### Education

**PhD** (2006) Department of Natural Resources Management and Agricultural Engineering, Agricultural University of Athens, Greece. Dissertation: "Geographical Information Systems, Spatial Statistics and Spatio-Temporal Models in the research of land use changes. The case of the Forest of Dadia".

**MSc** (2006) in "Geographical Information Systems with Remote Sensing", Department of Environmental Sciences, University of Greenwich, UK.

MSc thesis: "Use of Neural Networks in Land Use Classification modelling in the Dadia Nature Reserve, North-Eastern Greece".

**MSc** (2000) in "Environmental Management", Department of Natural Resources Management and Agricultural Engineering, Agricultural University of Athens.

MSc thesis: "Study of spatial distribution of environmental and soil parameters using Geostatistics and G.I.S.".

**Diploma** (2002) in "Pedagogical Studies", General Department of Education, School of Pedagogical and Technological Education of Athens (1 year program).

**BSc, MSc** (1997) in "Soil Science and Agricultural Chemistry", Natural Resources Management and Agricultural Engineering, Agricultural University of Athens (5-years program).

Diploma thesis: "Usage of geostatistical and fuzzy set theory techniques to manage soil data in a G.I.S. environment".

## Research Portfolio

Assistant Professor (June 2024 – today) on Cutting Edge Technologies in Precision Agriculture of the Department of Sustainable Agriculture, University of Patras, Greece.

**Researcher** (2016-June 2024) of the Hellenic Agricultural Organization (HAO)-"DEMETER", Institute of Soil and Water Resources, Department of Soil Science.

**Responsibilities:** 

Participation in research projects, Geographical Information Systems applications in agriculture, spatial analysis, soil mapping, soil evaluation, management and disposal of agricultural waste, sustainable fertilization practices, etc.) **PostDoc Researcher** (2014-2015) University of Thessaly, Department of Planning and Regional Development. Funded by the Greek State Scholarships Foundation (IKY Fellowships of Excellence for Postgraduate Studies in Greece – Siemens Program) Responsibilities:

1. Research in urban land use changes modelling.

2. Assist under and post-graduate students in their theses.

3. Teaching Assistant in Spatial Analysis and Planning.

PostDoc Researcher (2014-2015) National Hellenic Research Foundation. Responsibilities:

Scientific support of the design and development of Geographical Information Systems and Spatial Databases (web-GIS)

**PostDoc Researcher** (2013) Foundation of Research and Technology – Hellas (FORTH)

**Responsibilities:** 

1. Involved in a) ERA.Net RUS Innovation project: GEOURBAN (ExploitinG Earth Observation in sUstainable uRBan plAnning & maNagement) and b) OSDDT (Occupation des sols et development durable du territoire sur l'arc mediterraneen).

2. Participation in research proposals

3. Contribution to Journal papers preparation

**PostDoc Researcher** (2010-2012) Agricultural University of Athens, Department of Natural Resources Management and Agricultural Engineering, Greece

Responsibilities:

1. Research in urban land use changes modelling using GIS.

2. Assist post-graduate students in their theses.

3. Teaching Assistant in GIS and Spatial Analysis.

**PostDoc Researcher** (2009-2010) College of Environmental Science and Forestry, State University of New York, USA. Responsibilities:

- 1. Involved in a NASA sponsored Program researching urban land use land cover changes and their linkages to socioeconomic factors. Developing novel spatiotemporal remote sensing classifiers using advanced machine learning methods (e.g. neural networks).
- 2. Assist students in their theses.
- 3. Teaching Assistant in Remote Sensing course.

**PostDoc Researcher** (2008-2009) School of Civil Engineering and Geosciences, University of Newcastle, UK.

Responsibilities:

Worked in SCORCHIO project (Sustainable Cities: Options for Responding to Climate Change Impacts and Outcomes). The project develops tools and models of heat and human comfort adaptation within urban areas under climate change scenarios.

## Teaching

## Portfolio

(2010-today) Taught the course: "Geographical Information Systems", "Spatial Modelling" on the postgraduate programme as Teaching Assistant at the Agricultural University of Athens, Greece.

(2014-2015) Involved in teaching the course: "Spatial Analysis and Planning" on the postgraduate programme as Teaching Assistant at the University of Thessaly.

(2010) Taught the course: "Remote Sensing" as Teaching Assistant at the State University of New York College of Environmental Science and Forestry.

(2008) Taught the course: "Geographical Information Systems" as an Adjunct Professor at the Department of Ecology and Environment of the Technological Educational Institute of Ionion Islands, Greece.

(2007) Taught the course: "Geograhical Information Systems using ArcGIS" at the Center of Continuing Education organized by Agricultural University of Athens.

(2005) Taught the course: "Geographical Information Systems" at the National School for Public Administration of Athens, Greece.

