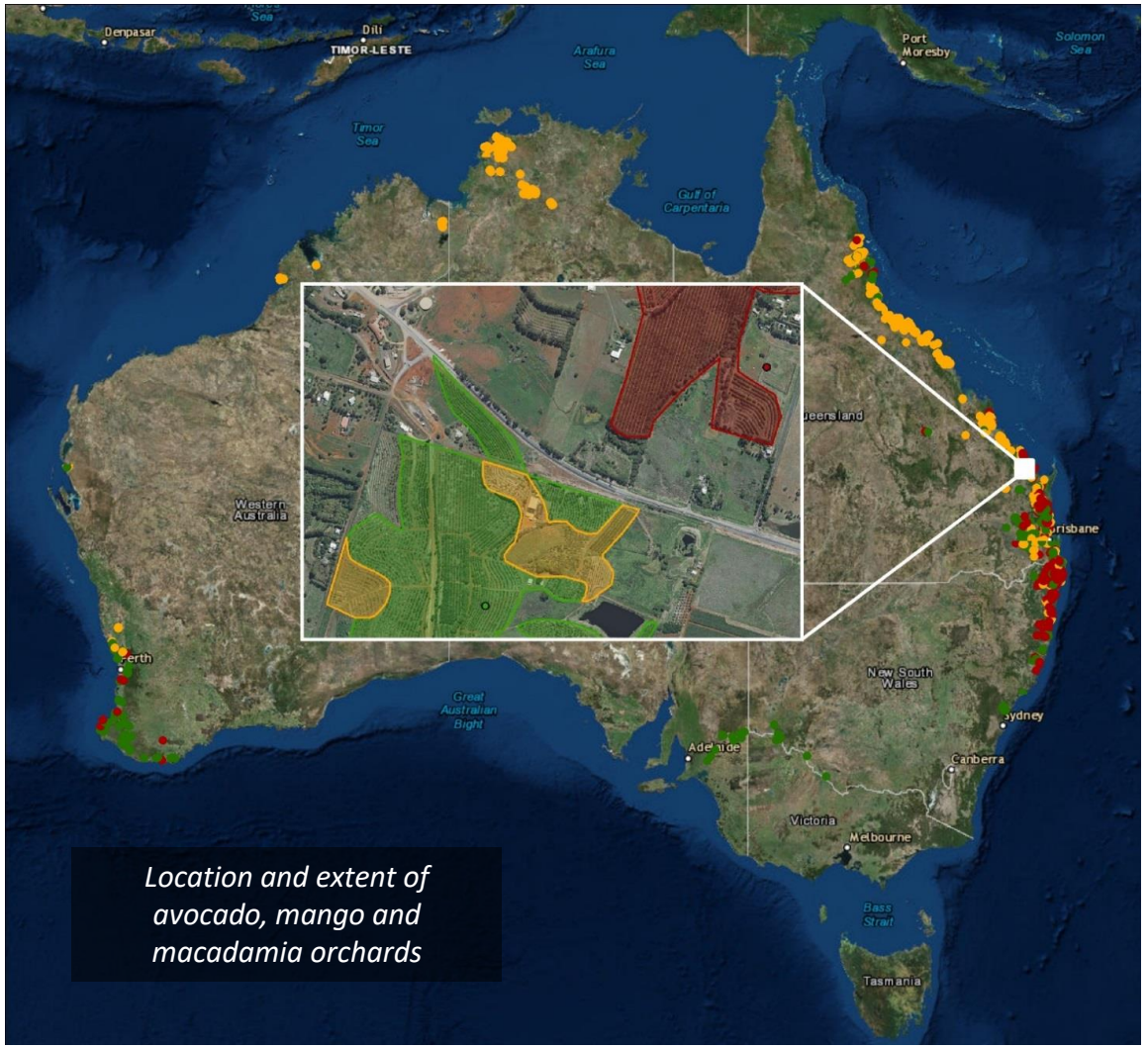
of the horticulture sector (by value) is **mapped using satellite imagery.**

What are we talking about?

