

FishMIP

Fisheries & Marine Ecosystem
Model Intercomparison Project



in the North Pacific

Phoebe Woodworth-Jefcoats
NOAA Fisheries



fishmip.org & [fishmip.coordinators@gmail.com](mailto:fishmip coordinators@gmail.com)

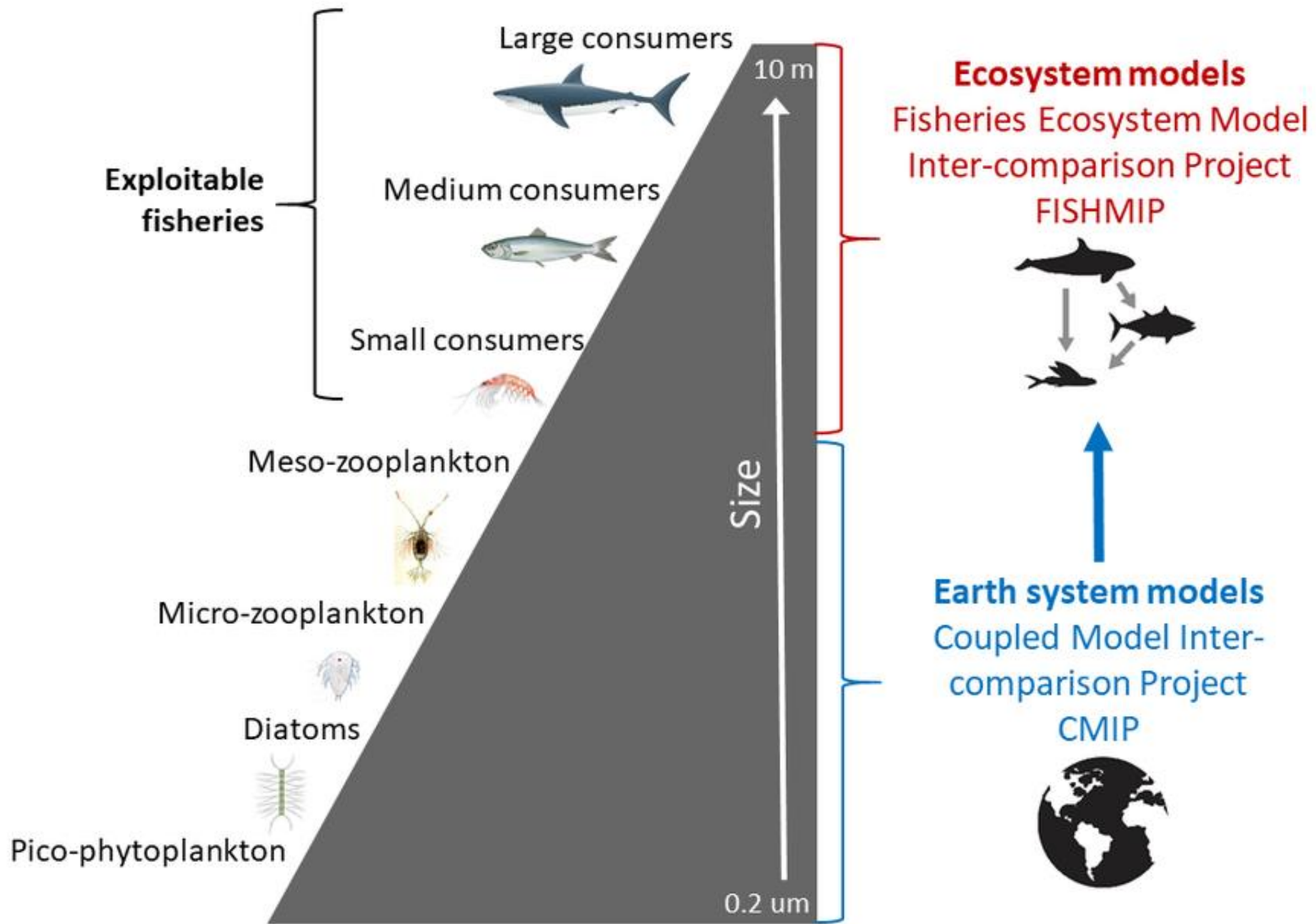
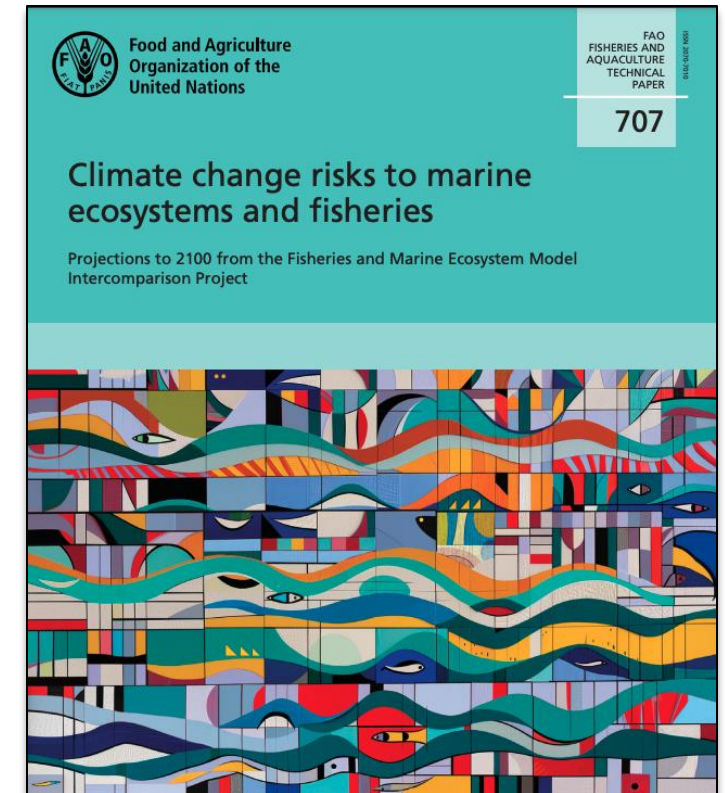
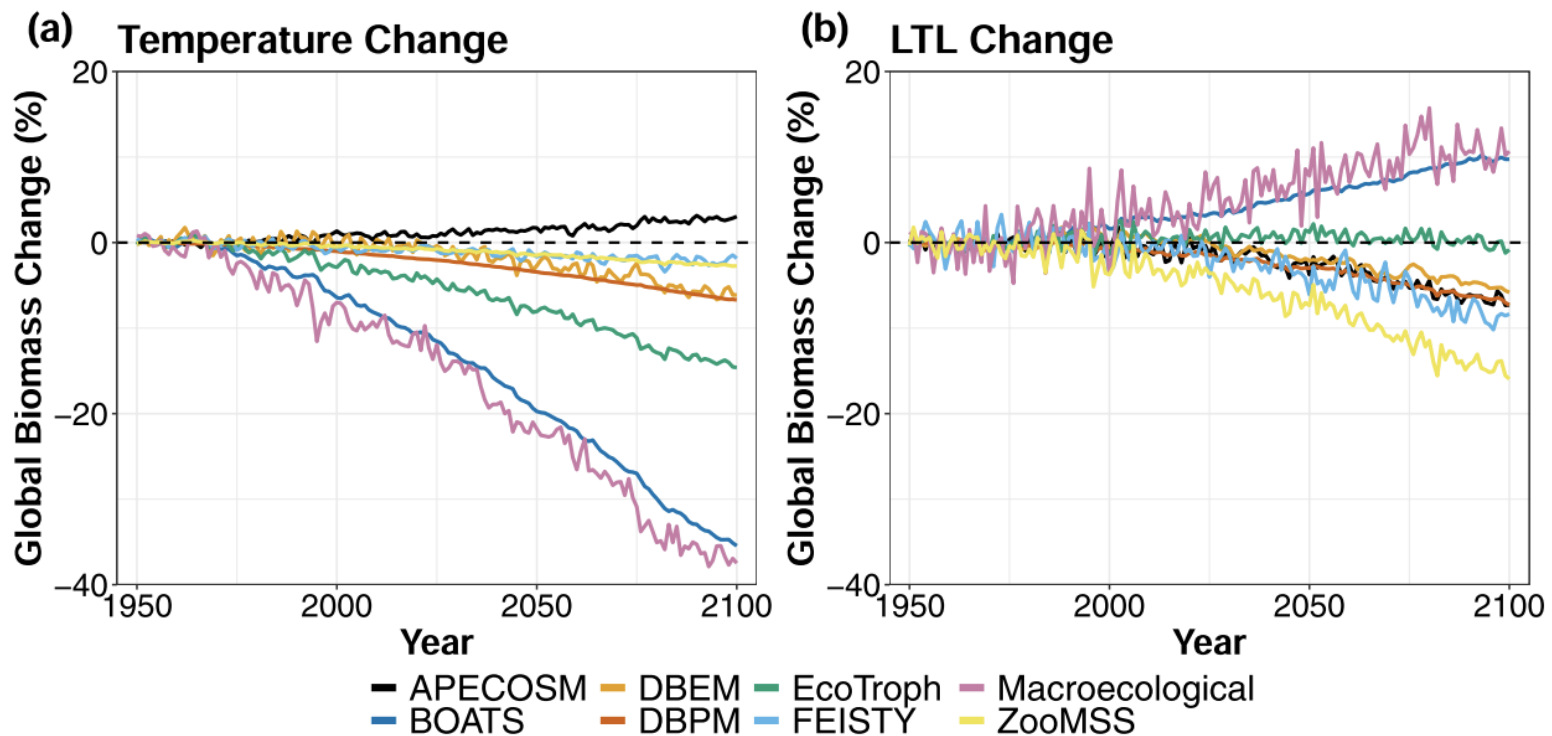


