# Dr EMMANOUIL PSOMIADIS

Assistant Professor Remote Sensing in Geological & Agricultural Applications Agricultural University of Athens Department of Natural Resources and Agricultural Engineering Lab of Mineralogy & Geology



# INFORMATION

Date of birth: 29/01/1974 Place of birth: Athens, Greece

**Nationality: Greek** 

Marital Status: Married, 2 children

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### 1. EDUCATION

#### 1.1. Postgraduate

2010	<b>PhD</b> / Department of Sciences, Agricultural University of Athens, Greece / Dissertation Title: Research of Environmental and Geomorphological changes in Sperchios river basin, Central Greece utilizing Remote Sensing and Geographical Information System techniques.
2000	<b>MSc</b> degree in Environmental Management / Department of Natural Resources & Agricultural Engineering, Agricultural University of Athens, Greece / Master's Study: Temporal monitoring, and detection of land cover changes in the wider area of Lamia city by Landsat satellite images processing.
1997	<b>MSc</b> degree in Water Resources Management / Department of Natural Resources & Agricultural Engineering, Agricultural University of Athens, Greece

#### 1.2. Undergraduate

**Bachelor's** degree in Agriculture sciences / Department of Natural Resources and Agricultural Engineering, Agricultural University of Athens, Greece, Degree Study: "Hydrogeological conditions of the Northern Corinthian Gulf coastal basins, with emphasis on the detection of groundwater leakage, using Remote Sensing techniques".

#### 1.3. Language Skills

- Greek (Native Language)
- English (Fluently)
- Italian (Moderate)

#### 1.4. Awards / Honors / Fellowships

[1]. 2022. In 2022 I received the Digital Governance Award, by winning the first prize in the Ministry of Digital Government's Annual Competition in the category entitled "Best New Idea" for the thematic category "Public Administration, Self-Government and Justice", as a Scientific responsible for the Project titled: "Digital dynamic and multilevel rural map with the assisted ranking of agricultural land in productivity categories"

[2]. 2020. In 2021 I was 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")

- [3]. **2019-2021**. Designation as a member of the 8-member Scientific Committee of the Management Committee of the National ParkQ "Mt. Oiti, Sperchios river watershed and Maliakos Gulf" (decision 137/17-04-2019 of the Board of Directors)
- [4]. 2000-2003. Scholarship by the State Scholarship Foundation (IKY) for PhD research in the fields of remote sensing and GIS applications in agriculture (after successful exams)
- [5]. 1995. I was honoured by the State Scholarship Foundation (IKY) for my academic performance, for the years 1995-96. I was also awarded an Outstanding Grade Performance Award / Department of Natural Resources & Agricultural Engineering / Agricultural University of Athens-Greece
- [6]. 1996. I was honoured by the State Scholarship Foundation (IKY) for my academic performance, for the years 1994-95. I was also awarded an Outstanding Grade Performance Award / Department of Natural Resources & Agricultural Engineering / Agricultural University of Athens-Greece

#### 1.5. Profiles in Research Databases

- Scopus Author ID: 12753107100
   https://www.scopus.com/authid/detail.uri?authorld=12753107100
- Google Scholar: https://scholar.google.gr/citations?user=iEkyv9kAAAAJ&hl=el
- ORCID: http://orcid.org/0000-0002-1094-9397
- Research Gate: https://www.researchgate.net/profile/Emmanouil Psomiadis
- Publons: https://publons.com/researcher/1574644/emmanouil-psomiadis/peer-review/

### 2. PUBLICATIONS

#### 2.1. Peer-Reviewed Journals

[A1]. Parcharidis Is., Psomiadis E., Stamatis G., 1998. Using Landsat TM images to study karstic phenomenon. *International Journal of Applied Earth Observation and Geoinformation (formerly ITC Journal)* 1998 (2), pp. 118-123. [IF: 0,29]

