



Statistical Learning for Earth Observation Data Analysis.

Wyniki

Informacje na temat projektu

SEDAL

Identyfikator umowy o grant: 647423

[Strona internetowa projektu](#)

DOI

[10.3030/647423](https://doi.org/10.3030/647423)

Projekt został zamknięty

Data podpisania przez KE

11 Sierpnia 2015

Data rozpoczęcia

1 Września 2015

Data zakończenia

31 Sierpnia 2020

Finansowanie w ramach

EXCELLENT SCIENCE - European Research Council (ERC)

Koszt całkowity

€ 1 716 954,00

Wkład UE

€ 1 716 954,00

Koordynowany przez

UNIVERSITAT DE VALENCIA



Spain

CORDIS oferuje możliwość skorzystania z odnośników do publicznie dostępnych publikacji i rezultatów projektów realizowanych w ramach programów ramowych HORYZONT.

Odnośniki do rezultatów i publikacji związanych z poszczególnymi projektami 7PR, a także odnośniki do niektórych konkretnych kategorii wyników, takich jak zbiory danych i oprogramowanie, są dynamicznie pobierane z systemu [OpenAIRE](#) .

Publikacje

The causality for climate competition

Autorzy: Runge, Jakob and Tibau, Xavier-Andoni and Bruhns, Matthias and Muñoz-Mari, Jordi and Camps-Valls, Gustau

Opublikowane w: NeurIPS 2019 Competition and Demonstration Track, 2020, 2020, ISSN 2640-3498

Wydawca: JMLR

[Cloud detection machine learning algorithms for PROBA-V](#)

Autorzy: Luis Gomez-Chova, Gonzalo Mateo-Garcia, Jordi Muñoz-Mari, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2251-2254, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127437

[Automatic emulator and optimized look-up table generation for radiative transfer models](#)

Autorzy: Luca Martino, Jorge Vicent, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 1457-1460, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127241

[Smap-based retrieval of vegetation opacity and albedo](#)

Autorzy: Dara Entekhabi, Alexandra Konings, Maria Piles, Narendra Das

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2554-2556, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127516

[A spatially consistent downscaling approach for SMOS using an adaptive moving window](#)

Autorzy: G. Portal, M. Vall-llossera, M. Piles, A. Camps, D. Chaparro, M. Pablos, L. Rossato

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 4151-4153, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127915

[Joint Gaussian processes for inverse modeling](#)

Autorzy: Daniel Heestermans Svendsen, Luca Martino, Manuel Campos-Taberner, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing

Symposium (IGARSS), 2017, Strona(/y) 3980-3983, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127872

[Causal inference in geosciences with kernel sensitivity maps](#)

Autorzy: Adrian Perez-Suay, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 763-766, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127064

[Remote sensing of vegetation dynamics in agro-ecosystems using smap vegetation optical depth and optical vegetation indices](#)

Autorzy: M. Piles, G. Camps-Valls, D. Chaparro, D. Entekhabi, A. G. Konings, T. Jagdhuber

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 4346-4349, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127964

[Nonlinear statistical retrieval of surface emissivity from IASI data](#)

Autorzy: Valero Laparra, Jordi Munoz-Mari, Luis Gomez-Chova, Xavier Calbet, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 5450-5453, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8128237

[Estimation of vegetation loss coefficients and canopy penetration depths from smap radiometer and ICESat lidar data](#)

Autorzy: M. Baur, T. Jagdhuber, M. Link, M. Piles, D. Entekhabi, A. Fink

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2891-2894, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127602

[Predicting year of plantation with hyperspectral and lidar data](#)

Autorzy: Adria Descals, Luis Alonso, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 1780-1783, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127320

[Comparison of downscaling techniques for high resolution soil moisture mapping](#)

Autorzy: Sabah Sabaghy, Jeffrey Walker, Luigi Renzullo, Ruzbeh Akbar, Steven Chan, Julian Chaubell, Narendra Das, R. Scott Dunbar, Dara Entekhabi, Anouk Gevaert, Thomas Jackson, Olivier Merlin, Mahta Moghaddam, Jinzheng Peng, Jeffrey Piepmeier, Maria Piles, Gerard Portal, Christoph Rudiger, Vivien Stefan, Xiaoling Wu, Nan Ye, Simon Yueh

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2523-2526, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127508

[Convolutional neural networks for multispectral image cloud masking](#)

Autorzy: Gonzalo Mateo-Garcia, Luis Gomez-Chova, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2255-2258, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127438

[Preliminary assessment of an integrated SMOS and MODIS application for global agricultural drought monitoring](#)

Autorzy: N. Sanchez, A. Gonzalez-Zamora, J. Martinez-Fernandez, M. Piles, M. Pablos, Brian Wardlow, Tsegaye Tadesse, Mark Svoboda

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2000-2003, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/IGARSS.2017.8127374

[Spatial noise-aware temperature retrieval from infrared sounder data](#)

Autorzy: David Malmgren-Hansen, Valero Laparra, Allan Aasbjerg Nielsen, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 17-20, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8126882

[Efficient remote sensing image classification with Gaussian processes and Fourier features](#)

Autorzy: Pablo Morales, Adrian Perez-Suay, Rafael Molina, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2227-2230, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127431

[Retrieval of coloured dissolved organic matter with machine learning methods](#)

Autorzy: Ana B. Ruescas, Martin Hieronymi, Sampsa Koponen, Kari Kallio, Gustau Camps-Valls

Opublikowane w: 2017 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2017, Strona(/y) 2187-2190, ISBN 978-1-5090-4951-6

Wydawca: IEEE

DOI: 10.1109/igarss.2017.8127421

[Physics-Aware Gaussian Processes for Earth Observation](#)

Autorzy: Gustau Camps-Valls, Daniel H. Svendsen, Luca Martino, Jordi Muñoz-Marí, Valero Laparra, Manuel Campos-Taberner, David Luengo

Opublikowane w: Lecture Notes in Computer Science, 2017, Strona(/y) 205-217, ISBN 978-3-319-59129-2

Wydawca: Springer International Publishing

DOI: 10.1007/978-3-319-59129-2_18

[Revisiting impacts of MJO on soil moisture: a causality perspective](#)

Autorzy: Bueso, Piles, Camps-Valls

Opublikowane w: 2019

Wydawca: AGU

DOI: 10.1002/essoar.10501866.1

[Distributed Particle Metropolis-Hastings Schemes](#)

Autorzy: Luca Martino, Victor Elvira, Gustau Camps-Valls

Opublikowane w: 2018 IEEE Statistical Signal Processing Workshop (SSP), 2018, Strona(/y) 553-557, ISBN 978-1-5386-1571-3

