

#	Topic	Authors	Title
1	CLIMATE CHANGE	Gozzi Caterina, Buccianti Antonella, Rantitsch Gerd, Vaselli Orlando, Nisi Barbara	Downstream propagation of geochemical footprints in the Tiber River catchment (central Italy) assessed through a CoDA approach
2	CLIMATE CHANGE	Ribeiro Maria Margarida, Almeida Alice Maria, Martins Maria João, Campagnolo Manuel Lameiras, Gerassis Saki, Fernandez Paulo, Albuquerque Teresa, Gonçalves José Carlos	The effect of global warming on the Mediterranean region using a typical species ( <i>Arbutus unedo</i> L.)
3	CLIMATE CHANGE	Vesselinov Velimir V.	Identification of climate impacts on watersheds using unsupervised machine learning
4	CO <sub>2</sub> SEQUESTRATION	Fabusuyi Oluwatosin, Azevedo Leonardo, Pereira Maria João	Geostatistical modelling and characterization of CO <sub>2</sub> storage in a deep saline aquifer
5	CO <sub>2</sub> SEQUESTRATION	Amri Abdellah, Saadi Zakaria, Ababou Rachid	Modeling two phase flow with entry pressure and hysteresis: application to gas transport in deep geological structures
6	ECOLOGY, NATURAL RESOURCES	Ilnur Minniakhmetov	Non-stationary multivariate conditional simulation of Olympic Dam deposit
7	ECOLOGY, NATURAL RESOURCES	Kanevski Mikhail, Guignard Fabian, Amato Federico	Wind energy potential estimation using machine learning: feature engineering and selection
8	ECOLOGY, NATURAL RESOURCES	Metivier Jean-Michel, Greau Claire	First geostatistical mapping of indoor radon concentrations data in France
9	ECOLOGY, NATURAL RESOURCES	Petitgas Pierre, Desassis Nicolas, Woillez Mathieu, Doray Mathieu, Renard Didier	Comparing SPDE and kriging for mapping fisheries survey data with complex anisotropies
10	FORESTRY, AGRICULTURE	Kerry Ruth, Ingram Ben, Garcia-Cela Esther, Ortiz Brenda, Magan Naresh	Geostatistical Analysis in Mycotoxin studies
11	FORESTRY, AGRICULTURE	Rosillon Damien, Huart Jean Pierre, Journée Michel, Planchon Viviane	The Agromet project: a virtual weather station network for agricultural decision support systems.
12	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Bez Nicolas, Cariou Thibault, Renard Didier, Vogel Camille, Dubroca Laurent	Mixing PGS and SPDE frameworks in order to cokriging continuous and categorical variables: a fishery application
13	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Bruno Roberto, Kasmaeeyazdi Sara, Tinti Francesco	Generalized Variograms of k-order: application to the spatial variability analysis of satellite images
14	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Daly Colin	A Conditional Random Field approach to Geostatistical Modelling
15	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Desassis Nicolas, Pereira Mike, Renard Didier, Freulon Xavier, Romary Thomas, Allard Denis	Inference of non-stationary SPDE based models
16	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	El Hachem Abbas, Bárdossy András, Seidel Jochen	The use of citizen observations for better precipitation estimation and interpolation
17	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Goovaerts Pierre	How Geostatistics can Help You Find Lead and Galvanized Service Lines in Public Water Systems: A compositional Approach

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18	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Jordão Helga, Sousa António Jorge, Soares Amílcar	Random Function Simulation Using GENERATIVE ADVERSARIAL NETWORKS with Variogram Constraints
19	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Le Coz Mathieu, Pannecoucke Léa, Houzé Clémence, Saintenoy Albane, Freulon Xavier, Cazala Charlotte, De Fouquet Chantal	The Kri-Terres project: combining geophysics, hydrogeological modelling and geostatistics for better characterizing contaminated soils
20	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Mohammadzadeh Mohsen, Zahmatkesh Samira	Bayesian Analysis of Spatial Data with Missing Values
21	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Ortiz Julian, Cevik Ilkay	Manifold learning for geostatistical domaining
22	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Rongier Guillaume, Peeters Luk	On simulating fluvial deposits using process-based models and generative adversarial network
23	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Siena Martina, Riva Monica, Guadagnini Alberto	Geostatistical interpretation of spatial distributions of porous media attributes through generalized sub-Gaussian models
24	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Vieira Mancio Dos Santos Alini, Coimbra Leite Costa João Felipe, Zacche Camilla	Land surface modeling by Simple Kriging with Locally Varying Mean (SKLVM) with vegetation elevation as secondary variable.