- [A2]. Parcharidis Is., Gartzos E., **Psomiadis E., 1999**. Alteration zones detection in Lesvos island, through the application of Landsat 5 TM band ratio images. *Mineral Wealth*, 112. 37-46.
- [A3]. **Psomiadis E.,** Parcharidis I., Poulos S., Stamatis G., Migiros G., Pavlopoulos A., **2005**. Earth observation data in seasonal and long term coastline changes monitoring: the case of Sperchios River delta. *Zeitschrift fur Geomorphologie*, 137, 159-175, Berlin-Stuttgart. [IF: 0,716]
- [A4]. Dercas N., Spyropoulos N.V., Dalezios N.R., **Psomiadis E.,** Stefopoulou A., Mantonanakis G. and Tserlikakis N., **2017.** Cotton evapotranspiration using very high spatial resolution WV-2 satellite data and ground measurements for Precision Agriculture. *Ecology and The Environment*, 220, 101-106, *Water Management* WITpress (Sustainable Water Resources Management International conference IX), doi:10.2495/WRM170101.
- [A5]. Dalezios R.N., Dercas N., Spyropoulos V.N., **Psomiadis E., 2017.** Water availability and requirements for precision agriculture in vulnerable agroecosystems. *European Water*, 59, 387-394.
- [A6]. Chatziantoniou A., Petropoulos G., Psomiadis E., 2017. Co-orbital Sentinel 1 & 2 for Wetlands Mapping Based on Machine Learning: A Case Study from a Mediterranean Setting. MDPI, Remote Sensing (MDPI), 9 (12), 1259. https://doi.org/10.3390/rs9121259 [IF: 3,244]
- [A7]. Efthimiou N. & Psomiadis E., 2018. The Significance of Land Cover Delineation on Soil Erosion Assessment. *Environmental Management*, Springer, 62, 383-402. doi:10.1007/s00267-018-1044-3. [IF: 1,878]
- [A8]. Zoka M., Psomiadis E., Dercas N., 2018. The complementary use of Optical and SAR data in monitoring flood events and their effects. MDPI, Proceedings J., 2(11), 644. https://doi.org/10.3390/proceedings2110644.
- [A9]. Dalezios N., Dercas N., Spyropoulos N., **Psomiadis E., 2019**. Remotely sensed methodologies for crop water availability and requirements in precision farming of

- vulnerable agriculture. Springer, *WATER RESOURCES MANAGEMENT*, 33(4), 1499-1519, https://doi.org/10.1007/s11269-018-2161-8 (https://rdcu.be/bfk8d). [IF: 2,644]
- [A10]. Psomiadis E., Soulis K., 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* (MDPI), 11(3), 448. https://doi.org/10.3390/w11030448. [IF: 2,069]
- [A11]. Efthimiou N., Psomiadis E., Panagos P., 2020. Fire severity and soil erosion susceptibility mapping using multi-temporal Earth Observation data: The case of Mati fatal wildfire in Eastern Attica, Greece. *Catena* (Elsevier), 187, 1-16 (104320). https://doi.org/10.1016/j.catena.2019.104320. [IF:4,333]
- [A12]. Psomiadis E., Papazachariou A., Soulis K.X., D.-S. Alexiou, Charalampopoulos I., 2020. Landslide mapping and risk assessment using geospatial analysis and Earth Observation data. *LAND* (MDPI), 9(5), 133. https://doi.org/10.3390/land9050133. [Predicted IF: 2,429]
- [A13]. 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 spatiotemporal land cover changes. *WATER* (MDPI), 12 (5), 1386. https://doi.org/10.3390/w12051386. [IF: 2,544]
- [A14]. Efthimiou N., Lykoudi E., **Psomiadis E., 2020**. Inherent relationship of the USLE, RUSLE topographic factor (LS-factor) algorithms and its impact on soil erosion modelling at diverse alpine landscapes. *Hydrological Sciences Journal* Taylor & Francis), 65 (11), 1879-1893. DOI: 10.1080/02626667.2020.1784423. [IF:2,180]
- **[A15].** Athanasiadou L., **Psomiadis E.,** Stamatis G., **2020**. Thermal Remote Sensing for water outflows detection and determination of the role of lineaments in underground hydrodynamics of Evia Island/Central Greece. Bulletin of the Geological Society of Greece, 56(1), 100-132. https://doi.org/10.12681/bgsg.20948
- **[A16].** Soulis K.X., **Psomiadis E.**, Lontra 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 (17), 7137. https://doi.org/10.3390/su12177137. [IF: 2,576]
- [A17]. Psomiadis E., Charizopoulos N., Efthimiou N., Soulis X.K., Charalampopoulos I., 2020. Earth Observation and GIS-based analysis for landslide susceptibility and risk assessment. *ISPRS International Journal Of Geo-Information*, 9 (9), 552. https://doi.org/10.3390/ijgi9090552. [IF: 2,239]
- **[A18]. Psomiadis E.,** Charizopoulos N., Soulis X.K., 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*, 10(9), 377. https://doi.org/10.3390/geosciences10090377. [Scopus: 2,1]
- [A19]. 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, 12(23), 3980. https://doi.org/10.3390/rs12233980. [IF: 4,509]
- [A20]. Soulis K.X., Generali K-A., Papadaki C., Theodoropoulos C., **Psomiadis E., 2021**. Hydrological response of natural Mediterranean watersheds to forest fires. *Hydrology*, 8(1), 15. https://doi.org/10.3390/hydrology8010015 [Scopus: 3,2]
- [A21]. Charalampopoulos I., Polychroni I., Psomiadis E., Nastos P., 2021. Agroclimatic projection for the Balkan region with a multiple linear regression model. The case of viticulture and olive trees cultivation. *Atmosphere*, 12(2), 148. https://doi.org/10.3390/atmos12020148 [IF: 2,397]
- [A22]. 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 Multi-Criteria Approach. *Water*, 13(3), 364. https://doi.org/10.3390/w13030364 [IF: 2,544]
- [A23]. Darra N., Psomiadis E., Kasimati A., Anastasiou A., Anastasiou V., Fountas S., 2021
  Remote and Proximal Sensing Derived Spectral Indices and Biophysical Variables for
  Spatial Variation Determination in Vineyards. *Agronomy*, 11(4), 741.
  https://doi.org/10.3390/agronomy11040741 [IF: 2,603]
- [A24]. Alexiou S., Deligiannakis G., Pallikarakis A., Papanikolaou I., **Psomiadis E.**, Klaus Reicherter K., **2021**. Comparing high accuracy tLiDAR and UAV-derived point clouds for geomorphological change detection in two semi-mountainous Mediterranean catchments in Central Evia island, Greece. *ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION*, 10(6), 367. https://doi.org/10.3390/ijgi10060367 [IF: 2,899]
- [A25]. Alexandris S., Psomiadis E., Proutsos N., Philippopoulos P., Charalampopoulos I., Kakaletris G., Vassilakis S., Papoutsi E-M., Paraskevopoulos A., 2021. Integrating drone technology into an innovative agrometeorological methodology for the precise and real-time estimation of crop water requirements. *Hydrology*, 8(3), 131; https://doi.org/10.3390/hydrology8030131 [Scopus: 3,2].
- [A26]. Psomiadis E., 2022. Long and Short-Term Coastal Changes Assessment Using Earth Observation Data and GIS Analysis. The Case of Sperchios River Delta. *ISPRS International Journal of Geo-Information*, 11(1), 61. https://doi.org/10.3390/ijgi11010061 [IF: 2,899].
- [A27]. Efthimiou N., **Psomiadis E.,** Papanikolaou I., Soulis K.X., Borrelli P., Panagos P., **2022**. Developing a high-resolution Land Use/Land Cover map by upgrading CORINE's

