

Address:
Agricultural University of Athens
Laboratory of Agricultural Hydraulics
Iera Odos, 75 str.
11855 Athens, GREECE

Tel: +30 2105294070
Mob: +30 6977023603
e-mail: soco@aua.gr
k.soulis@gmail.com

CURRICULUM VITAE



Dr. Konstantinos X. SOULIS, Assistant Professor
Geoinformatics and Spatial Analysis in Agriculture and Environment

PERSONAL INFORMATION

Date of birth: 08/02/1973
Place of birth: Athens, Greece
Nationality: GREEK
Civil Status: Married with two children

EDUCATION:

- (1996) BSc/MSc in Agricultural Engineering, Agricultural University of Athens
- (2009) PhD in Hydrology and Geoinformatics (Agricultural University of Athens). Subject: "Water Resources Management: Development of a Hydrological Model Using Geographical Information Systems"

AWARDS / HONORS

- **(2020) Hydrological Sciences Journal - Associate Editor Award 2020.**
- **Listed among the top 2% of scientists in the world for 2020, (Baas, Jeroen; Boyack, Kevin; Ioannidis, John P.A. (2021), "August 2021 data-update for "Updated science-wide author databases of standardized citation indicators"", Mendeley Data, V3, doi: 10.17632/btchxktzyw.3)**
- (2019) **Publons Peer Review Award** 2019 in Environment/Ecology
<https://publons.com/researcher/1209071/konstantinos-x-soulis/>
- (2019) **Publons Peer Review Award** 2019 Cross-Field
<https://publons.com/researcher/1209071/konstantinos-x-soulis/>
- (2018) **Publons Peer Review Award** as one of the top 1 per cent of peer reviewers in Environment/Ecology
- (2017) **Publons Peer Review Award** as one of the top 1 per cent of peer reviewers in Environmental Sciences
- (1998) **Scholarship** for research on the fields of remote sensing and GIS applications in agriculture (National Scholarship Foundation, after successful exams)
- **Associate Editor at the "Hydrological Sciences Journal"**, which is the most historical Peer Reviewed Journal in hydrology.
<http://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=thsj20>
- **Member of the editorial board** of the Peer Reviewed Journal, "**Journal of Mountain Science**".

- <http://www.springer.com/earth+sciences+and+geography/journal/11629?detailsPage=editorialBoard>)
- **Section Board Member** of the “**Remote Sensing**” Journal, https://www.mdpi.com/journal/remotesensing/sectioneditors/earth_observation_data
 - **Guest Editor, Water Journal**, Special Issue "Soil Conservation Service Curve Number (SCS-CN) Method Current Applications, Remaining Challenges, and Future Perspectives" (2019), https://www.mdpi.com/journal/water/special_issues/Soil_Conservation_Service
 - **Guest Editor, ISPRS International Journal of Geo-Information**, Special Issue " GIS and Remote Sensing Applications in Geomorphology" (2020), https://www.mdpi.com/journal/ijgi/special_issues/gis_geomorphology
 - **Guest Editor, Fire**, Special Issue " Advances in the Assessment of Fire Impacts on Hydrology" (2021), https://www.mdpi.com/journal/fire/special_issues/Fire_Hydrology

LANGUAGE SKILLS

Greek, English, French (basic)

Profiles in research databases:

- Scopus Author ID: 23398632200
- Google Scholar: <https://scholar.google.gr/citations?user=fO-lvagAAAAJ&hl=en>
- ORCID: <http://orcid.org/0000-0002-2712-1676>
- ResearcherID: <http://www.researcherid.com/rid/B-4750-2014>
- Research Gate: https://www.researchgate.net/profile/Konstantinos_Soulis2
- Publons: <https://publons.com/author/1209071/konstantinos-x-soulis#profile>

PROFESSIONAL EXPERIENCE

- From December 2021 until today, I am an **Assistant Professor** in the field “**Geoinformatics and Geospatial Analysis in Agriculture and the Environment**” in the **Agricultural University of Athens**, Department of Natural Resources Management & Agricultural Engineering.
- From July 2014 until 2021, I am member of the Laboratory Teaching Personnel of the Agricultural University of Athens (Department of Natural Resources Management & Agricultural Engineering, Division of Water Resources, Laboratory of Agricultural Hydraulics).
- From 1997 until 2014, I worked as a member of a research team in Agricultural University of Athens (Department of Natural Resources Management & Agricultural Engineering, Division of Water Resources Management (WRM), Laboratory of Agricultural Hydraulics).
- My main research and teaching subjects are: Hydrology, Environmental Hydrology, Modeling, Hydrological Modeling, Hydrometry, Experimental Hydrology, Geospatial Analysis, Geographical Information Systems (GIS), Earth Observation, WRM, Irrigation, Irrigation Water Management, Soil Hydrology, and applications development.
- In parallel, from 1999 up to now, I work as a scientific partner in several projects conducted by other Departments of AUA, by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.), by the Centre for Renewable Energy Sources and Saving (CRES), and by the School of Mechanical Engineering of NTUA.

- Finally, from 2004 up to now, I am responsible for the organization, instrumentation, and operation of the experimental watershed of the division of WRM of the Agricultural University of Athens (Lykorrema experimental watershed, mount Penteli, Attica, Greece).