Wydawca: IEEE

DOI: 10.1109/ssp.2018.8450763

[Passive millimeter wave image classification with large scale Gaussian processes](#)

Autorzy: Pablo Morales, Adrian Perez-Suay, Rafael Molina, Gustau Camps-Valls, Aggelos K. Katsaggelos

Opublikowane w: 2017 IEEE International Conference on Image Processing (ICIP), 2017, Strona(/y) 370-374, ISBN 978-1-5090-2175-8

Wydawca: IEEE

DOI: 10.1109/icip.2017.8296305

[Large-scale random features for kernel regression](#)

Autorzy: Valero Laparra, Diego Marcos Gonzalez, Devis Tuia, Gustau Camps-Valls

Opublikowane w: 2015 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2015, Strona(/y) 17-20, ISBN 978-1-4799-7929-5

Wydawca: IEEE

DOI: 10.1109/igarss.2015.7325686

[Latent force models for earth observation time series prediction](#)

Autorzy: David Luengo, Manuel Campos-Taberner, Gustau Camps-Valls

Opublikowane w: 2016 IEEE 26th International Workshop on Machine Learning for Signal Processing (MLSP), 2016, Strona(/y) 1-6, ISBN 978-1-5090-0746-2

Wydawca: IEEE

DOI: 10.1109/MLSP.2016.7738844

[A Deep Network Approach to Multitemporal Cloud Detection](#)

Autorzy: Devis Tuia, Benjamin Kellenberger, Adrian Perez-Suey, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 4351-4354, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517312

[Randomized RX for Target Detection](#)

Autorzy: Fatih Nar, Adrian Perez-Suay, Jose Antonio Padron, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 4237-4240, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517961

[Global Estimation of Soil Moisture Persistence with L and C-Band Microwave Sensors](#)

Autorzy: M. Piles, R. van der Schalie, A. Gruber, J. Munoz-Mari, G. Camps-Valls, A. Mateo-Sanchis, W. Dorigo, R. de Jeu

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 8259-8262, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518161

[Probabilistic cross-validation estimators for Gaussian process regression](#)

Autorzy: Luca Martino, Valero Laparra, Gustau Camps-Valls

Opublikowane w: 2017 25th European Signal Processing Conference (EUSIPCO), 2017, Strona(/y) 823-827, ISBN 978-0-9928626-7-1

Wydawca: IEEE

DOI: 10.23919/eusipco.2017.8081322

[Interpolation and Gap Filling of Landsat Reflectance Time Series](#)

Autorzy: Alvaro Moreno-Martinez, Marco Moneta, Gustau Camps Valls, Luca Martino, Nathaniel Robinson, Brady Allred, Steven W Running

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 349-352, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517503

[Recycling Gibbs sampling](#)

Autorzy: Luca Martino, Victor Elvira, Gustau Camps-Valls

Opublikowane w: 2017 25th European Signal Processing Conference (EUSIPCO), 2017, Strona(/y) 171-175, ISBN 978-0-9928626-7-1

Wydawca: IEEE

DOI: 10.23919/eusipco.2017.8081191

[Consistent Regression of Biophysical Parameters with Kernel Methods](#)

Autorzy: Emiliano Diaz, Adrian Perez-Suay, Valero Laparra, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 4047-4050, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518504

[Retrieval of Case 2 Water Quality Parameters with Machine Learning](#)

Autorzy: Ana B. Ruescas, Gonzalo Mateo-Garcia, Gustau Camps-Valls, Martin Hieronymi

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 124-127, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518810

[Transfer Learning with Convolutional Networks for Atmospheric Parameter Retrieval](#)

Autorzy: David Malmgren-Hansen, Allan Aasbjerg Nielsen, Valero Laparra, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 2111-2114, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518097

[Statistical Learning For End-To-End Simulations](#)

Autorzy: J. Vicent, J. Verrelst, J.P. Rivera-Caicedo, N. Sabater, J. Munoz-Mari, G. Camps-Valls, J. Moreno

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and

Remote Sensing Symposium, 2018, Strona(/y) 1699-1702, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518366

[Sparsity-Driven Digital Terrain Model Extraction](#)

Autorzy: Fatih Nar, Erdal Yilmaz, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 1316-1319, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517569

[Gap Filling of Biophysical Parameter Time Series with Multi-Output Gaussian Processes](#)

Autorzy: Anna Mateo-Sanchis, Jordi Munoz-Mari, Manuel Campos-Taberner, Javier Garcia-Haro, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 4039-4042, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8519254

[Generation of Global Vegetation Products from Eumetsat AVHRR/METOP Satellites](#)

Autorzy: Francisco Javier Garcia-Hare, Manuel Campos-Taberner, Beatriz Martinez, Sergio Sanchez-Ruiz, Maria Amparo Gilabert, Gustau Camps-Valls, Jordi Munoz-Mari, Valero Laparra, Fernando Camacho, Jorge Sanchez-Zapero, Beatriz Fuster

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 1826-1829, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518083

[Nonlinear Complex PCA for Spatio-Temporal Analysis of Global Soil Moisture](#)

Autorzy: Diego Bueso, Maria Piles, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 5780-5783, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518155

[Disentangling Derivatives, Uncertainty and Error in Gaussian Process Models](#)

Autorzy: Juan Emmanuel Johnson, Valero Laparra, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and

Remote Sensing Symposium, 2018, Strona(/y) 4051-4054, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8519020

[Multioutput Automatic Emulator for Radiative Transfer Models](#) 

Autorzy: Daniel Heestermans Svendsen, Luca Martino, Jorge Vicent, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 4019-4022, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8518195

[Adaptive Sequential Interpolator Using Active Learning for Efficient Emulation of Complex Systems](#) 

Autorzy: Luca Martino, Daniel Heestermans Svendsen, Jorge Vicent, Gustau Camps-Valls

Opublikowane w: ICASSP 2020 - 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2020, Strona(/y) 3577-3581, ISBN 978-1-5090-6631-5

Wydawca: IEEE

DOI: 10.1109/icassp40776.2020.9053372

[Nonlinear Cook Distance for Anomalous Change Detection](#) 

Autorzy: Jose A. Padron Hidalgo, Adrian Perez-Suay, Fatih Nar, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and Remote Sensing Symposium, 2018, Strona(/y) 5025-5028, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517369

[Particle Group Metropolis Methods for Tracking the Leaf Area Index](#) 

Autorzy: Luca Martino, Victor Elvira, Gustau Camps-Valls

Opublikowane w: ICASSP 2020 - 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2020, Strona(/y) 5865-5869, ISBN 978-1-5090-6631-5

