

Inspiring the Next Generation of EO Scientists

Last week, whilst Europe's Earth Observation (EO) community was focussed on the successful launch of Sentinel-5P, over in America Tuesday 10th October was Earth Observation Day!

This annual event is co-ordinated by [AmericaView](#), a non-profit organisation, whose aim to advance the widespread use of remote sensing data and technology through education and outreach, workforce development, applied research, and technology transfer to the public and private sectors.

[Earth Observation Day](#) is a Science, Technology, Engineering, and Mathematics (STEM) event celebrating the Landsat mission and its forty-five year archive of imagery. Using satellite imagery provides valuable experience for children in maths and sciences, together with introducing subjects such as land cover, food production, hydrology, habitats, local climate and spatial thinking. The AmericaView website contains a wealth of EO materials available for teachers to use, from fun puzzles and games through to a variety of remote sensing tutorials. Even more impressive is that the event links schools to local scientists in remote sensing and geospatial technologies. These scientists provide support to teachers including giving talks, helping design lessons or being available to answer student's questions.

This is a fantastic event by AmericaView, supporting by wonderful resources and remote sensing specialists. We first [wrote about this three years ago](#), and thought the UK would benefit from something similar. We still do. The UK Space Agency recently had an [opportunity](#) for organisations interested in providing education and outreach activities to support EO, satellite launch programme or the James Webb Space Telescope. It will be interesting to see what the successful candidates come up with.

At Pixalytics we're passionate about educating and inspiring the next generation of EO scientists. For example, we regularly support the Remote Sensing and Photogrammetry Society's Wavelength conference for students and early career scientists; and sponsored the Best Early-Career Researcher prize at this year's GISRUK Conference. We're also involved with two exciting events at [Plymouth's Marine Biological Association](#), a Young Marine Biologists (YMB) Summit for 12-18 year olds at the end of this month and their 2018 Postgraduate conference.

Why is this important?

The space industry, and the EO sector, is continuing to grow. According to Euroconsult's ['Satellites to Be Built & Launched by 2026'](#) – I know this is another of the expensive reports we highlighted recently – there will be around 3,000 satellites with a mass above 50 kg launched in the next decade – of which around half are anticipated as being used for EO or communication purposes. This almost doubles the number of satellites launched in the last ten years and doesn't include the increasing number of nano and cubesats going up.

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Alongside the number of satellites, technological developments mean that the amount of EO data available is increasing almost exponentially. For example, earlier this month [World View](#) successfully [completed multi-day flight](#) of its Stratollite™ service, which uses high-altitude balloons coupled with the ability to steer within stratospheric winds. They can carry a variety of sensors, a mega-pixel camera was on the recent flight, offering an alternative vehicle for collecting EO data.

Therefore, we need a future EO workforce who are excited, and inspired, by the possibilities and who will take this data and do fantastic things with it.

To find that workforce we need to shout about our exciting industry and make sure everyone knows about the career opportunities available.