



Global Ocean Protection

The 10% target: where do we stand?

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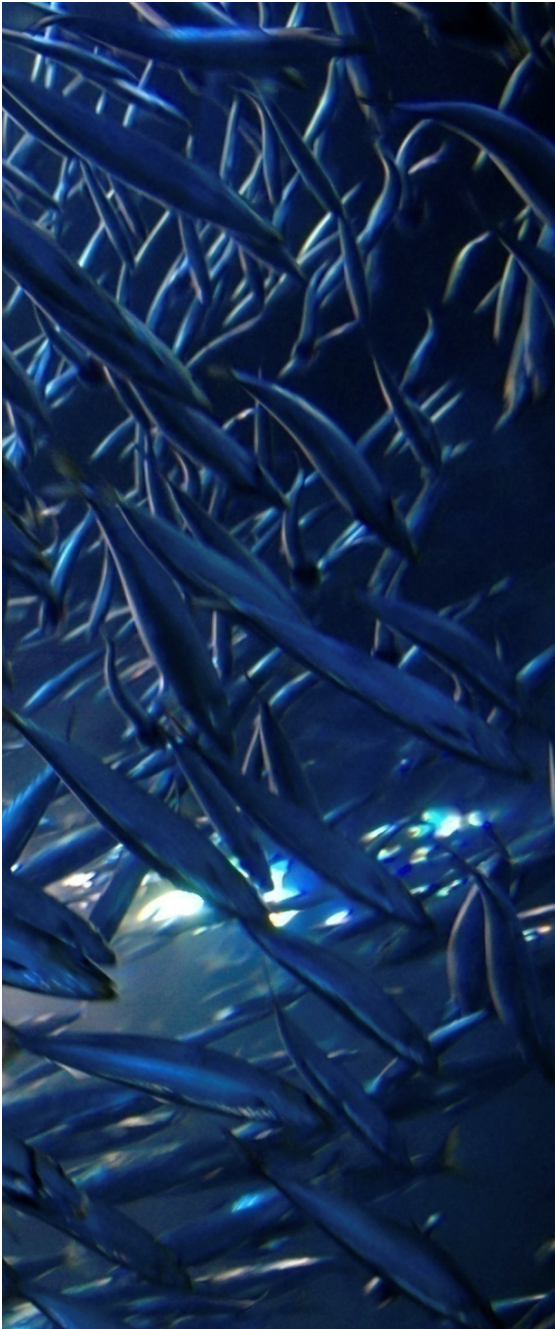
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Aim

- To provide an overview of the current status of marine protection in relation to CBD targets:
- 2004: systems of MPAs that are comprehensive, effectively managed, and ecologically representative
- 2006: at least 10% of marine ecological regions “effectively conserved”

Methods

- Used World Database on Protected Areas:
 - updated to mid 2010
 - IUCN definition of MPA;
- Target is for 'effective conservation'
- WDPA is the only globally consistent dataset but does not capture all types of spatial management measure that contribute to the CBD target
- This is a 'best guess' based on the best available information



