

Spotlight



Copernicus: from geospatial to agribusiness

**Free and open satellite data supporting
innovation in sustainable agribusiness**

Bologna, Italy | 25 October 2017

Information pack

#Spotlight
Learning.climate-kic.org

Climate-KIC is supported by the
EIT, a body of the European Union



This intensive one-day course aims to promote awareness and knowledge of Copernicus services and geospatial data products with environmental data modeling and geocomputation. Through the presentation of case studies, real experiences and Web tools, representatives of the public and private sectors can learn how to use them to develop successful sustainable business. This course will explore sustainable agriculture challenges in order to provide knowledge and insights into using earth observation added-value data and information from Sentinel satellites and Copernicus services.

The course is preceded by an e-learning module which outlines the key Copernicus concepts and work assignments.

The course is organized by Climate-KIC in collaboration with MEEO S.r.l, partner of the European Space Agency (ESA) and ASTER, in partnership with StudioMapp, member of the Copernicus Academy.

Course objectives

The course introduces a systemic approach to using Copernicus satellite data and monitoring services (www.Copernicus.eu) in combination with open-source tools for image and data processing, to support innovation in sustainable agribusiness by:

- understanding what Sentinel satellites and Copernicus services are, why they are important and how they relate to the green and climate challenges;
- using key approaches and tools for designing new analytics models or reconfiguring existing ones based on Earth observation;
- implementing sustainability-oriented methodologies to address climate challenges in agricultural activities
- understanding of the Copernicus programme in sustainable agribusiness

Background

Vast amounts of global data from satellites and from ground-based, airborne and seaborne measurement systems are being used to provide information to help service providers, public authorities and other international organizations improve the quality of life for the citizens of Europe. The information services provided are freely and openly accessible to its users. Copernicus is a European Union Programme aimed at developing European information services based on satellite Earth observation and in situ (non-space) data. In particular agriculture is currently benefitting from Copernicus services that use satellite imagery (Sentinels) and climate change services (C3S) for feeding crop growth models, for estimating damage after meteorological events (including extreme events) and climate change, and for improving Common Agricultural Policy (CAP) management. The Copernicus data and products can also largely be used by insurance companies and farmer associations to negotiate new agricultural insurance products and services.

What we offer:

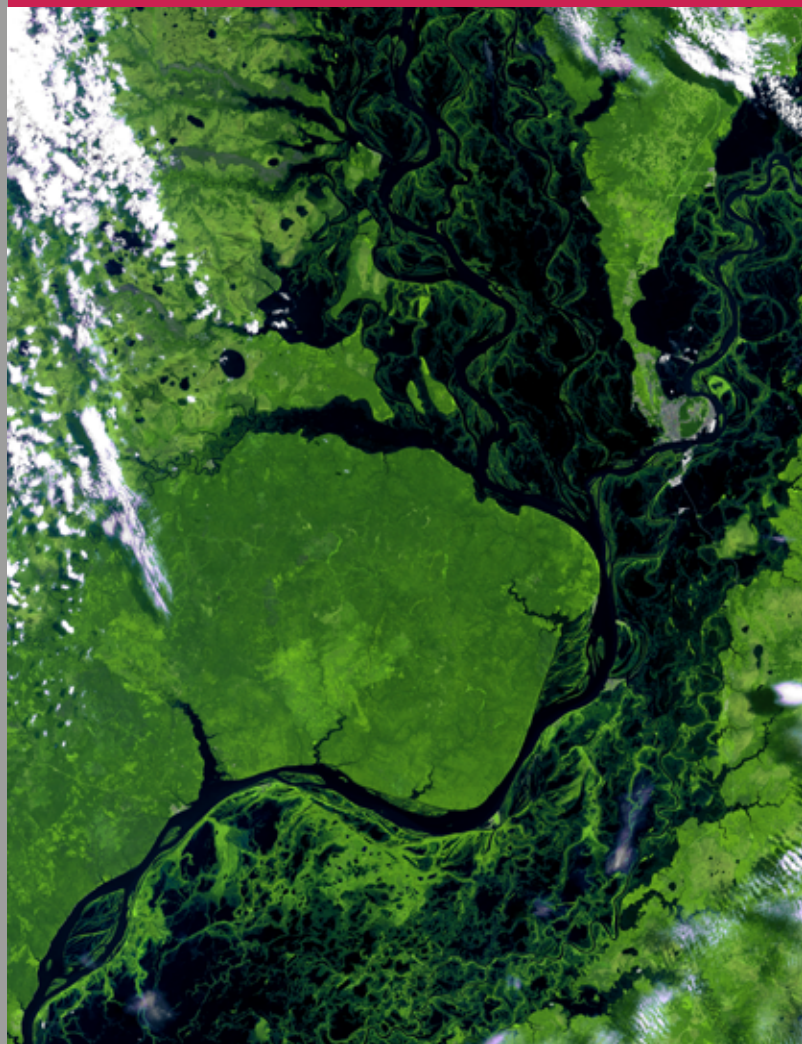
The training course aims to provide those basic skills and knowledge that will enable the users listed above to identify those Copernicus products and services particularly useful for agriculture, which means knowing which data are to be used (i.e. climate data and land use data), access to the right tools to manage these data and how to correctly understand the results by means of exploring examples of Copernicus projects in agriculture and good practice. In particular the expected outcomes are:

- Knowledge of current data and information provided by Sentinel satellites and Copernicus services;
- Understanding of the future opportunities of Earth observation;
- Knowledge of the current tools and frameworks to support, facilitate and accelerate the use of Copernicus satellite data in those fields;
- Data sources identification to solve specific problems in agriculture and natural resources management;
- Discussion of practical cases;
- Increasing the innovation potential of respective organizations and addressing of specific issues;
- Concrete opportunities for potential new collaborations;
- Becoming part of a world-class network of professionals and researchers within the Climate-KIC and Copernicus community.

Who can take part?

Remote-sensing-based information products can support agricultural users in decision making at many different levels, including:

- Agronomists/technicians and consultants
- Local and regional decision-makers
- Public administration professionals
- Agribusiness managers large/medium cooperatives of producers, distributors of fertilizers, irrigation consortia)
- Insurance representatives and brokers



Agenda

Online module #0

12 October 2017 (Launch webinar)

16:00 Welcome to participants and introduction to the course programme

16:10 Participant roundtable

17:00 Assignment of tasks in preparation for the course proper and presentation of Web portals based on environmental satellite data for practice purposes before the course

17:50 – 18:00 Logistical information and description of the course online platform

Course proper – 25 October 2017

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9:00 Welcome

9:10 Module #1 – Assignment review

Co-creation session: discussion about the task assigned to attendees at the end of the launch webinar and sharing of feedback and reflection

11:30 – 14:30 Module #2 - Copernicus overview

Knowledge consolidation: Copernicus world overview by Stephane Ourevitch and focus on agribusiness by Annekatrien Debieu. Discussion, Questions and answers.

Link focusing on main aspects: short review of the previous sessions, feedback and reflection.

14:30 – 15:30 Module #3 - Tools

Data processing: main tools and examples by Simone Mantovani, MEEO S.r.l., Earth Observation Data web portal expert.

16:30 – 17:30 Module #4 – Assignment finalization

Reflection and conclusions of the three working groups: lessons learnt and follow up.

Co-creation session: analysing solutions and business approach of participants' group work. Continuous feedback and support by experts.

Coaches and experts



Angela Corbari – Coach and expert on natural resources management & remote sensing expert

Angela holds a Master's degree in Natural Sciences, Conservation and Natural Resources Management from the Alma Mater Bologna University, Italy. She is specialized in GIS (Geographic Information Systems) for agriculture and natural resources. She is a certified Wildlife Technician from the Institute of Environmental Protection in Italy (ISPRA) and certified Agrotechnician. She had been working for more than 10 years as a professional consultant for human/wildlife conflicts in agriculture and impact assessment studies for Italian local authorities and private businesses. She has also participated in several European projects. An active innovator, she founded Studiomapp srl in 2015, a startup that aims to develop maps and apps for quality of life. Studiomapp has been recently appointed a Copernicus Academy member by the European Commission.