25	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Xiao Bo, Haslauer Claus, Bohling Geoff, Bárdossy András	Does More Information Included in Spatially Distributed Fields Lead to an Improved Match to Observed Dependent Variables?
26	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Posada Lilian, Sánchez Luis, Rosado Gabriel, Medina Jorge	Geostatistical approach to estimate the local seismic hazard in municipalities of Antioquia, Colombia
27	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Thiesen Stephanie, Ehret Uwe	Assessing local and spatial uncertainty with non-parametric geostatistics
28	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Biver Pierre, Dall'alba Valentin, Morandini Francis, Renard Philippe, Caballero Yvan	Facies modeling using unstructured grid, a groundwater field case: the Roussillon coastal aquifer.
29	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Riquelme Alvaro, Ortiz Julian	Random Fields on Manifolds and Applications to Geostatistical Modelling.
30	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Berretta Serena, Cabiddu Daniela, Pittaluga Simone, Mortara Michela, Spagnuolo Michela, Vetuschi Zuccolini Marino	Real-time sampling of environmental variables in free-form harbour water body with change-of-support evaluation
31	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Troncoso Alan, Freulon Xavier, Lantuéjoul Christian, Ors Fabien, Rivoirard Jacques	Conditional Simulation of Channelized Meandering Reservoirs using Particle Filtering
32	GEOSTATISTICAL THEORY AND NEW METHODOLOGIES	Coube-Sisqueille Sébastien, Banerjee Sudipto, Liquet Benoît	Nonstationary Nearest Neighbor Gaussian Process : hierarchical model architecture and MCMC sampling

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33	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Gerassis Saki, Boente Carlos, Albuquerque Teresa, Ribeiro Maria Margarida, Abad Alberto, Taboada Javier, Saavedra Ángeles, Giráldez Eduardo	Unpacking occupational health data in the tertiary sector. From Spatial Clustering to Bayesian decision making
34	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Higham Christopher, Kerry Ruth, Ingram Ben, Vowles Maureen	Asthma Exacerbation: using aerosol optical thickness to determine the relative effects of vehicular pollution and desert/mining dust on the PM2.5 atmospheric pollution in Utah, USA
35	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Maldani Mohamed, Aliyat Fatima Zahra, Cappello Simone, Morabito Marina, Genovese Maria, Santisi Santina, Giarratana Filippo, Nassiri Laila, Ibjibijen Jamal	Effect of glyphosate and paraquat on seeds germination and seedlings of Sorghum vulgare, Phaseolus vulgaris and Vicia faba
36	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Mckinley Jennifer, Mueller Ute, Atkinson Peter, Cox Siobhan, Doherty Rory, Ofterdinger Ulrich, Fogarty Damian, Egozcue Juan Jose, Pawlowsky-Glahn Vera	Exploring the effects of environmental toxins from air pollution on Chronic Kidney Disease
37	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Mejia-Dominguez Nancy, Diaz-Avalos Carlos, Gutierrez-Prieto Angel, Flores Bernardo	Spatial models for chronic non-communicable diseases in Mexico
38	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Mayala Benjamin K, Dontamsetti Trinadh, Fish Tom, Croft Trevor	Modeling of DHS Survey Data at Sub-national Administrative Level 2
39	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Ribeiro Manuel Castro, Pereira Maria João	A combined approach to evaluate local impacts of air pollution exposure on health using synthetic data
40	HEALTH, EPIDEMIOLOGY, ECOTOXICOLOGY	Scimone Riccardo, Menafoglio Alessandra, Secchi Piercesare	An O2S2 analysis of the impact on total mortality of the COVID-19 pandemic in Italian municipalities