PUBLICATIONS

In Peer Reviewed Journals

1. **Soulis K.** and Dercas N., 2007. Development of a GIS-based Spatially Distributed Continuous Hydrological Model and its First Application, *Water International*, 32(1): 177-192. DOI:10.1080/02508060708691974
2. Mimides Th., Kotsovinos N., Rizos S., **Soulis K.**, Karakatsoulis P. and Stavropoulos D., 2007. Integrated runoff and balance analysis concerning Greek-Bulgarian transboundary hydrological basin of River Nestos/Mesta, *Desalination*, 213(1-3) 174-181.
3. Stefopoulou A., **Soulis K.**, Papapetrou M., Kyritsis S. and Epp Ch., 2008. Institutional and policy framework analysis in relation to the application of autonomous desalination systems — Greece, *Desalination*, 220(1-3): 455-467.
4. Vavoulidou E., Charoulis A., **Soulis K.** Karyotis K. and Kavvadias V., 2009. “Soil Survey for Improvement of Farming Practices in Malia Municipality, Greece.” *Communications in Soil Science and Plant Analysis*. 40(1):1020-1033. DOI: 10.1080/00103620802698010
5. Valiantzas J.D., Pollalis, E.D., **Soulis, K.X.** and Londra, P., 2009. “Modified form of the extended Kostiaikov equation including various initial and boundary conditions.” *Journal of Irrigation and Drainage Engineering*, ASCE, Volume: 135(4), 450-458, doi:10.1061/(ASCE)IR.1943-4774.0000011.
6. **Soulis K.X.**, Valiantzas J.D., Dercas N. and Londra P.A., 2009. “Investigation of the direct runoff generation mechanism for the analysis of the SCS-CN method applicability to a partial area experimental watershed” *Hydrology and Earth System Sciences*, 13(5): 605–615.
7. Valiantzas, J.D., Pollalis V., **Soulis K.X.**, and Londra P.A., 2011. “Rapid Graphical Detection of Weakness Problems in Numerical Simulation Infiltration Models Using a Linearized Form Equation”. *Journal of Irrigation and Drainage Engineering*, ASCE, 137(8), 524-529 DOI: 10.1061/(ASCE)IR.1943-4774.0000318.
8. Diamantopoulos E., Dercas N., **Soulis K.**, Jellali S. and Stefopoulou A., 2011, “Application of phosphate water and slime in agriculture : investigation of the mobility of the pollutants using hydrologic modeling”, *Global NEST Journal*, 13(2), 130-140.
9. **Soulis K.X.** and Valiantzas J.D., 2012, “SCS-CN parameter determination using rainfall-runoff data in heterogeneous watersheds-the two-CN system approach. The Two-CN system approach.” *Hydrology and Earth System Sciences*, 16, 1001-1015. doi:10.5194/hess-16-1001-2012.
10. **Soulis K.X.** and Dercas N., 2012, “Field calibration of weirs using partial volumetric flow measurements.” *Journal of Irrigation and Drainage Engineering*, ASCE, 138(5), 481-484, DOI: 10.1061/(ASCE)IR.1943-4774.0000424
11. Kargas G. and **Soulis K.X.**, 2012, “Performance analysis and calibration of a new low-cost capacitance soil moisture sensor” *Journal of Irrigation and Drainage Engineering*, ASCE, 138(7), 632–641, DOI: 10.1061/(ASCE)IR.1943-4774.0000449
12. **Soulis K.X.**, Dercas N., Valiantzas J.D., 2012. “Wildfires impact on hydrological response – the case of Lykorrema experimental watershed.” *Global NEST Journal*, 14(3), 303-310.
13. **Soulis K.X.**, Valiantzas J.D., 2013, “Identification of the SCS-CN parameter spatial distribution using rainfall-runoff data in heterogeneous watersheds”, *Water Resources Management*, 27:1737–1749, DOI: 10.1007/s11269-012-0082-5

14. **Soulis K.X.**, 2013, "Development of a simplified grid cells ordering method facilitating GIS-based spatially distributed hydrological modeling." *Computers & Geosciences*, 54, 160-163, DOI:<http://dx.doi.org/10.1016/j.cageo.2012.12.003>.
15. Elmaloglou S., **Soulis K. X.**, Dercas, N., 2013, Simulation of soil water dynamics under surface drip irrigation from equidistant line sources. *Water Resources Management*, 27:4131–4148, DOI 10.1007/s11269-013-0399-8.
16. Elmaloglou S., **Soulis K. X.**, 2013, The effect of hysteresis on soil water dynamics during surface trickle irrigation in layered soils. *Global NEST Journal*, 15 (3), 351-365.
17. **Soulis K.X.**, 2015, "Discussion of "Procedures to Develop a Standardized Reference Evapotranspiration Zone Map" by Noemi Mancosu, Richard L. Snyder, and Donatella Spano." *Journal of Irrigation and Drainage Engineering*, 141(7), 07014055, doi: ASCE, 10.1061/(ASCE)IR.1943-4774.0000831 , 07014055
18. Kargas G. and **Soulis K.X.**, 2015, "Discussion of 'Calibration of the 10HS Soil Moisture Sensor for Southwest Florida Agricultural Soils' by David Spelman, Kristoph-Dietrich Kinzli, Tanya Kunberger." *Journal of Irrigation and Drainage Engineering*, ASCE, 141(6), 07014050, doi: 10.1061/(ASCE)IR.1943-4774.0000823 , 07014050.
19. **Soulis K.X.**, Dercas N. and Papadaki CH., 2015, Effects of forest roads on the hydrological response of a small-scale mountain watershed in Greece. *Hydrological Processes*, doi: 10.1002/hyp.10301
20. **Soulis K.X.**, Elmaloglou S., and Dercas N., 2015, Investigating the effects of soil moisture sensors positioning and accuracy on soil moisture based drip irrigation scheduling systems. *Agricultural Water Management*, 148, 258–268, doi: <http://dx.doi.org/10.1016/j.agwat.2014.10.015>
21. Papadaki C., **Soulis K.X.**, Muñoz-Mas R., Martinez-Capel F., Zogaris S., Ntoanidis L., Dimitriou E., 2015, Potential impacts of climate change on flow regime and fish habitat in mountain rivers of the south-western Balkans. *Science of the Total Environment*, S0048-9697(15)30333-8. doi: 10.1016/j.scitotenv.2015.06.134
22. **Soulis, K.X.**, Manolakos, D., Anagnostopoulos, J. and Papantonis, D. 2016. "Development of a geo-information system embedding a spatially distributed hydrological model for the preliminary assessment of the hydropower potential of historical hydro sites in poorly gauged areas." *Renewable Energy*, 92: 222-232. doi:10.1016/j.renene.2016.02.013
23. **Soulis K.X.** and Elmaloglou S., 2016, Optimum soil water content sensors placement in drip irrigation scheduling systems: the concept of Time Stable Representative Positions, *Journal of Irrigation and Drainage Engineering*, ASCE, 10.1061/(ASCE)IR.1943-4774.0001093 , 04016054.
24. **Soulis K.X.**, Ntoulas N., Nektarios P.A. and Kargas, G., 2017. Runoff reduction from extensive green roofs having different substrate depth and plant cover. *Ecological Engineering*, 102, 80-89. doi:10.1016/j.ecoleng.2017.01.031
25. Papadaki C., **Soulis K.**, Ntoanidis L. Zogaris S., Dercas N., Dimitriou E., 2017. Comparative Assessment of Environmental Flow Estimation Methods in a Mediterranean Mountain River. *Environmental Management*. doi:10.1007/s00267-017-0878-4
26. **Soulis K.X.**, Valiantzas J.D., Ntoulas N., Kargas G., Nektarios P.A., 2017. Simulation of green roof runoff under different substrate depths and vegetation covers by coupling a simple conceptual and a physically based hydrological model. *Journal of Environmental Management* <http://dx.doi.org/10.1016/j.jenvman.2017.06.012>
27. **Soulis, K.X.**, Ntoulas, N., Nektarios, P.A., & Kargas, G. (2017). Green roof runoff reduction under different substrate depths and vegetation covers: The effect of initial substrate moisture conditions and total rainfall depth. *Acta Hort.* 2017.1189.108
28. **Soulis, K.X.**, and Tsesmelis, D.E., (2017). Calculation of the irrigation water needs spatial and temporal distribution in Greece, *European Water*, 59, 247-254.