Accurate horticulture category mapping, from the individual block to the national level

Inputs

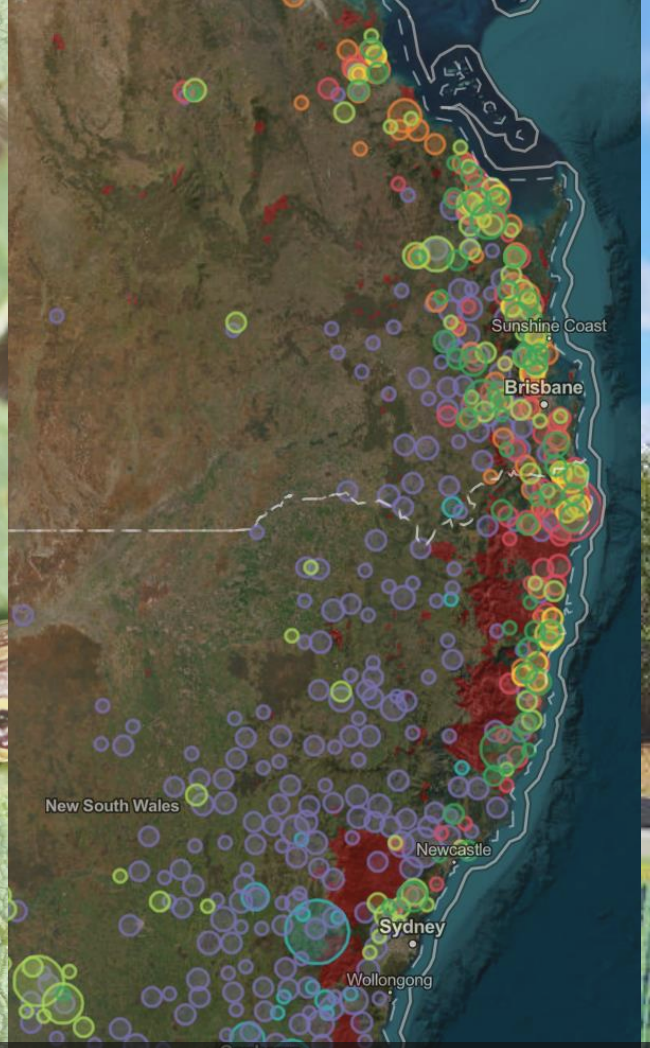
- Industry and government data
- Satellite imagery
- Aerial photography
- Citizen Science ‘Land use Survey App’
- Field observations
- Expert knowledge & industry engagement



Location and extent of avocado, mango and macadamia orchards

Biosecurity

Regional biosecurity preparedness and response



Natural Disaster

Natural disaster planning, response and policy

Production Area Data

Foundational data layer for further application of current and emerging technology