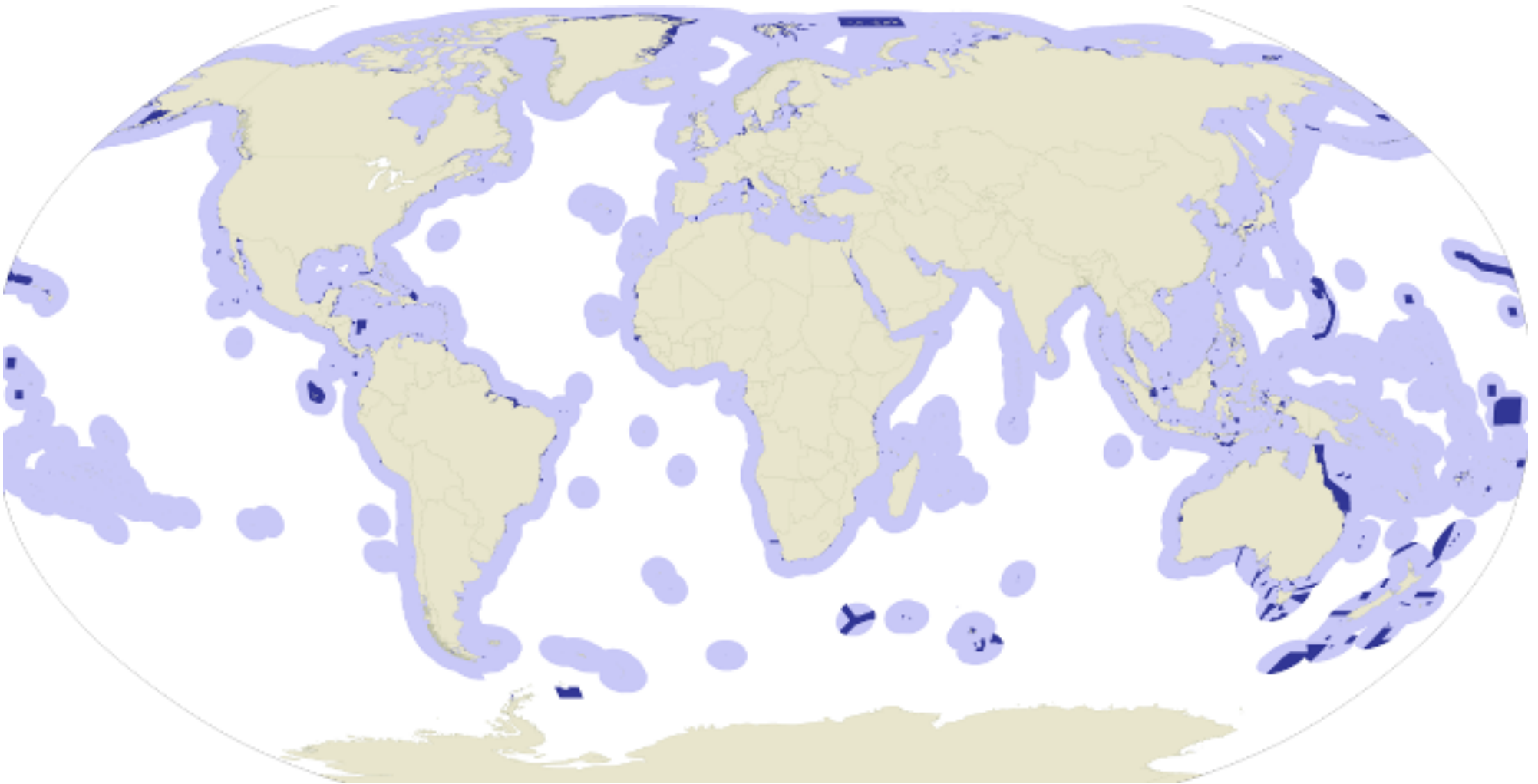
Methods

- GIS overlay analysis:
- ‘Jurisdictional’ analysis:
‘potential national marine jurisdictions’ based on
VLIZ Maritime Boundaries Database*.
- Biogeographic analysis
 - Continental shelf: Marine Ecological Regions
of the World
 - Offshore: provinces refined from GOODS
 - Benthic – bathyal
 - Benthic – abyssal



*Statistics are indicative approximations only and imply no opinion of the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries

Results: MPAs globally



Dark blue: MPAs; light blue: approximate 'potential marine jurisdiction areas' (200nm)

Results: number and areal coverage of MPAs

	2003^a		2006^b		2008^c		2010^d	
Number of MPAs	4116		4435		5045		5880	
MPA area coverage statistics	million km ²	%	million km ²	%	million km ²	%	million km ²	%
Global total	1.64	0.45	2.35	0.65	2.59	0.72	4.21	1.17
Within 'national jurisdiction'	1.64	1.14	2.35	1.63	2.59	1.80	4.12	2.86
On continental shelf					1.20	4.09	1.27	4.32
Off-shelf					1.39	0.42	3.01	0.91