Figure from <https://fishmip.org/about.html> Boyce et al. 2021

FishMIP Goals

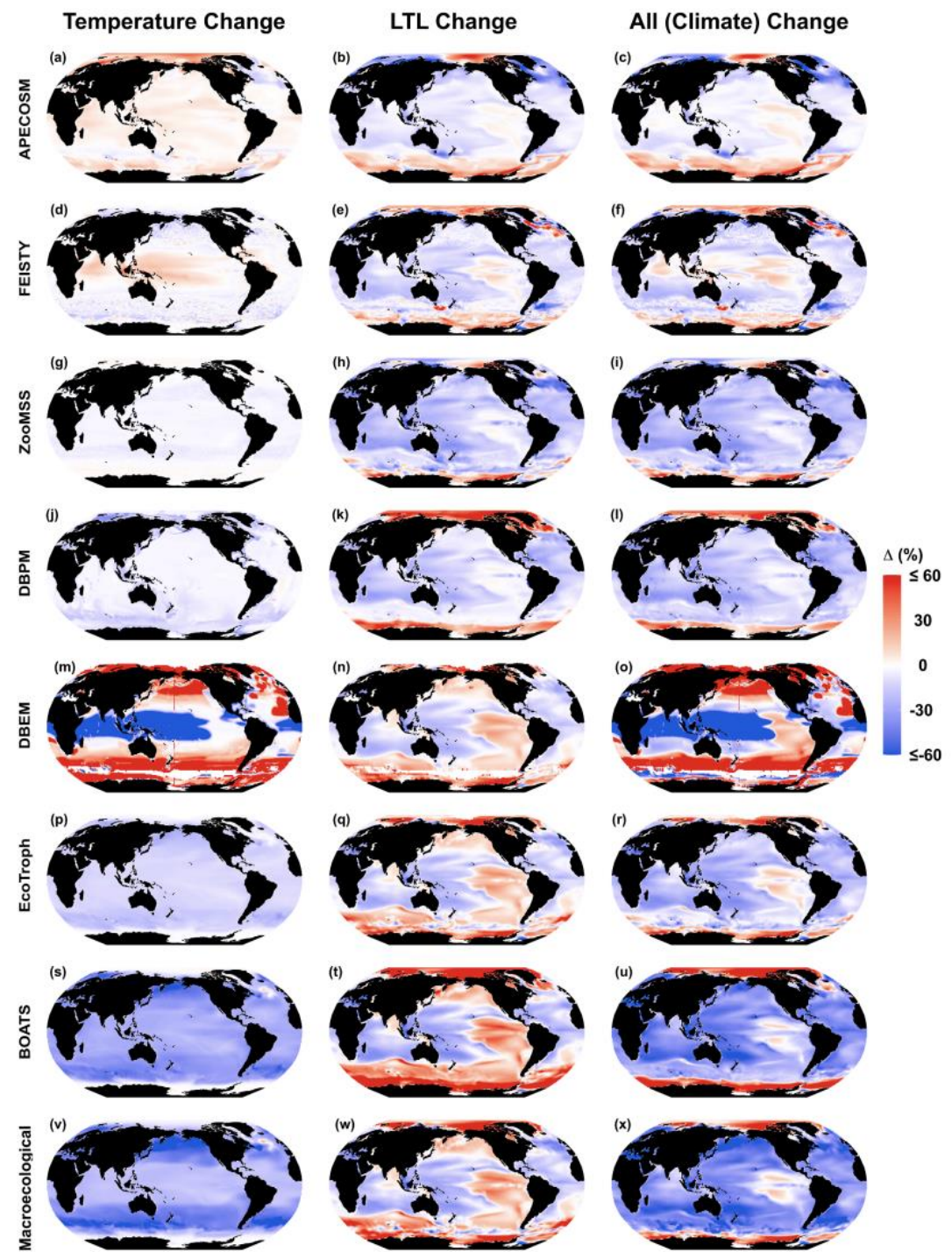
Understand model differences | Facilitate model development |
Offer insight into climate effects on marine resources



