

Dr Roxanne Suzette Lorilla

Postdoctoral researcher at the BEYOND Centre of Earth Observation Research & Satellite Remote Sensing (National Observatory of Athens)

GENERAL INFORMATION

Place of Birth: Athens, Greece

Date of Birth: 03 September 1992

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Researcher ID: AAN-7067-2020 <https://publons.com/researcher/3052340/roxanne-suzette-lorilla/>

ResearchGate: https://www.researchgate.net/profile/Roxanne_Lorilla

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EDUCATION

Sep 2016 - Jun 2020 **PhD in Geography.** Department of Geography, Harokopio University of Athens, Greece. *Title of thesis: Mapping and valuation of ecosystem services for informed decision making in spatial planning. Evaluation: Excellent.*

Sep 2014 - Jul 2016 **MSc in Geoinformatics.** Department of Geography, Harokopio University of Athens, Greece. *Title of thesis: Assessing and mapping ecosystem services on the Ionian Islands. Degree classification: 9.5/10 (Excellent).*

Oct 2010 - Dec 2014 **BSc in Environmental Technology.** Department of Environmental Technology, Technological Educational Institute of Ionian Islands (now Department of Environmental Sciences, Ionian University), Zakynthos - Greece. *Title of thesis: Mapping and assessing desertification risk on the Ionian Islands using spatial analysis methods. Degree classification: 8.21/10 (Very good).*

EMPLOYMENT

Sep 2020 - Present **Research Associate and Project Manager** at the National Observatory of Athens (Centre of Earth Observation Research & Satellite Remote Sensing, Institute for Astronomy, Astrophysics, Space Applications & Remote Sensing)

Project management and technical implementation:

- **"MICROSERVICES** - Predicting climate change impacts on the crop microbiome and cascading effects on ecosystem services delivery in agroecosystems" (BiodivClim-296, BIODIVERSA 2019-2020, ERA NET).
- **"Eiffel** - Revealing the Role of GEOSS as the Default Digital Portal for Building Climate Change Adaptation & Mitigation Applications" (101003518, H2020-LC-CLA-2020-2, LC-CLA-19-2020).
- **"TRANSITION** - Innovative resilient farming systems in Mediterranean environments (PRIMA, ERA-LEARN)"

Other projects:

- **"CLIMPACT** - National Research Network on the Impacts of Climate Change"; responsibilities: Ecosystem services modelling.
- **"SOILGUARD** - Sustainable soil management to unleash soil biodiversity potential and increase environmental, economic and social well being"; responsibilities: Applied spatial analysis and remote sensing in the analysis and modelling of ecosystem services and the relationships between soil biodiversity and multifunctionality" (101000371, H2020-SFS-2018-2020).
- **"Risk estimation of seismic, flood and fire events in the Attica region"**

- Sep 2021 - Feb 2022 **External Partner** at the Frederick Research Center (Limassol, Cyprus)
Under the research project:
- **“WaterWays (INTERREG-V Greece-Cyprus 2014-2020)”**; *responsibilities: Mapping natural and cultural values on the Marathasa Valley Region in Cyprus.*
- Sep 2020 - Oct 2020;
Oct 2018 - Nov 2018 **External Partner** at Nature Conservation Consultants (ncc) Ltd. (Athens)
Under the research project:
- **“LIFE-KEDROS** - Integrated conservation management of priority habitat type 9590* in the Natura 2000 site Koilada Kedron-Kampos (Contract Number LIFE15 NAT/CY/000850)”
- Mar 2017 - Jun 2017 **Teaching assistant** at the Harokopio University of Athens (Department of Geography); lectures, tutorials, examination and marking in Applied Spatial Analysis (Postgraduate Teaching Assistantship in Geo-informatics)
- Dec 2016 - Jun 2017 **Research Associate** at the Harokopio University of Athens (Department of Geography)
Under the research project:
- **“Assessing the socioeconomic profile of the residents of the municipality of Pavlos Melas, Thessaloniki (Greece) and its spatial structure”**; *responsibilities: Data collection and digitisation.*
- Mar 2014 - Sep 2014 **Internship/Lab Assistant** at the Ionian University (Department of Environmental Sciences), Former Technological Educational Institute of Ionian Islands
- *Assistance for GIS and Remote Sensing lab courses; Mapping and assessing desertification risk on the Ionian Islands using spatial analysis methods.*
- Jun 2013 - Sep 2014 **External Partner** at the University of West Attica (Department of Informatics and Computer Engineering), Former Technological Educational Institute of Piraeus
Under the research project:
- **“IndrAQ** - Multidisciplinary study of air-quality with emphasis indoors”
- responsibilities: In-situ data measurements*