Wydawca: IEEE

DOI: 10.1109/icassp40776.2020.9053962

[Deep Gaussian Processes for Geophysical Parameter Retrieval](#) 

Autorzy: Daniel Heestermans Svendsen, Pablo Morales-Alvarez, Rafael Molina, Gustau Camps-Valls

Opublikowane w: IGARSS 2018 - 2018 IEEE International Geoscience and

Remote Sensing Symposium, 2018, Strona(/y) 6175-6178, ISBN 978-1-5386-7150-4

Wydawca: IEEE

DOI: 10.1109/igarss.2018.8517647

[Group metropolis sampling](#) 

Autorzy: Luca Martino, Victor Elvira, Gustau Camps-Valls

Opublikowane w: 2017 25th European Signal Processing Conference (EUSIPCO), 2017, Strona(/y) 201-205, ISBN 978-0-9928626-7-1

Wydawca: IEEE

DOI: 10.23919/eusipco.2017.8081197

Peer reviewed articles (76)

[Scaling carbon fluxes from eddy covariance sites to globe: synthesis and evaluation of the FLUXCOM approach](#) 

Autorzy: Martin Jung, Christopher Schwalm, Mirco Migliavacca, Sophia Walther, Gustau Camps-Valls, Sujan Koirala, Peter Anthoni, Simon Besnard, Paul Bodesheim, Nuno Carvalhais, Frédéric Chevallier, Fabian Gans, Daniel S. Goll, Vanessa Haverd, Philipp Köhler, Kazuhito Ichii, Atul K. Jain, Junzhi Liu, Danica Lombardozzi, Julia E. M. S. Nabel, Jacob A. Nelson, Michael O'Sullivan, Martijn Pallandt, Dario Pap

Opublikowane w: Biogeosciences, Numer 17/5, 2020, Strona(/y) 1343-1365, ISSN 1726-4189

Wydawca: Copernicus

DOI: 10.5194/bg-17-1343-2020

[Multispectral high resolution sensor fusion for smoothing and gap-filling in the cloud](#) 

Autorzy: Álvaro Moreno-Martínez, Emma Izquierdo-Verdiguier, Marco P.

Maneta, Gustau Camps-Valls, Nathaniel Robinson, Jordi Muñoz-Marí, Fernando Sedano, Nicholas Clinton, Steven W. Running

Opublikowane w: Remote Sensing of Environment, Numer 247, 2020, Strona(/y) 111901, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2020.111901

[Gaussian processes retrieval of LAI from Sentinel-2 top-of-atmosphere radiance data](#) 

Autorzy: José Estévez, Jorge Vicent, Juan Pablo Rivera-Caicedo, Pablo Morcillo-Pallarés, Francesco Vuolo, Neus Sabater, Gustau Camps-Valls, José Moreno, Jochem Verrelst

Opublikowane w: ISPRS Journal of Photogrammetry and Remote Sensing, Numer 167, 2020, Strona(/y) 289-304, ISSN 0924-2716

Wydawca: Elsevier BV

DOI: 10.1016/j.isprsjprs.2020.07.004

[Retrieval of aboveground crop nitrogen content with a hybrid machine learning method](#)

Autorzy: Katja Berger, Jochem Verrelst, Jean-Baptiste Féret, Tobias Hank, Matthias Woher, Wolfram Mauser, Gustau Camps-Valls

Opublikowane w: International Journal of Applied Earth Observation and Geoinformation, Numer 92, 2020, Strona(/y) 102174, ISSN 0303-2434

Wydawca: International Institute for Aerial Survey and Earth Sciences

DOI: 10.1016/j.jag.2020.102174

[Kernel methods and their derivatives: Concept and perspectives for the earth system sciences](#)

Autorzy: J. Emmanuel Johnson, Valero Laparra, Adrián Pérez-Suay, Miguel D. Mahecha, Gustau Camps-Valls

Opublikowane w: PLOS ONE, Numer 15/10, 2020, Strona(/y) e0235885, ISSN 1932-6203

Wydawca: Public Library of Science

DOI: 10.1371/journal.pone.0235885

[Partitioning net carbon dioxide fluxes into photosynthesis and respiration using neural networks](#)

Autorzy: Gianluca Tramontana, Mirco Migliavacca, Martin Jung, Markus Reichstein, Trevor F. Keenan, Gustau Camps-Valls, Jerome Ogee, Jochem Verrelst, Dario Papale

Opublikowane w: Global Change Biology, Numer 26/9, 2020, Strona(/y) 5235-5253, ISSN 1354-1013

Wydawca: Blackwell Publishing Inc.

DOI: 10.1111/gcb.15203

[Machine learning information fusion in Earth observation: A comprehensive review of methods, applications and data sources](#)

Autorzy: S. Salcedo-Sanz, P. Ghamisi, M. Piles, M. Werner, L. Cuadra, A. Moreno-Martínez, E. Izquierdo-Verdiguier, J. Muñoz-Marí, Amirhosein Mosavi, G. Camps-Valls

Opublikowane w: Information Fusion, Numer 63, 2020, Strona(/y) 256-272, ISSN 1566-2535

Wydawca: Elsevier BV

DOI: 10.1016/j.inffus.2020.07.004

[Crop Yield Estimation and Interpretability With Gaussian Processes](#)

Autorzy: Laura Martinez-Ferrer, Maria Piles, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, 2020, Strona(/y) 1-5, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/lgrs.2020.3016140

[Deep Gaussian processes for biogeophysical parameter retrieval and model inversion](#) 

Autorzy: Daniel Heestermans Svendsen, Pablo Morales-Álvarez, Ana Belen Ruescas, Rafael Molina, Gustau Camps-Valls

Opublikowane w: ISPRS Journal of Photogrammetry and Remote Sensing, Numer 166, 2020, Strona(/y) 68-81, ISSN 0924-2716

Wydawca: Elsevier BV

DOI: 10.1016/j.isprsjprs.2020.04.014

[The Recycling Gibbs sampler for efficient learning](#) 

Autorzy: Luca Martino, Víctor Elvira, Gustau Camps-Valls

Opublikowane w: Digital Signal Processing, Numer 74, 2018, Strona(/y) 1-13, ISSN 1051-2004

Wydawca: Academic Press

DOI: 10.1016/j.dsp.2017.11.012

[Assessing the relationship between microwave vegetation optical depth and gross primary production](#) 

Autorzy: Irene E. Teubner, Matthias Forkel, Martin Jung, Yi Y. Liu, Diego G. Miralles, Robert Parinussa, Robin van der Schalie, Mariette Vreugdenhil, Christopher R. Schwalm, Gianluca Tramontana, Gustau Camps-Valls, Wouter A. Dorigo

