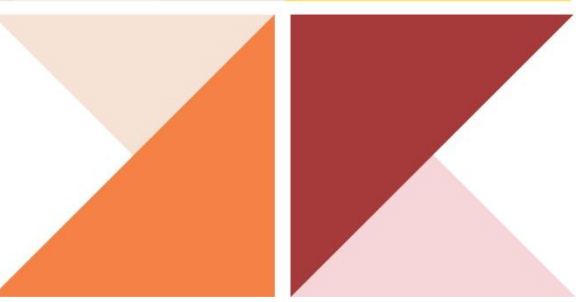




# Integrating Statistical and Geospatial Information

Presented by: Mr David W. Kalisch, Australian Statistician, Australian Bureau of Statistics

47th Session of Statistical Commission side event - Geospatial Information and Earth Observations: Supporting Official Statistics in Monitoring the SDGs





# ABS mission



## UNLEASHING THE POWER OF STATISTICS FOR A BETTER AUSTRALIA

**TRANSFORMING** FOR THE FUTURE

**WHILE CONTINUING TO**

- DELIVER** HIGH QUALITY OFFICIAL STATISTICS
- STRENGTHEN** OUR PARTNERSHIPS
- DRIVE** HIGH PERFORMANCE



## ENVIRONMENT

We collaborate with stakeholders to understand and respond better to the current and future external environment

## STRATEGY

Our strategies enable rigorous statistics, strong partnerships, and effective use of resources

## GOVERNANCE

Our governance supports responsive decision making, prioritisation and management of enterprise risk

## TRANSFORMATION GOALS

## INFRASTRUCTURE

Our infrastructure is effective, efficient and adaptable

## CULTURE

We are high performing, aligned, engaged, innovative and accountable


## PEOPLE

We have a diverse, expert, motivated and agile workforce

# ABS Engagement Plan




## HOW DO WE DO IT?




We seek to understand the current and future policy landscape. We listen to our stakeholders to understand their pressures, priorities and pain points. We invite input into our work program to ensure we remain responsive.

**OUTCOME: SHARED VISION**



We commit to ongoing open relationships. We care about our partners and seek to develop an environment ripe for innovation. We recognise that others play a significant role in Australia's statistical system.

**OUTCOME: SHARED BENEFIT**



We work together with partners on purposeful ways to inform understanding and action on complex issues and improve Australia's statistical system.

**OUTCOME: SHARED SOLUTIONS**





UN Economic and Social Council (ECOSOC)

UN Statistical Commission (UNSC)

- ABS International Geospatial Program Review – proposed a global framework

UN Committee of Experts on Global Geospatial Information Management (UN-GGIM)

- List of nine issues included 'linking of spatial to statistics'

UN Expert Group – Integration of Statistical Geospatial Information





- ABS is building a partnership with Geoscience Australia
  - leveraging both organisations investments and capabilities.
- Cooperative international representation
- Sharing transformation experiences
- Collaboration on projects
  - Foundation Spatial Data Framework
  - Earth observation data collaboration project



