

# AquaMaps

## Mapping Marine Biodiversity

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# What are AquaMaps

- Computer-generated distribution maps
- Based on environmental preferences of species and known occurrences
- For eventually all species on Earth

# Who Does AquaMaps

- Under the umbrella of the FishBase Consortium
- With data from FishBase, SeaLifeBase, GBIF and OBIS
- With support from Pew Charitable Trusts, European Commission, USGS, GBIF

# Who Does AquaMaps

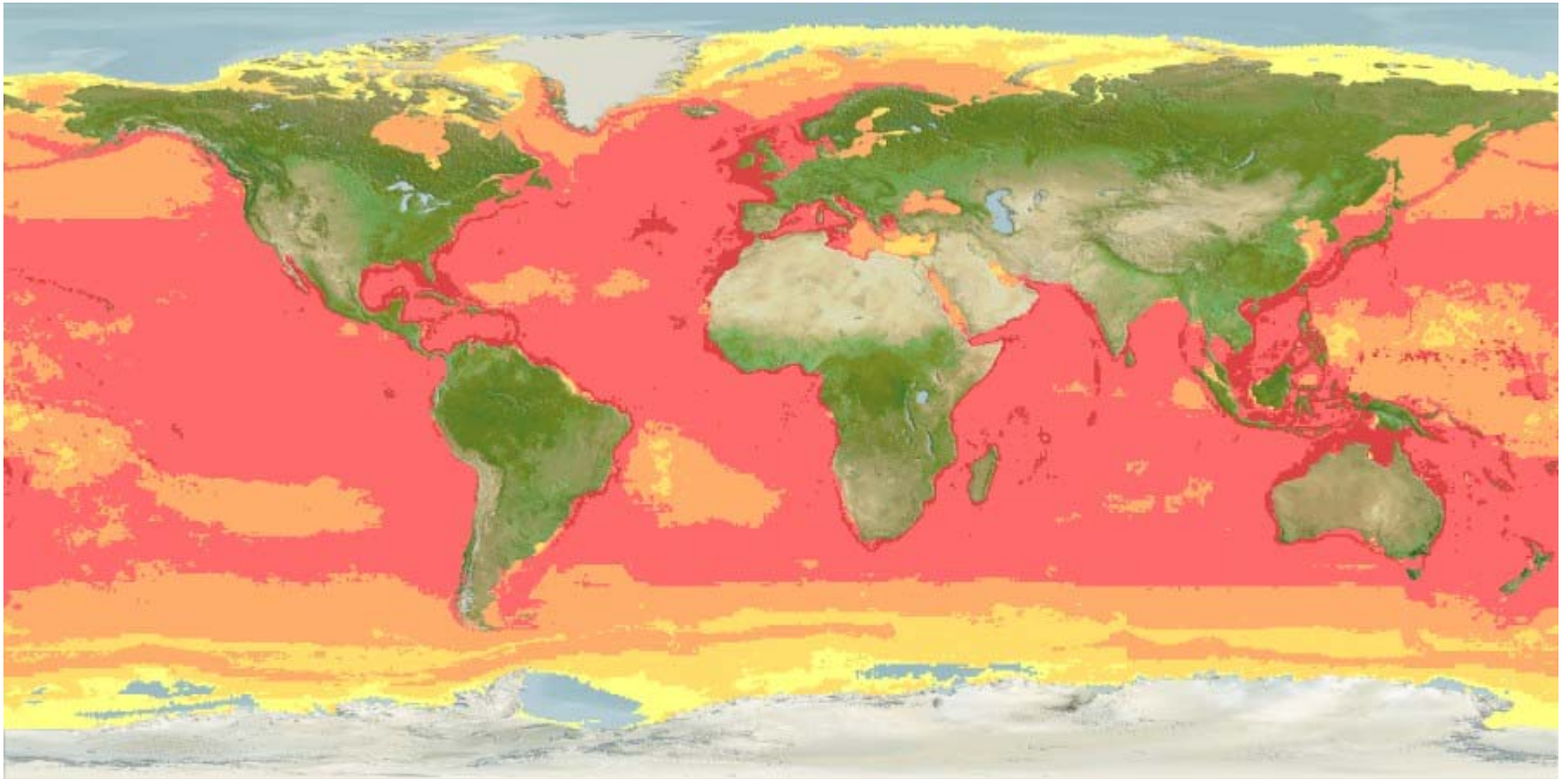
- Rainer Froese, IFM-GEOMAR, Coordinator
- Kristin Kaschner, UBC, model development
- Sven Kullander, NRM, extension to freshwater
- Jonathan Ready, formerly NRM, implementation
- Tony Rees, CSIRO, mapping tools
- Paul Eastwood, CEFAS, valuation
- Eli Agbayani, WFC, web programming
- Josephine Rius Barile, WFC, database programming
- Kathleen Reyes, WFC, map checking

