



## LET'S PUT DATA FIRST

WITH THE RIGHT INFORMATION, WE CAN CHANGE THE WORLD – OR SAVE IT

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Recording as much information as possible, as accurately as possible, has always been one of the main goals of surveying. Only if we know the world in detail will we be able to plan and make the right decisions.

But never has it been more important that we know those details. Fortunately, thanks to the work of the geospatial industry, we can now obtain the best data we've even been able to.

On page 24 of this issue is one of the clearest examples of the importance of accurate information. Road traffic is vital to the economy and people's lives, but it is contributing to global warming and lives are lost to both its emissions and road accidents. But countries around the world plan to cut emissions and fatalities anywhere from 50%

to 100%. How can they achieve this? Lida Joly explains how traffic analytics will be key.

Renewable energy will also be vital in fighting climate change. But projects to build more generators are often held back by data challenges. On page 30, Sandra Merten argues that putting data first will enable organisations to meet the world's sustainable development goals.

Change is the key word in both of those articles. But change can be small-scale, as well as global. Berlin has long been a haven for LGBT people, but some of the city's most important places are disappearing. On page 26, we look at how an artist is using laser scanning to record those sites – before they're gone forever.

I hope you enjoy the issue.

## ALL CREATURES GREAT AND SMALL

COMBINING THE USE OF VERY HIGH RESOLUTION (VHR) SATELLITE IMAGERY WITH ARTIFICIAL INTELLIGENCE HOLDS GREAT PROMISE IN EFFORTS TO PROTECT VULNERABLE WILDLIFE HABITATS. RESEARCH IN THE UK IS PUTTING THEORY INTO PRACTICE



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Anyone who watched the 2022: *The Year from Space* documentary on Channel 4 will have seen how real-time high resolution satellite imagery is impacting on almost every sphere of human activity, whether documenting war crimes, monitoring environmental change or detecting sites for archaeological investigation.

The same is true for environmental protection and where researchers from the University of Surrey's Centre for Environment and Sustainability (CES) have been working with the Surrey Wildlife Trust's Space4Nature partnership to test the use of VHR satellite imagery and automated feature recognition in evaluating wildlife habitats across Surrey<sup>1</sup> ... an activity that holds the key to Defra's new Environmental Land Management Scheme, the primary mechanism for distributing funding previously paid under CAP<sup>2</sup>

According to Professor Richard Murphy of the CES, the researchers found it possible to balance the level of detail available from satellite imagery with the level of scrutiny required for an accurate evaluation of habitat in sustainable land management. "With nature in crisis, we want Surrey to lead the way in improving how we manage and protect our wild places. By using images from space, now available in unprecedented sharpness of detail, Space4Nature will help us develop a more accurate understanding than ever before of our natural environment and what we can do to preserve it."

1. <https://www.surrey.ac.uk/news/chobham-common-joins-painshill-park-and-quarry-hangers-pioneer-site-surreys-ground-breaking-habitat>  
2. <https://www.gov.uk/government/publications/environmental-land-management-schemes-overview/environmental-land-management-scheme-overview>

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