GRANTS AND FUNDING

- Aug 2017- Feb 2020 PhD Fellowship Grant - General Secretariat for Research and Technology (GSRT) and the Hellenic Foundation for Research and Innovation (HFRI) [€27,900]
- Aug 2013 Grant for participation in the Summer School on Integrated Environmental Planning in an island environment held by the Technological Educational Institute of Ionian Islands [€300]

SCIENTIFIC SERVICE, ACTIVITIES AND MEMBERSHIPS

- Feb 2022 - Present **Member** of Ecosystem Services Partnership (ESP)
- Jul 2020 - Present **Member** of Young Ecosystem Services Specialists (YESS)
- Feb 2022 - Present **Fellow** of the IPBES nexus assessment; participation in *“Chapter 2: Status and past trends of interactions in the nexus”* of the thematic assessment of the interlinkages among biodiversity, water, food and health (nexus assessment)
<https://ipbes.net/nexus/experts>

- Feb 2022 - Present **Lead Team Member** of the ESP Thematic Working Group 3 for ES Indicators. <https://www.es-partnership.org/community/workings-groups/thematic-working-groups/twg-3-es-indicators/>
- Mar 2022 - Oct 2022 **Member** of the Scientific Program Committee (SPC) of the 4th ESP Europe Conference
- Jul 2020 - Oct 2021 **Guest Editor** of the Special Issue *Advances in Machine Learning and Statistical Analysis of Geographical Data*. Publisher: MDPI. URL: https://www.mdpi.com/journal/ijgi/special_issues/MachineLearning_Statistical
- May 2020 - Dec 2020 **Guest Editor** of the Special Issue *Tools for ecosystem services quantification and valuation, Journal: Environmental Science*. Publisher: American Institute of Mathematical Sciences. URL: <https://www.aimspress.com/newsinfo/1428.html>
- Jul 2019 - Present **Peer-reviewer** for the Scientific journals: *Geocarto International (Taylor & Francis Group)*, *Remote Sensing (MDPI)*, *Ecosystems (Springer)*, *Ecology and Society (Resilience Alliance)*, *Land (MDPI)*, *Int. Journal of Environmental Research and Public Health (MDPI)*, *Sustainability (MDPI)*, *Ecological Modelling (Elsevier)*, *Arabian Journal of Geosciences (Springer)*, *Ecosystems and People (Taylor & Francis Group)*
- May 2018 Participation in the *Establishment of the National Environmental Strategy for Forests* held by the Hellenic Ministry of Environment and Energy.