(2005) Taught ArcGIS on the postgraduate programme: "Geo-Informatics" as Teaching Assistant (TA) at the Agricultural University of Athens.

(1998-2005: every year) Taught the commercial packages: Arc/Info, ArcView and ArcGIS, and statistical software: SPSS and SPLUS on the undergraduate courses: "Geographical Information Systems" as a Teaching Assistant at the Agricultural University of Athens.

(1999-2005: every year) Taught the commercial packages: Arc/Info, ArcView and ArcGIS, and the statistical software SPSS and SPLUS on the undergraduate course: "Advanced Techniques in Soil Resources Mapping" as a Teaching Assistant at the Agricultural University of Athens.

(2003) Taught the course: "Geographical Information Systems (ArcInfo, ArcView, ArcGIS) and designing applications" at the Center of Continuing Education of Agricultural University of Athens.

(1999-2001) Taught the courses: "Visualization of Spatial Data", "Network Analysis", "Cadastre", "Program Language of GIS software", "IDRISI software" and "DOS – WINDOWS Environments" at Vocational Training Institutes of Aigaleo and Sivitanideio, Greece.

As a PhD student I was an assistant supervisor in 5 undergraduate and 3 postgraduate theses.

## Professional Experience

(2006-2008) Department of Statistics and GIS, Greek Agricultural Insurance Organization, Athens, Greece.

Responsibilities:

Statistical and spatio-temporal analysis of indemnities against crop damages. Storage, retrieval, manipulation and display the geographical data of indemnities. Application of remote sensing using satellite images to estimate the damage of cultivations after rain, snow or frost. Organizing and teaching GIS and Remote Sensing courses.

(2003-2004) Greek Ministry of Agriculture, Athens, Greece. Responsibilities:

Supervision of Environmental Impact Assessments, quality control of irrigation water in rivers, lakes, irrigation networks and drillings, and finally, digital mapping of water sampling places for the control of their quality in Greece with G.I.S.

(2000) Department of GIS, Epsilon International S.A., Athens, Greece. Responsibilities:

Digital mapping using ArcInfo (in Unix and Windows NT environment) and ArcView.

# Continuous

## Training

(2005) Summer School of the ISPRS (International Society for Photogrammetry and Remote Sensing) on "Satellite Data Processing and Spatio-Temporal Analysis for Resource and Disaster Mapping, Monitoring and Management". Istanbul (Turkey), June 19-25, 2005.

(2003) NATO – CCMS and Science Committee Workshop on "Desertification in the Mediterranean Region: A Security Issue". Valencia (Spain), December 2-5, 2003.

(1999) Advanced study course on "Desertification in Europe: Mitigation Strategies, Land Use and Planning". University of Sassari, Alghero (Sardinia, Italy), June 1-9, 1999.

(1997) 40-hour course at the National Technical University of Athens, Greece on "Geographical Information Systems".

(1997) Institute of Soil Science of Athens, Greece. Practical training on soil chemical analyses.

## Languages

English Greek (mother tongue)

Esteem Indicators Reviewer in Ecology and Society Journal. Reviewer in Remote Sensing Journal. Reviewer in GIScience Remote Sensing Journal Reviewer in Sustainability Journal Reviewer in International Journal of Geographical Information Science. Reviewer in Geocarto International Journal. Reviewer in Transactions in GIS Journal. Reviewer in ESPON (European Spatial Planning Observation Network) for two projects:

- 1. the Web-based G.I.S., an application for map representation of the ESPON data and spatial data analysis via Internet. Three applications were included: simple analysis map, advanced analysis map and statistical analysis,
- 2. the HyperAtlas, a package of modules for interactive cartography.

## Fellowships

- State Scholarships Foundation (IKY): 2 years (2014-2015) Postdoc Fellowships of Excellence – Siemens in the thematic area: Infrastructure – Urban Development – Environment.
- 2. WWF Greece: 12 months grant for the 1<sup>st</sup> year of PhD thesis.
- 3. Kasimati's fellowship Greece: 12 months grant for the MSc studies in UK.
- 4. Ordnance Survey United Kingdom: award for the presentation of the MSc dissertation of the MSc programme in GIS with RS.

#### Interests

Poetry, music, theatre.

## References

Available upon request.

## **Publications**

#### Books

1. Kollias, V., Kalivas, D. and **D. Triantakonstantis**, 2012. "Geographical Information Systems". Embryo publications, ISBN: 9789608002692 (Book in Greek).

#### **Book Chapters**

 D. Triantakonstantis, Sp. Detsikas, (2025). Chapter 6 - Mapping the Greek salt affected soils with the use of machine learning and remote sensing data, Editor(s): George P. Petropoulos, Daniela Fernanda Da Silva Fuzzo, Dimitris Triantakonstantis, JoOΘo Alberto Fischer Filho, Prashant K. Srivastava, Salim Lamine. In Earth Observation, Earth Observation for Monitoring and Modeling Land Use, Elsevier, 2025, Pages129-150, <u>https://doi.org/10.1016/B978-0-323-95193-7.00007-5</u>.

