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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

Changes in vegetation-water response in the Sahel-Sudan during recent decades

Lu, Tingting, Zhang, Wenmin, Abel, Christin, Horion, Stéphanie, Brandt, Martin Stefan, Huang, K. & Fensholt, Rasmus, 2024. In: *Journal of Hydrology: Regional Studies*. 52, 10 p., 101672.

Delineating Standing Deadwood in High-Resolution RGB Drone Imagery

Möhring, J., Mosig, C., Cheng, Y., Mahecha, M., 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., Junttila, S., Potts, A., Uhl, A., Rossi, C. & Kattenborn, T., 2024. 1 p.

High-resolution mapping of tree mortality in European forests

Cheng, Yan, Oehmcke, Stefan, Mosig, C., Beloiu, M., Kattenborn, T., Abel, Christin, Gominski, Dimitri Pierre Johannes, Nord-Larsen, Thomas, Fensholt, Rasmus & Horion, Stéphanie, 2024. 1 p.

Increasing global ecosystem respiration between 1982 and 2015 from Earth observation-based modelling

Tagesson, Håkan Torbern, Kelly, J., Schurgers, Guy, Tian, F., Ardö, J., Horion, Stéphanie, Ahlström, A., Olin, S. & Fensholt, Rasmus, 2024, In: *Global Ecology and Biogeography*. 33, 1, p. 116–130

Mapping Tree Mortality at Global Scale Using Sentinel-2

Mosig, C., Mahecha, M., Montero, D., Cheng, Y., Perez Priego, O., Beloiu, M., Volpi, M., Horion, S., Latifi, H., Shafeian, E., Fassnacht, F., Ganz, S., Zielewska-Büttner, K., Laliberté, E., Cloutier, M., Schmehl, M-T., Frick, A., Müller-Landau, H., Cushman, KC., Hupy, J. & 11 others, Ma, Q., Su, Y., Khatri-Chhetri, P., Kruse, S., Frey, J., Schiefer, F., Junttila, S., Potts, A., Uhl, A., Rossi, C. & Kattenborn, T., 2024. 1 p.

Remote Sensing in Wetland Studies: The application of Earth Observation for detecting change, mapping carbon storage, and assessing land use impact in wetlands – A synopsis.

Kovács, Gyula Mate, Fensholt, Rasmus & Horion, Stéphanie, 2024, Department of Geosciences and Natural Resource Management, Faculty of Science, University of Copenhagen. 118 p.

Scattered tree death contributes to substantial forest loss in California

Cheng, Yan, Oehmcke, Stefan, Brandt, Martin Stefan, Rosenthal, L., Das, A., Vrieling, A., Saatchi, S., Wagner, F., Mugabowindekwe, Maurice, Verbruggen, Wim, Beier, Claus & Horion, Stéphanie, 2024, In: *Nature Communications*. 15, 1, p. 1-13 641.

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

Verbruggen, Wim, Schurgers, Guy, Meunier, F., Verbeek, H. & Horion, Stéphanie, 2024, In: *Earth's Future*. 12, 1, 19 p., e2023EF004096.

The success of ecological engineering projects on vegetation restoration in China strongly depends on climatic conditions

Dou, Y., Tong, Xiaoye, Horion, Stéphanie, Feng, L., Fensholt, Rasmus, Shao, Q. & Tian, F., 2024, In: *Science of the Total Environment*. 915, 11 p., 170041.

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

Abel, Christin, Abdi, A. M., Tagesson, Håkan Torbern, Horion, Stéphanie & Fensholt, Rasmus, 2023, In: *Global Change Biology*. 29, 14, p. 3954-3969

Deep learning for mapping water bodies in the Sahel

de FLEURY, M., Kergoat, L., Brandt, Martin Stefan, Fensholt, Rasmus, Kariryaa, Ankit, Kovács, Gyula Mate, Horion, Stéphanie & Grippa, M., 2023. 1 p.