- agricultural components using detailed national and pan-European datasets. *Geocarto International*, DOI: 10.1080/10106049.2022.2041107 [IF: 4,889].
- [A28]. Efthimiou N., Psomiadis E., Papanikolaou I., Soulis K.X., Borrelli P., Panagos P., 2022. A new high-resolution object-oriented approach to define the spatiotemporal dynamics of the cover-management factor in soil erosion modelling. *CATENA*, 213, 106149. https://doi.org/10.1016/j.catena.2022.106149 [IF: 5,198].
- [A29]. Papadaki C., Theodoropoulos C., Soulis X.K., Generali K., **Psomiadis E.,** Dimitriou E., **2022**. Effects of forest fires on headwater streamflow and the habitat suitability of benthic macroinvertebrates. *Hydrological Sciences Journal*, *DOI:* 10.1080/02626667.2022.2081508 [IF: 3,787].
- [A30]. Alexiou S., Efthimiou N., Karamesouti M., Papanikolaou I., **Psomiadis E.,** Charizopoulos N. 2023. Measuring Annual Sedimentation through High Accuracy UAV-Photogrammetry Data and Comparison with RUSLE and PESERA Erosion Models. REMOTE SENSING, 15(5), 1339.
- [A31]. Darra N., Borja E-G., Kasimati A., Kriezi O., **Psomiadis E.,** Fountas S., 2023 (Under review). Can satellites predict yield? Ensemble machine learning and statistical analysis of Sentinel-2 imagery for processing tomato yield prediction. SENSORS, 23(5), 2586. https://doi.org/10.3390/s23052586

#### 2.2. Publications in International Conference Proceedings

- **[B1].** Parcharidis I., **Psomiadis E.**, Tsintzouras S., **1998**. Remote Sensing and raster Geographic Information System techniques, detecting the relation between natural vegetation and lithology-morphology. Proceeding of the 8th International Congress of the Geological Society of Greece (Environmental Geology), Patra, Vol. 1 (297-305).
- [B2]. Stamatis G., Gatsis I., **Psomiadis E.,** Parcharidis I., **2000**. Satellite data and information technology to the verification of coastal water pollution deriving from human activities, in Vavrona gulf (Attica, Greece). Proceedings of the 5th International Congress on Environmental Protection and Restoration, Thasos island, Vol 1: 535-542. (1 αναφορά στα Scopus Secondary Documents)
- [B3]. Parcharidis I., Lagios E., **Psomiadis E., 2001.** Multitemporal hazard assessment in a high flash flood risk area using RS/GIS techniques: The case study of Hymittos Mt. (Athens). Proceeding of the 9<sup>th</sup> International Congress of the Geological Society of Greece, Vol.5 (2055-2062). (3 αναφορές στα Scopus Secondary Documents)
- [B4]. Parcharidis I., Gartzos E., **Psomiadis E., 2001.** Evaluation of different remote sensing methods for the detection of hydrothermal alteration zones in Milos island (Greece). Proceeding of the 9th International Congress, Bulletin of the Geological Society of Greece, Vol. 5 (2047-2054). (1 αναφορά στα Scopus Secondary Documents)
- [B5]. Psomiadis E., Parcharidis I., Poulos S., Migiros G., 2004. «Short-period change

detection of Sperchios lower delta area using space radar images». Proceeding of the  $10^{th}$  International Congress of the Geological Society of Greece, Vol. 36:919-927. (7  $\alpha \nu \alpha \phi o \rho \epsilon \varsigma \sigma \tau \alpha$  Scopus Secondary Documents)

