
George D. Bathrellos

Professor of Geomorphology

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PERSONAL INFORMATION

Date of Birth: May 27, 1965
Place of Birth: Athens
Marital status: Married with two children
Nationality: Greek

EDUCATION

1991: Bachelor in Geology, Faculty of Geology, National & Kapodistrian University of Athens (N.K.U.A.), Greece
2000: MSc in Geography & Environment, Faculty of Geology, N.K.U.A., Greece
2005: PhD in Urban Geology & Geomorphology, Faculty of Geology, N.K.U.A., Greece
2014: MSc in Geological and Atmospheric Environment for Infrastructure Design, Department of Natural Resources & Agricultural Engineering, Agricultural University of Athens, Greece

WORK EXPERIENCE

1986: Internships in "S & B Industrial Metals S.A." - Greece
1987-1989: Internships in "Institute of Geological and Mineral Exploration (I.G.M.E.)"
1992-1993: Geologist in "Ministry of Environment, Spatial Planning and Public Works"
1994-1997: Collaborator of Pyli Municipality (Trikala Prefecture)
1995-1999: Geologist Researcher
1997-2000: Secondary Education Teacher in Private Schools
2000-2005: Employee of a certain time in National & Kapodistrian University of Athens (N.K.U.A.)
2005-2014: Laboratory Technologist & Researcher in Department of Geography & Climatology, Faculty of Geology & Geoenvironment, N.K.U.A.
2006-2007, 2009-2010, 2011-2012: Under Appointed Lecturer Faculty of Geology & Geoenvironment, N.K.U.A.
2012-2013: Teaching Staff in "MSc in Water Resources of the Mediterranean"
2013-2014: Laboratory Teaching Staff in Department of Civil Engineering and Surveying & Geoinformatics Engineering, Technological Educational Institute of Athens
2014-2020: Laboratory Teaching Staff & Researcher of "Geomorphology and Natural Hazards", Department of Geography & Climatology, Faculty of Geology & Geoenvironment, N.K.U.A.
2016-2018: Teaching Staff in Hellenic Open University
2020-2024: Associate Professor of "Geomorphology", in Department of Geology, University of Patras
2024 until now: Professor of "Geomorphology", in Department of Geology, University of Patras

MAIN RESEARCH TOPICS

- Geomorphology
- Relief evolution
- Geomorphological Processes
- Fluvial Geomorphology
- Hydrology

- Glacial & Periglacial Geomorphology
- Karst Geomorphology
- Aeolian Geomorphology
- Coastal Geomorphology
- Natural Geomorphological Hazards & Natural Disasters
- Mass Movements (Landslides)
- Erosion
- Floods
- Geomorphological Hazard Assessment Models (for floods, erosion, landslides, karst)
- Quaternary Geology
- Urban Geology & Geomorphology
- Planning, Land uses

NATIONAL & INTERNATIONAL RECOGNITION

- **2015: Award** Konstantinos Ktenas from *Academy of Sciences, Humanities and Fine Arts of Athens*
- **2016:** Most Cited Paper for “Engineering Geology” (Elsevier - IF: 7.4)
- **2018:** Highly Cited Paper for “Journal of African Earth Sciences” (Elsevier - IF: 2.3)
- **Reviewer** for more than 100 journals (Science Citation Index)
- **2017: Excellence in Review Award** for “Journal of Environmental Management” (Elsevier - IF: 8.7)
- **2021 until now** Associate Editor in “Natural Hazards” (Springer - IF: 3.7)
- **Editorial Board member** in the following journals “Sustainability” & “Earth”
- **Guest Editor** in *Special Issues* for the following journals “Land”, “Sustainability” & “Journal of Marine Science and Engineering”
- Member of Organizing and Scientific Committees in several national & international Conferences
- More than **3,600 citations**
- **Citations / publication: 56.71**