MAPPING TREE MORTALITY IN CALIFORNIA FROM VERY HIGH RESOLUTION IMAGERY USING DEEP LEARNING

Cheng, Yan, Oehmcke, Stefan, Brandt, Martin Stefan, Das, A., Rosenthal, L., Saatchi, S., Wagner, F., Vrieling, A., Verbruggen, Wim, Beier, Claus & Horion, Stéphanie, 2023.

Mapping and characterising tree mortality in California at individual tree level using deep learning

Cheng, Yan, Oehmcke, Stefan, Brandt, Martin Stefan, Das, A., Rosenthal, L., Saatchi, S., Wagner, F., Verbruggen, Wim, Vrieling, A., Beier, Claus & Horion, Stéphanie, 2023. 1 p.

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

Jääskeläinen, J., Junttila, S., O'Sullivan, H., Cheng, Yan, Horion, Stéphanie & Vastaranta, M., 2023, SSRN: Social Science Research Network, 50 p.

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

Kovács, Gyula Mate, Oehmcke, Stefan, Horion, Stéphanie, Gominiski, Dimitri Pierre Johannes, Tong, Xiaoye & Fensholt, Rasmus, 2023. 1 p.

Seasonal-Trend Time Series Decomposition on Graphics Processing Units

Serykh, Dmitry, Oehmcke, Stefan, Oancea, Cosmin Eugen, Masiliunas, D., Verbesselt, J., Cheng, Yan, Horion, Stéphanie, Gieseke, F. & Hinnerskov, Nikolaj Hey, 2023, *Proceedings - 2023 IEEE International Conference on Big Data, BigData*

2023. He, J., Palpanas, T., Hu, X., Cuzzocrea, A., Dou, D., Slezak, D., Wang, W., Gruca, A., Lin, J. C-W. & Agrawal, R. (eds.). IEEE, p. 5914-5923 10 p.

Simulated tree-grass competition in drylands is modulated by CO₂ fertilization

Verbruggen, Wim, Schurgers, Guy, Meunier, F., Verbeeck, H. & Horion, Stéphanie, 2023. 1 p.

Characterizing ecosystem change in wetlands using dense earth observation time series

Kovács, Gyula Mate, Horion, Stéphanie & Fensholt, Rasmus, 2022, In: Remote Sensing of Environment. 281, 18 p., 113267.

EMERGENCY FLOOD MAPPING IN AUSTRALIA WITH SENTINEL-1 AND SENTINEL-2 SATELLITE IMAGERY = CARTOGRAPHIE D'URGENCE DES INONDATIONS EN AUSTRALIE À PARTIR D'IMAGES SATELLITAIRES SENTINEL-1 ET SENTINEL-2

Meyer, Rasmus Probst, Søgaard, M. G., Schødt, M. P., Horion, Stéphanie & Prishchepov, Alexander V., 2022, In: BSLG. 78, 1, p. 123-138 16 p.

Global quantification of the bidirectional dependency between soil moisture and vegetation productivity

Zhang, Wenmin, Wei, F., Horion, Stéphanie, Fensholt, Rasmus, Forkel, M. & Brandt, Martin Stefan, 2022, In: Agricultural and Forest Meteorology. 313, 9 p., 108735.

Tracking sustainable restoration in agro-pastoral ecotone of northwest China

Yang, L., Horion, Stéphanie, He, C. & Fensholt, Rasmus, 1 Dec 2021, In: Remote Sensing. 13, 24, 20 p., 5031.

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

Verbruggen, Wim, Schurgers, Guy, Horion, Stéphanie, Ardö, J., Bernardino, P. N., Cappelaere, B., Demarty, J., Fensholt, Rasmus, Kergoat, L., Sibret, T., Tagesson, Håkan Torbern & Verbeeck, H., 7 Jan 2021, In: Biogeosciences. 18, 1, p. 77-93 17 p.

A physiology-based Earth observation model indicates stagnation in the global gross primary production during recent decades

Tagesson, Håkan Torbern, Tian, F., Schurgers, Guy, Horion, Stéphanie, Scholes, R., Ahlström, A., Ardö, J., Moreno, A., Madani, N., Olin, S. & Fensholt, Rasmus, 2021, In: Global Change Biology. 27, 4, p. 836-854 19 p.

