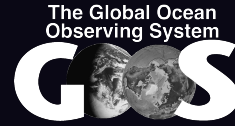




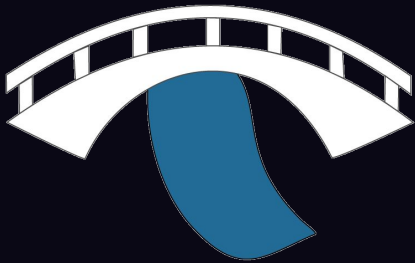
Updates and Opportunities for Engagement

Leslie M. Smith, PhD
DOOS Project Director

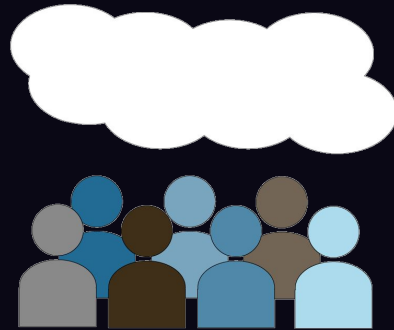
What is DOOS?



The Deep Ocean Observing Strategy (DOOS) is a community-driven, international initiative strategically aligning the deep ocean observing community toward collective solution-based science.



Builds bridges across disciplines and communities



Facilitates discussions between people/groups tackling similar global deep-sea challenges



Promotes the development of future leaders and elevates diverse global voices

How do we do DOOS?

DOOS working groups address global deep sea challenges at the intersection of communities and disciplines.

Working groups were designed with...

-community input to determine priority actions,
-leverage existing research efforts and resources,
-and address defined challenges and gaps together.

Our Working Model - Align individual efforts toward shared aims of addressing challenges in the deep sea by creating a series of initiatives designed to 1) add value to the work of the global volunteers and 2) lead to novel research collaborations and external funding opportunities.

DOOS Events



Join us virtually at the
DOOS Annual Meeting

**“Exploring collective
solutions to global deep
sea challenges”**

May 9-11, 2023



For more information email
leslie.smith@youroceanconsulting.com

Register at
<https://forms.gle/cqGyBwhXKmswep7>



Image credit: PhotoReference (a) Image courtesy of the NOAA Office of Ocean Exploration and Research, "Woods Hole Deep 2019"



Join us virtually at the
DOOS Annual Meeting

**“Addressing
Global Challenges
in the Deep Sea
through
Collaboration”**

May 3-5, 2022

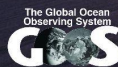


Credit: WHOI, Adam Smith, Rebecca Conry, Dan Ferreri

Apply now for the workshop event:
**“Deep Ocean Collective
Solution Accelerator”**

October 2-5, 2023
La Jolla, CA, USA

<https://forms.gle/CVfEtQZ9B2jwmWkv9>



United Nations Decade
of Ocean Science
for Sustainable Development

Image credit: Flickr user John Getchel, CC BY-NC 2.0 image darkened

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with partners





Join us virtually at the
DOOS Annual Meeting

Missing Pieces:
Identifying gaps and prioritizing solutions
to address global deep ocean challenges

May 21-23, 2024



Register Here!

For more information email
deeoceanobserving@gmail.com

- DOERs Plenary
- Community Lightning Talks
- DOOS, Community, Partner-led Breakouts
 - Deep Sea Capacity Development Monitoring & Evaluation Initiative (Ocean Discovery League)
 - Subseafloor Marine Carbon Dioxide Removal: Strategies and Knowledge Gaps (COBRA)
 - Pathways Connecting Climate Changes to the Deep Ocean (US CLIVAR/OCB)
 - Accessible Technology Solutions
 - Deepening the Decade
 - Habitat & Ecological Mapping for Place-Based Management
- Mind the Gaps! Community Conversations



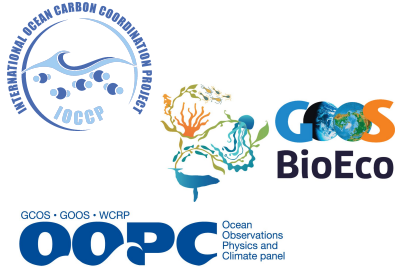
2021-2030 United Nations Decade of Ocean Science for Sustainable Development



New bathymetry data of the New England Seamounts. Image courtesy of NOAA Ocean Exploration, 2021 North Atlantic Stepping Stones: New England and Corner Rise Seamounts

iDOOS Working Groups

Essential Ocean Variables



Accessible Ocean Technology



Assessing Observational Gaps for Understanding Climate Change



Habitat Mapping for Place-Based Management



Science to Policy



Integrating Modeling and Observing



SeaFAIRers



Accessible Ocean Technology

- Leading network coordination to synergize efforts
- Creating standards and goal-driven timelines across stakeholders to rapidly expand accessible ocean tech.
- Producing synthesis reports to assess gaps and prioritize technology maturation to observe EOVs.
- Co-Creating an online community hub to connect accessible providers and users.



