



HAROKOPIO UNIVERSITY



→ 4th ADVANCED TRAINING COURSE IN LAND REMOTE SENSING

# *Training Course Summary*

1–5 July 2013 | Harokopio University | Athens, Greece



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## Outline

- Objectives of the Course
- Participants and Teaching Team
- Week's pictures
- Training material updates and questionnaire

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### Context

#### Why ESA ADVANCED TRAINING COURSES

- Action of SEOM (Scientific Exploitation of Operational Missions) element of EOEP-4 program

#### Objectives

- Training the next generation of European and Canadian Principal Investigators (PIs)
- Teaching and demonstrating theoretical principles, processing algorithms, data products and their use in applications
- Introducing tools and methods for the scientific exploitation of EO satellite data
- Stimulating and supporting the scientific exploitation of ESA EO and Third Party operational Missions



### The participants

<b>Countries</b>	<b>31</b>
EU-ESA member state	61
Non-EU citizen	13

**74/220 selected participants**

<b>Male</b>	<b>45</b>
<b>Female</b>	<b>29</b>

**Gender**

<b>PhD Student</b>	<b>44</b>
<b>Researcher</b>	<b>12</b>
<b>MSc</b>	<b>15</b>
<b>MSc candidate</b>	<b>3</b>

**Education levels**

<b>SAR Group</b>	<b>33</b>
<b>Optical Group</b>	<b>28</b>
<b>Thermal Group</b>	<b>13</b>

**3 Training Course groups**



## The organising committee

- Yves Louis Desnos (ESA)
- Michael Fouvelis (ESA)
- Andrea Minchella (RSAC c/o ESA)
- Issaak Parcharidis (HUA)
- John Papadakis (GSRT)

### Co-sponsors

- European Space Agency (ESA)
- Harokopio University, Athens, Greece (HUA)
- General Secretariat for Research and Technology, Athens, Greece (GSRT)



## The Teaching Team: SAR Lecturers



**Prof. Alberto Moreira** – DLR, Germany

**Prof. Eric Pottier** – University of Rennes-1, France

**Dr. Kostas Papathanassiou** – DLR, Germany

**Prof. T. Wright** – University of Leeds, United Kingdom

**Prof. Christiane Schmullius** – University of Jena, Germany

**Dr. Hervé Yésou** – SERTIT, France

## The Teaching Team: Optical & Thermal Lecturers



- Prof. Jose Moreno** – University of Valencia, Spain
- Prof. Bob Su** – University of Twente, The Netherlands
- M. Sc. Lichun Wang** – University of Twente, The Netherlands
- Dr. Mickael Savinaud** – CS, France
- Dr. Daniel Odermatt** – Brockmann Consult, Germany
- Prof. Mário Caetano** – ISEGI-UNL, Portugal
- Prof. Lorenzo Bruzzone** – University of Trento, Italy
- Dr. Harris Kontoes** – NOA/ISARS, Greece
- Dr. Gregory Duveiller** – JRC, Italy
- Dr. Tobias Bolch** – University of Zurich, Switzerland

## Topics

Missions and access to EO data	<b>0.5</b>
Basic and advanced theory & principles in <b>optical, thermal, passive and active microwave</b> for land surface measurements	<b>1.5</b>
Demonstrate software tools for pre-processing of ESA & TPM EO data	<b>1.25</b>
Land applications theory and practicals	<b>1.75</b>
14 Practical	

<b>ESA &amp; 3<sup>rd</sup> party Tools</b>	<b>Optical Group</b>	<b>Thermal Group</b>	<b>SAR Group</b>
<b>POLSARPRO</b>	Image Classification, Land Use & Change Detection		Polarimetry
<b>ORFEO</b>	Multitemporal Analysis	Hotspot & Fire Detection	InSAR Terrain motion
<b>BEAM</b>	Agriculture	Soil Moisture	Forest & Agriculture
<b>NEST</b>	Glacier Monitoring	Water Resources	Flood Mapping

## Poster Session

- >50 Posters presented in 6 categories
- Thanks to all who presented a poster
- All very well received and interesting
- Open for 3 days
- **Thanks to all the Adjudicators**

- Terrain Motion
- Water Availability & Floods
- Land Use/ Land Cover
- Forest & Agriculture
- Hot Spots & Glaciers
- Other Applications

## Web Streaming

→ EUROPEAN SPACE AGENCY ABOUT US OUR ACTIVITIES FOR PUBLIC FOR MEDIA FOR EDUCATORS FOR KIDS

observing the earth

ESA OBSERVING THE EARTH UNDERSTANDING OUR PLANET SECURING OUR ENVIRONMENT BENEFITTING OUR ECONOMY

ESA > Our Activities > Observing the Earth

Search here

EO programmes

- The Living Planet
- GMES

ESA's Earth Observing missions

- Envisat overview
- ERS overview
- Earth Explorers overview
- Sentinels overview
- MSG overview

→ LIVE FROM ATHENS

Future Earth observation scientists: follow the Advanced Training Course in Land Remote Sensing 1-5 July via live

Image of the week archive

Earth from Space on ESA Web-TV

<https://earth.esa.int/web/guest/landtrainingcourse2013/webstreaming>



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## Some pictures of the week



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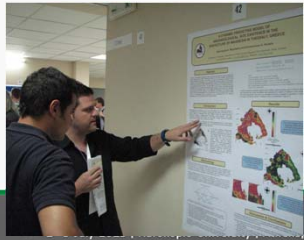




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## Poster Session



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### ESA and HUA Local Team



ESA Team: Yves-Louis, Dominique, Micheal, Andrea

HUA Team: Issaak, Sotiria, Yannis, Christina, Spyros, Georges, Christos, Loreta, Eva, Panos

### Francesco "the Web streaming man"





### Training course material

- Training course material on website/ftp by July
- List of the participants will be sent via email
- On-line Course Evaluation: link will be provided by email (it is anonymous, please send your feedback to improve for the future)
- Web recording of Theory lectures of the course
- Further info at: <https://earth.esa.int/landtrainingcourse2013>

#### Useful websites

- **<http://seom.esa.int>**
- <http://eopi.esa.int>
- <http://earth.esa.int>



### Thanks....

- To the Lecturing team, without which there simply would be no course
- To the HUA Local support Team
- To ESA support Team

*And to the participants team, for your enthusiasm, your participation, and for making this course a success!*



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