

BIO-PROFILE (229 words)

Dr Amy Parker is an up- and down-stream Earth Observation (EO) specialist with ten years of experience spanning satellite operations and mission planning, EO data management and EO applications research and development. She obtained a BSc (Hons 1st class) in Geophysics from the University of Liverpool (UK), and was subsequently awarded a PhD in Volcanology and Geophysics from the University of Bristol in 2015.

Dr Parker works at the CSIRO Centre for Earth Observation in Perth, WA. There she manages activities for Australia's first-ever sovereign EO satellite capability, NovaSAR-1, leads CSIRO SAR Synthetic Aperture Radar (SAR) Science Initiative, and collaborates with the Aquawatch Australia mission team. She currently holds an Australian Research Council (ARC) Discovery Early Career Research (DECRA) fellowship at Curtin University, using EO for monitoring natural hazards such as earthquakes, bushfires and floods.

Dr Parker is Vice-President of Australia's primary cross-sector EO community organisation, Earth Observation Australia Inc., and sits on a number of boards, including the advisory board of the Australian Space Data Analytics Facility, and the inter-governmental Group on Earth Observations Programme Board. Internationally, she participates in EO working groups for disaster risk reduction, and equality, diversity and inclusion.

Dr Amy Parker was a finalist for the Australian Space Industry's 2019 Rising Star of the Year Award, and in 2020 was awarded the CSIRO Women in Science Career Award for Digital, National Facilities and Collections.

ANSWERS TO SPECIFIC QUESTIONS

Where do you work, and what is your occupation / position?

I work within CSIRO's Centre for Earth Observation as a Satellite Operations and Data Manager, providing EO expertise and leading many activities related to Australia's involvement in the NovaSAR-1 satellite mission. I am also a Research Fellow at Curtin University, where I use Earth Observation data to solve problems related to natural hazards.

What is the most exciting part of your job?

NovaSAR-1 is like a pathfinder for a full-scale, Australian-led constellation of EO satellites. The potential impacts of that would transcend the space industry, and the fact that Australian-led satellite missions are now a real possibility is hugely exciting!

What do you enjoy most about your job?

The information we derive from Earth Observation infiltrates almost all industries – from agriculture to mining, insurance, environmental protection and even disaster response. It's that huge variety in the topics, people and locations we work with, that I enjoy most about my job.

How did you become...

I am a Geophysicist by training and have specialised in the use of radar satellites, or SAR, for assessing natural hazards since my very first research project at uni. With this solid experience in Earth Observation applications, I relocated to Australia as a researcher just before the space industry began to gain momentum. Satellite radar data was really quite underutilised in Australia, and I took every opportunity to engage in the national Earth Observation community to champion this type of imagery. With Australia announcing an investment in NovaSAR-1 in 2017, this seemed like a perfect fit, and I joined CSIRO in November 2018. I guess now I am an Earth AND Space scientist!

Any other interest

Travelling was always a huge part of my job and life before we were forced to lockdown at the beginning of 2020. Since then, I've been trail running and making the most of WA's incredible outdoors.