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Phaedon C. Kyriakidis

Curriculum Vitae

Last update: October 2015

Education

- 1999 • Ph.D.: Department of Geological & Environmental Sciences, Stanford University, U.S.A. Specialization: Geostatistics in the Earth Sciences. Thesis advisor: Prof. André G. Journel.
- 1994 • B.Sc. (Ptychion): Department of Geology, Aristotelian University of Thessaloniki, Greece.

Professional Appointments

- 2015- • Professor, Dept. of Civil Engineering and Geomatics, Faculty of Engineering and Technology, Cyprus University of Technology, Cyprus
- 2015- • Adjunct Professor, Dept. of Geography, University of California Santa Barbara, U.S.A.
- 2012-14 • Vice Chair & Graduate Advisor, Dept. of Geography, University of California Santa Barbara, U.S.A.
- 2012-15 • Professor, Dept. of Geography, University of California Santa Barbara, U.S.A.
- 2010-12 • Director of Graduate Studies Program in: *Geography and Applied Geo-Informatics*, Dept. of Geography, University of the Aegean, Greece.
- 2010- • Professor of Spatial Analysis, Dept. of Geography, University of the Aegean, Greece (on leave of absence).
- 2009-10 • Instructor on short-term contract at the Professorial level (presidential decree 407/1982), Dept. of Geography, University of the Aegean, Greece.
- 2008-09 • Vice Chair & Graduate Advisor, Dept. of Geography, University of California Santa Barbara, U.S.A.
- 2005-12 • Associate Professor, Dept. of Geography, University of California Santa Barbara, U.S.A. – on leave-of-absence (without salary) from September 2009 to December 2012.
- 2001-13 • Faculty Staff, Earth Sciences Division, Berkeley National Laboratory, U.S.A.
- 2001-05 • Assistant Professor, Dept. of Geography, University of California Santa Barbara, U.S.A.
- 1999-00 • Post-doctoral Fellow, Earth Sciences Division, Berkeley National Laboratory, U.S.A.
- 1994-99 • Graduate Research Assistant, Dept. of Geological & Environmental Sciences, Stanford University, U.S.A.
- 1997 • Visiting Graduate Research Assistant (June-August), National Center for Geographic Information and Analysis (NCGIA), University of California Santa Barbara, U.S.A.
- 1996 • Visiting Graduate Research Assistant (June-August), Earth and Environmental Sciences Division GeoAnalysis (EES-5) Group, Los Alamos National Laboratory, U.S.A.

Honors, Distinctions & Awards

- 2015 • Best poster award: “Delineating water quality regions from remotely sensed data using textual information” (co-authored with Vasios and Kitsiou), and presented at the *Third International Conference on Remote Sensing and Geoinformation of Environment (RSCy 2015)*, on March 16-19 2015, in Paphos, Cyprus.
- 2014 • Best paper award: “Efficient simulation of (Log)Normal Random Fields for Hydrogeological Applications” (co-authored with Gaganis), published in *Mathematical Geosciences*, 45(6): 531-556. Selected as the best paper for 2013 (out of a total of 48 published papers); see the related announcement of the International Association for Mathematical Geosciences (IAMG) in the November 2014 issue of *Mathematical Geosciences*, 46(8): 1035-1037, DOI 10.1007/s11004-014-9572-8, as well as in the biannual IAMG Newsletter No. 89 (Winter 2014).
- 2012 • National (Greek) competition in scientific research excellence “Aristeia”: *Advances in Geostatistics for Environmental Characterization and Natural Resources Management* was selected for funding (€250,000) in the 1st Greek national competition in scientific research excellence, “Aristeia”, administered by the Greek General Secretariat for Research and Technology. This proposal was one of the 206 proposals selected for funding out of a total of 1497 proposals submitted. It also was one of the 14 proposals (out of the 206 retained) that was funded as interdisciplinary – Primary disciplinary field: 01. Mathematics, Statistics, Informatics and Computer Science; Secondary disciplinary field: 10. Energy and the Environment.
- 2010 • Best paper award: “Geostatistical Regression for Areal Data” (co-authored with Nagle), and published in the proceedings of the *9th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Leicester, UK, July 20-23.
- 1999 • Exemption (until 2003) from the obligatory military services of Greece due to distinguished scientific activities abroad.
- 1997 • First place in written competition on Statistics in Geology organized by the National Scholarship Foundation of Greece.
- 1994 • Honors degree from the Department of Geology of the Aristotelian University of Thessaloniki, Greece. Highest GPA in graduating class, and among the five highest GPAs in the Department’s history.

Research Interests

Geostatistics, Geocomputation, Geoinformatics

- Development of geostatistical and geocomputation methodologies for: (a) quantifying and interpreting spatial and/or spatiotemporal patterns in geographical variables, (b) integrating spatial and/or spatiotemporal data of different resolution and reliability, (c) modeling uncertainty in the spatiotemporal distribution of geographical variables, and (d) propagating efficiently uncertainty in the spatiotemporal distribution of environmental model parameters to model predictions.
- Application of the above methodologies of spatiotemporal data analysis and modeling to Geographic Information Science, as well as Earth, Environmental and Social Sciences.
- Development and application of geostatistical methodologies for mineral resources assessment and reservoir characterization.

Grants & Contracts

- 2014-19 • *Demonstrating an Effective Marine Biodiversity Observation Network in the Santa Barbara Channel*. PI: Miller, Co-PIs: Carlson, Lafferty, Rassweiler, Reed, **Kyriakidis**, Siegel, Iglesias-Rodriguez, Manjunath, Love, Thompson, Hildebrand, McCauley. Funding sources: NASA, NOAA. *This project is funded as part of the US National Oceanographic Partnership Program federal funding opportunity “FY2014 Demonstration of a U.S. Marine Biodiversity Observation Network (Marine BON)”*, with an overall budget of approximately \$6,000,000 over 5 years.
- 2013-15 • *Collaborative Research: Thermal Controls on Ecosystem Metabolism and Function: Scaling from Leaves to Canopies to Regions*. PI: Roberts, Co-I: **Kyriakidis**. Funding source: National Science Foundation (NSF). Amount: \$255,000. This project is part of a larger collaborative project involving Oregon State, Harvard, UPenn, UC Irvine, and UC Santa Barbara, led by Prof. Still at Oregon State, and funded by NSF’s MacroSystems Biology program with an overall budget of approximately \$1,008,000 over 2 years.
- 2012-15 • *Advances in Geostatistics for Environmental Characterization and Natural Resources Management*. PI: **Kyriakidis**. Funding source: Greek General Secretariat for Research and Technology. Amount: €250,000.
- 2007-11 • *A Geostatistical Framework for Geospatial Data Analysis and Modeling Across Multiple Spatial and Temporal Scales*. PI: Goodchild, Co-PI: **Kyriakidis**. Funding source: National Geospatial-Intelligence Agency (NGA). Amount: \$450,000.
- 2008-09 • *Modeling Soil Moisture in California Across Multiple Scales*. PI: Chadwick, Co-PIs: Roberts & **Kyriakidis**. Funding source: Kearney Foundation of Soil Science (\$88,951).
- 2007-09 • *Remote Assessment of Giant Kelp Dynamics – The Engineer of California’s Near-Shore Ecosystems*. PI: Siegel, Co-I: **Kyriakidis**. Funding source: National Aeronautics and Space Administration (NASA). Amount: \$859,049.
- 2005-06 • *Intra-urban Industrial Location Under Institutional and Accessibility Constraints: An Empirical Approach*. PI: Sweeney, Co-PI: **Kyriakidis**. Funding source: National Science Foundation (NSF). Amount: \$100,000.
- 2004-06 • *A Geostatistical Framework for Downscaling Spatial Data*. PI: **Kyriakidis**. Funding source: National Science Foundation (NSF). Amount: \$125,002.
- 2004-06 • *An Integrated, Dynamic and Predictive Model of Wildfire Risk in Southern California Using MODIS Imagery*. PI: **Kyriakidis**, Co-PI: Schneider. Funding source: National Aeronautics and Space Administration (NASA). Amount: \$48,000.
- 2004-07 • *Strategic Enhancement of NGA’s Geographic Information Science Infrastructure* PI: Goodchild, Co-I: **Kyriakidis**. Funding source: National Geospatial-Intelligence Agency (NGA). Amount: \$693,000.
- 2004-05 • *Instructional Improvement Grant: An Integrated Software Environment for Enhanced Geographic Education*. PIs: Sweeney and **Kyriakidis**. Funding source: Academic Senate University of California Santa Barbara. Amount: \$24,000.
- 2003-05 • *A Systems Approach to the Visualization of Spatial Uncertainty*. PI: **Kyriakidis**. Funding source: National Science Foundation. Amount: \$69,951.
- 2002-03 • *Sub-County Population and Household Projections for SCAG Sub-Regions, Cities, and Unincorporated Areas to 2025*. PI: Sweeney, Co-PI: **Kyriakidis**. Funding source: Southern California Association of Governments (SCAG). Amount: \$74,937.
- 2001 • *Junior Faculty Research Incentive Award*. PI: **Kyriakidis**. Funding source: Academic Senate, University of California Santa Barbara. Amount: \$5,000.

Publications

In Peer-Reviewed Journals

- 52 • Lioudakis, S., **Kyriakidis**, P., and Gaganis, P. (2015): Accounting for model sensitivity in controlled (log)Gaussian geostatistical simulation, *Spatial Statistics* (in press).
- 51 • Menzer, O., Meiring, W., **Kyriakidis**, P.C., and McFadden, J.P. (2015): Annual sums of carbon dioxide exchange over a heterogeneous urban landscape through machine learning based gap-filling, *Atmospheric Environment*, 101(January 2015), 312–327.
- 50 • Kavroudakis, D., and **Kyriakidis**, P.C. (2013): “DTH 1.0”: Towards an artificial intelligence system for geographical analysis of health data, *European Journal of Geography*, 4(3), 38–49.
- 49 • **Kyriakidis**, P.C., and Gaganis, P. (2013): Efficient simulation of (log)normal random fields for hydrogeological applications, *Mathematical Geosciences*, 45(5), 531–556. DOI 10.1007/s11004-013-9470-5.
- 48 • Palaiologou, P., Kalabokidis, K., and **Kyriakidis**, P. (2013): Forest mapping by geoinformatics for landscape fire behaviour modelling in coastal forests, Greece, *International Journal of Remote Sensing*, 34(12), 4466–4490.
- 47 • Hamada, Y., Stow., D.A., Roberts, D.A., Franklin, J., and **Kyriakidis**, P.C. (2013): Assessing and monitoring semi-arid shrublands using object-based image analysis and multiple endmember spectral mixture analysis, *Environmental Monitoring and Assessment*, 185(4), 3173–3190.
- 46 • Sales, M.H., Sousa Jr., C.M., and **Kyriakidis**, P.C. (2013): Fusion of MODIS images using Kriging with External Drift, *IEEE Transactions on Geoscience and Remote Sensing*, 51(4): 2250–2259.
- 45 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F. (2012): Response to ‘Comments on “Combining spatial transition probabilities for stochastic simulation of categorical fields” with communications on some issues related to Markov chain geostatistics’, *International Journal of Geographical Information Science*, 26(10): 1741–1750.
- 44 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F. (2011): A multinomial logistic mixed model for the prediction of categorical spatial data, *International Journal of Geographical Information Science*, 25(12): 2071–2086.
- 43 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F. (2011): Combining spatial transition probabilities for stochastic simulation of categorical fields, *International Journal of Geographical Information Science*, 25(11): 1773–1791.
- 42 • Guan, Q., **Kyriakidis**, P.C., and Goodchild, M.F. (2011): A parallel computing approach to fast geostatistical areal interpolation, *International Journal of Geographical Information Science*, 25(8): 1241–1267.
- 41 • Legleiter, C.J., **Kyriakidis**, P.C., McDonald R.R., and Nelson J.M. (2011): Effects of uncertain topographic input data on two-dimensional flow modeling in a gravel-bed river, *Water Resources Research*, 47, W03518, doi:10.1029/2010WR009618.
- 40 • Husak, G.J., Michaelsen, J., **Kyriakidis**, P.C., Verdin, J.P., Funk, C., and Galu, G. (2011): The forecast interpretation tool – A Monte Carlo technique for blending climatic distributions with probabilistic forecasts, *International Journal of Climatology*, 31(3): 461–467.
- 39 • Nagle, N.N., Sweeney, S.H., and **Kyriakidis**, P.C. (2011): A geostatistical linear regression model for small-area data, *Geographical Analysis*, 43(1): 38–60.

