



Australian Government



AUSTRALIAN INSTITUTE
OF MARINE SCIENCE

Managing data and AI risks to enable innovation

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AIMS: Australia's tropical marine research agency.

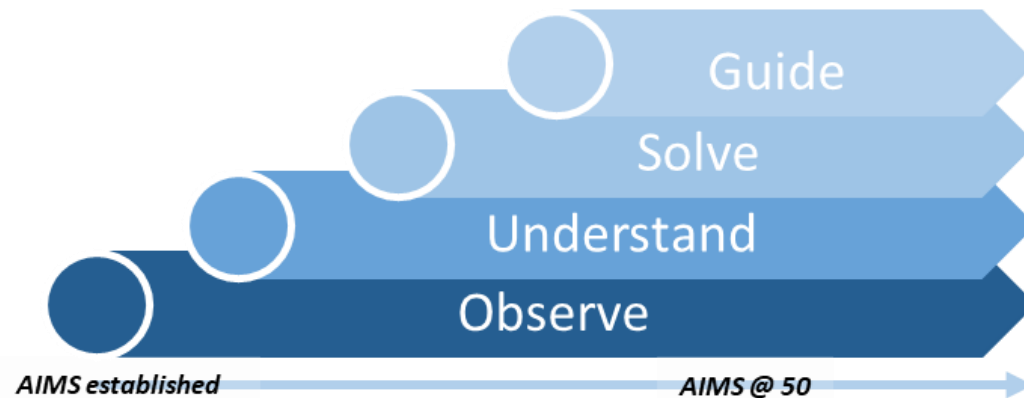


Who we are

- A publicly funded research agency under the AIMS Act 1972
- ~400 staff , 20 postdocs, 80 PhD students
- 3 sites: Townsville HQ, Perth, Darwin

AIMS' Mission

To provide the research and knowledge of Australia's tropical marine estate required to support growth in its sustainable use, effective environmental management and protection of its unique ecosystems.



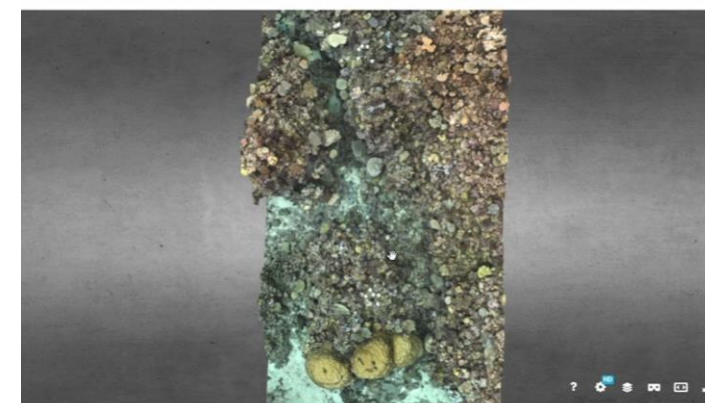
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Visual census, image-based techniques with AI processing, sensors, eDNA

AIMS Digital and Technology Transformation



- Greater **scaling and automation** of our data collection
- **Digital solutions** for more rapid data analyses
- Integrating **insights** from monitoring efforts to inform evidence-based management decisions
- Seamless **digital experience** that simplifies how we deliver information and advise
- Building **digital capabilities** with our partners
- Embedding **trust** into digital technology developments



The 5-Pillars of AIMS Digital Transformation



Improving how we work and conduct our research and development, by enhancing communication and teamwork within AIMS and with our partners.



Boosting our science and operations by using advanced analytics and modelling to derive insights, and create value for end-users and stakeholders.



Providing the necessary solutions, resources, tools, and support to enable innovation and value generation.



