

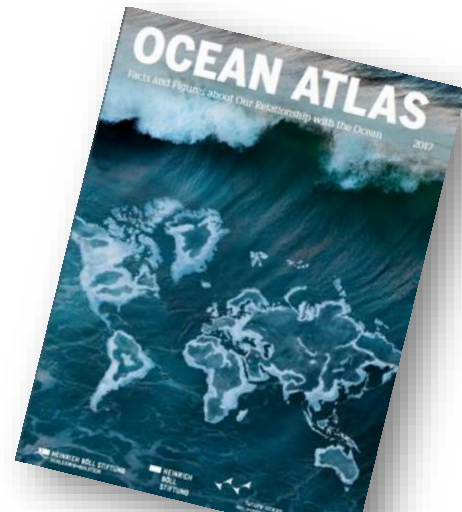
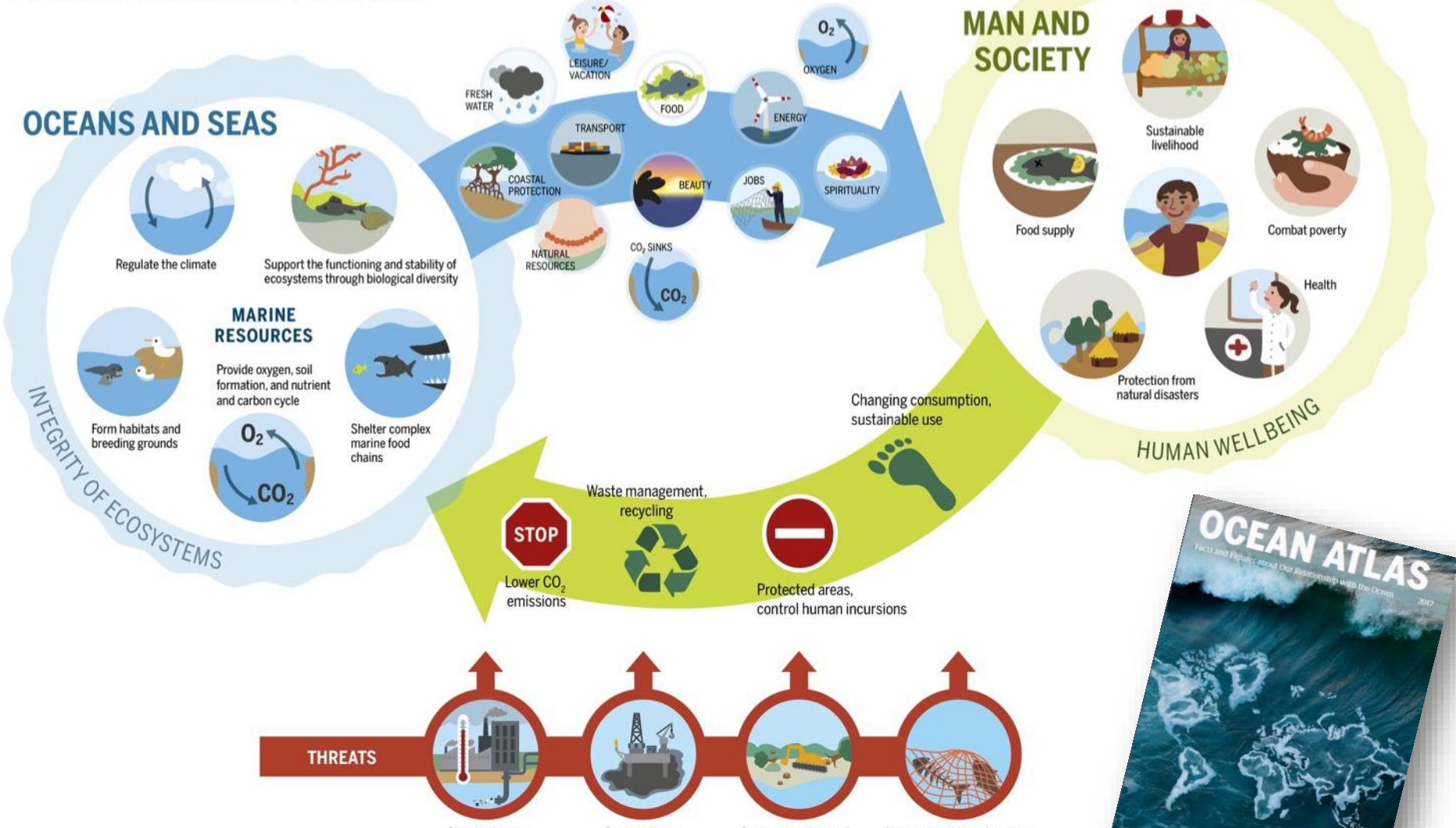
Ocean Innovation and Partnership #OceanOptimism