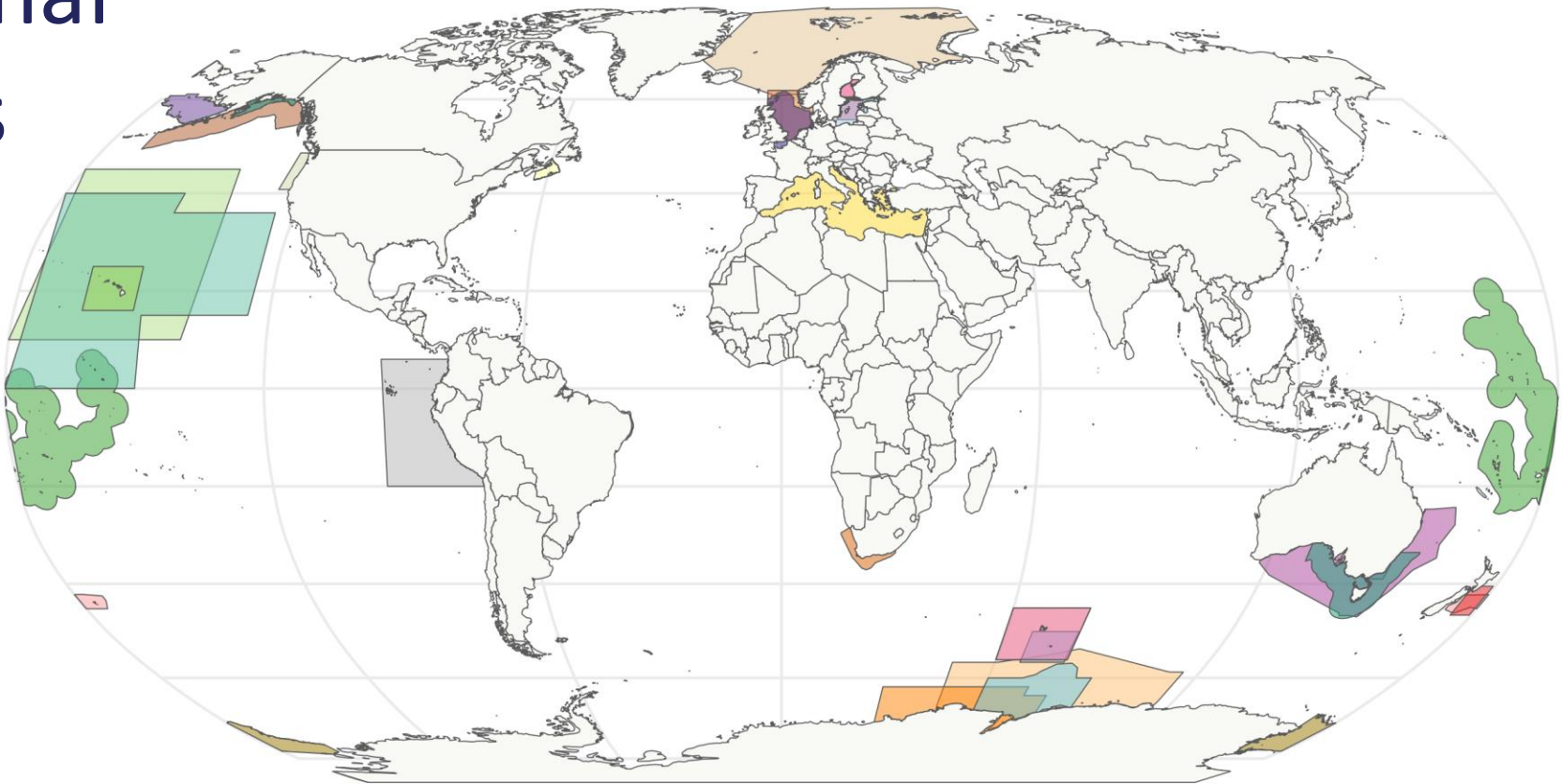
(L) Heneghan et al. 2021 10.1016/j.pocean.2021.102659

