



GFSAD30 Field Work Planning: Progress in Australia

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GFSAD30 monthly meeting, February 20th, 2014, Telecon from Flagstaff

GFSAD30 Field Work Planning for Australia

Content

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GFSAD30 Field Work Planning for Australia

Objectives

- ❖ **Comprehensive Investigation of 4 key GFSAD30 products:**
 - **Land use: Croplands vs. non-croplands**
 - **Cropping intensity: Single, double, triple, continuous cropping**
 - **Crop watering method: Irrigated vs. rainfed**
 - **Crop type: Major 8 crops and others**



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Work Plan

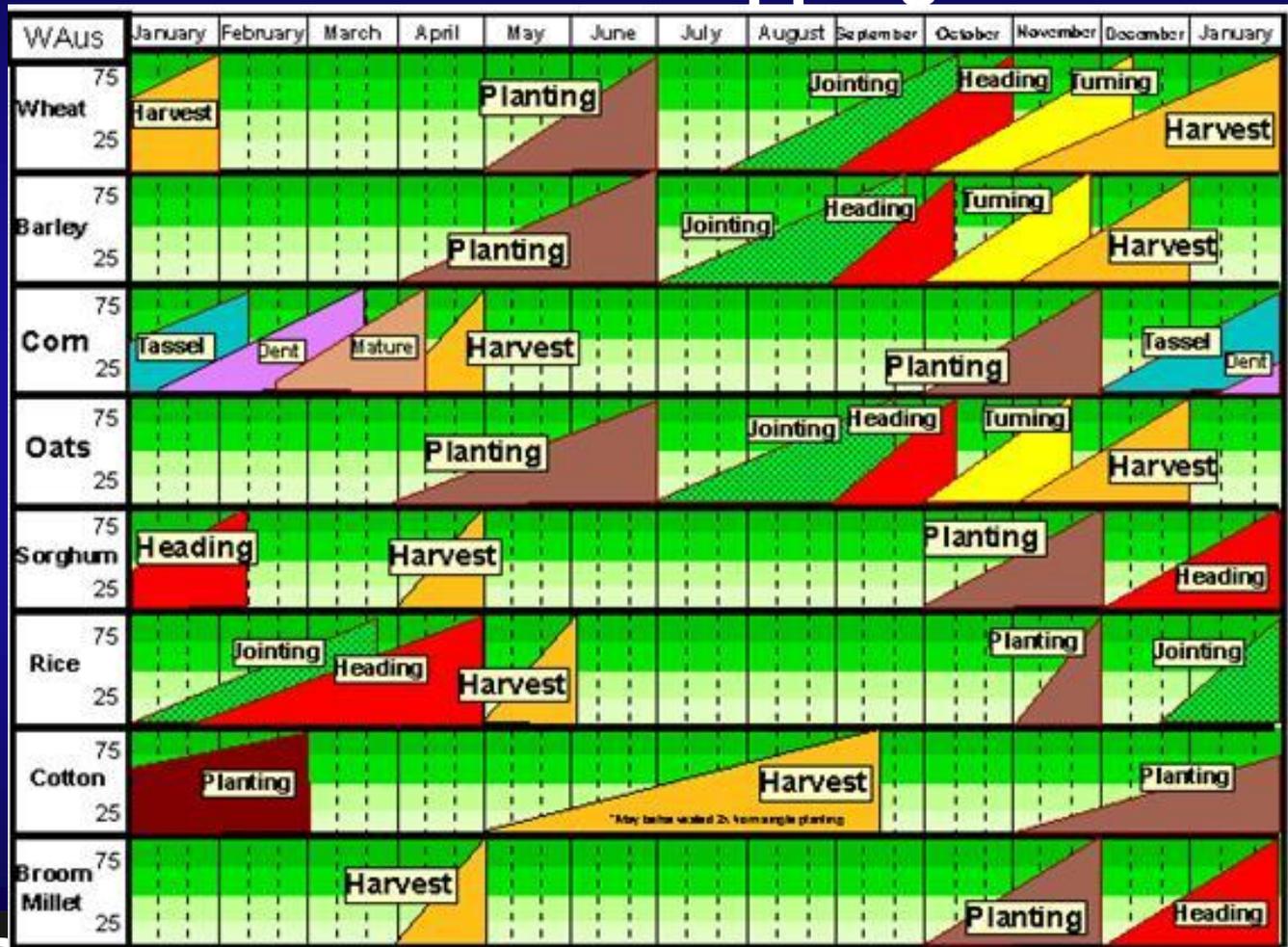
- ❖ **First field visit: Starts in third week of August, ~ 5 – 6 weeks.(end of September)**
 - ❖ **Peak growing season is August and September months for majority of crops. (e.g., Wheat , Barley, Oats).**
 - ❖ **Coverage area : New South Wales, Queensland, Victoria, South Australia, and Western Australia**
 - ❖ **Mileage: 5000-6000 Miles (200m/ day)**
- ❖ **Major Crop types:**
 - ❖ **Wheat , Barley, Corn, Oats, Canola, Potato, Cotton, Sorghum , Sugarcane, Fruits and Vegetables**



