

The Group on Earth Observations (GEO)

3rd Blue Planet Symposium

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GEO Secretariat

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GEO Vision

*To realize a future wherein decisions and actions,
for the benefit of humankind, are informed by
coordinated, comprehensive and sustained
Earth observations and information*





GEO Partnership 105 Members

GEO Member Map for the year 2017

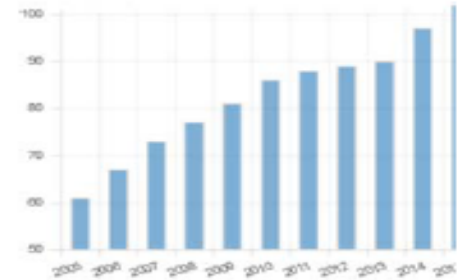
(Use slider under the map to change the year)



Number of Members (2017)

Africa:	27
Americas:	16
Asia/Oceania:	21
C.I.S.:	7
Europe:	34
Total:	105

Number of Members by year



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017



109 Participating Organizations



GEOSS Implementation Requires: *Data Sharing Principles*

- Free and Open Exchange of Data
- Data and Products at Minimum Time delay and Minimum Cost
- Free of Charge or Cost of Reproduction





A Global Earth Observation System of Systems



**Integrating Earth Observations Across Many Platforms
and Disciplines to Benefit Society**



GEOS Common Infrastructure (GCI)

THE GEOS COMMON INFRASTRUCTURE

International Data Providers*

Environment



Disasters



Biodiversity



Energy



Food & Security



Satellite



Water



Regional and National Providers*

Chile



China



France



Germany



India



Italy



Japan



New Zealand



Norway



Russia



South Africa



Spain



Switzerland



Private Sector Providers



GEO Websites



GEOS Portal



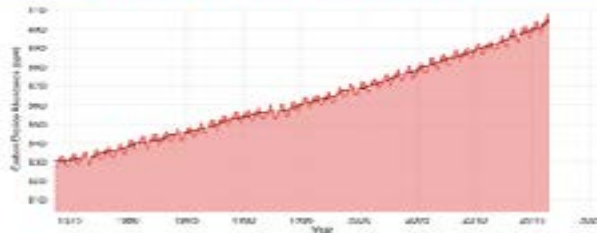
Discovery and Access Broker (DAB)

* a selection of more than 150 providers

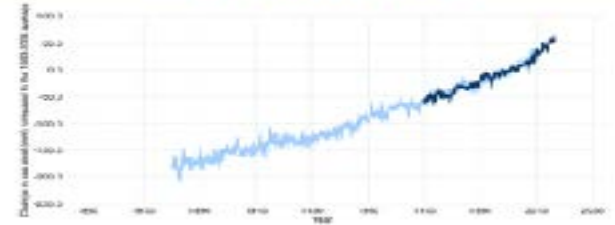
Our Changing Planet



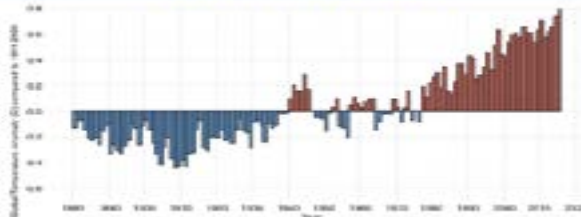
Atmospheric Carbon Dioxide



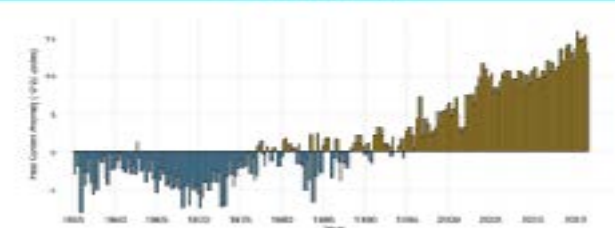
Global Sea Level



Global Temperature



Ocean Heat





UN Sustainable Development Goals



Transforming Our World: The 2030 Plan for Global Action - Article 76:
“We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, including Earth observation and geo-spatial information, while ensuring national ownership in supporting and tracking progress.”