# 9,000 Species in 2008

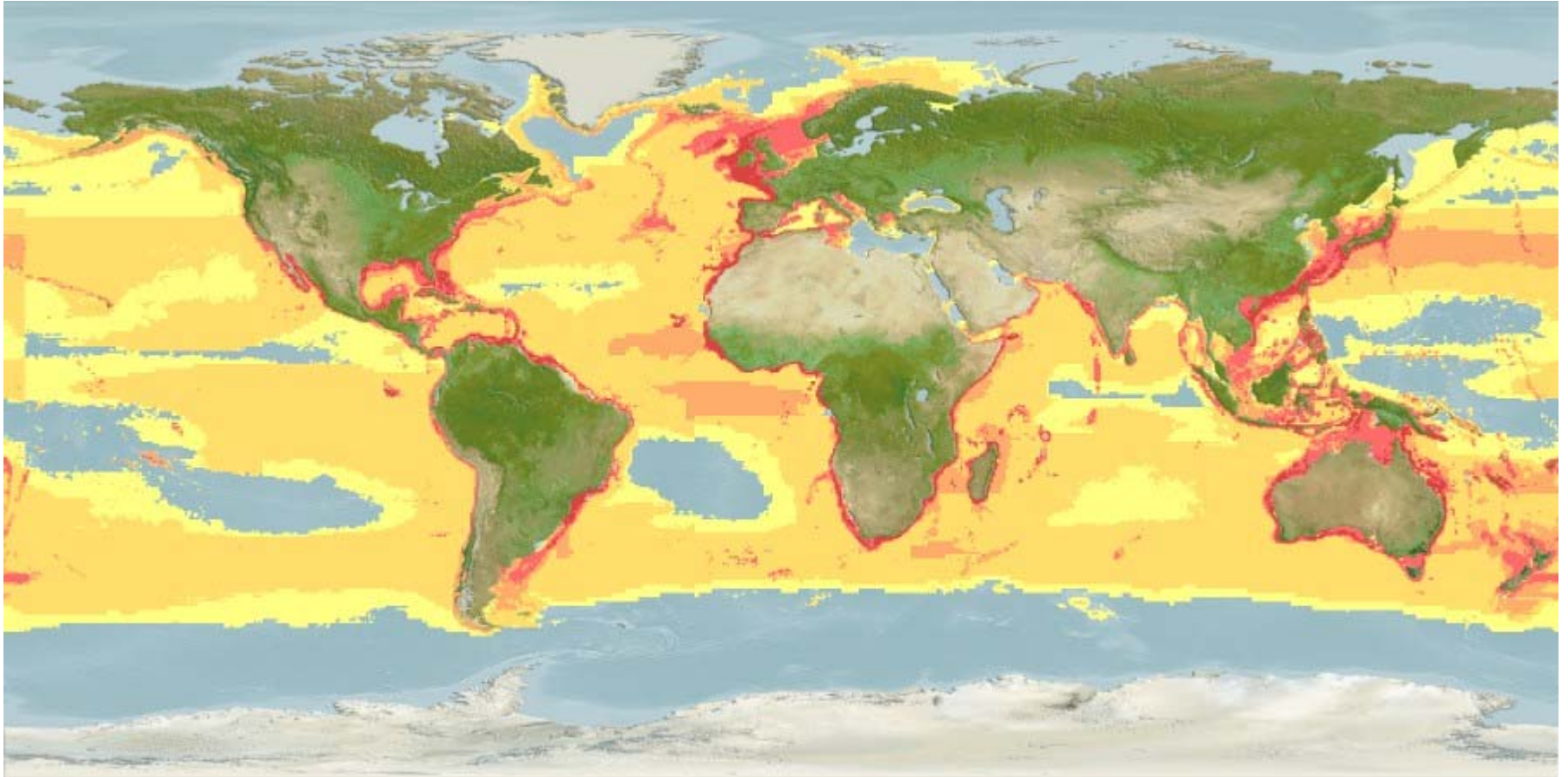
- Half of all marine fishes (~7,000)
- All marine mammals
- All marine reptiles (turtles, snakes)
- **Many seabirds** (those that are predicted by the properties of the water)
- Over 1,000 invertebrates
- Important invasive species

# Examples from AquaMaps: Global Species Richness

[www.aquamaps.org](http://www.aquamaps.org)