Abrupt Change in Dryland Ecosystem Functioning: Recent Advances and Lessons Learnt from the U-TURN Project

Horion, Stéphanie, Verbruggen, Wim, Bernardino, P., Souverijns, N., de Keersmaecker, W., Fensholt, Rasmus, Schurgers, Guy, van de Kerchove, R., Verbeeck, H., Verbesselt, J. & Somers, B., 2021, *IGARSS 2021 - 2021 IEEE International Geoscience and Remote Sensing Symposium, Proceedings*. Institute of Electrical and Electronics Engineers Inc., p. 1394-1397 4 p. (International Geoscience and Remote Sensing Symposium (IGARSS), Vol. 2021-July).

MAPPING SAHELIAN ECOSYSTEM VULNERABILITY TO VEGETATION COLLAPSE: VEGETATION MODEL OPTIMIZATION

Verbruggen, Wim, Verbeeck, H., Horion, Stéphanie, Souverijns, N. & Schurgers, Guy, 2021, p. 1591-1593. 3 p.

Sensitivity of Gross Primary Production in Tropical Savannas to Drought Timescales

Abdi, A., Horion, Stéphanie & Fensholt, Rasmus, 2021. 1 p.

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

Abel, Christin, Horion, Stéphanie, Kovács, Gyula Mate, Wang, M., Wigneron, J., Fensholt, Rasmus & Berdugo, M., 2021. 1 p.

The human–environment nexus and vegetation–rainfall sensitivity in tropical drylands

Abel, Christin, Horion, Stéphanie, Tagesson, Håkan Torbern, De Keersmaecker, W., Seddon, A. W. R., Abdi, A. M. & Fensholt, Rasmus, 2021, In: Nature Sustainability. 4, p. 25–32 8 p.

An updated assessment of Ireland's wave energy resource using satellite data assimilation and a revised wave period ratio

O'connell, R., De Montera, L., Peters, J. L. & Horion, Stéphanie, 1 Nov 2020, In: Renewable Energy. 160, p. 1431-1444 14 p.

Thirty Years of Land Cover and Fraction Cover Changes over the Sudano-Sahel Using Landsat Time Series

Souverijns, N., Buchhorn, M., Horion, Stéphanie, Fensholt, Rasmus, Verbeeck, H., Verbesselt, J., Herold, M., Tsendbazar, N., Bernardino, P. N., Somers, B. & Van De Kerchove, R., 1 Nov 2020, In: Remote Sensing. 12, 22, 21 p., 3817.

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

Verbruggen, Wim, Schurgers, Guy, Horion, Stéphanie, Ardö, J., Bernardino, P. N., Cappelaere, B., Demarty, J., Fensholt, Rasmus, Kergoat, L., Sibret, T., Tagesson, Håkan Torbern & Verbeeck, H., 2 Jul 2020

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

Bernardino, P., De Keersmaecker, W., Fensholt, Rasmus, Verbesselt, J., Somers, B. & Horion, Stéphanie, 1 May 2020. 2 p.

How global dryland vegetation dynamics relate to changing climatic conditions and anthropogenic dynamics

Abel, Christin, Horion, Stéphanie, Tagesson, Håkan Torbern, De Keersmaecker, W., Seddon, A. W. R., Abdi, A. M. & Fensholt, Rasmus, 1 May 2020, In: 22nd EGU General Assembly, held online 4-8 May, 2020. 22, 7723.

Forest management in southern China generates short term extensive carbon sequestration

Tong, Xiaowei, Brandt, Martin Stefan, Yue, Y., Ciais, P., Jepsen, Martin Rudbeck, Penuelas, J., Wigneron, J. P., Xiao, X., Song, X. P., Horion, Stéphanie, Rasmussen, Kjeld, Saatchi, S., Fan, L., Wang, K., Zhang, B., Chen, Z., Wang, Y., Li, X. & Fensholt, Rasmus, 2020, In: Nature Communications. 11, 1, 10 p., 129.