- [**B6**]. Parcharidis I., Zaré M., Foumelis M., **Psomiadis E., 2005**. Investigation on Bam (Iran) earthquake 26/12/03, based on interferometric coherence. Proceedings of *SPIE* (12th International Symposium of Remote Sensing, Bruges, Belgium), Volume 5983, No 59831T, (8 pages). (2 αναφορές)
- [B7]. **Psomiadis E.,** Parcharidis I., Stamatis G., Foumelis M., **2005**. Remotely sensing data and thematic mapping for sustainable development in Sperchios river basin (Central Greece). Proc. SPIE 5983, Remote Sensing for Environmental Monitoring, GIS Applications, and Geology V, Article number 59831U. https://doi.org/10.1117/12.627546; Bruges, Belgium, (12 pages). (3 αναφορές)
- [B8]. Mimides T., **Psomiadis E.,** Trikili I., **2007**. Monitoring land use changes and soil degradation using SPOT and temporal aerial photograph data The case of Vathy basin (Kalymnos Island-Dodecanese Greece. Proceedings of the 11th International Congress of the Geological Society of Greece, Vol. 3 (1476-1484).
- [B9]. Migiros G., **Psomiadis E.,** Papanikolaou I., Karamousalis T., Stamatis G., **2008**. Groundwater coastal discharge of the karstic system of the Mani Peninsula, Southern Peloponnesus-Greece. Proceedings of the 8th International Congress of Hydrogeology, Vol. 1, p. 317-326.
- [**B10**]. **Psomiadis E.,** Stamatis G., Parpodis K., Kontari A., **2011**. Assessment of the effect of natural and human parameters in the underground aquifer of the Sperchios river basin alluvial zone. Proceedings of the 9th International Hydrogeological Congress, Advances in the research of aquatic environment, Kalavryta, Vol. 2: 307-315. (2 αναφορές στα Scopus Secondary Documents)
- [B11]. Fakhri F., Psomiadis E., Parcharidis I., 2012. Monitoring soil deformation using Persistent Scatters Interferometry (PSI) technique: the case study of Thessaly prefecture (Central Greece). Geoscience and Remote Sensing Symposium, IGARSS, 2012 IEEE International, pp. 3903-3906 (cd), doi:10.1109/IGARSS.2012.6350559 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6350559&isnumber=6350328)
- [B12]. Kyriazis D., Zagana E., Stamatis G., Filippidis F., **Psomiadis E., 2013**. Assessment of groundwater pollution in relation to heavy metals of the alluvial aquifer of Thriasion Plain (NW Attica). 13th International Congress of the Geological Society of Greece, Chania, digital Proceedings, Vol. XLVII, No1, p.731-739. (3 αναφορές στα Scopus Secondary Documents)
- [B13]. Psomiadis E., Migiros G., Antoniou V., 2013. Geomorphological quantitative analysis of Sperchios river basin area (Central Greece) utilizing Geographical Information Systems. 13th International Congress of the Geological Society of Greece, Chania, digital Proceedings, Vol. XLVII, No1, p.325-334. (3 αναφορές στα Scopus Secondary Documents)

[**B14**]. Kavvadias A., **Psomiadis E.,** Chanioti M., Gala E., Michas S., **2015**. Precision Agriculture – Comparison and Evaluation of Innovative Very High Resolution (UAV) and Landsat Data. Proceedings of the 7th International Conference on Information and Communication Technologies in Agriculture Food and Environment, HAICTA 2015, p.376-386. (8 αναφορές, 5+3 αναφορές στα Scopus Secondary Documents)