29. **Soulis, K.X.**, 2018. Estimation of SCS Curve Number variation following forest fires. *Hydrological Sciences Journal*, 63(9), pp. 1332-1346, DOI: 10.1080/02626667.2018.1501482.
30. **Soulis K.X.** and Elmaloglou S., 2018. Optimum soil water content sensors placement for surface drip irrigation scheduling in layered soils. *Computers and Electronics in Agriculture*, 152, 1-8. doi:10.1016/j.compag.2018.06.052
31. **Soulis, K. X.**, Kalivas, D. P., and Apostolopoulos, C. 2018. Delimitation of agricultural areas with natural constraints in Greece: Assessment of the dryness climatic criterion using geostatistics. *Agronomy*, 8(9) doi:10.3390/agronomy8090161
32. Kargas G., **Soulis K.X.**, 2019, Performance evaluation of a recently developed soil water content, dielectric permittivity, and bulk electrical conductivity electromagnetic sensor. *Agricultural Water Management*, 213(1), 568-579, <https://doi.org/10.1016/j.agwat.2018.11.002>
33. Psomiadis, E., **Soulis, K.X.**, Zoka, M., Dercas, N., 2019, Synergistic Approach of Remote Sensing and GIS Techniques for Flash-Flood Monitoring and Damage Assessment in Thessaly Plain Area, Greece. *Water*, 11, 448. <https://doi.org/10.3390/w11030448>
34. Psomiadis, E.; Papazachariou, A.; **Soulis, K.X.**; Alexiou, D.-S.; Charalampopoulos, I. 2020. Landslide Mapping and Susceptibility Assessment Using Geospatial Analysis and Earth Observation Data. *Land*, 9, 133. <https://doi.org/10.3390/land9050133> (**IF: 2.43**)
35. Psomiadis, E., **Soulis, K.X.**, Efthimiou N. 2020, Using SCS-CN and earth observation for the comparative assessment of the hydrological effect of gradual and abrupt spatio-temporal land cover changes. *Water*, 2020, 12, 1386; doi:10.3390/w12051386
36. **Soulis, K.X.**, Londra P., Kargas G., 2020. Characterizing surface soil layer saturated hydraulic conductivity in a Mediterranean natural watershed. *Hydrological Sciences Journal*, 65:15, 2616-2629, DOI: 10.1080/02626667.2020.1831694
37. Papadaki C., **Soulis K.**, Bellos V., Ntoanidis L., Dimitriou E., 2020. Estimation of a Suitable Range of Discharges for the Development of Instream Flow Recommendations. *Environmental Processes*, <https://doi.org/10.1007/s40710-020-00456-1>
38. **Soulis, K.X.**; Psomiadis, E.; Londra, P.; Skuras, D., 2020. A New Model-Based Approach for the Evaluation of the Net Contribution of the European Union Rural Development Program to the Reduction of Water Abstractions in Agriculture. *Sustainability* 12, 7137. <https://doi.org/10.3390/su12177137>
39. Psomiadis, E.; Charizopoulos, N.; Efthimiou, N.; **Soulis, K.X.**; Charalampopoulos, I. 2020. Earth Observation and GIS-Based Analysis for Landslide Susceptibility and Risk Assessment. *ISPRS International Journal of Geo-Information* 2020, 9, 552. <https://doi.org/10.3390/ijgi9090552>
40. Psomiadis, E.; Charizopoulos, N.; **Soulis, K.X.**; Efthimiou, N. 2020. Investigating the Correlation of Tectonic and Morphometric Characteristics with the Hydrological Response in a Greek River Catchment Using Earth Observation and Geospatial Analysis Techniques. *Geosciences* 2020, 10, 377. <https://doi.org/10.3390/geosciences10090377>
41. Psomiadis E., Diakakis M., **Soulis K.X.** 2020. Combining SAR and Optical Earth Observation with Hydraulic Simulation for Flood Mapping and Impact Assessment. *Remote Sensing*. 2020; 12(23):3980. <https://doi.org/10.3390/rs12233980>
42. **Soulis, K.X.** 2021. Soil Conservation Service Curve Number (SCS-CN) Method: Current Applications, Remaining Challenges, and Future Perspectives. *Water* 2021, 13, 192. <https://doi.org/10.3390/w13020192>