Opublikowane w: International Journal of Applied Earth Observation and Geoinformation, Numer 65, 2018, Strona(/y) 79-91, ISSN 0303-2434

Wydawca: International Institute for Aerial Survey and Earth Sciences

DOI: 10.1016/j.jag.2017.10.006

[A review of multiple try MCMC algorithms for signal processing](#) 

Autorzy: Luca Martino

Opublikowane w: Digital Signal Processing, Numer 75, 2018, Strona(/y) 134-152, ISSN 1051-2004

Wydawca: Academic Press

DOI: 10.1016/j.dsp.2018.01.004

[Derivation of global vegetation biophysical parameters from EUMETSAT Polar System](#) 

Autorzy: Francisco Javier García-Haro, Manuel Campos-Taberner, Jordi Muñoz-Marí, Valero Laparra, Fernando Camacho, Jorge Sánchez-Zapero, Gustau Camps-Valls

Opublikowane w: ISPRS Journal of Photogrammetry and Remote Sensing, Numer 139, 2018, Strona(/y) 57-74, ISSN 0924-2716

Wydawca: Elsevier BV

DOI: 10.1016/j.isprsjprs.2018.03.005

[Remote Sensing Image Classification With Large-Scale Gaussian Processes](#) 

Autorzy: Pablo Morales-Alvarez, Adrian Perez-Suay, Rafael Molina, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 56/2, 2018, Strona(/y) 1103-1114, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/TGRS.2017.2758922

[Nonlinear Time-Series Adaptation for Land Cover Classification](#) 

Autorzy: Adeline Bailly, Laetitia Chapel, Romain Tavenard, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 14/6, 2017, Strona(/y) 896-900, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/LGRS.2017.2686639

[Joint Gaussian Processes for Biophysical Parameter Retrieval](#) 

Autorzy: Daniel Heestermans Svendsen, Luca Martino, Manuel Campos-Taberner, Francisco Javier Garcia-Haro, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 56/3, 2018, Strona(/y) 1718-1727, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/TGRS.2017.2767205

[Processing of Extremely High-Resolution LiDAR and RGB Data: Outcome of the 2015 IEEE GRSS Data Fusion Contest-Part A: 2-D Contest](#) 

Autorzy: Manuel Campos-Taberner, Adriana Romero-Soriano, Carlo Gatta, Gustau Camps-Valls, Adrien Lagrange, Bertrand Le Saux, Anne Beaupere, Alexandre Boulch, Adrien Chan-Hon-Tong, Stephane Herbin, Hicham Randrianarivo, Marin Ferecatu, Michal Shimoni, Gabriele Moser, Devis Tuia

Opublikowane w: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Numer 9/12, 2016, Strona(/y) 5547-5559, ISSN 1939-1404

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/JSTARS.2016.2569162

[SCOPE-Based Emulators for Fast Generation of Synthetic Canopy Reflectance and Sun-Induced Fluorescence Spectra](#) 

Autorzy: Jochem Verrelst, Juan Rivera Caicedo, Jordi Muñoz-Marí, Gustau Camps-Valls, José Moreno

Opublikowane w: Remote Sensing, Numer 9/9, 2017, Strona(/y) 927, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs9090927

[Machine Learning Regression Approaches for Colored Dissolved Organic Matter \(CDOM\) Retrieval with S2-MSI and S3-OLCI Simulated Data](#) 

Autorzy: Ana Ruescas, Martin Hieronymi, Gonzalo Mateo-Garcia, Sampsa Koponen, Kari Kallio, Gustau Camps-Valls

Opublikowane w: Remote Sensing, Numer 10/5, 2018, Strona(/y) 786, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs10050786

[A Critical Comparison of Remote Sensing Leaf Area Index Estimates over Rice-Cultivated Areas: From Sentinel-2 and Landsat-7/8 to MODIS, GEOV1 and EUMETSAT Polar System](#) 

Autorzy: Manuel Campos-Taberner, Francisco García-Haro, Lorenzo Busetto, Luigi Ranghetti, Beatriz Martínez, María Amparo Gilabert, Gustau Camps-Valls, Fernando Camacho, Mirco Boschetti

Opublikowane w: Remote Sensing, Numer 10/5, 2018, Strona(/y) 763, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs10050763

[Parsimonious adaptive rejection sampling](#) 

Autorzy: L. Martino

Opublikowane w: Electronics Letters, Numer 53/16, 2017, Strona(/y) 1115-1117, ISSN 0013-5194

Wydawca: Institute of Electrical Engineers

DOI: 10.1049/el.2017.1711

[Spectral Band Selection for Vegetation Properties Retrieval using Gaussian Processes Regression](#) 

Autorzy: Jochem Verrelst, Juan Pablo Rivera, Anatoly Gitelson, Jesus Delegido, José Moreno and Camps-Valls, G.

Opublikowane w: International Journal of Applied Earth Observation and Geoinformation, Numer 52, 2016, Strona(/y) 554–567, ISSN 0303-2434

Wydawca: International Institute for Aerial Survey and Earth Sciences

DOI: 10.1016/j.jag.2016.07.016

[Active learning methods for efficient hybrid biophysical variable retrieval](#) 

Autorzy: Verrelst, J. and Dethier, S. and Rivera, J.P. and Muñoz-Marí, J. and Camps-Valls, G. and Moreno, J.

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 13-7, 2016, Strona(/y) 1012-1016, ISSN 1558-0571

Wydawca: IEEE

DOI: 10.1109/LGRS.2016.2560799

[Emulation of Leaf, Canopy and Atmosphere Radiative Transfer Models for Fast Global Sensitivity Analysis](#) 

Autorzy: Verrelst, Jochem and Sabater, Neus and Rivera, Juan Pablo and Munoz-Mari, Jordi and Vicent, Jorge and Camps-Valls, Gustau and Moreno, José

Opublikowane w: Remote Sensing, Numer 8-8, 2016, Strona(/y) 673, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs8080673

[Multi-temporal and Multi-source Remote Sensing Image Classification by Nonlinear Relative Normalization](#) 

Autorzy: Tuia, D. and Marcos, D. and Camps-Valls, G.