LANGUAGES

Greek: Native
English: C2 Proficient user

PUBLICATIONS

Peer-reviewed journal articles

- LORILLA, R.S.**, POIRAZIDIS, K., DETSIS, V., KALOGIROU, S., CHALKIAS, C. (2020) Socio-ecological determinants of multiple ecosystem services on the Mediterranean landscapes of the Ionian Islands (Greece). *Ecological Modelling*, 422C, 108994. DOI: 10.1016/j.ecolmodel.2020.108994.
- KEFALAS, G., KALOGIROU, S., POIRAZIDIS, K., **LORILLA, R.S.** (2019). Landscape transition in Mediterranean islands: the case of Ionian Islands, Greece 1985 - 2015. *Landscape and Urban Planning*, Volume 191, 103641. DOI: 10.1016/j.landurbplan.2019.103641.
- LORILLA, R.S.**, KALOGIROU, S., POIRAZIDIS, K., KEFALAS, G. (2019). Identifying spatial mismatches between the supply and demand of ecosystem services to achieve a sustainable management regime in the Ionian Islands (Western Greece). *Land Use Policy*, Volume 88, 104171. DOI: 10.1016/j.landusepol.2019.104171.
- LORILLA R.S.**, POIRAZIDIS K., KALOGIROU S., DETSIS V., MARTINIS, A. (2018). Assessment of the Spatial Dynamics and Interactions among Multiple Ecosystem Services to Promote Effective Policy Making across Mediterranean Island Landscapes. *Sustainability*, Volume 10, Issue 9, 3285. DOI: 10.3390/su10093285
- KEFALAS G., LATTAS P., XOFIS P., **LORILLA R.S.**, MARTINIS A., POIRAZIDIS K. (2018). The use of vegetation indices and change detection techniques as a tool for monitoring ecosystem and biodiversity integrity. *International Journal of Sustainable Agricultural Management and Informatics*, Volume 4, Issue 1, 47 - 67. DOI: 10.1504/IJSAMI.2018.092411.

KOULOGLIOTIS, D., KALIMERIS, A., POTOZI, S., **LORILLA** R.S., KEFALAS, G., NIKOLOPOULOS, D. (2015). Indoor Air Pollution: The Case of Ozone in Three Regions in Greece. *Physical Chemistry & Biophysics*, Volume 5, Issue 6, 1000191. DOI: 10.4172/2161-0398.1000191.

KOTTOU, S., NIKOLOPOULOS, D., KOULOGLIOTIS, D., POULIEZOS, K., VOGIANNIS, E., GORGOLIS, N., **LORILLA**, R.S., KEFALAS, G., POTOZI, S., CHALDEOS, Y., SEVVOS, T., PETRAKI, E., MICHAEL, C., MOUSTANIS, P., KALIMERIS, A., YANNAKOPOULOS, P.H. (2014). Preliminary study of distribution of indoor EMR in Greek dwellings. *Physica Medica*, Volume 30, Supplement 1, e91-e92. DOI: 10.1016/j.ejmp.2014.07.263.

Full papers at Conferences & Congresses

GIANNARAKIS, G., SITOKONSTANTINOY, V., **LORILLA**, R.S., & KONTOES, C. (2022). Towards assessing agricultural land suitability with causal machine learning. *EarthVision: Large Scale Computer Vision for Remote Sensing Imagery (EarthVision)*. Accepted. New Orleans, Louisiana, 19 June 2022.

POIRAZIDIS, K., LATTAS, P., KEFALAS, G., **LORILLA**, R.S. & MARTINIS, A. (2017). Multi-Temporal Change Analysis of Biomass using Remote Sensing Data as a tool to monitoring Ecosystem and Biodiversity Integrity: The Case of Ilia - Greece. *Proceedings of the 18th Hellenic Forestry Congress & International Workshop*. Edessa, Greece, 8 - 11 October 2017. Available at: https://www.forestry.gr/assets/pdf/praktika/PRC_WORK.pdf

KALOGEROPOULOS, K., ROUMELIS, S., CHALKIAS, C., PSAROYIANNIS, A., APOSTOLIDIS, V., DIGKAS, K., DIMITRAKI, K., DIMOPOULOU, E., KARKALETSOU, A., KEFALAS, G., **LORILLA** R.S., MATALA, A., MAVROKEFALOU, G., SALONIKIDI, A., SOFIANOPOULOS, S., STAMELLOU, E., STATHOPOULOS, N., VOUTOS, G. (2015). A GIS - based model for solid waste collection management: The case of Heraklion city, Greece. *3rd INTERNATIONAL CONFERENCE on Sustainable Solid Waste Management*. Tinos Island, Greece, July 2015.

