

Dr. Peter Strobl

CONTACT

EC-JRC,
Dir. D.6, TP123
I-21027 Ispra, ITALY
Peter.Strobl@ec.europa.eu
Off: +39 0332 786695

https://www.researchgate.net/profile/Peter_Strobl
<https://orcid.org/0000-0003-2733-1822>

ACADEMIC EDUCATION

Doctoral Degree in Geosciences (remote sensing), University of Potsdam, Germany Feb. 2000
Thesis title: “Development of methods for pre-processing and calibration of the VIS-TIR
imaging spectrometer DAIS7915” (in German)
Graduate Studies in Geophysics, University of Munich, Germany Nov. 1987 - June 1991

WORK EXPERIENCE

Since 11/2004

European Commission (EC), Directorate General Joint Research Centre (JRC), Directorate for Sustainable Resources, I-21027 Ispra, ITALY, Principal Scientist:

Since 01/2017 Nature Conservation and Observation Unit

Participation in and coordination of various internal and external Expert Groups supporting the COPERNICUS and HE program and other international committees and working groups (see below). Consulting the Knowledge Centre on Earth Observation (KCEO) and the Copernicus Land Management Service (CLMS) on topics such as system architecture and evolution, standards and references, cloud technologies, and service implementation.

01/2013 – 12/2016 Forest Resources and Climate Unit

Coordination of tasks related to COPERNICUS and to land reference data (e.g. Digital Elevation Models). Development and implementation of novel techniques for (semi-)automated image processing and analysis.

11/2004 – 12/2012 Land Management & Natural Hazards Unit

Point of reference for tasks related to pre-processing and quality issues of Earth Observation data for pan-European Forest Mapping and the European Forest Fire Information System. Development and implementation of novel techniques for (semi-) automated image processing and analysis.

11/2000 – 11/2004

German Aerospace Center – DLR, Remote Sensing Technology Institute, D-82230 Weßling, GERMANY, Senior Research Scientist:

Team leader of the “Sensor Operations” group. Responsible for the coordination of maintenance, calibration and pre-processing of the institutes’ airborne optical imaging systems. Project head for the definition and acquisition of future EO systems and related projects. Initiation of international co-operations.

09/1999- 09/2000

European Commission, Directorate General Joint Research Centre, Space Applications Institute, Environment and GeoInformation Unit, I-21020 Ispra, ITALY, Auxiliary Agent:

Algorithm development and implementation for time series analysis of satellite data (SPOT-VEGETATION, NOAA-AVHRR). Consultancy in imaging spectrometry and related matters.

07/1997-09/1999

Deutsches Zentrum für Luft und Raumfahrt, Institut für Optoelektronik, D-82230 Weßling, GERMANY, Research Scientist:

Responsible coordinator of the Data-Facility and the calibration efforts for an airborne imaging spectrometer. Scientific studies on aspects of multi-sensor Remote Sensing. Acquisition and management of international co-operation projects with academic and industrial partners.

04/1994-06/1997

Ludwig-Maximilians-Universität, Institut für Geographie, D-80333 München GERMANY, Research Scientist:

Implementation and operationalisation of the pre-processing for airborne imaging spectrometers. Development of quality assurance mechanisms during automatic data processing. Evaluation of radiometric laboratory calibration measurements and in-flight validation experiments.

04/1992-03/1994

Deutsches Zentrum für Luft und Raumfahrt, Institut für Optoelektronik, D-82230 Weßling, GERMANY, Research Scientist:

Combined evaluation of SAR and imaging spectrometer data. Preparation of the German D2 Spacelab mission. Contribution to projects in the European Commission Research Framework programs 3&4.

COMMITTEES AND WORKING GROUPS (CURRENT AND PAST)

- Since 03/2023 Member of the Mission Advisory Group for the Copernicus Sentinel-2 Next Generation mission (S2NG AHEG)
- Since 11/2021 Co-Chair of the Committee on Earth Observation Satellites' Land Surface Imaging Virtual Constellation (CEOS LSI-VC)
- Since 10/2019 Chair of the Terrain Mapping Sub-Group of the Committee on Earth Observation Satellites' Working Group for Calibration and Validation (CEOS WGCV-TMSG)
- Since 03/2018 Co-chair of the Open Geospatial Consortium's Domain Working Group on Discrete Global Grid Systems (OGC DGGS DWG)
- Since 02/2018 Member of the Mission Advisory Group for the Copernicus High-Priority Candidate Mission (HPCM) 'Copernicus Hyperspectral Imaging Mission for the Environment' (CHIME MAG)
- Since 03/2016 Member of the Sentinel-2 Quality Working Group (S2 QWG)
- 2021 -2023 Member of the Ad-Hoc Expert Group for the Copernicus Sentinel-2 Next Generation mission (S2NG AHEG)
- 06/2018-06/2020 Member of the Mission Advisory Group for the Copernicus High-Priority Candidate Mission (HPCM) 'Land Surface Temperature Mission' (LSTM MAG)
- 2018 – 2023 Member of the NASA/USGS Landsat Science Team (LST)
- 04/2012 – 04/2018 Elected member of the Local and Central Staff Committees of the EC
- 2010-2012 & 2019-2020 Member of EPSO juries in open competitions for administrators
- 09/2008 – 04/2010 Leader of the JRC Task Force on "Natural Disasters"