Martin Visbeck

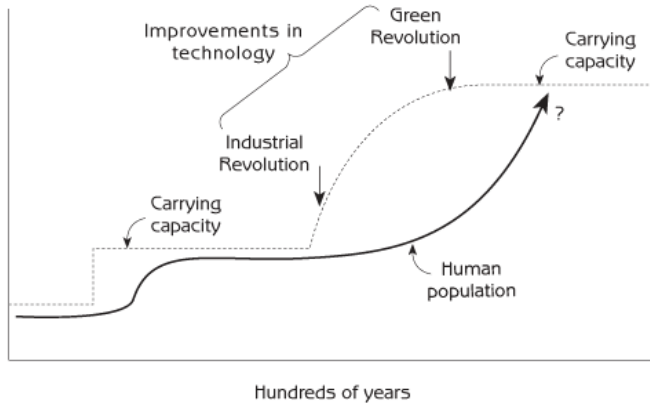
GEOMAR Helmholtz Center for Ocean Research Kiel and Kiel University
UNSDSN, FutureEarth, WCRP, GOOS

Humanity and the Ocean

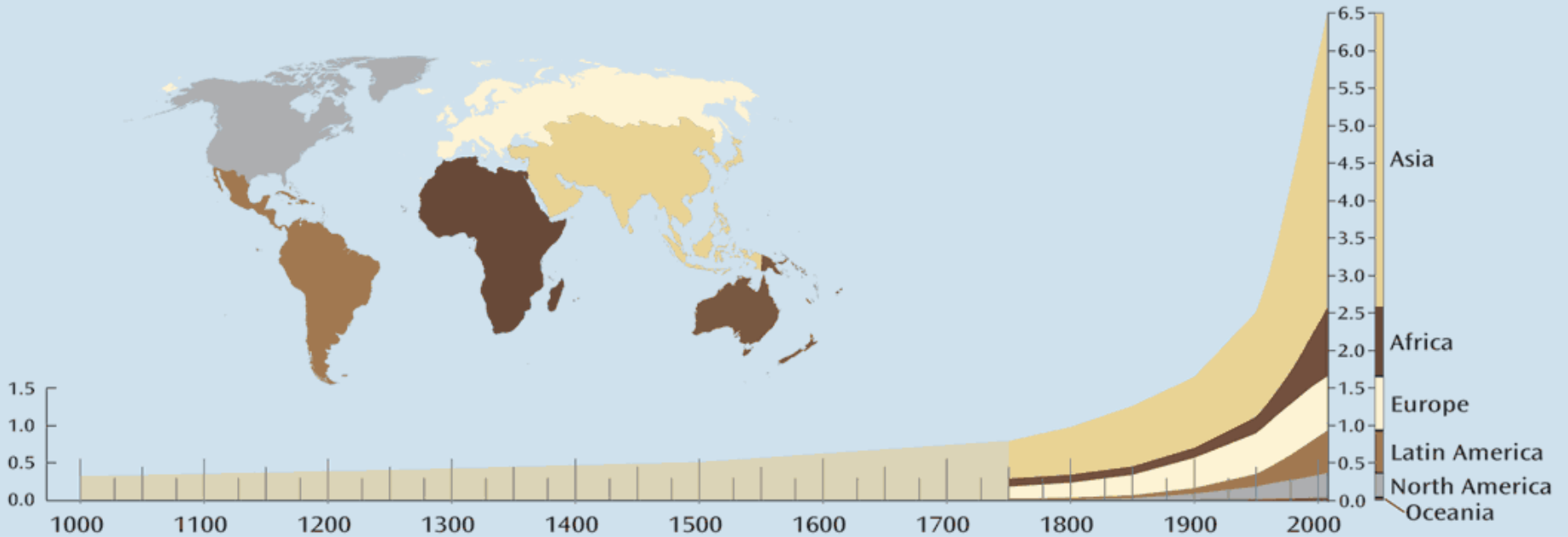
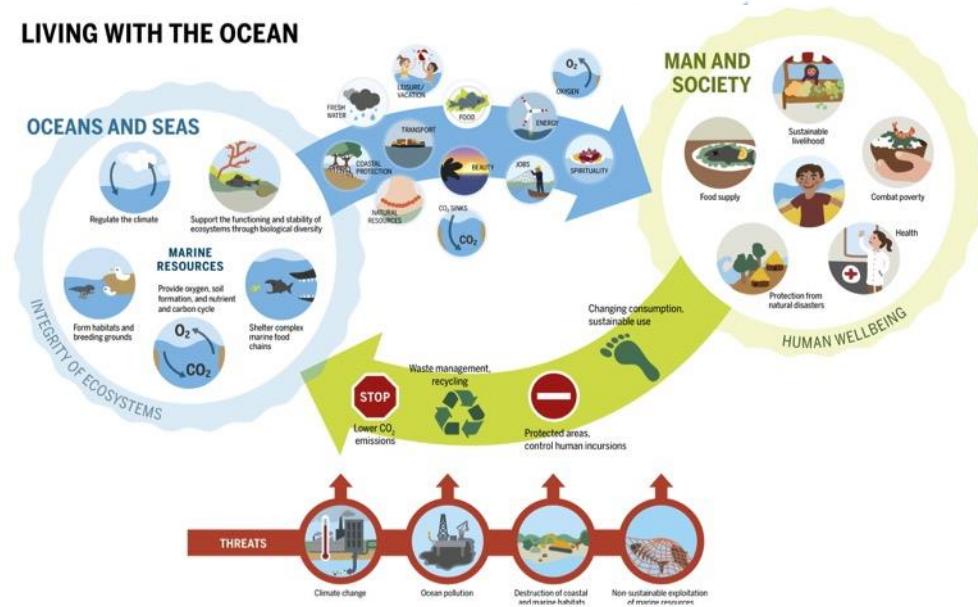
LIVING WITH THE OCEAN