KALOGEROPOULOS, K., ROUMELIS, S., CHALKIAS, C., PSAROYIANNIS, A., APOSTOLIDIS, V., DIGKAS, K., DIMOPOULOU, E., KARKALETSOU, A., KEFALAS, G., **LORILLA**, R.S., MATALA, A., MAVROKEFALOU, G., SALONIKIDI, A., SOFIANOPOULOS, S., STAMELLOU, E., STATHOPOULOS, N., VOUTOS, G. (2015). Siting of sanitary landfills using GIS modelling: Empirical analysis in Tinos Island, Greece. *3rd INTERNATIONAL CONFERENCE on Sustainable Solid Waste Management*. Tinos Island, Greece, July 2015.

NIKOLOPOULOS, D., KOTTOU, S., KOULOGLIOTIS, D., VOGIANNIS, E., PETRAKI, E., GIANNAKOPOULOS, I., GORGOLIS, N., KEFALAS, G., POTOZI, S., **LORILLA**, R.S., TEMENOS, N., TSELES, D. (2014). Background EMR measurements in Zante and Lesbos islands, Greece. *International Scientific Conference eRA-9 The SynEnergy Forum*. ISSN-1791-1133. T.E.I. of Piraeus, September 2014.

CHAIDEFTOU, E., KEFALAS, G., **LORILLA**, R.S., MARTINIS, A. & POIRAZIDIS, K. (2013). Changes in the biodiversity of forest ecosystems with different frequency of fires in Zakynthos. *Proceedings of the 16th Hellenic Forestry Congress & Annual meeting of Prosilva Europe*. p. 238 - 246. Thessaloniki, 6 - 9 October 2013. Available at: <http://gisc.gr/docs/proceedings/ProceedingsForestryConference2013.pdf>

PETRAKI, E., GIANNAKOPOULOS, I., SEVVOS, T., ARGYRIOU, X., KOULOGLIOTIS, D., KOTTOU, S., NIKOLOPOULOS, D., VOGIANNIS, E., GORGOLIS, N., ZISOS, I., KEFALAS, G., **LORILLA**, R.S., POTOZI, S., ZISOS, I. (2013). Preliminary study of distribution of background EMR in Greek apartment dwellings. *International Scientific Conference eRA - T.E.I. of Piraeus*. p. 64 - 90. Piraeus Campus, 23 - 25 September 2013.

NIKOLOPOULOS, D., PETRAKI, E., SEVVOS, T., CHALDEOS, Y., ARGYRIOU, X., FILTISAKOS, S., GORGOLIS, N., TEMENOS, N., KEFALAS, G., **LORILLA**, R.S., POTOZI, S., CHATZISAVVAS, N., KOULOGLIOTIS, D., KOTTOU, S., YANNAKOPOULOS, P., ZISOS, A. (2013). Factors affecting indoor radon and progeny concentration

variations in Attica (Greece). *International Scientific Conference eRA - 8 T.E.I. of Piraeus*. p. 39 - 43. Piraeus Campus, 23 - 25 September 2013.

NIKOLOPOULOS, D., PETRAKI, E., KOULOGLIOTIS, D., KOTTOU, S., YANNAKOPOULOS, P., VOGIANNIS, E., FILTISAKOS, S., GORGOLIS, N., ARGYRIOU, X., SEVVOS, T., TEMENOS, N., CHALDEOS, Y., POTOZI, S., KEFALAS, G., **LORILLA, R.S.**, CHATZISAVVAS, N., ZISOS, A. (2013). Human radiation risk of due to radon and progeny: results from extended active measurements in Attica (Greece). *International Scientific Conference eRA - 8 T.E.I. of Piraeus*. p. 24 - 38. Piraeus Campus, 23 - 25 September 2013.

Published abstracts (presentations and posters)

LORILLA R.S., SITOKONSTANTINOY, V., KONTOES, C., KOUKOS, A. & TSOUMAS, I. (2021). Using Machine learning to analyze the relationships between ecosystem services and agricultural practices. *Third Ecosystem Services Partnership (ESP) Europe Conference (Book of Abstracts)*. Estonian University of Life Sciences (Tartu, Estonia), 7-10 June 2021, Sectoral Session S1. Available at: <https://www.espconference.org/europe2020/wiki/486623/session-overview#Sectoral>

LORILLA R.S., POIRAZIDIS, K. & DETSIS, V. (2019). Identifying the main explanatory variables of the supply and demand of multiple ecosystem services. *Proceedings of the 3rd Congress on GIS and Spatial Analysis in Agriculture and the Environment (Book of Abstracts)*. Agricultural University of Athens (Greece), 11-13 December 2019, pp. 55-56.