- D. Triantakonstantis, Sp. Detsikas, (2025). Chapter 5 Mapping the soil organic carbon sequestration potential of Greek agricultural soils, Editor(s): George P. Petropoulos, Daniela Fernanda Da Silva Fuzzo, Dimitris Triantakonstantis, JoOΘo Alberto Fischer Filho, Prashant K. Srivastava, Salim Lamine. In Earth Observation, Earth Observation for Monitoring and Modeling Land Use, Elsevier, 2025, Pages 105-127, https://doi.org/10.1016/B978-0-323-95193-7.00013-0.
- D. Triantakonstantis, S. Detsikas (2024). Chapter 6 Soil organic carbon sequestration potential dynamics in saline and sodic soils in Greece, Editor(s): Salim Lamine, Prashant K. Srivastava, Ahmed Kayad, Francisco MuO±oz-Arriola, Prem Chandra Pandey. In Earth Observation, Remote Sensing in Precision Agriculture, Academic Press, 2024, Pages 93-103, https://doi.org/10.1016/B978-0-323-91068-2.00022-9.
- 4. D. Triantakonstantis, K. Bithas, S. Detsikas, G. Biancofiore, R. Lorenzetti, J. Pascual, M. Ros, C. Guerrero, T. Panagopoulos (2024). Chapter 4 LIFE GEOCARBON: carbon farming geolocation support by establishing a spatial soil database management system, Editor(s): Salim Lamine, Prashant K. Srivastava, Ahmed Kayad, Francisco MuO±oz-Arriola, Prem Chandra Pandey. In Earth Observation, Remote Sensing in Precision Agriculture, Academic Press, 2024, Pages 61-69, https://doi.org/10.1016/B978-0-323-91068-2.00010-2.
- Amit Kumar Tripathi, Prem Chandra Pandey, Jyoti Kumar Sharma, Dimitris Triantakonstantis & Prashant K. Srivastava. Climate Change and Its Impact on Forest of Indian Himalayan Region: A Review. Climate Change 2022, 207–222, doi: <u>https://doi.org/10.1007/978-3-030-92782-0\_10</u>.
- Triantakonstantis D, Stathakis D, Papadopoulou Z. Estimating Urban Population Density Using Remotely Sensed Imagery Products, in Advances in Remote Sensing for Natural Resource Monitoring, Eds. P C Pandey and L. K. Sharma, 2021, pp. 132-149, <u>https://doi.org/10.1002/9781119616016.ch9</u>.
- Triantakonstantis D, Papadopoulou Z, Katsenios N, Sparangis P, Efthimiadou A. Use of GPS, remote sensing imagery, and GIS in soil organic carbon mapping, in GPS and GNSS Technology in Geosciences, Eds. G P Petropoulos and P K Srivastava, 2021, pp. 351-369, <u>https://doi.org/10.1016/B978-0-12-818617-6.00022-6</u>.
- 8. N. Chrysoulakis, C. Feigenwinter, D. Triantakonstantis, I. Penyevskiy, A. Tal, E. Parlow, G. Fleishman, S. Düzgün, Th. Esch and M. Marconcini, 2016. "A Conceptual List of Indicators for Urban Planning and Management Based on Earth Observation". Invited Chapter in the book: Kimberly Etingoff (eds). Urban Ecology, Strategies for Green Infrastructure and Land Use, pp. 285-313, Apple Academic Press Inc.
- D. Triantakonstantis and D. Stathakis, 2014. "Cokriging Areal Interpolation for Estimating Economic Activity using Night-Time Light Satellite Data". ICCSA 2014, Part IV, Lecture Notes in Computer Science (LNCS) 8582, pp. 243-252, (doi: 10.1007/978-3-319-09147-1 18).
- 10.Poirazidis, K., V. Kati, S. Schindler, D. Triantakonstantis, D. Kalivas and St. Gatzogiannis. "Landscape and biodiversity in Dadia-Lefkimi-Soufli Forest National Park". Invited Chapter in the book: Catsadorakis, G. and H. Källander (eds). The Dadia-Lefkimi-Soufli Forest National Park, Greece: Biodiversity, Management and Conservation. WWF Greece, Athens, 2010, pp.103-114 (ISBN: 978-960-7506-10-8).

11.D. P. Triantakonstantis and S. L. Barr, 2009. "A Spatial Structural and Statistical Approach to Building Classification of Residential Function for City-Scale Impact Assessment Studies". Lecture Notes in Computer Science (LNCS) 5592, pp. 221-236, (doi: 10.1007/978-3-642-02454-2 16).