- [B15]. Psomiadis E., Dercas N., Dalezios N. and Spyropoulos N., 2016. The role of spatial and spectral resolution on the effectiveness of satellite-based vegetation indices. Proc. *SPIE*. 9998, Remote Sensing for Agriculture, Ecosystems, and Hydrology XVIII, 99981L. (October 25, 2016) doi: 10.1117/12.2241316, Edinburgh.(12 αναφορές, 10+2 αναφορές στα Scopus Secondary Documents)
- [B16]. Psomiadis E., 2016. Flash flood area mapping utilizing Sentinel-1 radar data. Proc. SPIE. 10005, Earth Resources and Environmental Remote Sensing/GIS Applications VII, 100051G 1-11. (October 18) https://doi.org/10.1117/12.2241055, Edinburgh (Scopus). (19 αναφορές, 14+5 αναφορές στα Scopus Secondary Documents)
- **[B17].** Fernandez-Steeger T.M., Maessen T., Grenzdörfer M., Schneiderwind S., Papanikolaou I., Deligiannakis G., Migiros G., **Psomiadis E.,** Kairis O. and Pallikarakis A., 2016. How geology influences the type and magnitude of postfire effects like landslides. Geophysical Research, Vol. 18, EGU2016-10994-3, oral presentation. (1 αναφορά στα Scopus Secondary Documents)
- [B18]. Psomiadis E., Dercas N., Dalezios R.N., Spyropoulos N., 2017. Evaluation and cross-comparison of vegetation indices for crop monitoring from Sentinel-2 and WorldView-2 images, Proceedings of SPIE (Remote Sensing for Agriculture, Ecosystems, and Hydrology XIX), The International Society for Optical Engineering, 10421, 104211B (Warsaw/Poland) doi: 10.1117/12.2278217. (7 αναφορές, 5+2 αναφορά στα Scopus Secondary Documents)
- [B19]. Athanasakis G., **Psomiadis E.,** Chatziantoniou A., **2017**. High-resolution Earth Observation data and spatial analysis for burn severity evaluation and post-fire effects assessment in the Island of Chios, Greece. Proceedings of *SPIE* 10428, Remote Sensing-Earth Resources and Environmental Remote Sensing/GIS Applications VII, 104281P (Warsaw/Poland) doi: 10.1117/12.2278271. (3 αναφορές)
- [B20]. Kavvadias A., **Psomiadis E.,** Chanioti M., Tsitouras A., Toulios L., Dercas N., **2017**. Unmanned Aerial Vehicle (UAV) data analysis for fertilization dose assessment. Proceedings of *SPIE* (Remote Sensing for Agriculture, Ecosystems, and Hydrology XIX), The International Society for Optical Engineering, 10421, 1042121 (Warsaw/Poland) doi:10.1117/12.2278152 (4 αναφορές, 3+1 αναφορά στα Scopus Secondary Documents)
- [B21]. Chatziantoniou A., Petropoulos G., **Psomiadis E., 2017**. An investigation of the use of Sentinel-2 data for mapping wetlands: a case study from Greece. Proceedings of the 10<sup>th</sup> World Congress of European Water Resources Association on Water Resources and Environment (EWRA), "Panta Rhei", Athens, p.595-600. (1 αναφορά στα Scopus Secondary Documents)

[B22]. Dalezios N.R., Dercas N., Spiropoulos N.V., **Psomiadis E., 2017**. Water availability and requirements for precision agriculture in vulnerable agroecosystems. Proceedings of the 10th World Congress of European Water Resources Association on Water Resources and Environment (EWRA), "Panta Rhei", Athens, p.1715-1722.

- [B23]. Dercas N., Spyropoulos N.V., Dalezios N.R., **Psomiadis E.,** Stefopoulou A., Madonanakis G. and Tserlikakis N., **2017**. Comparing of cotton crop evapotranspiration using diachronic very high spatial resolution satellite data and ground measurements. Proceedings of the 9th International Conference on Sustainable Water Resources Management, July, Prague, Vol.WRM, p. 49-58.
- [B24]. Stefanakis A., Charalampopoulos I., Psomiadis E., Prigent S., 2018. The thermal regime of a large Constructed Wetland in the desert environment. Proceedings of the 16<sup>th</sup> IWA International Conference on Wetland Systems of Water Pollution Control, 4 pages, 30 Sept.-04 Octob. Valencia, Spain. (2 αναφορές στα Scopus Secondary Documents)
- [B25]. Soulis, K., **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, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-1489, https://doi.org/10.5194/egusphere-egu2020-1489. (1 αναφορά στα Scopus Secondary Documents)
- [B26]. Psomiadis E., Alexiou S., Zevgoli E., Avramidou M., Veropoulou D., Mecaj P., Soulis K.X., Papanikolaou I., 2022. How Land Use/Cover and Landscape Characteristics Along with Fire Severity and Frequency Can Affect the Potential Vegetation Recovery: The Case of Varibobi Wildfire. Proceedings of the 16th International Congress of the Geological Society of Greece 17-19 October 2022 Patras, Greece (Abstract/Poster).