High level commitment to use EO for policy



Ministerial Declaration , GEO Plenary XII, Mexico City, 2015

*“Affirm that GEO and its Earth observations and information will support the implementation of, inter alia, the **2030 Global Goals for Sustainable Development**, the **Sendai Framework for Disaster Risk Reduction 2015-2030**, the **United Nations System of Environmental and Economic Accounts**, and the **United Nations Framework Convention on Climate Change**.”*



GEO support to the 2030 Agenda



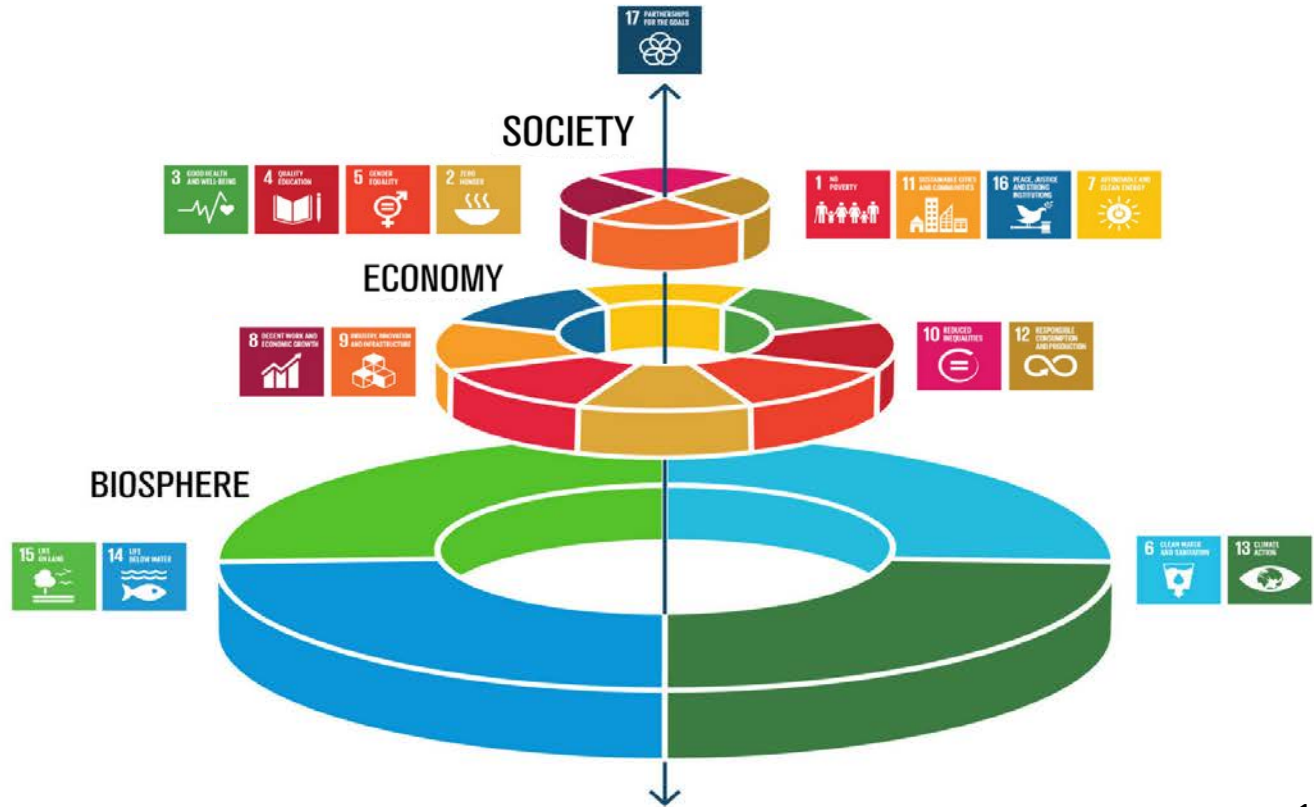
Target Contribute to progress on the Target yet not the Indicator per se							Goal	Indicator Direct measure or indirect support
						1.5	1 No poverty	
			2.3	2.4		2.c	2 Zero hunger	2.4.1
			3.3	3.4	3.9	3.d	3 Good health and well-being	3.9.1
							4 Quality education	
							5 Gender equality	5.9.1
	6.3	6.4	6.5	6.6	6.a	6.b	6 Clean water and sanitation	6.3.2 6.4.2 6.5.1 6.6.1
			7.2	7.3	7.a	7.b	7 Affordable and clean energy	7.1.1
						8.4	8 Decent work and economic growth	
			9.1	9.4	9.5	9.a	9 Industry, innovation and infrastructure	9.1.1
							10 Reduced inequalities	
	11.3	11.4	11.5	11.6	11.7	11.b	11 Sustainable cities and communities	11.3.1 11.6.2 11.7.1
				12.2	12.a	12.b	12 Responsible consumption and production	
				13.1	13.3	13.b	13 Climate action	13.1.1
	14.1	14.2	14.3	14.4	14.6	14.7	14 Life below water	14.3.1
15.1	15.2	15.3	15.4	15.5	15.7	15.8	15 Life on land	15.1.1 15.2.1 15.3.1 15.4.1 15.4.2
			17.6	17.7	17.9	17.16	17 Partnerships for the goals	