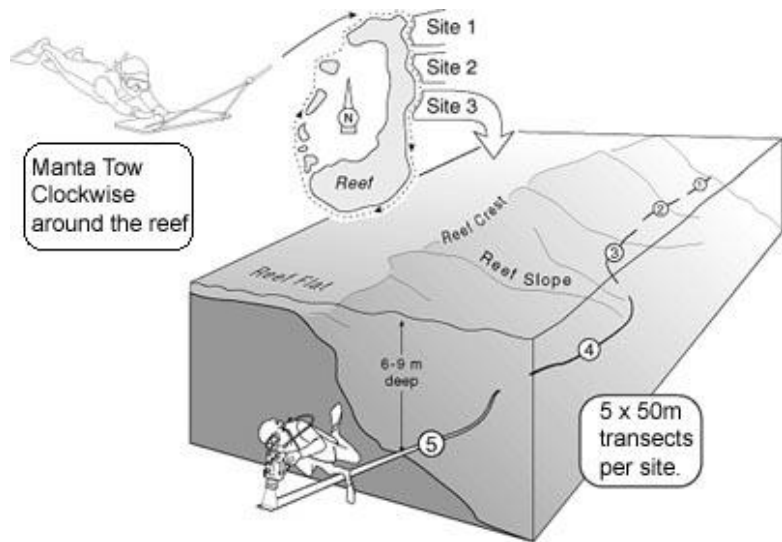
Ensuring all research and business activities and offerings are safe, reliable, and compliant, including managing identities and access, cybersecurity, infrastructure, and data and technology governance.

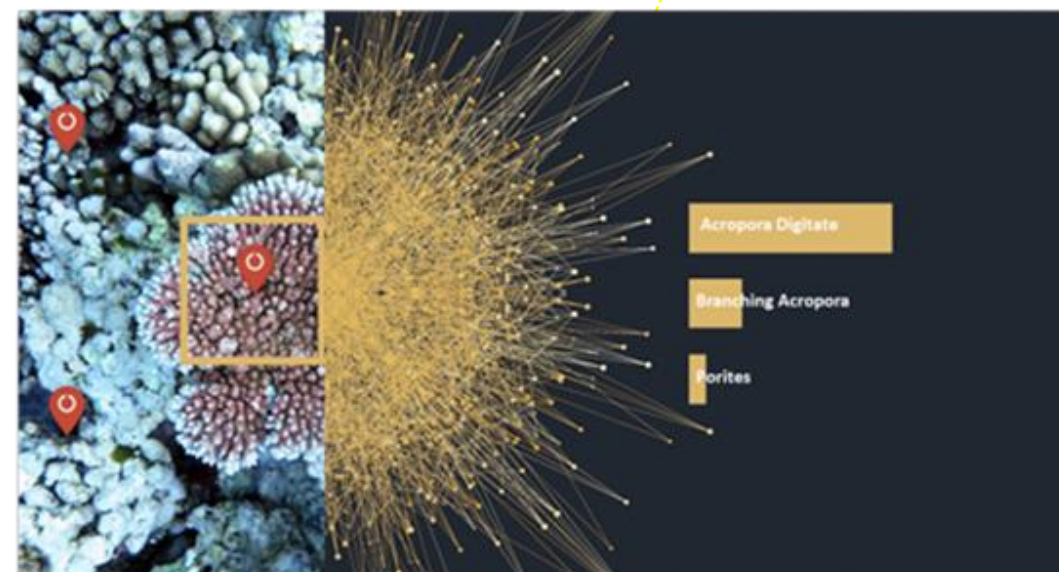
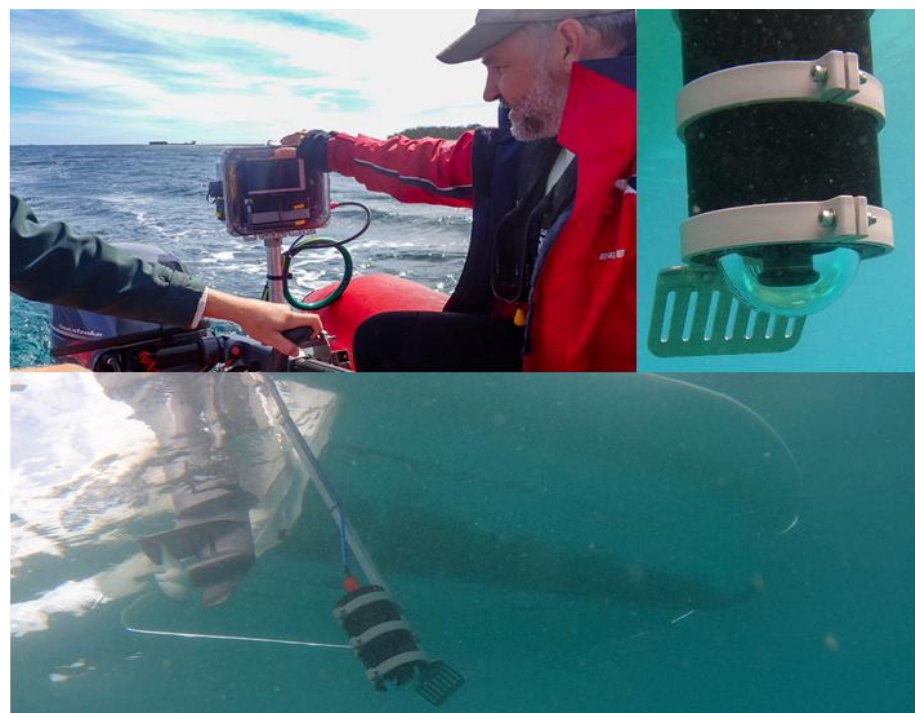


