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Editor in Chief

Dr. Emily Chenette, Public Library of Science: San Francisco, CA, US

Dear Dr. Chenette,

My name is Wesley Lourenco Barbosa and I am a Master's student at the Escola Politécnica of the Universidade de São Paulo. My research topic is focused on assessing the impact of data quality problems on species distribution models (SDM). As part of my thesis, I developed a literature review that originated the paper "Quality Problems with the Acquisition and the Analysis Process in Bioclimatic Data Used in Species Distribution Models: A Systematic Literature Review". I submitted the paper for exclusive consideration in the PlosONE Journal. I confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

The paper presents a literature review aimed at identifying the main quality problems observed in bioclimatic data used in species distribution models, both from the point of view of acquisition and the analysis process and investigate what solutions have been proposed in the scientific literature to deal with these problems. Incorrect location problems were the most cited in the literature, followed by problems related to the taxonomic identification of species, which are characteristic of data collected by volunteer observers. Solution proposals range from intelligent data handling like crossing information with other bases such as geographic positioning, to changes in data collection procedures. Due to the importance of SDM to the area of biogeography, agriculture, and decision-making for strategic conservation policies, understanding the role that the quality of the data used in this context is of fundamental importance.

The submitted paper fits into a systematic review in the field of ecological informatics, particularly related to the quality of species occurrence data. Furthermore, it is different from the previous ones published in this journal, as it is a review that seeks to converge the data quality area to the analysis and modeling of species distribution. Thus, it was intended to investigate the challenges of obtaining data used in SDMs, and how the scientific literature deals with the impacts of these problems. Quality problems are identified at all stages of the life cycle of bioclimatic data and it is necessary for researchers to know how to deal or measure these problems. Therefore, this paper should be of interest to a broad readership, including those interested in species distribution modeling and in applying these models to real-world scenarios. Hence, I believe that this manuscript is appropriate for publication by PlosONE because of the multidisciplinary and interdisciplinary nature of the articles published by the Journal.

I will be serving as the corresponding author for this manuscript. All of the authors approved the final version of the manuscript and are in agreement with its submission to

PlosONE. I have assumed responsibility for keeping my coauthors informed of our progress throughout the editorial review process, the content of the reviews, and any revisions made to the manuscript. I understand that, if accepted for publication, a certification of authorship form will be required that all coauthors will sign.

I suggest Dr. Miquel Vall-Iloera Camps to handle my manuscript because of his background in biology and interest in biodiversity conservation. Thank you for considering the manuscript for publication. I look forward to hearing from you.

Sincerely,  
Mr. Barbosa