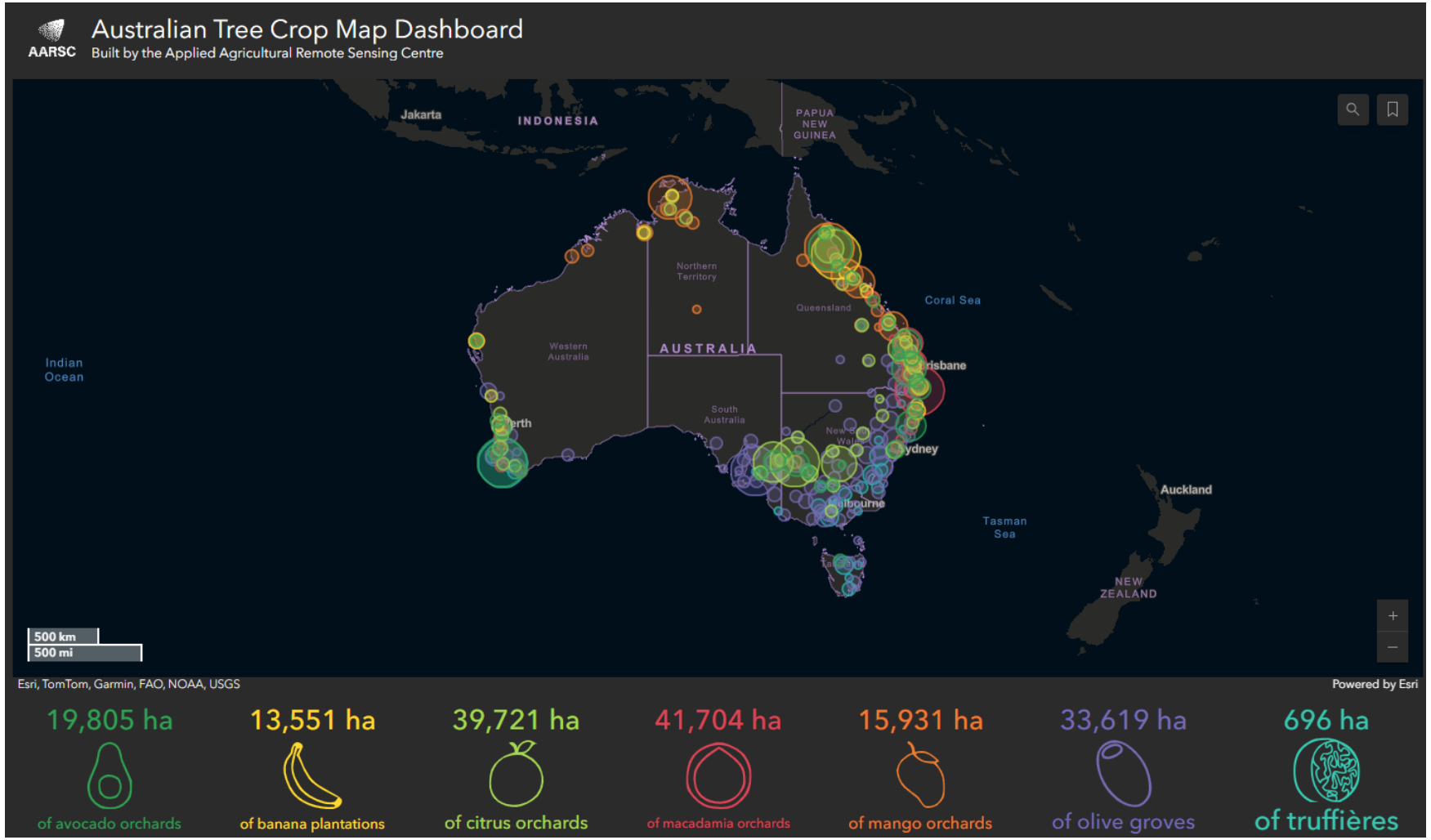
Industry Planning

Data to support industry decision-making, planning and monitor industry trends & forecasts