43. **Soulis, K.X.**; Generali, K.A.; Papadaki, C.; Theodoropoulos, C.; Psomiadis, E. 2021. Hydrological Response of Natural Mediterranean Watersheds to Forest Fires. *Hydrology* 2021, 8, 15. <https://doi.org/10.3390/hydrology8010015>
44. Psomiadis, E.; Tomanis, L.; Kavvadias, A.; **Soulis, K.X.**; Charizopoulos, N.; Michas, S. 2021. Potential Dam Breach Analysis and Flood Wave Risk Assessment Using HEC-RAS and Remote Sensing Data: A Multicriteria Approach. *Water* 2021, 13, 364. <https://doi.org/10.3390/w13030364>
45. Kargas, G., **Soulis, K. X.**, & Kerkides, P. (2021). Implications of hysteresis on the horizontal soil water redistribution after infiltration. *Water (Switzerland)*, 13(19) doi:10.3390/w13192773
46. **Soulis, K. X.**, Manolakos, D., Ntavou, E., & Kosmadakis, G. (2022). A geospatial analysis approach for the operational assessment of solar ORC systems. case study: Performance evaluation of a two-stage solar ORC engine in greece. *Renewable Energy*, 181, 116-128. doi:10.1016/j.renene.2021.09.046

In Other Journals

1. Σούλης Κ., Θεοχάρης Α., Εκπαιδευτική εφαρμογή πολυμέσων για τις αρδεύσεις, Γεωργία και Κτηνοτροφία, Τεύχος 3, Μάρτιος 2000. (Soulis K., Theocharis A., 2000, Educational Multimedia application development with subject: “Irrigation Techniques”, Agriculture and Livestock, Volume 3, March 2000.)(in Greek)

Patent

Soulis Konstantinos, 2017. Patent for “Decision Support System for the Design of Extensive and Semi Intensive Green Roofs” Patent Number 1008943 Hellenic Industrial Property Organization, 6/2/2017.

In Conferences Proceedings (Peer Reviewed)

1. **Soulis K.**, Rizos S., Mimides Th. and Kotsovinos N., A GIS application for the preliminary selection of small hydroelectric power plants suitable sites. “Proceedings of the 7th International Conference on Environmental Science and Technology”, Syros, Greece, 3-6/9 2001, Vol. II, pp. 821-829.
2. Mimides Th., Karakatsoulis P., Rizos S. and **Soulis K.** New Perspectives in the management of water resources. The case of Tranboundary hydrological basin of Strymonas/Struma River between Greece and Bulgaria. “Proceedings of the 7th International Conference on Environmental Science and Technology”, Syros, Greece, 3-6/9 2001, Vol. II, pp. 831-839.
3. Dercas N., **Soulis K.** and Kyritsis S. A GIS Application for the Integrated Water Resources Management of Naxos Island (Greece). “Proceedings of the 1st Conference of Hellenic Association of ICT in Agriculture, Food and Environment, Athens, Greece, 6-7 June 2002, pp. 347-356
4. Mimides Th., Rizos S., **Soulis K.**, Karakatsoulis P. and Dimitrov D., System of Prediction & Warning of Floods in the Water Basin of Strymonas/Struma River, Conference on Water

Observation and Information System for Decision Support Ohrid, FYROM - 25/29 May 2004 (Paper available at www.balwois.net)

5. Vavoulidou, E., Charoulis A., Karyotis Th., **Soulis K.** and Papadopoulos P. 2004. Evaluation of Greece Histosols using GIS: a case study from —Tenagi-Philippon“ in Northern Greece. Eurosoil 2004, Freiburg, Germany. Proc. p. 251. www.bodenkunde.uni-freiburg.de/eurosoil/inhalt_poster1
6. Mimides Th., Kotsovinos N., Karakatsoulis P., Rhizos S., **Soulis K.** and Stavropoulos D. 2005. «Contribution for an Integrated Water Management of the Greek-Bulgarian Transboundary River Nestos/Mesta». International Conference on Water Economics, Statistics and Finance. Rethimno, Greece, 8-10 July 2005, pp. 443 - 450.
7. Mimides Th., Kotsovinos N., Rhizos S., **Soulis C.**, Karakatsoulis P. and Stavropoulos D., 2005. «Integrated Runoff and Balance Analysis Concerning Greek-Bulgarian Transboundary Hydrological Basin of River Nestos/Mesta». Proceedings of the International Conference on New Water Culture of South East European Countries-AQUA 2005, Helexpo, 21 - 23 October, Athens, Greece.
8. Mimides Th., Kotsovinos N., Rhizos S., **Soulis C.** and Karakatsoulis P., 2005. «Integrated Rainfall Analysis Concerning Greek-Bulgarian Transboundary Hydrological Basin of River Nestos/Mesta». Proceedings of the International Conference on New Water Culture of South East European Countries-AQUA 2005, Helexpo, 21 - 23 October, Athens, Greece.
9. Valiantzas J.D., Asimakopoulos A., Dercas N., **Soulis K.**, 2005, Development of a software tool for the hydraulic design of microirrigation systems with sloping irrigation pipelines. Proceedings of the 4th Congress of the Hellenic Society of Agricultural Engineers, Athens: 6 - 7 October. In Greek.
10. Vavoulidou E., Charoulis A., **Soulis K.**, Avramidis E., Dimirkou A., and Papadopoulos P., 2005. Evaluation of arable soils using GIS. Proceedings SEESOIL, Journal of the south East England Soil Discussion Group. Volume 16, 2006. SEESOIL, Winter Meeting Uni. of Reading U.K, 7. December, 2005
11. Vavoulidou E., Avramidis E., Papadopoulos P., Charoulis A., Karyotis Th., and **Soulis K.**, 2006. The Use of Soil Mapping with the Aim of Improving Farming Practices in a Region of Crete, Greece., 18th World Congress of Soil Science, July 9-15, 2006 - Philadelphia, Pennsylvania, USA. <http://www.ldd.go.th/18wcss/techprogram/P19248.HTM>
12. **Soulis K.**, Dercas N., Valiantzas J.D., 2007, Presentation of the Experimental Watershed in the Stream Lykorrema of Penteli Mountain, Proceedings of the 5th Congress of the Hellenic Society of Agricultural Engineers, Larisa: 18 – 20 October. In Greek.
13. Subiela, V. J., Peñate B., Sánchez A. S., **Soulis K.**, 2007, Cost Reduction Strategies for Autonomous Desalination Units Based on Renewable Energies. IDA World Congress-Maspalomas, Gran Canaria –Spain October 21-26, 2007. REF: IDAWC/MP07-251
14. Vavoulidou E., Charoulis A., **Soulis K.**, Karyotis Th. and Papadopoulos P.. 2007. Soil survey using GIS with the Aim of Improving Farming Practices. The case of Malia Municipality, Greece.10th Internat. Symposium on Soil and Plant Analysis. Abstract Book, p.31, ISBN 978-963-06-2678-1.
15. Kerkides P., **Soulis K.**, Psomiadis E. and Giannouloupoulos P. Water resources conditions assessment in Greece and their role in desertification. CEST 2007 - 10th International Conference on Environmental Science and Technology, Kos Island, Greece, September 5th - 7th, 2007