LANGUAGES

	Listening	Reading	Speaking	Writing
German*	C2	C2	C2	C2
English	C2	C2	C2	C2
Italian	C1	C1	B2	B2

*mother tongue

SELECTED PUBLICATIONS

- Zhou Q., Neigh C., Ju J., Dabney P., Cook B., Zhe Zhu, Crawford C.J., Gascon F., Strobl P., and Sridhar M, *Towards Seamless Global 30-meter Terrestrial Monitoring: Evaluating 2022 Cloud Free Coverage of Harmonized Landsat and Sentinel-2 (HLS) V2.0*, IEEE Geoscience and Remote Sensing Letters, doi: [10.1109/LGRS.2025.3533923](https://doi.org/10.1109/LGRS.2025.3533923), 2025
- d'Andrimont, R., Yordanov, M., Sedano, F., Verhegghen, A., Strobl, P., Zachariadis, S., Camilleri, F., Palmieri, A., Eiselt, B., Rubio Iglesias, J. M., and van der Velde, M.: *Advances in LUCAS Copernicus 2022: enhancing Earth observations with comprehensive in situ data on EU land cover and use*, Earth Syst. Sci. Data, 16, 5723–5735, <https://doi.org/10.5194/essd-16-5723-2024>, 2024
- Kmoch, A., Bovy, B., Magin, J., Abernathey, R., Strobl, P., Coca-Castro, A., Fouilloux, A., Loos, D., and Odaka, T.: XDGGS: Xarray Extension for Discrete Global Grid Systems (DGGS), EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-15416, <https://doi.org/10.5194/egusphere-egu24-15416>, 2024
- Strobl, P.A., Woolliams, E.R. & Molch, K. *Lost in Translation: The Need for Common Vocabularies and an Interoperable Thesaurus in Earth Observation Sciences*, Surveys in Geophysics, <https://doi.org/10.1007/s10712-024-09854-8>, 2024
- Riazanoff, S.; Corseaux, A.; Albinet, C.; Strobl, P.A.; López-Vázquez, C.; Guth, P.L.; Tadono, T. Best BiCubic Method to Compute the Planimetric Misregistration between Images with Sub-Pixel Accuracy: Application to Digital Elevation Models. *ISPRS Int. J. Geo-Inf.* 13, 96. <https://doi.org/10.3390/ijgi13030096>, 2024
- Bielski C., López-Vázquez C., Grohmann C.H., Guth P.L., Hawker, L., Gesch D., Trevisani, S., Herrera-Cruz V., Riazanoff S., Corseaux A., Reuter H.I., Strobl P., *Novel approach for ranking DEMs: Copernicus DEM improves one arc second open global topography*, IEEE Transactions on Geoscience and Remote Sensing, doi: [10.1109/TGRS.2024.3368015](https://doi.org/10.1109/TGRS.2024.3368015), 2024
- Radeloff, V. C., D. P. Roy, M. A. Wulder, M. Anderson, B. Cook, C. J. Crawford, M. Friedl, F. Gao, N. Gorelick, M. Hansen, S. Healey, P. Hostert, G. Hulley, J. L. Huntington, D. M. Johnson, C. Neigh, A. Lyapustin, L. Lyburner, N. Pahlevan, J.-F. Pekel, T. A. Scambos, C. Schaaf, P. Strobl, E. Vermote, C. E. Woodcock, H. K. Zhang, and Z. Zhu., *Need and vision for global medium-resolution Landsat and Sentinel-2 data products*, Remote Sensing of Environment, doi: [10.1016/j.rse.2023.113918](https://doi.org/10.1016/j.rse.2023.113918), 2023
- Strobl P., ‘Proposal of a revised processing level scheme for Earth observation data’, in Proceedings of the 2023 conference on Big Data from Space, Soille P., Lumnitz S. and Albani S., eds., Publications Office of the European Union, Luxembourg, pp. 53-56, doi: [10.2760/46796](https://doi.org/10.2760/46796), 2023
- Wulder M., Roy D., Radeloff V., Loveland T., Anderson M., Johnson D., Healey S., Zhu Z., Scambos T., Pahlevan N., Hansen M., Gorelick N., Crawford C., Masek J., Hermosilla T., White J., Belward A., Schaaf C., Woodcock C., Huntington J., Lyburner L., Hostert P., Gao F., Lyapustin A., Pekel J-F, Strobl P., Cook B., *Fifty years of Landsat science and impacts*, Remote Sensing of Environment, Volume 280, 113195, ISSN 0034-4257, <https://doi.org/10.1016/j.rse.2022.113195>, 2022
- Guth P.L., Van Niekerk A., Grohmann C.H., Muller J.-P., Hawker, L., Florinsky I.V., Gesch D., Reuter H.I., Herrera-Cruz V., Riazanoff S., López-Vázquez C., Carabajal C.C., Albinet C., Strobl P., *Digital Elevation Models: Terminology and Definitions*. Remote Sens. 2021, 13, 3581. <https://doi.org/10.3390/rs13183581>, 2021
- Abernathey R., M. Neteler, A. Amici, A. Jacob, M. Cherlet, P. Strobl, *Opening new horizons: How to migrate the Copernicus Global Land Service to a Cloud environment*, Publications Office of the European Union, EUR 30554 EN, Luxembourg, ISBN 978-92-76-28406-2, doi: [10.2760/668980](https://doi.org/10.2760/668980), JRC122454, 2021