#### 2.3. Thesis

Research of Environmental and Geomorphological changes in Sperchios river basin, Central Greece utilizing Remote Sensing and Geographical Information System techniques, Department of Sciences/Agricultural University of Athens, Greece, 2010. <a href="https://www.didaktorika.gr/eadd/handle/10442/25931">https://www.didaktorika.gr/eadd/handle/10442/25931</a>

#### 2.4. Books – Book Chapters

- Migiros G., Pavlopoulos A., Parcharidis I., Gatsis I., **Psomiadis E., 2003**. "Remote Sensing–Implementation to geosciences". Agricultural University of Athens-lecture notes, p. 231.
- Androulakakis N., **Psomiadis E.,** Tsatsaris A., **2017**. Scientific Notes of the educational program of the Training Institute / National Center for Public Administration & Local Government, entitled: "DISTANCE EDUCATION IN GEOGRAPHIC INFORMATION SYSTEMS", Athens.

- Androulakakis N., **Psomiadis E.,** Mougiakou E., **2021**. Scientific Notes for the educational program of the Training Institute / National Center for Public Administration & Local Government, entitled: "DISTANCE EDUCATION IN QGIS", Athens.
- Androulakakis N., **Psomiadis E.,** Tsatsaris Andreas, Papastylianou Anastasia, **2022**. Scientific Notes for the program of the Training Institute / National Center for Public Administration & Local Government, entitled: "DISTANCE EDUCATION IN RASTER GIS", Athens.

#### 2.5. Reviewing Activity / Memberships

2010 - 2022	Reviewer of the Scientific Journals: Remote Sensing / LAND / European Journal of Remote Sensing / International Journal of Remote Sensing / ISPRS International Journal of Geo-Information / Geocarto International / Sensors / GIScience & Remote Sensing / Water / Sustainability / Applied Sciences / Environmental International / Land Degradation & Development / Hydrological Sciences Journal / Water and Environment Journal		
2023-today Topic Editor of "Remote Sensing and Geoinformatics in Agriculture and Environ Volume II""			
2021-today Topical Advisory Panel Member of Fire Journal			
2022-2023	<b>Topic Editor</b> of "Remote Sensing and Geoinformatics in Agriculture and Environment"		
2019-2022	Guest Editor of Journals' Special Issues:  Remote Sensing "Remote Sensing in Urban Natural Hazards Monitoring"  ISPRS International Journal of Geo-Information "GIS and Remote Sensing Applications in Geomorphology"  Geomatics "Geographical Information Systems and Spatial Analysis in Agriculture and Environment" /		
	FIRE "Advances in the Assessment of Fire Impacts on Hydrology"		
2020-today	Member of the <b>Reviewer Editorial Board</b> , LAND journal		
1998 - 2022	Member of the Remote Sensing and Photogrammetry Society (RSPS)		
2014 - 2022	Member of the European Geosciences Union (EGU)		
1998 - 2022	1998 - 2022 Member of the Geotechnical Chamber of Greece		

# 3. PROFESSIONAL EXPERIENCE

### 3.1. Current & Previous Position (s)

	Assistant Professor in the field "Remote Sensing in Agricultural and
2021 -2023	Geological Applications" in the Agricultural University of Athens, Department
	of Natural Resources Management & Agricultural Engineering
	Teaching and Research Associate in the field of Remote Sensing, in the
2014 -2021	Laboratory of Mineralogy & Geology / Department of Natural Resources &
	Agricultural Engineering, Agricultural University of Athens, Greece
	Senior Researcher in Remote Sensing & GIS in Copernicus programme-
2014 2014	GIO land monitoring service 2011-2013 (Corine 2006 & 2012)
2014-2014	(http://www.eea.europa.eu/about-us/what/seis-initiatives/gio-land)
	Hellenic Cadastre/Greece
	Senior Researcher in Remote Sensing & GIS Applications
2012-2014	Department of Natural Resources & Agricultural Engineering, Agricultural
	University of Athens, Greece
2011	Senior Researcher in Remote Sensing & GIS Applications
2011	Hellenic Mapping and Cadastre Organization/Greece
	Senior Researcher in Remote Sensing & GIS Applications
2008-2010	Department of Natural Resources & Agricultural Engineering, Agricultural
	University of Athens, Greece
	Junior Researcher in Remote Sensing & GIS applications in Agriculture,
2000-2008	Geology, Geomorphology, Natural disasters, Environment, etc.
2000-2008	Technical Companies and the Department of Natural Resources & Agricultural
	Engineering, Agricultural University of Athens, Greece
	Junior Researcher in Remote Sensing & GIS Applications
1998-2008	Laboratory of Mineralogy & Geology / Department of Natural Resources &
	Agricultural Engineering, Agricultural University of Athens, Greece

### 3.2. Teaching Activities

	Assistant Professor, <b>Graduate Courses</b> : Remote Sensing-Topography,
2021-2023	Geology-Geomorphology, Environmental Geology-Natural Disasters /
2021-2023	Department of Natural Resources and Agricultural Engineering, Agricultural
	University of Athens, Greece