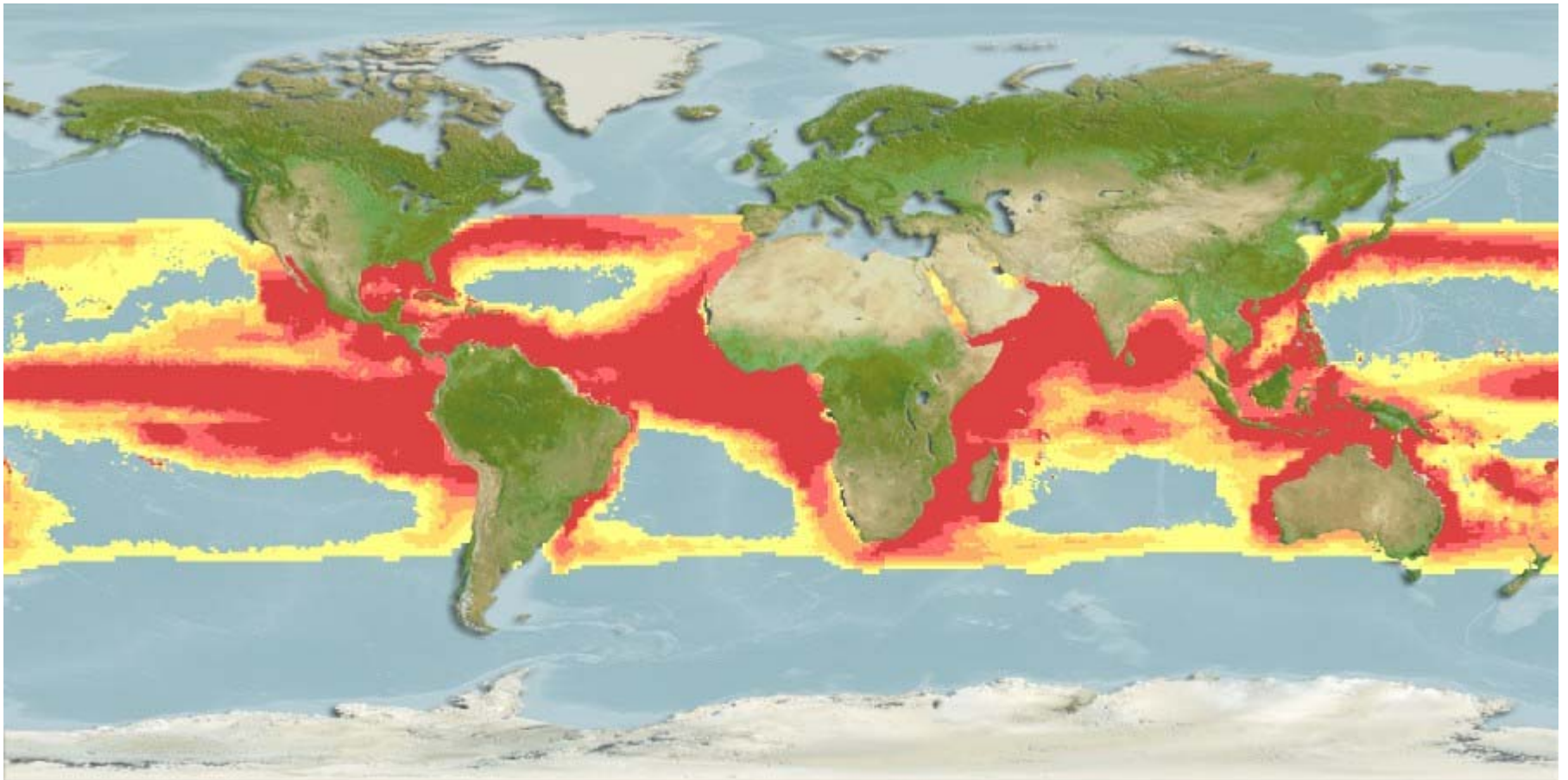


# Examples from AquaMaps: No Sharks in Antarctica