Marco Folegani – Course leader and remote sensing expert

He holds a Bachelor's degree in Physics from the University of Ferrara and is founder and managing director of MEEEO S.r.l and SISTEMA G.m.b.H, Italian and Austrian companies respectively, both focusing on environmental data processing, climate data services, solar radiation mapping, air quality monitoring, multi-spectral and multi-temporal analysis, geo-spatial data infrastructures implementation for time series access and visualization, and standardization of processes (OGC, Inspire). During his career he has written more than 50 proposal of research project at regional (POR), national (ASI) and European (ESA, FP7, H2020, Climate-KIC) level. He is managing several Climate-KIC projects in the Climate Adaptation, Sustainable Land Use and Urban Transition domains.

Coaches and experts



Simone Mantovani – EO data web portal expert

Simone holds an academic degree in Physics from the University of Ferrara. Founder and managing director of MEEEO S.r.l and SISTEMA G.m.b.H, he has over ten years' experience in the framework of national and international projects funded by the European Space Agency (ESA) and European Commission. He led the implementation of relevant tools for Big Data exploitation in the framework of European Space Agency programmes, in particular, he led the implementation of [EO Datacube](#) and [EO Data Service](#) based on a key platform for data exploitation called

MEA - Multi-sensor Evolution Analysis. At MEEEO he is head of the European project [Earthserver2](#), to supporting the Climate & Atmosphere and Land & Ocean communities on fully exploiting heterogeneous products including satellite, forecasts and ground measurements.



Stephane Ourevitch is the supervisor of the Copernicus Support Office.

He has more than 20 years of experience in management, and has had leading roles in several Copernicus and Security-related projects (BOSS4GMES, SpaceExpo, Copernicus4Regions). He is an expert on Copernicus and space policy in an international context. Stephane has held top management positions at Becker Flugfunkwerke and Dassault Electronique, and has an MBA, and Master's in Law, Political Science / Int'l Affairs (Sciences Po).



Annekatrien Debien is an engineer with 7 years of experience in the Earth observation sector.

Her experience includes technical project management of EU FP7 and ESA projects, user outreach and education, and product development on applications such as agriculture, forestry, and sea ice. She is currently working on facilitating the development of the content of the Copernicus User Uptake Infosessions, and as On Duty Operator for the Copernicus Support Office.

Partner organizations



MEEO is a privately held company devoted to the development and implementation of products and services based on remote sensing of the Earth-atmosphere system. MEEO is able to provide a wide range of services and products based on analysis of multispectral, multisensor and multitemporal satellite data for environmental monitoring, land management and agriculture. MEEO is a partner of Climate-KIC and of the European Space Agency, working on several National and European projects.



Climate-KIC is Europe's largest public-private innovation partnership, working together to address the challenge of climate change. It drives innovation in climate change through creative partnerships large and small, local and global, between the private, public and academic sectors. All Climate-KIC partners bring their industry experience to the community and are connected through the [centres across Europe](#).



ASTER is the consortium for innovation and technology transfer of Emilia-Romagna. Its partners are the Emilia-Romagna regional government, the six universities and the national research centres located in the region (the National Research Council-CNR, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development-ENEA, the National Institute for Nuclear Physics- INFN), the Regional Union of Chambers of Commerce, working in collaboration with regional business associations and innovation centres.



The **Copernicus Academy**, launched by the European Commission, will connect European universities, research institutions, business schools, and both private and non-profit organizations, in the participating countries of the programme and beyond. The goal of the network is to develop lectures, training sessions, traineeships as well as educational and training material to empower the next generation of researchers, scientists, and entrepreneurs with suitable skill sets to use Copernicus data and information services to their full potential.



STUDIOMAPP SRL is an innovative startup established to create innovative tools to help improve quality of life and promote the economy through technology; it is specialized in geographic information systems, open data, software analysis and development. It develops products and services in the fields of smart cities, environmental and economic sustainability, mobility, transport and logistics, tourism and cultural heritage, agriculture, land and natural resource management, health and social.