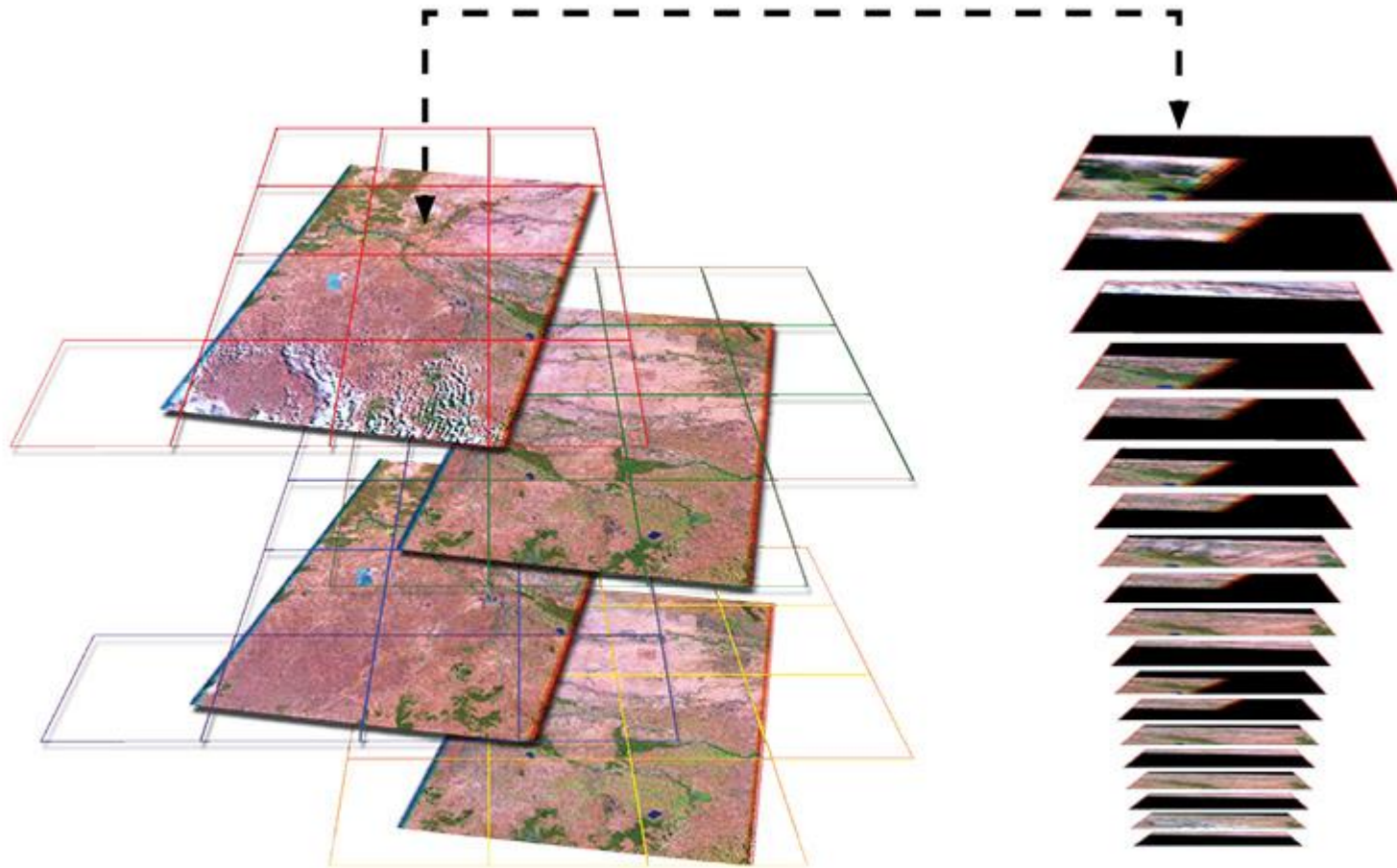
© ANZLIC



- Collaboration using Earth observation data
  - Specifically as a collaboration project
  - Leveraging national investments:
    - National computing infrastructure
    - Geoscience Data Cube
    - Official statistics
  - Develop new products for agricultural and environmental statistical programs.
  - Bridge gap between geospatial and statistical experts