Scopus	Google Scholar
Number of Citations	
2,945	3,987
h index	
28	31

SELECTED PUBLICATIONS

1. Skilodimou H, Stefouli M, *Bathrellos G* (2002). **Spatio-temporal analysis of the coastline of Faliro Bay, Attica, Greece.** *Estudios Geológicos*, 58(3-4): 87-93, doi: [10.3989/egeol.02583-4113](https://doi.org/10.3989/egeol.02583-4113), Spanish National Research Council.
2. Skilodimou H, Livaditis G, *Bathrellos G*, Verikiou–Papaspiridakou E (2003). **Investigating the flooding events of the urban regions of Glyfada and Voula, Attica, Greece: a contribution to Urban Geomorphology.** *Geografiska Annaler: Series A, Physical Geography*, 85(2): 197–204, doi: [10.1111/1468-0459.00198](https://doi.org/10.1111/1468-0459.00198), Blackwell Publishing–Wiley–Swedish Society for Anthropology and Geography.
3. *Bathrellos GD*, Skilodimou HD, Kelepertsis A, Alexakis D, Chrisanthaki I, Archonti D (2008). **Environmental research of groundwater in the urban and suburban areas of Attica region, Greece.** *Environmental Geology*, 56(1): 11–18, doi: [10.1007/s00254-007-1135-6](https://doi.org/10.1007/s00254-007-1135-6), Springer.
4. *Bathrellos G*, Antoniou B, Skilodimou H (2009). **Morphotectonic characteristics of Lefkas Island during the Quaternary (Ionian Sea, Greece).** *Geologica Balcanica*, 38(1-3): 23–33, Bulgarian Academy of Sciences.
5. *Bathrellos GD*, Kalivas DP, Skilodimou HD (2009). **GIS-based landslide susceptibility mapping models applied to natural and urban planning in Trikala, Central Greece.** *Estudios Geológicos*, 65(1): 49–65, doi: [10.3989/egeol.08642.036](https://doi.org/10.3989/egeol.08642.036), Spanish National Research Council.
6. *Bathrellos GD*, Vasilatos C, Skilodimou HD, Stamatakis MG (2009). **On the occurrence of a pumice-rich layer in Holocene deposits of western Peloponnesus, Ionian Sea, Greece. A geomorphological and geochemical approach.** *Central European Journal of Geosciences*, 1(1): 19–32, doi: [10.2478/v10085-009-0006-7](https://doi.org/10.2478/v10085-009-0006-7), Springer-Versita.
7. Rozos D, *Bathrellos GD*, Skilodimou HD (2011). **Comparison of the implementation of rock engineering system and analytic hierarchy process methods, upon landslide susceptibility mapping, using GIS: a case study from the Eastern Achaia County of Peloponnesus, Greece.** *Environmental Earth Sciences*, 63(1): 49–63, doi: [10.1007/s12665-010-0687-z](https://doi.org/10.1007/s12665-010-0687-z), Springer.