16. Vavoulidou E., Karyotis Th., **Soulis K.**, Charoulis A., Panoras A. and Stavrinou E., 2007. GIS application for nitrates evaluation in a peat area in Greece. Poster. Achievements Cost 856, Denitrification and related aspects. Uppsala, Sweden 5-8.12.2007.
17. Bru K., Guézennec A.G., Lanini S., Graveline N., **Soulis K.**, Karaouli F. and Guesmi A., 2008, Model development for integrated water management in the influence area of phosphate mines, Proceedings of the iEMSs Fourth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2008). International Environmental Modelling and Software Society, Barcelona, Catalonia, July 2008. ISBN: 978-84-7653-074-0
18. Diamantopoulos E., Dercas N., **Soulis K.**, Jellali S. and Stefopoulou A., 2008, Investigation of groundwater pollution risk from phosphate water and sludge utilization in agriculture using hydrodynamic modelling, 4th International Conference on Information and Communication Technologies in Bio and Earth Sciences (HAICTA 2008), September 18-20, 2008, Athens, Greece
19. Stefopoulou, A., N. Dercas, S. Diamantopoulos, S.Jellali and **K. Soulis**, 2008. "Investigation on the environmental risk from phosphate sludge disposal using hydrodynamic modeling". 8th International Hydrogeological Congress of Greece, Athens, pp 379-388.
20. Mimides Th., **Soulis K.**, Trikili I. Rhizos S. Pylarinou A. and Ermides D., 2008. "Physicogeography and micrometeorology of the Hydrologic basin Vathi of Kalymnos, Dodecanese, Greece". Proceedings of the 8th International hydrogeological congress of Greece, 8-10 October. In Greek.
21. Pollalis, E., **K. Soulis**, E. Diamantopoulos, P. Londra, G. Kargas, and J.D. Valiantzas. 2009. "Evaluation of a low cost soil moisture sensor". Proceedings of the 11th National Conference of the Hellenic Hydrotechnical Association. – 7th National Conference of the Hellenic Committee of Water Resources Management. Volos, 27-30 May, pp. 677-684. In Greek.
22. **Soulis K.**, Londra P., Alonistioti D., Pollalis E. and Valiantzas J. D., 2009, Investigation of wildfires effect on flood runoff. 6th Proceedings of the 6th Congress of the Hellenic Society of Agricultural Engineers, Thessaloniki, 8-10 October. In Greek.
23. **Soulis K.**, Psomiadis E., Kerkides P., 2010, Development and Testing of a Spatially Distributed Continuous Hydrological Model for Assessing Desertification. Workshop in the frame of the European Commission "Understanding, Assessing and Monitoring Desertification", Institute of Mediterranean Forest Ecosystems and Forest Products Technology, Athens, Greece, May 19, 2010. In Greek.
24. Bru, K., Graveline N., **Soulis K.**, Dercas N., Stefopoulou A., Guesmi A., Karaouli F., and Guézennec A.G., 2010. Development of a methodology for Integrated Water Resources Management in Mediterranean phosphate mine areas, International Congress on Environmental Modelling and Software, Modelling for Environment's Sake, Fifth Biennial Meeting (iEMSs), Ottawa, Canada, 2010.
25. **Soulis K.**, Dercas N., 2010. AgroHydroLogos: development and testing of a spatially distributed agro-hydrological model on the basis of ArcGIS, International Congress on Environmental Modelling and Software, Modelling for Environment's Sake, Fifth Biennial Meeting (iEMSs), Ottawa, Canada, 2010.
26. **Soulis K.**, Dercas N., Bru, K., Graveline N., Stefopoulou A., 2010. Development of a Decision Support System (ElmaaDSS) for the integrated water management of Mediterranean phosphate mining areas, International Congress on Environmental