Opublikowane w: ISPRS Journal of Photogrammetry and Remote Sensing, Numer 120, 2016, Strona(/y) 1-12, ISSN 0924-2716

Wydawca: Elsevier BV

DOI: 10.1016/j.isprsjprs.2016.07.004

[Compensatory water effects link yearly global land CO2 sink changes to temperature](#) 

Autorzy: Martin Jung, Markus Reichstein, Christopher R. Schwalm, Chris Huntingford, Stephen Sitch, Anders Ahlström, Almut Arneth, Gustau Camps-Valls, Philippe Ciais, Pierre Friedlingstein, Fabian Gans, Kazuhito Ichii, Atul K. Jain, Etsushi Kato, Dario Papale, Ben Poulter, Botond Raduly, Christian Rödenbeck, Gianluca Tramontana, Nicolas Viovy, Ying-Ping Wang, Ulrich Weber, Sönke Zaehle, Ning Zeng

Opublikowane w: Nature, Numer 541/7638, 2017, Strona(/y) 516-520, ISSN 0028-0836

Wydawca: Nature Publishing Group

DOI: 10.1038/nature20780

[Predicting carbon dioxide and energy fluxes across global FLUXNET sites with regression algorithms](#) 

Autorzy: Tramontana, G. and Jung, M. and Camps-Valls, G. and Ichii, K. and Raduly, B. and Reichstein, M. and Schwalm, C. R. and Arain, M. A. and Cescatti, A. and Kiely, G. and Merbold, L. and Serrano-Ortiz, P. and Sickert, S. and Wolf, S. and Papale, D. <http://isp.uv.es/papers/Tramontana16bg.pdf>

Opublikowane w: Biogeosciences Discussions, Numer 13, 2016, Strona(/y) 4291-4313, ISSN 1726-4189

Wydawca: EGU

DOI: 10.5194/bg-2015-661

[Gaussian Process Sensitivity Analysis for Oceanic Chlorophyll Estimation](#) 

Autorzy: Blix, K. and Jenssen, R. and Camps-Valls, Gustau

Opublikowane w: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Numer 99, 2017, Strona(/y) 1-13, ISSN 2151-1535

Wydawca: IEEE

DOI: 10.1109/JSTARS.2016.2641583

[Kernel spectral angle mapper](#)

Autorzy: G. Camps-Valls

Opublikowane w: Electronics Letters, Numer 52/14, 2016, Strona(/y) 1218-1220, ISSN 0013-5194

Wydawca: Institute of Electrical Engineers

DOI: 10.1049/el.2016.0661

[Optimized Kernel Entropy Components](#)

Autorzy: Izquierdo-Verdiguier, E. and Laparra, V. and Jenssen, R and Gómez-Chova, L. and Camps-Valls, G.

Opublikowane w: IEEE Transactions on Neural Networks and Learning Systems, Numer 99, 2016, Strona(/y) 1-7, ISSN 2162-237X

Wydawca: IEEE Computational Intelligence Society

DOI: 10.1109/TNNLS.2016.2530403

[Multitemporal and multiresolution leaf area index retrieval for operational local rice crop monitoring](#)

Autorzy: Manuel Campos-Taberner and Francisco Javier García-Haro and Gustau Camps-Valls and Gonçal Grau-Muedra and Francesco Nutini and Alberto Crema and Mirco Boschetti

Opublikowane w: Remote Sensing of Environment, Numer 187, 2016, Strona(/y) 102-118, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2016.10.009

[Exploitation of SAR and optical Sentinel data to detect rice crop and estimate seasonal dynamics of leaf area index](#)

Autorzy: Manuel Campos-Taberner, M. and Garcia-Haro, F.J and Camps-Valls, G. and Grau-Muedra, G. and Nutini, F. and Busetto, L. and Katsantonis, D. and Stavrakoudis, D. and Minakou, C. and Gatti, L. and Barbieri, M. and Holecz, F. and Stroppiana, D. and Boschetti, M.

Opublikowane w: Remote Sensing, Numer 9-3, 2017, Strona(/y) 248, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs9030248

[An Optical Classification Tool for Global Lake Waters](#)

Autorzy: Marieke Eleveld, Ana Ruescas, Annelies Hommersom, Timothy Moore, Steef Peters, Carsten Brockmann

Opublikowane w: Remote Sensing, Numer 9/5, 2017, Strona(/y) 420, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs9050420

[Kernel Manifold Alignment for Domain Adaptation](#)

Autorzy: Devis Tuia, Gustau Camps-Valls

Opublikowane w: PLOS ONE, Numer 11/2, 2016, Strona(/y) e0148655, ISSN 1932-6203

Wydawca: Public Library of Science

DOI: 10.1371/journal.pone.0148655

[Sensitivity Maps of the Hilbert-Schmidt Independence Criterion](#)

Autorzy: Adrián Pérez-Suay, Gustau Camps-Valls

Opublikowane w: Applied Soft Computing, 2017, ISSN 1568-4946

Wydawca: Elsevier BV

DOI: 10.1016/j.asoc.2017.04.024

[Global distribution of groundwater-vegetation spatial covariation](#)

Autorzy: Sujan Koirala, Martin Jung, Markus Reichstein, Inge E. M. de Graaf, Gustau Camps-Valls, Kazuhito Ichii, Dario Papale, Botond Ráduly, Christopher R. Schwalm, Gianluca Tramontana, Nuno Carvalhais

Opublikowane w: Geophysical Research Letters, 2017, ISSN 0094-8276

Wydawca: American Geophysical Union

DOI: 10.1002/2017GL072885

[Randomized kernels for large scale Earth observation applications](#)

Autorzy: Adrián Pérez-Suay, Julia Amorós-López, Luis Gómez-Chova, Valero Laparra, Jordi Muñoz-Marí, Gustau Camps-Valls

Opublikowane w: Remote Sensing of Environment, 2017, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2017.02.009

[Accounting for Input Noise in Gaussian Process Parameter Retrieval](#)

Autorzy: Juan Emmanuel Johnson, Valero Laparra, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 17/3, 2020, Strona(/y) 391-395, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/lgrs.2019.2921476

[Efficient Nonlinear RX Anomaly Detectors](#)

Autorzy: Jose A. Padron Hidalgo, Adrian Perez-Suay, Fatih Nar, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 2020, 2020, Strona(/y) 1-5, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/lgrs.2020.2970582

[Kernel Anomalous Change Detection for Remote Sensing Imagery](#)

Autorzy: Jose A. Padron-Hidalgo, Valero Laparra, Nathan Longbotham, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 57/10, 2019, Strona(/y) 7743-7755, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/tgrs.2019.2916212

[Nonlinear PCA for Spatio-Temporal Analysis of Earth Observation Data](#)

Autorzy: Diego Bueso, Maria Piles, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, 2020, Strona(/y) 1-12, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/tgrs.2020.2969813

[Nonlinear Distribution Regression for Remote Sensing Applications](#)

Autorzy: Jose E. Adsuara, Adrian Perez-Suay, Jordi Munoz-Mari, Anna Mateo-Sanchis, Maria Piles, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 57/12, 2019, Strona(/y) 10025-10035, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/tgrs.2019.2931085