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Work Plan

Western Australia cropping calendar



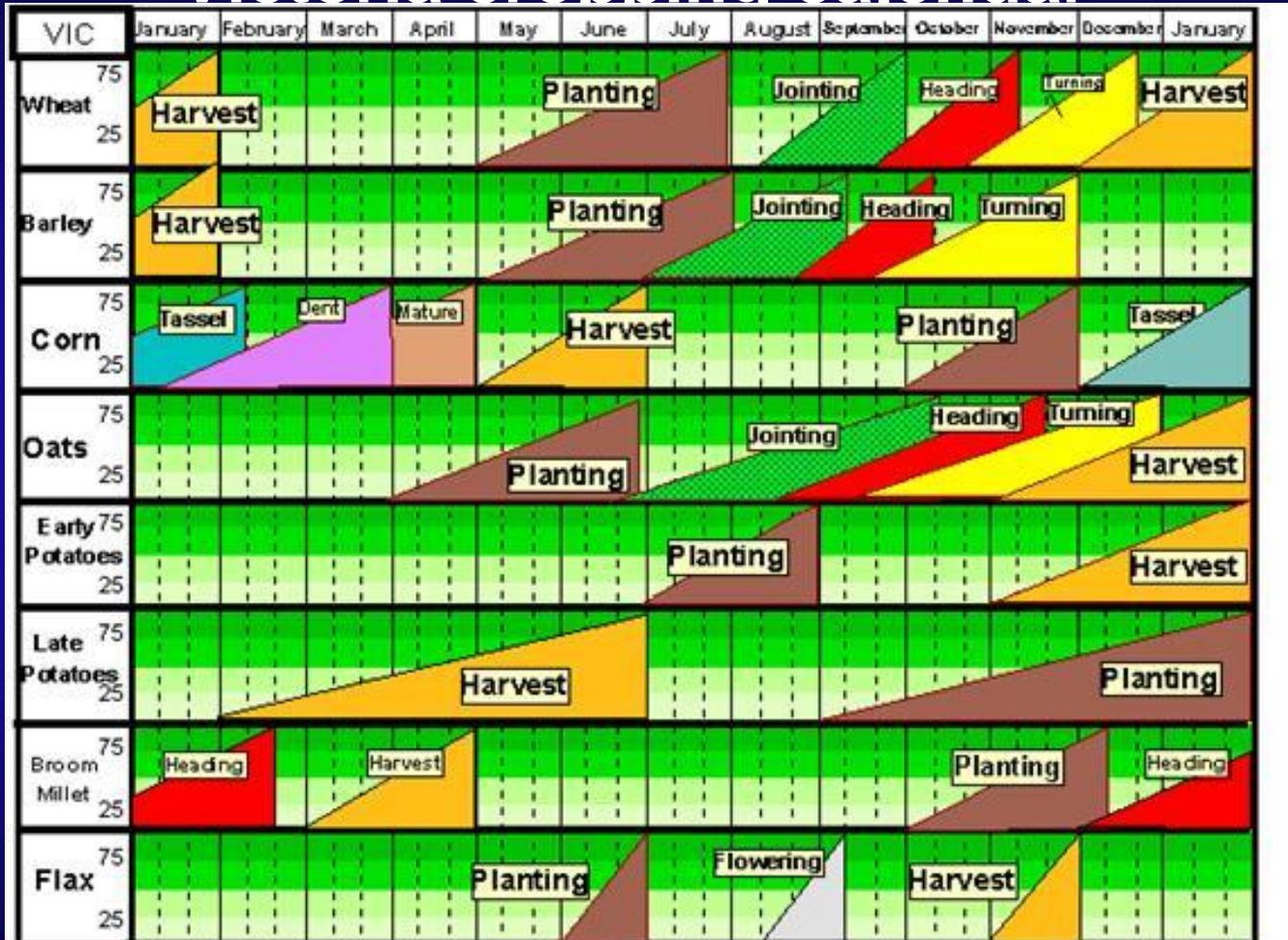
This information is based on normal seasonal conditions when crop sowing commences early May. Season variations will alter the above stages. Variation from normal would include wheat sowings being late and erratic due to dry conditions.



