





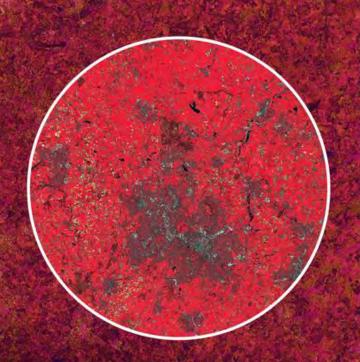
→ 8th ADVANCED TRAINING COURSE ON LAND REMOTE SENSING

10-14 September 2018
University of Leicester | United Kingdom

Course Introduction and Overview

Zoltan Bartalis

Data Applications Division Science, Applications and Climate Department ESA – European Space Agency Frascati, Italy



Why ESA Advanced Training Courses?



Objectives:

- Training the next generation of EO scientists
- Explaining theoretical principles, processing algorithms, data products and their use in applications
- Introducing tools and methods for the exploitation of satellite EO data, in particular from the Sentinels
- Stimulating and supporting the exploitation of ESA and non-ESA EO data for land remote sensing science and applications
- Networking among young scientists.



eo science for society

















Previous Editions











Lisbon 2007

Prague 2009

Krakow 2011

Athens 2013





Secon scientific exploitation of operational missions

**Terminal Control of Secondary Secondary

Valencia 2014

Bucharest 2015

Gödöllő 2017

Behind The Course



Organising Committee

- European Space Agency (ESA)
 - Zoltan Bartalis
 - Diego Fernandez
 - Magdalena Fitrzyk
 - Irene Renis
- National Centre for Earth Observation (NCEO) / University of Leicester (UoL)
 - John Remedios (NCEO / UoL)
 - Kevin Tansey (UoL)
 - Martin Wooster (NCEO / King's College London)
 - Heiko Balzter (NCEO / UoL)
 - Darren Ghent (NCEO / UoL)
 - Michael Perry (NCEO / UoL)
 - Jane Hull (NCEO / UoL)







Supporters

Airbus UK

AIRBUS

Behind The Course



International team of top-notch lecturers

- Dr Ahmad Al Bitar, CESBIO, France
- Dr Pete Bunting, Aberystwyth University, UK
- Prof Mario Caetano, DGT/NOVA-IMS, Portugal
- Dr Gregory Duveiller, JRC, Italy
- Prof Laurent Ferro-Famil, Univ. of Rennes 1, France
- Dr Magdalena Fitrzyk, RSAC/ESA, Italy
- Dr Darren Ghent, NCEO/UoL, UK
- Prof Ramon Hanssen, TU Delft, Netherlands
- Prof Andy Hooper, University of Leeds, UK
- Dr Thuy le Toan, CESBIO, France
- Dr Arnaud Mialon, CESBIO, France
- Dr Andrea Minchella, Airbus, UK

- Dr Jolanda Patruno, RHEA/ESA, Italy
- Dr Mike Perry, NCEO/UoL, UK
- Prof Eric Pottier, Univ. de Rennes 1, France
- MSc Fabrizio Ramoino, Serco/ESA, Italy
- Dr Angelica Tarpanelli, CNR, Italy
- Dr Sebastian van der Linden, Humboldt Univ. Berlin, Germany
- Prof Martin Wooster, NCEO / King's College London, UK
- Dr Herve Yesou, SERTIT, France

Supporting UoL students and staff

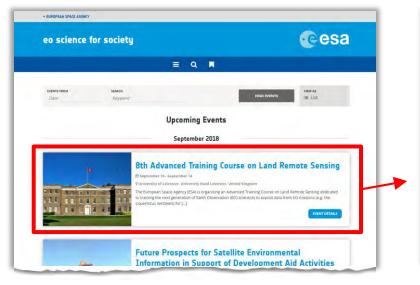
- Emma Dodd
- Karen Veal
- Harjinder Sembhi

