‘Earth Observation into the future’

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Terri Freemantle reports from the 2018 UK National Earth Observation Conference

In early September 2018, the Satellite Applications Catapult joined 350 leading researchers in Earth Observation, photogrammetry and satellite instrument engineering at the UK National Earth Observation Conference1.

Hosted by the National Centre for Earth Observation (NCEO), Remote Sensing and Photogrammetry Society (RSPSoc) and the Centre for Earth Observation Instrumentation (CEOI), the event was held against the stunning backdrop of The Great Hall at the University of Birmingham (pictured below).

Selecting a conference theme that specifically addressed the future of the satellite industry acknowledged the enormous innovation currently taking place and the UK’s leading role on the global stage.

Although a UK-centric event, it also attracted overseas delegates with a diverse range of backgrounds - testament to the UK’s collaborative approach to research. This was also evident in the keynote speakers who travelled from far afield to engage with the UK delegation.

Keynotes

While I was unable to make the first keynote, given at the opening reception, I understand that Professor Christian Heipke, President of the International Society for Photogrammetry and Remote Sensing, delivered an incredibly interesting talk on the role of remote sensing in deep learning; an area of huge growth and opportunity across research and industry.

Dr Josef Aschbacher, Director of Earth Observation at the European Space Agency stressed the importance of the UK’s expertise in EO science, not least its contribution to the ESA Climate Change Initiative (CCI). It reinforced the message that UK involvement in ESA research programmes was critical, despite Brexit. ESA intends to maintain a close working relationship with the UK and recognises that it has some of the brightest minds in satellite science.

Professor Tim Wright, Professor of Satellite Geodesy and Director of NERC-COMET gave an insightful talk on how Sentinel-1 has revolutionised the application of SAR data, particularly for monitoring geohazards and disasters, and outlined lessons learned from the 2015 earthquake in Nepal.

Massimiliano Vitale, Senior VP – Operations, Planet Labs Germany GmbH, spoke on how daily revisit data, provided the company’s fleet of Dove satellites is being exploited to address some of the world’s greatest problems, from food security to establishing a global coral reef monitoring system.

Downstream developments

Plenary sessions focussed on the future of the downstream EO industry, covering innovation in areas such as machine learning, video from space and open source platforms for non-profit purposes. The valuable role of EO and satellite technology for government was also explored, including the UK Space Agency’s Space for Smarter Government Programme. A ‘first’ for the conference was a special session on how EO is uniquely placed to be exploited for Overseas Development Assistance.

The science programme showcased the best in UK research across a diverse range of 21 Parallel sessions that demonstrated the versatility of EO data and technology.

Encouraging the next generation

Students and early career researchers supported the core programme, including a dedicated oral and poster session, showing real recognition of the importance of young researchers. As part of this, the 2018 cohort of Space Placement in Industry (SPIN) Interns presented the outcomes of their eight-week placements in the space industry.

A significant moment was the presentation of the Remote Sensing and Photogrammetry Society Award. A novelty of this year’s award was that, for the first time, it went to someone working in industry rather than academia. The recipient was no less than the Satellite Applications Catapult’s very own Professor Nick Veck, MBE. Congratulations to Nick!

In summary, the conference achieved its goal of bringing together world- leading researchers and industry professionals to showcase the UK’s capability in space science. Congratulations to the organising committee who worked tirelessly to ensure a successful outcome. it’s just a shame we have to wait another year for the next event!

https://www.nceo.ac.uk/article/national-earth-observation-conference-2018/

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