# Examples from AquaMaps

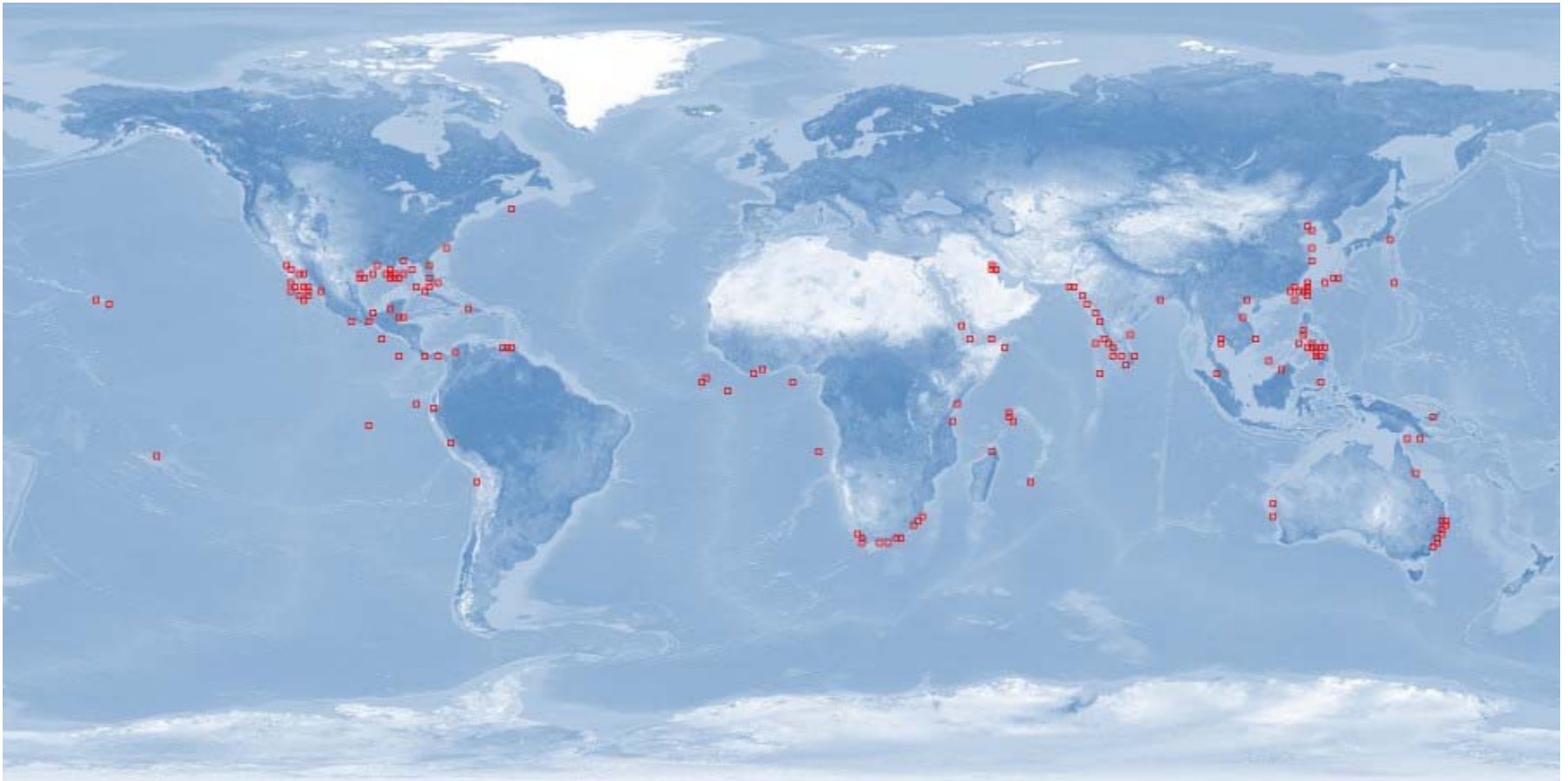
## Whale shark (cosmopolitan)