Course Website



http://seom.esa.int

https://eo4society.esa.int/events/



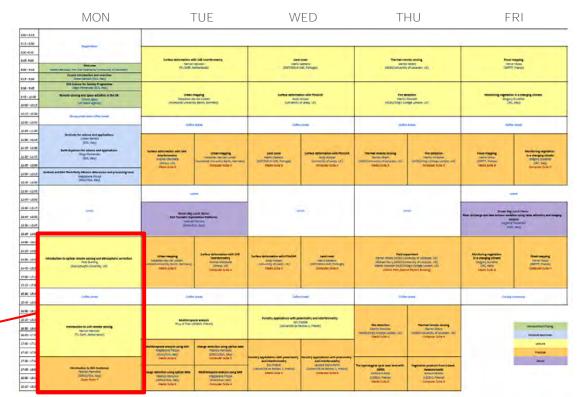
http://eoscience.esa.int/landtraining2018









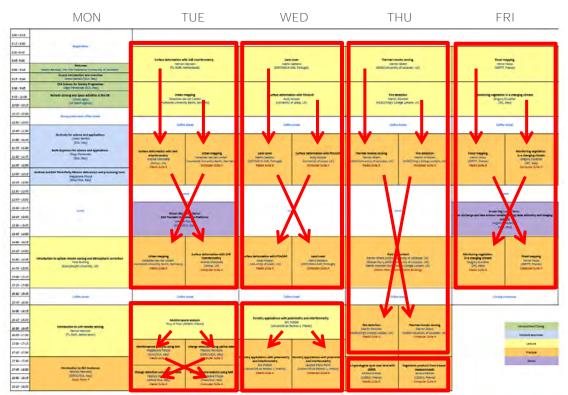


Theoretical background (optical, SAR) and intro to ESA toolboxes



EO Applications in-depth (theory and practice):

- SAR interferometry
- Urban mapping
- Multitemporal analysis
- Land cover
- PSInSAR
- Forestry
- Thermal remote sensing
- Fire detection
- Hydrological cycle/SMOS
- Flood mapping
- Vegetation and climate

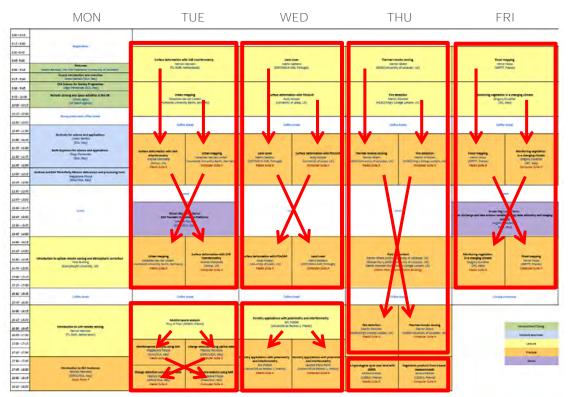




No parallel sessions, no need to choose and miss Out (except Hydrological cycle/SMOS)

Computer practicals take place in two groups in two computer rooms

- Group 1: last names from Abel to Mulas: in Computer Suite H
- Group 2: last names from Mulder to Wrobel: in Study Room F
- Practicals repeated for each group (lecturers swapping rooms)