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

Bernardino, P. N., De Keersmaecker, W., Fensholt, Rasmus, Verbesselt, J., Somers, B. & Horion, Stéphanie, 2020, In: Global Ecology and Biogeography. 29, 7, p. 1230-1245 16 p.

Recent divergence in the contributions of tropical and boreal forests to the terrestrial carbon sink

Tagesson, Håkan Torbern, Schurgers, Guy, Horion, Stéphanie, Ciais, P., Tian, F., Brandt, Martin Stefan, Ahlström, A., Wigneron, J., Ardö, J., Olin, S., Fan, L., Wu, Z. & Fensholt, Rasmus, 2020, In: Nature Ecology & Evolution. 4, p. 202-209 8 p.

Uncovering Dryland Woody Dynamics Using Optical, Microwave, and Field Data—Prolonged Above-Average Rainfall Paradoxically Contributes to Woody Plant Die-Off in the Western Sahel

Bernardino, P. N., Brandt, Martin Stefan, De Keersmaecker, W., Horion, Stéphanie, Fensholt, Rasmus, Storms, I., Wigneron, J., Verbesselt, J. & Somers, B., 2020, In: Remote Sensing. 12, 14, 21 p., 2332.

Understanding Turning Points in Dryland Ecosystem Functioning (U-TURN)

Horion, Stéphanie, Bernardino, P., De Keersmaecker, W., Fensholt, Rasmus, Lhermitte, S., Schurgers, Guy, Souverijns, N., Van De Kerchove, R., Verbeeck, H., Verbesselt, J., Verbruggen, Wim & Somers, B., 2020.

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

Niu, Q., Xiao, X., Zhang, Y., Qin, Y., Dang, X., Wang, J., Zou, Z., Doughty, R. B., Brandt, Martin Stefan, Tong, Xiaowei, Horion, Stéphanie, Fensholt, Rasmus, Chen, C., Myneni, R. B., Xu, W., Di, G. & Zhou, X., 2019, In: Land Degradation & Development. 30, 13, p. 1620-1631 12 p.

Mapping European ecosystem change types in response to land-use change, extreme climate events, and land degradation

Horion, Stéphanie, Ivits, E., De Keersmaecker, W., Tagesson, Håkan Torbern, Vogt, J. & Fensholt, Rasmus, 2019, In: Land Degradation and Development. 30, 8, p. 951-963 13 p.

Towards improved remote sensing based monitoring of dryland ecosystem functioning using sequential linear regression slopes (SeRGS)

Abel, Christin, Horion, Stéphanie, Tagesson, Håkan Torbern, Brandt, Martin Stefan & Fensholt, Rasmus, 2019, In: Remote Sensing of Environment. 224, p. 317-332 16 p.

Disaggregation of SMOS soil moisture over West Africa using the Temperature and Vegetation Dryness Index based on SEVIRI land surface parameters

Tagesson, Håkan Torbern, Horion, Stéphanie, Nieto, H., Fornies, V. Z., Gonzalez, G. M., Bulgin, C. E., Ghent, D. & Fensholt, Rasmus, 2018, In: Remote Sensing of Environment. 206, p. 424-441 18 p.

Drylands under pressure: vegetation modeling of dryland ecosystems in the Sahel

Verbruggen, Wim, Schurgers, Guy, Combe, M., Brugnera, M. D. P. E., Tagesson, Håkan Torbern, Fensholt, Rasmus, Horion, Stéphanie, Ardö, J., Cappelaere, B., Demarty, J., Kergoat, L., Sibret, T. & Verbeeck, H., 2018, In: Geophysical Research Abstracts. 20, 13042.

Increased vegetation growth and carbon stock in China karst via ecological engineering

Tong, X., Brandt, Martin Stefan, Yue, Y., Horion, Stéphanie, Wang, K., Keersmaecker, W. D., Tian, F., Schurgers, Guy, Xiao, X., Luo, Y., Chen, C., Myneni, R., Shi, Z., Chen, H. & Fensholt, Rasmus, 2018, In: Nature Sustainability. 1, 1, p. 44-50 7 p.

