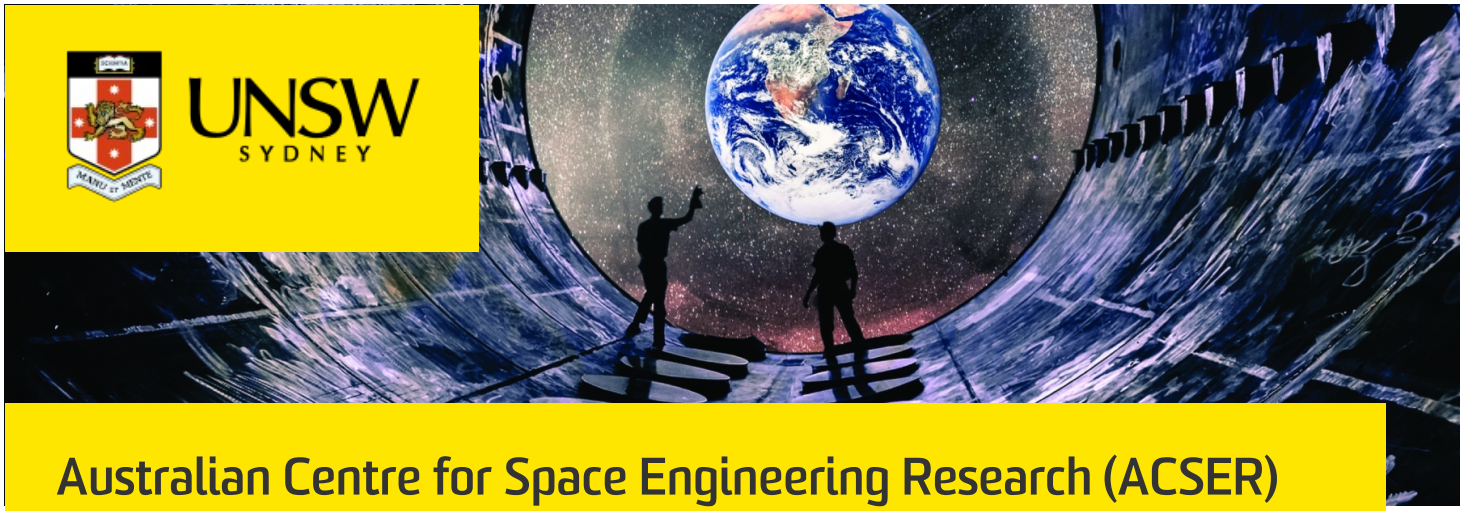

Australian Centre for Space Engineering Research (ACSER)

Launched in 2010, Australian Centre for Space Engineering Research (ACSER) develops space capabilities relevant to the nation's needs through research, innovation and education. ACSER builds and operates its own satellites and spins out technology to industry.

Competitive advantage

- Receiver design for global navigation satellite systems (GNSS)
- Earth observation satellite systems
- CubeSat development
- GNSS remote observation research and space resource utilisation
- Extensive stratospheric balloon experience
- Four experiments on the UNSW-EC0 CubeSat
- Internationally recognised research in off-earth mining

Impact

- Better satellite communication and navigation
- Technology commercialisation opportunities for industry

More Information

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Successful applications

- Phase 0 of a synthetic aperture radar satellite system (Garada) that can map Australia for soil moisture every three days at 10 m resolution
- UAVs and their applications to develop Global Positioning System (GPS) reflectometry as a new method of remote sensing
- Built and successfully launched two Australian satellites in 2017
- Two models of Global Positioning System (GPS) receiver on-orbit
- Founded Delta V- space business accelerator
- New remote sensing technology: GNSS reflectometry, for Un-crewed Aerial Vehicles (UAV), High Altitude Platform Station (HAPS) and satellite platforms

Capabilities and facilities

- Laboratory facilities suitable for significant testing of CubeSats, including thermal vacuum chamber
- Satellite simulators for satellite navigation

Our partners

- Australian Space Research Program
- Seaskip
- Defence Materiel Technology Centre