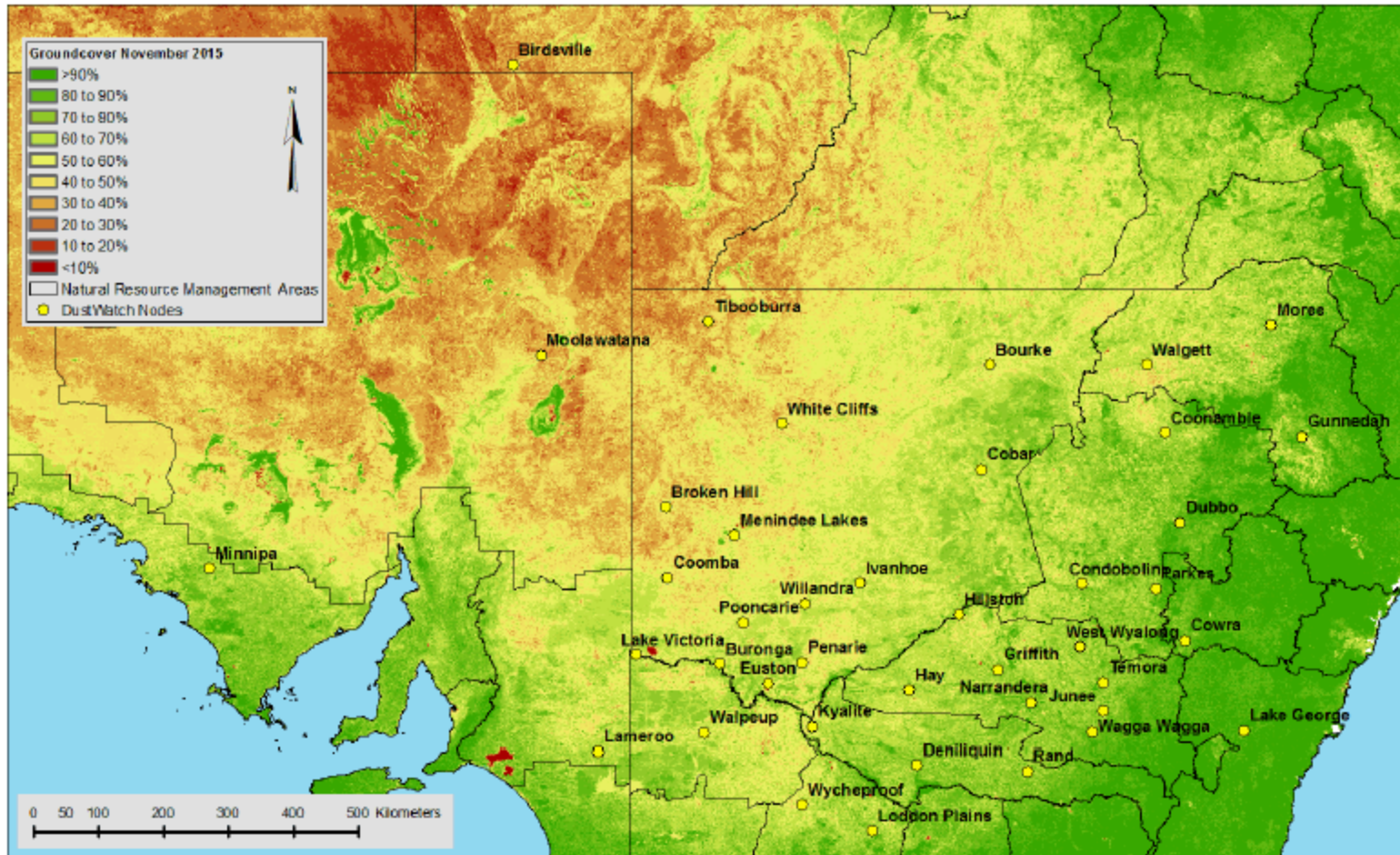


# Australian Geoscience Data Cube – Geoscience Australia



Source: Geoscience Australia