8. Migiros G, *Bathrellos GD*, Skilodimou HD, Karamousalis T (2011). **Pinios (Peneus) River (Central Greece): Hydrological — Geomorphological elements and changes during the Quaternary**. *Central European Journal of Geosciences*, 3(2): 215–228, doi: [10.2478/s13533-011-0019-1](https://doi.org/10.2478/s13533-011-0019-1), Springer-Versita.
9. Panagopoulos GP, *Bathrellos GD*, Skilodimou HD, Martsouka FA (2012). **Mapping Urban Water Demands Using Multi-Criteria Analysis and GIS**. *Water Resources Management*, 26 (5): 1347 – 1363, doi: [10.1007/s11269-011-9962-3](https://doi.org/10.1007/s11269-011-9962-3), Springer.
10. *Bathrellos GD*, Gaki-Papanastassiou K, Skilodimou HD, Papanastassiou D, Chousianitis KG (2012). **Potential suitability for urban planning and industry development by using natural hazard maps and geological - geomorphological parameters**. *Environmental Earth Sciences*, 66(2): 537–548, doi: [10.1007/s12665-011-1263-x](https://doi.org/10.1007/s12665-011-1263-x), Springer.
11. Kamberis E, *Bathrellos GD*, Kokinou E, Skilodimou HD (2012). **Correlation between the structural pattern and the development of the hydrographic network in a portion of the Western Thessaly basin (Greece)**. *Central European Journal of Geosciences*, 4(3): 416–424, doi: [10.2478/s13533-011-0074-7](https://doi.org/10.2478/s13533-011-0074-7), Springer-Versita.
12. *Bathrellos GD*, Gaki-Papanastassiou K, Skilodimou HD, Skianis GA, Chousianitis KG (2013). **Assessment of rural community and agricultural development using geomorphological-geological factors and GIS in the Trikala prefecture (Central Greece)**. *Stochastic Environmental Research & Risk Assessment*, 27(2): 573–588, doi: [10.1007/s00477-012-0602-0](https://doi.org/10.1007/s00477-012-0602-0), Springer.
13. Papadopoulou-Vrynioti K, *Bathrellos GD*, Skilodimou HD, Kaviris G, Makropoulos K (2013). **Karst collapse susceptibility mapping considering peak ground acceleration in a rapidly growing urban area**. *Engineering Geology*, 158: 77–88, doi: [10.1016/j.enggeo.2013.02.009](https://doi.org/10.1016/j.enggeo.2013.02.009), Elsevier.
14. Papadopoulou-Vrynioti K, Alexakis D, *Bathrellos GD*, Skilodimou HD, Vryniotis D, Vasiliades E, Gamvroula D (2013). **Distribution of trace elements in stream sediments of Arta plain (western Hellas): The influence of geomorphological parameters**. *Journal of Geochemical Exploration*, 134: 17–26, doi: [10.1016/j.gexplo.2013.07.007](https://doi.org/10.1016/j.gexplo.2013.07.007), Elsevier.
15. Rozos D, Skilodimou HD, Loupasakis C, *Bathrellos GD* (2013). **Application of the revised universal soil loss equation model on landslide prevention. An example from N. Euboea (Evia) Island, Greece**. *Environmental Earth Sciences*, 70(7): 3255–3266, doi: [10.1007/s12665-013-2390-3](https://doi.org/10.1007/s12665-013-2390-3), Springer.