Publications

- 38 • Yoo, E.-H., **Kyriakidis**, P.C., and Tobler, W. (2010): Reconstructing population density surfaces from areal data: A comparison of Tobler's pycnophylactic interpolation method and area-to-point Kriging, *Geographical Analysis*, 42(1): 78–98.
- 37 • Yoo, E.-H., and **Kyriakidis**, P.C. (2009): Area-to-point Kriging in spatial hedonic pricing models, *Journal of Geographical Systems*, 11(4): 381–406.
- 36 • Zhang, J., **Kyriakidis**, P.C., and Kelly, R. (2009): Geostatistical approaches to conflation of continental snow data, *International Journal of Remote Sensing*, 30(20): 5441–5451.
- 35 • Goodchild, M.F, Zhang, J., and **Kyriakidis**, P.C. (2009): Discriminant models of uncertainty in nominal fields, *Transactions in GIS*, 13(1): 7–23.
- 34 • Park, N.-W., and **Kyriakidis**, P.C. (2008): Geostatistical integration of different sources of elevation and its effect on landslide hazard mapping, *Korean Journal of Remote Sensing*, 24(5): 453–462.
- 33 • Yoo, E.-H., and **Kyriakidis**, P.C. (2008): Area-to-point prediction under boundary conditions, *Geographical Analysis*, 40(4): 355–379.
- 32 • Schneider, P., Roberts, D.A., and **Kyriakidis**, P.C. (2008): A VARI-based relative greenness from MODIS data for computing the Fire Potential Index, *Remote Sensing of Environment* 112(3): 1151–1167.
- 31 • Liu, X., **Kyriakidis**, P.C., and Goodchild, M.F. (2008): Population density estimation using regression and area-to-point residual Kriging, *International Journal of Geographical Information Science* 22(4): 431–447.
- 30 • Legleiter, C., and **Kyriakidis**, P.C. (2008): Spatial prediction of river channel topography by Kriging, *Earth Surface Processes and Landforms* 33(6): 841–867.
- 29 • Boucher, A., **Kyriakidis**, P.C., and Cronkite-Ratcliff, C. (2008): Geostatistical solutions for super-resolution land cover mapping, *IEEE Transactions on Geoscience and Remote Sensing*, 46(1): 272–283.
- 28 • Zhang, J., Goodchild, M., and **Kyriakidis**, P. (2007): A conceptual framework for categorical mapping and error modeling, *Acta Geodaetica et Cartographica Sinica*, 3(8): 296–301.
- 27 • Sales, M.H., Souza Jr., C.M., **Kyriakidis**, P.C., Roberts, D.A., and Vidal, E. (2007): Improving spatial distribution estimation of aboveground forest biomass with geostatistics: A case study of Rondônia, Brazil, *Ecological Modelling*, 205(1-2): 221–230.
- 26 • Ekström, M., **Kyriakidis**, P.C., Chappell, A., and Jones, P. (2007): Spatiotemporal stochastic simulation of monthly rainfall patterns in the United Kingdom (1980-1987), *Journal of Climate*, 20(16): 4194–4210.
- 25 • Boucher, A., and **Kyriakidis**, P.C. (2007): Integrating fine scale information in super-resolution land cover mapping, *Photogrammetric Engineering & Remote Sensing*, 73(8): 913–921.
- 24 • Legleiter, C., and **Kyriakidis**, P.C. (2006): Forward and inverse transformations between Cartesian and channel-fitted coordinate systems for meandering rivers, *Mathematical Geology*, 38(8): 927–958.
- 23 • Yoo, E.-H., and **Kyriakidis**, P.C. (2006): Area-to-point Kriging with inequality-type data, *Journal of Geographical Systems*, 8(4): 357–390.
- 22 • Boucher, A., and **Kyriakidis**, P.C. (2006): Super-resolution land cover mapping with indicator geostatistics, *Remote Sensing of Environment*, 104(3): 264–282.

Publications

- 21 • **Kyriakidis**, P.C., and Goodchild, M.F. (2006): On the prediction error variance of three common spatial interpolation schemes, *International Journal of Geographical Information Science*, 20(8): 823–855.
- 20 • Adler, P.B., Hille Ris Lambers, J., **Kyriakidis**, P.C., Guan, Q., and Levine, J.M. (2006): Climate variability has a stabilizing effect on the coexistence of prairie grasses, *Proceedings of the National Academy of Sciences*, 103(34): 12793–12798.
- 19 • Holmes, K.W., Chadwick, O.A., **Kyriakidis**, P.C., Silva de Filho, E.P., Soares, J.V., and Roberts, D.A. (2006): Large-area spatially explicit estimates of tropical soil carbon stocks and response to land-cover change, *Global Biogeochemical Cycles*, 20(3), GB3004, doi:10.1029/2005GB002507.
- 18 • **Kyriakidis**, P.C., and Yoo, E.-H. (2005): Geostatistical prediction and simulation of point values from areal data, *Geographical Analysis*, 37(2): 124–151.
- 17 • Holmes, K.W., **Kyriakidis**, P.C., Chadwick, O.A., Soares, J.V. and Roberts, D.A. (2005): Multi-scale variability in tropical soil nutrients following land-cover change, *Biogeochemistry*, 74(2): 173–203.
- 16 • Washburn, L., Clark, J., and **Kyriakidis**, P.C. (2005): The spatial scales, distribution, and intensity of natural marine hydrocarbon seeps near Coal Oil Point, California, *Marine and Petroleum Geology*, 22(4): 569–578.
- 15 • **Kyriakidis**, P.C., Miller, N.L., and Kim, J. (2004): A spatial time series framework for simulating daily precipitation at regional scales, *Journal of Hydrology*, 297(1-4): 236–255.
- 14 • **Kyriakidis**, P.C. (2004): A geostatistical framework for area-to-point spatial interpolation, *Geographical Analysis*, 36(3): 259–289.
- 13 • **Kyriakidis**, P.C., and Dungan, J.L. (2001): A geostatistical approach for mapping thematic classification accuracy and evaluating the impact of inaccurate spatial data on ecological model predictions, *Environmental and Ecological Statistics*, 8(4): 311–330.
- 12 • **Kyriakidis**, P.C., Kim, J., and Miller, N.L. (2001): Geostatistical mapping of precipitation from rain gauge data using atmospheric and terrain characteristics, *Journal of Applied Meteorology*, 40(11): 1855–1877.
- 11 • **Kyriakidis**, P.C., and Journel, A.G. (2001): Stochastic modeling of atmospheric pollution, a spatial time series framework. Part II: Application to monitoring monthly sulphate deposition over Europe, *Atmospheric Environment*, 35(13): 2339–2348.
- 10 • **Kyriakidis**, P.C., and Journel, A.G. (2001): Stochastic modeling of atmospheric pollution, a spatial time series framework. Part I: Methodology, *Atmospheric Environment*, 35(13): 2331–2337.
- 9 • **Kyriakidis**, P.C., Miller, N.L., and Kim, J. (2001): Uncertainty propagation of regional climate precipitation forecasts to hydrologic impact assessment, *Journal of Hydrometeorology*, 2(2): 140–160.
- 8 • Holmes, K.W., Chadwick, O.A., and **Kyriakidis**, P.C. (2000): Error in a USGS 30m digital elevation model and its impact on terrain modeling, *Journal of Hydrology*, 233: 154–173.
- 7 • Journel, A.G., **Kyriakidis**, P.C., and Mao, S. (2000): Correcting the smoothing effect of estimators: A spectral post-processor, *Mathematical Geology*, 32(7): 787–813.
- 6 • Loague, K., Gander, G.A., Van der Kwaak, J.E., Abrahams, R.H., and **Kyriakidis**, P.C. (2000): Simulating hydrologic response for the R-5 catchment: A never ending story, *Journal of Floodplain Management*, 1(2): 57–83.

Publications

- 5 • **Kyriakidis**, P.C., and Journel, A.G. (1999): Geostatistical space-time models, *Mathematical Geology*, 31(6): 651–684.
- 4 • **Kyriakidis**, P.C., Deutsch, C.V., and Grant, M.L. (1999): Calculation of the normal scores variogram for truncated Gaussian lithofacies simulation: Theory and FORTRAN code, *Computers & Geosciences*, 25(2): 161–169.
- 3 • **Kyriakidis**, P.C., Shortridge, A.M., and Goodchild, M.F. (1999): Geostatistics for conflation and accuracy assessment of digital elevation models, *International Journal of Geographical Information Science*, 13(7): 677–708.
- 2 • Wahlstrom, E., Loague, K., and **Kyriakidis**, P.C. (1999): Hydrologic response: Kaho'olawe, Hawaii, *Journal of Environmental Quality*, 28: 481–492.
- 1 • Loague, K., and **Kyriakidis**, P.C. (1997): Spatial and temporal variability in the R-5 infiltration data set: Déjà vu and rainfall-runoff simulations, *Water Resources Research*, 33(12): 2883–2895.

