

Latest developments of the CSIRO NovaSAR-1 S-band SAR National Facility

Laura Brindle and Zheng-Shu Zhou (Australia)

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SUMMARY

Launched in September 2018, NovaSAR-1 is a technology demonstrator by Surrey Satellite Technology Ltd, UK (SSTL), and Airbus Defence and Space Ltd. The NovaSAR-1 satellite utilises the only currently operational spaceborne S-band Synthetic Aperture Radar (SAR) providing medium and high-resolution images of Earth from space. □□ CSIRO secured a 10% capacity share in this mission, providing the nation with a first-ever sovereign civilian Earth observation satellite capability. This is operated as a national research facility on behalf of Australia. All users (including outside Australia) can freely access the NovaSAR-1 data collected under CSIRO's share via a dedicated portal and can submit requests to CSIRO for new image tasking at any time. □□ We have undertaken work to improve the accessibility of NovaSAR-1 data to a wider range of potential users, most significantly, generating Normalised Radar Backscatter (NRB) products that align with the CEOS-ARD protocol. In October 2023 the NovaSAR-1 CEOS-ARD NRB v5.5 products were evaluated as CEOS-ARD compliant at the Threshold level. □□ All the archive data covering Australia has been processed to CEOS-ARD standard and ongoing images over Australia are automatically processed to CEOS-ARD. The products are available to download from the CSIRO NovaSAR-1 National Facility Datahub. □□ We will discuss operational updates, the CEOS-ARD products, and highlight applications from past and current projects.

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