[Gradient-Based Automatic Lookup Table Generator for Radiative Transfer Models](#)

Autorzy: Jorge Vicent Servera, Luis Alonso, Luca Martino, Neus Sabater, Jochem Verrelst, Gustau Camps-Valls, Jose Moreno

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 57/2, 2019, Strona(/y) 1040-1048, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/tgrs.2018.2864517

[Warped Gaussian Processes in Remote Sensing Parameter Estimation and Causal Inference](#)

Autorzy: Anna Mateo-Sanchis, Jordi Munoz-Mari, Adrian Perez-Suay, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 15/11, 2018, Strona(/y) 1647-1651, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/lgrs.2018.2853760

[Satellite Observations of the Contrasting Response of Trees and Grasses to Variations in Water Availability](#)

Autorzy: Sophia Walther, Gregory Duveiller, Martin Jung, Luis Guanter, Alessandro Cescatti, Gustau Camps-Valls
Opublikowane w: Geophysical Research Letters, Numer 46/3, 2019, Strona(/y) 1429-1440, ISSN 0094-8276
Wydawca: American Geophysical Union
DOI: 10.1029/2018gl080535

[Activities of the IEEE GRSS Spain Chapter \[Chapters\]](#) 

Autorzy: Javier Marcello, Maria Piles, Gustau Camps-Valls, Carlos Lopez-Martinez, Jose Luis Alvarez-Perez, Antonio Plaza
Opublikowane w: IEEE Geoscience and Remote Sensing Magazine, Numer 7/2, 2019, Strona(/y) 177-180, ISSN 2168-6831
Wydawca: IEEE Geoscience and Remote Sensing Society
DOI: 10.1109/mgrs.2019.2911368

[Causal Inference in Geoscience and Remote Sensing From Observational Data](#) 

Autorzy: Adrian Perez-Suay, Gustau Camps-Valls
Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 57/3, 2019, Strona(/y) 1502-1513, ISSN 0196-2892
Wydawca: Institute of Electrical and Electronics Engineers
DOI: 10.1109/tgrs.2018.2867002

[Emulation as an Accurate Alternative to Interpolation in Sampling Radiative Transfer Codes](#) 

Autorzy: Jorge Vicent, Jochem Verrelst, Juan Pablo Rivera-Caicedo, Neus Sabater, Jordi Munoz-Mari, Gustau Camps-Valls, Jose Moreno
Opublikowane w: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Numer 11/12, 2018, Strona(/y) 4918-4931, ISSN 1939-1404
Wydawca: Institute of Electrical and Electronics Engineers
DOI: 10.1109/jstars.2018.2875330

[Global Estimation of Biophysical Variables from Google Earth Engine Platform](#) 

Autorzy: Manuel Campos-Taberner, Álvaro Moreno-Martínez, Francisco García-Haro, Gustau Camps-Valls, Nathaniel Robinson, Jens Kattge, Steven Running
Opublikowane w: Remote Sensing, Numer 10/8, 2018, Strona(/y) 1167, ISSN 2072-4292
Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/rs10081167

[Multitemporal Cloud Masking in the Google Earth Engine](#) 

Autorzy: Gonzalo Mateo-García, Luis Gómez-Chova, Julia Amorós-López, Jordi Muñoz-Marí, Gustau Camps-Valls
Opublikowane w: Remote Sensing, Numer 10/7, 2018, Strona(/y) 1079, ISSN 2072-4292

Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)

DOI: 10.3390/rs10071079

[A methodology to derive global maps of leaf traits using remote sensing and climate data](#)

Autorzy: Álvaro Moreno-Martínez, Gustau Camps-Valls, Jens Kattge, Nathaniel Robinson, Markus Reichstein, Peter van Bodegom, Koen Kramer, J. Hans C. Cornelissen, Peter Reich, Michael Bahn, Ülo Niinemets, Josep Peñuelas, Joseph M. Craine, Bruno E.L. Cerabolini, Vanessa Minden, Daniel C. Laughlin, Lawren Sack, Brady Allred, Christopher Baraloto, Chaeho Byun, Nadejda A. Soudzilovskaia, Steve W. Running

Opublikowane w: Remote Sensing of Environment, Numer 218, 2018, Strona(/y) 69-88, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2018.09.006

[Pattern Recognition Scheme for Large-Scale Cloud Detection Over Landmarks](#)

Autorzy: Adrian Perez-Suay, Julia Amoros-Lopez, Luis Gomez-Chova, Jordi Munoz-Mari, Dieter Just, Gustau Camps-Valls

Opublikowane w: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Numer 11/11, 2018, Strona(/y) 3977-3987, ISSN 1939-1404

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/jstars.2018.2863383

[Physics-aware Gaussian processes in remote sensing](#)

Autorzy: Gustau Camps-Valls, Luca Martino, Daniel H. Svendsen, Manuel Campos-Taberner, Jordi Muñoz-Marí, Valero Laparra, David Luengo, Francisco Javier García-Haro

Opublikowane w: Applied Soft Computing, Numer 68, 2018, Strona(/y) 69-82, ISSN 1568-4946

Wydawca: Elsevier BV

DOI: 10.1016/j.asoc.2018.03.021

[Group Importance Sampling for particle filtering and MCMC](#)

Autorzy: Luca Martino, Víctor Elvira, Gustau Camps-Valls

Opublikowane w: Digital Signal Processing, Numer 82, 2018, Strona(/y) 133-151, ISSN 1051-2004

Wydawca: Academic Press

DOI: 10.1016/j.dsp.2018.07.007

[Signal-to-noise ratio in reproducing kernel Hilbert spaces](#)

Autorzy: Luis Gómez-Chova, Raúl Santos-Rodríguez, Gustau Camps-Valls

Opublikowane w: Pattern Recognition Letters, Numer 112, 2018, Strona(/y) 75-82, ISSN 0167-8655

Wydawca: Elsevier BV

DOI: 10.1016/j.patrec.2018.06.004

[Quantifying Vegetation Biophysical Variables from Imaging Spectroscopy Data: A Review on Retrieval Methods](#)

Autorzy: Jochem Verrelst, Zbyněk Malenovský, Christiaan Van der Tol, Gustau Camps-Valls, Jean-Philippe Gastellu-Etchegorry, Philip Lewis, Peter North, Jose Moreno

Opublikowane w: Surveys in Geophysics, Numer 40/3, 2019, Strona(/y) 589-629, ISSN 0169-3298

Wydawca: Kluwer Academic Publishers

DOI: 10.1007/s10712-018-9478-y

[Mapping Leaf Area Index With a Smartphone and Gaussian Processes](#)