Building a core of advanced digital skills and maintaining their currency. Raising the general data and computing maturity of the whole workforce.

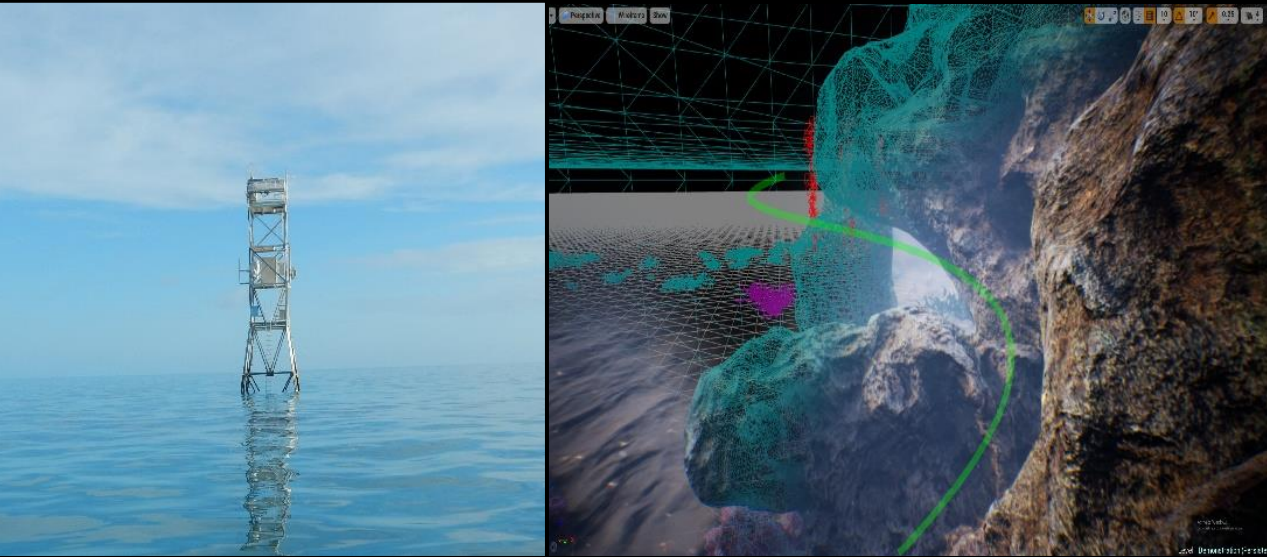


