



STUDY **COPERNICUS & DIGITAL EARTH**



**Co-funded by
the European Union**

**ERASMUS MUNDUS
JOINT MASTER**

**OCTOBER 2024
ISSUE NO 4**



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



<https://master-cde.eu/programme/accréditation>

AQ quality seal 2022-2028



This Erasmus Mundus Joint Master fulfills all necessary requirements for a joint Master of Science. The Agency for Quality Assurance and Accreditation Austria (AQ Austria) awarded the programme with a quality seal applicable for a period of six years (2022-2028). This is in compliance with the European Approach for the Quality Assurance of Joint Programmes.



COPERNICUS MASTER
IN DIGITAL EARTH

Get acquainted with our faculty, current students and alumni as they share their insights and experiences. Discover their perspectives and find answers to questions that may pique your interest about the geospatial Master of Science. The Erasmus Mundus Joint Master (EMJM) is a scholarship programme proudly co-funded by the European Union.



Co-funded by
the European Union



Palacký University
Olomouc



WELCOME!!!

Last week, the Erasmus Mundus Joint Master (EMJM), Copernicus Masters in Digital Earth (CDE) welcomed 25 international students to the Paris Lodron University of Salzburg, for the new academic session of the Master's programme. The edition 1 students consist of both EU scholarship recipients and self-funded participants from across 17 different countries.



CDE edition 1 students

The entire CDE faculty, along with the Paris Lodron University (PLUS) and our partner universities for the specialization tracks, Palacký University Olomouc in Czechia and Université Bretagne Sud in Vannes, France, extend a warm welcome to all new students.

*"As all students embark on this journey, remember that success does not come from perfection, it comes from passion and dedicated commitment to study within the EO*GI domain. Don't be afraid to step out of your comfort zone, to ask questions, and to seek support when you need it. Our faculty, staff, and fellow students are here to help you every step of the way. We wish you a successful start to your academic journey and much success over the next two years of the programme."*



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



ORIENTATION WEEK

Every academic year, we look forward to welcoming our new students with the orientation week. This year's held from September 30th to October 4th. The week started with welcome addresses from the Programme Board and the Head of Department (PLUS). A keynote presentation by Christoph Schröder from the European Topic Centre, University of Malaga, on the evolution of "Copernicus in Digital Earth" followed, setting the perfect introduction into the European Earth Observation's programme "Copernicus".

New students had the opportunity to introduce themselves, sharing their diverse academic backgrounds, unique skills, and expectations for the forthcoming study years. Additionally, research groups from the host department presented their work, offering insights into various ongoing projects.



Partner universities had dedicated sessions to familiarize students with the programme's structure and what to expect throughout their studies. A special workshop was conducted by Prof Thomas Blaschke, allowing for deeper engagement with the students.

The week concluded with a dinner, where students had the chance to connect with faculty in a more informal setting.

#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Geocommunication

New Students Highlights



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

Guide for New Students

TIPS FOR THE ACADEMIC YEAR



TO STAY POSITIVE

Create ways to manage stress, use multivitamins, and relax with friends outdoors



TO COPE WITH THE WEATHER

Stay warm and hydrated



TO ENSURE PRODUCTIVITY

Build a consistent personal routine, get organized



TO ENSURE CREATIVITY

Ask questions, seek help, try new things



TO AVOID BURN OUT

Take just the right amount of courses per semester



TO IMPROVE FOCUS

Set goals, break it down into smaller steps, track progress and don't forget to celebrate your small wins



TO CREATE VISIBILITY

Start building ePortfolio early & update regularly



TO SECURE A GOOD INTERNSHIP

Start searching early, showcase your skills



COPERNICUS MASTER
IN DIGITAL EARTH

#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

Guide for New Students



Co-funded by
the European Union



Palacký University
Olomouc



HELPFUL LINKS FOR THE YEAR



MEDICAL CARE

[Healthcare in Salzburg](#)



TRANSPORT

[Kilmaticket](#), [OBB](#), [Vorteilscard](#), [WESTBahn](#), [Ryanair](#)



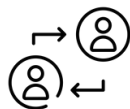
PERSONAL PRODUCTIVITY

[Studo](#), [Notion](#), [Spark](#)



EXPLORE NEW LANGUAGES

[PLUS language center](#)



CONNECT WITH OTHERS

[Geospatial networks](#), [Erasmus Mundus Student Network](#),
[European Forum Alpbach](#), [InterNations](#)



SPORTS & FITNESS

[Sports at PLUS](#)



STUDENT DISCOUNTS

[Edustore](#)



LIVING IN AUSTRIA

[Residency Guide](#)



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



HACKATHON - ROHIT & DAVID



Congratulations to Rohit Khati and David Hansen, students from CDE Intake 5, GeoData Science track, for claiming **1st place** in the 2024 ML4Earth Foundation Models for Earth Observation 2024 Hackathon.