Course location and logistics

Bologna, Italy | 25 October 2017

Launch webinar: 12 October 2017

Course proper: Bologna, CNR Centro Congressi Via Gobetti 101: **16 June 2017**



City description

Bologna is the largest city (and the capital) of the Emilia-Romagna region, in Northern Italy. It is the seventh most populous city in Italy, located in the heart of a metropolitan area of about one million. The first settlements date back to at least 1000 BC. The city has long been an urban centre, first under the Etruscans (Velzna/Felsina) and the Celts (Bona), then under the Romans (Bononia), then again in the Middle Ages, as a free municipality (for one century it was the fifth largest European city based on population). Home to the oldest university in the world, founded in 1088, Bologna hosts thousands of students who enrich the social and cultural life of the city. Famous for its towers and lengthy porticoes, Bologna has a well- preserved historical centre (one of the largest in Italy) thanks to a careful restoration and conservation policy which began at the end of the 1970s. In 2000 it was declared European Capital of Culture and in 2006, a UNESCO "City of Music". The city of Bologna was selected to participate in the Universal Exposition of Shanghai 2010 together with 45 other cities from around the world.

The best way to discover Bologna is on foot, covering the history, traditions and architecture under the shelter of its 40 km of porticoes, candidated as Unesco "world heritage site". A unique pathway worldwide that allows you to enjoy the city with no umbrellas when it rains and the cool shade when the sun warms our summer months.

Practical information

How to get to the Bologna course venue

From the airport to the city centre:

By bus (BLQ)

One-way ticket from/to the Airport costs €6 - tickets can be purchased on board too. It takes about 20 minutes to get from the airport to Bologna city centre ("Rizzoli" stop) or to Bologna Centrale train station.

You can call or reserve or book a taxi from COTABO +39 051 372727 or CAT RadioTaxi +39 0514590

To the venue:

You can reach the course venue by bus number 87, which stops just in the area. [Here is the map.](#)

From the city centre and the train station, the suggested bus stop for departure is "autostazione" at the beginning of "Via Indipendenza" (see "Google Street View" for the right stop. Bus direction: "Via Gobetti – rotonda CNR").

The bus ticket must be bought at a kiosk, a bar or a tobacco shop. On the 87 usually there aren't ticket selling machines.

If you are coming directly from the airport it takes about 1 hour by public transport. You should get the shuttle BLQ and then get the bus 87. By taxi it takes about 15 minutes for approximately €15/20.

Accommodation

Suggested hotels in the city centre of Bologna:



Tre Vecchi ★★★★★

Via Indipendenza, 47

P. 051231991

bookinghoteltrevecchi@zanhotel.it

www.zanhotel.it



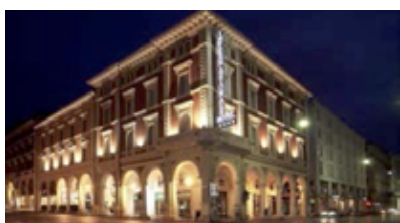
Hotel Regina ★★★

Via Indipendenza, 51

P.051248878 Fax 0519914309

bookinghotelregina@zanhotel.it

www.zanhotel.it



Hotel Internazionale ★★★★★

Via Indipendenza, 60

P. 051 245544 Fax 051 249544

internazionale@monrifhotels.com

www.monrifhotels.it



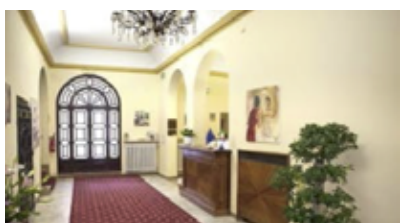
Zanhotel Europa ★★★★★

Via Cesare Boldrini, 11

P. 0514211348 Fax 0519914311

bookinghoteleuropa@zanhotel.it

www.zanhotel.it



Hotel Accademia ★★★

Via Delle Belle Arti, 6

P. 051232318 Fax 051263590

hotelaccademia@hotelaccademia.com

www.hotelaccademia.com

Fees and registration

Fee for the whole course (4 modules): 400 EUR A 50% discount on the regular fee is available for the following groups:

- Employees of public bodies
- Employees of Climate-KIC partners
- Employees of NGOs
- Climate-KIC alumni

Participation can be cancelled free of charge until 4 weeks before the course. Fees already paid will be reimbursed.

50% of course fees are payable in case of cancellation between four and one week before the course. Already paid fees will be reimbursed accordingly.

Full fees apply after cancellation less than one week before the course.

For further information and online registration:

[click here](#)

Contacts:

folegani@meeo.it

In collaboration with:

