

**Australia-UK Cal-Val SpaceBridge
Australian Community Initial Workshop
1st December 2021**

Hybrid event: Online and in person @ CSIRO, Black Mountain, Canberra

Objectives

The Australia-UK Cal-Val Spacebridge project seeks to capitalise on the Earth observation (EO) data calibration and validation expertise in Australia and the UK. Both communities are recognised as world leaders in different aspects of this sector, and the project seeks to identify synergies, complementarities and opportunities for the development of collaborative projects that will advance their individual national space programmes and develop new markets for these services. The demographic of the EO satellite data market is changing with the rapidly increasing number of commercial smallsats. The project team seeks to explore how existing public infrastructure and expertise in Australia and the UK can be applied to best effect so that these new data sources have maximum utility and value. The project also seeks to explore how a bilateral cooperation might explore tools for assuring data integrity, as EO data is increasingly relied upon as the basis for information related to, for example, carbon market assurance, or national emissions reporting; information which may be subject to legal scrutiny and challenge.

This first workshop aims to establish a vision for a vibrant Australian cal-val market offering products and services to space data providers and users around the world.

The objectives of the workshop are:

1. **To outline the vision of a future Australian & UK cal-val sector that builds on the world-class facilities and expertise in-country** and is positioned to take advantage of the cal-val requirements of the 1000s of New Space EO missions in planning.
2. **To debate and refine that vision.** To understand the facilities, agencies and companies that might form the basis of the sector - which companies currently offer relevant products and services and what companies might evolve to do so. And to develop a community subscribed to this vision and willing to participate in its development in the years ahead.
3. **To begin to develop an understanding of the needs of our domestic agencies and companies building and operating EO satellites**, including Aquawatch, as well as the many anticipated smallsat missions.
4. **To consider a small number of case study** ideas for exploration during the Spacebridge project, being:
 - a. Biomass and carbon market applications, including support for the BIOMASS mission and participation in GEO-TREES.
 - b. Open source methodology and tools for data integrity monitoring and exploration of Aus-UK initiated framework to develop a critical mass of capabilities. Discussion of the need and market for data integrity services.
 - c. Cooperation between the SCR (Aus) and TRUTHS (UK) missions.

Attendees

The Spacebridge project is somewhat exploratory and aspirational. Australia is widely recognised as a world-leader in EO cal-val. The evolution of this capacity to be fit for purpose for the global New Space EO market and in support of our national EO satellite missions is, however, not assured and will need public and private organisations to cooperate around a shared vision of the opportunity. The workshop aims to bring together the key public agencies (GA, CSIRO, ASA, State Govt bodies), universities, domestic smallsat aspirants, and companies that might see themselves bringing relevant expertise to the table or see opportunities for themselves in the future market vision. Limited numbers of attendees may attend in person at CSIRO, Black Mountain. Further attendees are welcome to join by videoconference.

Draft agenda

Kick-off: 11:00am AEDT (Canberra, Melbourne, Sydney); 10:00am AEST (Brisbane); 10:30am ACDT (Adelaide); 8:00am AWST (Perth)

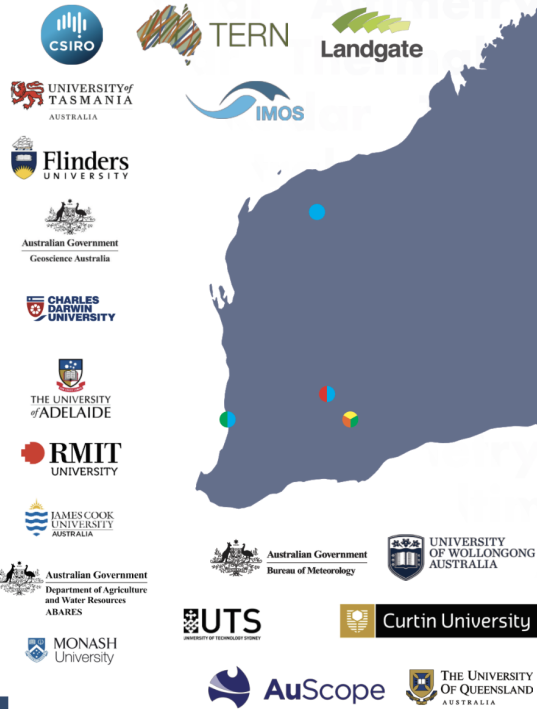
Duration: 2.5 hours

Link: [Click here to join the meeting](#)

1.	Introductions & Welcome <ul style="list-style-type: none">- Organisation profiles submitted in advance	Spacebridge project team	10 mins
2.	Vision outline <ul style="list-style-type: none">- Capabilities- Opportunity- Challenges	Spacebridge project team with GA and CSIRO	30 mins
3.	Discussion <ul style="list-style-type: none">- The vision- The community- The market	All	25 mins
	Short Break	All	5 mins
4.	Australian satellite cal-val requirements & plans	Relevant agencies and companies	20 mins
5.	Interest in the Spacebridge case studies & their focus <ul style="list-style-type: none">- Biomass & carbon markets- Open source integrity tools- SCR-TRUTHS	Relevant agencies and companies	40 mins
6.	Wrap	Spacebridge project team	20 mins

Facilities & Scope

The core facilities of the AusCalVal network are sites already established by numerous partner organisations:

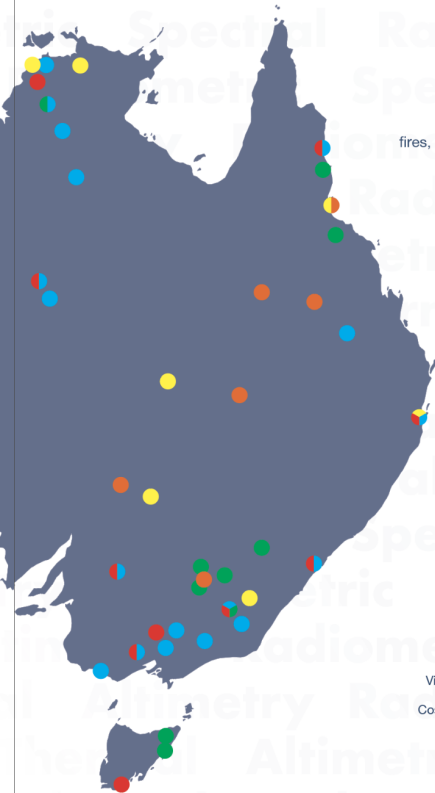


Calibration Capabilities

radiometric
spectral
radar
thermal
altimetry

Validation Capabilities

fires, hot spots and burnt areas
sea surface temperature
solar irradiance
aerosols
surface reflectance
groundcover monitoring
vegetation properties
biophysical maps
mineral products
rainfall
soil moisture
soil, groundcover



OzFlux Sites
TERN Supersites
Aerosol Sites
Vicarious Calibration Sites
Cosmoz Soil Moisture Sites