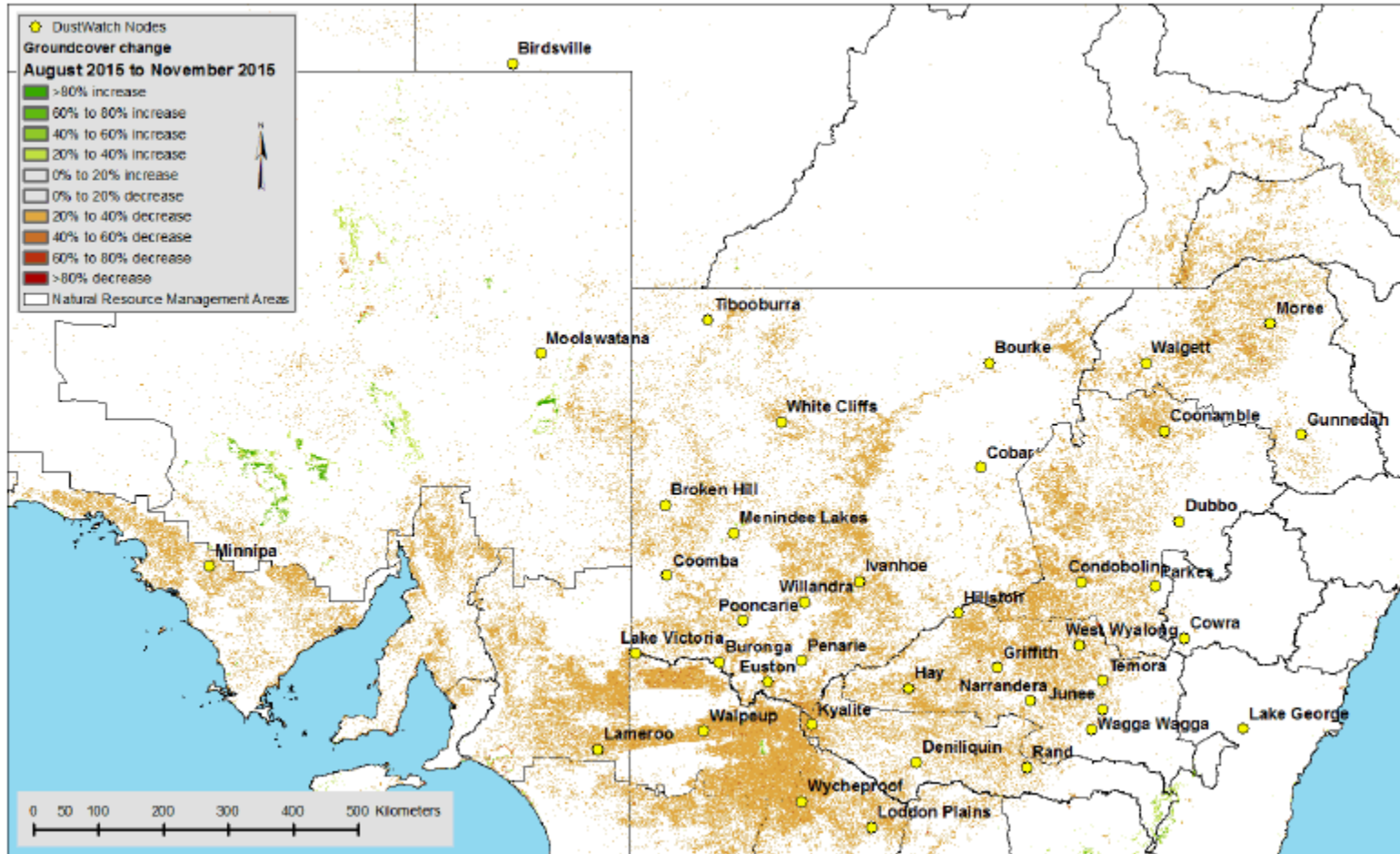
# Groundcover from MODIS



DustWatch Australia (©)



# Groundcover change from MODIS



DustWatch Australia (©)