41	INVERSE MODELING	Butera Ilaria, Gómez-Hernández J. Jaime, Nicotra Silvia	Ensemble Kalman filter for pollution source characterization in water supply systems
42	INVERSE MODELING	Friedli Lea, Linde Niklas, Doucet Arnaud, Ginsbourger David	Accounting for petrophysical uncertainty in hydrogeophysical inversion with the Correlated Pseudo-Marginal method
43	INVERSE MODELING	Gautier Athénaïs, Ginsbourger David, Pirot Guillaume	Logistic Gaussian fields for inversion based on stochastic responses
44	INVERSE MODELING	Godoy Vanessa, Todaro Valeria, Napa-García Gian Franco, Zanini Andrea, Gómez-Hernández Jaime	Identification of hydraulic conductivity and contaminant source position in a sandbox experiment via the normal-score ensemble smoother with multiple data assimilation
45	INVERSE MODELING	Grana Dario, Smeltz Natalie, Ayani Mohit, Parsekian Andrew	Bayesian time-lapse inversion of geophysical data for water saturation changes during snowpack melting in mountain watersheds

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46	INVERSE MODELING	Hasan Md Moudud, Vidmar Tim, Rogiers Bart, Laloy Eric, Rutten Jos, Camps Johan, Huysmans Marijke	Deconvolution of gamma-ray spectrometric measurements for radiological site characterization
47	INVERSE MODELING	Jamshidi Azade, Mohammad Vali Samani Jamal, Tanda Maria Giovanna, Zanini Andrea	Contaminant release history identification through simulation-optimization method and surrogate transport model
48	INVERSE MODELING	Juda Przemyslaw, Dagasan Yasin, Jäggli Christoph, Straubhaar Julien, Renard Philippe	Accelerating adaptive importance sampling using machine learning schemes
49	INVERSE MODELING	Laine Eevaliisa, Linden Hilding, Huotari Taija, Laxström Heidi, Suppala Ilkka, Westerholm Jan	Gravity forward modelling with GECCO tools and 3D gravity inversion applied to study geological subsurface structures within the urban areas in southern Finland
50	INVERSE MODELING	Levy Shiran, Hunziker Jürg, Laloy Eric, Irving James, Linde Niklas	Accounting for model errors using deep neural networks within a Markov chain Monte Carlo inversion framework
51	INVERSE MODELING	Pirot Guillaume, Joshi Raneer, Jessell Mark, Lindsay Mark	Parameterizing spatially complex conceptual models for Bayesian optimization
52	INVERSE MODELING	Rambourg Dimitri, Bildstein Olivier, Ackerer Philippe	Combining 2D groundwater parameter inversion and transition probability geostatistics to construct a 3D aquifer model
53	INVERSE MODELING	Travelletti Cédric, Ginsbourger David, Linde Niklas	Fast, large scale Gaussian Process based Bayesian inversion for set estimation in geophysics
54	MULTIPOINT GEOSTATISTICS	Comunian Alessandro, Consonni Edoardo, Zuffetti Chiara, Bersezio Riccardo, Giudici Mauro	Handling non-stationarity in multiple-point statistic simulation with a hierarchical approach
55	MULTIPOINT GEOSTATISTICS	Dall'alba Valentin, Neven Alexis, Louis Cyprien, Vallat Marie, Juda Przemyslaw, Chauveau Lucile, Straubhaar Julien, Renard Philippe	Estimating the volume of the Tsanfleuron glacier (Swiss Alps) using ground penetrating radar and multiple points statistics
56	MULTIPOINT GEOSTATISTICS	Gravey Mathieu, Mariéthoz Grégoire	Cheetah: a revisited list approach for categorical MPS
57	MULTIPOINT GEOSTATISTICS	Selia Sangga Rima Roman, Tolosana-Delgado Raimon, Nascimento Sibebe C., Parbhakar-Fox Anita, Van Den Boogaart K. Gerald, Schaeben Helmut	Applied Multi-Point Geostatistics for Tailings Characterization at King River Delta, Australia
58	REMOTE SENSING	Bernardi Mara Sabina, Fontana Matteo, Menafoglio Alessandra, Vantini Simone, Cigna Francesca, Tapete Deodato	InSAR data post-processing via functional data analysis with application to the case of Santa Barbara mud volcano
59	REMOTE SENSING	Cao Guofeng, Zhao Naizhuo	Time series analysis of VIIRS-DNB nighttime lights imagery for change detection in urban areas: A case study of devastation in Puerto Rico from hurricanes Irma and Maria

