COLLOQUIUM

REMOTE SENSING

Earth from Above: How Satellites, Drones and Sensors Reveal Our Planet's Environment, Climate and Landscapes

SAVE THE DATE **29.10** *2026*

Machera, Grevenmacher

Administration de la gestion de l'eau
Grand-Duché de Luxembourg

Administration de la nature et des forêts
Grand-Duché de Luxembourg

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Agriculture, de l'Alimentation et de la Viticulture

NATUR MUSÉE
MUSÉE NATIONAL D'HISTOIRE NATURELLE LUXEMBOURG

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How can we observe changes in our landscapes that are invisible to the naked eye? How can satellites help us understand forests, monitor water quality, support agriculture, or even detect changes in the ground beneath our feet?

This event brings together researchers, experts, public institutions, and practitioners to explore how modern technologies are transforming the way we observe and understand our environment. From satellite-based radar and InSAR techniques to LiDAR, camera systems, and multi-parameter monitoring tools, participants will discover how data collected from above and increasingly from the ground, can provide valuable insights into the world around us.

The programme offers a fascinating journey through a wide range of applications in the Greater Region and Luxembourg: monitoring ground deformation, observing our planet through clouds and darkness, tracking harmful cyanobacteria in bathing waters, studying the complexity of forest ecosystems, supporting biodiversity, exploring renewable energy, and monitoring agricultural activities.

The event is designed to make these technologies and their scientific principles accessible to a broad audience, while also highlighting their practical relevance for society and environmental management.

Whether you are a scientist, professional, student, nature enthusiast, or simply curious about how technology can help us better understand our planet, this morning offers an opportunity to discover new perspectives, exchange ideas, and see how science is contributing to a more informed and sustainable future.

Program

8:30 **Registrations**

9:00 **Introduction**

9:10 **Satellite Synthetic Aperture Radar Interferometry (InSAR) for ground deformation monitoring in the Greater Region**

Dr Nicolas d'Oreye
National Museum of Natural History European Centerfor Geodynamics and Seismology

9:40 **Seeing Through Clouds and Darkness: SAR and InSAR for Earth Observation**

Dr Delphine Smittarello & Dr Quentin Glaude
European Center for Geodynamics and Seismology

10:10 **Applying a multi-parameter toolbox to track harmful cyanobacteria blooms in Luxembourgish bathing waters**

Dr Jean-Baptiste Burnet
Luxembourg Institute of Science and Technology

10:40 **Coffee break & possibility to visit stalls**

Utilisation de la technologie « lidar mobile » pour décrire la complexité de nos écosystèmes forestiers
Gestion des Ressources Forestières,Gembloux Agro-Bio Tech, Université de Liège

Sauvons bambi Luxembourg a.s.b.l.
Georges Fohl
Jacques Schroeder

Euro kite
Katharina Klein
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11:25 **La télédétection pour mieux connaître les forêts : où en est-on au Grand-Duché de Luxembourg ?**

Dr Philippe Lejeune
Gestion des Ressources Forestières, Gembloux Agro-Bio Tech, Université de Liège

11:55 **Windkraftanlagen, Kamerasysteme**

Guy Uhres
Head of Renewable Energies, Soler

12:25 **Monitoring agricultural activities with satellite data in the framework of the CAP**

Georges Thewes
Administration des services techniques de l'agriculture

12:55 **Closing remarks**

Claudine Felten
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13:05 **Lunch**

14:00 **Excursion: Krankheiten und Trockenheit im Weinbau: Esca Monitoring und Trockenstressanalysen mit drohnengestützten Sensoren**

Dr Miriam Machwitz
Luxembourg Institute of Science and Technology
Institut viti-vinicole

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29 October 2026
Machera - Grevenmacher

Registration & Information

Registration until Sunday, **20 October 2026**

€ 15 half-day without lunch

€ 40 half-day with lunch

€ 40 full day with lunch and an excursion
(Please make sure to wear sturdy shoes)

€ 10 half-day student discount without lunch

Location:
Machera - Centre culturel Grevenmacher
3, Place du Marché aux Bestiaux
L-6731 Grevenmacher

www.mobiliteit.lu

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natur&ëmwelt a.s.b.l. 5, route de Luxembourg L-1899 Kockelscheuer
Tel: 29 04 04 - 1 / reservation@naturemwelt.lu / www.naturemweltasbl.lu