Autorzy: Manuel Campos-Taberner, Franciso Javier Garcia-Haro, Alvaro Moreno, Maria Amparo Gilabert, Sergio Sanchez-Ruiz, Beatriz Martinez, Gustau Camps-Valls

Opublikowane w: IEEE Geoscience and Remote Sensing Letters, Numer 12/12, 2015, Strona(/y) 2501-2505, ISSN 1545-598X

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/lgrs.2015.2488682

[A Survey on Gaussian Processes for Earth-Observation Data Analysis: A Comprehensive Investigation](#)

Autorzy: Gustau Camps-Valls, Jochem Verrelst, Jordi Munoz-Mari, Valero Laparra, Fernando Mateo-Jimenez, Jose Gomez-Dans

Opublikowane w: IEEE Geoscience and Remote Sensing Magazine, Numer 4/2, 2016, Strona(/y) 58-78, ISSN 2168-6831

Wydawca: IEEE Geoscience and Remote Sensing Society

DOI: 10.1109/mgrs.2015.2510084

[Improved Statistically Based Retrievals via Spatial-Spectral Data Compression for IASI Data](#)

Autorzy: Joaquin Garcia-Sobrino, Valero Laparra, Joan Serra-Sagrista, Xavier Calbet, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing, Numer 57/8, 2019, Strona(/y) 5651-5668, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/TGRS.2019.2901396

[Statistical Atmospheric Parameter Retrieval Largely Benefits From Spatial-Spectral Image Compression](#)

Autorzy: Joaquin Garcia-Sobrino, Joan Serra-Sagrista, Valero Laparra, Xavier Calbet, Gustau Camps-Valls

Opublikowane w: IEEE Transactions on Geoscience and Remote Sensing,

Numer 55/4, 2017, Strona(/y) 2213-2224, ISSN 0196-2892

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/tgrs.2016.2639099

[Deep learning and process understanding for data-driven Earth system science](#)

Autorzy: Markus Reichstein, Gustau Camps-Valls, Bjorn Stevens, Martin Jung, Joachim Denzler, Nuno Carvalhais, Prabhat

Opublikowane w: Nature, Numer 566/7743, 2019, Strona(/y) 195-204, ISSN 0028-0836

Wydawca: Nature Publishing Group

DOI: 10.1038/s41586-019-0912-1

[Fusing optical and SAR time series for LAI gap filling with multioutput Gaussian processes](#)

Autorzy: Luca Pipia, Jordi Muñoz-Marí, Eatidal Amin, Santiago Belda, Gustau Camps-Valls, Jochem Verrelst

Opublikowane w: Remote Sensing of Environment, Numer 235, 2019, Strona(/y) 111452, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2019.111452

[Synergistic integration of optical and microwave satellite data for crop yield estimation](#)

Autorzy: Anna Mateo-Sanchis, Maria Piles, Jordi Muñoz-Marí, Jose E. Adsuaara, Adrián Pérez-Suay, Gustau Camps-Valls

Opublikowane w: Remote Sensing of Environment, Numer 234, 2019, Strona(/y) 111460, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2019.111460

[The FLUXCOM ensemble of global land-atmosphere energy fluxes](#)

Autorzy: Martin Jung, Sujan Koirala, Ulrich Weber, Kazuhito Ichii, Fabian Gans, Gustau Camps-Valls, Dario Papale, Christopher Schwalm, Gianluca Tramontana, Markus Reichstein

Opublikowane w: Scientific Data, Numer 6/1, 2019, ISSN 2052-4463

Wydawca: Nature

DOI: 10.1038/s41597-019-0076-8

[A perspective on Gaussian processes for Earth observation](#)

Autorzy: Gustau Camps-Valls, Dino Sejdinovic, Jakob Runge, Markus Reichstein

Opublikowane w: National Science Review, Numer 6/4, 2019, Strona(/y) 616-618, ISSN 2095-5138

Wydawca: Oxford press

DOI: 10.1093/nsr/nwz028

[Inferring causation from time series in Earth system sciences](#) 

Autorzy: Jakob Runge, Sebastian Bathiany, Erik Boltt, Gustau Camps-Valls, Dim Coumou, Ethan Deyle, Clark Glymour, Marlene Kretschmer, Miguel D. Mahecha, Jordi Muñoz-Marí, Egbert H. van Nes, Jonas Peters, Rick Quax, Markus Reichstein, Marten Scheffer, Bernhard Schölkopf, Peter Spirtes, George Sugihara, Jie Sun, Kun Zhang, Jakob Zscheischler

Opublikowane w: Nature Communications, Numer 10/1, 2019, ISSN 2041-1723

Wydawca: Nature Publishing Group

DOI: 10.1038/s41467-019-10105-3

[A carbon sink-driven approach to estimate gross primary production from microwave satellite observations](#) 

Autorzy: Irene E. Teubner, Matthias Forkel, Gustau Camps-Valls, Martin Jung, Diego G. Miralles, Gianluca Tramontana, Robin van der Schalie, Mariette Vreugdenhil, Leander Mössinger, Wouter A. Dorigo

Opublikowane w: Remote Sensing of Environment, Numer 229, 2019, Strona(/y) 100-113, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2019.04.022

[Estimating crop primary productivity with Sentinel-2 and Landsat 8 using machine learning methods trained with radiative transfer simulations](#) 

Autorzy: Aleksandra Wolanin, Gustau Camps-Valls, Luis Gómez-Chova, Gonzalo Mateo-García, Christiaan van der Tol, Yongguang Zhang, Luis Guanter

Opublikowane w: Remote Sensing of Environment, Numer 225, 2019, Strona(/y) 441-457, ISSN 0034-4257

Wydawca: Elsevier BV

DOI: 10.1016/j.rse.2019.03.002

[Estimating and understanding crop yields with explainable deep learning in the Indian Wheat Belt](#) 

Autorzy: Aleksandra Wolanin, Gonzalo Mateo-García, Gustau Camps-Valls, Luis Gómez-Chova, Michele Meroni, Gregory Duveiller, You Liangzhi, Luis Guanter

Opublikowane w: Environmental Research Letters, Numer 15/2, 2020, Strona(/y) 024019, ISSN 1748-9326

Wydawca: Institute of Physics Publishing

DOI: 10.1088/1748-9326/ab68ac

[A global canopy water content product from AVHRR/Metop](#) 

Autorzy: Francisco Javier García-Haro, Manuel Campos-Taberner, Álvaro Moreno, Håkan Torbern Tagesson, Fernando Camacho, Beatriz Martínez, Sergio Sánchez, María Piles, Gustau Camps-Valls, Marta Yebra, María Amparo Gilabert