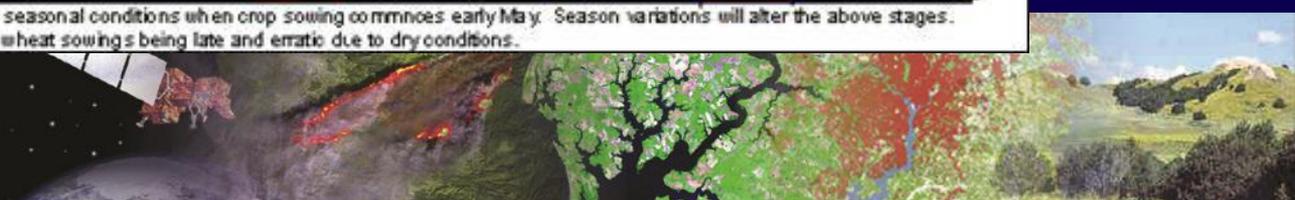
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Work Plan

Victoria cropping calendar

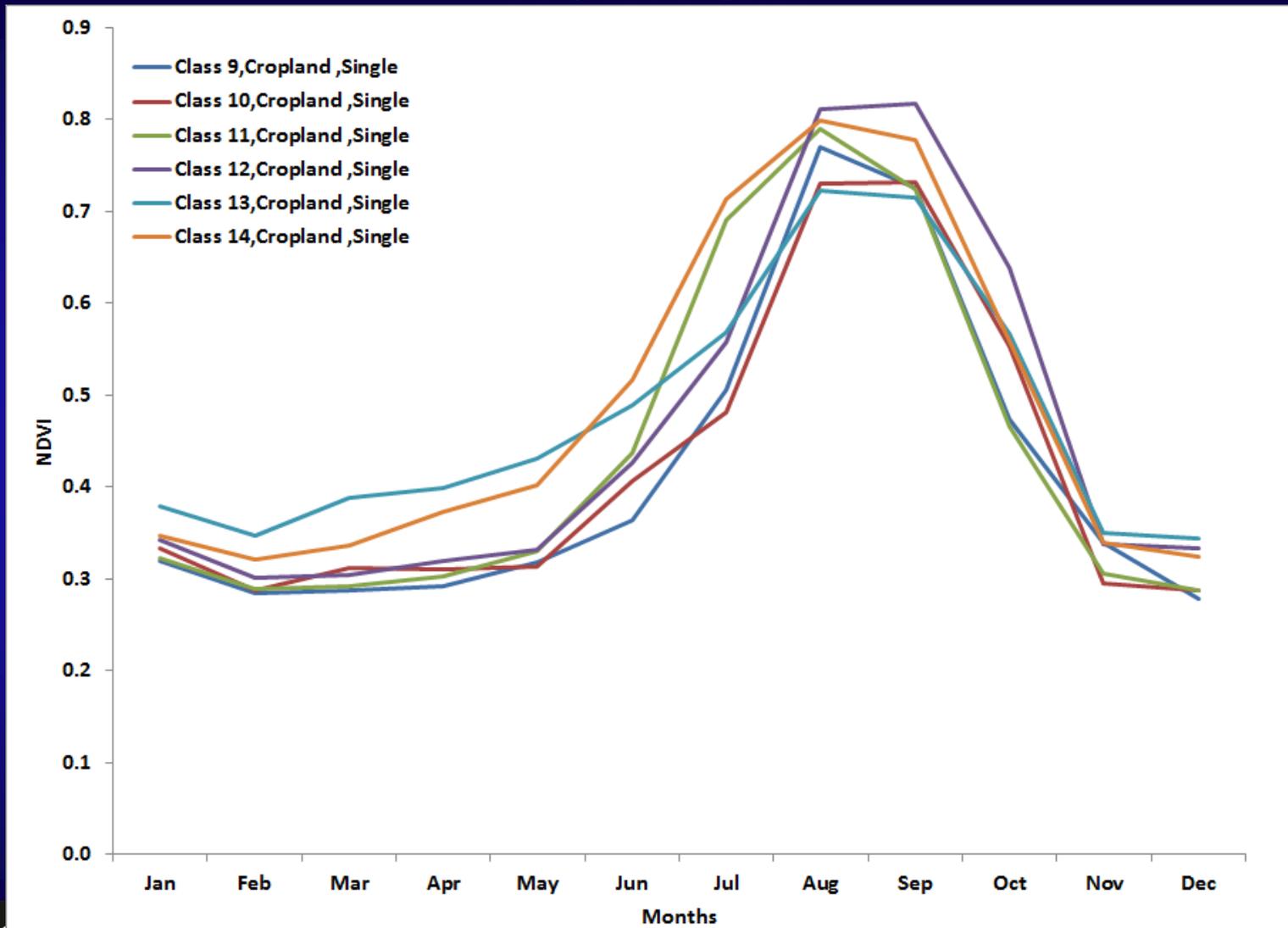