## Journal Papers

- Triantakonstantis, D., Batsalia, M., & Lolos, N. (2024). Spatio-Temporal Dynamics of Soil Organic Carbon Stock in Greek Croplands: A Long-Term Assessment. Sustainability, 16(18), 7984. <u>https://doi.org/10.3390/su16187984</u>.
- 13.Christina Lekka, George P Petropoulos, Dimitris Triantakonstantis, Spyridon E Detsikas, Christos Chalkias, 2023. Exploring the spatial patterns of soil salinity and organic carbon in agricultural areas of Lesvos Island, Greece, using geoinformation technologies. Environmental Monitoring and Assessment 195 (3): 391, doi: <u>https://doi.org/10.1007/s10661-023-10923-5</u>.
- 14.Owen D. Howells, George P. Petropoulos, **Dimitris Triantakonstantis**, Zacharias Ioannou, Prashant K. Srivastava, Spyridon E. Detsikas & George Stavroulakis, 2023. Examining the variation of soil moisture from cosmic-ray neutron probes footprint: experimental results from a COSMOS-UK site. Environmental Earth Sciences volume 82 (41), doi: https://doi.org/10.1007/s12665-022-10721-1.
- 15.Srivastava, P.K.; Petropoulos, G.P.; Prasad, R.; Triantakonstantis, D. Random Forests with Bagging and Genetic Algorithms Coupled with Least Trimmed Squares Regression for Soil Moisture Deficit Using SMOS Satellite Soil Moisture. ISPRS International Journal of Geoinformation 2021, 10, 507, doi: <u>https://doi.org/10.3390/ijgi10080507</u>.
- 16.O.D. Howells, G.P. Petropoulos, P.K. Srivastava, D. Triantakonstantis, I. Sandric. Exploring the potential of SCAT-SAR SWI for soil moisture retrievals at selected COSMOS-UK sites. International Journal of Remote Sensing, 42 (23) (2021), pp. 9155-9169, doi: <u>https://doi.org/10.1080/01431161.2021.1988185</u>.
- 17. Triantakonstantis D, Detsikas Sp, Papadopoulou Z, Kavvadias V, Sparangis P, Katsenios N, Megalooikonomou V, Vlachakis D, Efthimiadou A. Land Suitability Assessment for Olive Mill Wastewater Disposal by Integrating Multicriteria Decision Support Tools, EMBnet Journal 2021, 26, e947, doi: <a href="https://doi.org/10.14806/ej.26.1.947">https://doi.org/10.14806/ej.26.1.947</a>.
- 18.Papadimitriou K, Koumoulidis D, Papalamprou L, Kasimatis C, Sparangis P, Katsenios N, Megalooikonomou V, Vlachakis D, Triantakonstantis D, Efthimiadou A. Environmental impacts of wars-Social consequences. Case Study: Aleppo Governorate Syria, EMBnet Journal 2021, 26, e965, doi: <a href="https://doi.org/10.14806/ej.26.1.965">https://doi.org/10.14806/ej.26.1.965</a>.
- 19.Fani Samara, Stavros Sakellariou, Stergios Tampekis, **Dimitrios Triantakonstantis** and Olga Christopoulou, 2017. "The application of the model of cellular automata (CA) on the island of Skiathos, Greece". Fresenius Environmental Bulletin, 26 (9), pp. 5551-5555.
- 20.Dimitrios Triantakonstantis, Nektarios Chrysoulakis, Anna Sazonova, Thomas Esch, Christian Feigenwinter, Sebnem Düzgün, Ebwerhard Parlow, Mattia Marconcini and Abraham Tal, 2015. "On-line evaluation of Earth Observation derived indicators for urban planning and management". Urban Planning and Design Research 3, pp. 17-33, (doi: 10.14355/updr.2015.03.003).

