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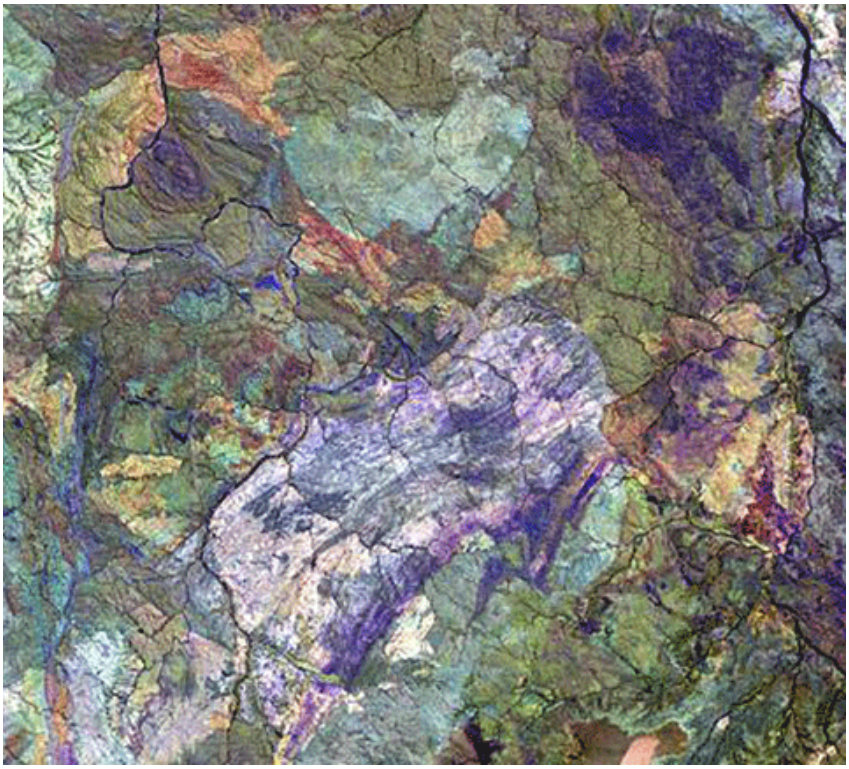
Australia gets new platform for future Earth observation

A new Earth Observation Informatics Transformational Capability Platform (TCP) will enable CSIRO to help serve the nation's future information needs, as Earth observation moves towards gathering more detail from the surface of the planet, at a faster rate.



Credit: Earth observations from space contribute more than $3.3 billion to Australia's gross domestic product (GDP). There are now more than 100 operational programs in Australia relying on such data, particularly from the environmental, social, regulatory and industrial sectors. The contribution of these programs to the GDP is expected to grow up to $12 billion by 2030.

'Worldwide, more than 400 earth observation sensors are planned for the next 15 years,' says Professor Arnold Dekker, Director of the Earth Observation Informatics TCP.

'CSIRO is leading the way in terms of developing future capabilities for Earth observation science.'

'Earth observation' refers to the gathering of information about Earth's physical, chemical and biological systems via a range of sources. Data may be acquired from satellites, airborne platforms or direct measurements from the land, water and atmosphere.

Professor Dekker says the research and development conducted by CSIRO is a key element of Australia's space capabilities, which the Earth Observation Informatics TCP will support and grow.

‘What this platform does is provide projects in areas of national and international engagement; Earth observation sensor calibration and validation using innovative approaches; International next-generation satellite data access and evaluation; computational and informatics capabilities to deal with the petabyte challenge for complex datasets and model-data fusion approaches as well as transformational science applications.’

Transformational Capability Platforms (TCPs) are strategic initiatives that focus and strengthen CSIRO’s core science capability and address national landscape stewardship and resource management challenges.

The latest initiative will build on existing CSIRO investment in research infrastructure such as the Terrestrial Ecosystem Research Network (TERN), the AusCover facility and the Integrated Marine Observing System (IMOS) satellite remote sensing facility.

Source: CSIRO