16. Papadopoulou-Vrynioti K, Alexakis D, *Bathrellos GD*, Skilodimou HD, Vryniotis D, Vasiliades E (2014). **Environmental research and evaluation of agricultural soil of the Arta plain, western Hellas**. *Journal of Geochemical Exploration*, 136: 84–92, doi: [10.1016/j.gexplo.2013.10.007](https://doi.org/10.1016/j.gexplo.2013.10.007), Elsevier.
17. Skilodimou HD, *Bathrellos GD*, Maroukian H, Gaki- Papanastassiou K (2014). **Late Quaternary evolution of the lower reaches of Ziliana stream in south Mt. Olympus (Greece)**. *Geografia Fisica e Dinamica Quaternaria*, 37(1): 43–50, doi: [10.4461/GFDQ.2014.37.5](https://doi.org/10.4461/GFDQ.2014.37.5), Associazione Italiana di Geografia fisica e Geomorfologia.
18. *Bathrellos GD*, Skilodimou HD, Maroukian H (2014). **The spatial distribution of Middle and Late Pleistocene Cirques in Greece**. *Geografiska Annaler: Series A, Physical Geography*, 96(3): 323–338, doi: [10.1111/geoa.12044](https://doi.org/10.1111/geoa.12044), Wiley–Swedish Society for Anthropology and Geography.
19. Youssef AM, Pradhan B, Al-Kathery M, *Bathrellos GD*, Skilodimou HD (2015). **Assessment of rockfall hazard at Al-Noor Mountain, Makkah city (Saudi Arabia) using spatio-temporal remote sensing data and field investigation**. *Journal of African Earth Sciences*, 101: 309–321, doi: [10.1016/j.jafrearsci.2014.09.021](https://doi.org/10.1016/j.jafrearsci.2014.09.021), Elsevier.
20. Kokinou E, Skilodimou HD, *Bathrellos GD*, Antonarakou A, Kamberis E (2015). **Morphotectonic analysis, structural evolution/pattern of a contractional ridge: Giouchtas Mt., Central Crete, Greece**. *Journal of Earth System Science*, 124(3): 587–602, doi: [10.1007/s12040-015-0551-3](https://doi.org/10.1007/s12040-015-0551-3), Springer.
21. Chousianitis K, DelGaudio V, Sabatakakis N, Kavoura K, Drakatos G, *Bathrellos GD*, Skilodimou HD (2016). **Assessment of earthquake-induced landslide hazard in Greece: From Arias Intensity to spatial distribution of slope resistance demand**. *Bulletin of the Seismological Society of America*, 106(1): 174–188, doi: [10.1785/0120150172](https://doi.org/10.1785/0120150172), Seismological Society of America.
22. *Bathrellos GD*, Karymbalis E, Skilodimou HD, Gaki-Papanastassiou K, Baltas EA (2016). **Urban flood hazard assessment in the basin of Athens Metropolitan city, Greece**. *Environmental Earth Sciences*, 75(4): 319, doi: [10.1007/s12665-015-5157-1](https://doi.org/10.1007/s12665-015-5157-1), Springer.
23. *Bathrellos GD*, Skilodimou HD, Chousianitis K, Youssef AM, Pradhan B (2017). **Suitability estimation for urban development using multi-hazard assessment map**. *Science of the Total Environment*, 575: 119–134, doi: [10.1016/j.scitotenv.2016.10.025](https://doi.org/10.1016/j.scitotenv.2016.10.025), Elsevier.
24. *Bathrellos GD*, Skilodimou HD, Maroukian H, Gaki-Papanastassiou K, Kouli K, Tsourou T, Tsaparas N (2017). **Pleistocene glacial and lacustrine activity in the southern part of Mount Olympus (central Greece)**. *Area*,