Australia is a marine nation

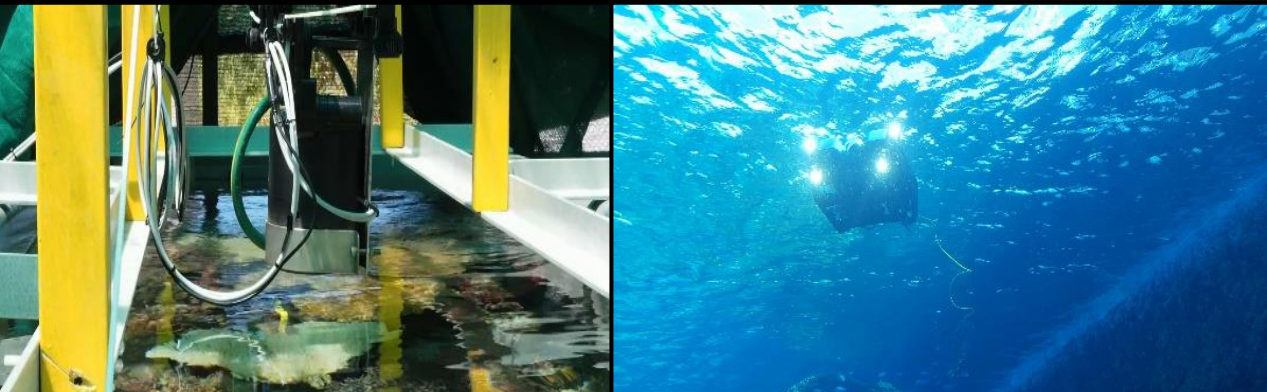




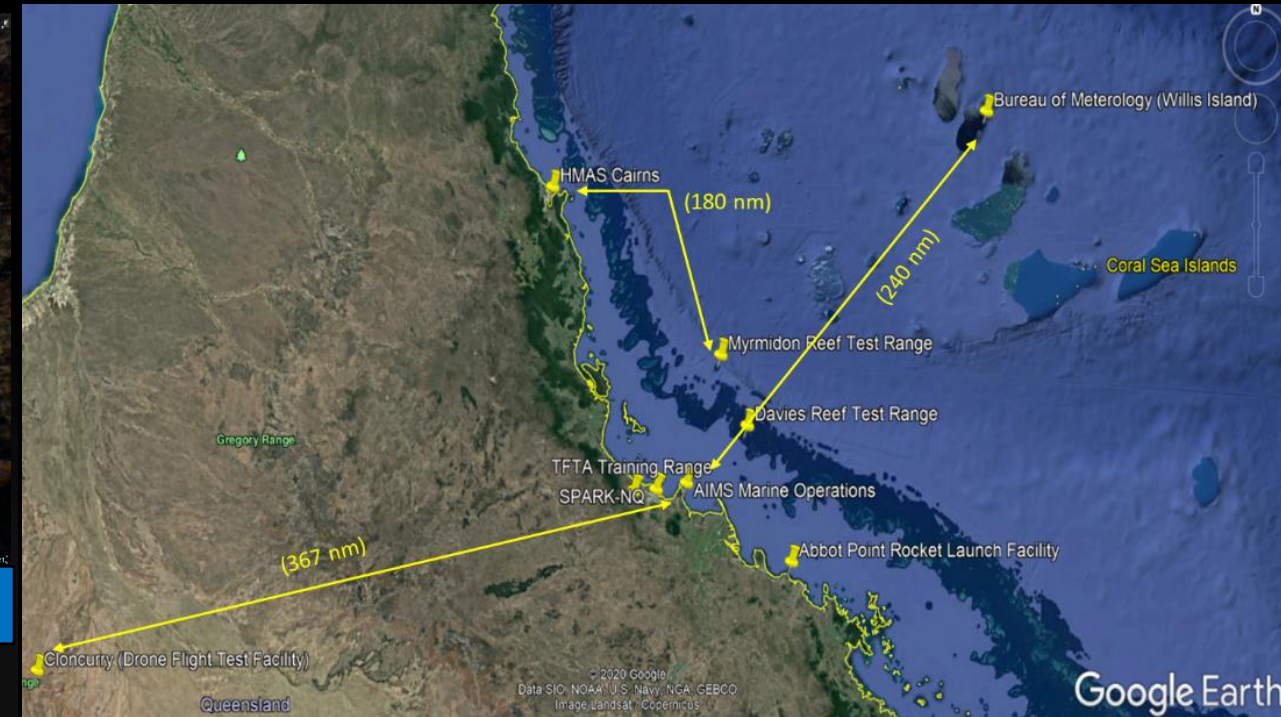
Reefworks – Australia's Tropical Marine Technology Test Range