EO to support the 2030 Agenda. GEO represented on Inter-Agency Expert Group of the UN Statistics Division.

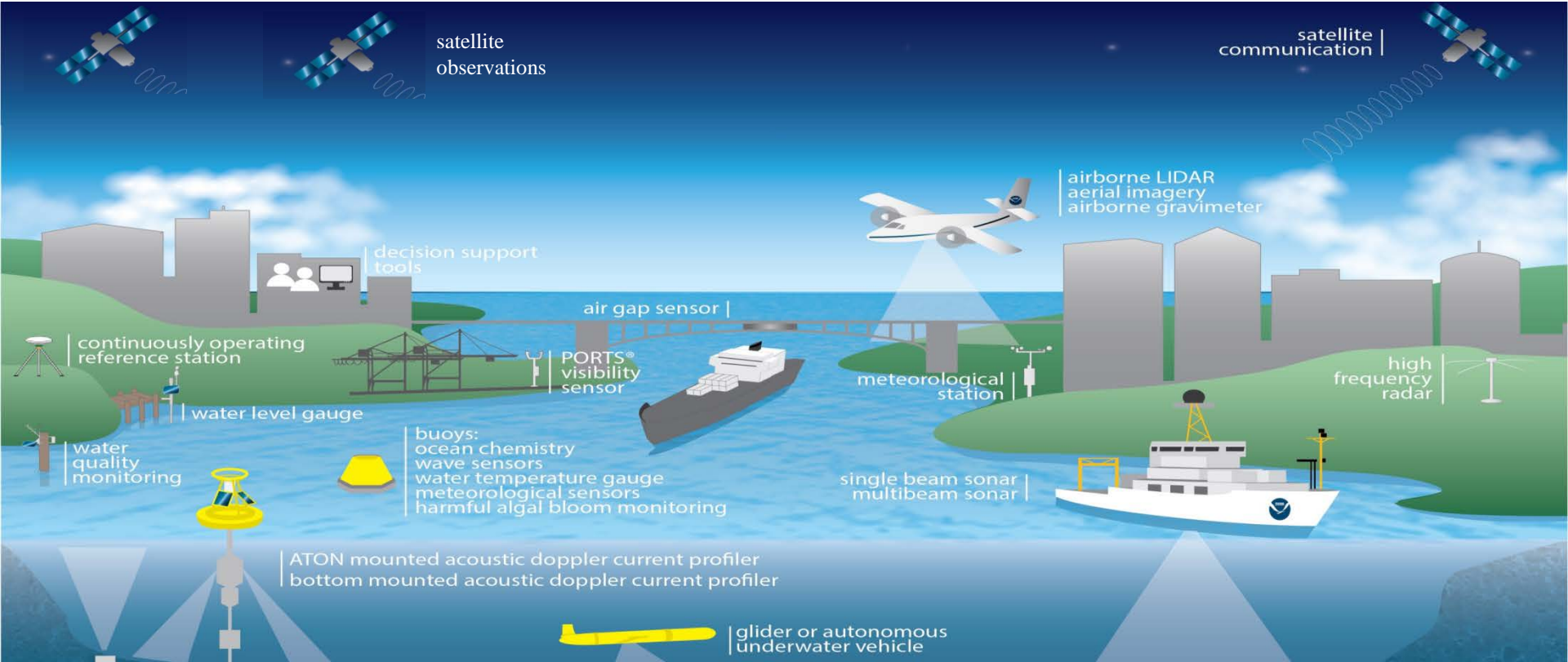
GEO is the Earth Observation Anchor Partner to the Global Partnership for Sustainable Development Data.



