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9/15/2022

Abstract

Introduction

Methods

Data were downloaded from the Global Biodiversity Information Framework (GBIF) and the Ocean Biodiversity Information System (OBIS) on September 9th, 2022 using rgbif (Chamberlain et al. 2022) and robis (Provoost and Bosch 2021) respectively. Queries included a polygon for the North and Central American Pacific coastline from Alaska to the Equator, and restricted to 6 bivalve families and 11 polychaete families (Appendix). Families were selected for their prevalence in existing eDNA data.

GBIF data were cleaned by removing high levels of coordinate uncertainty (100 meters of uncertainty for every 1000 meters), removing fossils and machine observations, removing individual counts of 0, removing records with only a family level id, then standardizing taxonomy to match the World Register of Marine Species (WoRMS) (WoRMS Editorial Board 2022).

References

Chamberlain, S., Barve, V., Mcglinn, D., Oldoni, D., Desmet, P., Geffert, L. & Ram, K. (2022) Rgbif: Interface to the global biodiversity information facility API.

Provoost, P. & Bosch, S. (2021) Robis: Ocean biodiversity information system (OBIS) client.

WoRMS Editorial Board (2022) World Register of Marine Species. Available from https://www.marinespecies.org at VLIZ. Accessed yyyy-mm-dd. https://doi.org/10.14284/170

Figures

Appendix

Families selected

Bivalves: Veneridae, Myidae, Glycymerididae, Lasaeidae, Mactridae, Tellinidae

Polychaetes: Polynoidae, Glyceridae, Sabellidae, Goniadidae, Capitellidae, Syllidae, Nereididae, Orbiniidae, “Phyllodocidae, Sigalionidae