- 49(2): 137–147, doi: [10.1111/area.12297](https://doi.org/10.1111/area.12297), Wiley & The Royal Geographical Society & The Institute of British Geographers.
25. *Bathrellos GD*, Skilodimou HD, Maroukian H (2017). **The significance of tectonism in the glaciations of Greece**. In: Hughes PD, Woodward JC (Eds) *Quaternary Glaciation in the Mediterranean Mountains*. Geological Society Special Publication, 433: 237-250, doi: [10.1144/SP433.5](https://doi.org/10.1144/SP433.5), The Geological Society of London.
26. *Bathrellos GD*, Kalivas DP, Skilodimou HD (2017). **Landslide susceptibility assessment mapping: a case study in Central Greece**. In: Petropoulos GP, Islam T (Eds) *Remote sensing of hydro-meteorological hazards*, 24: 493-512, doi: [10.1201/b20993](https://doi.org/10.1201/b20993), ISBN-13: 978-1498777582, CRC Press & Taylor-Francis.
27. Tsolaki-Fiaka S, *Bathrellos GD*, Skilodimou HD (2018). **Multi-Criteria Decision Analysis for an Abandoned Quarry in the Evros Region (NE Greece)**. *Land*, 7(2): 43, doi: [10.3390/land7020043](https://doi.org/10.3390/land7020043), MDPI Publishing.
28. Skilodimou HD, *Bathrellos GD*, Koskeridou E, Soukis K, Rozos D (2018). **Physical and anthropogenic factors related to landslide activity in the Northern Peloponnese, Greece**. *Land*, 7(3): 85, doi: [10.3390/land7030085](https://doi.org/10.3390/land7030085), MDPI Publishing.
29. *Bathrellos GD*, Skilodimou HD, Soukis K, Koskeridou E (2018). **Temporal and Spatial Analysis of Flood Occurrences in the Drainage Basin of Pinios River (Thessaly, Central Greece)**. *Land*, 7(3): 106, doi: [10.3390/land7030106](https://doi.org/10.3390/land7030106), MDPI Publishing.
30. Skilodimou HD, *Bathrellos GD*, Chousianitis K, Youssef AM, Pradhan B (2019). **Multi-hazard assessment modeling via multi-criteria analysis and GIS: A case study**. *Environmental Earth Sciences*, 78(2): 47, doi: [10.1007/s12665-018-8003-4](https://doi.org/10.1007/s12665-018-8003-4), Springer.
31. *Bathrellos GD*, Skilodimou HD (2019). **Land Use Planning for Natural Hazards**. *Land*, 8(9): 128, doi: [10.3390/land8090128](https://doi.org/10.3390/land8090128), MDPI Publishing.
32. Makri P, Stathopoulou E, Hermides D, Kontakiotis G, Zarkogiannis SD, Skilodimou H, *Bathrellos GD*, Antonarakou A, Scoullou M (2020). **The environmental impact of a complex hydrogeological system on hydrocarbon-pollutants' natural attenuation: the case of the coastal aquifers in Eleusis, West Attica, Greece**. *Journal of Marine Science & Engineering*, 8(12): 1018, doi: [10.3390/jmse8121018](https://doi.org/10.3390/jmse8121018), MDPI Publishing.
33. Skilodimou HD, *Bathrellos GD*, Alexakis DE (2021). **Flood Hazard Assessment Mapping in Burned and Urban Areas**. *Sustainability*, 13(8): 4455, doi: [10.3390/su13084455](https://doi.org/10.3390/su13084455), MDPI Publishing.
34. *Bathrellos GD*, Skilodimou HD, Zygouri V, Koukouvelas I (2021). **Landslide: A recurrent phenomenon? Landslide hazard assessment in mountainous areas of central Greece**. *Zeitschrift für Geomorphologie*, 63(1): 95-114, doi: [10.1127/zfg/2021/0670](https://doi.org/10.1127/zfg/2021/0670), Schweizerbart Science Publishers.
35. Youssef AM, Abu-Abdullah MM, AlFadail EA, Skilodimou HD, *Bathrellos GD* (2021). **The devastating flood in the arid region a consequence of rainfall and dam failure: Case study, Al-Lith flood on 23th November 2018, Kingdom of Saudi Arabia**. *Zeitschrift für Geomorphologie*, 63(1): 115-136, doi: [10.1127/zfg/2021/0672](https://doi.org/10.1127/zfg/2021/0672), Schweizerbart Science Publishers.
36. Alexakis DE, *Bathrellos GD*, Skilodimou HD, Gamvroula DE (2021). **Land suitability Mapping Using Geochemical and Spatial Analysis Methods**. *Applied Sciences*, 11(12): 5404, doi: [10.3390/app11125404](https://doi.org/10.3390/app11125404), MDPI Publishing.
37. Alexakis DE, *Bathrellos GD*, Skilodimou HD, Gamvroula DE (2021). **Spatial Distribution and Evaluation of Arsenic and Zinc Content in the Soil of a Karst Landscape**. *Sustainability*, 13(12): 6976, doi: [10.3390/su13126976](https://doi.org/10.3390/su13126976), MDPI Publishing.
38. Skilodimou HD, *Bathrellos GD* (2021). **Natural and Technological Hazards in Urban Areas: Assessment, Planning and Solutions**. *Sustainability*, 13(15): 8301, doi: [10.3390/su13158301](https://doi.org/10.3390/su13158301), MDPI Publishing.
39. Skilodimou HD, Antoniou V, *Bathrellos GD*, Tsami E (2021). **Mapping of coastline changes in Athens Riviera: over the past 76 year's measurements**. *Water*, 13(15): 2135, doi: [10.3390/w13152135](https://doi.org/10.3390/w13152135), MDPI Publishing.
40. Karpouza M, Chousianitis K, *Bathrellos GD*, Skilodimou HD, Kaviris G, Antonarakou A (2021). **Hazard zonation mapping of earthquake-induced secondary effects using spatial multi-criteria analysis**. *Natural Hazards*, 109(1): 637–669, doi: [10.1007/s11069-021-04852-0](https://doi.org/10.1007/s11069-021-04852-0), Springer.
41. *Bathrellos GD*, Skilodimou HD (2022). **Estimation of Sand and Gravel Extraction Sites**. *Zeitschrift für Geomorphologie*, 63(2-3): 313-328, doi: [10.1127/zfg/2021/0674](https://doi.org/10.1127/zfg/2021/0674), Schweizerbart Science Publishers.
42. Valkanou K, Karymbalis E, *Bathrellos GD*, Skilodimou HD, Tsanakas K, Papanastassiou D, Gaki-Papanastassiou K (2022). **Soil Loss Potential Assessment for Natural and Post-fire Condition in Evia Island, Greece**. *Geosciences*, 12(10): 367, doi: [10.3390/geosciences12100367](https://doi.org/10.3390/geosciences12100367), MDPI Publishing.