Section 02

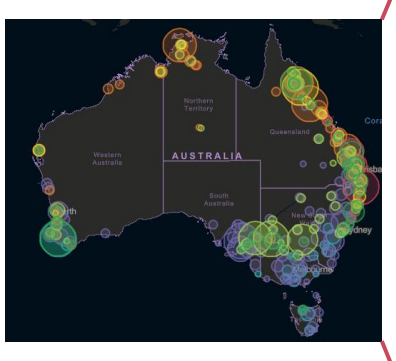
The Australian Tree Crop Map Dashboard

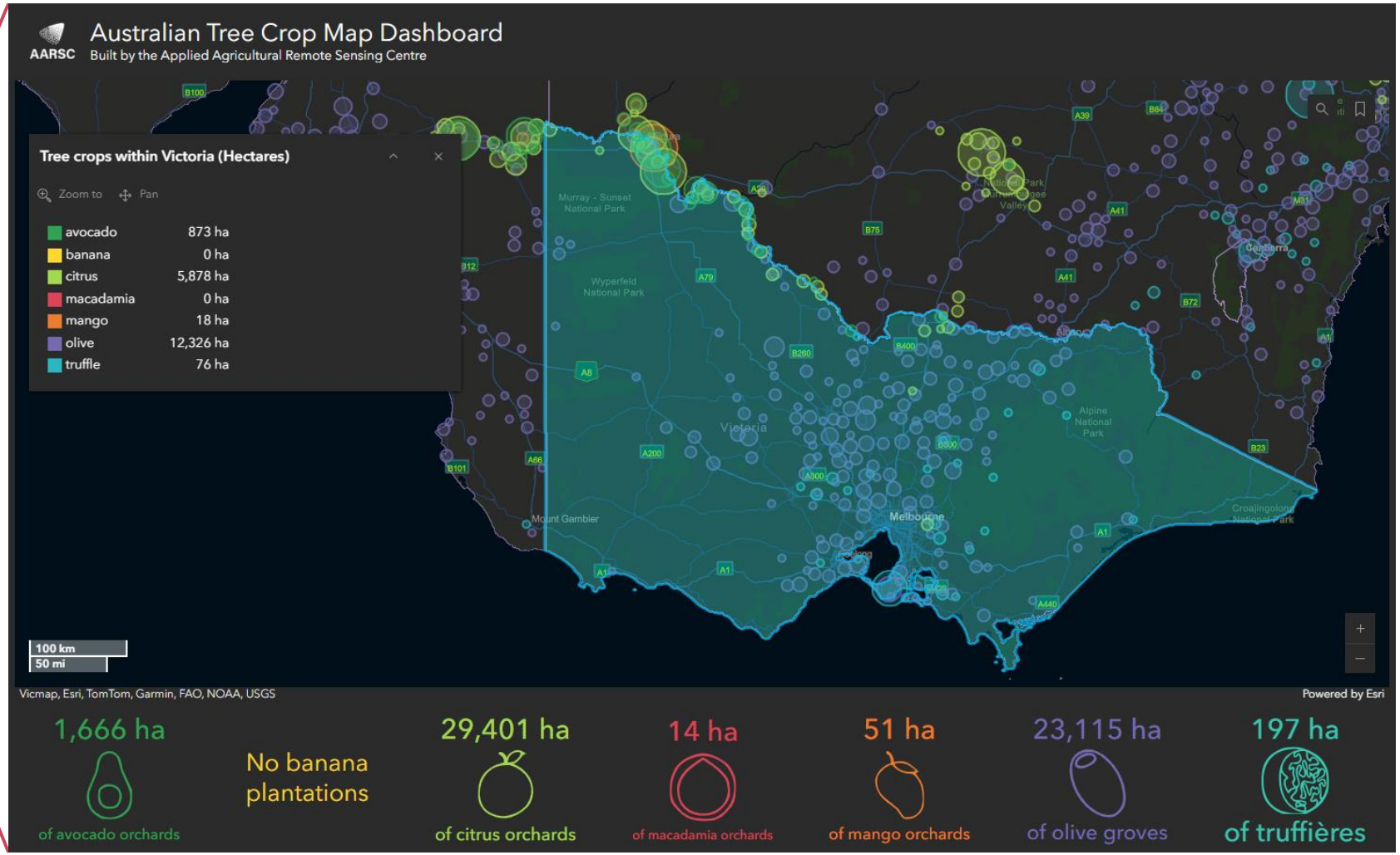
Australian Tree Crop Map Dashboard



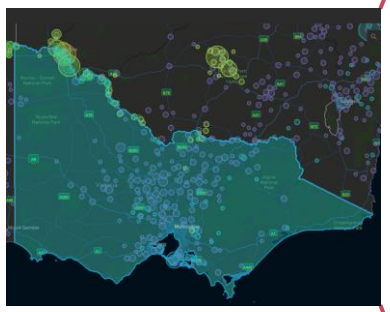
AARSC
Applied Agricultural
Remote Sensing Centre