- Nordbeck O., Duchossois G., Kohlhammer G., Andersson E., Diehl T., Dinessen F., Eriksson P., Flett D., Garric G., Gros J-C., Jacq F., Molch K., Nagler T., Nicolas J., Strobl P., *User Requirements for a Copernicus Polar Observing System– Phase 3 Report - Towards Operational Products and Services*. ISBN: 978-92-76-34378-3 DOI 10.2889/90647, 2021
- Dimitrijevic A., Strobl P., *Continuous 2D Maps Based on Spherical Cube Datasets*, Proc. 55th International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST), doi:10.1109/ICEST49890.2020.9232678, 2020
- Amatulli, G., McInerney, D., Sethi, T., Strobl, P., Domisch S., *Geomorpho90m, empirical evaluation and accuracy assessment of global high-resolution geomorphometric layers*. Science Data 7, 162 (2020). <https://doi.org/10.1038/s41597-020-0479-6>, 2020
- d’Andrimont, R., Verhegghen, A., Meroni, M., Lemoine, G., Strobl, P., Eiselt, B., van der Velde, M., *LUCAS Copernicus 2018: earth observation relevant in-situ data on land cover throughout the European Union*. Earth Syst. Sci. Data. <https://doi.org/10.5194/essd-2020-178> preprint, 2020
- Zhu Z, Wulder M, Roy D, Woodcock C, Hansen M, Radeloff V, Healey J, Schaaf C, Hostert P, Strobl P, Pekel J-F, Lymburner L, Pahlevan N, Scambos T, “*Benefits of the free and open Landsat data policy*”, RSE, Vol224, pp 382-385, ISSN 0034-4257, <https://doi.org/10.1016/j.rse.2019.02.016>, 2019
- Szantoi Z, Strobl P, “*Copernicus Sentinel-2 Calibration and Validation*”, European Journal of Remote Sensing 52(1):253, DOI: 10.1080/22797254.2019.1582840, 2019
- Purss M, Peterson P, Strobl P, “*Datacubes: a discrete global grid systems perspective*”, Cartographica 54(1):63–71, doi:10.3138/cart.54.1.2018-0017, 2019
- Duchossois G., P. Strobl, V. Toumazou, S. Antunes, A. Bartsch, T. Diehl, F. Dinessen, P. Eriksson, G. Garric, M-N. Houssais, M. Jindrova, J. Muñoz-Sabater, T. Nagler, O. Nordbeck, “*User Requirements for a Copernicus Polar Mission*”, EUR , Publications Office of the European Union, 29144 EN, ISBN 978-92-79-80961-3, doi:10.2760/22832, JRC111067, European Union, Luxembourg, 2018
- Strobl P, Baumann P, Lewis A, Szantoi Z, Killough B, Purss M, Craglia M, Nativi S, Held A, Dhu T, “*The Six Faces of the Data Cube*”, Proc. of the 2017 Conference on Big Data from Space (BiDS’17), pp 32-35, DOI: 10.2760/383579, 2017
- Descals A, Szantoi Z, Beck P, Brink A, Strobl P, “*Automated Detection of Selective Logging Using SmallSat Imagery*”, IEEE Geoscience and Remote Sensing Letters PP(99):1-5, DOI:10.1109/LGRS.2017.2720841, 2017
- Seebach L, Strobl P, Vogt P, Mehl W, San Miguel J, “*Enhancing post-classification change detection through morphological post-processing – a sensitivity analysis*”, International Journal of Remote Sensing, 34(20):7145-7162, 2013
- Seebach L, Strobl P, San Miguel J, Gallego F., Bastrup-Birk A, “*Comparative analysis of harmonized forest area estimates for European countries*”, Forestry, Vol. 84, Iss. 3, 2012
- Kempeneers P, Sedano F, Strobl P, McInerney D, San Miguel J, “*Increasing Robustness of Postclassification Change Detection Using Time Series of Land Cover Maps*”, IEEE Transactions on Geoscience and Remote Sensing, Nr. 99, 2012
- Kempeneers P, McInerney D, Sedano F, Gallego F., Strobl P, Kay S, Kohonen K, San Miguel J, “*Accuracy assessment of a remote sensing-based, pan-European forest cover map using multi-country national forest inventory data*”, IEEE Journal of selected topics in applied Earth Observation and remote sensing, 2012
- San Miguel J, Kempeneers P, McInerney D, Pekkarinnen A, Sedano F, Seebach L, Strobl P, “*Use of wall to wall moderate and high resolution satellite imagery to monitor forest cover across Europe*”, Global Forest monitoring, Ed. Achard F, Hansen M, 2012
- Seebach L, Strobl P, San Miguel-Ayanz J, Bastrup-Birk A, “*Identifying strengths and limitations of pan-European forest cover maps through spatial comparison*”, International Journal of Geographical Information Science, Vol. 25, Iss. 11, 2011