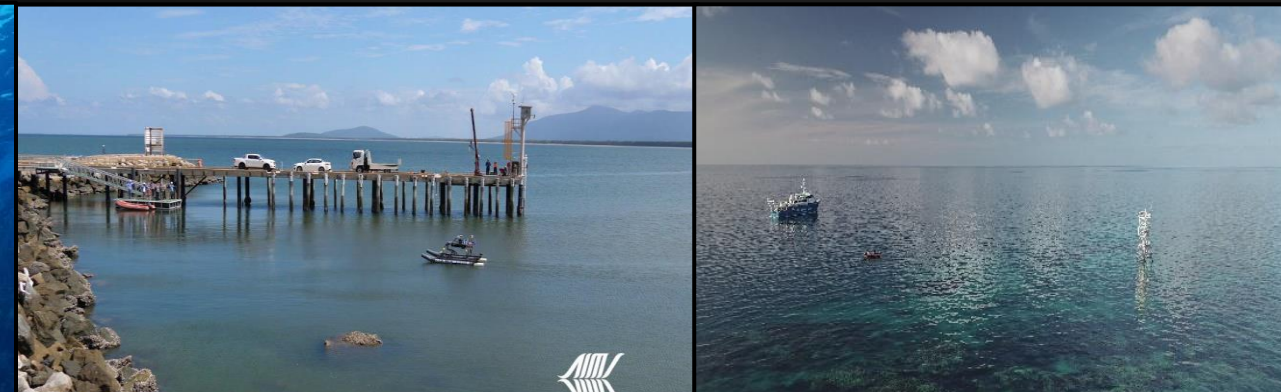
Test Range Digital Twins



Sensor and Platform Test Tanks

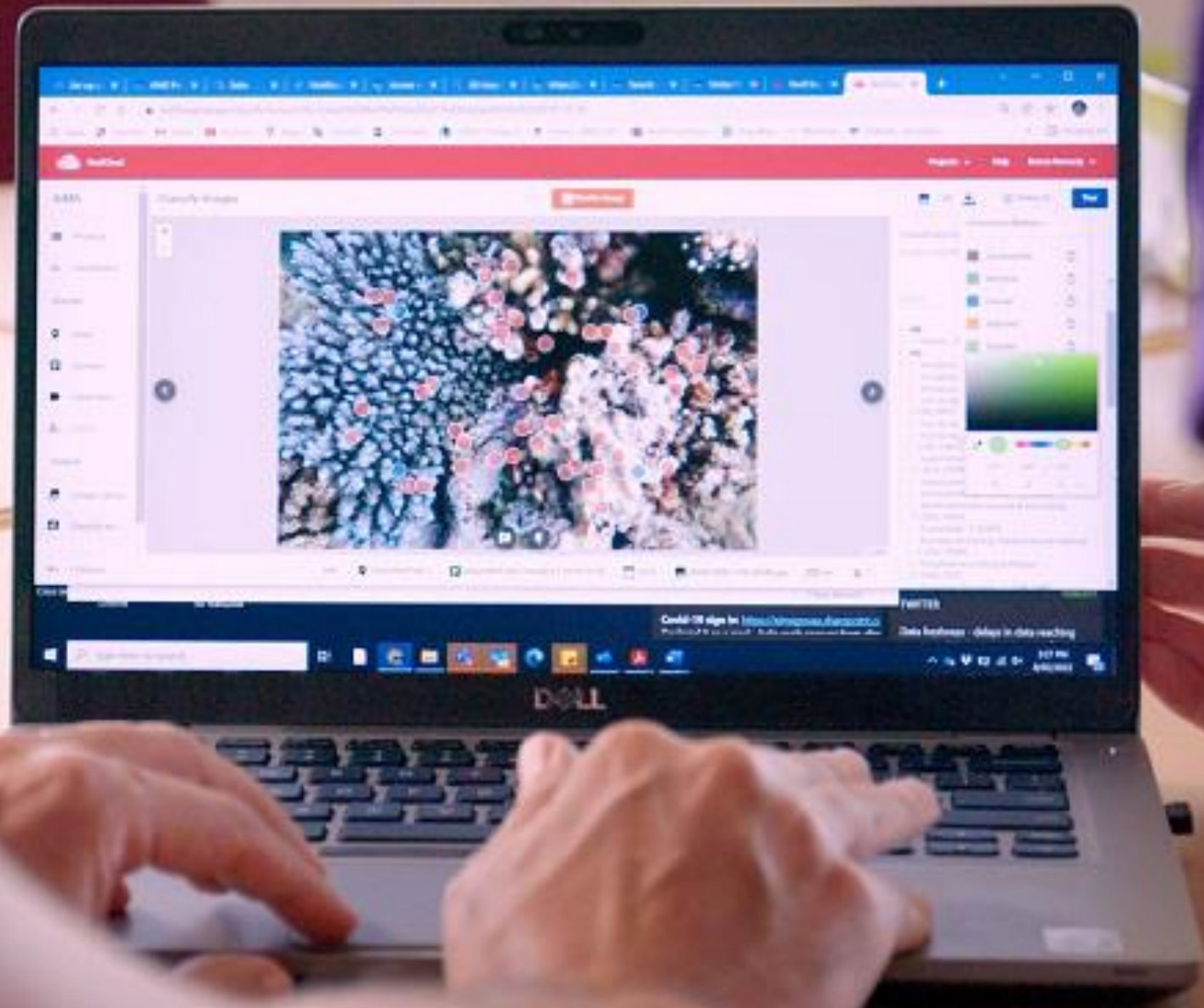
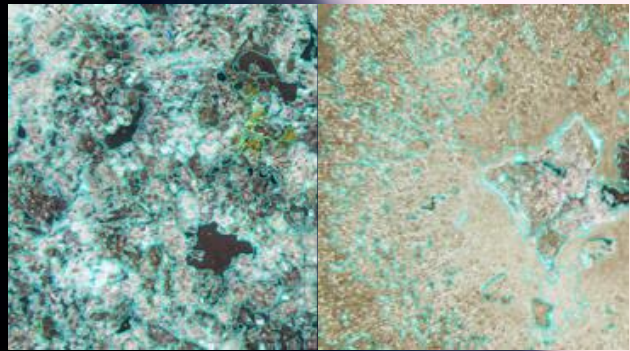


Maritime Autonomous Platform Corridors



At Sea Technology Testing Ranges

ReefCloud





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Developing guidelines and principles

Ensure transparency,
accountability, and
fairness.





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Making Data and AI comprehensible

We need
communication that
demystifies, not
complicates.



A closing note..

Rigorous design, regular testing, and reassessment ensures we are effectively managing risk related to data and AI and identifying opportunities to advance our capabilities.



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