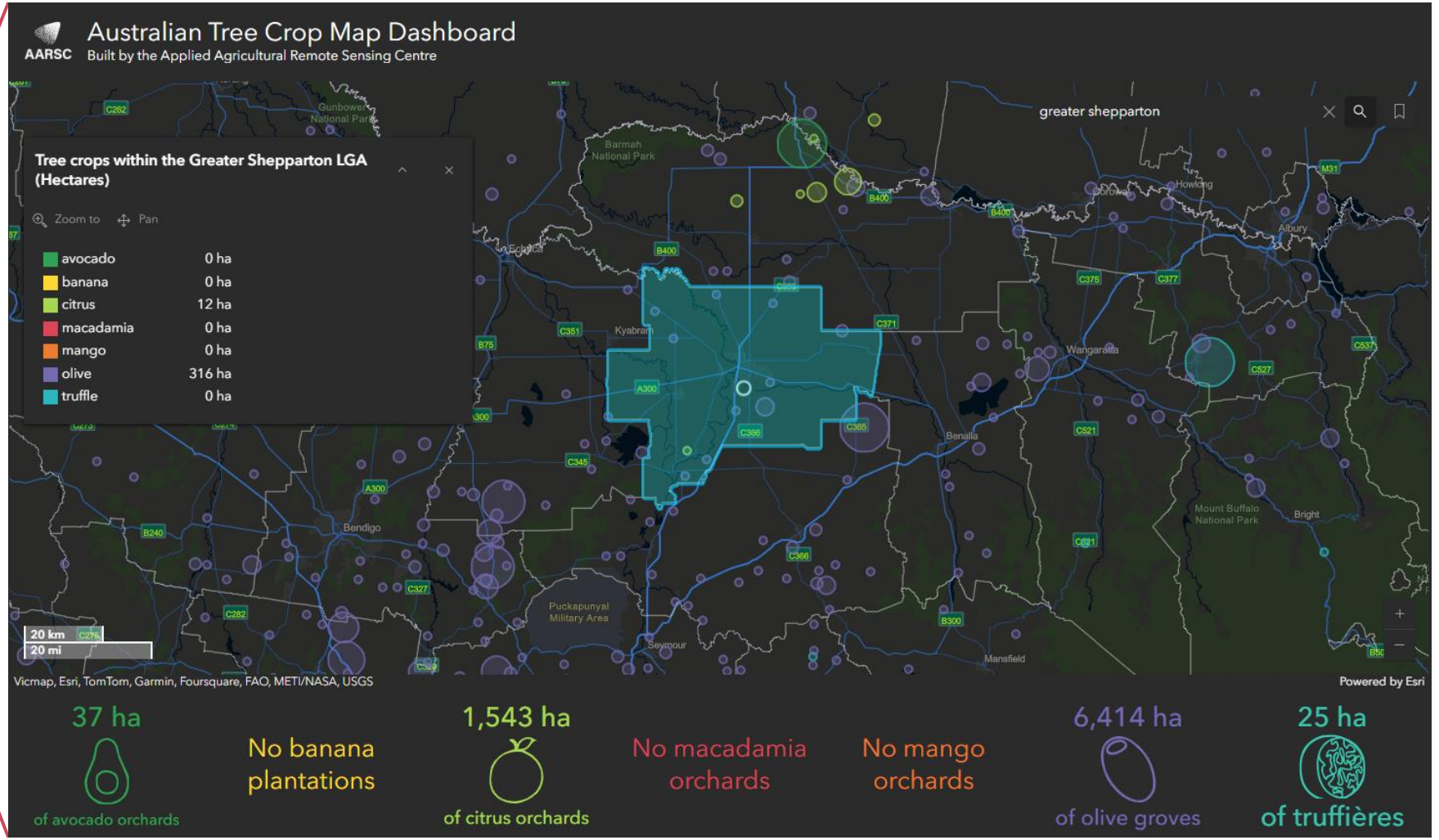
Tree Crop Map – *State level*



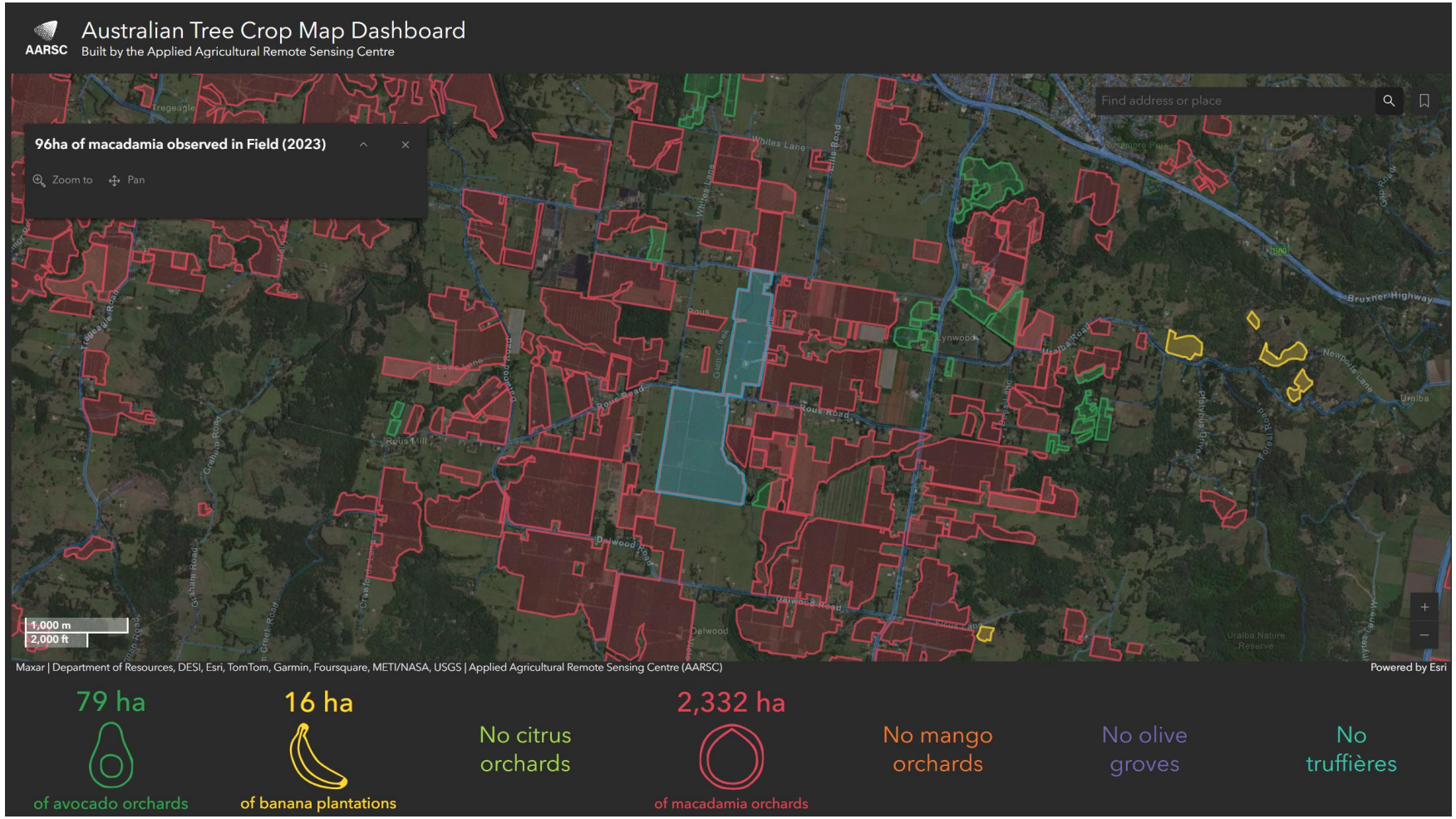


Tree Crop Map – *LGA level*





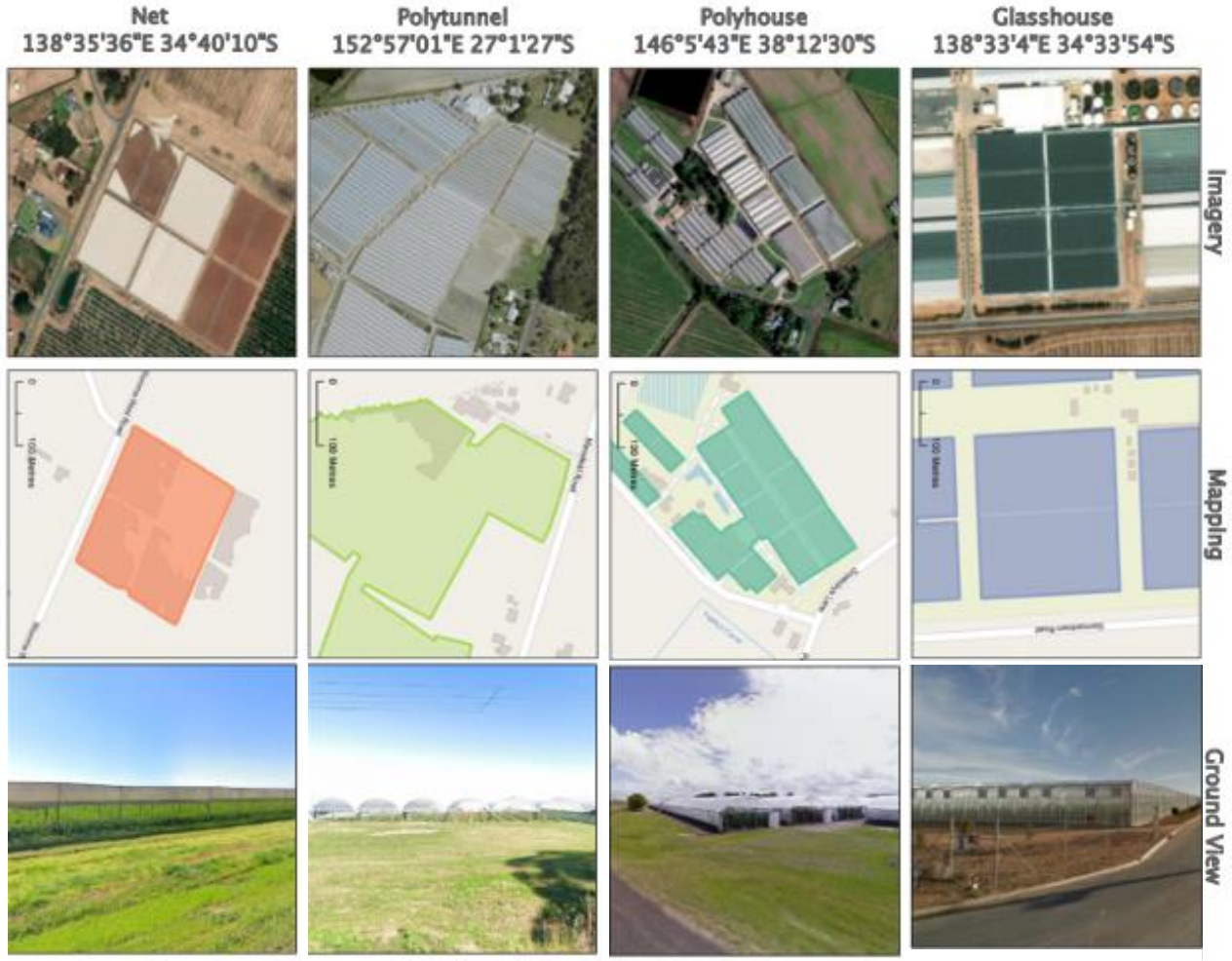
Tree Crop Map – *Polygon level (>1ha)*



National Map of Protected Cropping Systems

National map of all protected cropping systems in Australia