(R) openknowledge.fao.org/items/097908c4-e2ad-428a-9350-e15e5dcd11f4

Growing suite of global models



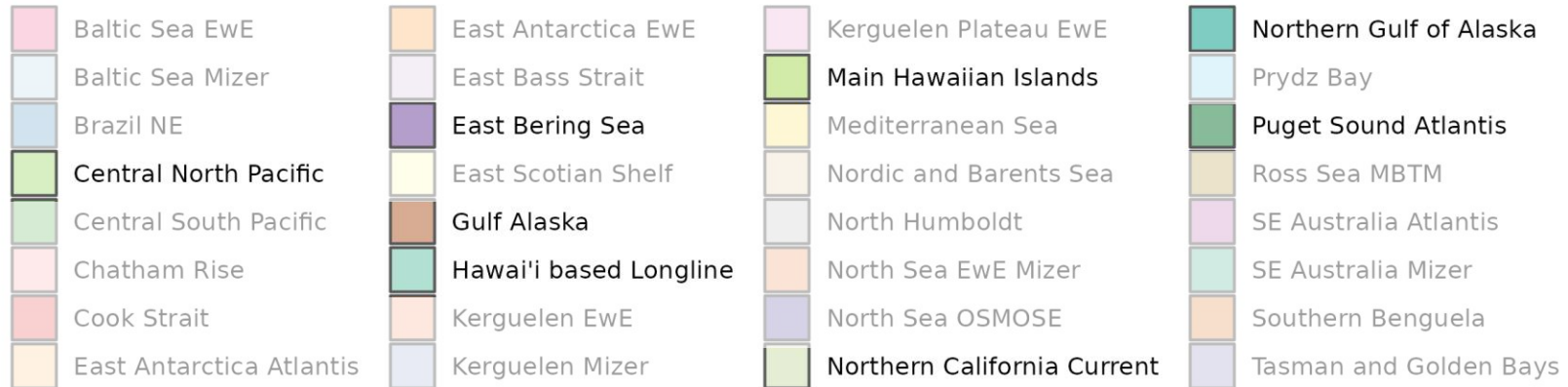
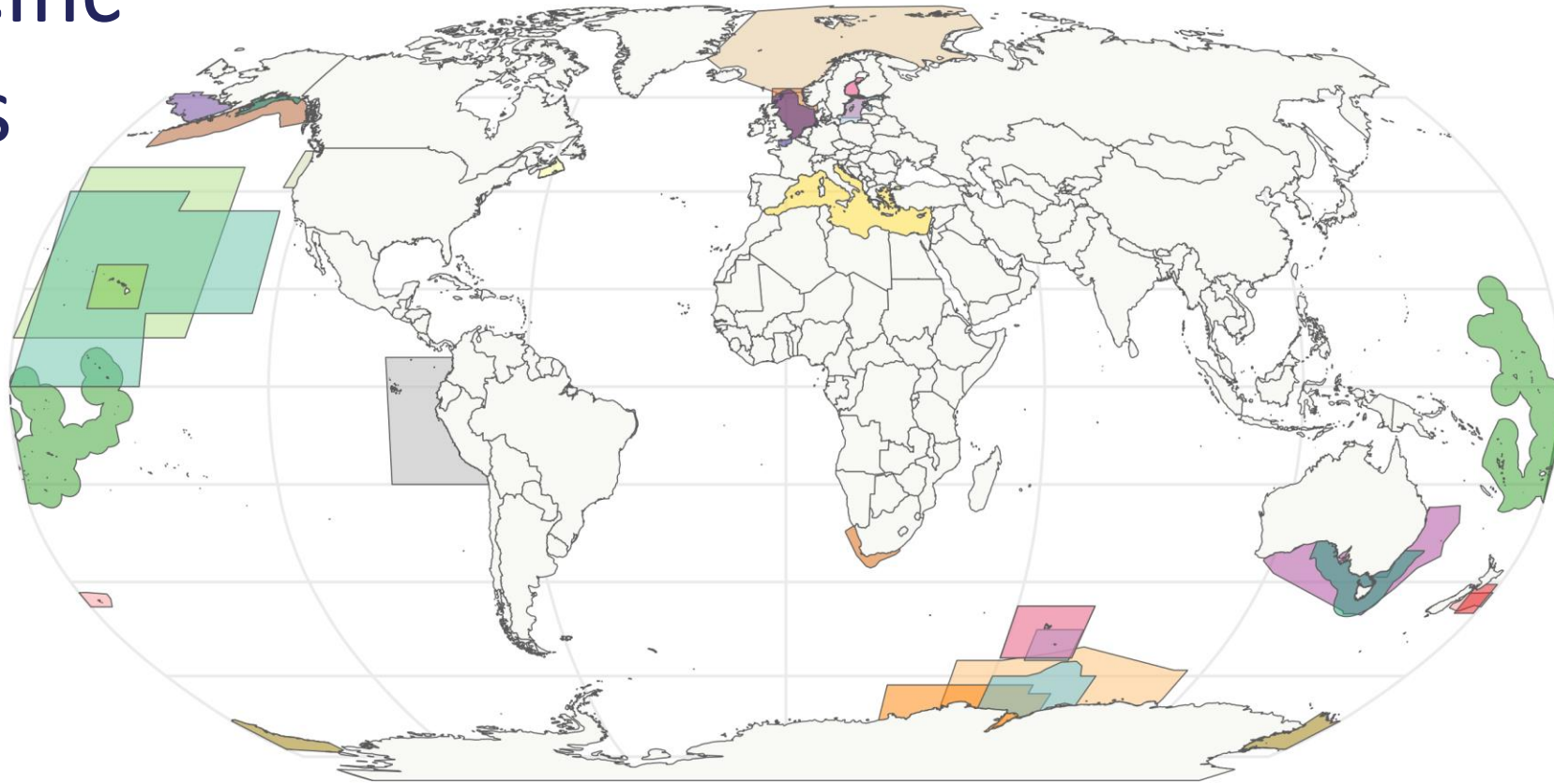
and regional models



