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Valdivia, February 2, 2023

Subject: Manuscript Submission Journal: Ecological Informatics

Dear Editor-in-Chief,

We hereby submit a mauscript entitled: "Spatial and temporal representation of marine fish occurrences available online" authored by Vanessa Pizarro, Andrea Castillo, Andrea Piñones and myself.

The marine ecosystem is among the least explored of our biota and understanding the spatial distribution of its biodiversity is essential to produce adequate protection planning nowadays. Several ecoinformatics tools have now been developed for such task with sometimes uncertain outcome; vast knowledge is produced at some locations while other are left unsampled. This work tackles precisely on this issue and seeks to provide a description of how marine fish diversity has been collected and stored in publicly available repositories such as OBIS and GBIF. By using a combination of spatial analyses and more classic diversity evaluation, we have identified the current state of the art among fish biodiversity inventories. We identify gaps, associated sample efforts and potential determinants e.g. life history features. Finally, an assessment on the incidence of protection areas and cultural values upon fish species richness is also provided.

We believe that this manuscript is of great interest for your audience as it addresses a unifying theme across biogeography and ecoinformatics by building on prominent contributions in the field, current effort to index our biota, so that we may pinpoint where efforts should be placed for conservation.

We hope that you find the manuscript compelling and would appreciate its prompt evaluation.

Thank you in advance for the consideration,

Sincerely,

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