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Work Plan



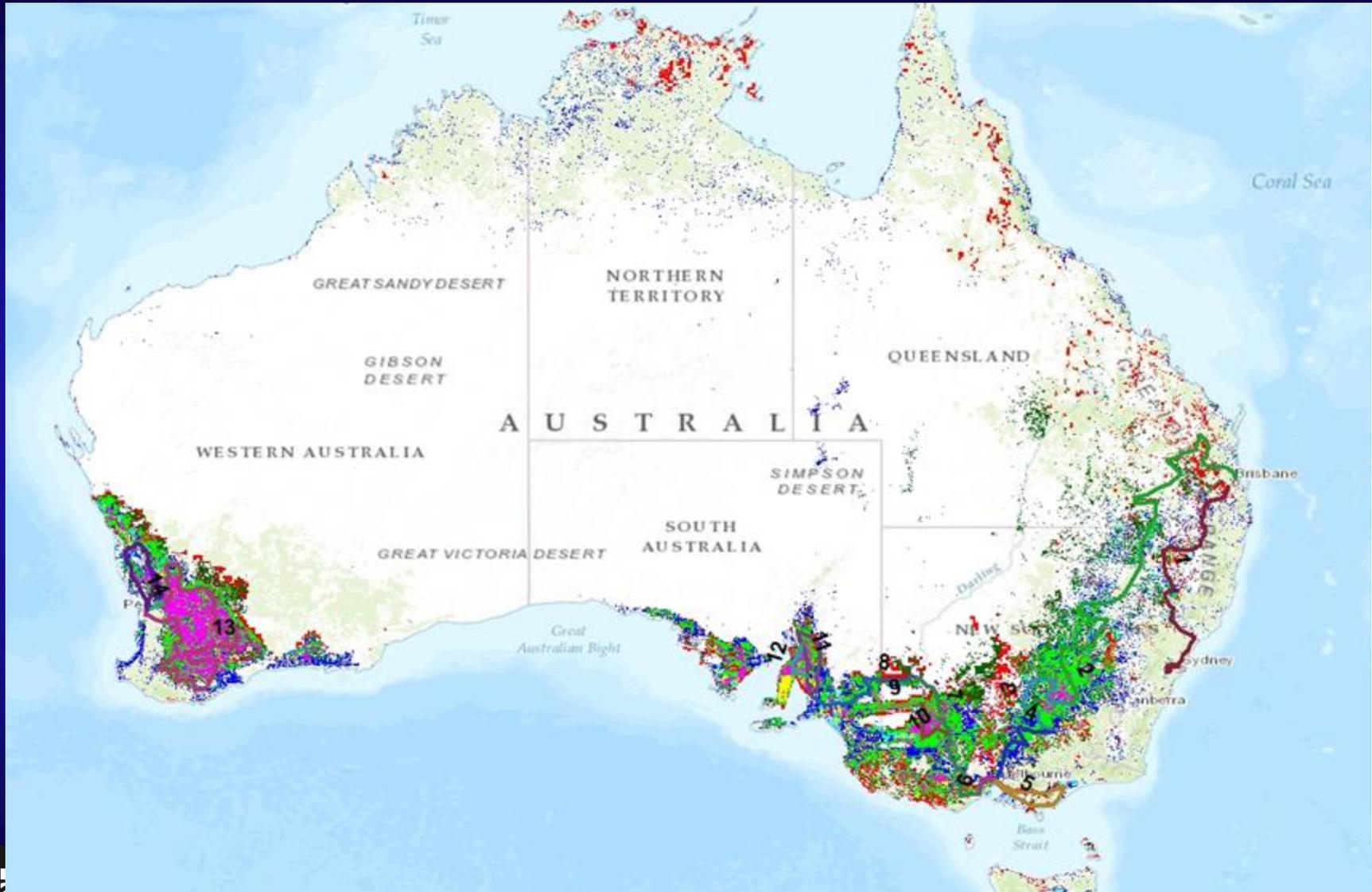
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Overview of Field plan