Humanity and the Ocean

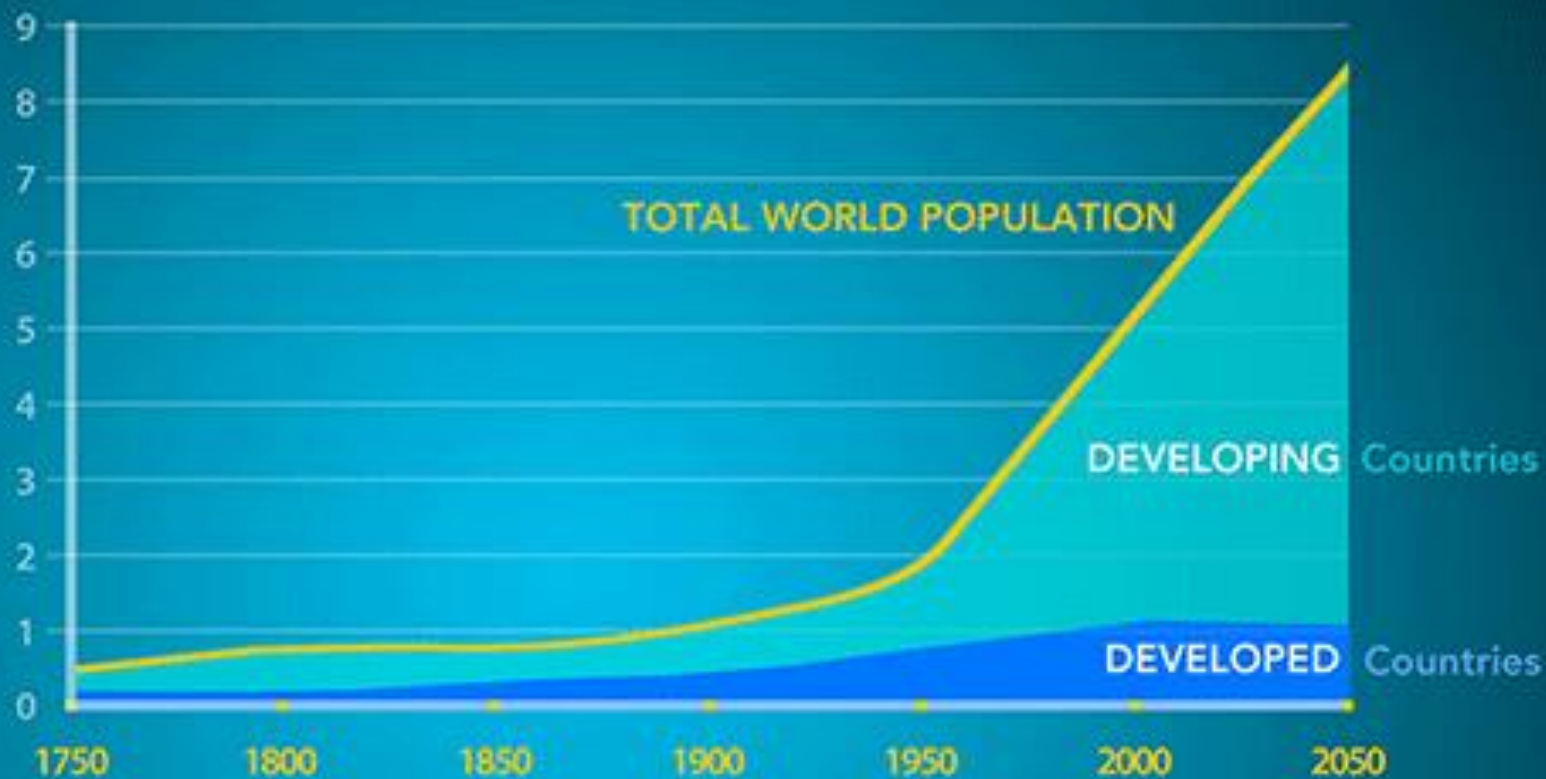


LIVING WITH THE OCEAN



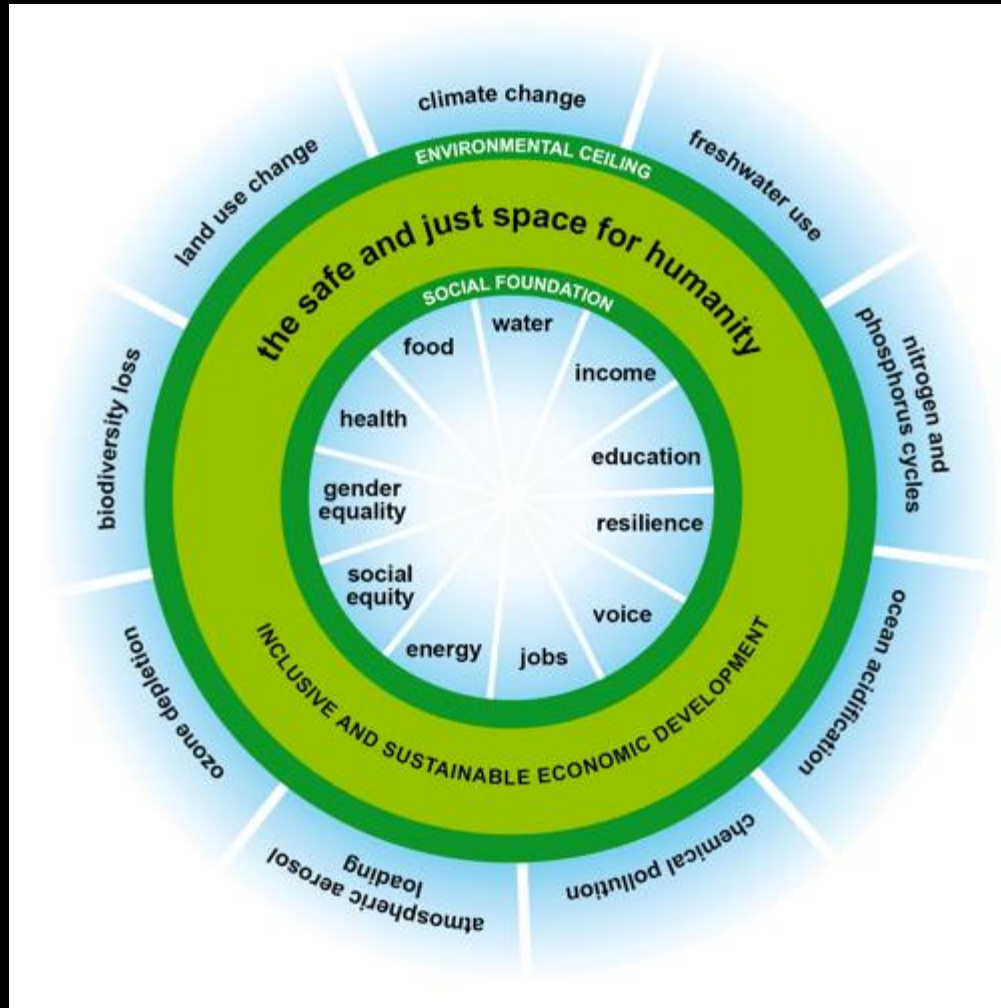
Sources: 1 - The World at Six Billion; Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision, <<http://esa.un.org/unpp>> 2 - United Nations, 1973. "The Determinants and Consequences of Population Trends, Vol.1" (United Nations, New York). United Nations, (forthcoming). "World Population Prospects: The 1998 Revision" (United Nations, New York). <<http://www.geohive.com/global/>>