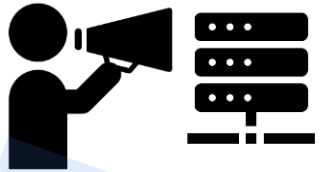
- | | | | |
|--|--|---|--|
|  Baltic Sea EWE |  East Antarctica EWE |  Kerguelen Plateau EWE |  Northern Gulf of Alaska |
|  Baltic Sea Mizer |  East Bass Strait |  Main Hawaiian Islands |  Prydz Bay |
|  Brazil NE |  East Bering Sea |  Mediterranean Sea |  Puget Sound Atlantis |
|  Central North Pacific |  East Scotian Shelf |  Nordic and Barents Sea |  Ross Sea MBTM |
|  Central South Pacific |  Gulf Alaska |  North Humboldt |  SE Australia Atlantis |
|  Chatham Rise |  Hawai'i based Longline |  North Sea EWE Mizer |  SE Australia Mizer |
|  Cook Strait |  Kerguelen EWE |  North Sea OSMOSE |  Southern Benguela |
|  East Antarctica Atlantis |  Kerguelen Mizer |  Northern California Current |  Tasman and Golden Bays |

Figure by Denisse Fierro Arcos
fishmip.org/modellingteams.html

North Pacific models



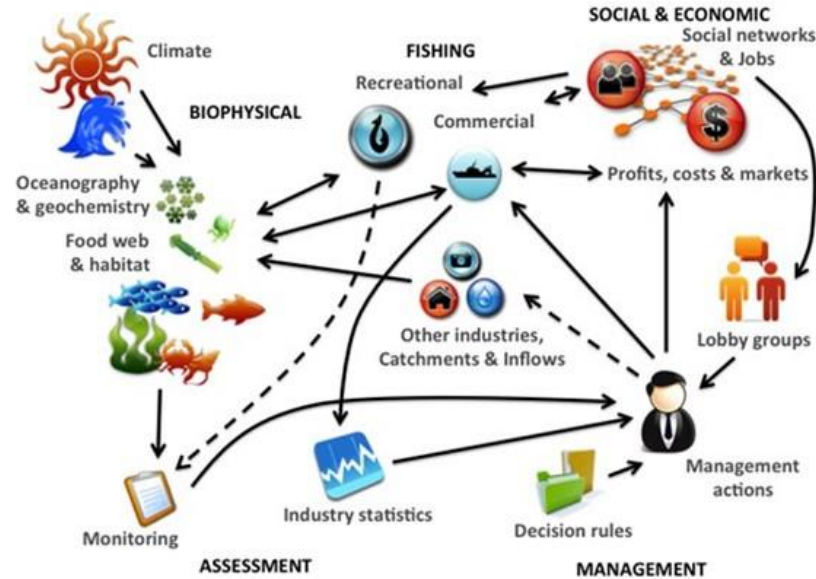
How to join: Four key steps to contribute to FishMIP experiments Regional modelling team



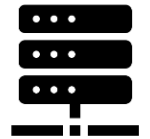
1. Let us know and set up your account on the ISIMIP server



2. Access climate and fishing inputs



3. Run core simulations described in the protocol



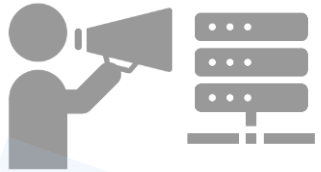
4. Save outputs following guidelines and upload them to the ISIMIP server

[fishmip.coordinators@gmail.com](mailto:fishmip coordinators@gmail.com)

How to join:

Four key steps to contribute to FishMIP experiments

Regional modelling team

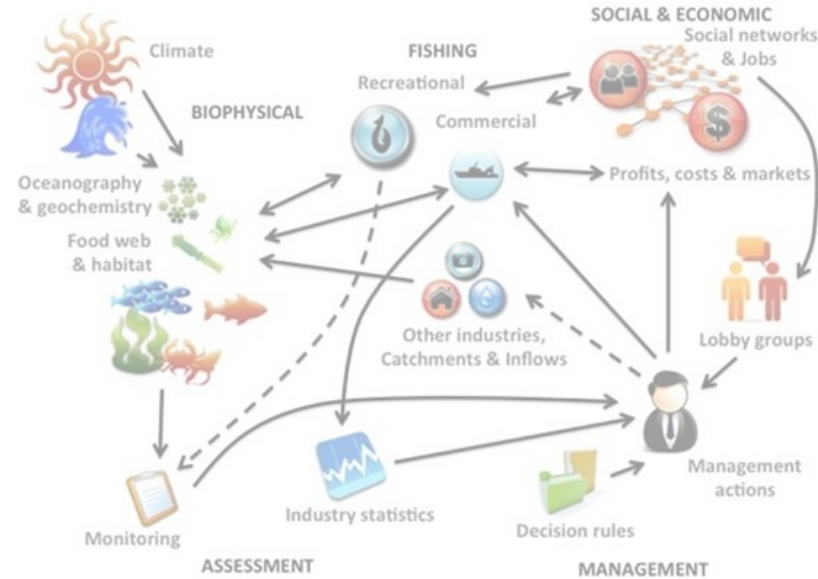


1. Let us know and set up your account on the ISIMIP server



2. Access climate and fishing inputs

Late Nov 2024



3. Run core simulations described in the protocol

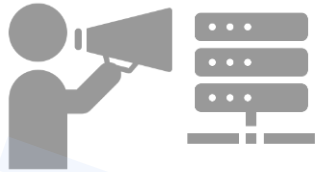


4. Save outputs following guidelines and upload them to the ISIMIP server

How to join:

Four key steps to contribute to FishMIP experiments

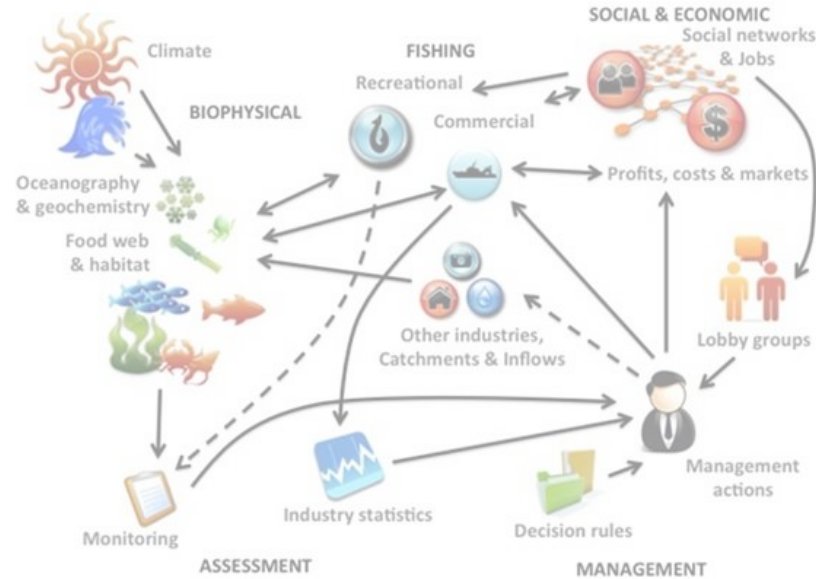
Regional modelling team



1. Let us know and set up your account on the ISIMIP server

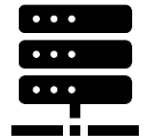


2. Access climate and fishing inputs



3. Run core simulations described in the protocol

**March/April
2025**



4. Save outputs following guidelines and upload them to the ISIMIP server

The Inter-Sectoral Impact Model Intercomparison Project

ISIMIP offers a framework for consistently projecting the impacts of climate change across affected sectors and spatial scales. An international network of climate-impact modellers contribute to a comprehensive and consistent picture of the world under different climate-change scenarios.

[READ MORE](#)



ISIMIP3a protocol for all sectors

Protocol goal
Simulation climate forcing
Output repository



Data access tools
Simulation fishing forcing
Modeler community: *FishMIP folks are friendly and helpful* 😊