Opublikowane w: ISPRS Journal of Photogrammetry and Remote Sensing,

Numer 162, 2020, Strona(/y) 77-93, ISSN 0924-2716

Wydawca: Elsevier BV

DOI: 10.1016/j.isprsjprs.2020.02.007

[Active emulation of computer codes with Gaussian processes – Application to remote sensing](#)

Autorzy: Daniel Heestermans Svendsen, Luca Martino, Gustau Camps-Valls
Opublikowane w: Pattern Recognition, Numer 100, 2020, Strona(/y) 107103, ISSN 0031-3203

Wydawca: Pergamon Press

DOI: 10.1016/j.patcog.2019.107103

[Earth system data cubes unravel global multivariate dynamics](#)

Autorzy: Miguel D. Mahecha, Fabian Gans, Gunnar Brandt, Rune Christiansen, Sarah E. Cornell, Normann Fomferra, Guido Kraemer, Jonas Peters, Paul Bodesheim, Gustau Camps-Valls, Jonathan F. Donges, Wouter Dorigo, Lina M. Estupinan-Suarez, Victor H. Gutierrez-Velez, Martin Gutwin, Martin Jung, Maria C. Londoño, Diego G. Miralles, Phillip Papastefanou, Markus Reichstein

Opublikowane w: Earth System Dynamics, Numer 11/1, 2020, Strona(/y) 201-234, ISSN 2190-4987

Wydawca: EGU

DOI: 10.5194/esd-11-201-2020

[Summarizing the state of the terrestrial biosphere in few dimensions](#)

Autorzy: Guido Kraemer, Gustau Camps-Valls, Markus Reichstein, Miguel D. Mahecha

Opublikowane w: Biogeosciences, Numer 17/9, 2020, Strona(/y) 2397-2424, ISSN 1726-4189

Wydawca: EGU

DOI: 10.5194/bg-17-2397-2020

Explicit Granger causality in kernel Hilbert spaces

Autorzy: Diego Bueso, Maria Piles, and Gustau Camps-Valls

Opublikowane w: Physical Review E, 2020, ISSN 2470-0045

Wydawca: American Physical Society

[Understanding deep learning in land use classification based on Sentinel-2 time series](#)

Autorzy: Manuel Campos-Taberner, Francisco Javier García-Haro, Beatriz Martínez, Emma Izquierdo-Verdiguier, Clement Atzberger, Gustau Camps-Valls, María Amparo Gilabert

Opublikowane w: Scientific Reports, Numer 10/1, 2020, ISSN 2045-2322

Wydawca: Nature Publishing Group

DOI: 10.1038/s41598-020-74215-5

[Efficient Kernel Cook's Distance for Remote Sensing Anomalous Change Detection](#)

Autorzy: Jose Antonio Padron-Hidalgo, Adrian Perez-Suay, Fatih Nar, Valero Laparra, Gustau Camps-Valls

Opublikowane w: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Numer 13, 2020, Strona(/y) 5480-5488, ISSN 1939-1404

Wydawca: Institute of Electrical and Electronics Engineers

DOI: 10.1109/jstars.2020.3020913

Non-peer reviewed articles (1)

[Computer Science Meets Ecology \(Dagstuhl Seminar 17091\)](#)

Autorzy: Gustau Camps-Valls and Thomas Hickler and Birgitta König-Ries

Opublikowane w: Dagstuhl Reports, 2017, ISSN 2192-5283

Wydawca: Schloss Dagstuhl--Leibniz-Zentrum fuer Informatik

DOI: 10.4230/DagRep.7.2.109

Monographic books (3)

[Image Analysis](#)

Autorzy: Puneet Sharma, Filippo Maria Bianchi

Opublikowane w: Lecture Notes in Computer Science, 2017, ISBN 978-3-319-59129-2

Wydawca: Springer International Publishing

DOI: 10.1007/978-3-319-59129-2

[Wiley StatsRef: Statistics Reference Online](#)

Autorzy: N. Balakrishnan, Theodore Colton, Brian Everitt, Walter Piegorsch, Fabrizio Ruggeri, Jozef L. Teugels

Opublikowane w: 2014, ISBN 9781-118445112

Wydawca: John Wiley & Sons, Ltd

DOI: 10.1002/9781118445112.stat03876.pub2

[Digital Signal Processing with Kernel Methods](#)

Autorzy: Jose Luis Rojo-Alvarez, Manel Martinez-Ramon, Jordi Munoz-Mari, Gustau Camps-Valls

Opublikowane w: BOOK, 2018, ISBN 9781-118705810

Wydawca: Wiley & Sons

DOI: 10.1002/9781118705810

Book chapters (1)



[Learning Structures in Earth Observation Data with Gaussian Processes](#)

Autorzy: Fernando Mateo, Jordi Muñoz-Marí, Valero Laparra, Jochem Verrelst, Gustau Camps-Valls

Opublikowane w: Advanced Analysis and Learning on Temporal Data, Numer 9785, 2016, Strona(/y) 78-94, ISBN 978-3-319-44411-6

Wydawca: Springer International Publishing

DOI: 10.1007/978-3-319-44412-3_6

Zbiory danych

Zbiory danych za pośrednictwem OpenAIRE (2)



[Remote sensing data for crop yield in CONUS](#)

Autorzy: Martínez-Ferrer, Laura; Mateo-Sanchis, Anna; Muñoz-Marí, Jordi; Piles, Maria

Opublikowane w: Zenodo

[Dataset for the manuscript "Are remote sensing evapotranspiration models reliable 2 across South American ecoregions?" published in WRR](#)

Autorzy: , Melo; , Anache; , Borges; , Miralles; , Martens; , Fisher; , Nóbrega; , Moreno; , Cabral; , Rodrigues; , Bezerra; , Silva; Neto, Meira; , Moura; , Marques; , Campos; , Nogueira; , Rosolem; , Souza; , Antonino; , Holl; , Galleguillos; , Perez-Quezada; , Verhoef; , Kutzbach; , Lima; , Souza; , Gassman; , Perez; , Tonti; , Posse; , Rains; , Oliveira; , Wendland

Opublikowane w: Zenodo

Pozostałe produkty badawcze

Pozostałe produkty badawcze dostępne przez OpenAire (2)



[Revisiting impacts of MJO on soil moisture: a causality perspective](#)

Autorzy: Bueso, Diego; Piles, Maria; Székely, Eniko; Camps-Valls, Gustau

[Monte Carlo Methods](#) 

Autorzy: Robert, Christian P.

Opublikowane w: Wiley

Ostatnia aktualizacja: 5 Czerwca 2023

Permalink: <https://cordis.europa.eu/project/id/647423/results/pl>

European Union, 2025