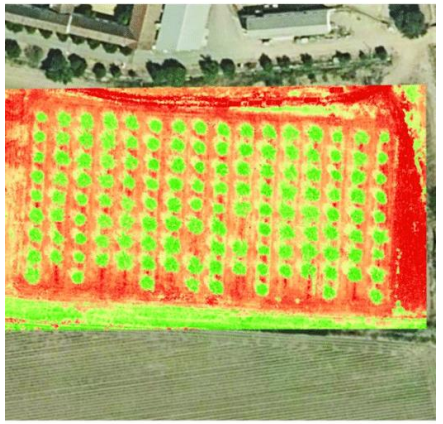
- Publicly accessible imagery.
- Published PCS dashboard in July 2023.
- Deep learning model developed.
- Supported Varroa mite response in NSW.

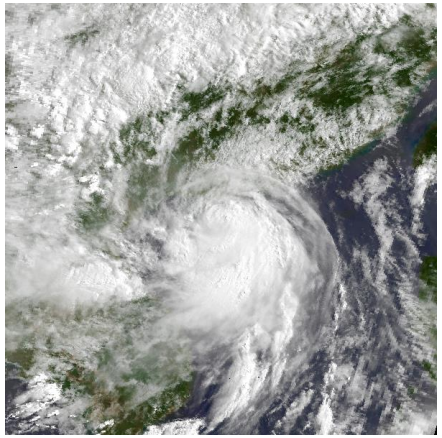


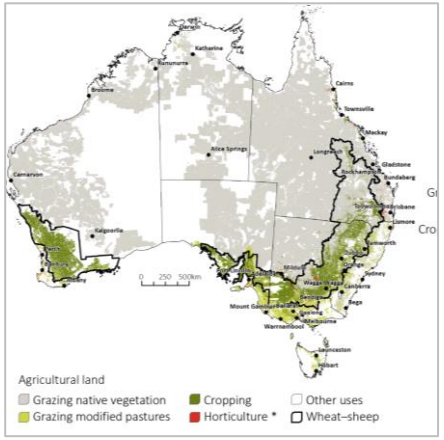
Mapping applications

Applications:

- Rapid Response Map
  - ➢ Biosecurity response and recovery (e.g. Varroa).
  - ➢ Natural disaster management
- Analysis and metrics.
- Image analysis (e.g yield, vigour, productivity).
- Baseline for additional data.
- Industry planning and forecasting.







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Thank you

Hort Innovation website

Australian Tree Crop Map Dashboard