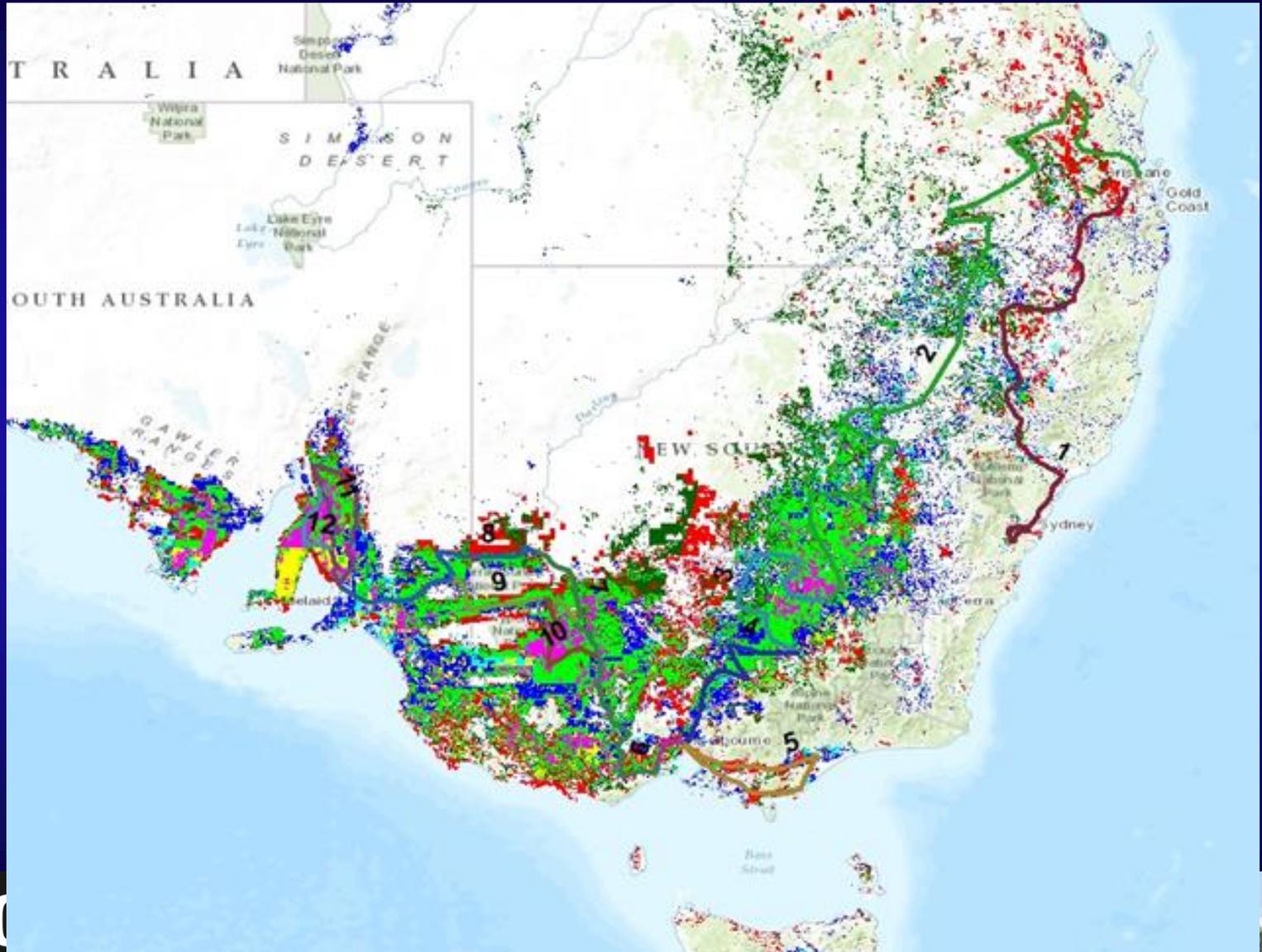
GFSAD30 Field Work Planning for Australia