- Kempeneers P., Sedano F, Seebach L, Strobl P, San-Miguel-Ayanz J, "*Data Fusion of Different Spatial Resolution Remote Sensing Images Applied to Forest-Type Mapping*", IEEE Transactions on Geoscience and Remote Sensing, vol.49, 2011
- Sedano F, Kempeneers P, Strobl P, Kucera J, Vogt P, Seebach L, San-Miguel-Ayanz J, "*A cloud mask methodology for high resolution remote sensing data combining information from high and medium resolution optical sensors*", ISPRS Journal of Photogrammetry and Remote Sensing, Volume 66, Issue 5, 2011
- Sedano F, Kempeneers P, San Miguel J, Strobl P, Vogt P, "*Towards a pan-European burnt scar mapping methodology based on single date medium resolution optical remote sensing data*", International Journal of Applied Earth Observation and Geoinformation, in press, available online 2011
- Clerici N, Weissteiner C, Paracchini M, Strobl P, "*Riparian zones: where green and blue networks meet. Pan-European zonation modelling based on remote sensing and GIS*" . EUR 24774 EN. Luxembourg (Luxembourg): Publications Office of the European Union; 2011
- Weissteiner C, Strobl P, Sommer S.: *Assessment of Status and Trends of Olive Farming Intensity in EU-Mediterranean Countries Using Remote Sensing Time Series and Land Cover Data*. ECOLOGICAL INDICATORS 11 (2); p. 601-610. JRC402, 2009
- San Miguel-Ayanz J., Pereira J., Boca R., Strobl P., Kucera J., Pekkarinen A., *Forest fires in the European Mediterranean region: Mapping and analysis of burned areas*, Earth Observation of Wildland Fires in Mediterranean Ecosystems, Springer, 2009
- Gege, P., Fries, J., Haschberger, P., Schötz, P., Schwarzer, H., Strobl, P., Suhr B., Ulbrich, G. and Vreeling, W.: *Calibration facility for airborne imaging spectrometers*, ISPRS Journal of Photogrammetry & Remote Sensing, 07/2009; 64(2009-02-25):387-397
- Pekkarinen, A., Reithmaier, L. and Strobl, P.: *Pan-European forest/non-forest mapping with Landsat ETM+ and Corine Land Cover 2000 data*, ISPRS Journal of Photogrammetry and Remote Sensing, ISPRS Journal of Photogrammetry and Remote Sensing, 01/2009
- Hausamann, D., Zirnig, W., Schreier, G. and Strobl, P.: *Monitoring of Gas Transmission Pipelines - A Customer Driven Civil UAV Application*", Aircraft Engineering and Aerospace Technology Vol. 7, No. 5, 2005