Why the SDGs are Important

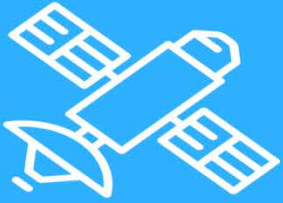


Environmental Process Understanding





GEO: Connecting data to decisions



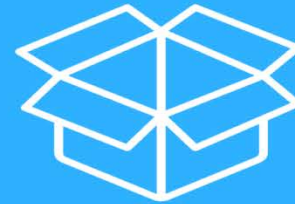
SNAPSHOT



VERIFY



ANALYZE



PACKAGE



SOCIETY

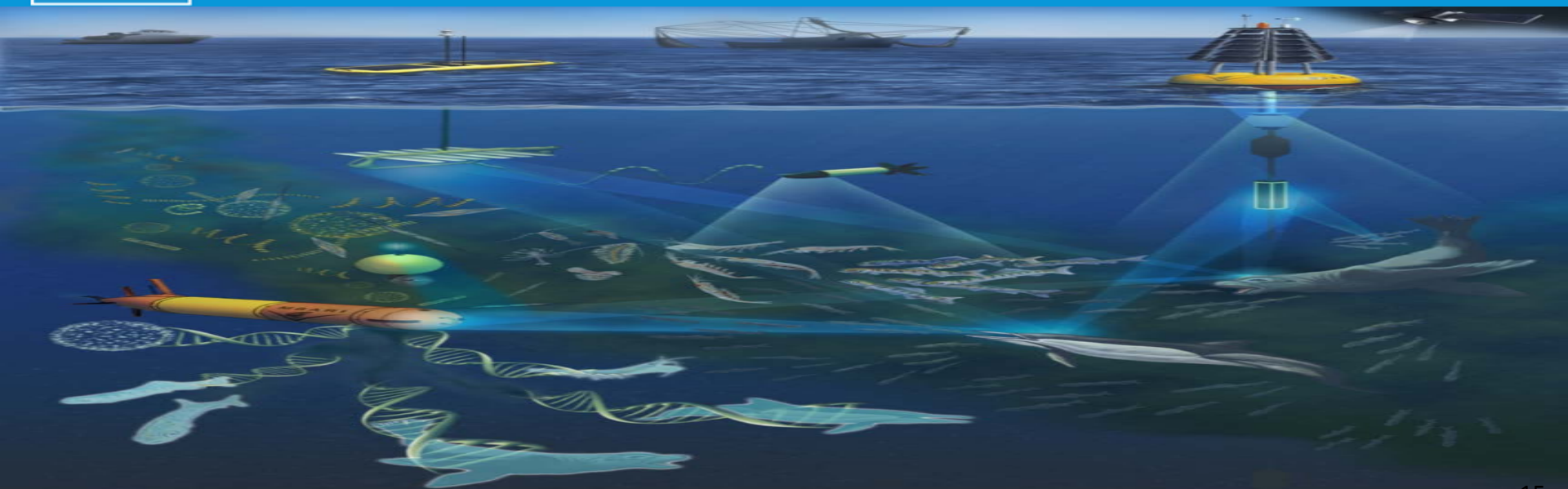


SUSTAINABLE DEVELOPMENT GOALS

14 LIFE BELOW WATER



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





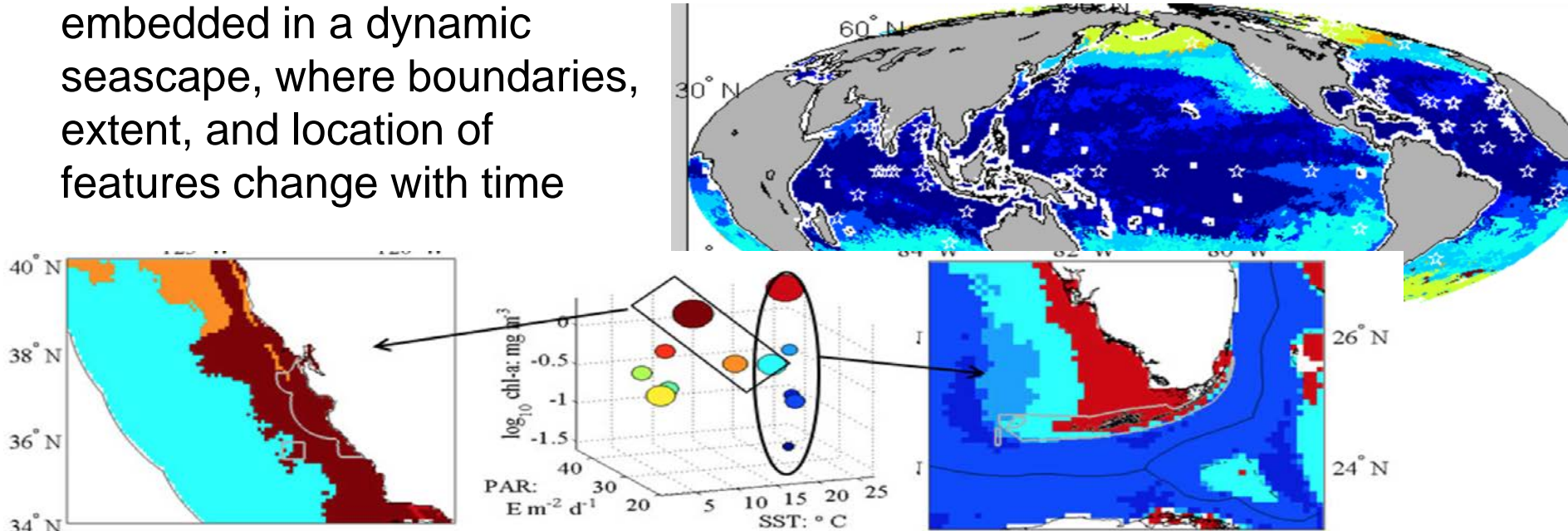
Marine Biodiversity Observation Network Components





MBON Seascapes

- Inter-disciplinary approach based on landscape ecology
- Merges ecology, geography, and ocean dynamics to observe species embedded in a dynamic seascape, where boundaries, extent, and location of features change with time