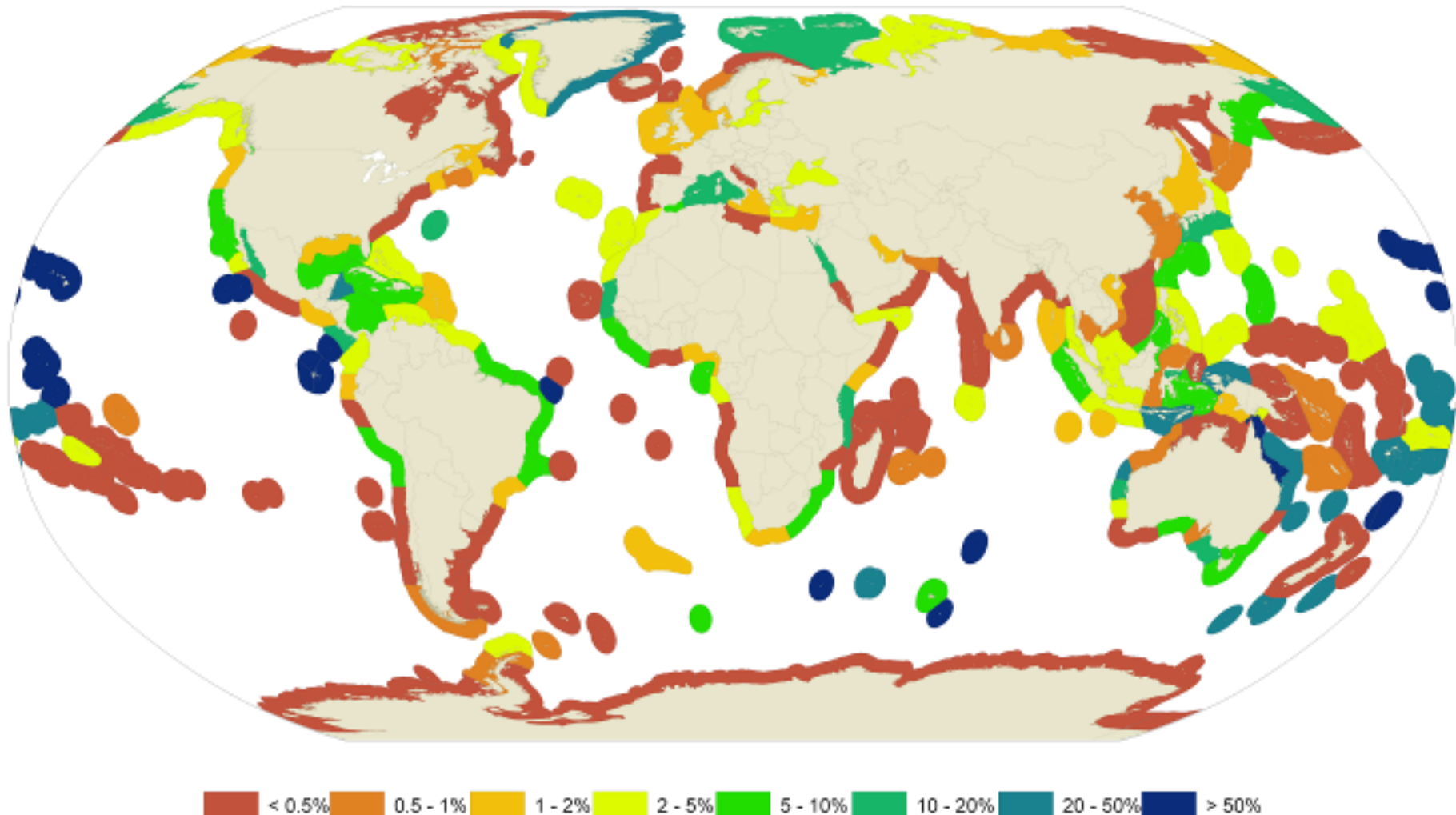
^aChape et al (2003) ^bWood et al (2008) ^cSpalding et al (2008) ^dThis study

Results: 60% of total area in 11 MPAs

Name of MPA	Jurisdiction	Marine Area (calculated in GIS) (km ²)
Phoenix Islands Protected Area	Kiribati	408,342
Great Barrier Reef Marine Park	Australia	343,480
Papahānaumokuākea Marine National Monument	United States	334,154
Mariana Trench Marine National Monument	United States	247,179
Pacific Remote Islands Marine National Monument	United States	212,788
Prince Edward Islands Marine Protected Area	South Africa	180,633
Kermadec Benthic Protection Area	New Zealand	164,840
Macquarie Island Commonwealth Marine Reserve	Australia	161,895
Galapagos Marine Reserve	Ecuador	137,975
Franz Josef Land Zakaznik	Russia	123,877
Antipodes Transect Benthic Protection Area	New Zealand	110,565