- Modelling and Software, Modelling for Environment's Sake, Fifth Biennial Meeting (iEMSs), Ottawa, Canada, 2010.
27. **Soulis K.**, Valiantzas J., Dercas N., 2010. Modelling forest fires hydrological impact using spatio-temporal geographical data. International Congress on Environmental Modelling and Software, Modelling for Environment's Sake, Fifth Biennial Meeting (iEMSs), Ottawa, Canada, 2010.
 28. **Soulis K.X.**, Valiantzas J.D., 2011, "Identification of the SCS-CN parameter spatial distribution using rainfall-runoff data in heterogeneous watersheds", VI EWRA International Symposium - Water Engineering and Management in a Changing Environment, Catania, June 29 - July 2 2011.
 29. **Soulis K.X.**, Dercas N., Valiantzas J.D., 2011. "Wildfires impact on hydrological response – the case of Lykorrema experimental watershed." CEST2011 – Rhodes, Greece: 8 - 10 September.
 30. Kargas G., **Soulis K.X.**, Tsitou P. 2011, "Volumetric moisture determination by the 10HS sensor in various porous media.", Proceedings of the 7th Congress of the Hellenic Society of Agricultural Engineers, Athens: 5 – 8 October.
 31. **Soulis K.X.**, Dercas N., Papadaki, X., 2013, "Effects of forest roads on the hydrological response of a small scale mountain watershed in Greece.", Proceedings of the 13th International Conference on Environmental Science and Technology, Athens, Greece, 5-7 September.
 32. **Soulis K.X.**, Manolakos D., Anagnostopoulos J., Papantonis D., 2015, "Assessing The Hydropower Potential of Historical Hydro Sites Using A Geo-Information System and Hydrological Modeling in Poorly Gauged Areas", 9th World Congress of the European Water Resources Association (EWRA) "Water Resources Management in a Changing World: Challenges and Opportunities", June 10-13, 2015, Istanbul Turkey.
 33. Papadaki C., **Soulis K.X.**, Muñoz-Mas R., Ntoanidis L., Zogaris S., Dercas N., Dimitriou E., 2015 "A New Approach for Determining the Environmental Flow Regime in a Greek River", 9th World Congress of the European Water Resources Association (EWRA) "Water Resources Management in a Changing World: Challenges and Opportunities", June 10-13, 2015, Istanbul Turkey.
 34. **Soulis K.X.**, Elmaloglou S., 2015, "Automated Irrigation Scheduling in Drip Irrigation Systems: Optimum Soil Moisture Sensors Positioning", 9th World Congress of the European Water Resources Association (EWRA) "Water Resources Management in a Changing World: Challenges and Opportunities", June 10-13, 2015, Istanbul Turkey.
 35. Kargas G., Mpakogianis K., Papaioanou I., **Soulis K.** 2015, "Temporal variability of hydraulic conductivity at saturation of upper soil layer." Proceedings of the 9th Congress of the Hellenic Society of Agricultural Engineers, Thessaloniki: 8 – 9 October.
 36. **Soulis K. X.**, Ntoulas N., Nektarios P. A., Kargas G. 2016, "Green roof runoff reduction under different substrate depths and vegetation covers: the effect of initial substrate moisture conditions and total rainfall depth" 6th International Conference on Landscape & Urban Horticulture, 20-25 June 2016, Athens – Greece, <http://www.luh2016.org/>
 37. Tsesmelis E.D., Cosmas K., **Soulis K.**, Alexandris S., Karavitis A.C., 2017. «Common ground among drought vulnerability and desertification vulnerability using the composite indexes ESA and SDVI in Greece», 2^o Conference on Geographical Information Systems and Spatial Analysis in Agriculture and Environment, Athens 25-26 May 2017.

38. **Soulis K. X.** and Tsesmelis D. E., 2017. “Calculation of the irrigation water needs spatial and temporal distribution in Greece.” 10th World Congress of the European Water Resources Association (EWRA) on Water Resources and Environment “Panta Rhei”, 5-9 July 2017, Athens, Greece
39. Kargas G., **Soulis K.**, Londra P., 2017. “Water losses during the dry period in a bare and with free natural vegetation loam soil” 10^o Congress of the Hellenic Society of Agricultural Engineers, Athens, 28-29 September 2017.
40. **Soulis K.X.**, Londra P., Metaxas G., Kargas G., 2019. Hydraulic conductivity spatiotemporal variability in watersheds. 11th World Congress on Water Resources and Environment (EWRA 2019) “Managing Water Resources for a Sustainable Future” Madrid, Spain, 25-29 June 2019
41. Kargas G., Londra P., Karistinou E., Katsipis D., **Soulis K.**, 2019. Evaluation of the Square Root Time model in estimating the evaporation from a bare loam soil. 11th World Congress on Water Resources and Environment (EWRA 2019) “Managing Water Resources for a Sustainable Future” Madrid, Spain, 25-29 June 2019
42. Papadaki Ch., Bellos V., **Soulis K.**, Dimitriou E., 2019. Incorporating biological components to analyse the hydrological variability for ecological flow recommendations. 11th World Congress on Water Resources and Environment (EWRA 2019) “Managing Water Resources for a Sustainable Future” Madrid, Spain, 25-29 June 2019.
43. 40. **Soulis K.X.**, Psomiadis, E., Londra P., 2019. A new modelling approach for the estimation of the rural development program’s contribution in water use efficiency in agriculture, 3rd Conference of Geographic Information Systems and Spatial Analysis in Agriculture and the Environment, Athens 11-13 December 2019.
44. Psomiadis, E., Efthimiou N., **Soulis K.X.**, Stamatoniolos G., 2019. Land use / land cover change effect on natural disasters and succeeding processes. 3rd Conference of Geographic Information Systems and Spatial Analysis in Agriculture and the Environment, Athens 11-13 December 2019.
45. **Soulis K.X.**, Psomiadis E., Londra P., 2020. A new modelling approach for the evaluation of the EU Rural Development Program’s contribution to the reduction of water abstractions in agriculture. Online, 4–8 May 2020, EGU2020-1489, <https://doi.org/10.5194/egusphere-egu2020-1489>, 2019

PhD. Thesis

Soulis, K.X. “Water Resources Management: Development of a Hydrological Model Using Geographical Information Systems”, Agricultural University of Athens, Dept. of Natural Resources Management & Agricultural Engineering, 2009.

Books

1. **Konstantinos Soulis**, Eleftherios Nellas “Computer applications in agriculture” (1999) (in Greek).
2. **Soulis K.X.**, 2021. Chapter 2. Hydrological data sources and analysis for the determination of environmental water requirements in mountainous areas. in Environmental Water Requirements in Mountainous Areas, In Environmental Water

Requirements in Mountainous Areas, Edited by Dimitriou, E., Papadaki, C., Elsevier, ISBN: 9780128193426, <https://doi.org/10.1016/B978-0-12-819342-6.00007-5>

3. C. Depraetere, K.X. Soulis, D.E. Tsesmelis, G. Avgoustidis, I. Spilanis, 2020. Impacts of climate change on the evolution of water resources in the context of the Mediterranean islands using as an example two Aegean Sea islands: consequences for touristic activities in the future. In “THE ANTHROPOCENE AND ISLANDS: VULNERABILITY, ADAPTATION AND RESILIENCE TO NATURAL HAZARDS AND CLIMATE CHANGE” “Geographies of the Anthropocene” Il Sileno Edizioni, ISSN 2611-3171, Lago (CS), Italy. www.ilsileno.it/geographiesoftheanthropocene

