

SIDS4 Conference Side Event

Digital Earth Pacific: Navigating Climate Resilience in Small Island Developing States

Thursday, May 30th, 08:00, Room 5

Organized by: Pacific Community (SPC) and Group on Earth Observations (GEO)

Background on the event (one paragraph)

Digital Earth Pacific (DEP) offers a transformative role in strengthening climate resilience among Pacific Small Island Developing States (SIDS). As an operational digital public infrastructure making decades of Earth observation data, products and services available at scale for every island across the Pacific, DEP offers new actionable insights for decision-makers about the changing land and ocean. With representatives from Pacific Island Country and Territory (PICTs), we discussed country-specific needs and challenges in using geospatial and Earth observation data and our approach to governance, capacity development and country engagement. Existing products in support of climate resilience, sustainable development and disaster risk reduction were showcased including the capture of high-resolution drone imagery from PLACE in Tuvalu. We also addressed lessons learned and future plans. Joining the discussion were the Tuvalu Minister for Climate Change, Dr. Maina Talia and Director of Land and Survey, Faatasi Malologa, the Director General of SPREP, Sefanaia Nawadra, and George Carter from the Australian National University. The Digital Earth Pacific program was represented by Sachindra Singh, Geoinformatics Team Lead at SPC, Anne-Claire Goarant who moderated the session, and Aditya Agrawal, Founder at D4DInsights. The session stressed the local ownership, co-design, co-design and inclusive governance aspects of this program so that it is responsive to the needs of the region, and provides a platform for free and open data, science and algorithms.

Key Issues discussed (5-8 bullet points)

- Digital Earth Pacific (DEP) is a free and open digital public infrastructure that provides operational Earth observation data, products, and services for every island within SPC's 22 Pacific member countries and territories (PICTs) across the Pacific.
- It operates under an inclusive governance model, with representation from eight SPC's Pacific member countries that inform and guide the program's priorities. This ensures alignment with existing programs and initiatives, and responsiveness to key needs and challenges.
- (PICTs are facing an existential crisis due to climate change and require more relevant and timely data to better monitor and plan against these resulting threats. The Earth observations and products provided by DEP equip these countries with essential capabilities. In the coming months, SPC and the DEP Team will work more closely with countries to enhance these capacities building efforts.
- Building capacity in the use of Earth observations and digital literacy is crucial not only for developing the necessary skillsets but also for fostering innovation and entrepreneurship. Developing a holistic approach to capacity development and partnering with academic institutions to create new curricula will be important moving forward.
- Current products available include data on coastline changes over 22 years, water observations over 7 years, mangrove distribution, and landcover. More work is required to finalize these products, and collaborating with countries on the co-design and validation of these products is an important next step.

Key recommendations for action (5-6 bullet points)

- We aim to identify opportunities for further engagement with PICTs to demonstrate the current capabilities of the Digital Earth Pacific (DEP) infrastructure, understand needs and opportunities, improve products through co-design, and identify new use cases.
- We will collaborate with PICTs and regional partners to implement a capacity development strategy that enhances skillsets in using Earth observation data, interpreting these products for decision-making, and developing new products.
- We will work with leaders and decision-makers across the Pacific to ensure DEP remains relevant and effectively supports the science-policy interface.
- We will engage with users across the Pacific to develop a user community as an approach to capacity development, facilitating peer-to-peer learning and networking.
- We will collaborate with other Council of Regional Organisations in the Pacific (CROP) agencies and international partners as global SIDS data hub to align efforts, avoid duplication, and maximize potential impact through collective effort.