Overview of Field plan



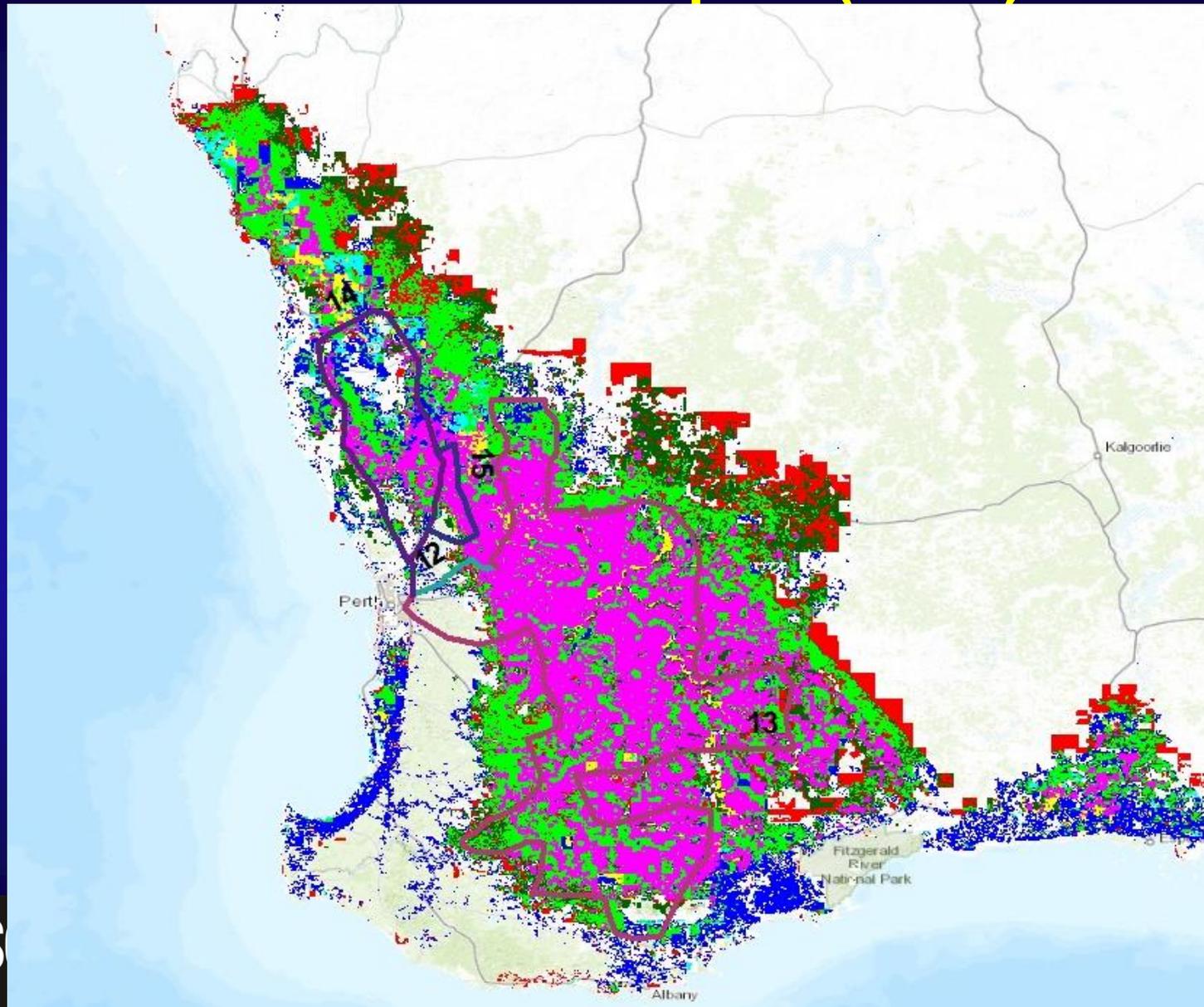
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Overview of Field plan (East and South)