13 March 2024

Oceanology International
London, UK

2021 United Nations Decade of Ocean Science for Sustainable Development

EOOS | Technology Forum 2024

CATCHING THE MOMENTUM IN OCEAN OBSERVING TECHNOLOGY:
OPTIMISING VALUE AND DATA PROVISION

EuroGOOS European Global Ocean Observing System

JERICO₅₃

Ifremer

OGS National Institute of Oceanography and Applied Geophysics

SMHI

iDOOS



Technologies in Sustainable Ocean Observations

📍 World Trade Center, Room 9+10, Barcelona

📅 9 April 2024 | 12:00 - 14:00 CET

Many technology challenges exist when it comes to observing and monitoring the ocean. Dismantling these barriers and identifying opportunities towards achieving a mature and vibrant Ocean Observing Enterprise for all is the focus of this event.

This side event will allow for an opportunity to interact, foster connections and discuss cross collaborative efforts.

PRESENTATION

Lucie Cocquempot [JERICO, Ifremer]
Ann-Christine Zinkann [UCAR/NOAA]

EXPERT PANEL

Patrick Gorringer [SMHI]
Jess Sandoval [Deep Ocean Observing Strategy, AquaVela]
Patricia López-García [National Oceanography Centre]
Thanos Gkrizalis [Flanders Marine Institute]
Peer Fietzek [Kongsberg Discovery]
Emma Heslop [GOOS]

MODERATOR

Brendal Townsend [MTS]

For questions please contact Ann-Christine Zinkann [ann-christine.zinkann@noaa.gov]

Register [here](#)



Partners:



Ecological Mapping

Datastream Planning

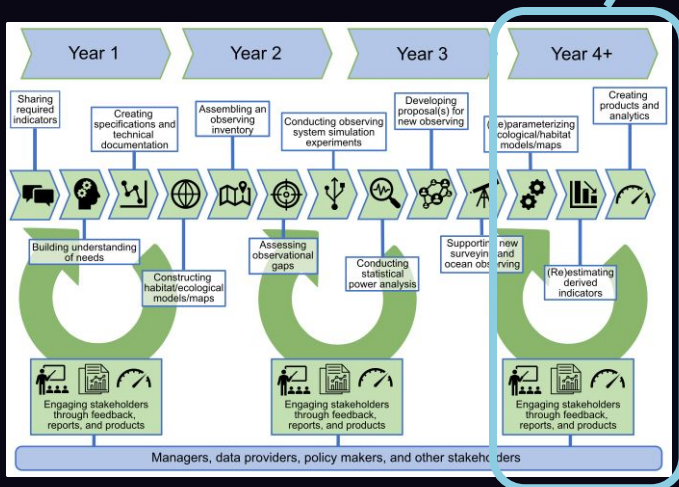


ICES Journal of Marine Science, 2022, 0, 1-5
DOI: 10.1093/icesjms/fsac145
Food for Thought

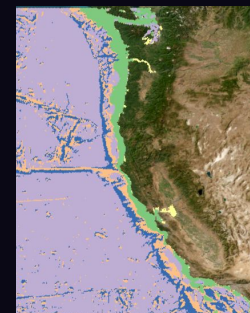
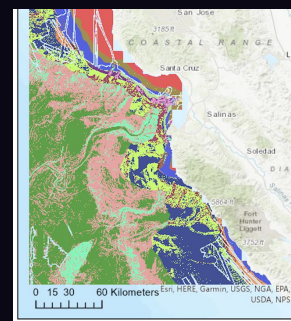
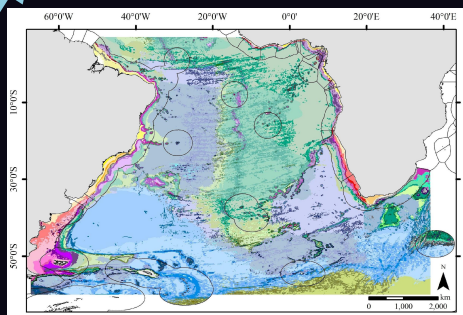


Building on a human-centred, iterative, and agile co-design strategy to facilitate the availability of deep ocean data