TEACHING ACTIVITY

Graduate Courses

- Surface Water Hydrology
- Hydrology
- Computers Applications in Water Resources
- Fluid mechanics / Applied Hydraulics
- Close Conduits Hydraulics
- Experimental Hydraulics
- Land Reclamation / Collective Irrigation Networks
- Drainage

Postgraduate Courses

- Advanced GIS Applications in Hydrology and Hydraulic Works
- Advanced Surface Water Hydrology
- GIS and Remote Sensing Applications
- Land Reclamations

RESEARCH PROJECTS

- Member of the scientific teams in the following research projects:

1. “A preliminary research for an integrated management of the Nestos/Mesta transboundary river basin waters. Existing regime - general specifications”, financed by the Greek Ministry of National Economy and Interreg II, EC. 1998 – 1999, Scientific responsible: Karakatsoulis P.
2. Environmental study - Soil survey with thematic maps in region Gorgopotamos- Lamia Central Greece. The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) and financed by the region of Central Greece (Coordinator Dr. E. Vavoulidou-Theodorou) (2000-2002)
3. Soil survey and mapping of a peat area “Tennagi –Philippi” by Kavala-Drama in NE Greece) The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) and financed by the Ministry of Agriculture (YEB, ΣΑΜ 081, ΚΑ 97 81 7000) (Coordinator Dr. E. Vavoulidou-Theodorou) (1998-2002)

4. Soil survey and mapping of Fokida prefecture in scale 1:100.000. The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) (Coordinator Dr. E. Vavoulidou-Theodorou) (1995-2000).
5. “Flood forecasting and warning system for the Strymona/Struma transboundary river basin (STRIPLIM)”, financed by the Greek Ministry of Economy and Interreg II & III and Phare CBC, EC 1999-2000. Scientific responsible: Karakatsoulis P.
6. “Integrated research of the water resources of eastern Macedonia, Thrace and Thasos Island, Greece for establishing small hydroelectric dams”, financed by the Center for Renewable Energy Resources, 2000-2001. Scientific responsible: Mimides Th.
7. “Contamination sources and proposals for the environmental upgrading of Koumoundourou Lake, Attica Greece”, 2nd phase, financed by LIFE and the self-ruling Prefecture of West Attica. Scientific responsible: Mimides Th. (2001–2006)
8. “Rational exploitation of water resources and environmental of the hydrological basin of Vathi Kalymnos with emphasis on the holistic geohydroeconomic management of these resources”, financed by Interreg II – Drought and Municipal Company of Water and Sewerage of Kalymnos, 2000-2001. Scientific responsible: Mimides Th.
9. Compatibility of the Transboundary Monitoring Stations for the Water Quality of River AXIOS/VARDAR. Search for Software Water Quality and Local Conditions, Ministry of Environment, Physical Planning and Public Works, 2000. Scientific responsible: Karakatsoulis P.
10. Environmental study plus maps, in region Malia-Herakleion –Crete, The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) and financed by the municipality of Malia (Coordinator Dr. E. Vavoulidou-Theodorou) (2001-2003).
11. Policy Initiative to Overcome Water Competition between the Vital Economic Sectors of Agriculture and Tourism in the Mediterranean EC Contract No. ICA3 – CT2000 – 30002. (2000-2004) Scientific responsible: S. Kyritsis.
12. Water Observation and Information System for Decision Support (WOISYDES) (2003-2004). Scientific responsible: Mimides Th.
13. Coordination action for autonomous desalination units based on renewable energy systems. ADU-RES. INCO MPC – 1 – 50 90 93. (2004 - 2007). Scientific responsible: S. Kyritsis.
14. “Cane Resources Network for South Africa” ICA4-CT-2001-10103. (2001 – 2005) Scientific responsible: N. Dercas
15. Environmental study plus maps, in region Gazi-Herakleion Crete, The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) and financed by the municipality of Gazi (Coordinator Dr. E. Vavoulidou-Theodorou) (2002-2008).
16. Soil evaluation and soil fertility with thematic maps, in Region on Archanes Herakleion-Crete, The project was implemented by the Soil Science Institute of Athens of the National Agricultural Research Foundation (N.AG.RE.F.) and financed by the municipality of Archanes (Coordinator Dr. E. Vavoulidou-Theodorou) (2004-2005)
17. Soil evaluation with thematic maps, in region Messara -Herakleion-Crete (2003-2004), The project was implemented by the Soil Science Institute of Athens and the Institute for Olive Tree and Subtropical Plants of Chania of the National Agricultural Research Foundation (N.AG.RE.F.) (Coordinator Dr. E. Vavoulidou-Theodorou) (2004-2005).
18. Geographical Information System development in order to organize the technical services of the municipality of Marousi, Greece (2004-2006). Scientific responsible: Mimides Th.
19. Instrumentation and study of an experimental watershed. (2004 - continue) Scientific responsible: N. Dercas.

20. “Integrated water management of Mediterranean phosphate mining and local agricultural systems” INCO-MPC- 015410 Scientific responsible for Agric. University of Athens: N. Dercas (2005 – 2009)
21. “DeSurvey: A Surveillance System for Assessing and Monitoring of Desertification” IP-003950. Scientific responsible for Agric. University of Athens: P. Kerkides (2005-2010)
22. “Analysis of flood runoffs on Penteli mountain, Attica, Greece” Scientific responsible: N. Dercas (2009 – 2012)
23. “Renewable Energy Sources Transforming Our Regions - Hydro (RESTOR HYDRO)”. Intelligent Energy Europe IEE/11/957, Partner for Greece School of Mechanical Engineering of NTUA, Scientific responsible: D. E. Papantonis, (2012-2015)
24. Urban BioRoof - Cooperation for R&D on screening and formulation of substrates and plants for green roofs. Scientific responsible: Panagiotis Nektarios (2013-2015)
25. Farming tools for external nutrient inputs and water management (FATIMA) / Horizon 2020 / Sustainable Food Security / Call: H2020-SFS-2014-2, Scientific responsible for Agric. University of Athens: N. Dercas (2015 – ongoing)
26. “Applying Common Criteria to Identify Agricultural Areas with Natural Constraints: Greece”, Hellenic Ministry of Rural Development and Foods Administrative Sector for Community Resources and Infrastructure, Scientific responsible: D. Kalivas (2017 – 2018)
27. CLICHA: Climate Change in Agriculture. Erasmus+ Programme. Project Nr. 586273-EPP-1-2017-1-EL-EPPKA2-CBHE-JP (2018 – ongoing)
28. Study for the evaluation of the impact of the Common Agricultural Policy (CAP) agricultural development programme in water use efficiency. Hellenic Ministry of Rural Development and Food. Scientific responsible: Em. Psomiadis (2019-ongoing)
29. Technical Support for the design of the new Common Agricultural Policy strategic plan. Hellenic Ministry of Rural Development and Food, Administrative Sector for Community Resources and Infrastructure Scientific responsible: E. Klonaris (2020 - 2022)