- 21.D. Triantakonstantis and D. Stathakis, 2015. "Examining urban sprawl in Europe using spatial metrics". Geocarto International, (doi: 10.1080/10106049.2015.1027289).
- 22.D. Triantakonstantis and D. Stathakis, 2015. "Urban Growth Prediction in Athens, Greece, Using Artificial Neural Networks". International Journal of Civil, Structural, Construction and Architectural Engineering 9(3), pp. 166-170, (<u>http://www.waset.org/Publications</u>).Dimitrios Triantakonstantis, Nektarios Chrysoulakis, Anna Sazonova, Thomas Esch, Christian Feigenwinter, Sebnem Düzgün, Ebwerhard Parlow, Mattia Marconcini and Abraham Tal, 2015. "Online evaluation of Earth Observation derived indicators for urban planning and management". Urban Planning and Design Research 3, pp. 17-33, (doi: 10.14355/updr.2015.03.003).
- 23.**D. Triantakonstantis** and D. Stathakis, 2015. "Examining urban sprawl in Europe using spatial metrics". Geocarto International, (doi: 10.1080/10106049.2015.1027289).
- 24.**D. Triantakonstantis** and D. Stathakis, 2015. "Urban Growth Prediction in Athens, Greece, Using Artificial Neural Networks". International Journal of Civil, Structural, Construction and Architectural Engineering 9(3), pp. 166-170, (http://www.waset.org/Publications).
- 25.N. Chrysoulakis, C. Feigenwinter, D. Triantakonstantis, I. Penyevskiy, A. Tal, E. Parlow, G. Fleishman, S. Düzgün and Th. Esch, 2014. "A Conceptual List of Indicators for Urban Planning and Management Based on Earth Observation". ISPRS International Journal of Geo-Information 3(3), pp. 980-1002, (doi: 10.3390/ijgi3030980).
- 26.**D. Triantakonstantis**, P. Prastacos and A. Tsoukala, 2014. "Analysing urban sprawl in Rethymno, Greece". Journal of the Indian Society of Remote Sensing 42 (3), pp. 601-610, (doi: 10.1007/s12524-013-0350-8).
- 27.**D. P. Triantakonstantis**, D. P. Kalivas and V. J. Kollias, 2013. "Autologistic regression and multicriteria evaluation models for the prediction of forest growth in the Dadia nature reserve". International Journal of New Forests 44 (2), pp. 163-181, (doi: 10.1007/s11056-012-9308-x).
- 28.D. Triantakonstantis and G. Mountrakis, 2012. "Urban growth prediction: A review of computational models and human perceptions". Journal of Geographical Information System 4 (6), pp. 555-587, (doi: 10.4236/jgis.2012.46060).
- 29.**D. Triantakonstantis**, 2012. "Urban growth prediction modelling using fractal and theory of chaos". Open Journal of Civil Engineering 2, pp. 81-86 (doi: 10.4236/ojce.2012.22013).
- 30.**D. Triantakonstantis**, 2012. "Urban growth modelling using determinism and stochasticity in a touristic village in western Greece". Open Journal of Civil Engineering 2, pp. 42-48 (doi:10.4236/ojce.2012.21007).
- 31.G. Mountrakis and **D. Triantakonstantis**, 2012. "Inquiry-based learning in remote sensing: A space balloon educational experiment". Journal of Geography in Higher Education, iFirst article (doi: 10.1080/03098265.2011.638707).
- 32.**D. Triantakonstantis**, G. Mountrakis and J. Wang, 2011. "A Spatial Heterogeneous Expert Based (SHEB) Urban Growth Model using Model Regionalization". Journal of Geographical Information System 3, pp. 189-202, (doi: 10.4236/jgis.2011.33016).
- 33.**D. P. Triantakonstantis**, V. J. Kollias and D. P. Kalivas, 2007. "Use of logistic regression in the cellular automata model for the study of land use changes in the

forest of Dadia". Agricultural Research Journal of Greek Agricultural Research Foundation 30 (2).

- 34.D. P. Triantakonstantis, V. J. Kollias and D. P. Kalivas, 2006. "Forest regrowth since 1945 in the Dadia forest nature reserve in northern Greece". International Journal of New Forests 32, pp. 51-69, (doi: 10.1007/s11056-005-<u>3626-1</u>).
- 35.D. P. Kalivas, **D. P. Triantakonstantis** and V. J. Kollias, 2002. "Spatial prediction of two soil properties using topographic information". International Journal of Global Nest, Vol. 4, pp. 41-49, (Available online at:: <u>http://www.gnest.org/Journal/vol4 No1/ kalivas.pdf</u>).

## Refereed

#### **Conference Papers**

- 1. Triantakonstantis D., Batsalia M., Lolos N. Topsoil and subsoil distribution of soil properties in an agricultural area, Soil Health: Current Status and Future Needs Conference, 7 9/10/2024, Chania, Crete
- Triantakonstantis D., Lolos N., Batsalia M.: Assessment of land productivity at the national level through the vegetation index NDVI, 5° Conference on Geographic Information Systems and Spatial Analysis in Agriculture and the Environment, 21 – 23 /05/2024, Conference Amphitheatre of the Agricultural University of Athens.
- Lolos N., Batsalia M., Triantakonstantis D., Zacharoudi S., Fotelli M., Radoglou K.: Calculation of soil carbon in deciduous oak forests and shrublands using machine learning techniques, 5° Conference on Geographic Information Systems and Spatial Analysis in Agriculture and the Environment, 21 23 /05/2024, Conference Amphitheatre of the Agricultural University of Athens.
- Lolos, N. Batsalia, M. Triantakonstantis, D. Modelling soil organic carbon stocks in forest soils. 1st Open – air Cities International Conference (Local and Regional Sustainable Development & Urban Reconstruction), Harokopio University of Athens, Greece, 16 – 18/02/2024.
- 5. Triantakonstantis D., Batsalia M., Lolos N.: PRIMA SOILS4MED: Soil health monitoring systems for sustainable management in the Mediterranean region, 16th Panhellenic Soil Congress, 4-6 December 2023, Conference Amphitheatre of the Agricultural University of Athens.
- 6. Triantakonstantis D., Batsalia M., Lolos N.: LIFE GEOCARBON: An application of carbon agriculture using the RothC model, 16th Panhellenic Soil Congress, 4-6 December 2023, Conference Amphitheatre of the Agricultural University of Athens.
- 7. Triantakonstantis D., Batsalia M., Lolos N.: LIFE GEOCARBON: A carbon farming support system by creating a spatial soil database, 16th Panhellenic Soil Conference, 4-6 December 2023, Conference Amphitheatre of the Agricultural University of Athens.
- 8. Triantakonstantis D., Lolos N., Batsalia M.: Creation of National Maps of Soil Properties, 16th Panhellenic Soil Conference, 4-6 December 2023, Conference Amphitheatre of the Agricultural University of Athens.
- 9. Triantakonstantis D., Batsalia M., Lolos N.: SOILS4MED: Harmonization and expansion of soil indicators in the Mediterranean, 13th Panhellenic Conference on Agricultural Engineering, 19-20 October 2023, Agricultural University of Athens.