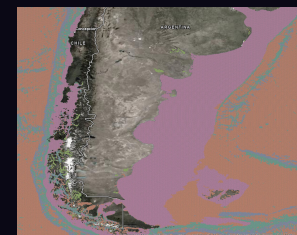
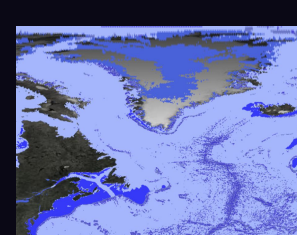
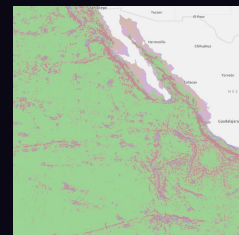
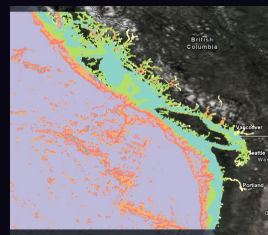
Diana E. LaScala-Gruenewald¹, Natalie H. N. Low¹, James P. Barry¹, Jennifer A. Brown^{2,3}, Chad King³, Francisco P. Chavez¹ and Henry A. Ruhl^{1,7}



Goal - gridded regional habitat characterization maps for use across applications - MPAs, Sanctuaries and offshore wind.



McQuaid et al., 2023



Science to Policy Translation

Listening Sessions with UN & International Bodies

Leads: Lisa Levin, Dawn Wright, Kristina Gjerde



ICES Journal of Marine Science, 2022, 0, 1–4
DOI: 10.1093/icesjms/fsac143
Food for Thought



Designing, generating, and translating deep-ocean observations for and with international policy makers

Lisa A. Levin ^{1,*}, Laura Cimoli², Kristina Gjerde³, Harriet Harden-Davies⁴, Patrick Heimbach ⁵, Diana LaScala-Gruenewald ⁶, Maria Pachiadaki ⁷, Helen R. Pillar⁵, Leslie M. Smith⁸, Karen Stocks⁹, Justin E. Stopa¹⁰ and Dawn J. Wright ¹¹

Desktop Projects:

- Review of Deep Ocean in IOC's State of the Ocean Report - Pilot June 2022, COMPLETED
- Assessment of Ocean Data Use by RFMOs - Led by Amelia Bridges and Lissette Victorero
- Climate-Related Data Gaps (AR 6) - Led by Laura Cimoli, Liz Hetherington and Helen Pillar
- GESAMP Reports and the Deep Ocean - TO BE INITIATED

Integrating Modeling and Observing

Bringing together observational oceanographers and modelers across physical, biogeochemical, and ecological communities...

to assess our understanding of pathways connecting the surface to the seafloor...

and to develop recommendations for improved detection and attribution of change in the global deep ocean system.

Virtual registration open until
April 16th

Pathways Connecting Climate Changes to the Deep Ocean Workshop

Tracing physical, biogeochemical, and ecological signals from surface to deep sea

A joint US CLIVAR/OCB workshop
April 23-25, 2024, in Lewes, DE and virtual



Deepening the Decade!

DEEPENING THE DECADE

Deep Ocean Actions for a Sustainable Ocean

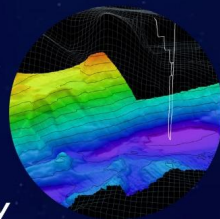


April 12th, 13:15 - 14:45
CCIB, Southern Ocean Room (133+134)

Featuring expert panels on:

- *Deep ocean health, wealth, and the role of biodiversity*
- *Progressing deep ocean observing for the next generation*

DOOS



Images courtesy of NOAA Ocean Exploration



DEEPENING THE DECADE

Booth #2 Schedule

UN Ocean Decade Conference, Level 2 Banqueting Hall,
CCIB, Barcelona



Representatives from the projects listed below will be at the booth at the following times:

Time	Wednesday 10 April	Thursday 11 April	Friday 12 April
8-9 am	Closed	Closed	Opens 08:30
9-10 am	Closed	Closed	
10-11 am	Digital DEPTH		DOOS
11 am -12 pm	Digital DEPTH	SMART Cables	DOOS
12-1 pm	AleutBio	AleutBio	
1-2 pm	COESS	Challenger 150	COESS
2-3 pm	NEPDEP	Challenger 150	SMART Cables
3-4 pm	OneDeep Ocean		JETZON
4-5 pm	OneDeep Ocean	DOSI	JETZON
5-6 pm	NEPDEP	DOSI	ECOPs networking event



 Thank you!

leslie.smith@youroceanconsulting.com
www.deepoceanobserving.org



iDOOS

Join us virtually at the
DOOS Annual Meeting

Missing Pieces:
Identifying gaps and prioritizing solutions
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May 21-23, 2024



Register Here!

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 2021 United Nations Decade of Ocean Science for Sustainable Development 2030

 The Global Ocean Observing System

 NSE

New bathymetry data of the New England Seamounts. Image courtesy of NOAA Ocean Exploration, 2021 North Atlantic Stepping Stones: New England and Corner Rise Seamounts