WORLD POPULATION 1750-2050 (in Billions)



Source: World Bank, Development Education Program

Development needs to respect planetary boundaries



**One Planet
One Ocean**

What is the safe and just operating space for humanity?

Scientific underpinning



Conserve and sustainably use the oceans, seas and marine resources for sustainable development



Targets are agreed to by the nations.

How to measure progress against targets?

The need to derive indicators building on a smart index framework, based on reliable open access authoritative ocean information. Better observations, understanding, projection and assessment.



GOALS COMPONENTS INDEX BY COUNTRY ABOUT OHI NEWS SEARCH

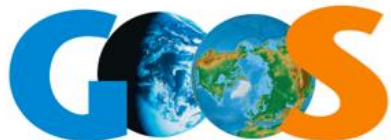
Follow us



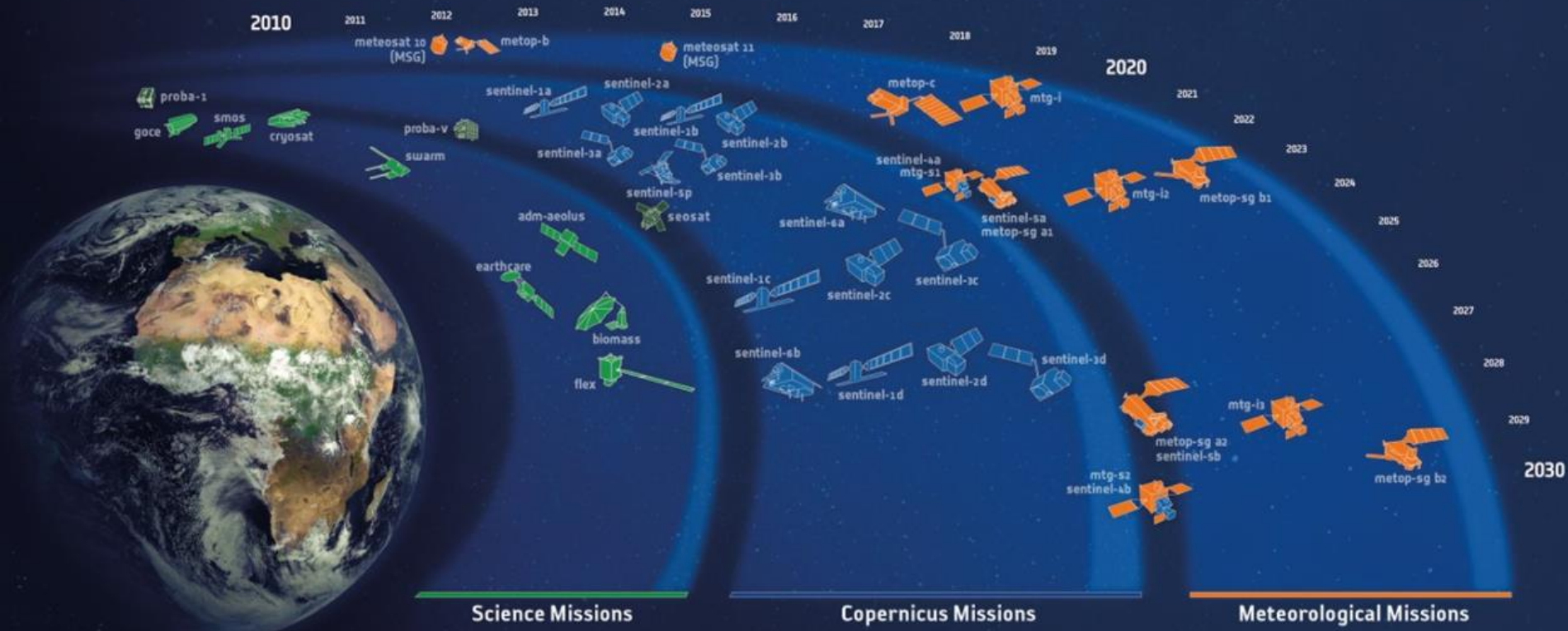
#OceanOptimism



Innovation, Integration and Collaboration in Ocean Observing



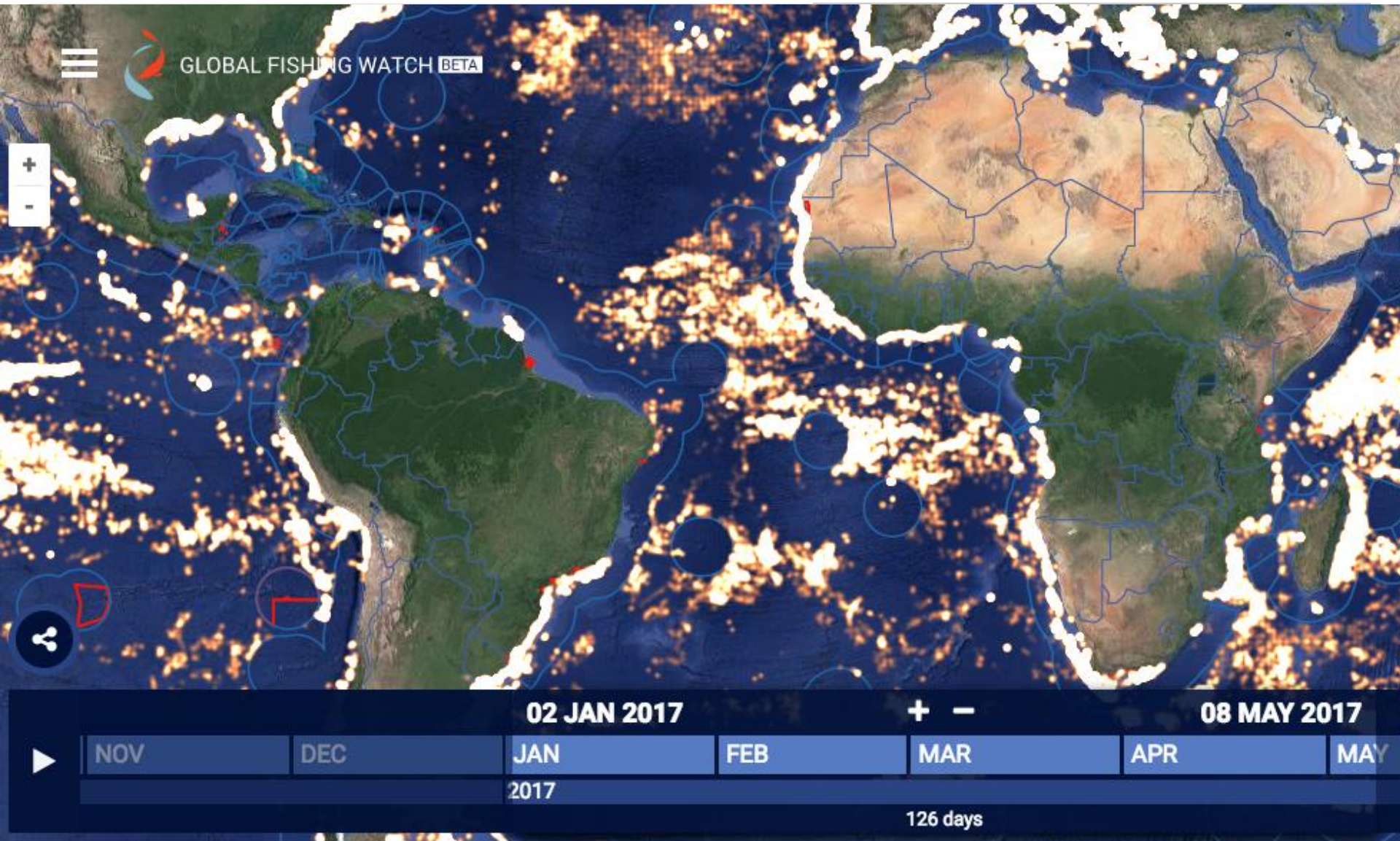
Space Observations



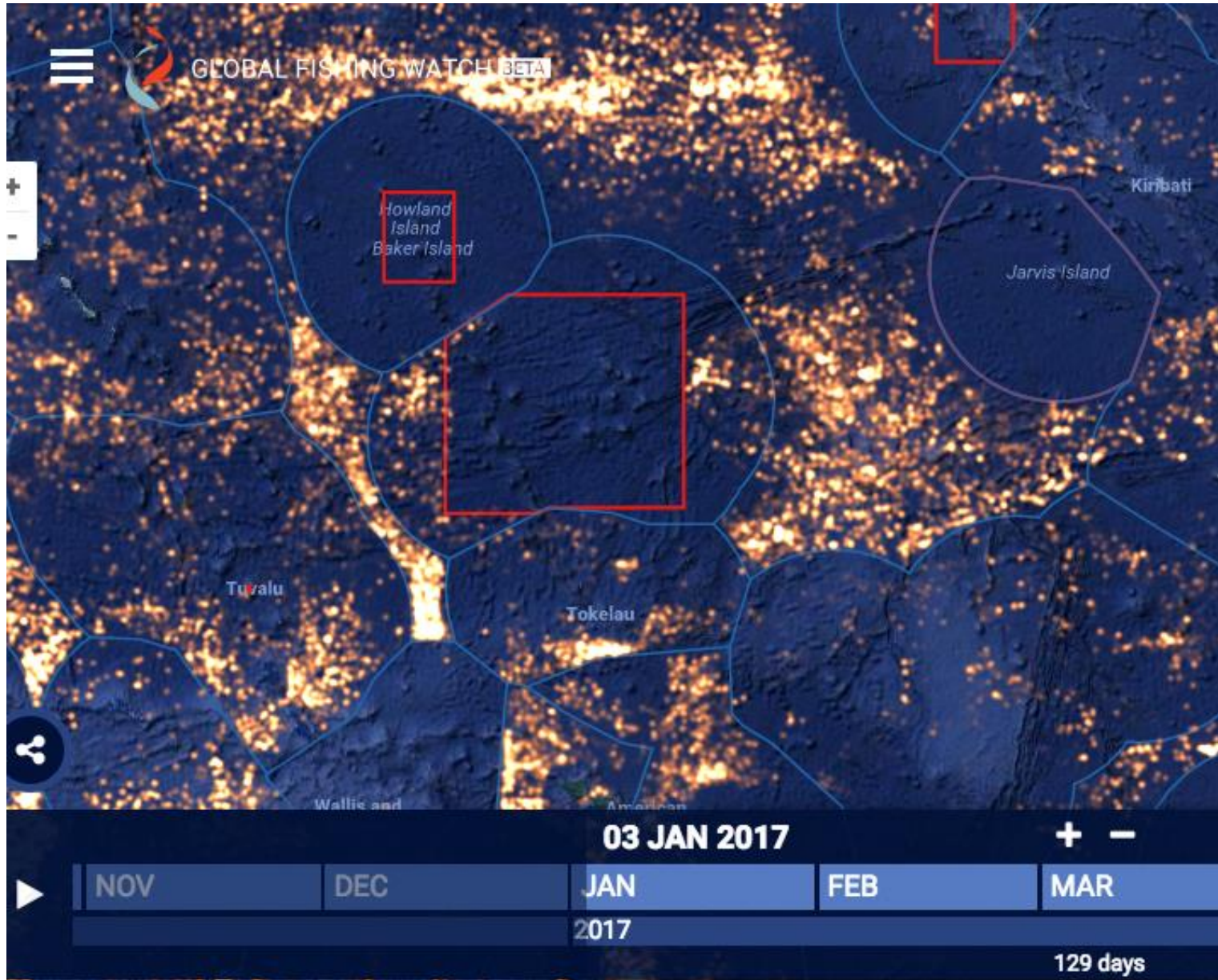
In Situ Ocean Observing



Innovation in Monitoring



Innovation in Monitoring



#OceanOptimism



Innovation, Global Learning and Problem Solving



From Ocean Discovery to Sustainable Development



www.oceanmooc.org



Ocean Value Chain

Increased need for ocean information to meet a growing range of societal needs can only be fully realized if all elements of the value chain are resourced adequately.

Societal Benefit

Scientific Discovery



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