In Peer-Reviewed Conference Proceedings

- 18 • Liodakis, S.C., **Kyriakidis**, P.C., and Gaganis, P. (2015): Efficient uncertainty propagation of lognormal hydraulic conductivity in a three dimensional hydrogeological model of flow and transport on very large regular grids, in: *Proceedings of the 17th Annual Conference of the International Association for Mathematical Geosciences (IAMG 2015)*, September 5-13, 2015, Freiberg (Saxony), Germany.
- 17 • Vasios, G.K., **Kyriakidis**, P.C., and Kitsiou, D. (2015): Measurement aggregation effects on the spatial statistics of sea surface temperature (SST) and chlorophyll (Chl-a) over the North Aegean, in: *Proceedings of the 14th International Conference on Environmental Science and Technology (CEST 2015)*, September 3-5, Rhodes, Greece.
- 16 • Liodakis, S., **Kyriakidis**, P.C., and Gaganis, P. (2015): Efficient uncertainty analysis in a three dimensional hydrogeological model of flow and transport, in: *Proceedings of the 14th International Conference on Environmental Science and Technology (CEST 2015)*, September 3-5, Rhodes, Greece.
- 15 • Mwenda, K., **Kyriakidis**, P., and López-Carr, D. (2015): Exploring HIV prevalence estimates using fine-scale population estimates: Evidence from three Tanzanian districts, in: *Proceedings of the 19th European Colloquium on Theoretical and Quantitative Geography (ECTQG2015)*, Bari, Italy, 3-7 September 2011. Draft also published in: *Plurimondi. An International Forum for Research and Debate on Human Settlements*, 7(15), in press.
- 14 • López-Carr, D., Mwenda, K.,M., Pricope, N.G., **Kyriakidis**, P.C., Jankowska, M.M., Weeks, J., Funk, C., Husak, G., and Michaelsen, J. (2015): A spatial analysis of climate-related child malnutrition in the Lake Victoria basin, in: *Proceedings of the 2015 International Geoscience and Remote Sensing Symposium (IGARSS 2015)*, July 26-31, Milan, Italy.
- 13 • **Kyriakidis**, P.C., Vasios, G., and Kitsiou, D. (2015): Delineating sea surface water quality regions from remotely sensed data using textural information, in: Hadjimitsis, D., Themistocleous, K., Michaelides, S., and Papadavid, G. (Eds.), *Proceedings of SPIE 9535, Third International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2015)*, 95351W (June 19, 2015); doi:10.1117/12.2192565.

Publications

- 12 • Vasios, G.K., **Kyriakidis**, P.C., and Kitsiou, D. (2015): Incorporating multivariate spatial association information for delineating sea water quality regions over the Aegean, in: *Proceedings of the 11th Panhellenic Symposium on Oceanography and Fisheries: Aquatic Horizons Challenges and Perspectives*, pp 889-892, May 13-17, Mytilene, Lesvos, Greece.
- 11 • **Kyriakidis**, P.C., Kitsiou, D., and Kavroudakis, D. (2013): Multivariate variogram and madogram: Tools for quantifying diversity/dissimilarity in spatiotemporal data, in: E. Pardo-Igúzquiza, C. Guardiola-Albert, J. Hereida, L. Moreno-Merino, J.J. Durán, J.A. Vargas-Guzmán, Editors, *Mathematics of Planet Earth, Proceedings of the 15th Annual Conference of the International Association for Mathematical Geosciences*, Madrid, Spain, September 2013, Lecture Notes in Earth System Sciences, Springer, pp. 235–238.
- 10 • Zargli, E., Liodakis, S., **Kyriakidis**, P., and Savvaidis, A. (2013): Classification of topography using DEM data and its correlation with the geology of Greece, *First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013)*, edited by: Diofantos G. Hadjimitsis, Kyriacos Themistocleous, Silas Michaelides, George Papadavid, Proc. of SPIE Vol. 8795, doi: 10.1117/12.2028801, Paphos, Cyprus, April 2013.
- 9 • Maina, I., Siapatis, A., Kavadas, S., **Kyriakidis**, P., Georgakarakos, S., and Somarakis, S. (2012): Geographic Information Systems and Generalized Additive Models for predicting potential spawning habitats of anchovy (in Greek), in *Proceedings of the 10th Panhellenic Symposium of Oceanography and Fisheries*, Athens, Greece, May 2012.
- 8 • Kavroudakis, D., and **Kyriakidis**, P.C. (2011): Towards an artificial intelligence health decision support system, in: *Proceedings of the 17th European Colloquium on Theoretical and Quantitative Geography (ECTQG2011)*, Harokopeio University, Athens, Greece, September 2-5, 2011.
- 7 • **Kyriakidis**, P.C. (2011): Popular cartographic areal interpolation methods viewed from a geostatistical perspective, in *Proceedings of the 25th International Cartographic Conference*, Paris, France, July 2011.
- 6 • Papakonstantinou, A., Varsamis, D., Soulakellis, N., and **Kyriakidis**, P.C. (2011): Inset Mapper: A tool for scale selection and inset placing configuration of multiple insets in island cartography, in *Proceedings of the 25th International Cartographic Conference*, Paris, France, July 2011.
- 5 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F. (2009): Prediction and simulation in categorical fields: A transition probability combination approach, in: *Proceedings of the 17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, Seattle, Washington, November 2009.
- 4 • Zhang, J., Goodchild, M.F., **Kyriakidis**, P.C., and Rao, X. (2006): Categorical mapping and error modeling based on the discriminant space. in: J. Gong, and J. Zhang (Eds.), *Proceedings of SPIE – Volume 6420, Geoinformatics 2006: Geospatial Information Science*, 64201H.
- 3 • **Kyriakidis**, P.C. (2005): Sequential spatial simulation using Latin hypercube sampling, in: O. Leuangthong, and C.V. Deutsch (Eds.), *Geostatistics Banff 2004: Seventh International Geostatistics Congress*, Quantitative Geology and Geostatistics, 14(1): 65–74, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Publications

- 2 • **Kyriakidis**, P.C., and Journel, A.G. (1999): Stochastic modeling of spatiotemporal distributions: Application to sulphate deposition trends over Europe, in: J. Gomez-Hernandez, A. Soares, and R. Froidevaux (Eds.), *geoENV II Geostatistics for Environmental Applications*, Quantitative Geology and Geostatistics, 10: 89–100, Kluwer Academic Publishers, Dordrecht, The Netherlands.
- 1 • **Kyriakidis**, P.C. (1997): Selecting panels for remediation in contaminated soils via stochastic imaging, in: E.Y. Baafi, and N.A. Schofield (Eds.), *Geostatistics Wollongong '96*, Quantitative Geology and Geostatistics, 8(2): 973–983, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Dissertations

- 1 • **Kyriakidis**, P.C. (1999): *Stochastic Simulation of Spatiotemporal Phenomena*, Ph.D. Dissertation, Branner Earth Sciences Library, Stanford University, 220p.

Books

- 1 • Journel A.G., and **Kyriakidis**, P.C. (2004): *Evaluation of Mineral Reserves: A Simulation Approach*, Oxford University Press, Applied Geostatistics Series, 216p.

Peer-Reviewed Book Chapters

- 3 • Kavroudakis, D., and **Kyriakidis**, P. (2014): DTH 1.0: Towards an artificial intelligence decision support system for geographical analysis of health data, in: Koutsopoulos, K., and Photis, G. (Eds.), *Geospatial Technologies and Geographical Issues*, ISBN: 9783863874704.
- 2 • **Kyriakidis**, P.C., Liu, X., and Goodchild, M.F. (2004): Geostatistical mapping of thematic classification uncertainty, in: Lunetta, R.S., and Lyon, J.G. (Eds.), *Remote Sensing and GIS Accuracy Assessment*, p. 145–162, CRC Press, Boca Raton, FL. Also appearing In: *Geospatial Data Accuracy Assessment Report*, EPA/600/R-03/64, p. 171–190.
- 1 • **Kyriakidis**, P.C. (2001): Geostatistical models of uncertainty for spatial data, in: Hunsaker, C.T., Goodchild, M.F., Friedl, M.A., and Case, T.J. (Eds.), *Spatial Uncertainty in Ecology: Implications for Remote Sensing and GIS Applications*, p. 175–213, Springer-Verlag, New York.

In Scientific Newsletters

- 1 • Cao, C., **Kyriakidis**, P.C., and Goodchild, M.F. (2011): PhD Showcase: A geostatistical framework for categorical spatial data modeling, *Newsletter of the Association for Computing Machinery Special Interest Group on Spatial Information – The SIGSPATIAL Special*, 3(3), 4–9.

Book Reviews

- 1 • **Kyriakidis**, P.C. (2003): Geostatistics for Environmental Scientists, *International Journal of Geographical Information Science*, 17(2): 198–199.

Publications

In Conference Proceedings (not peer-reviewed)

accepted after extended abstract review

- 17 • Kavroudakis, D., Vasios, G. **Kyriakidis**, P. (2014): Quantification of multivariate (dis)similarity in geospatial data with the use of Free/Open source software (in Greek), in: *Proceedings of the 8th Panhellenic Conference of the Hellenic Association for Geographical Information Systems (HellasG.I.s)*, Athens, Greece, December 11-12, 2014.
- 16 • **Kyriakidis**, Ph., Polydoropoulos, I., and Kizos, Th.: Global and local indicators of multivariate spatial association: A case study of accessibility between islands of the North and South Aegean prefectures and Attica, *10th International Congress of the Hellenic Geographical Society*, Thessaloniki, Greece, October 2014.
- 15 • Liodakis, S., **Kyriakidis**, Ph., and Gaganis, P.: Latin hypercube simulation of hydraulic conductivity fields for efficient parameter uncertainty assessment in flow and transport problems, *10th International Congress of the Hellenic Geographical Society*, Thessaloniki, Greece, October 2014.
- 14 • Ravulaparthi, S., Goulias, K.G., Sweeney, S., and **Kyriakidis**, P.C. (2013): Exploring the spatial and temporal patterns of business concentration and dispersion: A case study of analysis for County of Santa Barbara, in proceedings of: *52nd Annual Meeting of Western Regional Science Association*, Santa Barbara, CA, February 24-27, 2013.
- 13 • Kalabokidis, K., Palaiologou, P., and **Kyriakidis**, P.C. (2010): Forest fire fuels mapping by geoinformatics for fire behavior modeling, in: D.X. Viegas (Ed.), *Proceedings of the 6th International Conference on Forest Fire Research*, Coimbra, Portugal, November 2010.
- 12 • **Kyriakidis**, P.C., and Cao, G. (2010): Generating fine resolution area class maps subject to coarser resolution data constraints, in: R.S. Purves, and R. Weibel (Eds.), *GIScience 2010: Extended Abstracts Volume of the 6th International Conference on Geographic Information Science*, Zurich, Switzerland, September 2010.
- 11 • **Kyriakidis**, P.C., and Nagle, N.N. (2010): Geostatistical regression for areal data, in: N. Tate, and P. Fisher (Eds.), *Proceedings of the 9th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Leicester, UK, June 2010.
- 10 • Cao, G., and **Kyriakidis**, P.C. (2008): Combining transition probabilities in the prediction and simulation of categorical fields, in: J. Zhang, and M.F. Goodchild (Eds.), *Proceedings of the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Shanghai, China, June.
- 9 • Zhang, J., **Kyriakidis**, P.C., and Kelly, R. (2008): Geostatistical approaches to conflation of continental snow data, in: J. Zhang, and M.F. Goodchild (Eds.), *Proceedings of the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Shanghai, China, June 2008.
- 8 • Boucher, A., and **Kyriakidis**, P.C. (2006): Geostatistical solutions for super-resolution land cover mapping, in: *Proceedings of the 2006 Annual Conference of the Remote Sensing and Photogrammetry Society*, Cambridge, UK, September 2006.
- 7 • **Kyriakidis**, P.C. (2006) Towards a systems approach to the visualization of spatial uncertainty, in: M. Caetano, and M. Painho (Eds.), *Proceedings of the 7th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Lisbon, Portugal, July 2006.