Rohit Khati



David Hansen

We are especially proud of them, as despite their limited computer science background and having just begun their Data Science specialization in France, the team emerged as the top contender among 141 participants with their winning solution, Prithvi4QR. You can view their solution and results here.



Prithvi4QR Presentation



Award Announcement at 3:30

To discover hackathons similar to the ML4Earth competition, check out platforms such as IEEE DataPort, Devpost, ESA and Copernicus web pages.

#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

Student Activities



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



#Copernicus #DigitalEarth #EO #GI #GeodataScience
#ArtificialIntelligenceforEarthObservation #AI4EO
#Geovisualisation #Geocommunication

Student Activities

INTERNSHIP - GERNOT NIKOLAUS

During the summer, I had the chance to intern at the United Nations University - Institute for Environment and Human Security (UNU-EHS) and at the Munich Climate Insurance Initiative (MCII) in Bonn, Germany. The MCII is a leading think tank that focuses on finding insurance solutions to help vulnerable communities adapt to the hazards of climate change.

As part of the Analytics Team, I worked on climate risk analysis, contributing to key projects by scripting automation for data processing and producing detailed maps for the climate risk reports. The work allowed me to apply my academic background to current challenges, providing insights that supported decision-making in climate adaptation strategies.



One of the highlights of the internship was the welcoming and supportive colleagues. The atmosphere made me feel comfortable right from the start. The work environment was fantastic, and I was lucky to meet and collaborate with passionate people who are so dedicated for the greater good. It was such a positive experience that, by the end of my internship, I was offered a student assistant position with a consultant contract. I was very happy to accept it and to be able to continue contributing to UNU-EHS and MCII's important mission.

The second year of the program has started now, and I have moved to Olomouc in order to continue my studies. Despite the move, I am continuing my work remotely with UNU-EHS and MCII, which allows me to stay connected to the projects while balancing my academic commitments.



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

Alumni Highlight

ALUMNUS - KENNEDY ADRIKO



Tell us a little about yourself and what you do? I am from Uganda and an intake-3 alumnus, GeoDataScience track. I work as a Doctoral Researcher at Forschungszentrum Jülich conducting research in AI compression techniques for earth observation applications.

What was a deciding factor for you on whether to work or do further research after graduation? The motivating factor for me was the desire to both further develop my skills and do it in a subject that was of interest to me.

What factors did you consider when choosing your PhD study programme or research lab? I had never heard about the research institute before and the topic seemed daunting at first. But, going through the interview rounds, I was able to discover more about the position and the research centre and it became easy to say yes when I was offered the position.

Did you acquire a 'unique selling point' during the CDE Master's that helped position you better for a PHD? Definitely, I would say that the CDE programme will position you to go anywhere you wish to whether it is academia or industry.

What is the most interesting thing about research? Research is about discovery, the opportunity to try new things, and push boundaries of what's possible, and in our case as earth observation domain experts, it's about finding new ways to explore, ingest, interpret and make sense of earth observation data.

Can you share any ideas on how to secure a PhD admission? Though cliché, update your resume and show one of the CDE lecturers, preferably your supervisor. This will help tailor it to the research field. Then, start actively searching for a PhD opportunity on LinkedIn, job forums for academia, university websites and also information from your supervisors. You have to also decide for yourself what you want out of a PhD.



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



#Copernicus #DigitalEarth #EO #GI #GeodataScience
#ArtificialIntelligenceforEarthObservation #AI4EO
#Geovisualisation #Gecommunication

Alumni Highlight

ALUMNA - SAYANA DE GOROSTIZAGA



Tell us a little about yourself and what you do?

I am an Earth Observation scientist with a background in environmental science, and for nearly three years I've been working remotely with the World Food Programme. I graduated from the first intake of the CDE Master degree, in 2021, specializing in the geovisualisation track.

What was a deciding factor for you on whether to work or do further research after graduation? After two years of study, my goal was to gain a broader perspective on available professional opportunities and areas of application that excited me. I was fortunate to land a job that motivated me, and I felt confident in my decision.

What's a typical workday like for you at the WFP? I work with a cool all-women team of GIS and Remote Sensing specialists monitoring assets that improve food security and resilience. We analyze satellite imagery to assess the impact of WFP projects worldwide, producing detailed reports that provide evidence-based insights for decision-makers.

We regularly partner with experts worldwide, including field colleagues from various disciplines and highly skilled in-house data scientists. The diversity and scale of these projects make the work particularly dynamic and exciting, even if we often engage with them remotely.

What makes working at a large organization such as WFP more desirable? Working at a large organization like WFP offers unique advantages, especially in terms of collaboration and diversity.

Any ideas you can share for recent graduates? Stay curious, keep learning, and actively seek opportunities to apply your knowledge. If jobs or PhD opportunities don't come immediately, don't hesitate to engage in internships or collaborations.



COPERNICUS MASTER
IN DIGITAL EARTH



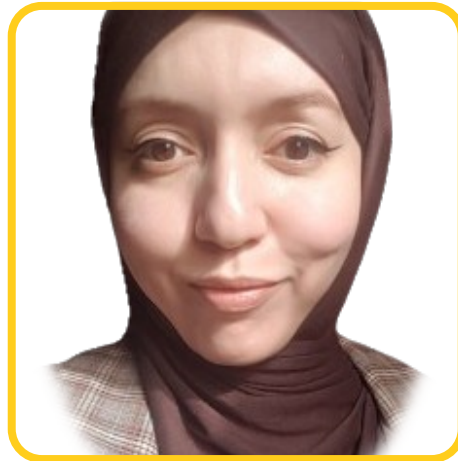
Co-funded by
the European Union



Palacký University
Olomouc



NEW STAFF - KARIMA HADJ-RABAH



A very warm welcome to Karima Hadj-Rabah PhD, who is having a background in Computer Science and Telecommunication Engineering. She received her Ph.D. degree in Radar Remote Sensing from the University of Sciences and Technology Houari Boumedienne (USTHB), Algiers, Algeria, in 2023.

In 2019, she spent a short period at the Telecommunication Group, University of Naples “Parthenope”, Naples, Italy, as a visiting Ph.D. student.

She has been involved in various applications such as forest height estimation for ecosystem management, geohazard assessment, urban resilience, and environmental monitoring. Her work emphasizes the development of innovative techniques for SAR data processing and analysis to address global challenges such as climate change, natural disasters, and sustainable development.

Currently, she is a post-doctoral researcher within the EO Analytics Research Group headed by Assoc. Prof Dirk Tiede and Dr. Martin Sudmanns at the Paris-Lodron University of Salzburg, Department of Geoinformatics. Her research interests include Synthetic Aperture Radar (SAR) applications, with a focus on Interferometry (InSAR) and tomographic reconstruction (TomoSAR).

For this Erasmus Mundus Joint Master, she will be teaching and supervising students. Karima is also the coordinator of Master Theses topics and final exams for this joint programme.

#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

What's new in the CDE?



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc



Department of Computer Science

GeoData Science



SÉBASTIEN LEFÈVRE

is a full Professor in computer science. His expertise is in efficient models for image processing and deep learning for Earth observation. He chairs the GeoData Science track of the CDE programme.



NICOLAS COURTY

is a full Professor in computer science and head of the Obelix team in IRISA research lab. He is an experienced researcher in the domain of machine learning and artificial intelligence.



CHARLOTTE PELLETIER

is an Associate Professor in computer science, specializing in machine learning and computer vision with a focus on time series analysis for EO applications. She co-chairs the GeoData Science track.



MINH-TAN PHAM

is an Associate Professor in computer science. His research focuses on vision and Earth observation tasks, such as classification, object detection, and super-resolution.



FRÉDÉRIC RAIMBAULT

is an Associate Professor in Computer science. His expertise is in Distributed computing and Big data.

#Copernicus #DigitalEarth #EO #GI #GeodataScience
Artificial Intelligence for Earth Observation #AI4EO
#Geovisualisation #Gecommunication

Meet core Faculty Members



COPERNICUS MASTER
IN DIGITAL EARTH



Co-funded by
the European Union



Palacký University
Olomouc

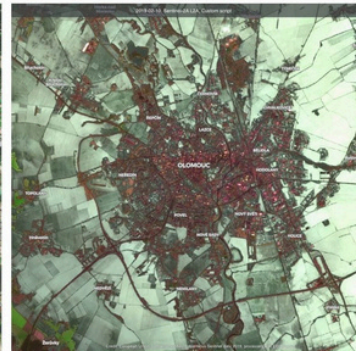


EDITORS

Arioluwa .A. Aribisala (MSc.)
Mag. Barbara Brunner-Maresch



Palacký University
Olomouc



Salzburg, Vannes, Olomouc: contains modified Copernicus Sentinel data

designed with canva.com

Connect with us



www.master-cde.eu | msc-cde@plus.ac.at



COPERNICUS MASTER
IN DIGITAL EARTH

Co-funded by the European Union

The European Commission support for the production of this publication does not constitute endorsement of its contents which reflects the views only of the authors, and the commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by
the European Union



Palacký University
Olomouc



**Co-funded by
the European Union**

Erasmus Mundus Joint Master

Copernicus Master in Digital Earth (CDE) is proudly co-funded by the European Union under the Erasmus+ programme. For a second period of funding (2023-2029), in total 83 student scholarships can be provided, in addition the programme can support 34 self-paying students with a fee-waiver. For the programme's period 2018-2024 a total of 61 scholarships have been offered to international and European students.

