Institute for Environmental Analytics

Delivering Value from Big Data

Learn to use the Sentinel-1 toolbox

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Learn how to use open source satellite data to inform decisions on risk including flooding, subsidence, earthquake movement and sea ice mapping during a two-day practical workshop in March.

The IEA course is being re-run on March 8-9 at Harwell Campus after the sell-out success of the January workshop, which included a visit from Digital Economy Minister Ed Vaizey who was keen to see how UK businesses are making use of data from the first of ESA's Sentinel satellites.

The two-day course provides Synthetic Aperture Radar theory and hands-on use of the toolbox for Sentinel-1. The Sentinel-1 satellites provide a wealth of open source data, with rapid dissemination, covering the globe every six days and carrying a C-band SAR. The all-weather images are taken day and night, and can map marine oil spills, detect movements of the Earth's surface and monitor sea ice and icebergs.

The first morning of the course will cover SAR theory including interferometry. The remainder of the course will be in a computing lab using the Sentinel-1 toolbox developed by the European Space Agency (ESA), processing data both via the interface and command line.

This course will be delivered by Dr Andrea Minchella and Dr Raffaella Guida and is designed for participants who have familiarity with Earth Observation (EO) concepts such as calibration and/or awareness of common EO data issues necessary to go from a level-1 to a high-level product.

The course will comprise:

- SAR theory

- Two examples of using the SNAP interface

- One example of using the command line

- Q&A sessions

The cost is £650 (not including accommodation), places are limited and must be booked by February 29.

Book at: http://store.rdg.ac/SNAP_Sentinel_1_Toolbox_Course_Mar_2016

Bespoke courses can be arranged to match the needs of specific groups – please contact Vicky Lucas, Training, Development and Executive Education at the IEA, on 0118 378 8831 or email v.lucas@the-iea.org

Note to Editors:

The Institute for Environmental Analytics (IEA) was founded in January 2015 and is a unique flagship centre, funded by the HEFCE Catalyst Fund and hosted by the University of Reading. Harnessing the expertise of world-leading academics and commercial organisations, the IEA is developing the technologies and skills that are urgently required to transform big data into commercially-relevant solutions.
Led by CEO, Colin McKinnon, the IEA aims to become a leading worldwide centre of excellence supporting the development of the environmental big data analytics market. The IEA works closely with clients to help them tackle environmental challenges drawing on a range of advanced data analytics expertise from within the core team and across the partners. Key sectors include insurance, agri-food, infrastructure, logistics and utilities.

Services include applied, near-market R&D, the development of proof of concept demonstrators, the establishment of training courses and the broader dissemination of the opportunity of big data analytics for industry, policymakers and the third sector.

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IEA Partners include the University of Reading, Airbus Defence and Space, Deimos Space UK, Lighthill Risk Network, Met Office, Microsoft UK & Microsoft Research, National Centre for Earth Observation, University of Oxford, Sainsbury's, Satellite Applications Catapult, Science and Technologies Facilities Council, University of Surrey, Telespazio Vega, BMT Group, ERM and Agrimetrics. The IEA also works closely with the UK Space Agency and hosts the Climate Data from Space Stakeholder Group (CDSSG) and UK Space Sector Skills Manager.

For more information on the IEA please visit www.the-iea.org or email info@the-iea.org

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