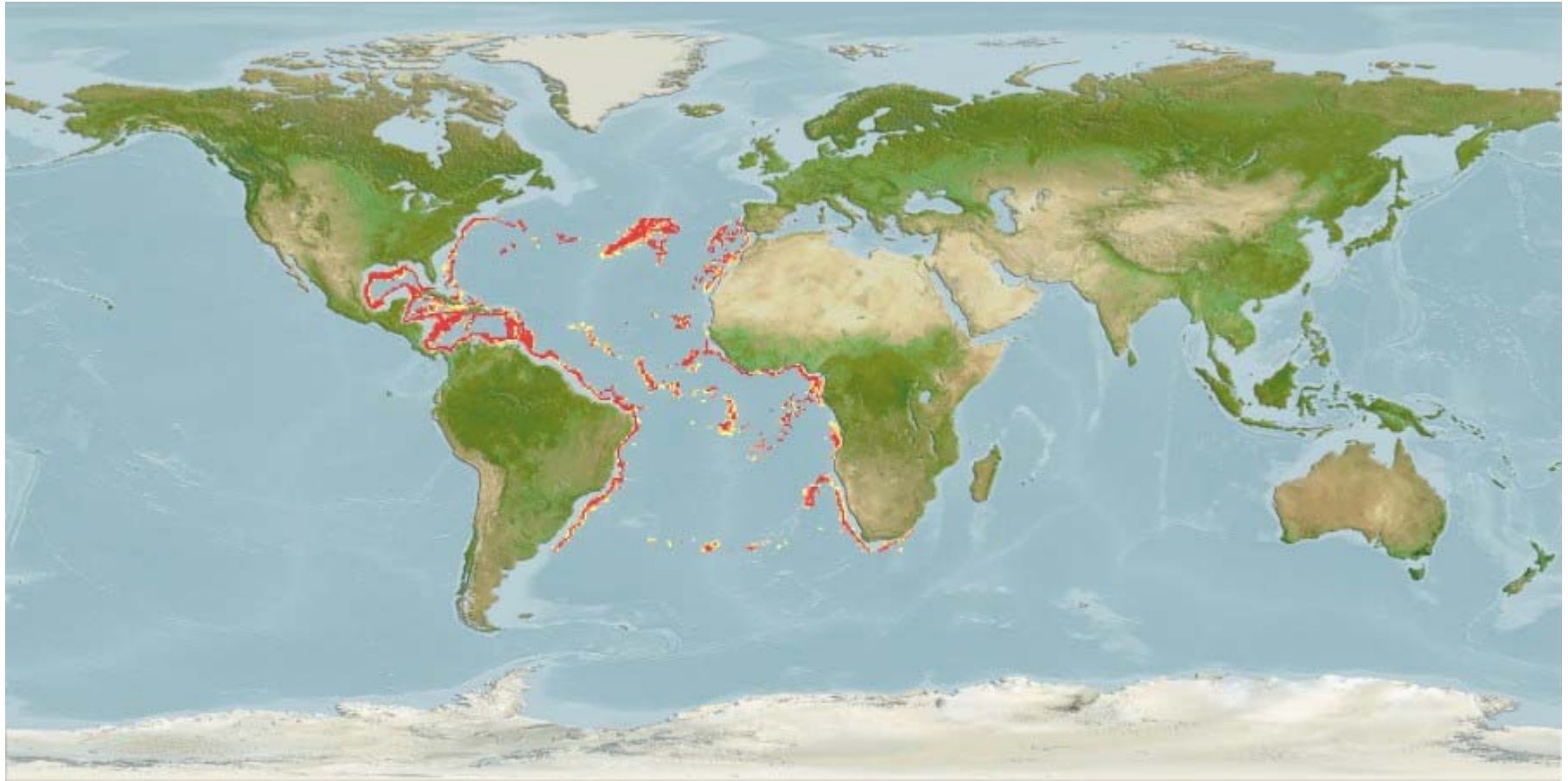
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