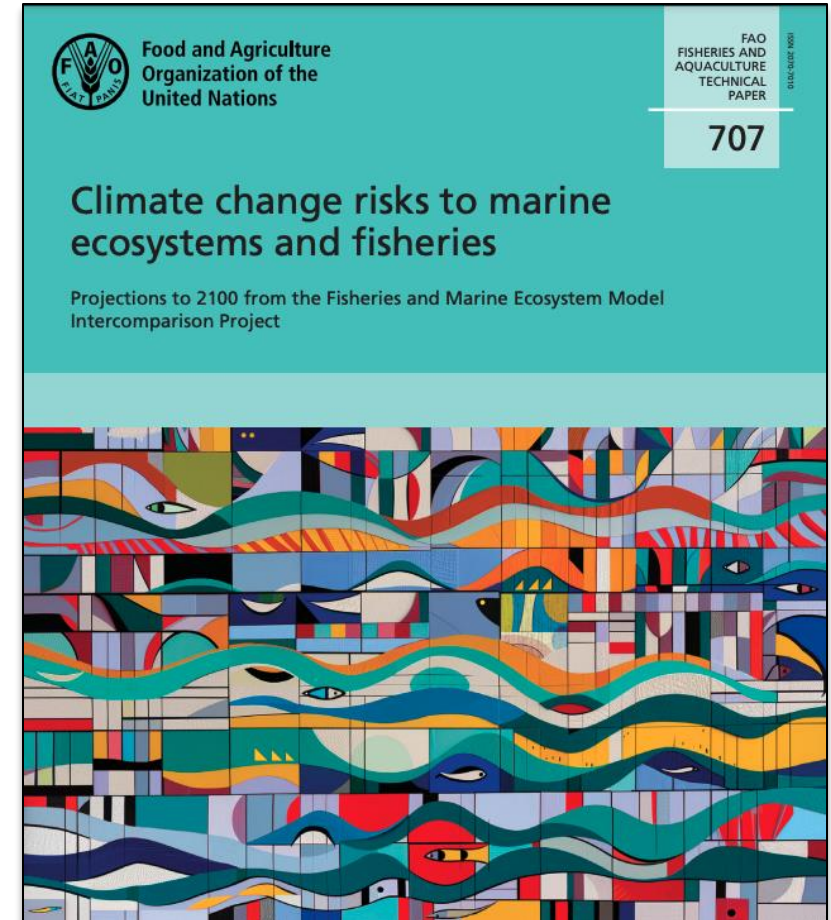
FishMIP Working Groups:

- **WG1: Model improvement & data tools** developing tools to assess the reliability of marine ecosystem model ensembles
- **WG2: Socio-economic scenarios** development, implementation, testing, and simulation of the Oceanic System Pathways (OSPs)
- **WG3: Food security** climate change impacts, risk, vulnerability assessments on food systems and food security
- **WG4: Biodiversity protection** explore the role of MPAs and other area-based fisheries management strategies
- **WG5: Climate change mitigation** explores the potential impacts of climate interventions on marine ecosystems

fishmip.org/workinggroups.html

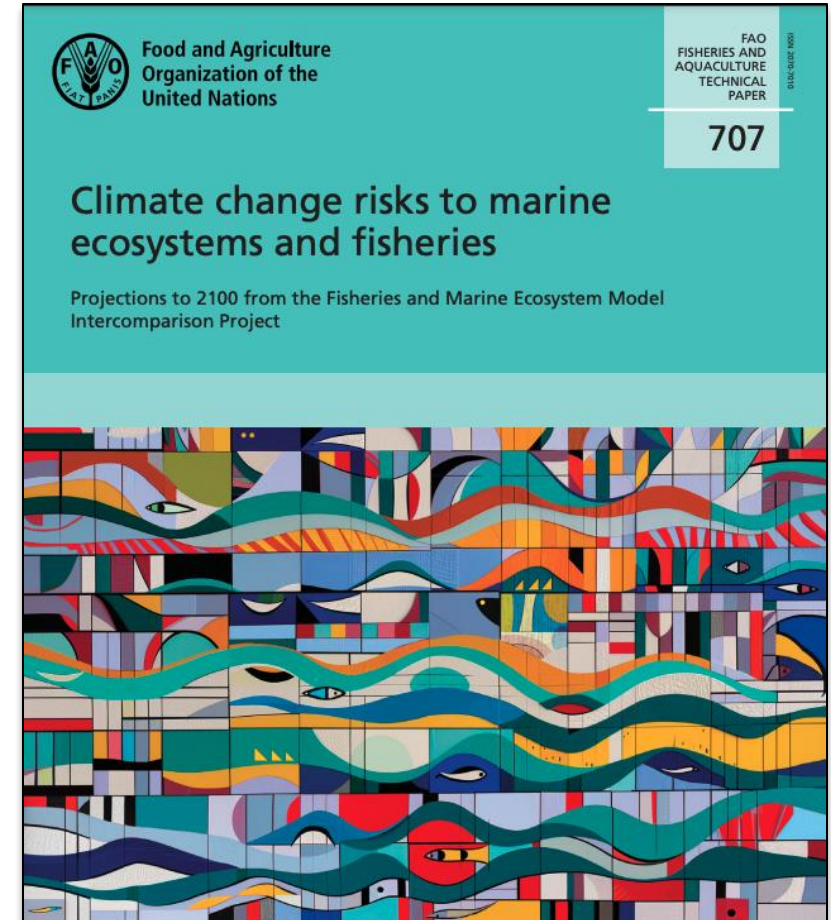
Why participate?

- Your science will influence policy



Why participate?

- Your science will influence policy
- Your efforts will advance our field (resulting in better policy)



Why participate?

- Your science will influence policy
- Your efforts will advance our field (resulting in better policy)
- You will be joining a community of modelers



FishMIP

Fisheries & Marine Ecosystem
Model Intercomparison Project



fishmip.org & fishmip.coordinators@gmail.com

phoebe.woodworth-jefcoats@noaa.gov