Publications

- 6 • **Kyriakidis**, P.C., Schneider, P., and Goodchild, M.F. (2005): Fast geostatistical areal interpolation, in: Y. Xie, and D. Brown (Eds.), *Proceedings of the 8th International Conference on Geocomputation*, Ann Arbor, Michigan, August 2005.
- 5 • Yoo, E.-H., and **Kyriakidis**, P.C. (2005): Area-to-point Kriging with inequality-type data, in: Y. Xie, and D. Brown (Eds.), *Proceedings of the 8th International Conference on Geocomputation*, Ann Arbor, Michigan, August 2005.
- 4 • Goodchild, M.F., **Kyriakidis**, P.C., Schneider, P., and Sifuentes, J. (2005): Uncertainty and interoperability: The areal interpolation problem. in: L. Wu, W. Shi, Y. Fang, and Q. Tong (Eds.), *Proceedings of the 4th International Symposium on Spatial Data Quality (ISSDQ 05)*, Beijing, China, August 2005.
- 3 • **Kyriakidis**, P.C, and Yoo, E.-H. (2003): Geostatistical prediction/simulation of point values from areal data, in: D. Martin (Ed.), *Proceedings of the 7th International Conference on Geocomputation*, Southampton, UK, September 2003.
- 2 • **Kyriakidis**, P.C., Miller, N.L., and Kim, J. (2002): A spatial time series framework for modeling daily precipitation at regional scales, in: *Proceedings of the 82nd Annual Meeting of the American Meteorological Society*, Orlando, FL, January 2002.
- 1 • **Kyriakidis**, P.C. (1999): Stochastic imaging for assessing the impact of imprecise spatial information on ecological models, in: *Proceedings of the International Statistical Institute (ISI) Cutting Edge Conference on Spatial Statistics for Production Ecology: GIS, Remote Sensing, and Modeling*, Wageningen, The Netherlands, April.

In Peer-Reviewed Conference Abstracts

- 23 • Zevgolis, Y., Vasios, G.K., **Kyriakidis**, P.C., Troumbis, A.Y. (2015): Thermal map analysis of tree trunks in urban parks with spatial statistics, in: *18th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region*, September 26-30, Crete, Greece.
- 22 • Vasios, G.K., **Kyriakidis**, P.C., Dimitrakopoulos, P.G. (2015): Analyzing spatial distribution of plant species in a Mediterranean island: A geostatistical approach, in: *13th European Ecological Federation (EEF): Ecology at the Interface, Science-Based Solutions for Human Well-Being*, September 21-25, Rome, Italy.
- 21 • Liodakis, S.C., **Kyriakidis**, P.C., and Gaganis, P.: Geostatistical sampling methods for efficient uncertainty analysis in flow and transport problems, in: *European Geosciences Union General Assembly 2015, Session on Nonlinear Processes in Geosciences (General)*, Vienna, Austria, April 12-17, 2015.
- 20 • Vasios, G.K., **Kyriakidis**, P.C. Dimitrakopoulos, P.G. (2014): Geostatistical analysis of plant species spatial distribution: The case of Crete (in Greek), in: Dimitrakopoulos, P.G., Kokkoris, G.D. (Eds.), *Abstracts Book of the 7th Panhellenic Conference of Ecology: Connecting Systems, Scales and Research Fields*, October 9-12, Mytilene, Greece.
- 19 • **Kyriakidis**, P., Liodakis, S., and Gaganis, P. (2014): Likelihood-representative sampling from (log)normal random field models, in: *10th Conference on Geostatistics for Environmental Applications (geoENV2014)*, July 7-11, Paris, France.
- 18 • **Kyriakidis**, P.C.: Computationally efficient uncertainty propagation for spatially distributed models, *17th European Colloquium on Theoretical and Quantitative Geography (ECTQG2011)*, Harokopeio University, Athens, Greece, September 2011.

Publications

- 17 • **Kyriakidis**, P.C.: Latin hypercube sampling of Gaussian random fields on very large regular grids, *Spatial Statistics 2011 – Mapping Global Change*, University of Twente, Enschede, The Netherlands, March 2011.
- 16 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F.: Prediction and simulation in categorical fields: A transition probability combination approach, *IAMG'09: Annual Meeting of the International Association for Mathematical Geosciences*, Stanford, CA, August 2009.
- 15 • Legleiter, C.J., McDonald, R., **Kyriakidis**, P.C., and Nelson, J.M.: Effects of uncertain topographic input data on two-dimensional modeling of flow hydraulics, habitat suitability, and bed mobility, *American Geophysical Union, Fall Meeting 2009*, San Francisco, CA, December 2009.
- 14 • **Kyriakidis**, P.C.: Perspectives on geostatistical downscaling, *Invited keynote presentation: geoENV 2008: 7th International Conference on Geostatistics for Environmental Applications*, Southampton, UK, September 2008.
- 13 • **Kyriakidis**, P.C., Nagle, N.N., and Goodchild, M.F.: Geostatistical alternatives for incorporating covariates in areal interpolation, *Geocomputation 2007*, National Center for Geocomputation, Maynooth, Ireland, September 2007.
- 12 • Legleiter, C.J., Wyzga, M.A., Faulkenberry, K., Encinas, D., **Kyriakidis**, P.C., and Thomas, D.: Morphologic response of a restored, gravel-bed reach of the Merced river to sustained high flows, *2006 CALFED Science Conference*, Sacramento, CA, October 2006.
- 11 • Schneider, P., and **Kyriakidis**, P.C.: Improving spatial support interoperability in GIS using geostatistics: An areal interpolation toolbox, *GIScience 2006, 4th International Conference on Geographic Information Science*, Münster, Germany, September 2006.
- 10 • Schneider, P., Roberts, D.A., and **Kyriakidis**, P.C.: Using MODIS data as the remote sensing input to the Fire Potential Index, *American Geophysical Union, Fall Meeting 2006*, San Francisco, CA, December 2006.
- 9 • Holmes, K.W., **Kyriakidis**, P.C., Chadwick, O.A., Matricardi, E., Soares, J., and Roberts, D.A.: Environmental controls on multi-scale soil nutrient variability in the tropics: The importance of land-cover change, *American Geophysical Union, Fall Meeting 2003*, San Francisco, CA, December 2003.
- 8 • **Kyriakidis**, P.C., and J. Zhang, J.: A geostatistical framework for accuracy assessment of remotely sensed land-cover information, *7th International Conference on Geocomputation*, Southampton, UK, September 2003.
- 7 • Washburn, L., **Kyriakidis**, P.C., Yoo, E.-H., and Clark, J.: Spatial scales and distribution of hydrocarbon seeps near Coal Oil Point, California, *Annual meeting of the American Association of Petroleum Geologists*, Salt Lake City, UT, May 2003.
- 6 • Rogan, J., **Kyriakidis**, P.C., and Stow, D.: Evaluation of thematic change map classification using geostatistical methods, *2nd International Conference on Geographic Information Science*, Boudler, CO, September 2002.
- 5 • Fabrikant, S.I., and **Kyriakidis**, P.C.: Geovizualization of large databases and spatial uncertainty, *invited presentation in the session on Visualization Technology and Geographical Information Science sponsored by the University Consortium on Geographic Information Science (UCGIS)*, *Joint Statistical Meetings*, New York, NY, August 2002.
- 4 • **Kyriakidis**, P.C., Liu, X., and Goodchild, M.F.: A probabilistic framework for improved accuracy assessment of thematic classification, *Remote Sensing and GIS Accuracy Assessment Symposium*, U.S. Environmental Protection Agency, Las Vegas, NV, December 2001.

Publications

- 3 • **Kyriakidis**, P.C.: Graduate deformation of conditional stochastic simulations for dynamic visualization of spatial uncertainty, *GIScience 2000: 1st International Conference on Geographic Information Science*, Savannah, GA, October 2000.
- 2 • **Kyriakidis**, P.C.: Stochastic imaging for assessing the impact of imprecise spatial information on ecological models, invited keynote presentation, *International Statistical Institute (ISI) Cutting Edge Conference on Spatial Statistics for Production Ecology: GIS, Remote Sensing, and Modeling*, Wageningen, The Netherlands, April 1999.
- 1 • **Kyriakidis**, P.C.: Geostatistical models for integrating indirect (soft) data into spatial uncertainty assessment, *American Geophysical Union (AGU) Chapman-Soil Science Society of America (SSSA) Outreach Conference: Applications of GIS, Remote Sensing, Geostatistics, and Solute Transport Modeling to the Assessment of Non-point Source Pollutants in the Vadose Zone*, Riverside, CA, October 1997.

In Conference Abstracts (not peer-reviewed)

- 13 • Cao, G., Clarke, K., Goodchild, M., Wang, S., and **Kyriakidis**, P.: A spatial multinomial logistic mixed model for mapping thematic classification uncertainty, *108th Annual Meeting of the Association of American Geographers*, New York, NY, February 2012.
- 12 • Guan, Q., **Kyriakidis**, P.C., and Goodchild, M.F.: Speeding up geostatistical areal interpolation using parallel computing technology, *107th Annual Meeting of the Association of American Geographers*, Seattle, Washington, April 2011.
- 11 • Cao, G., **Kyriakidis**, P.C., and Goodchild, M.F.: Transition probability-based geostatistical methods for modeling categorical spatial data, *106th Annual Meeting of the Association of American Geographers*, Washington, DC, April 2010.
- 10 • Cao, G., and **Kyriakidis**, P.C.: An approach for combining spatial transition probabilities in the prediction and simulation of categorical fields, *105th Annual Meeting of the Association of American Geographers*, Las Vegas, NV, March 2009.
- 9 • Schneider, P., Roberts, D.A., and **Kyriakidis**, P.C.: Evaluation of MODIS time-series for wildfire susceptibility assessment in southern California, *103rd Annual Meeting of the Association of American Geographers*, San Francisco, CA, April 2007.
- 8 • Yoo, E.-H., and **Kyriakidis**, P.C.: Area-to-point coKriging in spatial hedonic pricing models, *103rd Annual Meeting of the Association of American Geographers*, San Francisco, CA, April 2007.
- 7 • Nagle, N., Sweeney, S., and **Kyriakidis**, P.C.: Change of support and the regression analysis of areally aggregated data, *102nd Annual Meeting of the Association of American Geographers*, Chicago, IL, March 2006.
- 6 • Quan, Q., **Kyriakidis**, P.C., and Goodchild, M.F.: Parallel computing for geostatistical areal interpolation, *102nd Annual Meeting of the Association of American Geographers*, Chicago, IL, March 2006.
- 5 • Yoo, E.-H., and **Kyriakidis**, P.C.: Extension of a geostatistical framework for reconstructing population density surfaces, *102nd Annual Meeting of the Association of American Geographers*, Chicago, IL, March 2006.
- 4 • **Kyriakidis**, P.C. (2005): A Geostatistical Framework for area-to-point spatial interpolation, *101st Annual Meeting of the Association of American Geographers*, Denver, CO, April 2005.

