



Global expansion of marine protected areas and the redistribution of fishing effort

First Submission: RR_WLD_2024_153

Marina Visintini, Nihaa Sajid

reproducibility@worldbank.org

13th February, 2025

This review verifies the reproducibility of the exhibits included in the paper “*Global Expansion Of Marine Protected Areas And The Redistribution Of Fishing Effort*”.

Contents in this review:

1. Main findings
2. List of exhibits and reproducibility status
3. Reproduction Environment

Main findings

- The code was successfully executed on a new computer after:
 1. Running run.R
 2. Running `r/05_analysis_generate_paper_figures_tables.rmd`
- The code takes approximately 16 hours to run.
- We conducted our reproducibility analysis based on the published paper.
- Every exhibit has been reproduced accurately.
- **Reproducibility Summary:**
 - **Data:** The reproducibility package starts from constructed data. All constructed data is included in the reproducibility package. Rmd files for data construction are included in the package. However, some raw data is restricted and has not been included in the reproducibility package. For more details, please refer to the README file. Reviewers have verified the reproducibility of the output of construction files.
 - **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
 - **Outputs:** All outputs are generated by code included in the reproducibility package.
 - **Reproducibility verification:** Reviewers used data provided directly by the authors to conduct the reproducibility verification, and this is not fully included in the public reproducibility package. The reviewers did not verify if publicly available data matches the data provided by the authors.
 - **Dependencies environment:** The reviewers created a new environment for dependencies using the latest versions available for each dependency at the moment of the review.

*List of exhibits and reproducibility status***Results in the Main Section of the Paper**

- **Figure 1** Reproduced.
- **Figure 2** Reproduced.
- **Figure 3** Reproduced.
- **Figure 4** Reproduced.
- **Figure 5** Reproduced.
- **Figure 6** Reproduced.
- **Table 1** Does not apply. The exhibit does not show analysis result.

Reproduction Environment

- Paper exhibits were reproduced in a computer with the following specifications:
 - OS: Mac OS Sequoia 15.0.1 (24A348)
 - Processor: Apple M1 Pro
 - Memory available: 14 GB
 - Software version: R 4.4.2