- Demertzi, I. I., Detsikas, S. E., Tselka, I., Tzanavari, I., Triantakonstantis, D., Karymbalis, E., and Petropoulos, G. P.: Monitoring morphological changes in river deltas exploiting GEE and the full Landsat archive, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-11722, https://doi.org/10.5194/egusphere-egu22-11722.
- 11.Petropoulos, G. P., Silva-Fuzzo, D. F., Bao, Y., Sandric, I., Triantakonstantis, D., Detsikas, S. E., Srivastava, P. K., and Lamine, S.: SimSphere: a software toolkit to facilitate teaching and research in the study of Land Surface Interactions, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-12605, <u>https://doi.org/10.5194/egusphere-egu22-12605</u>.
- Dosiadis, E., Triantakonstantis, D., Popa, A.-M., Detsikas, S. E., Sandric, I., Petropoulos, G. P., Onose, D., and Chalkias, C.: A GEOBIA-based approach for mapping Urban Green Spaces using PlanetScope imagery: the case of Athens, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-11946, <u>https://doi.org/10.5194/egusphere-egu22-11946</u>.
- Lekka, C., Detsikas, S. E., Petropoulos, G. P., Katsafados, P., Triantakonstantis, D., and Srivastava, P. K.: Utilizing hyperspectral imagery for burnt area mapping in a Greek setting, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-10163, <u>https://doi.org/10.5194/egusphereegu22-10163</u>.
- 14.Detsikas, S. E., Howells, O. D., Ioannou, Z., Petropoulos, G. P., Triantakonstantis, D., Srivastava, P. K., and Stavroulakis, G.: Soil Surface Moisture retrievals from EO and cosmic ray- based approach for selected sites in the UK, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-11703, <u>https://doi.org/10.5194/egusphere-egu22-11703</u>.
- Tselka, I., Detsikas, S. E., Demertzi, I. I., Petropoulos, G. P., Triantakonstantis, D., and Karymbalis, E.: GEE and Machine Learning for mapping burnt areas from ESA's Sentinel-2 demonstrated in a Greek setting, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-9454, <u>https://doi.org/10.5194/egusphere-egu22-9454</u>.
- 16. Triantakonstantis, D., Bithas, K., Detsikas, S. E., Petropoulos, G. P., Calzolari, C., Vaccari, F., Pascual, J., Ros, M., and Guerrero, C.: Establishing a Spatial Soil Database Management System to Support Carbon Farming Geolocation: Introducing the LIFE GEOCARBON Preparatory Project, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-9949, <u>https://doi.org/10.5194/egusphere-egu22-9949</u>.
- 17. **Triantakonstantis D,** Detsikas Sp. 2021. Greek National Map of Soil Organic Carbon, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-13211.
- 18.Lekka Ch, Petropoulos G P, Triantakonstantis D, Detsikas Sp, Chalkias Ch. 2021. Geoinformation in support of sustainable soils' management to strengthen resilience under the pressure of climate change, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-12973.
- 19.D. Triantakonstantis and D. Stathakis, 2015. "Urban Growth Prediction in Athens, Greece, Using Artificial Neural Networks", ICUPRD 2015 : XIII International Conference on Urban Planning and Regional Development, Dubai, 11-12 March 2015.
- 20.**D. Triantakonstantis** and D. Stathakis, 2014. "Estimating Economic Activity in Greece during Economic Crisis using Night-Time Light Satellite Data". Submitted in Geomapplica, 1<sup>st</sup> International Geomatics Applications Conference. Skiathos Island, Greece, 8-11 September 2014.