Publications

- 3 • Schneider, P., Goodchild, M.F., **Kyriakidis**, P.C., Guan, Q., Hastings, J., and Rice, M.: A framework for areal interpolation and its applications for geospatial data interoperability in a distributed GIS environment, *101st Annual Meeting of the Association of American Geographers*, Denver, CO, April 2005.
- 2 • **Kyriakidis**, P.C.: A systems approach to the visualization of spatial uncertainty, *Centennial Annual Meeting of the Association of American Geographers*, Philadelphia, PA, March 2004.
- 1 • **Kyriakidis**, P.C.: On the use of interpolation in spatial analysis, *98th Annual Meeting of the Association of American Geographers*, Los Angeles, CA, March 2002.

In Proceedings of Research Unit Meetings

- 5 • Boucher, A., and **Kyriakidis**, P.C. (2006): Super-resolution land cover mapping with indicator geostatistics, in: *Proceedings of the 19th Annual Meeting of the Stanford Center for Reservoir Forecasting*, Stanford University, CA, May 2006.
- 4 • Liu, Y., Jiang, Y., and **Kyriakidis**, P.C. (2006): Calculation of average covariance using Fast Fourier Transform (FFT), in: *Proceedings of the 19th Annual Meeting of the Stanford Center for Reservoir Forecasting*, Stanford University, CA, May 2006.
- 3 • **Kyriakidis**, P.C., Journel, A.G., and Mao, S. (1999): Correcting the smoothing effect of estimators: A spectral post-processor, in: *Proceedings of the 12th Annual Meeting of the Stanford Center for Reservoir Forecasting*, Stanford University, CA, May 1999.
- 2 • **Kyriakidis**, P.C. (1998): Stochastic modeling of spatiotemporal distributions: Application to monitoring sulphate deposition over Europe, in: *Proceedings of the 11th Annual Meeting of the Stanford Center for Reservoir Forecasting*, Stanford University, CA, May 1998.
- 1 • **Kyriakidis**, P.C. (1997): Stochastic models for spatiotemporal phenomena: A review and a proposal, in: *Proceedings of the 10th Annual Meeting of the Stanford Center for Reservoir Forecasting*, Stanford University, CA, May 1997.

Presentations

In Meetings & Workshops

- **Kyriakidis**, P.: A geostatistical framework for studying the modifiable area unit and ecological inference problems, *8th Conference of the Hellenic Society for Geographical Information Systems*, Athens, Greece, December 2014.
- López-Carr D., Bookhagen, B., and **Kyriakidis**, P.: A Vision for Geography: Dynamic Integration of Human and Physical Sciences in Space and Place, *76th Annual Meeting of the Association of Pacific Coast Geographers*, Lake Tahoe, CA, September 2013.
- **Kyriakidis**, P.C.: Spatial uncertainty and decision making. *Vespucci Institute: Synthesizing Population, Health, and Place*, Wrigley Marine Science Center, University of Southern California, Catalina Island, CA, April 2013.
- **Kyriakidis**, P.C.: Applications of geostatistics in hydrocarbon research: Data integration, geo-model development and uncertainty. *Hydrocarbon Prospecting, Research and Exploitation*, Aristotle University of Thessaloniki, Greece, March 2012.

Presentations

- Sales, M.H., Souza, C., **Kyriakidis**, P.C., Roberts, D.A., and Vidal, E.J.: Estimating above-ground forest biomass using geostatistics: A case study of Rondonia, southern Brazilian Amazon. *LBA-ECO 9th Science Team Meeting*, Sao Paulo, Brazil, November 2005.
- Goodchild, M.F., **Kyriakidis**, P.C., Schneider, P., Guan, Q., and Rice, M.: Improving spatial support interoperability: A computationally fast, geostatistical approach and its GIS implementation, *Army Research Office Principal Investigator Research Review Meeting*, US Army Corps of Engineers Topographical Engineering Center, Ft. Belvoir, VA, September 2005.
- Goodchild, M.F., **Kyriakidis**, P.C., Schneider, P., Guan, Q., and Rice, M.: Improving spatial support interoperability: A computationally fast, geostatistical approach and its GIS implementation, *National Geospatial-Intelligence Agency Academic Research Program Symposium (NARP)*, National Academy of Sciences, Washington, D.C., September 2005.
- Goodchild, M.F., **Kyriakidis**, P.C., Schneider, P., Rice, M., Guan, Q., and Hastings, J.: Improving spatial data interoperability: A framework for geostatistical support-to-support interpolation, *U.S. Army Research Office Principal Investigator Research Review Meeting*, US Army Corps of Engineers Topographical Engineering Center, Ft Belvoir, VA, February 2005.
- **Kyriakidis**, P.C.: Some geostatistical concepts for interoperability, *NCGIA Specialist Meeting on Spatial Webs*, Santa Barbara, CA, December 2004.
- Goldsberry, K., Fabrikant, S.I., and **Kyriakidis**, P.C.: The influence of classification choice on animated choropleth maps, *Annual Meeting of the North American Cartographic Society*, Portland, Maine, October 2004.
- Loague, K., and **Kyriakidis**, P.C.: R-5 revisited, again: A closer look at the spatial and temporal variability in an infiltration data set for a small rangeland catchment, invited presentation, *Workshop on Scale Problems in Hydrology*, Schlob Krumbach, Austria, June 1996.

Seminars & Colloquia

All presentations are given by **Kyriakidis**, unless otherwise noted

- Efficient uncertainty assessment methods in spatially distributed hydrogeological models of flow and transport, (presented by Liodakis, S.), in: *Space-Time Stochastic Models and their Applications*, Scientific Workshop, Geostatistics Laboratory, School of Mineral Resources Engineering, Technical University of Crete, September, 2015
- Efficient simulation of (log)normal random fields for hydrogeological applications, *Department of Mathematics and Statistics Seminar Series*, University of Cyprus, Nicosia, Cyprus, November 2013.
- Dynamic visualization of spatial uncertainty with geostatistics, *Geomatics Seminar Series*, Department of Civil, Environmental and Geomatic Engineering, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, September 2011.
- Recent developments in reconstructing attribute surfaces from areal data, *Postgraduate Colloquium Series*, Department of Geography, Harokopion University, Athens, Greece, May 2011.
- An overview of geostatistical modeling concepts, *Colloquium Series*, Department of Geomatics Engineering, Inha University, Incheon, South Korea, September 2010.
- Super-resolution simulation of land cover patterns, *GISLERS Summer School: Bridging GIS, Landscape Ecology and Remote Sensing for Landscape Planning*, Centre for Geoinformatics, University of Salzburg, Salzburg, Austria, July 2009.
- Some geostatistical approaches for downscaling spatial data, *Colloquium Series*, Department of Geography, San Diego State University, San Diego, December 2008.

Presentations

- Geostatistical super-resolution land cover mapping from coarse class fractions, *Colloquium Series*, Department of Geography, University of Colorado, Boulder, March 2008.
- Geostatistical approaches for super-resolution land cover mapping, *National Center for Geocomputation Seminar Series*, National Center for Geocomputation, Maynooth, Ireland, February 2008.
- Evaluation of recoverable mineral reserves: A geostatistical simulation approach, *Director's Seminar Series*, Greek Geological Institute, Athens, Greece, May 2006.
- Geostatistical super-resolution land cover mapping, *Post-Graduate Seminar Series on Geography and Applied Geographic Information Science*, Department of Geography, University of the Aegean, Greece, May 2006.
- Areal interpolation from an inverse problem perspective: Geostatistical solutions and some well-known particular cases, *Colloquium on Geographic Information Science*, Department of Geography, University of Zurich, Switzerland, May 2006.
- Super-resolution land cover mapping with indicator geostatistics, *Brown-Bag Seminar*, Department of Geography, University of Zurich, Switzerland, May 2006.
- Schneider, P., **Kyriakidis**, P.C., Goodchild, M.F., Guan, Q., and Rice, M.: Applications of geostatistics for improving spatial support Inter-operability of GIS, *Joint Colloquium of the University of Redlands Master's of GIS Program and the Environmental Systems Research Institute (ESRI)*, Environmental Systems Research Institute, Redlands, CA, October 2005.
- On the role of geostatistics in spatial analysis, *Geographic Science Seminar "Why Space Matters"*, Department of Geological and Environmental Sciences, Stanford University, CA, May 2005.
- Spatial analysis of areal data: The geostatistical alternative, *NCGIA Brown-Bag Seminar*, Department of Geography, UCSB, October 2003.
- Area-to-point spatial interpolation using geostatistics, *Quantitative Methods in Social Sciences Colloquium*, UCSB, April 2003.
- Changing spatial resolution using geostatistics, *NCGIA Brown-Bag Seminar*, Department of Geography, UCSB, November 2002.
- Dynamic visualization of spatial uncertainty via gradual deformation of conditional stochastic simulations, *Department of Geography Colloquium Series*, UCSB, February 2001.
- On the role of geostatistics in geographical information science, *Department of Geography Colloquium Series*, UCSB, January 2000.
- Geostatistics for environmental applications, *Earth Sciences Division Colloquium Series*, Berkeley National Laboratory, May 1999.
- Modern geostatistics: A comprehensive framework for environmental risk assessment, *Donald Bren School of Environmental Science and Management Colloquium Series*, UCSB, February 1999.
- Geostatistical space-time models and their application to monitoring sulphate deposition, *Hydrogeology Seminar Series*, Department of Geological and Environmental Sciences, Stanford University, January 1999.
- Stochastic space-time models for sulphate deposition, *Earth Sciences Division Colloquium*, NASA-Ames Research Center, January 1999.
- Beyond summary statistics for assessing accuracy in digital elevation models, *NCGIA Brown Bag Seminar*, Department of Geography, UCSB, August 1997.

Presentations

- Geostatistical space-time models, *NCGIA Brown-Bag Seminar*, Department of Geography, UCSB, July 1997.
- Stochastic imaging for spatial uncertainty assessment and integration of secondary (soft) information, *NCGIA Brown-Bag Seminar*, Department of Geography, UCSB, May 1997.
- Selecting panels for remediation in contaminated soils via stochastic imaging, *Environmental and Earth Sciences Division Colloquia*, Sandia National Laboratory, July 1996.
- Selecting panels for remediation in contaminated soils via stochastic imaging, *Environmental and Earth Sciences Division Colloquia*, Los Alamos National Laboratory, July 1996.