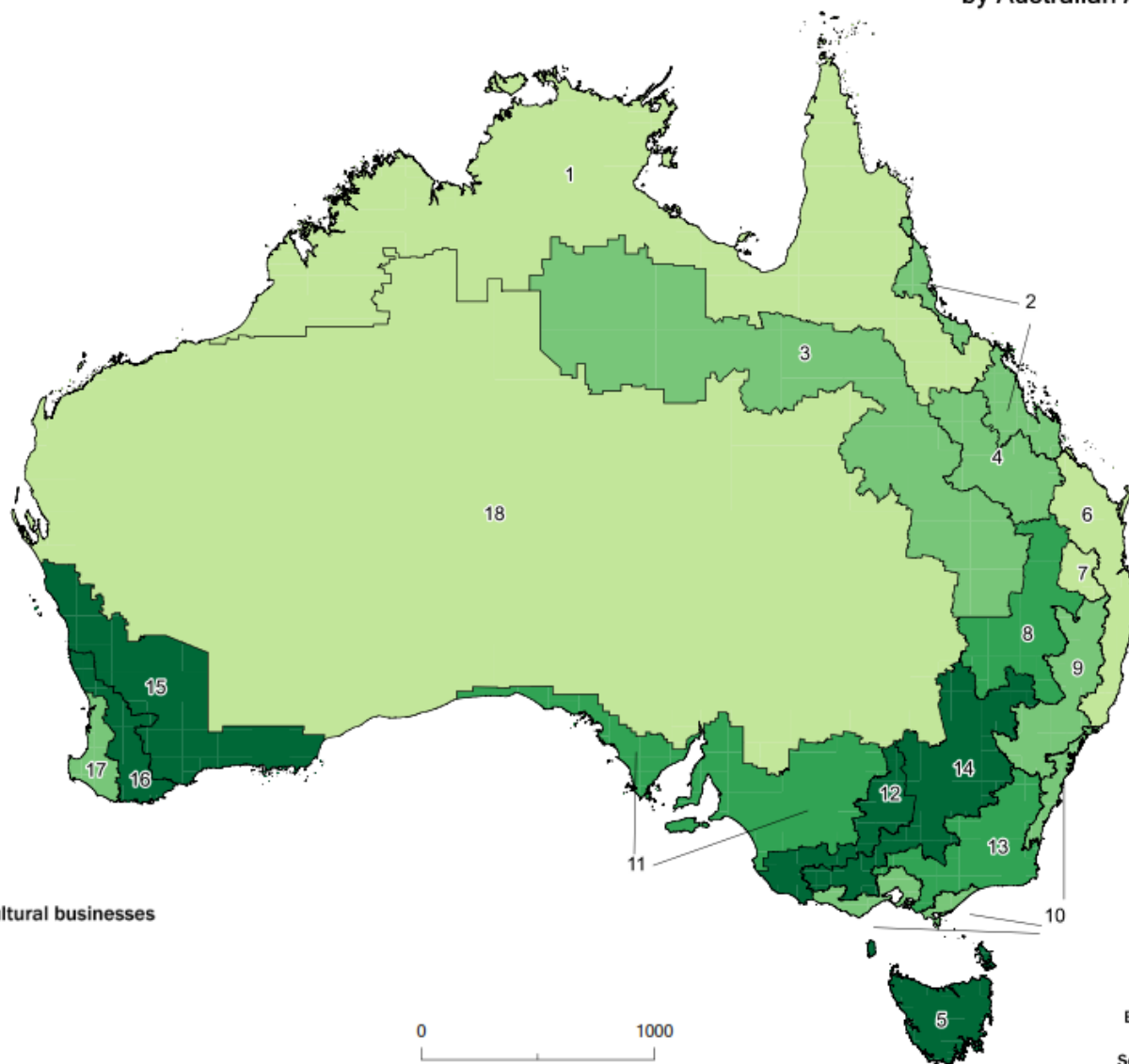






# Percent of agricultural businesses converting pasture to crop land, 2013-14

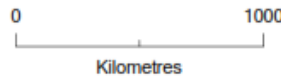
by Australian Agricultural Environments



### Australian Agricultural Environments

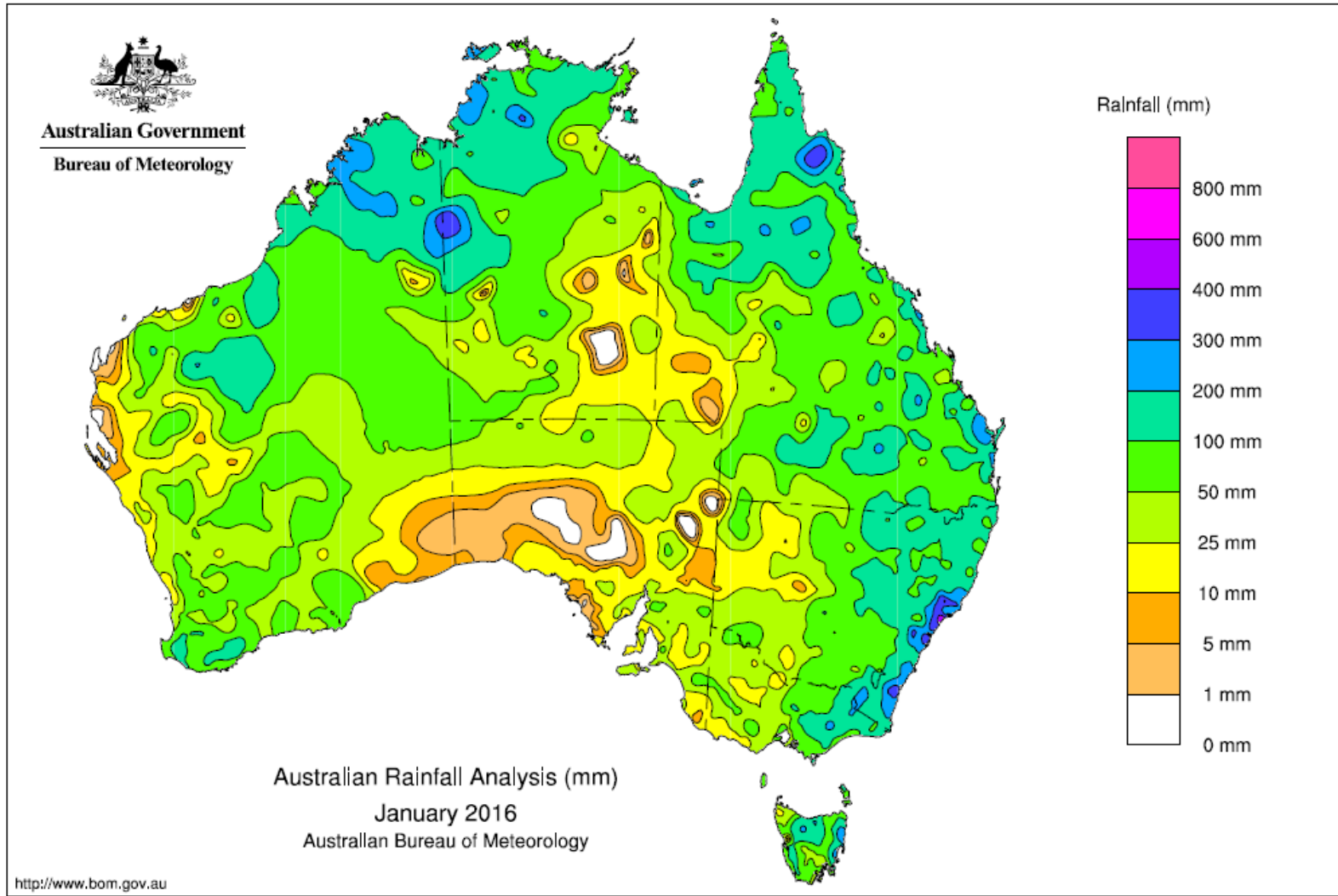
- 1 - Tropics
- 2 - Tropical Coast
- 3 - Semi Arid
- 4 - Subtropical Plains
- 5 - Temperate Coast South
- 6 - Subtropical Coast
- 7 - Wheatbelt Downs
- 8 - Wheatbelt North
- 9 - Subtropical Highlands
- 10 - Temperate Coast East
- 11 - Wheatbelt Central
- 12 - Wheatbelt Central East
- 13 - Temperate Highlands
- 14 - Wheatbelt East
- 15 - Wheatbelt West
- 16 - Mediterranean West
- 17 - Temperate Coast West
- 18 - Arid

### Percentage of agricultural businesses



Based on Australian Agricultural Environments (AAE)  
AAE boundaries supplied by ABARES  
Source: 2013-14 Land Management Practices Survey  
© Commonwealth of Australia, 2015

# Australian Rainfall



# Location is the link



- Integration of data provides a far richer picture for decision makers
- Allows use of a much wider range of existing data sources in analysis
- Location is an enabler for integrating data and making place based decisions