EVALUATION AND PEER REVIEW

Evaluation of European Research Projects Proposals

- (2016) ERANETMED2
- (2017) ERANETMED3
- (2018) Evaluation Committee Member PRIMA Section 2 – Thematic area 1: Sustainable water management for arid and semi-arid Mediterranean area - (Stage 1)
- (2018) Evaluation Committee Member - PRIMA Section 2 – Thematic area 1: Sustainable water management for arid and semi-arid Mediterranean area - (Stage 2)
- (2021) Midterm evaluation of research project under PRIMA
- (2021) Czech Science Foundation | GACR | Department of Technical Sciences

Reviewer

- Top Reviewer in Publons (2017, 2018, and 2019)
<https://publons.com/author/1209071/konstantinos-x-soulis#profile>

Reviewer of the following referred international journals and Congresses:

1. Acta Scientiarum Polonorum Seria Formatio Circumiectus

2. Agricultural Water Management
3. Agriculture
4. Agronomy
5. Applied Mathematical Modelling
6. Arabian Journal of Geosciences
7. CATENA
8. Computers & Geosciences
9. Computers and Electronics in Agriculture
10. Desalination and Water Treatment
11. Disaster Advances
12. Ecohydrology
13. Ecohydrology & Hydrobiology
14. Environmental Earth Sciences
15. Environmental Engineering and Management Journal
16. Environmental Modelling & Software
17. Environmental Processes
18. Frontiers of Earth Science
19. Horticulturae
20. Hydrological Processes
21. Hydrological Sciences Journal
22. Hydrology
23. Hydrology and Earth System Sciences
24. Hydrology Research
25. IEEE Access
26. International Journal of Environmental Research and Public Health
27. International Journal of Geophysics
28. International Journal of Hydrology Science and Technology
29. ISH Journal of Hydraulic Engineering
30. ISPRS International Journal of Geo-Information
31. Journal of Agricultural Science and Technology
32. Journal of Computational Methods in Sciences and Engineering
33. Journal of Engineering
34. Journal of Environmental Engineering and Landscape Management
35. Journal of Environmental Management
36. Journal of Flood Risk Management
37. Journal of Hydroinformatics
38. Journal of Hydrologic Engineering
39. Journal of Hydrology
40. Journal of Mountain Science
41. Journal of Water and Climate Change
42. Land Degradation & Development
43. Marine and Freshwater Research
44. Measurement
45. Natural Hazards
46. Pedosphere
47. Physical Geography
48. Remote Sensing
49. Science of the Total Environment
50. Scientia Agricola
51. Sensors

52. Soil Science Society of America Journal
53. South African Journal of Plant and Soil
54. Sustainability
55. Transactions of the ASABE
56. Urban Water Journal
57. Vadose Zone Journal
58. Water
59. Water Resources Management
60. Water Resources Research
61. Water SA
62. Υδροτεχνικά – Hydrotechnica

Congresses

63. International Congress on Environmental Modelling and Software, Modelling for Environment's Sake, Fifth Biennial Meeting (iEMSs), Ottawa, Canada, 2010.
64. 13th International Conference on Environmental Science and Technology, Athens, Greece, 2013.
65. 13th International Congress of the Geological Society of Greece, Chania, Crete, 2013.
66. 14^ο Συνεδρίο της Ελληνικής Υδροτεχνικής Ένωσης

MEMBERSHIP OF SCIENTIFIC SOCIETIES AND PROFESSIONAL BODIES:

- Geotechnical Chamber of Greece
- International Association of Hydrological Sciences (IAHS)
- European Geosciences Union (EGU)
- European Water Resources Association (EWRA)
- International Association for Mathematical Geosciences (IAMG)
- International Environmental Modelling and Software Society (iEMSs).

TRAINING COURSES AND SEMINARS

15 – 22 February 2014, SMHI/ Swedish Meteorological and Hydrological Institute (LLP / ERASMUS) (Hydrological modeling - HYPE model, snow hydrology, monitoring).

25 – 26 November 2000, Training course: “Introductory Groundwater Flow and Contaminant Transport Modelling”, Environmental Simulations International (esi), Athens, Greece.

1997, Training course: “Sea Resources Management and Environmental Protection”, duration: 300 hours, Ministry of Education, Life Long Learning and Religious Affairs, Athens, Greece.

August 1995, Training course: “Intense three weeks course on Multimedia Creation”, MuViReX, Multimedia and Virtual Reality Center of Studies, Kalithea, Athens, Greece.

March – May 1995, Graduated the 64th “Open Sea Sailing School”, Piraeus Sailing Club - I.O.P, Piraeus, Greece.

March – May 1994, Training course: “Apiculture”, duration: 60 hours Agricultural Sciences Institute, Marousi, Attica, Greece.

OTHER SKILLS and INTERESTS:

- Excellent use of computers and Computer programming
- GIS use and GIS applications development
- Hydrological models: SWAT, HEC-HMS, Hydrus 1D/2D/3D, etc.
- Photography
- Long distance running

Main Recent Races: Marathons (42.2 km): Athens Classic Marathon 2011, 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2021, Nafplio Marathon 2014, 2015, 2018 Thessaloniki Alexander the Great Marathon 2016 (PB: 3:39':01'').

- Cycling

Athens, December 2021