	Assistant Professor, <b>Postgraduate Courses</b> : Advanced Remote Sensing
2021-2023	applications, GIS, Long Term Changes of Geo-Environment / Department of
2021-2023	Natural Resources and Agricultural Engineering, Agricultural University of
	Athens, Greece
	Teaching & Research Associate, <b>Graduate Courses</b> : Remote Sensing-
2014 2021	Topography, Geology-Geomorphology, Environmental Geology-Natural Disasters
2014-2021	/ Department of Natural Resources and Agricultural Engineering, Agricultural
	University of Athens, Greece
	Teaching & Research Associate, <b>Postgraduate Courses</b> : Advanced Remote
2044 2024	Sensing applications, Long Term Changes of Geo-Environment / Department of
2014-2021	Natural Resources and Agricultural Engineering, Agricultural University of
	Athens, Greece
	Lecturer in several seminars such as: "Remote Sensing-Photointerpretation &
	Geospatial data applications of Public Administration Sector"; "Online seminar in
2011-2022	Geographic Information Systems"; "Online seminar in QGIS"; "Online Seminar in
	Raster GIS" /Institute of Education/ National Center for Public Administration &
	Local Government

# 3.3. Supervision of Undergraduate and Postgraduate Students

2021 - 2023	<ul> <li>Member of the three-member advisory committee of the PhD candidate Alexiou Simoni / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece</li> <li>Member of the three-member advisory committee of the PhD candidate Darra Nikoleta / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece</li> <li>Member of the seven-member evaluation committee of the PhD candidate Markogianni Vassiliki / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece</li> </ul>		
2021-2023	Supervisorof 3 Master candidates / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece		
2014-2021	Member of the three-member advisory committee for 12 Master Thesis / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece		
2014-2021	Supervisor of 3 and Member of the three-member advisory committee of 7 Undtergraduate Studies / Agricultural University of Athens / Department of Natural Resources and Agricultural Engineering/Greece		

2008 - 2014	Technical Advisory Member of more than 10 Undergraduate, Master and PhD thesis / Agricultural University of Athens / Department of Natural Resources and Agricultural
	Engineering/Greece

# 3.4. Research Projects

Project Title	Funding source	Period	Role of the PI
1. Development of a prototype approach methodology with modelling tools and creation of a geospatial database for the grading of agricultural land in productivity qualities and its classification in productivity categories	Municipality of Attica	2022-ongoing	Director of research
2. BRiZE research project entitled:  "Installation of green desalination plant at Kimolos Island incorporating innovative technology of brine treatment" Work Packages: (a) The assessment of the geothermal potential of Kimolos, and (b) the development of bilateral relations between the entities of donor countries and Greece for the exchange and transfer of knowledge and experiences and for the strengthening of networking and future cooperation between them.	European Economic Area Financial Mechanism 2014- 2021 and the Hellenic Ministry of Environment and Energy	2022-ongoing	Senior Researcher in Remote Sensing & GIS applications
3. Project of the Agricultural University of Athens entitled: "RESTORATION STUDIES OF FIRE-DAMAGED AREAS IN THE WIDER AREA OF VARYMBOPI" Packages: (a) Mapping fire	GSK Company/ AUA	2022-ongoing	Director of research

severity in the fire-affected study areas using satellite data and verification with field data, and (2) Temporal Observation of fires' effects (past, present, future) on land cover changes, restoration and revegetation			
4. Project: PILOT INNOVATIVE APPLICATION OF REFORESTATION USING UNMANNED AERIAL VEHICLE) IN THE AREA OF KINETA, ATTICA	Motor Oil / AUA	2021-ongoing	Principal investigator in Remote Sensing & GIS applications
5. GREENWATERDRONE Project- Development and Implementation of an Innovative and Economic System for the Precise & Dynamic Programming of Irrigation and the Monitoring of Crops, within the Framework of the National Scope Action: "RESEARCH-CREATE- INNOVATE"	General Secretariat for Research & Innovation	2018-2022	Senior Researcher in Remote Sensing & GIS applications
6. Spatiotemporal Observatory of Wine and Vine-producing potential of OPAP Nemeas, within the Framework of the National Scope Action:  "RESEARCH-CREATE-INNOVATE".	General Secretariat for Research & Innovation	2019-2022	Senior Researcher in Remote Sensing & GIS applications
7. Research for the evaluation of the impact of the Common Agricultural Policy (CAP) agricultural development program on water use efficiency	Hellenic Ministry of Rural Development and Food	2018-2019	Director of research
8. FATIMA Project - Farming tools for external nutrient inputs and water management / Horizon 2020 /Sustainable Food Security / Call: H2020-SFS-	EU	2015-2018	Senior Researcher in Remote Sensing & GIS applications

