

Australia Country Report

On behalf of the Australian Earth observation community, it is a pleasure to provide our Country Report to the 2024 16th AOGEO Symposium this year in Tokyo, Japan. As a member of this regional community, Australia is excited about this year's Symposium theme "*Creating Earth Intelligence with the Asia Oceania Society*". Australia would also like to extend our thanks to the host of this event, Japan, Ministry of Education Culture, Sport, Science and Technology.

This report from Australia will briefly highlight some important and exciting developments over the past year that are building our capacity, strengthening and increasing connections amongst the various sectors in the Earth observation community, both within Australia and across the broader Asia-Oceania Region.

Earth observation information is vital for monitoring and evaluating progress as we take steps towards building a more sustainable planet. The Asia-Oceania region is large and diverse, and we face many shared challenges. Our close proximity means we are uniquely positioned to assist each other with Earth observation requirements.

A recent global World Economic Forum report on the immense potential of Earth data in emerging economies shows that the Asia-Pacific region could reach a potential value of \$315 billion from 2023 to 2030, delivering direct climate benefits. Additionally, a recent Australian analysis of the risks to the supply of Earth observation data highlighted that 171 Australian government initiatives depend on this

information, with a significant 93% of them having a moderate to high reliance on Earth observation data.

We would like to highlight the support Australia has provided to our international Earth observation community through the adoption and uptake of open-source Open Data Cube, underpinned by Analysis Ready Data. Australia has played a pivotal role in global Earth observation initiatives such as the Group on Earth Observation Land Degradation Neutrality Flagship, Group on Earth Observation AquaWatch and established strong partnerships with the AquaWatch Australia program. We demonstrate our commitment to the Sustainable Development Goals, through participation in the international Committee on Earth Observation Satellites and the Group on Earth Observation.

Additionally, our involvement in the Early Warnings for All initiative, a groundbreaking effort to ensure that everyone on Earth is protected from hazardous weather, water, or climate events through life-saving early warning systems by the end of 2027, is crucial for building a climate-resistant future. These programmes are crucial to achieving global impacts on action to climate change.

Open data sharing is a Group on Earth Observation founding objective and remains a key focus for Australia within our Asia-Oceania region. Programs like Digital Earth Australia consistently promote open data and open access to geospatial information, enabling innovative solutions for environmental management and sustainable

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development. The Copernicus Australasia Hub provides free, open, and reliable access to Sentinel satellite data, empowering users across Australasia, Southeast Asia, and the Pacific to harness Earth observation for informed decision-making and has signed a new agreement that will ensure continuity for at least the next three years. Australia has formally joined the Landsat 2030 International Partnership Initiative which will enhance the Indo-Pacific capabilities to optimise food security and agricultural production, improve urban infrastructure planning, and prepare for disasters. AOGEO must continue to add value to support collaboration, especially in terms of promoting open data partnerships and user to user links of Earth Intelligence.

AOGEO has an important role to play in engaging national and intergovernmental agencies, users and potential users of Earth observation, identifying regional needs that might benefit from Earth observation applications and promoting communication and collaboration. As we support the implementation of GEO's Post-2025 Strategy, it is important that the promotion of equity remains central to our engagements and collaboration. The Advancing Earth Observation Forum (AEO 2024 Forum) and the Earth Observation Australia Awards are testament to the vibrant Earth observation community in Australia, celebrating significant contributions and innovations in the field. The AEO 2024 Forum will bring together participants from academia, government, and industry with end-users to

share the latest advances and applications in Earth observation. Australia also plays an active role in participating in the annual Asia-Pacific Regional Space Agency Forum (hosted in Perth, Western Australia this year) and allows us to participate in collaborative research and build international partnerships with space agencies from other countries to enhance cooperation and innovation.

Over the past four years, the GEO Pacific Island Advisory Group has been a forum for users to share their knowledge, experience and learnings, and has helped to strengthen relationships across our wide and varied region. Australia looks forward to continuing to engage with the Pacific community, including through the Digital Earth Pacific program, and calls for continued support of AOGEO members to Pacific Islands Countries and Territories (PICTs) to help find and co-design Earth observation informed solutions to the significant and increasing challenges they face from climate change. The PICTs are amongst the most vulnerable to our changing climate and would highly benefit from Earth observation derived information that can make a significant impact to mitigate these issues.

In summary we are looking forward to a great symposium on *"Creating Earth Intelligence with the Asia Oceania Society"*. We hope that our Australian experiences in multi-sector collaboration, open data partnerships and networks of users in Earth observation can contribute to the Symposium goals of creating earth intelligence with the Asia-Oceania society.