- 21.D. Triantakonstantis and D. Stathakis, 2014. "Cokriging Areal Interpolation for Estimating Economic Activity using Night-Time Light Satellite Data". Submitted in ICCSA 2014 (International Conference on Computation Science and its Applications, Session: "Geographical Analysis, Urban Modelling, Spatial Statistics". University of Minho, Guimaraes, Portugal, 30 June – 3 July, 2014.
- 22. N. Chrysoulakis, T. Esch, E. Parlow, S. H. Duzgun, A. Tal, A. Sazonova, C. Feigenwinter, **D. Triantakonstantis**, M. Marconcini and M. Cavour, 2013. "The role of Earth Observation in sustainable urban planning and management: the GEOURBAN project". 1st International Conference on Remote Sensing and Geoinformation of Environment. RSCy 2013, Pafos, Cyprus, 8-10 April 2013.
- 23. D. P. Triantakonstantis and S. L. Barr, 2009. "A Spatial Structural and Statistical Approach to Building Classification of Residential Function for City-Scale Impact Assessment Studies". 4th International Workshop "Geographical Analysis, Urban Modeling, Spatial Statistics", Yongin, Korea, 29 June – 2 July, 2009. Lecture Notes in Computer Science (LNCS) 5592, pp. 221-236.
- 24. D. P. Kalivas and **D. P. Triantakonstantis**, 2008. "Soil desertification modelling using neural networks". 4th International Conference on Information and Communication Technologies in Bio and Earth Sciences (HAICTA 2008), Athens, Greece, 18-20 September, 2008.
- D. P. Triantakonstantis, D. P. Kalivas and V. J. Kollias, 2008. "Land use changes modelling using neural networks ". International Conference: Protection and Restoration of the Environment IX. Kefalonia, Greece, 29 June – 3 July, 2008.
- 26. D. P. Triantakonstantis, V.J. Kollias and D.P. Kalivas, 2007. "Soil Desertification Index (SDI) produced by multi-criteria models using fuzzy set theory and Analytical Hierarchy Process (AHP)". 1<sup>st</sup> International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE), Skiathos, Greece, June 24-28, 2007.
- 27. **D. P. Triantakonstantis**, 2007. "Neural networks modeling in predicting soil desertification". 5<sup>th</sup> International Congress of the European Society for Soil Conservation. Palermo, Italy, 25-30 June, 2007.
- D. P. Triantakonstantis, 2007. "Geographical Information Systems: Tools or Science?" Geotechnical Review of Geotechnical Chamber of Greece, 148, pp. 31-32.
- D. P. Triantakonstantis, V. J. Kollias and D. P. Kalivas 2005. "Development of a logistic regression model for forecasting land use changes in a spatio-temporal G.I.S. environment". 4<sup>th</sup> Greek Agricultural Mechanics Conference, Athens, Greece, 6-8 October, 2005, pp.476-488.
- D. P. Triantakonstantis, V. J. Kollias and D. P. Kalivas, 2005. "Study of land use changes in the forest of Dadia Ebrou in a G.I.S. environment". 4<sup>th</sup> Greek Agricultural Mechanics Conference, Athens, Greece, 6-8 October, 2005, pp.359-368.
- 31. D. P. Triantakonstantis, V. J. Kollias and D. P. Kalivas, 2004. "A study of land use changes in a forest area of northeastern Greece using spatio-temporal models in a GIS environment". HAICTA2004 (Information Systems & Innovative Technologies in Agriculture, Food and Environment) Conference. Thessaloniki, Greece, 18-20 March, 2004, pp. 333-338.
- 32. D. P. Triantakonstantis, 2003. "Development of a spatio-temporal GIS to model land use changes in the forest of Dadia in Northeastern Greece". NATO CCMS and Science Committee Workshop on Desertification in the

Mediterranean Region: a Security Issue. Valencia (Spain), 2-5 December, 2003, p. 130 (book of abstracts). It was also presented as a poster.

- 33. D. P. Kalivas, **D. P. Triantakonstantis** and V. J. Kollias, 2001. "Environmental analysis using spatial statistics and GIS". International Conference: Ecological Protection of the Planet Earth, Xanthi, Greece, 5-8 June, 2001, pp. 245-252.
- 34. D. Kalivas, **D. Triantakonstantis** and V. Kollia, 2000. "The use of geomorpholocical data for the improvement of the mapping of soil parameters". 8<sup>th</sup> Greek Soil Science Congress, Kavala, Greece, 2000, pp. 167-177.
- 35. D. Kalivas, D. Triantakonstantis and V. Kollia, 1999. "The role of Geographical Information Systems in the planning and management of natural resources". International Congress on "The Geographical Information Systems of Information in the Challenge of 2000", Thessaloniki, Greece, 1999, pp. 82-95.
- 36. D. P. Triantakonstantis, 1999. "Evaluation of the risk of soil degradation using boolean and fuzzy logic theory techniques". Advanced study course: Desertification in Europe: Mitigation Strategies, Land Use and Planning. Alghero, Italy, 1-9 June, 1999, pp. 482-487.
- 37. D. Kalivas, **D. Triantakonstantis** and V. Kollia, 1998. "Comparison of soil thematic maps and land evaluation maps with maps produced from the application of geostatistical and fuzzy set methods on soil data". 7<sup>th</sup> Greek Soil Science Congress, Agrinio, Greece, 1998, pp. 586-600.