Posters

- Lioudakis, S.C., **Kyriakidis**, P.C., and Gaganis, P.: Geostatistical sampling methods for efficient uncertainty analysis in flow and transport problems, in: *European Geosciences Union General Assembly 2015, Session on Nonlinear Processes in Geosciences (General), Poster Session NP1.3/HS2.3.16, Uncertainty, Sensitivity Analysis and Efficient Diagnostics in Geosciences*, Vienna, Austria, April 12-17, 2015.
- **Kyriakidis**, P.C., Vasios, G.K., and Kitsiou, D.: Delineating sea surface water quality regions from remotely sensed data using textural information, *Third International Conference on Remote Sensing and Geoinformation of Environment (RSCy 2015)*, Paphos, Cyprus, March 2015.
- Menzer, O., Meiring, W., **Kyriakidis**, P.C., and McFadden, J.P.: Post processing of CO_2 flux measurements from an urban landscape, *Fall Meeting of the American Geophysical Union*, San Francisco, CA, December 2013.
- Prentice, S.E., **Kyriakidis**, P., Bookhagen, B., Chadwick, O.A.: Soil-landscape modeling of coastal California hillslopes using terrestrial LIDAR: *AGU Chapman Conference on Soil-Mediated Drivers of Coupled Biogeochemical and Hydrological Processes Across Scales*, Tucson, AZ, October, 2013.
- Schneider, P., Roberts, D.A., and **Kyriakidis**, P.C.: Using MODIS data as the remote sensing input to the Fire Potential Index, *Fall Meeting of the American Geophysical Union*, San Francisco, CA, December 2006.
- Holmes, K.W., **Kyriakidis**, P.C., Chadwick, O.A., Matricardi, E., Soares, J., and Roberts, D.A.: Environmental controls on multi-scale soil nutrient variability in the tropics: The importance of land-cover change, *American Geophysical Union, Fall Meeting 2003*, San Francisco, CA, December 2003.
- Holmes, K.W., **Kyriakidis**, P.C., Chadwick, O.A., Matricardi, E., Soares, J., and Roberts, D.A.: Impact of land-cover change on soil nutrient levels at multiple spatial scales, *7th LBA-ECO Science Team Business Meeting*, Fortaleza, Ceara, Brazil, November 2003.
- Holmes, K.W., **Kyriakidis**, P.C., Chadwick, O.A., Matricardi, E., Soares, J., Roberts, D.A.: Controls on plant-available soil nutrients in the tropics at multiple spatial scales, *5th Conference of the Commission on Pedometrics of the International Union of Soil Sciences*, Reading, UK, September 2003.
- Rogan, J., **Kyriakidis**, P.C., and Stow, D.: Evaluation of thematic change map classification using geostatistical methods, *2nd International Conference on Geographic Information Science*, Boudler, CO, September 2002.

Presentations

- Holmes, K.W., **Kyriakidis**, P.C., Matricardi, E., Batista, G.T., Chadwick, O.A.: Modeling regional soil patterns based on lithology and topographic attributes, *LBA-Ecology International Science Meeting*, Manaus, Brazil, July 2002.

Scientific Recognition

Citations to Published Work

- Web Sc. • Number of citations = 1399. Number of citations not including self-citations = 1355. **h-index = 20**. Search date: September 13, 2015.
- Scopus • Number of citations = 1479. **h-index = 22**. Number of citations excluding self citations of all (co)authors = 1438. **h-index = 22**. Search date: September 13, 2015.
- Scholar • Number of citations = 2310. **h-index = 26**. Search date: September 13, 2015.

Keynote Speaker

- 2008 • Perspectives on geostatistical downscaling, *geoENV 2008: 7th International Conference on Geostatistics for Environmental Applications*, Southampton, UK, September 8-10.
- 2006 • Towards a systems approach to the visualization of spatial uncertainty, *7th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Lisbon, Portugal, July 5-7.
- 1999 • Stochastic imaging for assessing the impact of imprecise spatial information on ecological models, *International Statistics Institute (ISI) Cutting Edge Conference on Spatial Statistics for Production Ecology, GIS, Remote Sensing, and Modeling*, Wageningen, The Netherlands, April 19-21.
- 2002 • Plenary discussant: Spatial Analysis and Modeling (SAM) Specialty Group of the Association of American Geographers (AAG), *98th Annual Meeting of the Association of American Geographers*, Los Angeles, CA, March 19-23.

Research Distinctions

- See also section on Honors, Distinctions & Awards on page 2.
- 2012 • Advancement to 2nd evaluation stage of European program IDEAS: Research proposal entitled *Geostatistical Population Disaggregation* (€1,022,520) advanced to the 2nd stage of evaluation (but was not selected for funding in the final evaluation) in the Advanced Grants competition of the program IDEAS administered by the European Research Council (ERC). The proposal was submitted to the Social Sciences & Humanities panel, and was the 1st Greek proposal to advance to the 2nd stage of evaluation for this panel since the commencement of the program in 2007.

Editorial Boards

- 2014- • *Geographical Analysis*, Wiley, **Associate Editor**
- 2012- • *Spatial Statistics*, Elsevier, Member of Editorial Board

Scientific Recognition

- 2007- • International Journal of Geographical Information Science, Taylor & Francis, Member of Editorial Board

Scientific Committees & Panels

- 2006-07 • Encyclopedia of GIS: **Field Editor** for the field of *Spatial Uncertainty and Imprecision* in the encyclopedia edited by S. Shekhar and H. Xiong, and published in 2007 by Springer
- 2005-06 • UCGIS GI S&T Body of Knowledge: **Advisory board member** for the Model Curriculum Project for Geographic Information Science & Technology, sponsored by the University Consortium for Geographic Information Science (UCGIS)
- NSF Geography & Regional Science DDRI panelist: **Panel member** for the Doctoral Dissertation Research Improvement grants awarded by the Geography & Regional Science Program of the National Science Foundation (NSF)

Offices in Professional Organizations

- 2015- • Board member of HellasGIS, the Hellenic Geographic Information Systems Society
- 2004-07 • Board member of the Spatial Analysis and Modeling (SAM) specialty group of the Association of American Geographers (AAG)

Invited Visits

- 2014 • Visiting Scholar (June 09-16) to the Department of Geography of the University of Southampton, UK, under the auspices of the Erasmus Mundus MSc Program “Geo-Information Science for Environmental Modelling and Management”, hosted by Prof. Peter Atkinson

Post-Doctoral Researchers

- 2013 • Dr. Dimitris Kavroudakis Geographer, PhD University of Sheffield, UK. Funding source: Greek General Secretariat of Research and Technology.
- 2008 • Dr. No-Wook Park: Senior researcher from the (South) Korea Institute of Geoscience and Mineral Resources (KIGAM). Funding source: Fellow of the (South) Korea Research Foundation from January 2008 through August 2008. Current affiliation: Assistant Professor, Department of Geomatics Engineering, Inha University, South Korea.

Teaching

UCSB Catalog Courses

- Geog 279 • Seminar in Geostatistics: Advanced Topics in Spatial Statistics (Graduate, elective, 3 units). Quarters taught: Winter 2007, 2005, 2004, 2003. As Geog 276C: Winter 2002, 2001. Catalog course description: Research frontiers in geostatistics, and innovative application of spatial statistics to the analysis of geographical data.

Teaching

- Geog 278 • Practice of Geostatistical Modeling of Spatial Data (Graduate, elective, 5 units). Quarters taught: Winter 2014, Fall 2012, 2008, 2007, 2006, 2005, 2004, 2003. As Geog 276A: Fall 2002, 2001. Catalog course description: Practice of geostatistics on large environmental data sets using MATLAB. Methods for modeling spatial patterns, integrating spatial data across multiple spatial scales, and simulating complex spatial distributions.
- Geog 210C • Analytical Methods in Geography III (Graduate, compulsory, 4 units). Quarters taught: Spring 2015, 2014, 2013, 2012, 2009, 2008, 2007, 2005, 2004. As Geog 274: Spring 2003, 2002, 2001. Catalog course description: Overview of key concepts in spatial statistics, including measures of spatial association and models for spatial regression, point processes and random fields. Geostatistical methods for analysis and interpolating continuous and area (lattice) data.
- Geog 210B • Analytical Methods in Geography II (Graduate, compulsory, 4 units). Quarters taught: Winter 2014, 2013, 2008. Catalog course description: Statistical principles and practice of analyzing geographical data. Topics include bivariate and multiple regression and other multivariate techniques. Emphasis on exploratory data analysis and graphical techniques.
- Geog 172 • Intermediate Geographical Data Analysis (Undergraduate, compulsory, 5 units). Quarters taught: Spring 2015, Fall 2012, Winter 2007, 2005, 2004, 2003, 2002. Catalog course description: Statistical analysis of geographical data. Topics include spatial auto-correlation, multiple regression in a spatial context, and introductory methods for the statistical analysis of point, area (lattice) and continuous spatial data. Lab includes the use of statistical software for carrying out analyses of various spatial data types.

Courses at the University of the Aegean

- Geo-A-101 • Spatial Analysis (Graduate, compulsory, 5 units). Semesters taught: Winter: 2011, 2010, 2009
- Geo-A-255 • Health-related Applications of Spatial Analysis (Graduate, elective, 3 units). Semesters taught: Spring 2012, 2011, 2010
- Geo-301 • Spatial Statistics (Undergraduate, compulsory, 5 units). Semesters taught: Winter 2011, 2010, 2009
- Geo-240 • Multivariate Analysis (Undergraduate, elective, 3 units). Semesters taught: Spring 2012, 2011, 2010

Invited Presentations in Short Courses

- Aug 2015 • *Spatial Analysis Applications in Health*, in: *Nutrition and Biodiversity as Tools of Well-Being*, Summer School organized by the University of the Aegean, and held at Molyvos, Lesvos, Greece.

Teaching

- Jun 2012 • (1) *Geostatistical Downscaling Concepts*, (2) *Geostatistical Simulation and Spatial Uncertainty*, (3) *Space-Time Geostatistics*, in: *Statistical Analysis of Geospatial Data for Environmental Studies*, Summer School organized by the Mediterranean Agronomic Institute of Zaragoza and the International Center for Advanced Mediterranean Agronomic Studies (IAMZ-CIHEAM), and held at Zaragoza, Spain (three lectures during one of the fifteen days of the summer school)
- Jul 2003 • (1) *Principles of Spatial Stochastic Simulation*, (2) *Geostatistical Space-Time Models*, (3) *Geostatistical Integration of Spatial Data*, in: *Spatio-Temporal Statistical Analysis of Multi-Platform Optical Ocean Color Observations*, Summer School organized by the School of Marine Sciences of the University of Maine (sponsored by the National Science Foundation initiative “Collaborations in Mathematical Geosciences”), and held at the Darling Marine Center, Walpole, Maine (three, 1-day, short courses)
- Feb 2003 • *Geostatistics for Environmental Applications*, National Center for Ecological Analysis and Synthesis, Santa Barbara, California (1-day short course)
- May 1998 • *Geostatistics Software Library*, Stanford Center for Reservoir Forecasting, Stanford, California (5-day short course with Prof. Journel)
- May 1999 • *Geostatistics Software Library*, Stanford Center for Reservoir Forecasting, Stanford, California (5-day short course with Prof. Journel)
- Aug 1997 • *Introduction to Geostatistics*, National Center for Geographic Information and Analysis, Santa Barbara, California (3-day short course)

Graduate Student Committees

Ph.D. Committees

*Chair of Committee (**), Co-Chair of Committee (*)*

- P. Palaiologou • University of the Aegean, Geography Department (2015): *Behavior Forecasting Design and Impact Assessment of Forest Fires Using Geoinformatics* (in Greek)
- Laura Harrison • UCSB Department of Geography (2014): *Impacts of Climate Variability on Surface Energy and Water Budget in Sub-Saharan Africa*
- S. Ravulaparthi • UCSB Department of Geography (2013): *Spatial Perspectives in Business Establishment Behavioral Modeling: A Case-Study Analysis in Santa Barbara County*
- Y. Yuan • UCSB Department of Geography (2013): *Characterizing Human Mobility from Mobile Phone Usage*
- O. Roussou • University of the Aegean, Geography Department (2013): *Spatial Analysis of Fuel Distribution for Fire Management* (in Greek)
- Papakonstantinou • University of the Aegean, Geography Department (2011): *Geo-Visualization and Scale Issues: Scale Selection and Integration via the Development of Computational Methods and Geoinformatics* (in Greek)
- Yupeng Li • Department of Civil and Environmental Engineering, University of Alberta (2011): *Improved Facies Modeling with Multivariate Spatial Statistics*

