

EO-Summer School 2025

Agenda



Sunday

August 31st, 2025

16:00 - 18:00

Icebreaker

Location will be sent via
Mattermost

Monday

September 1st, 2025

Wageningen International Congress Center (WICC)

Wageningen, The Netherlands

8:30 - 9:00

Registrations

9:00 - 10:30

Plenary introduction, including introduction to the hackathons

Tomislav Hengl

HugoTECH

10:30 - 11:00

Coffee break

HugoTECH

11:00 - 11:30

Keynote: Spatiotemporal Machine Learning: 15 practical lessons on how to organize monitoring,
modeling and updating predictions

Tomislav Hengl

HugoTECH

11:30 - 12:00

Keynote: Monitoring global grassland and pasture areas: An integrated approach based
data-fusion and regional calibration

Leandro Parente

HugoTECH

12:00 - 13:30

Lunch break

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13:30 - 15:00	Tutorial: Introduction of cloud-native vector format: hands-on in Python environment Yu-Feng Ho	HugoTECH
13:30 - 15:00	Tutorial: Automatic acquisition and processing of satellite data in R Krzysztof Dyba	Expert Room 6
13:30 - 15:00	Tutorial: Introduction to GRASS GIS as a spatial analysis engine Luis de Sousa	Expert Room 7
15:00 - 15:30	Coffee break	
15:30 - 16:30	Hackathon workshops Serkan Isik, Leandro Parente and Tomislav Hengl	HugoTECH
16:30 - 18:00	Research speed dating	W-invite

Tuesday
September 2nd, 2025

9:00 - 9:45	Keynote: Learning From Global Earth Observation Data Nico Lang	HugoTECH
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9:45 - 10:30	Cloud-based analysis of Earth Observation data using open-source software Edzer Pebesma	HugoTECH
10:30 - 11:00	Coffee break	
11:00 - 12:00	What does high resolution mean? Space-based spectrometry for air quality & climate Deborah C. Stein Zweers	HugoTECH
11:00 - 12:00	Passive optical instruments for Earth Observation Ralf Kohlhaas	Expert Room 6&7
12:00 - 13:30	Lunch break	W-Invite
13:30 - 15:00	Tutorial: Raster and vector data cubes in R and Python Edzer Pebesma	HugoTECH
13:30 - 15:00	Tutorial: Crash course on Google Earth Engine API Serkan Isik	Expert Room 6
13:30 - 15:00	Tutorial: Land Use and Land Cover Classification with Satellite Image Time Series in R Krzysztof Dyba	Expert Room 7

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15:00 - 15:30	Coffee break	
15:30 - 17:00	Tutorial: GRASS GIS automation for Earth Observation with Python, R and Julia Luis de Sousa	HugoTECH
15:30 - 17:00	Tutorial: Monitoring EO workflows with precision for better performance and resource utilization Serkan Girgin	Expert Room 6
15:30 - 17:00	Tutorial: Geomorphometry: high-performance computing using GRASS GIS, and WhitboxTools in Python Yu-Feng Ho	Expert Room 7
17:00 - 18:00	Hackathon Consultations	HugoTECH

Wednesday
September 3rd, 2025

9:00 - 9:30	Introduction to the EO Council Wouter van der Wal	HugoTECH
9:30 - 10:00	Introduction to SURF Haili Hu	HugoTECH
10:00 - 10:30	Introduction to NSO Marc Middendorp	HugoTECH

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10:30 - 11:00	Coffee break	
11:00 - 12:00	Data use in remote sensing of the atmosphere Sander Houweling	HugoTECH
11:00 - 12:00	Discrete Global Grid Systems - Awareness raising about the future of GIS Luis de Sousa	Expert Room 6&7
12:00 - 13:30	Lunch break	W-Invite
13:30 - 15:00	Tutorial: Space-time mapping at 30 m resolution based on Landsat ARCO data: hands-on for real case applications (python) Davide Consoli	HugoTECH
13:30 - 15:00	Tutorial: High performance computing with Python/RS-DAT Meiert Grootes, Francesco Nattino, Ou Ku	Expert Room 6
13:30 - 15:00	Tutorial: Processing PACE data with Python: get a polarized hyperspectral view of the Earth Jeroen Rietjens and Laura van der Schaaf	Expert Room 7

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15:00 - 15:30

Coffee break

15:30 - 18:00

Netherlands Space Office Companies Fair + Networking borrel

W-Invite

Thursday
September 4th, 2025

9:00 - 9:30

Introduction to openEO within the Copernicus Data Space Ecosystem
Pratichhya Sharma

HugoTECH

9:30 - 10:30

Observing earth system dynamics on weather and climate scales
Ad Stoffelen

HugoTECH

10:30 - 11:00

Coffee break

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11:00 - 12:30	Discussion panels: How to build an open decentralized EO fediverse? and Spatiotemporal Machine Learning and GeoAI technology: DO's and DON'Ts	HugoTECH
12:30 - 13:30	Lunch break	W-Invite
13:30 - 15:00	Tutorial: Build Advanced EO Workflows with Custom Functions in openEO within the Copernicus Data Space Ecosystem Pratichhya Sharma	HugoTECH
13:30 - 15:00	Tutorial: Application Packages in the xcube ecosystem Pontus Lurcock	Expert Room 6
13:30 - 15:00	Tutorial: An introduction to Julia Maarten Pronk	Expert Room 7
15:00 - 15:30	Coffee break	
15:30 - 17:00	Tutorial: AutoML: Automating machine learning applied to areal regression modeling Leandro Parente	HugoTECH
15:30 - 17:00	Tutorial: Less distorted analyses of satellite imagery using Discrete Global Grid Systems in Julia Daniel Loos	Expert Room 6

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15:30 - 17:00	Tutorial: Interactive geomorphometry in Julia Maarten Pronk	Expert Room 7
17:00 - 18:00	Hackathon Consultations	HugoTECH

Friday
September 5th, 2025

9:00 - 9:30	Keynote: Learning Representations: From Engineering Features to Engineering Pretext Tasks Nico Lang	HugoTECH
9:30 - 10:30	Machine learning for Tree Crop Monitoring with Earth Observation Data Robert Masolele	
10:30 - 11:00	Coffee break	
11:00 - 12:00	Synthetic Aperture Radar: system specificaitons and performance trade offs Paco Lopez Dekker	HugoTECH
11:00 - 12:00	The Radiative Transfer Theory Jochen Landgraf	Expert Room 6&7

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12:00 - 13:30	Lunch break	W-Invite
13:30 - 15:00	Tutorial: Greenhouse Gas Remote Sensing using Absorption Spectroscopy: Hands-on experience Jochen Landgraf	HugoTECH
13:30 - 15:00	Tutorial: Cryosphere Tutorial in Python Lu Zhou	Expert Room 6
13:30 - 15:00	Tutorial: Processing large grids and raster algebra using terra package (R) Tom Hengl, Alexandre Wadoux	Expert Room 7
15:00 - 15:30	Coffee break	
15:30 - 17:00	Closing remark and announcement of hackathon winners Tomislav Hengl	HugoTECH

Saturday
September 6th, 2025

10:00 - 14:00	Field Excursion: Doorwerth Castle	Details will be shared via Mattermost
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