Massively-parallel break detection for satellite data

von Mehren, M., Gieseke, Fabian Cristian, Verbesselt, J., Rosca, S., Horion, Stéphanie & Zeileis, A., 2018, *SSDBM '18 Proceedings of the 30th International Conference on Scientific and Statistical Database Management*. Association for Computing Machinery, Vol. Part F137913. 10 p. 5

A new method for large-scale assessment of change in ecosystem functioning in relation to land degradation

Horion, Stéphanie, Ivits, E., Verzaandvoort, S. & Fensholt, Rasmus, 2017, *EGU2017, proceedings from the conference held 23-28 April, 2017 in Vienna*. p. 13317 1 p. (Proceedings of the 19th EGU General Assembly (EGU2017)).

Modelling spatial and temporal dynamics of gross primary production in the Sahel from earth-observation-based photosynthetic capacity and quantum efficiency

Tagesson, Håkan Torbern, Ardoe, J., Cappelaere, B., Kergoat, L., Abdi, A., Horion, Stéphanie & Fensholt, Rasmus, 2017, In: Biogeosciences. 14, 5, p. 1333-1348 16 p.

Assessing European ecosystem stability to drought in the vegetation growing season

Ivits, E., Horion, Stéphanie, Erhard, M. & Fensholt, Rasmus, Sep 2016, In: Global Ecology and Biogeography. 25, 9, p. 1131-1143

Environmental change in the Sahel: reconciling contrasting evidence and interpretations

Rasmussen, Kjeld, D'haen, S. A. L., Fensholt, Rasmus, Fog, Bjarne, Horion, Stéphanie, Nielsen, J. O., Rasmussen, Laura Vang & Reenberg, A., 2016, In: Regional Environmental Change. 16, 3, p. 673-680

Revealing turning points in ecosystem functioning over the Northern Eurasian agricultural frontier

Horion, Stéphanie, Prishchepov, Alexander V., Verbesselt, J., de Beurs, K., Tagesson, Håkan Torbern & Fensholt, Rasmus, 2016, In: Global Change Biology. 22, 8, p. 2801-2817

Spatiotemporal variability in carbon exchange fluxes across the Sahel

Tagesson, Håkan Torbern, Fensholt, Rasmus, Cappelaere, B., Mougin, E., Horion, Stéphanie, Kergoat, L., Nieto Solana, H., Mbow, C., Ehammer, A., Demarty, J. & Ardö, J., 2016, In: Agricultural and Forest Meteorology. 226-227, p. 108-118 11 p.

Very high CO₂ exchange fluxes at the peak of the rainy season in a West African grazed semi-arid savanna ecosystem

Tagesson, Håkan Torbern, Ardoe, J., Guiro, I., Cropley, F., Mbow, C., Horion, Stéphanie, Ehammer, A., Mougin, E., Delon, C., Galy-Lacaux, C. & Fensholt, Rasmus, 2016, In: Geografisk Tidsskrift/Danish Journal of Geography. 116, 2, p. 93-109

Global-scale mapping of changes in ecosystem functioning from earth observation-based trends in total and recurrent vegetation

Fensholt, Rasmus, Horion, Stéphanie, Tagesson, Håkan Torbern, Ehammer, A., Ivits, E. & Rasmussen, Kjeld, Sep 2015, In: *Global Ecology and Biogeography*. 24, 9, p. 1003-1017

Dynamics in carbon exchange fluxes for a grazed semi-arid savanna ecosystem in West Africa

Tagesson, Håkan Torbern, Fensholt, Rasmus, Cropley, F., Guiro, I., Horion, Stéphanie, Ehammer, A. & Ardö, J., 1 Jul 2015, In: *Agriculture, Ecosystems and Environment*. 205, p. 15-24 10 p.

An assessment of actual evapotranspiration and soil water deficit in agricultural regions in Europe

Kurnik, B., Kajfež-Bogataj, L. & Horion, Stéphanie, 2015, In: *International Journal of Climatology*. 35, 9, p. 2451–2471 21 p.