43. Islam F, Ahmad MN, Janjuhah HT, Ullah M, Islam IU, Kontakiotis G, Skilodimou HD, *Bathrellos GD* (2022). **Modelling and Mapping of Soil Erosion Susceptibility of Murree, Sub-Himalayas Using GIS and RS Based Model.** *Applied Sciences*, 12 (23): 12211, doi: [10.3390/app122312211](https://doi.org/10.3390/app122312211), MDPI Publishing.
44. Ali L, Ali S, Khattak SA, Janjuhah HT, Kontakiotis G, Hussain R, Rukh S, Shah MT, *Bathrellos GD*, Skilodimou HD (2023). **Distribution, Risk Assessment and Source Identification of Potentially Toxic Elements in Coal Mining Contaminated Soils of Makarwal, Pakistan: Environmental and Human Health Outcomes.** *Land*, 12(4): 821, doi: [10.3390/land12040821](https://doi.org/10.3390/land12040821), MDPI Publishing.
45. Karpouza M, *Bathrellos GD*, Kaviris G, Antonarakou A, Skilodimou HD (2023). **How could students be safe during flood and tsunami events?** *International Journal of Disaster Risk Reduction*, 95: 103830, doi: [10.1016/j.ijdr.2023.103830](https://doi.org/10.1016/j.ijdr.2023.103830), Elsevier.
46. Khan J, Ahmed W, Waseem M, Ali W, Rehman IU, Islam I, Janjuhah HT, Kontakiotis G, *Bathrellos GD*, Skilodimou HD (2023). **Lowari Tunnel Water Quality Evaluation: Implications for Tunnel Support, Drinking, and Irrigation in Northwestern Himalayas, Pakistan.** *Applied Sciences*, 13(15): 8895, doi: [10.3390/app13158895](https://doi.org/10.3390/app13158895), MDPI Publishing.
47. Skilodimou HD, *Bathrellos GD*, Koukouvelas IK, Nikolakopoulos KG, Antoniou V, Kontakiotis G (published online): **GIS-based study of physical factors related to landslides events in a tectonic active area.** *Zeitschrift für Geomorphologie*, doi: [10.1127/zfg/2024/0782](https://doi.org/10.1127/zfg/2024/0782), Schweizerbart Science Publishers.
48. Ahmad MN, Shao Z, Javed A, Israr A, Islam F, Skilodimou HD, *Bathrellos GD* (2024). **Optical-SAR data fusion based on Simple Layer Stacking and XGBoost Algorithm to extract urban impervious surface in diverse Urban Environments.** *Remote Sensing*, 16(5): 873, doi: [10.3390/rs16050873](https://doi.org/10.3390/rs16050873), MDPI Publishing.
49. *Bathrellos GD*, Skilodimou HD, Gamvroula DE, Alexakis DE (2024). **Evaluate the spatial distribution of trace elements in soil of a karst terrain.** *Carbonates & Evaporites*, 39(2): 41, doi: [10.1007/s13146-024-00949-2](https://doi.org/10.1007/s13146-024-00949-2), Springer.
50. *Bathrellos GD*, Koukouvelas IK, Skilodimou HD, Nikolakopoulos K, Vgenopoulos AL (2024). **Landslide causative factors evaluation using GIS in the tectonically active Glafkos River area, northwestern Peloponnese, Greece.** *Geomorphology*, 461: 109285, doi: [10.1016/j.geomorph.2024.109285](https://doi.org/10.1016/j.geomorph.2024.109285), Elsevier.
51. Youssef AM, El-Haddad BA, Skilodimou HD, *Bathrellos GD*, Golkar F, Pourghasemi HR (published online): **Landslide susceptibility, ensemble machine learning, and accuracy methods in the southern Sinai Peninsula, Egypt: Assessment and Mapping.** *Natural Hazards*, doi: [10.1007/s11069-024-06769-w](https://doi.org/10.1007/s11069-024-06769-w), Springer.
52. *Bathrellos GD*, Skilodimou HD, Pappa MI, Youssef AM, Kontakiotis G, Karymbalis E (published online): **Assessing flood hazard mapping using AHP and GIS in a tectonically active region.** *Zeitschrift für Geomorphologie*, doi: [10.1127/zfg/2024/0804](https://doi.org/10.1127/zfg/2024/0804), Schweizerbart Science Publishers.
53. Karpouza M, Skilodimou HD, Kaviris G, Zymvragakis A, Antonarakou A, *Bathrellos GD* (2024). **Escape routes and safe points in natural hazards. A case study for soil.** *Engineering Geology*, 340: 107683, doi: [10.1016/j.enggeo.2024.107683](https://doi.org/10.1016/j.enggeo.2024.107683), Elsevier.