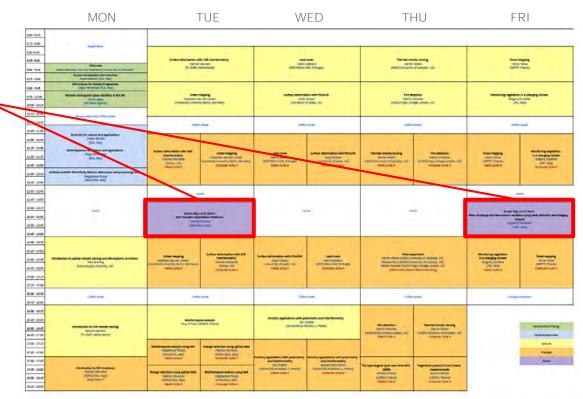




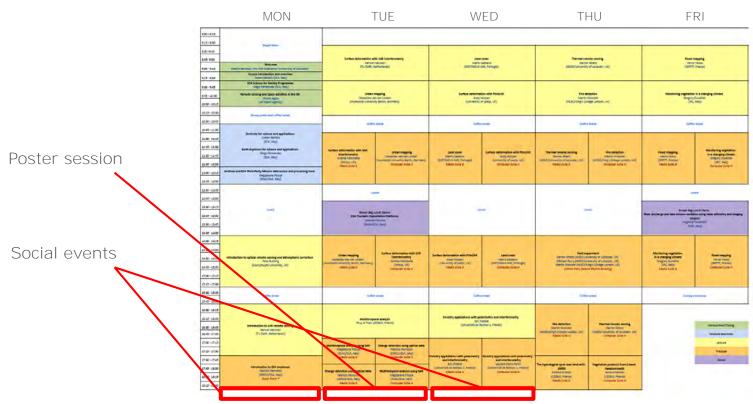




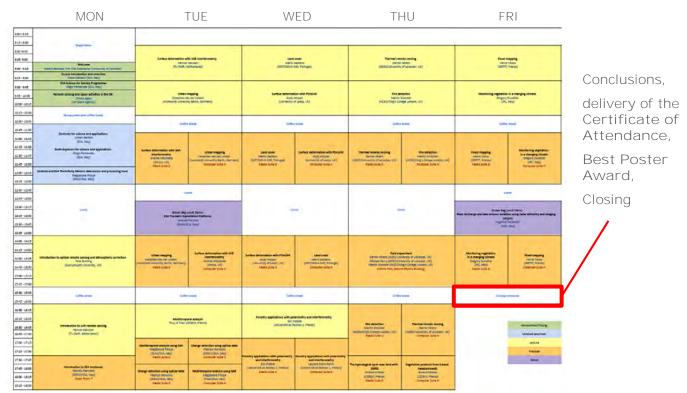
Brown Bag Lunches:
You are welcome to
pick up a takeaway
lunch from the
campus cafeterias/
restaurants and join
these demos
(Lecture Theatre A,
where we are now)









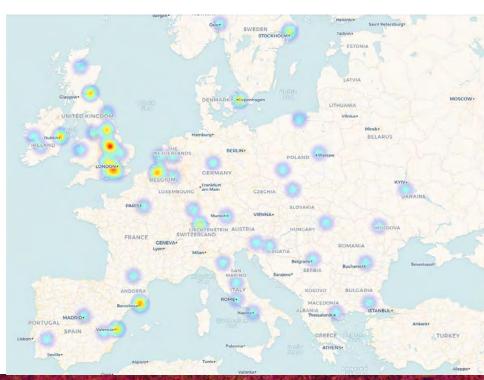




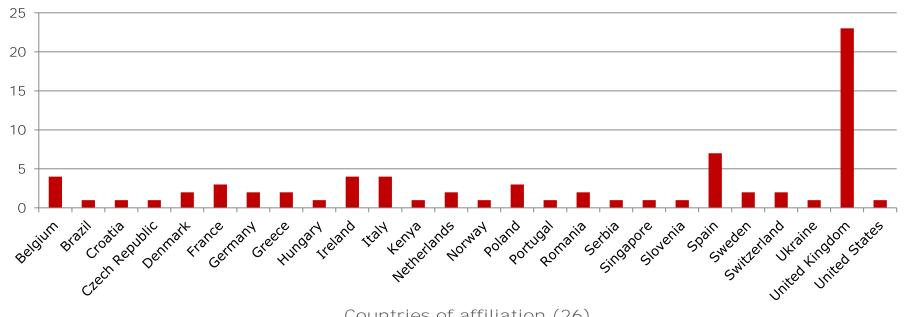
Location of affiliations of accepted participants