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60	REMOTE SENSING	Kasmaeeyazdi Sara, Mandanici Emanuele, Balomenos Efthymios, Tinti Francesco, Bonduà Stefano, Bruno Roberto	Mapping Vanadium in the Bauxite tailings with the integration of remote sensing and geostatistical approaches
61	REMOTE SENSING	Ramos Alzira, Azevedo Leonardo, Branquinho Cristina, Duveiller Gregory, Pereira Maria João	Deriving high spatial resolution daily vegetation index images from Sentinel and MODIS data: a geostatistical approach
62	REMOTE SENSING	Hoshino Buho, Seno Kazuki, McCarthy Christopher	"Environment risk assessment of China OBOR (BRI) project developed in Kazakhstan - Case study of evaluate the appearance and disappearance of oases farmland at OBOR"
63	SOIL APPLICATIONS	Boente Carlos, Gerassis Saki, Albuquerque Teresa, Ribeiro Margarida, Fernández Susana, Colina Arturo, Rodríguez Gallego José Luis	Sampling hillsides or floodplains to determine geochemical backgrounds for soils? A critical analysis through geostatistical and machine learning approaches
64	SOIL APPLICATIONS	Heuvelink Gerard, Wadoux Alexandre, Poggio Laura	Accounting for conditional bias in digital soil mapping with proximal soil sensing data
65	SOIL APPLICATIONS	Narciso João, Azevedo Leonardo, Van De Vijver Ellen, Van Meirvenne Marc	Geostatistical inversion of electromagnetic induction data for modelling waste deposits
66	SOIL APPLICATIONS	Nussbaum Madlene, Burgos Stéphane	Extrapolation of a legacy soil map to surrounding areas by machine learning based model averaging
67	SOIL APPLICATIONS	Pappagallo Giuseppe, Barca Emanuele, De Benedetto Daniela, Stellacci Anna Maria	Impact of different variogram models of total organic carbon on sampling scheme optimization and potentiality of covariate information in the precision agriculture framework
68	SOIL APPLICATIONS	Parra Gómez Luis José, Colmenares Montañez Julio Esteban, Bohorquez Castañeda Martha Patricia	Use of functional geostatistics for interpretation of geotechnical engineering data – a methodological approach
69	SOIL APPLICATIONS	Petermann Eric, Meyer Hanna, Nussbaum Madlene, Bossew Peter	Mapping the geogenic radon potential for Germany by machine learning
70	SOIL APPLICATIONS	Saby Nicolas, Opitz Thomas, Hu Bifeng, Bourennane Hocine, Lemerrier Blandine	Bayesian modeling of spatio-temporal trends in soil properties using INLA and SPDE
71	SOIL APPLICATIONS	Declerq Theo, Thannberger Laurent, Jardani Abderrahim	GEOCARE, Development of GEOPhysical methods for ChAracterization and REhabilitation of contaminated sites
72	SPATIO-TEMPORAL PROCESSES	Brady Aoibheann, Rougier Jonathan, Vishwakarma Bramha Dutt, Ziegler Yann, Westaway Richard, Bamber Jonathan	Spatio-temporal modelling for the decomposition of geophysical signals in North America
73	SPATIO-TEMPORAL PROCESSES	Dai Wenlin, Genton Marc	Trajectory Functional Boxplots with Spatio-Temporal Applications

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74	SPATIO-TEMPORAL PROCESSES	De Iaco Sandra, Giungato Giuseppina, Palma Monica, Posa Donato	Multivariate space-time anisotropic covariance function: modeling and prediction
75	SPATIO-TEMPORAL PROCESSES	De Iaco Sandra, Palma Monica, Cappello Claudia	Fuzzy logic and space-time interaction parameter in covariance model
76	SPATIO-TEMPORAL PROCESSES	De Iaco Sandra, Palma Monica, Pellegrino Daniela	Spatio-temporal geostatistical analysis and prediction for financial data
77	SPATIO-TEMPORAL PROCESSES	Qadir Ghulam, Kurtek Sebastian, Sun Ying	Estimation of Spatial Deformation for Non-stationary Processes via Variogram Alignment
78	SPATIO-TEMPORAL PROCESSES	Smillie Zeinab, Demyanov Vasily, Mckinley Jennifer, Cooper Mark	Can radiometric data improve lithology mapping and geological understanding through unsupervised classification?