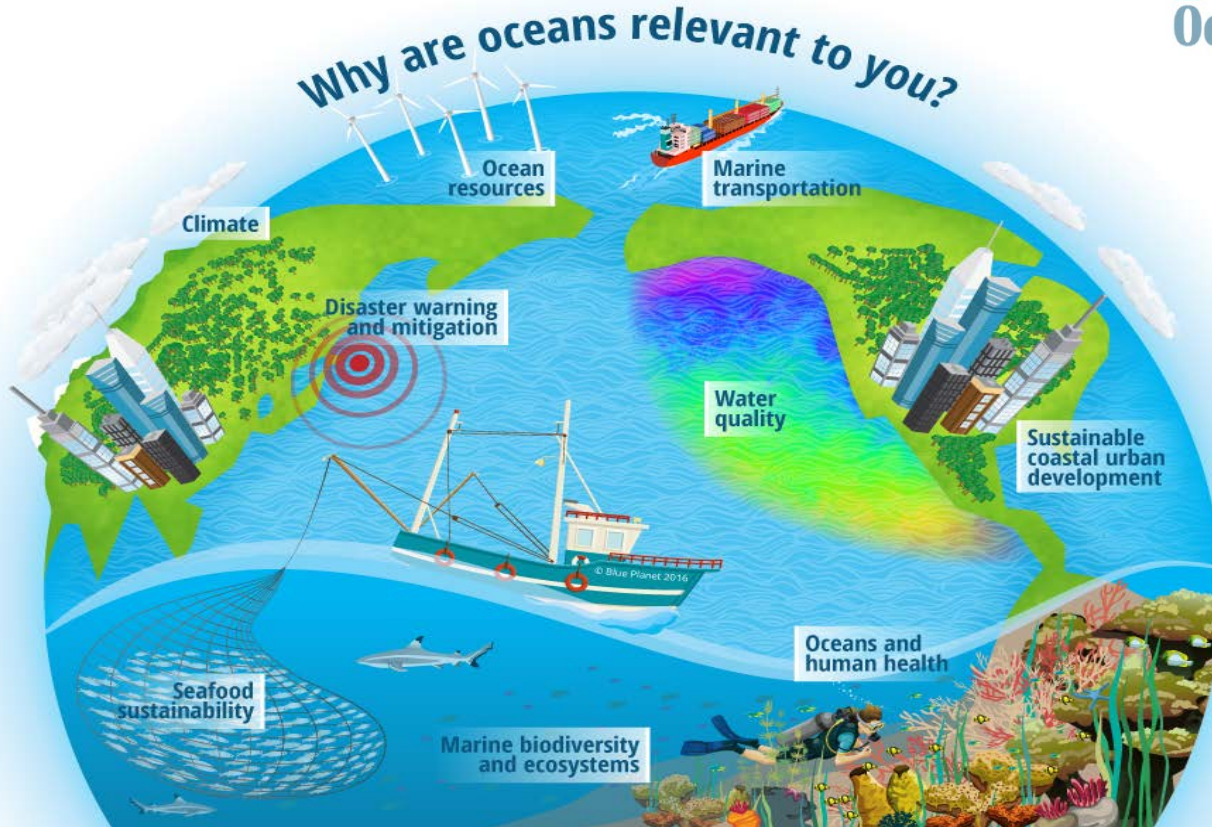


Kavanaugh et al (2016) Seascapes as a new vernacular for pelagic ocean monitoring, management and conservation. ICES

GEO Blue Planet Initiative



BLUE PLANET
Oceans and Society
a GEO Initiative



GEO Blue Planet Initiative



4M

**Multipurpose
Marine
Monitoring
Mechanism**

CARIBBEAN
INNOVATION



THE OCEAN CONFERENCE

OUR OCEANS, OUR FUTURE: PARTNERING FOR THE IMPLEMENTATION
OF SUSTAINABLE DEVELOPMENT GOAL 14
5 - 9 JUNE, 2017, NEW YORK



- NOAA-CSIRO develop inundation forecast in the Pacific to provide the people living on Pacific Islands with warnings of impending inundation events.
- Lead times of between hours and possibly as long as a week.
- PISIFIC supports SDG 13 and 11



"A Blue Web"