Total applications: 145 Accepted participants: 74



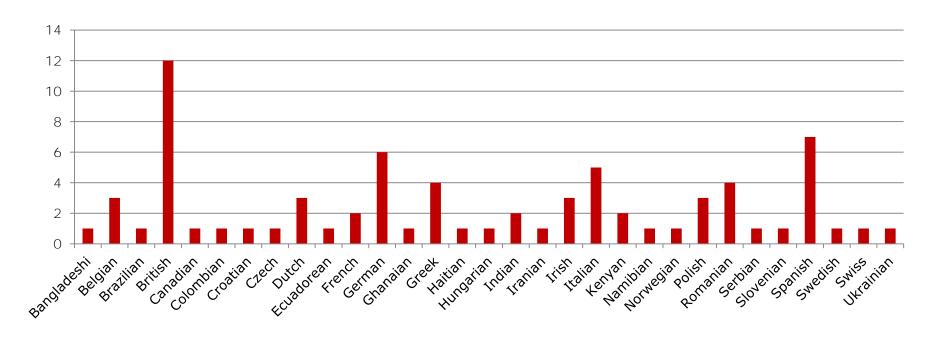




Countries of affiliation (26)

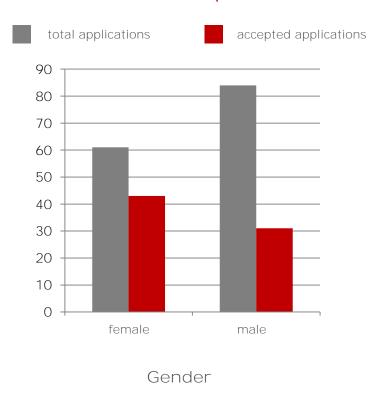
of which: ESA member/cooperating/associated states (20), other European (2), other non-European (4)

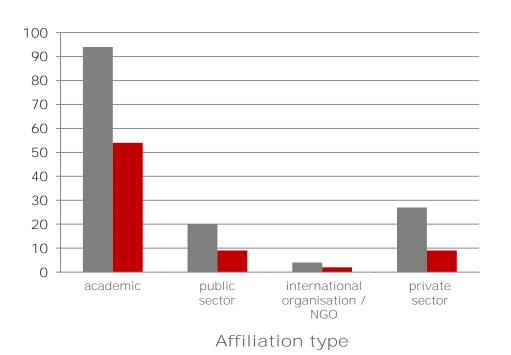




Nationalities (31)







Good to Know

Certificate of Attendance

- To get a certificate, attendance is mandatory for all lectures and practical classes
- Not enough to attend one or two lectures or to pick and choose from the programme
- Attendance lists will be in circulation during the week
- Certificates will be awarded during the closing ceremony on Saturday

FCTS Credits

- Will be awarded by UoL on request
- · Please contact organisers if interested

Online Course Evaluation

- To provide feedback to improve for future courses
- 10 minutes to complete
- The questionnaire is anonymous
- Link to website will be provided by email

Course material including videos will be made available on course website by end-September 2018



Poster Session



- Poster Exhibition open at the Foyer of the Physics Building
- Mounting of posters from Tuesday morning, during coffee breaks and lunch
- Please check to find your poster board number on the list in the poster area
- Boards are labelled, please mount on the correct board
- Please take time to view the posters during the session but also make yourself available for discussion about your own poster with colleagues and lecturers
- Posters in PDF form will be shared on the course website by end-September (unless you do not want that)
- All posters not removed by Friday noon will be disposed of



Foyer of the Physics Building

Logistics



Badges

- Colour-coded:
 - Lectures Red
 - Students Green
 - Organisers –Light brown
 - Guests Dark blue
- Please wear at all times while on site
 - Helps us to recognise each other
 - Easily recognised by guards and university staff

Participant list and poster abstracts

• will be shared electronically during the week

Most up to date course programme

• please consult the course webpage!

In case of any need please ask the organisers!









Logistics



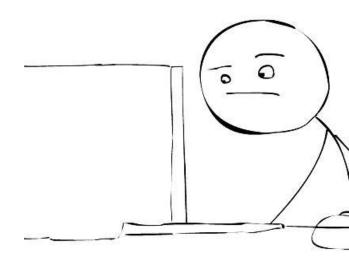
Wifi access:

• instructions to login to **eduroam** network were provided in the welcome package

Login to computers:

• instructions were provided in the welcome package

In case of any need please ask the organisers!



Spreading the Word





#ESALTC18