79	SPATIO-TEMPORAL PROCESSES	Takafuji Eduardo, Rocha Marcelo, Manzione Rodrigo	Atmospheric conditions at a wildfire start: spatiotemporal geostatistics approach
80	SPATIO-TEMPORAL PROCESSES	Varouchakis Emmanouil A, Hristopulos Dionissios T, Karatzas George P, Corzo Gerald	Dynamic rainfall modelling using spatiotemporal geostatistics: blending satellite and ground observations
81	SPATIO-TEMPORAL PROCESSES	Hadjipetrou Stylianos, Liidakis Stelios, Sykioti Anastasia, Park No-Wook, Kyriakidis Phaedon	Geostatistical downscaling of offshore wind speed data derived from numerical weather prediction models using higher spatial resolution satellite products
82	SURFACE AND SUBSURFACE HYDROLOGY	Bastianoni Alessia, Bernardinetti Stefano, Zirulia Andrea, Brancale Mariantonietta, Barbagli Alessio, Guastaldi Enrico	Multivariate statistical and geostatistical analysis for hydrogeochemical evaluating of the coastal aquifer between Rosignano Marittimo and San Vincenzo (Tuscany, Italy)
83	SURFACE AND SUBSURFACE HYDROLOGY	Bernardinetti Stefano, Bruno Pier Paolo Gennaro, Maraio Stefano, Zirulia Andrea, Barbagli Alessio, Serri Lisa, Brancale Mariantonietta, Giannuzzi Miriana, Colonna Tommaso, Guastaldi Enrico	Multivariate analyses as geophysical data integration method for aquifer characterization
84	SURFACE AND SUBSURFACE HYDROLOGY	Courtois Nathalie	Using geostatistical methods to help optimizing an existing groundwater monitoring network
85	SURFACE AND SUBSURFACE HYDROLOGY	Gómez-Hernández J. Jaime, Chen Zi, Xu Teng, Zanini Andrea	Help: The sandbox has become contaminated
86	SURFACE AND SUBSURFACE HYDROLOGY	Manzione Rodrigo Lilla, Castrignanò Annamaria	A geostatistical data fusion approach for probabilistic assessment of water table depth risks using multi source data
87	SURFACE AND SUBSURFACE HYDROLOGY	Normani Stefano, Snowdon Andrew	Methodology for embedding spatial variability of fracture zone and rock mass properties in groundwater models

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88	SURFACE AND SUBSURFACE HYDROLOGY	Pannecoucke Léa, Le Coz Mathieu, Freulon Xavier, De Fouquet Chantal	Combining flow and transport numerical modeling and geostatistics to improve the assessment of groundwater contamination: an application to the Chernobyl site
89	SURFACE AND SUBSURFACE HYDROLOGY	Pierron Patrick, Bernasconi Pascal	The PLAN.T.E Project: an African Missing Link to Fight Desertification
90	SURFACE AND SUBSURFACE HYDROLOGY	Romary Thomas, Wang Shuaitao, Flipo Nicolas	High frequency oxygen data assimilation in water quality assessment
91	SURFACE AND SUBSURFACE HYDROLOGY	Rongier Guillaume, Peeters Luk	What happens when we neglect geological heterogeneities? An illustration with recharge estimation
92	SURFACE AND SUBSURFACE HYDROLOGY	Trichakis Ioannis, Kyriakou Nikolaos, Karatzas George	On the use of artificial neural networks to identify relationships among nearby rainfall stations to infer past rainfall data
93	x-OTHER	Bossew Peter	Spatial dispersion of an environmental quantity in dependence of the size of a spatial unit
94	x-OTHER	Quesada Ruiz Lorenzo Carlos, Rodríguez Galiano Víctor Francisco, Zurita Milla Raul, Izquierdo Verdiguier Emma	Area and feature constrained random forest: a new feature selection method for binary classification
95	x-OTHER	Quesada Ruiz Lorenzo Carlos, Perez Liliana, Quesada Ruiz Lorenzo Carlos	Spatiotemporal analysis of the housing bubble's contribution to the proliferation of illegal landfills – the case of Gran Canaria
96	x-OTHER	Poggi Jean-Michel, Bobbia Michel, Portier Bruno	Spatial correction of low-cost sensors observations for statistical fusion of heterogeneous air quality measurements