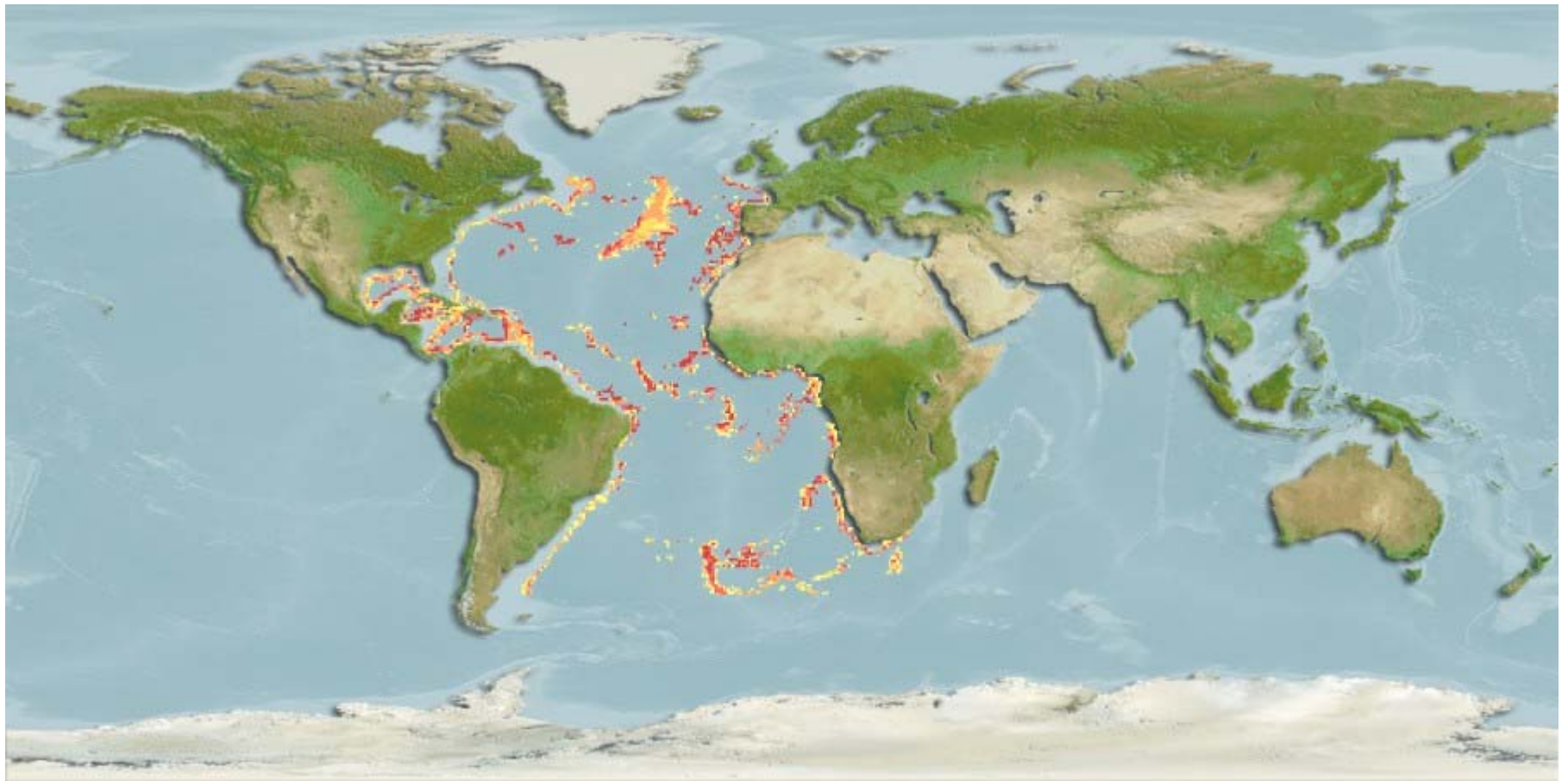
# Examples from AquaMaps