Monitoring

Analysis

Modeling

Predicting

Increasing Efficiency

Operating in Real Time

Measuring Everything

Forecasting

Optimizing Performance

Seeing Relationships

Communicating Effectively

Sensing

Visualizing

NGOs

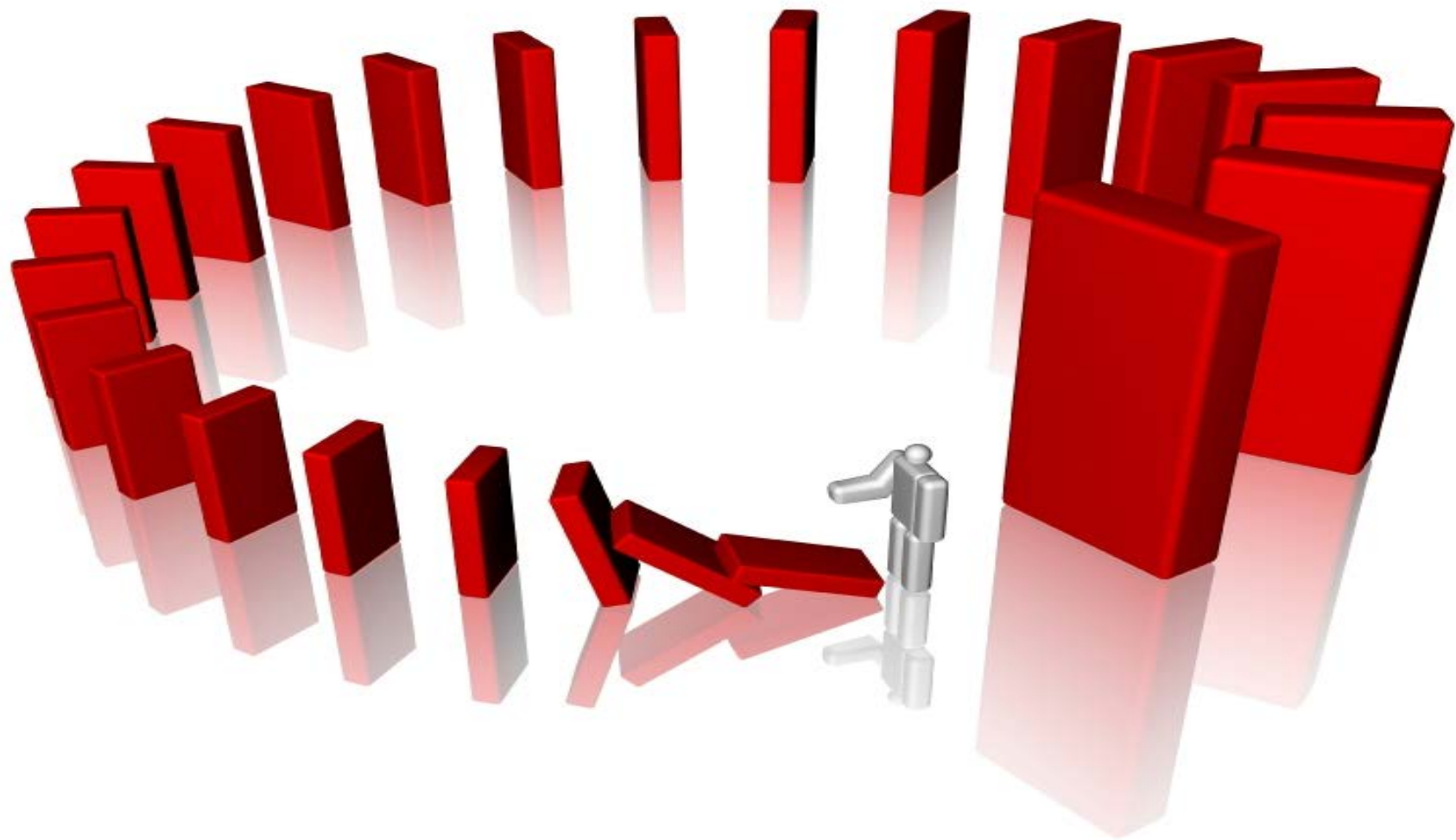
Utilities

Cities

Business

Nations







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IRRESPONSIBILITY

NO SINGLE RAINDROP BELIEVES IT IS TO BLAME FOR THE FLOOD.

Thank you !

www.earthobservations.org

www.geoportal.org



@geosec2025



Group on Earth Observations