Assessing drivers of vegetation changes in drylands from time series of earth observation data

Fensholt, Rasmus, Horion, Stéphanie, Tagesson, Håkan Torbern, Ehammer, A., Grogan, K., Tian, F., Huber, S., Verbesselt, J., Prince, S. D., Tucker, C. J. & Rasmussen, Kjeld, 2015, *Remote Sensing and Digital Image Processing*. Kuenzer, C., Dech, S. & Wagner, W. (eds.). Cham: Springer, p. 183-202 20 p. (Remote Sensing and Digital Image Processing, Vol. 22).

Assessment of vegetation trends in drylands from time series of earth observation data

Fensholt, Rasmus, Horion, Stéphanie, Tagesson, Håkan Torbern, Ehammer, A., Grogan, K., Tian, F., Huber, S., Verbesselt, J., Prince, S. D., Tucker, C. J. & Rasmussen, Kjeld, 2015, *Remote Sensing and Digital Image Processing*. Kuenzer, C., Dech, S. & Wagner, W. (eds.). Springer, p. 159-182 24 p. (Remote Sensing and Digital Image Processing, Vol. 22).

Deriving seasonal dynamics in ecosystem properties of semi-arid savanna grasslands from in situ-based hyperspectral reflectance

Tagesson, Håkan Torbern, Fensholt, Rasmus, Huber, S., Horion, Stéphanie, Guiro, I., Ehammer, A. & Ardö, J., 2015, In: *Biogeosciences*. 12, 15, p. 4621-4635

Ecosystem properties of semiarid savanna grassland in West Africa and its relationship with environmental variability

Tagesson, Håkan Torbern, Fensholt, Rasmus, Guiro, I., Rasmussen, M. O., Huber, S., Mbow, C., Garcia, M., Horion, Stéphanie, Sandholt, I., Holm-Rasmussen, B., Göttsche, F. M., Ridler, M., Olén, N., Olsen, J. L., Ehammer, A., Madsen, M., Olesen, F. S. & Ardö, J., 2015, In: *Global Change Biology*. 21, 1, p. 250–264

Evaluating temporal consistency of long-term global NDVI datasets for trend analysis

Tian, F., Fensholt, Rasmus, Verbesselt, J., Grogan, K., Horion, Stéphanie & Wang, Y., 2015, In: *Remote Sensing of Environment*. 163, p. 326-340

Global Ecosystem Response Types Derived from the Standardized Precipitation Evapotranspiration Index and FPAR3g Series

Ivits, E., Horion, Stéphanie, Fensholt, Rasmus & Cherlet, M., 1 May 2014, In: *Remote Sensing*. 6, 5, p. 4266-4288 23 p.

Drought footprint on European ecosystems between 1999 and 2010 assessed by remotely sensed vegetation phenology and productivity

Ivits, E., Horion, Stéphanie, Fensholt, Rasmus & Cherlet, M., 2014, In: *Global Change Biology*. 20, 2, p. 581–593

Using earth observation-based dry season NDVI trends for assessment of changes in tree cover in the Sahel

Horion, Stéphanie, Fensholt, Rasmus, Tagesson, Håkan Torbern & Ehammer, A., 2014, In: *International Journal of Remote Sensing*. 35, 7, p. 2493-2515

A multitemporal and non-parametric approach for assessing the impacts of drought on vegetation greenness: a case study for Latin America

Carrao, H., Sepulcre, G., Horion, Stéphanie & Barbosa, P., 2013, In: *E A R S e L eProceedings*. 12, 1, p. 8-24 17 p.

Assessing land degradation/recovery in the African Sahel from long-term earth observation based primary productivity and precipitation relationships

Fensholt, Rasmus, Rasmussen, Kjeld, Kaspersen, P. S., Huber, S., Horion, Stéphanie & Swinnen, E., 2013, In: Remote Sensing. 5, 2, p. 664-686 23 p.