Graduate Student Committees

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|------------------------------|---|
| Guofeng Cao* | <ul style="list-style-type: none"> ● UCSB Geography (2011): <i>A Geostatistical Framework for Categorical Spatial Data Modeling</i>. <u>Current employment:</u> Assistant Professor, Department of Geosciences, Texas Tech University, U.S.A. |
| Kyle Cavanaugh | <ul style="list-style-type: none"> ● UCSB Geography (2011): <i>Variability of Giant Kelp Forests in Southern California: A Remote Assessment of Kelp Biomass and the Drivers of Kelp Dynamics</i> |
| Seth Peterson
Kris Kuzera | <ul style="list-style-type: none"> ● UCSB Geography (2011): <i>Fire Risk in California</i> ● Joint SDSU/UCSB Ph.D. Program (2011): <i>Climate and Climate Change and Infectious Disease Risk in Thailand: A Spatial Study of Dengue Hemorrhagic Fever Using GIS and Remotely-Sensed Imagery</i> |
| Yuki Hamada | <ul style="list-style-type: none"> ● Joint SDSU/UCSB Ph.D. Program (2010): <i>Characterizing Conditions of California Sage Scrub Communities in Mediterranean Type Ecosystems Using Remote Sensing</i> |
| Linna Li | <ul style="list-style-type: none"> ● UCSB Geography (2010): <i>Design of a Conceptual Framework and Approaches for Geo-Object Data Conflation</i> |
| Carl Legleiter | <ul style="list-style-type: none"> ● UCSB Geography (2008): <i>Characterizing the Spatial Structure of River Morphology and Hydraulics: Remote Mapping and Geostatistical Modeling of Dynamic Fluvial Systems</i> |
| Ph. Schneider | <ul style="list-style-type: none"> ● UCSB Geography (2008): <i>Modeling Spatial Patterns of Wildfire Susceptibility in Southern California: Applications of MODIS Remote Sensing Data and Mesoscale Numerical Weather Models</i> |
| Kerry Halligan | <ul style="list-style-type: none"> ● UCSB Geography (2007): <i>Mapping Forest Canopy Fuels in Yellowstone National Park Using Lidar and Hyperspectral Data</i> |
| Jared Aldstadt | <ul style="list-style-type: none"> ● Joint SDSU/UCSB Ph.D. Program (2007): <i>Spatial/Spatiotemporal Analysis of Dengue Virus Transmission and Aedes aegypti Abundance</i> |
| Mark Janikas | <ul style="list-style-type: none"> ● Joint SDSU/UCSB Ph.D. Program (2006): <i>Comparative Regional Income Dynamics: Clustering, Scale, and Geocomputation</i> |
| Eun-Hye Yoo** | <ul style="list-style-type: none"> ● UCSB Geography (2006): <i>A Geostatistical Framework for Downscaling Spatial Data</i>. <u>Current Employment:</u> Assistant Professor, Department of Geography, State University of New York (SUNY) at Buffalo |
| Matthew Clark | <ul style="list-style-type: none"> ● UCSB Geography (2005): <i>An Assessment of Hyperspectral and Lidar Remote Sensing for the Monitoring of Tropical Rain Forest Trees</i> |
| Carlos Sousa Jr. | <ul style="list-style-type: none"> ● UCSB Geography (2005): <i>Mapping and Spatiotemporal Characterization of Degraded Forests in the Brazilian Amazon Through Remote Sensing</i> |
| Rich. Middleton | <ul style="list-style-type: none"> ● UCSB Geography (2005): <i>Geographical Distillation: Application of the p-Median, Traveling Salesman, and Regionalization Problems</i> |
| Gregory Husak | <ul style="list-style-type: none"> ● UCSB Geography (2005): <i>Methods for the Statistical Evaluation of African Precipitation</i> |
| Nicholas Nagle* | <ul style="list-style-type: none"> ● UCSB Geography (2005): <i>Continuous Field Statistical Methods for Spatial Analysis in the Social Sciences</i>. <u>Current Employment:</u> Assistant Professor, Department of Geography, University of Tennessee at Knoxville, USA |
| Mingjie Chen | <ul style="list-style-type: none"> ● UCSB Bren School of Environmental Science and Management (2005): <i>Stochastic Multiphase Flow in Heterogeneous Porous Media</i> |
| Xiaohang Liu | <ul style="list-style-type: none"> ● UCSB Geography (2003): <i>Estimation of the Spatial Distribution of Urban Population Using High Spatial Resolution Satellite Imagery</i> |

Graduate Student Committees

- Karen Holmes ● UCSB, Geography (2003): *Regional Effects of Deforestation on Soil Biogeochemistry in the Southwestern Amazon*

M.Sc./M.A. Committees

*Chair of Committee (**)*

- J.-H. Kim ● UCSB Department of Geography (2015): *Harvesting Geospatial Intelligence from Geotagged Social Media Data: A New Type of Early Warning System Against North Korea*
- P. Karabasis ● ** University of the Aegean, Department of Geography (2015): *Spatiotemporal Analysis of Vineyard Extent (and Corresponding Agricultural Production) as a Function of Biophysical and Climatic Factors in Greece* (in Greek)
- K. Lagkou ● University of the Aegean, Department of Geography (2015): *Methods for Forest Ecosystems Management and Fire Danger using Geoinformatics* (in Greek)
- S. Meerdink ● UCSB Department of Geography (2014): *Linking Seasonal Foliar Chemistry to VSWIR-TIR Spectroscopy Across California Ecosystems*
- K. Mwenda** ● UCSB Department of Geography (2014): *Decision-Making Under Spatial Uncertainty in Downscaled Population Estimates: An Assessment of HIV Prevalence in Tanzania* (Co-chaired with David Lopez-Carr)
- L. Katikas ● ** University of the Aegean, Department of Geography (2014): *Simulation of Hydraulic Conductivity Random Fields with the Latin Hypercube Method, and its Evaluation Using Simulation of Flow and Mass Transport* (in Greek)
- I. Polydoropoulos ● ** University of the Aegean, Department of Geography (2014): *Spatial Analysis of Accessibility to Islands of the North and South Aegean* (in Greek)
- B. Rastogi ● UCSB Department of Geography (2013): *Characterizing Spatial and Temporal Patterns of Cloud Cover and Fog Inundation for the Northern Channel Islands of California*
- S. Prentice ● UCSB Department of Geography (2013): *Soil-Landscape Modeling of Coastal California Hillslopes Using Terrestrial LIDAR*
- Stergiopoulos ● University of the Aegean, Department of Geography (2013): *Geostatistical Analysis of the Impact of Errors in Digital Terrain Models of Scale 1:5000 (HAGS) and ASTER on the Hydrologic Basin Response* (in Greek)
- G. Limitsios** ● University of the Aegean, Department of Geography (2013): *Spatial Point Pattern Analysis in Archaeology: The Case of Archaeological Sites of Pediada Heraklion* (in Greek)
- G. Daras ● University of the Aegean, Department of Geography (2012): *Analysis and Modeling of Terrace Distribution and Abandonment in Lesvos Island* (in Greek)
- Giannakopoulos ● University of the Aegean, Department of Geography (2012): *Evaluation of the Primary Health Care System in Lesvos* (in Greek)
- I. Maina** ● University of the Aegean, Department of Geography (2011): *The Use of Geographical Information Systems and Generalized Additive Models for the Prediction of Potential Spawning Fields of Anchovy and Sardinella* (in Greek)
- E. Hatzi ● Aegean Geography (2011): *Landslide Phenomena in Lesvos Island (Greece): Manifestation, Human Interventions, Impacts Confrontation* (in Greek)

Graduate Student Committees

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| C. Ntegianni** | ● Aegean Geography (2011): <i>Analysis of the Spatiotemporal Distribution of Sea Surface Temperature in the Aegean Archipelago Using Data from the MODIS Aqua Sensor</i> (in Greek) |
| Z. Kavakli** | ● Aegean Geography (2011): <i>Contribution of Geostatistics to the Delineation of Eutrophication Zones</i> (in Greek) |
| M. Mihelakaki** | ● Aegean Geography (2011): <i>Geostatistical Study of the Covariation of Chlorophyll and Sea Surface Temperature from Satellite Images</i> (in Greek) |
| S. Liodakis** | ● Aegean Geography (2011): <i>The Contribution of Geostatistics to Estimating Fire Ignition and Spread Probability: The Case of Western Attica</i> (in Greek) |
| S. Lappas | ● Aegean Geography (2011): <i>Extraction of Morphotectonic Characteristics via GIS: The Case of Lesbos</i> (in Greek) |
| H. Papazoglou | ● Aegean Geography (2011): <i>Management and Restoration of the Amali Peninsula in Lesbos for Reducing Fire Danger via Geoinformatics</i> (in Greek) |
| P. Kyriotellis | ● Aegean Geography (2011): <i>Operational Evaluation of the Web GIS "VIRTUAL FIRE" for Forest Fire Management in Lesbos</i> (in Greek) |
| K. Stefanidou** | ● Aegean Geography (2011): <i>Uncertainty Propagation of Wind Measurements in Fire Behavior Simulations</i> (in Greek) |
| B. Rozakis | ● Aegean Geography (2011): <i>Design and Development of a Geoinformation System for Supporting Real Estate Services</i> (in Greek) |
| Josh Bader | ● UCSB Geography (2011): <i>Degree by Examination</i> |
| Marcio Sales** | ● UCSB Geography (2010): <i>Estimating Interpolation Uncertainty of Forest Biomass Stocks and Carbon Emissions from Deforestation in the Brazilian Amazon Using Inventory Data and Geostatistics</i> . Current Employment: Statistics Analyst, Instituto do Homem e Meio Ambiente da Amazônia (IMAZON), Brazil |
| Diego Pedreros | ● UCSB Geography (2009): <i>The Effects of El Niño in Agricultural Water Balance in Guatemala</i> |
| Keely Roth | ● UCSB Geography (2009): <i>A Combined Lidar and Hyperspectral Remote Sensing Analysis for Mapping Forest Biomass</i> |
| Kathleen Rose | ● UCSB Geography (2009): <i>Degree by Examination</i> |
| Nate Isbell | ● UCSB Geography (2009): <i>Procedures to Identify "Low Hanging Fruit" Spoke-and-Hub Airline Routes Ripe for Conversion to Point-to-Point Operations</i> |
| Ben Holland** | ● UCSB Geography (2006): <i>Developing Alternative Null Hypotheses for Testing the Significance of Global Indices of Spatial Association</i> . Current Employment: Geospatial Analyst, SPADAC Inc., McLean, Virginia |
| Kirk Goldsberry | ● UCSB Geography (2004): <i>Stabilizing Rate of Change in Thematic Map Animations</i> |
| Mich. Robinson | ● UCSB Geography (2004): <i>The Effects of Lake Hydrology and Bootstrapping of Reservoir Inflow on Reservoir Capacity</i> |
| Barry Hooper | ● UCSB Geography (2003): <i>Spatial and Temporal Analysis of Controls on Soil Carbon Dioxide Flux at the Hillslope Scale in California Oak Savanna</i> |
| Nicholas Matzke | ● UCSB Geography (2003): <i>Remote Sensing and Geostatistical Analysis of Anthropogenic Biomass Burning and Forest Degredation in Madagascar</i> |