#### Conference Presentations

- 1. December 2024: "Monitoring soil health in agricultural and forest areas", ForOaks Workshop on the topic: "Monitoring the adaptation and carbon storage potential of oak forests to address climate change", Xanthi, Thrace, Greece.
- 2. October 2021: "Applying Sustainable Agricultural Management Practices in Saline and Sodic Soils to Increase Soil Organic Carbon Sequestration Potential and Mitigate Climate Change". Global Symposium of Salt Affected Soils (Virtual).
- 3. February 2020: "Estimation of Soil Organic Carbon using Satellite Data. A case study". OpenEARTH 2020 Conference on Climate Change Adaptation and Mitigation, Thessaloniki, Greece.
- 4. February 2020: "Estimation and calculation of deposition of cadmium (Cd), lead (Pb) and nickel (Ni) in protected and ecologically sensitive salt-lakes around Larnaca Airport Cyprus". OpenEARTH 2020 Conference on Climate Change Adaptation and Mitigation, Thessaloniki, Greece.
- 5. December 2019: "Estimation of soil organic carbon from Sentinel-2 satellite data". 3rd Conference on Geographic Information Systems and Spatial Analysis in Agriculture and Environment, Athens.
- 6. May 2019: "Calculation of soil carbon sequestration using GIS and Remote Sensing. A tool for climate change mitigation", 27th Panhellenic ArcGIS User Meeting, Athens.
- 7. March 2019: "The impact of citrus fruits on climate change mitigation", 1st Hesperida Oiniades, Aitoloakarnania.
- 8. May 2017: "Soil Assessment for the Disposal of Olive Mill Liquid Waste in Areas of the Prefectures of Etoloakarnania and Phocis". 2nd Conference on Geographic Information Systems and Spatial Analysis in Agriculture and the Environment, Athens.

- 9. October 2016: "Effects on the soil quality in an ecological control of the Medfly (Ceratitis capitata) with the use of the attractant BIODELEAR". Eurosoil, European Confederation of Soil Science Societies, Istanbul.
- 10. June 2016: "Soil Properties of the Orchards of the Plain of Chios". Presentation within the framework of the BIODELEAR project, Mandarin Museum, Chios.
- May 2013: "Urban land use changes in Crete Greece between 1997 and 2010".
  1<sup>st</sup> Greek Conference on Spatial Analysis, Athens, Greece.
- 12. February 2012: "Inquiry-based learning in remote sensing: A space balloon educational experiment". 2012 Annual Meeting, Association of American Geographers, New York, USA.
- 13. April 2010: "Handling spatial heterogeneity in urban growth models using neural networks". 2010 Annual Meeting, Association of American Geographers, Washington, DC, USA.
- 14. November 2006: "Use of Neural Networks in Land Use Classification Modelling in the Dadia Nature Reserve, North-Eastern Greece". 21<sup>st</sup> European Conference for ESRI Users. Athens, Greece, (oral presentation).
- November 2003: "Comparison of hail-meter measurements with the indemnities for the clingstone crop in the central Macedonia". 13<sup>th</sup> Greek User Conference of Geographical Information Systems Arc/Info – ArcView, Thessaloniki, Greece, (poster presentation).
- 16. November 2001: "Spatio-temporal analysis using fuzzy logic theory techniques. An example: Kotyhi lagoon". 11<sup>th</sup> Greek User Conference of Geographical Information Systems Arc/info – ArcView, Athens, Greece, (oral presentation).
- 17. March 2001: "Geographical Information Systems and Environment". Conference of the Environment, Organization of Agricultural Vocational Education Training and Employment, Athens, Greece, (oral presentation).
- November 1999: "Evaluation of Thessalian plain for the cotton culture using ArcView". 9<sup>th</sup> Greek User Conference of Geographical Information Systems Arc/Info – ArcView, Athens, Greece (oral presentation).
- 19. November 1999: "A study of topographic and soil conditions for the production of qualitative wines". 9<sup>th</sup> Greek User Conference of Geographical Information Systems Arc/Info ArcView, Athens, Greece, (oral presentation).
- 20. November 1999: "Land suitability maps for the use of fertilizers". 9<sup>th</sup> Greek User Conference of Geographical Information Systems Arc/info ArcView, Athens, Greece, (oral presentation).