

Automated Diet Matrix Construction for Marine Ecosystem Models Using Generative AI

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Data Availability

The complete codebase, including all scripts, configuration files, and analysis tools, is available at <https://github.com/s-spillias/AI-EwE-Diets>. The validation framework, including reference group definitions and classification rules, is documented in the project repository to ensure reproducibility.

Author Contributions

SS: Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Project administration. BF: Validation, Writing - Review & Editing, Supervision, Funding acquisition. FB: Methodology, Software, Validation, Writing - Review & Editing, Supervision. CB: Investigation, Data Curation, Validation, Writing - Review & Editing. JS: Conceptualization, Validation, Investigation, Writing - Review & Editing. RT: Methodology, Software, Validation, Investigation, Writing - Review & Editing, Supervision, Funding acquisition.

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Statement on the Use of Generative AI

Generative AI tools, specifically Claude Sonnet 3.5, were utilized in the preparation of this manuscript to assist with tasks such as language refinement, text structuring, and summarization. All scientific content, data interpretation, and conclusions were independently developed and verified by the authors to ensure accuracy and integrity.