

CLOSING SESSION

SAR for Water Management and Change Detection in MDBA

Dipak Paudyal, *Managing Director & Chief Scientist, APAC Geospatial*

This presentation describes Commonwealth Government initiative that includes an ambitious multiyear program of activities to drive improved measurement, monitoring and compliance of water use across the Murray-Darling Basin. This research delivers an operational Remote Sensing based method to use of Synthetic Aperture Radar (SAR) imagery for mapping and monitoring of floodplain structures and detecting changes both at a broader catchment and the farm level. The objective is to achieve long term improvements in the capabilities available to water management groups and water users to ensure that water resources are taken and used in accordance with entitlements and associated licensing regimes. This research unique in Australia and perhaps worldwide has led to the conclusion that Synthetic Aperture Radar (SAR) is extremely useful data to complement the existing use of Optical Imagery (sentinel-2 and Landsat) to monitor changes in on-farm storages as SAR possesses unique ability to capture images even in times of rain, cloud and in the absence of sunlight.

Becoming a Geospatial Scientist: from choosing "surveying" to discovering all that is Geospatial Science

Steve Harwin, *Lecturer in 3D Analysis & Geospatial Science – School of Geography, Planning, and Spatial Sciences, University of Tasmania*

Steve will be presenting on how the new 3D Spatial Data Capture and Analytics unit fits in the new Bachelor of Geospatial Science.

The new era in satellite altimetry has arrived – discoveries from validating the SWOT mission

Andrea Hay, *PhD Student, University of Tasmania*

The SWOT altimetry satellite mission launched in late 2022 represents a paradigm shift in the observation of Earth's oceans and inland waters. With new technology comes new challenges in how we validate this completely new measurement type. This presentation will showcase some of the incredible first results seen from SWOT and will highlight the Tasmanian contribution to this exciting international mission.

Navigating Nature with Geospatial Tools – A Master’s Journey in Geospatial Science

Harindi Yasara, *Master’s Student, University of Tasmania*

This presentation is a student’s story of following her passion for environment and preserving nature which lead to her studying a Masters Degree at the University of Tasmania. Harindi will explore the hurdles and successes of her academic journey and also review some examples of her student work that highlight the development of her geospatial skills.