



Llywodraeth Cymru  
Welsh Government

www.cymru.gov.uk



Cyfoeth  
Naturiol  
Cymru  
Natural  
Resources  
Wales



JNCC

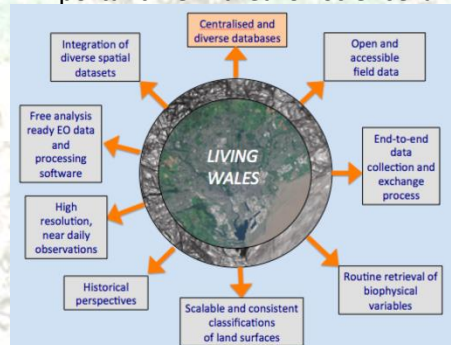
# Welsh Earth Observation Group

Welsh Government and Natural Resources Wales have established a collaborative working group to drive forward Earth Observation in Wales. We aim to work together on cross cutting projects, identifying opportunities where EO can have a real benefit to Wales and build a strong network of stakeholders within the two organisations to maximise the impact of our combined EO activities.

## Living Wales

**Living Wales** aims to make Wales a global leader in the integrated use of EO data, assist better management of the environment and grow an important new area of science and economy in Wales for national and global benefit.

Building on existing capability and working with relevant national and international organisations, *Living Wales* will significantly strengthen research capacity in Wales and our reputation in EO and related technologies. A wider surveillance element aligns with other evidence gathering and reporting activities to assist identification of emerging trends.



Contact:  
Claire.Horton@wales.gov

## LiDAR for Wales

Welsh Government and Natural Resources Wales are working with partners and stakeholders to achieve the ambition of a systematically acquired LiDAR coverage for Wales.

LiDAR products from previous acquisitions over Wales are available on the [Lle download data platform](#). You can browse and download the most recent digital surface and terrain data for presentation, use and analysis. Historic archive data are also being added to this download facility.

## Landsat Archive for Wales

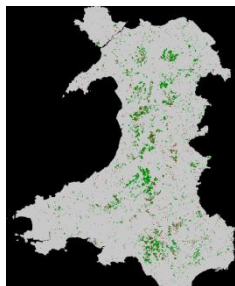
Working in collaboration with Aberystwyth University, an archive of all available Landsat imagery for Wales has been developed. All the imagery has been pre-processed to enable access to data in a 'ready to use' format, using the open source, Atmospheric and Radiometric Correction of Satellite Imagery (ARCSI). As part of our long term open data policy, this archive is shared via the Lle Geoportal.



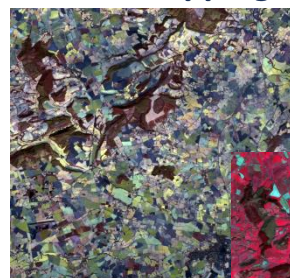
## Working with academic partners

Funding of PhD research projects and offering work placements for MSc students is of significant mutual benefit, providing opportunities to work effectively with academia and better align policy and research.

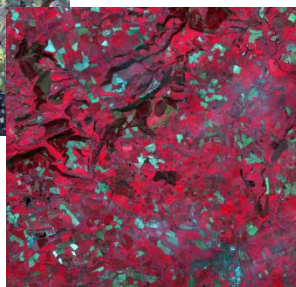
**Example:** Ph.D. research at Aberystwyth University is developing near-real time land cover monitoring (forestry focussed initially) utilising freely available data.



## Habitat Mapping and Change Detection



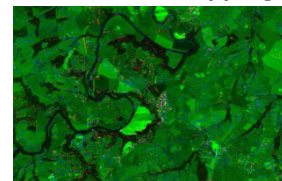
Sentinel-2 image composites (20 April 2016).



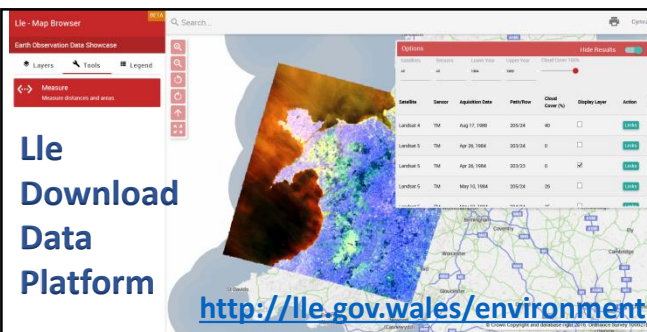
The new red-edge channels are particularly useful for discriminating vegetation (including crop) types

Maximising the use of freely available data (Sentinel-1/2), to inform habitat mapping work and identify and understand changes in land use and land cover.

### Tree mapping



**Example:** Increasing focus on mapping isolated trees in hedges and fields to monitor trends and impacts (e.g., on biodiversity)



The Lle EO platform has been developed to deliver the Landsat archive for Wales as an open dataset.