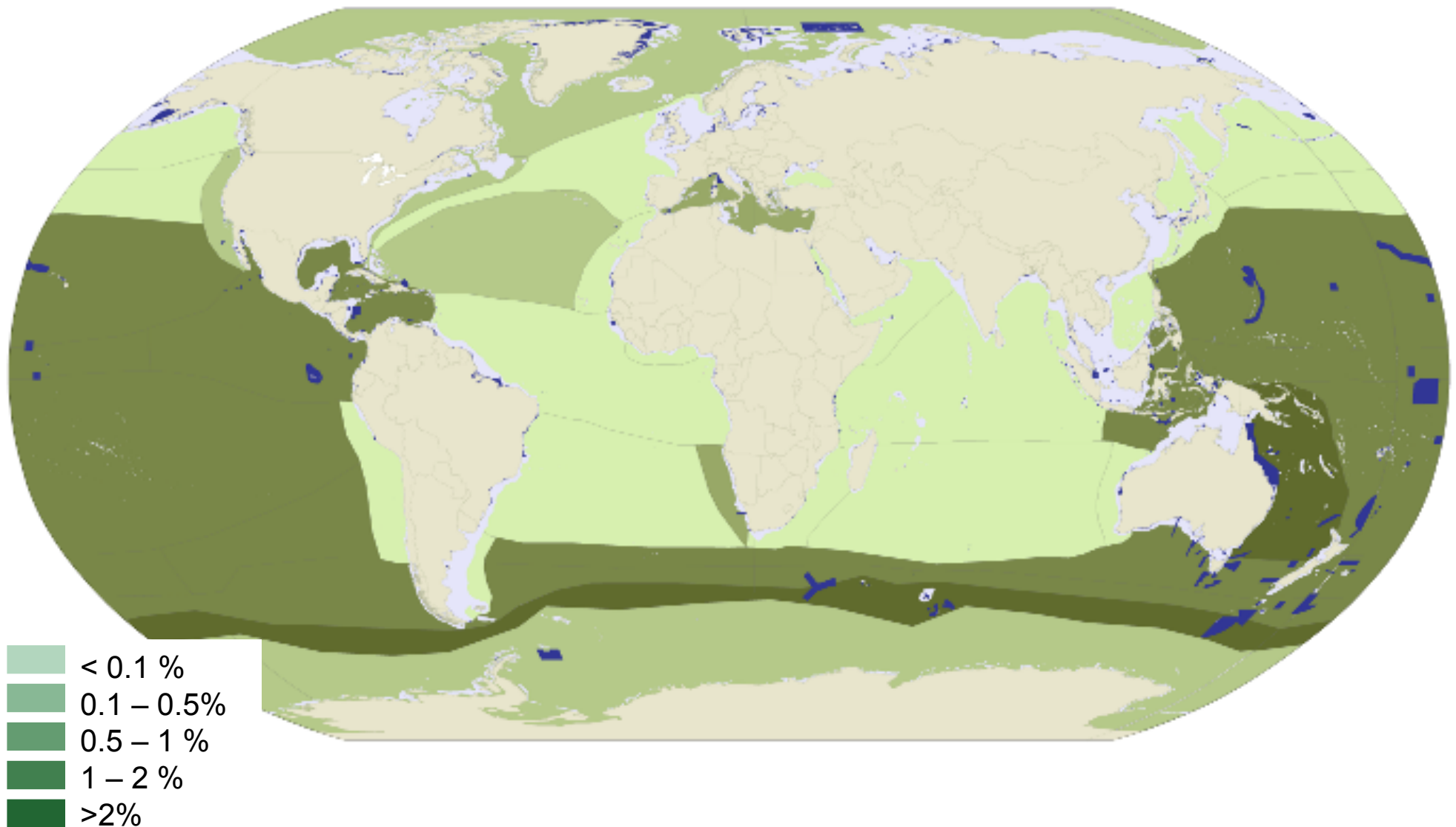
2700 MPAs are less than 1km² in size

Results: patchy & uneven biogeographic coverage



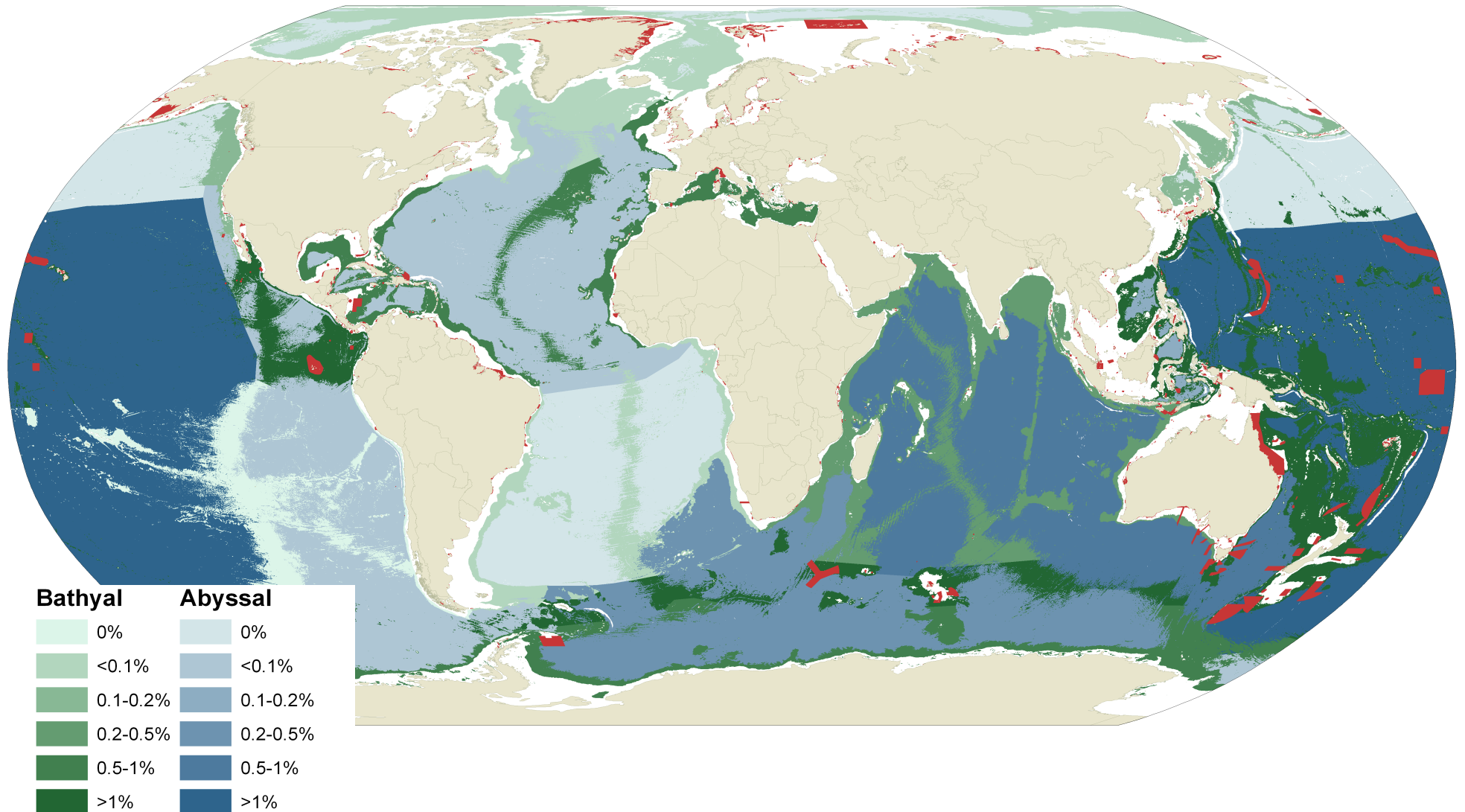
Results: poor offshore representation

Pelagic realms

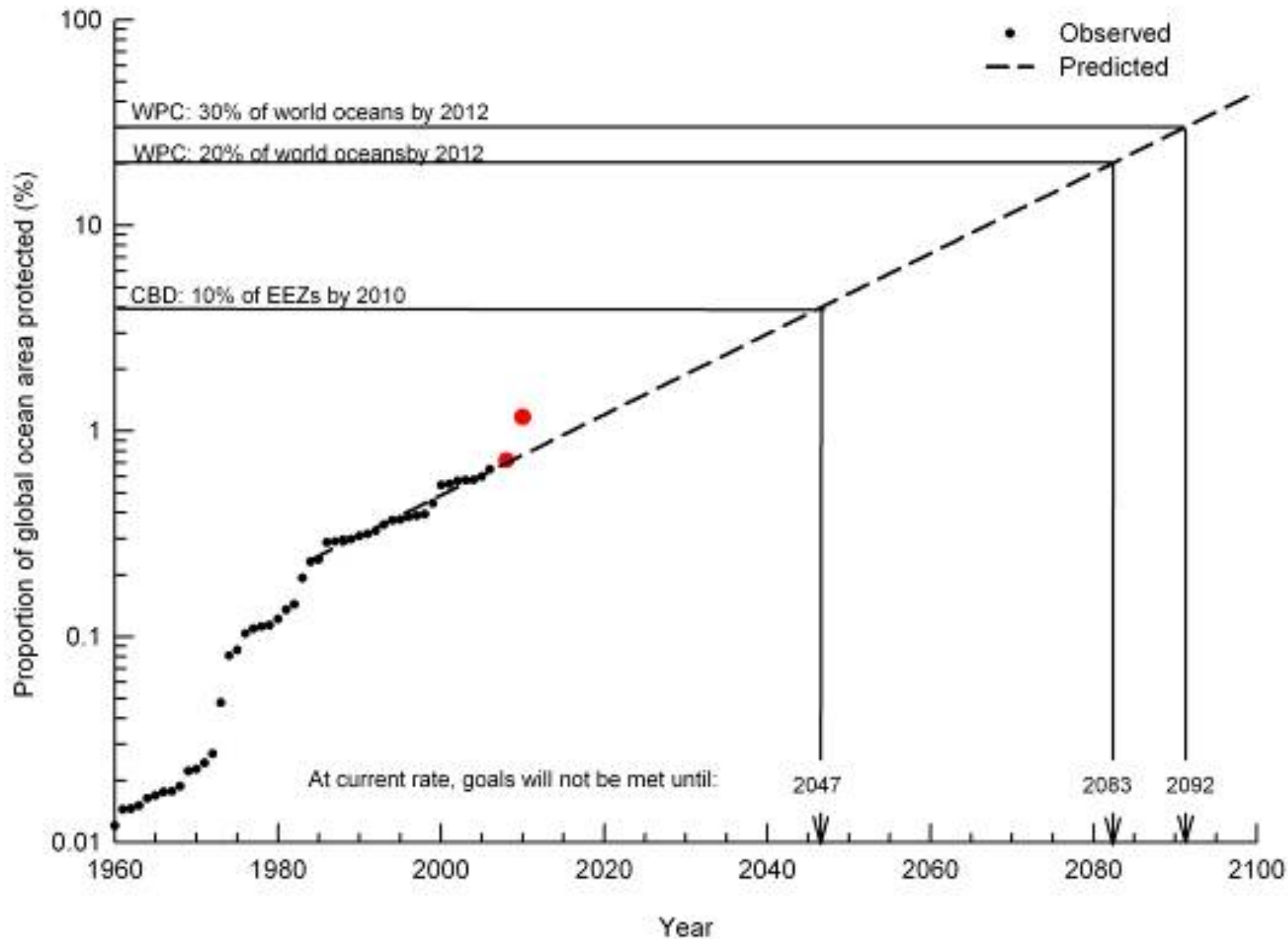


Results: poor offshore representation

Benthic realms



Results: change in growth rate



Conclusions

- Previously observed trends continue:
 - Most MPAs are coastal
 - Patchy biogeographic coverage
 - Targets will almost certainly not be met
- New trends:
 - Designation of few very large MPAs:
 - rapidly increasing total areal coverage
 - increasing offshore coverage
- Future directions
 - Need more comprehensive assessments to include broader range of spatial conservation measures
 - Continued and expanded emphasis on ecosystem-based management and holistic marine spatial planning approaches

Thank you!

Questions?



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