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Overview of Field plan (West)



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Collaborating Partner/ Country Partner

- ❖ **University Of Technology, Sydney, New South Wales (Prof. Alfredo Huete and Dr. Rakesh Devadas)**
 - ❖ **University of Melbourne , Victoria (Dr.Ryu and Dr Biju)**
 - ❖ **Edith Cowan University , Perth, Western Australia (Sreedhar Acharya)**
- ❖ **Telecon with USGS Melno to coordinate field work**
 - ❖ **Jan 28th, 2014**
 - ❖ **Feb 11th, 2014**
- ❖ **Final field work plan**
 - ❖ **Pardha from USGS**
 - ❖ **PhD students of Prof. Alfredo from UOT, Sydney**



GFSAD30 Field Work Planning for Australia

Australia Cropland Knowledge Base

- ❖ Preliminary cropland map
(GCE V2.0 @ 250m, Australia)
- ❖ Crop Calendar
- ❖ Knowledge from local partners
- ❖ Complete ancillary dataset (statistics reports, GIS maps about Australia cropland and their reliability)
- ❖ Existing global ground observed sampling points (eg. Mutlu's integrated global dataset)
- ❖ Landsat images and high resolution images in 2014



GFSAD30 Field Work Planning for Australia field data available (cont)



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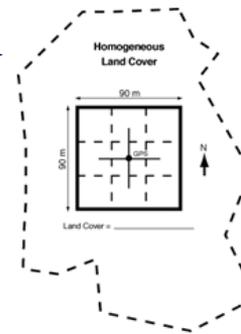
field data form

REFERENCE DATA COLLECTION FORM

Basic Required Information:

GPS Coordinates of Center of Sampling Unit (WGS84, DD): _____

Approximate Size of Sampling Unit (min. = 90mx90m): _____



Date of Collection (month, day, year): _____

1. Crop\<u>non-crop</u>: C\<u>NC</u>
2. Irrigation\<u>Rainfed</u>: I\<u>R</u>
3. <u>CropType</u> (Wheat, Corn, Rice, Barley, Soybeans, Pulses, Cotton, Potatoes, or Other):

4. Crop intensity: single, double, triple, continuous

Observer Name: _____ <u>Expert</u>: Yes or No

Were pictures acquired? Y or N

Any issues or anomalies at site: _____

Additional Desired Information:

Irrigated or <u>Rainfed</u> (circle one)

Cropping intensity: single, double, triple, continuous (Circle one)



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Field data sampling strategy

- ❖ **Sampling strategy: stratified random sampling**
- ❖ **Homogeneous representative sampling areas**
- ❖ **Documentation on the above will be created**



Comments? [Contact me](#)

