

Design and operation of Australia's TERN AusCover Remote Sensing Data Facility & Associated Forest Monitoring Activities

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ABSTRACT:

AusCover operates a national remote sensing data facility that links to national expert networks, and operates a data delivery service for the provision of Australian biophysical remote sensing data time-series, continental-scale map products and selected high resolution datasets over several Supersites under the Terrestrial Ecosystem Research Network (TERN). AusCover additionally supports a nationally consistent approach to the delivery of calibration/validation of key current and future core satellite-derived datasets. The primary goal is to assist in the production of ecosystem science data products designed specifically for Australian conditions. This is done by connecting relevant remote sensing science groups and their activities, and by providing infrastructure to make the connection and support data collection, calibration, validation and associated technical documentation. The physical implementation of the AusCover data facility is a 24/7 Distributed Data Archive and Access Capability (DAAC) linked to the AusCover Portal, that provides standardised, calibrated and validated biophysical data products. The DAAC comprises of several regional nodes to form the national network of terrestrial remote sensing experts for data production, validation and quality control. Several ground-, and airborne data acquisition campaign have been done since 20010, over key TERN Supersites, and many of which are forested sites. This paper will present an overview of how the AusCover data Facility was established, as well as showcase a number of key new datasets collected at key ecosystems in Australia and some research projects that are being done.

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