











Summer School

16-20 September, 2019

COPERNICUS Sentinels

Remote sensing techniques in forestry

The <u>Italian Association of Remote Sensing</u> (AIT), jointly with the <u>Institute for Electromagnetic Sensing of the Environment</u> (IREA) of the National Research Council of Italy (CNR), the <u>Laboratory of Forest Geomatics at the University of Florence</u>, the Geomatics Research Group of the DISAFA-University of Torino, in cooperation with <u>European Space Agency</u> (ESA) and <u>European Association of Remote Sensing Laboratories</u> (EARSeL), and under the auspicious of <u>EO4GEO</u> project organizes a Remote Sensing Summer School focused on "COPERNICUS Sentinels: Remote sensing techniques in forestry".

General contents

Copernicus <u>EU-ESA</u> satellites Sentinel 1, 2 and 3 with central focus on forestry applications for mapping modelling, support to policies, measurements, multi-temporal analysis and analytics for applications at different scales. Topics will include: forest type mapping (case studies) with several Earth Observation data, integration in forest inventory, disturbances detection, phenological phases survey and biogeochemical modeling.

Summer School Organization

- The School includes lectures covering overviews of all the Earth Observation missions, with special focus on the most recent Cosmo/SkyMed and Sentinel ones, RPAS (Remotely Piloted Aerial Systems), Earth System Modeling, Data Assimilation, as well as hands-on data processing practical exercises.
- The one-week course (<u>TimeTable</u>) aims at providing students with integrated end-to-end perspectives, ranging from analysis and measurement techniques to operational applications, at different working scales.
- In-field exercises will be organized to collect data through ad-hoc instrumentation: spectral measurements, drone imagery, proximal sensing, etc. Samples' collection for testing in proximity (weather permitting) of scheduled data acquisition is also planned.

Attendance

The school is open to early career scientists or employers, such as Ph.D. students, young post-doctoral scientists, technicians specialized in Earth Science disciplines, wishing to expand and improve their knowledge and skills on EO in Forestry.

Participation is limited to a maximum of 20 students: a selection based on CVs and motivation letters will be applied.

Selected students are expected to attend the school equipped with their own LAPTOP, having adequate capabilities for image processing. We recommend having the <u>SNAP tool</u> already installed.

Satellite images, instrumentations (e.g. spectroradiometers, drones, etc) for the in-field excursion are provided by CNR-IREA, geoLAB-DAGRI University of Florence, e-GEOS, ITHACA, DISAFA-University of Torino.

APPLICATION DEADLINE: The deadlines for candidacy submission is April 30th, 2019.

VENUE: agro-farm premises Centro Formazione Tadini, Loc. Cariga Podenzano (PC), Italy

DATE & TIME: 16 -20 September, 2019. Lessons start at 12:30 PM on Monday Sept 16th and end at 01:30 PM on Friday Sept 20th.

FEES: the cost is 1.050 Euro, VAT included, to be paid to AIT before 30/06/2019.

Fees include attendance to the lectures and laboratories (including in-field excursions), accommodation and luncheons costs. Travel costs are not included. (Financial support is not available).

Application procedure

- Download the Application Form
- Fill it with your personal data
- Save it in PDF format
- Send it with the other requested information

Once the form has been filled it must be sent to Mario Angelo Gomarasca at the following contacts

gomarasca.m@irea.cnr.it

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Summer School Director

Mario A. Gomarasca - CNR IREA Milan, Italy

Scientific Board

Livio Rossi, e-GEOS S.p.A., Rome, AIT President Marco Marchetti, Uni Molise, SISEF President Gherardo Chirici, DAGRI Università di Firenze Enrico Borgogno Mondino, DISAFA-Uni Torino, Italy Mirco Boschetti, CNR IREA Milan, Italy

Organizing Committe

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Acceptation: According to the Italian Law DRP 28/12/2000 no. 445, I declare that the above information is correct and true to the best of my knowledge; to be aware of the penal responsibility of a false declaration or to a declaration not corresponding to the truth; to be aware that AIT will verify the data. Based on Italian Law D.L. 196/03 I give my consensus to use my personal information