Graduate Student Committees

- Nicholas Nagle • UCSB Geography (2002): *A Point-based Regression Analysis of Industrial Location*

Service

At UCSB

*Chair of Committee (**)*

- 2012-14 • Vice Chair (Dept. of Geography)
- 2012-14 • Graduate Advisor (Dept. of Geography)
- 2008-09 • Vice Chair (Dept. of Geography)
- 2008-09 • Graduate Advisor (Dept. of Geography)
- 2008 • Land Use Land Cover Change (LULCC) Faculty Recruitment Committee (Dept. of Geography)
- 2005-08 • Colloquium Committee** (Dept. of Geography)
- 2005-08 • Diversity Committee (Dept. of Geography)
- 2004-05 • Curriculum Committee (Dept. of Geography)
- 2002-08 • Alternate delegate of the Department of Geography and UCSB to the University Consortium for Geographic Information Science (UCGIS)
- 2002-04 • Computer Committee (Dept. of Geography)

At the University of the Aegean

*Chair of Committee (**)*

- 2011-12 • Faculty Representative of University Professors at the Senate of The University of the Aegean
- 2010-12 • Director of Graduate Studies Program in: *Geography and Applied Geoinformatics* (Dept. of Geography)
- 2011-12 • Strategic Research Committee (Dept. of Geography)
- 2011-12 • Internal Evaluation Committee (Dept. of Geography)
- 2011 • Geoinformatics in the Social Sciences Faculty Recruitment Committee (Dept. of Geography)
- 2011 • Undergraduate Program Committee (Dept. of Geography)

Personnel Reviewer – External Evaluator

- 2015 • Apr. 2015: Evaluation of Dr. Reinhard Furrer for promotion to tenured Associate Professor (Extraordinarius) at the Institute of Mathematics, University of Zurich, Switzerland
- 2013 • Nov. 2013: Evaluation of Dr. Thomas Hansen (along with two other candidates) for promotion to Associate Professor in Computational Geoscience at the National Space Institute, Technical University of Denmark
- Sept. 2013: Evaluation of Dr. Stefan Leyk for promotion to Associate Professor in GIScience, Department of Geography, University of Colorado Boulder

Service

Membership in Scientific Committees

- 2015
 - *Spatial Statistics 2015: Emerging Patterns: 3rd Conference on Spatial Statistics*
 - *1st Conference on Geographical Information Systems and Spatial Analysis in Agriculture and Environment*, Athens, Greece
- 2014
 - *GIScience 2014: 8th International Conference on Geographic Information Science*
 - *geoEnv 2014: 10th Conference on Geostatistics for Environmental Applications*
- 2013
 - *Spatial Statistics 2013: 2nd Conference on Spatial Statistics*
 - *RSCy 2013: First International Conference on Remote Sensing and Geoinformation of the Environment*, Paphos, Cyprus
 - *1st Conference on Spatial Analysis*, Harokopeion University, Athens, Greece
- 2012
 - *GIScience 2012: 7th International Conference on Geographic Information Science*
 - *geoEnv 2012: 9th European Conference on Geostatistics for Environmental Applications*
- 2011
 - *ECQTG 2011: 17th European Colloquium on Theoretical and Quantitative Geography*
 - *Spatial Statistics 2011 - Mapping Global Change: 1st Conference on Spatial Statistics*
- 2010
 - *GIScience 2010: 6th International Conference on Geographic Information Science*
 - *Spatial Accuracy 2010: 9th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*
- 2009
 - *IAMG 2009: 2009 Annual Conference of the International Association for Mathematical Geosciences*
 - *StatGIS 2009: GeoInformatics for Environmental Surveillance Conference*
 - *IGARSS 2009: 2009 IEEE International Geoscience and Remote Sensing Symposium*
 - *ASCE/EWRI KSTAT-3 Standard: Consultant to the ASCE/EWRI's Standards Committee for the development of a Standard Guideline for the geostatistical estimation and block-averaging of homogeneous and isotropic saturated hydraulic conductivity*
- 2008
 - *Spatial Accuracy 2008: Member of Scientific and Organizing Committees for the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*
 - *IGARSS 2008: 2008 IEEE International Geoscience and Remote Sensing Symposium*
 - *geoENV 2008: 7th European Conference on Geostatistics for Environmental Applications*
- 2006
 - *geoENV 2006: Member of Scientific and Organizing Committees for the 6th European Conference on Geostatistics for Environmental Applications*
 - *Spatial Accuracy 2006: 7th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*
- 2004
 - *Geostatistics Banff 2004: 7th International Geostatistics Congress*
 - *geoENV V: 5th European Conference on Geostatistics for Environmental Applications*
 - *Environmental Soil-Landscape Modeling: Member of Scientific Committee for book edited by S. Grunwald, and published by CRC Press*
- 2003
 - *Geodynamics: Member of Scientific Committee for book edited by P.M. Atkinson, G.M. Foody, S.E. Darby, and F. Wu, and published by CRC Press*
- 1999
 - *Assessment of Non-Point Source Pollution in the Vadose Zone: Member of Scientific Committee for book edited by D.L. Corwin, K. Loague, and T.R. Ellsworth, and published by AGU Press*

Service

- 1998 • *geoENV II: 2nd European Conference on Geostatistics for Environmental Applications*

Sessions Chaired in Scientific Conferences

- 2014 • December 2014: Session Θ : Spatial Analysis (Part A), in 8th Panhellenic Conference of HellasGIs (Hellenic Society for Geographical Information Systems), December 11-12, National Technical University, Athens, Greece
- October 2014: (a) Session S.5: Spatial Data Analysis: Methodological Contributions and Applications, (b) Session G.20: Spatial Analysis & Modeling, in 10th International Congress of the Hellenic Geographical Society, October 22-24, Aristotle University of Thessaloniki, Greece

Refereeing

- 2015 • International Journal of Geographical Information Science, IEEE Transactions on Geoscience and Remote Sensing, two (2) proposals submitted to the Swiss National Science Foundation, Computers & Geosciences,
- 2014 • Geographical Analysis, Computers & Geosciences, Spatial Statistics, International Journal of Geographical Information Science, International Journal of Climatology, Journal of Applied Remote Sensing, Advances in Meteorology, IEEE Transactions on Geoscience and Remote Sensing, Proposal submitted to the Austrian Science Fund, Proposal submitted to the Kuwait Foundation for the Advancement of Sciences, Environment and Planning B, Transportation Letters, Southern African Institute of Mining and Metallurgy, Environmental Science and Pollution Research
- 2013 • Mathematical Geosciences, Remote Sensing of Environment, International Journal of Geographical Information Science, Spatial Statistics, Computers & Geosciences, Stochastic Environmental Research and Risk Assessment, International Journal of Remote Sensing, International Journal of Climatology, IEEE Transactions on Geoscience and Remote Sensing, Geographical Analysis, Computers Environment and Urban Systems
- 2012 • International Journal of Geographical Information Science, Water Resources Research, Geographical Analysis
- 2011 • Remote Sensing of Environment, International Journal of Applied Earth Observation and Geoinformation, Computers & Geosciences, US National Science Foundation (1 proposal submitted to the Geography and Spatial Sciences Program), International Journal of Geographical Information Science, Cartography and Geographic Information Science, Environment and Planning B, Journal of Geographical Systems, European Journal of Soil Science, Computers Environment and Urban Systems, Transactions in GIS
- 2010 • Computers & Geosciences, Chaos, Solitons & Fractals, Geographical Analysis, International Journal of Geographical Information Science
- 2009 • Canadian Journal of Forest Research, Geographical Analysis, International Journal of Geographical Information Science, European Journal of Soil Science, Stochastic Environmental Research and Risk Assessment, IEEE Geoscience and Remote Sensing Letters, US National Science Foundation (Division of Earth Sciences, Instrumentation and Facilities Program), Computers & Geosciences, Ecology, Mathematical Geosciences

Service

- 2008 • Water Resources Research, Geographical Analysis, IEEE Transactions on Geoscience and Remote Sensing, Mathematical Geosciences, Computers Environment and Urban Systems, Geography Compass, National Commission of Scientific Research of Chile, International Journal of Remote Sensing
- 2007 • Remote Sensing of Environment, Journal of the American Water Resources Association, IEEE Transactions on Geoscience and Remote Sensing, Journal of Hydrology, International Journal of Geographical Information Science, Journal of Hydrologic Engineering, Professional Geographer, Mathematical Geology
- 2006 • International Journal of Geographical Information Science, US National Science Foundation (1 proposal submitted to the Geography and Regional Science Program), Photogrammetric Engineering and Remote Sensing, Water Resources Research, Geographical Analysis
- 2005 • US National Science Foundation (1 proposal submitted to the Hydrology Program and 1 proposal submitted to the Science and Engineering Information Integration and Informatics Program), Annals of the Association of American Geographers, Environmental Science & Technology, Journal of Geographical Systems, Atmospheric Environment, Journal of Environmental Management, Computers & Geosciences, Mathematical Geology
- 2004 • Ecology, Society of Petroleum Engineers Journal, American Chemical Society (proposal submitted to the Petroleum Research Fund), US National Science Foundation (proposal submitted to the Measurement, Modeling, and Statistics Program), International Journal of Geographical Information Science, Annals of the Association of American Geographers, Photogrammetric Engineering & Remote Sensing, Geographical Analysis
- 2003 • Environmental Science & Technology (2 manuscripts), Stochastic Environmental Research & Risk Assessment (2 manuscripts), US National Science Foundation (2 proposals submitted to the Collaborations in Mathematical Geosciences), International Journal of Remote Sensing, Geographical Analysis, International Journal of Geographical Information Science (2 manuscripts), Computational Statistics & Data Analysis, Remote Sensing of Environment, Journal of Environmental Management
- 2002 • Photogrammetric Engineering and Remote Sensing (2 manuscripts), Environmental Science & Technology, Computers & Geosciences (2 manuscripts), Geographical Analysis, Environmental and Ecological Statistics, International Journal of Geographical Information Science, US National Science Foundation (proposal submitted to the Geography & Regional Science Program)
- 2001 • Journal of Hydrometeorology, Remote Sensing of Environment, Environmental Science & Technology, International Journal of Geographical Information Science, UNESCO Encyclopedia of Life Support Systems, Journal of Hydrology, Annals of the Association of American Geographers
- 2000 • Stochastic Environmental Research & Risk Assessment, Geographical Analysis, International Journal of Geographical Information Science, Computers & Geosciences, Mathematical Geology, Canadian Journal of Forest Research
- 1999 • Mathematical Geology, Ecological Applications

Membership in Professional Organizations

- 2001-
 - Association of American Geographers (AAG)
- 1999-2006
 - American Geophysical Union (AGU)
- 1997-
 - International Association for Mathematical Geology (IAMG)
- 1994-
 - Geotechnical Chamber of Greece