2014-2			
9. SPERCHIOS Project - Comprehensive Mapping and environmental-hydrological study to improve the Sperchios River basin and coastal zone management plans	EEA Grants 2009-2014	2015-2017	Senior Researcher in Remote Sensing & GIS applications
10. Copernicus programme-GIO land monitoring service 2011-2013 (Corine Land Cover 2006 & 2012) (http://www.eea.europa.eu/about-us/what/seis-initiatives/gio-land)	Hellenic Cadastre Agency	2014	Senior Researcher in Remote Sensing & GIS applications
11. Digital Services for Single Subsidy through the updated Land Parcel Identification System, 2014	Eratosthenes / OPEKEPE	2014	Senior Researcher in Remote Sensing & GIS applications
12. Land Use/Cover Area Frame Survey (LUCAS) 2012 for Cyprus	Geoset Ltd / ELSTAT	2012	Senior Researcher in Remote Sensing & GIS applications
13. Renewal and Re-Design of the existing Reference Parcels in the frame of the Land Parcel Identification System	Meleti AEM, Kotouzas & Partners / Ministry of Agriculture	2008-2009	Senior Researcher in Remote Sensing & GIS applications
14. DESURVEY - A Surveillance System for Assessing and Monitoring Desertification / H2020	EU	2005-2008	Senior Researcher in Remote Sensing & GIS applications
15. RemoteSensing Control of Arable and Forage Land Area-Based Subsidies in the frame of Integrated Administration and Control System, 2004.	Ministry of Agriculture in Cyprus	05-12/2004	Junior Researcher in Remote Sensing & GIS applications
16. Operational project: Competitiveness» in the framework of the E.U. Third Support Context, entitled:	Agricultural University of Athens In collaboration	01-12/2003	Junior Researcher in Remote Sensing & GIS applications

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"Geotectonic evolution and natural disasters in the areas of Sperchios river, Maliakos Gulf and Atalanti (Central Greece).	with the French scientific team		
17. Project Multi-Temporal change analysis using Remote Sensing and GIS techniques for the area «Trahones», municipality of Alimos/Athens.	METRO company / AUA	02-04/2003	Junior Researcher in Remote Sensing & GIS applications
<b>18.</b> Project "Citrus trees registration and geographic database creation of Argolida prefecture"	Ministry of Agriculture / ORIO-Engineer Consultants	04-09/2002	Junior Researcher in Remote Sensing & GIS applications
19. Project entitled "Integrated methods and operations to confront the phenomenon of aridity in Sifnos and Ios islands"	ORIO-Engineer Consultants	1999-2001	Junior Researcher in Remote Sensing, GIS & Hydrological applications
20. Project ILOTS 2000: Orthophoto interpretation and classification of land uses for Aegean islands and Crete using ARCGIS. The data were used for the detection of the eligible crops for subsidies using satellite images.	Ministry of Agriculture / FASMA Technical Company	05-12/2000	Researcher in Remote Sensing & GIS applications
21. Project Archaeomedes II:  Monitor and recognition of land degradation due to natural and human effects, in order to prevent or compact the desertification in the Argolida peninsula (Peloponnesus).	AUA	1998-1999	Junior Researcher in Remote Sensing & GIS applications

### 3.5. Training Skills

- 2023. Diploma of theoretical and practical training in Drone handling and operation
- 27-29/11/2017: Three-day Seminar entitled: "Cropland mapping from free multi-temporal satellite images", organized by the ITC (Faculty of Geo-Information Science and Earth Observation)-University of Twente and the company GeoSpatial Enabling Technologies Ltd., Athens.

21-23/6/2017: Three-day Seminar entitled: "Basic training in eCognition Developer software" (object-oriented classification (OBIA) software and earth observation data analysis (satellite images, aerial photos), INFOREST Company, Athens.

- 25/11-06/12 2013 Attendance of the seminar "Educator Training in Electronic Learning" organized by the Institute of Education (INEP), at the National Center for Public Administration and Local Government (EKDDA), 70 hours
- 10-11/2012: Attendance of the "Teacher Training" seminar organized by the Institute of Education (INEP), at the National Center for Public Administration and Local Government (EKDDA), 100 hours

# 4. OTHER SKILLS AND INTERESTS

ERDAS (v.2019- λογισμικό επεξεργασίας δορυφορικών εικόνων): Excellent knowledge

ENVI (v.5,7- λογισμικό επεξεργασίας δορυφορικών εικόνων): Excellent knowledge

SNAP ESA (v.7- λογισμικό επεξεργασίας δορυφορικών εικόνων): Excellent knowledge

ESRI ArcGIS (v.10.8/Pro): Excellent knowledge

Quantum GIS: Excellent knowledge

ILWIS (v.3,8-λογισμικό επεξεργασίας δορυφορικών εικόνων & GIS): Excellent knowledge

Global Mapper, GEOMATIKA, OPTIKS: Very good knowledge

Επεξεργασία εικόνας και γραφικών (Photoshop CS6): Excellent knowledge

AutoCAD Map: Good knowledge

#### **Activities - Interests**

- Driver's license
- Photography
- -Basketball
- -Travels-Hiking
- Reading