Global biogeographical pattern of ecosystem functional types derived from earth observation data

Ivits, E., Cherlet, M., Horion, Stéphanie & Fensholt, Rasmus, 2013, In: Remote Sensing. 5, 7, p. 3305-3330 26 p.

Studying interactions between climate variability and vegetation dynamic using a phenology based approach

Horion, Stéphanie, Cornet, Y., Erpicum, M. & Tychon, B., 2013, In: International Journal of Applied Earth Observation and Geoinformation. 20, p. 20-32 13 p.

Development of a combined drought indicator to detect agricultural drought in Europe

Sepulcre, G., Horion, Stéphanie, Singleton, A., Carrao, H. & Vogt, J., 2012, In: Natural Hazards and Earth System Sciences. 12, 11, p. 3519-3531 13 p.

JRC experience on the development of drought information systems: Europe, Africa and Latin America

Horion, Stéphanie, Carrão, H., Singleton, A., Barbosa, P. & Vogt, J., 2012, European Commission - Joint Research Centre - Institute for Environment and Sustainability . 65 p. (JRC Scientific and technical reports, Vol. EUR 25235 EN).

Satellite remote sensing for soil mapping in Africa: an overview

Dewitte, O., Jones, A., El-belhiti, H., Horion, Stéphanie & Montanarella, L., 2012, In: Progress in Physical Geography. 36, 4, p. 514-538

Understanding the explosion of cholera outbreaks in the Great Lake Region of Africa

Bompangue Nkoko, D., Giraudoux, P., Plisnier, P., Mutombo, A., Piarroux, M., Sudre, B., Horion, Stéphanie, Muyembe Tamfum, J., Kebela Ilunga, B. & Piarroux, R., Nov 2011, In: Emerging Infectious Diseases (Print Edition). 17, 11

Dynamics of cholera outbreaks in great Lakes region of Africa, 1978-2008

Nkoko, D. B., Giraudoux, P., Plisnier, P. D., Tinda, A. M., Piarroux, M., Sudre, B., Horion, Stéphanie, Tamfum, J. J. M., Ilunga, B. K. & Piarroux, R., 2011, In: Emerging Infectious Diseases (Print Edition). 17, 11, p. 2026-2034 9 p.

Improved drought monitoring in the Greater Horn of Africa by combining meteorological and remote sensing based indicators

Horion, Stéphanie, Kurnik, B., Barbosa, P. & Vogt, J., 1 May 2010, In: EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.11567. 12, 11567.

Inventory and monitoring options of peatlands at regional scale

Gardi, C., Sommer, S., Seep, K. & Horion, Stéphanie, 1 May 2010, In: EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.14372. 12, p. 14372

Modelling climate control on cropland and grassland development using phenologically tuned variables

Horion, Stéphanie, Tychon, B. & Cornet, Y., 1 May 2010, In: EGU General Assembly 2010, held 2-7 May, 2010 in Vienna, Austria, p.11680. 12, 11680.

Optimized extraction of daily bio-optical time series derived from MODIS/Aqua imagery for Lake Tanganyika, Africa

Horion, Stéphanie, Bergamino, N., Stenuite, S., Descy, J., Plisnier, P., Loiselle, S. A. & Cornet, Y., 15 Apr 2010, In: Remote Sensing of Environment. 114, 4, p. 781-791 11 p.

Spatio-temporal dynamics of phytoplankton and primary production in Lake Tanganyika using a MODIS based bio-optical time series

Bergamino, N., Horion, Stéphanie, Stenuite, S., Cornet, Y., Loiselle, S. A., Plisnier, P. & Descy, J. P., 2010, In: Remote Sensing of Environment. 114, 4, p. 772-780 9 p.

Limnological variability and pelagic fish abundance (*Stolothrissa tanganyicae* and *Lates stappersii*) in Lake Tanganyika
Plisnier, P. D., Mgana, H., Kimirei, H., Chande, A., Makasa, L., Chimanga, J., Zulu, F., Horion, Stéphanie, Bergamino, N., Naithani, J., Deleersnijder, E., Andre, L., Descy, J. P. & Cornet, Y., 2009, In: Hydrobiologia. 625

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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