ELIADES, N.-G., **LORILLA, R.S.**, KEFALAS, G., CHRISTOU, A., PAPASAVVAS, K., ANDREOU, M., KOYNNAMAS, K. & POIRAZIDIS, K. (2019). Mapping and assessing ecosystem services to ensure the long-term preservation of mountainous protected area: the case of Koilada Kedron-Kampos in Cyprus (Poster). *Proceedings of the 10th ESP World Conference (Book of Abstracts)*. Hannover, Germany, 21 - 25 October 2019, p. 136. Available at: <https://www.espconference.org/esp10/wiki/422544/book-of-abstracts>

POIRAZIDIS, K., KEFALAS, G., XOFIS, P., **LORILLA, R.S.** & MARTINIS, A. (2018). Long-term monitoring of changes in forest cover in Dadia's National Park (Poster). *Proceedings of the 11th International Conference of the Hellenic Geographical Society (Book of Abstracts)*. Lavrion, Greece, 12 - 15 April 2018. Available at: <http://www.hellenicgeosociety.org/en/11th-conference-proceedings>

LORILLA R.S., POIRAZIDIS, K., KALOGIROU, S. & MARTINIS, A. (2017). Mapping and identifying areas of high value in provisioning ecosystem services. *Proceedings of the 2nd Congress on GIS and Spatial Analysis in Agriculture and the Environment (Book of Abstracts)*. Agricultural University of Athens (Greece), 25-26 May 2017, pp. 60-61.

LORILLA R.S., POIRAZIDIS, K., KALOGIROU, S. & MARTINIS, A. (2016). Mapping and assessment of ecosystem services on the Ionian Islands. *Proceedings of the 9th Hellenic Congress of Hellas GIs (Book of Abstracts)*. National Technical University of Athens (Greece), 8-9 December 2016, p. 15.

LORILLA R.S., POIRAZIDIS, K., KALOGIROU, S. & MARTINIS, A. (2016). Synergies and trade-offs analysis of ecosystem services: the case of Ionian Islands. *Proceedings of the 8th Congress of the Hellenic Ecological Society (Book of Abstracts)*. Aristotle University of Thessaloniki (Greece), 20-23 October 2016, p. 62. Available at: www.helecos.gr/el/activities/helecos-congresses/2016-8th-helecos-conference/Proceedings_Thessaloniki_2016.pdf

KEFALAS G., **LORILLA R.S.**, POIRAZIDIS K., KALIVAS D. & MARTINIS A. (2014). Assessing and Mapping the Risk of Desertification and its Dynamic change in the Ionian Islands. *Proceedings of the 10th International Congress of the Hellenic Geographical Society (Book of Abstracts)*. Aristotle University of Thessaloniki (Greece), 22 - 24 October 2014.

LORILLA R.S., KEFALAS, G., POIRAZIDIS, K., MARTINIS, A. & KALIVAS, D. (2014). Interpreting the dynamic changes of desertification risk in Zakynthos with the use of landscape metrics. *Proceedings of the 7th Congress of the Hellenic Ecological Society (Book of Abstracts)*. Aegean University (Mytilene, Greece), 9-12 October 2014, p. 115. Available at: https://www.helecos.gr/el/activities/helecos-congresses/2014-7th-helecos-conference/Proceedings_Mytilini_2014.pdf

CHAIDEFTOU E., KEFALAS G., **LORILLA R.S.**, MARTINIS A. & POIRAZIDIS K. (2013). How biodiversity is affected by varied fire intensity? A case study in a Mediterranean island (Zante, Greece) using plant and bird taxa. *Proceedings of the Open Landscapes Conference - Ecology, Management and Nature Conservation (Book of Abstracts)*. University of Hildesheim (Germany), 29 September - 3 October 2013, p. 101.