## Blackfin spiderfish (continental shelves)

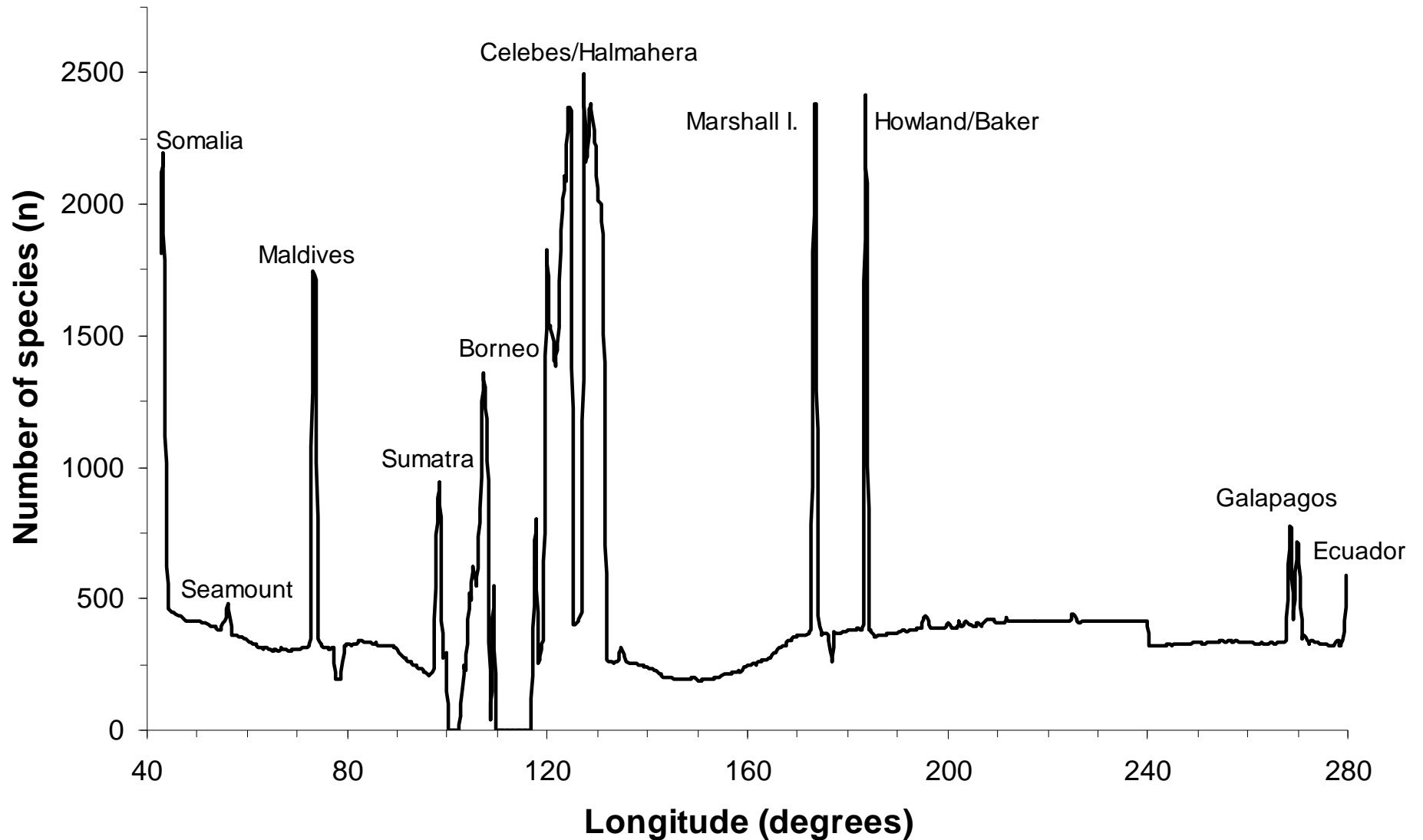


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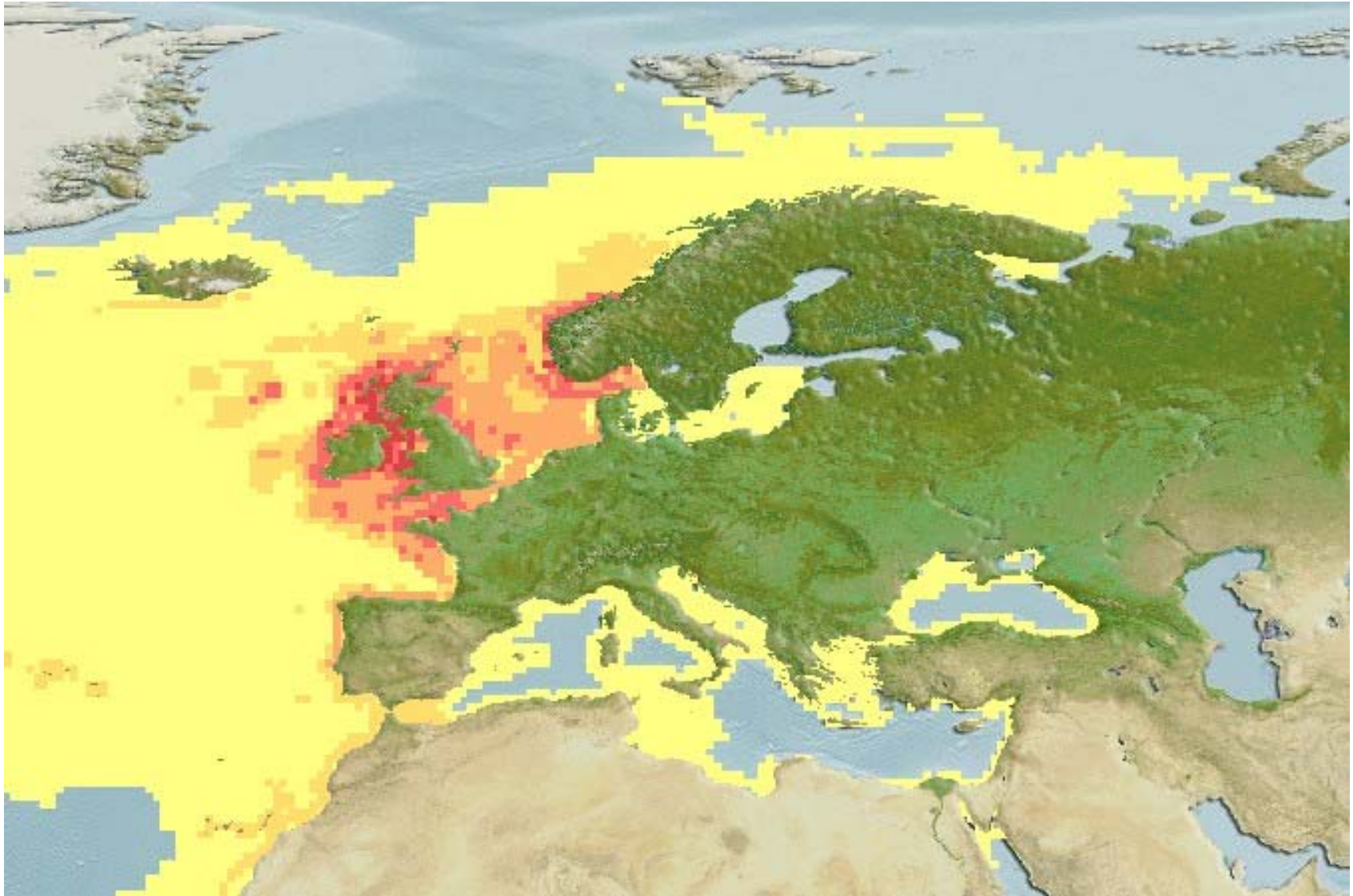
## Blackfin spiderfish (preliminary 2050)



