

Stéphanie Horion
Associate Professor
Geography 2
Postal address:
Øster Voldgade 10
1350
København K
Email: smh@ign.ku.dk
Phone: +4535325878
Web address: <https://ign.ku.dk/forskning/geografi/>



Short presentation

Stephanie Horion is associate professor at the Dept. of Geosciences and Natural Resource Management (KU, Denmark), and recipient of the **Villum Young Investigator 2021** (DRYTIP - Drought induced tipping point in ecosystem functioning, <https://ign.ku.dk/english/drytip/>). She is also PI on the newly founded **Global Wetland Center** (Novo Nordisk Challenge Programme 2023).

Her research focuses on **Earth Observation of terrestrial ecosystems, global environmental change, tipping points and climate extremes.**

Between 2009 and 2012, she worked at **Joint Research Center of the European Commission** (JRC, Ispra), where she contributed to the development of the European and Global Drought Observatories.
See less

Employment

Associate Professor

Geography 2
København K, Denmark
1 Jan 2016 → nu

Postdoc

Geology
København K, Denmark
15 Apr 2012 → 2 Jan 2013

Contract Agent FGIV

European Commission, Joint Research Centre
Italy
2 Mar 2009 → 29 Feb 2012

Research outputs

Delineating Standing Deadwood in High-Resolution RGB Drone Imagery

Möhring, J., Mosig, C., Cheng, Y., Mahecha, M. D., Priego, O. P., Beloiu, M., Volpi, M., Horion, S., Latifi, H., Shafeian, E., Fassnacht, F., Montero, D., Zielewska-Büttner, K., Laliberté, E., Cloutier, M., Schmehl, M-T., Frick, A., Müller-Landau, H., Cushman, K.C., Hupy, J. & 11 others, Ma, Q., Su, Y., Khatri-Chhetri, P., Kruse, S., Frey, J., Schiefer, F., Junntila, S., Potts, A., Uhl, A., Rossi, C. & Kattenborn, T., 15 Mar 2024.

High-resolution mapping of tree mortality in European forests

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Mapping Tree Mortality at Global Scale Using Sentinel-2

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Simulated Tree-Grass Competition in Drylands Is Modulated by CO₂ Fertilization

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Quantifying Tree Mortality Drivers - a Case Study in a Boreal Forest

Jääskeläinen, J., Junttila, S., O'Sullivan, H., Cheng, Yan, Horion, Stéphanie & Vastaranta, M., 11 Nov 2023, (FORECO-D-23-02383).

Contrasting ecosystem vegetation response in global drylands under drying and wetting conditions

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Deep learning for mapping water bodies in the Sahel

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Satellite-based continental-scale inventory of European wetland types at 10m spatial resolution

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Seasonal-Trend Time Series Decomposition on Graphics Processing Units

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**EMERGENCY FLOOD MAPPING IN AUSTRALIA WITH SENTINEL-1 AND SENTINEL-2 SATELLITE IMAGERY =
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SENTINEL-1 ET SENTINEL-2**

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Contrasting responses of woody and herbaceous vegetation to altered rainfall characteristics in the Sahel

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Temporal changes and dynamics of dryland ecosystem variables and their relation to aridity

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Global-scale characterization of turning points in arid and semi-arid ecosystems functioning

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Forest management in southern China generates short term extensive carbon sequestration

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Ecological engineering projects increased vegetation cover, production, and biomass in semiarid and subhumid Northern China

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Assessing European ecosystem stability to drought in the vegetation growing season

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Spatial aggregation of low resolution satellite data for the monitoring of vegetation response to climatic stresses: Analysis of the spatial heterogeneity of aggregated entities

Horion, Stéphanie, Eerens, H., Tychon, B. & Cornet, Y., 1 Jul 2007, In: European Space Agency, (Special Publication) ESA SP. SP-636

Activities

Member of PhD committee, Lund University

Horion, Stéphanie (Examiner)
31 Mar 2023

Chair of PhD assessment committee, University of Copenhagen

Horion, Stéphanie (Examiner)
21 Feb 2023

MSc examination, University of Cape Town, Faculty of Science

Horion, Stéphanie (Examiner)
17 Feb 2023

ETH Zürich, Distance Exam, observer

Horion, Stéphanie (Examiner)
9 Feb 2023

Chair of PhD assessment committee, University of Copenhagen

Horion, Stéphanie (Examiner)
10 May 2022

European Geophysical Union (External organisation)

Horion, Stéphanie (Member)
1 Jan 2021 → 31 Dec 2080

Organization of Remote sensing seminar, IGN, University of Copenhagen

Horion, Stéphanie (Participant)
1 Jan 2020 → 31 Dec 2023

Land Degradation and Development (Journal)

Horion, Stéphanie (Editor)
2018 → ...

Prizes

EGU Young Scientist Outstanding Poster Paper (YSOPP)

Horion, Stéphanie (Recipient), 2010

EMS Tromp Award 2017

Horion, Stéphanie (Recipient), Jul 2017

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