LinkedIn [Group on Earth Observations](#)

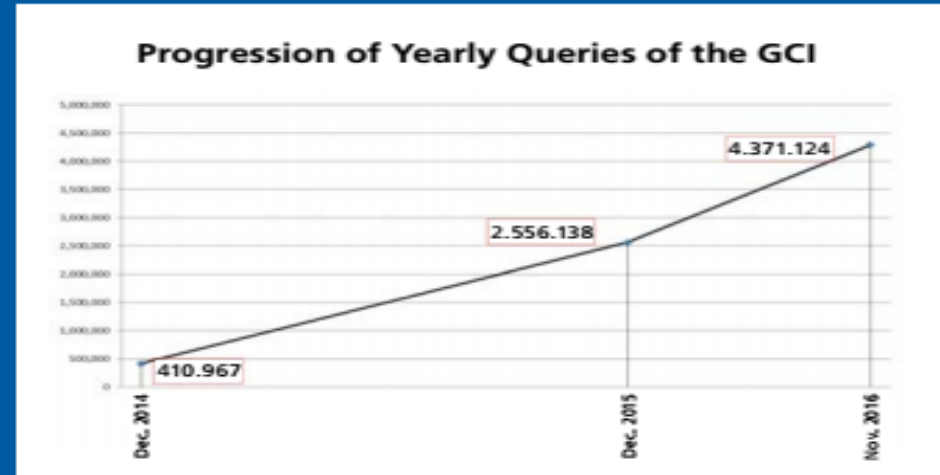




GEOSS Common Infrastructure (GCI)

GEOSS users can access more than 200 million data resources through the GCI (November 2016). More than 71 million are fully open and free (GEOSS Data Core). The GCI infrastructure has also seen a major increase in machine-to-machine queries, with exponential growth since 2014.

Number of queries through machine-to-machine connections Nov. 2016: 4.371.124
<http://statistics.geodab.eu/gi-stat/stats/>





8 Societal Benefit Areas