# Tools: Equatorial Species Richness Transect across the Indo-Pacific



# Tools : Where to Place an MPA



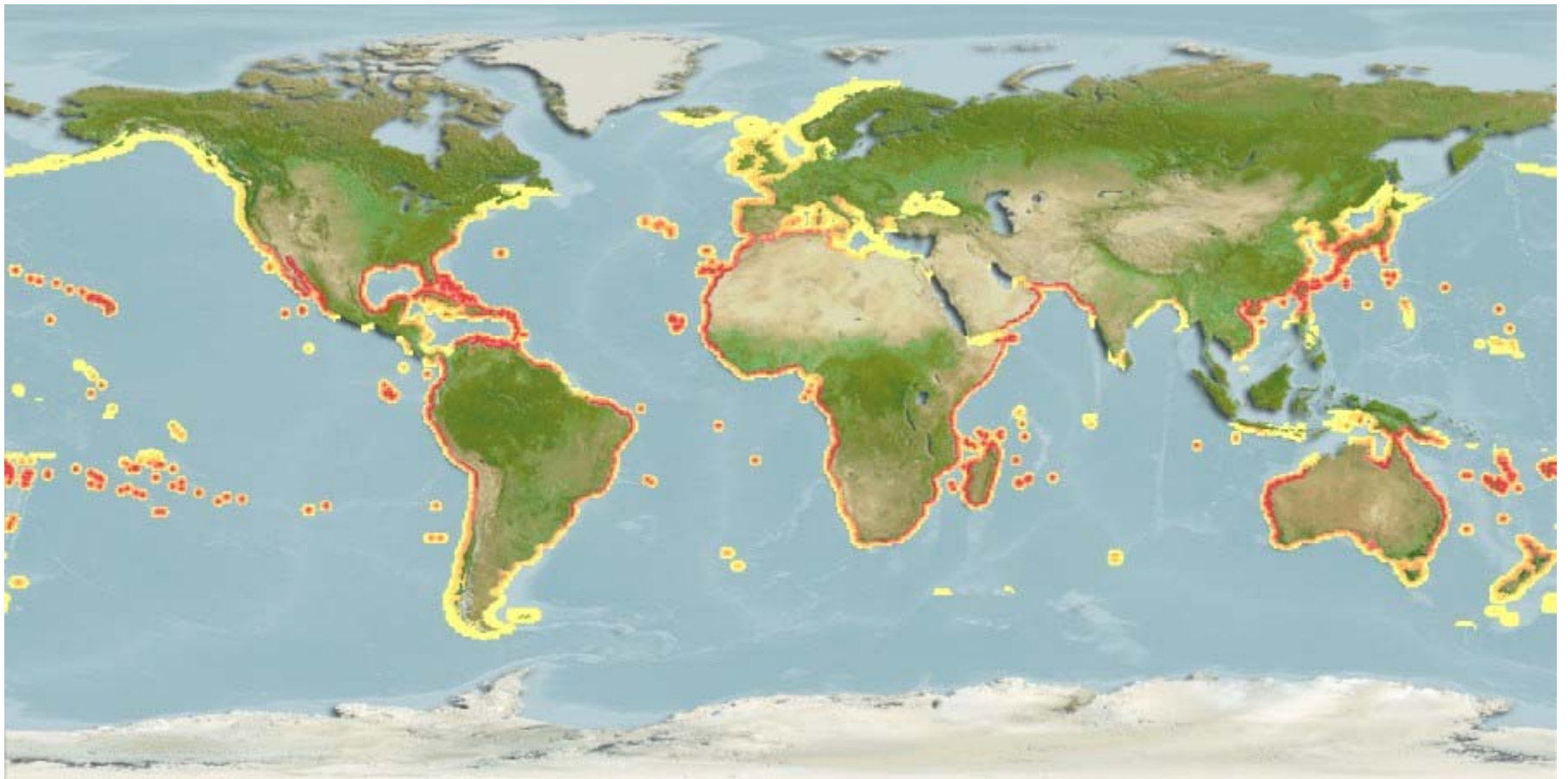
# Tools

*Mnemiopsis leidyi* (invasive Black Sea)



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# Other Tools from AquaMaps

- What lives in my Bay?
- What species may invade my coast?
- Where shall I put an MPA?
- Deep-water biodiversity: Cold Spots
- Checklists by Ecosystem and Country



# Live Demo!

- Thumbnail AquaMaps in Species Summary page
- Interactive Layers in expanded map
- Online Search Page

# No VaporWare

- [www.aquamaps.org](http://www.aquamaps.org)
- [www.fishbase.org](http://www.fishbase.org)
- [www.sealifebase.org](http://www.sealifebase.org)
- [www.speciesbase.mobi](http://www.speciesbase.mobi)

Thank You