

Building a globally integrated network of networks to observe the deep ocean effectively in support of science, policy, and planning for sustainable oceans.

Leslie Smith, PhD DOOS Project Director



What is DOOS

An **international, community-based group** focused on developing a roadmap that will lead to an improved understanding of the state of the global deep ocean with respect to baseline conditions, response to climate change and response to human disturbance.



poos is a Goos project envisioning a globally integrated network of systems that observes the deep ocean (> 200 m, with emphasis > 2000 m) in support of science, policy and planning for sustainable oceans.



UN Ocean Decade Endorsed Programme: DOOS will promote the human capital and observing infrastructure needed to address critical scientific and management questions related to the climate, biodiversity and sustainability, while growing a diverse and inclusive next generation of deep-ocean leaders.



Implementing a Deep Ocean Observing Strategy (iDOOS)

within the Global Ocean Observing System (GOOS)

Observing & Exploration Networks

Argo (Core, BGC, Deep) Challenger 150 (DOSI/SCOR) EMSO

GEO BON GO-SHIP

iAtlantic

MBON

NDSF/UNOLS

NOAA Ocean Exploration

OceanSITES

OECI

ONC OOI

REV Ocean

Schmidt Ocean Institute

JTF SMART Cables

SOOS/SOCCOM

TPOS 2020

US-IOOS

Data & Modelling CI Networks

CCHDO

CLIVAR GSOP

CLIVAR/OMDP & CMIP

ECCO

EMODnet

ESIP/MDC

Esri

FathomNet

IODE/ODIS

IRIS

ISA DeepData

Mercator Ocean

OBIS

OBPS

OceanPredict

Seabed 2030

Management & Policy Users

AtlantOS

DOSI

GEO-BluePlanet

GOOS

Internat. CLIVAR

InterRidge

ISA

IUCN

POGO

UN Decade

UN Global Compact

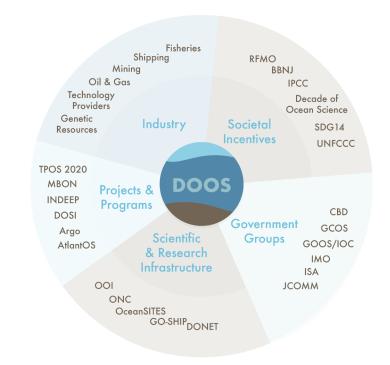
U.S. CLIVAR

U.S. OCB

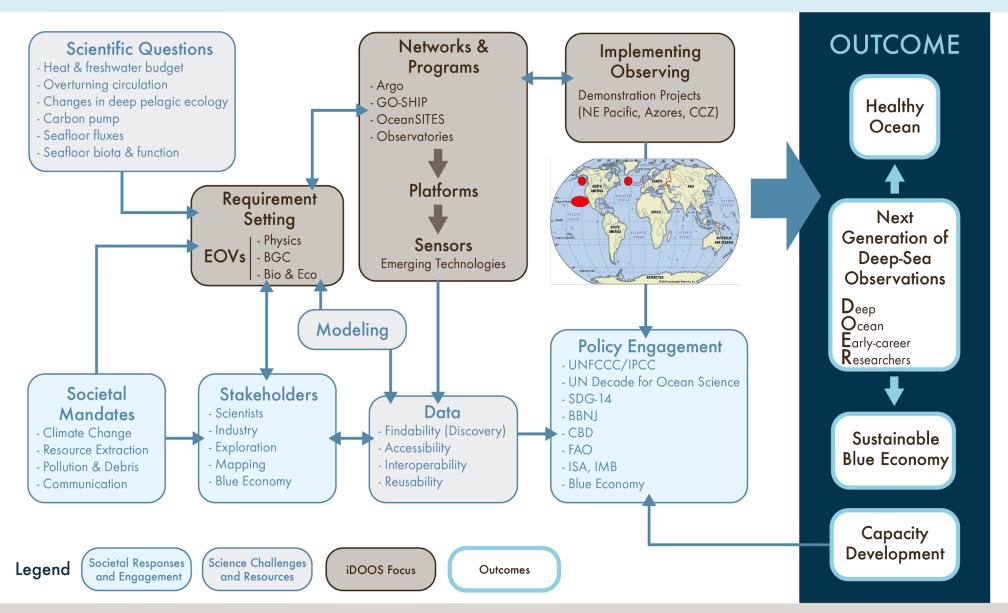
U.S. Sanctuaries

& Monuments

An interconnected network of deep-ocean observing, mapping, exploration, and modelling programs with a diverse set of stakeholders



How DOOS Works





Work with DOOS



Working Groups

Theme 1: Requirement Setting

- Essential (deep) Ocean Variables
- Coordination with Modelling Community
- Develop and Promote Best Practices

Theme 2: Implementation

- Create roadmaps for observers to contribute globally
- Technology Readiness Levels
- Demonstration Projects (e.g., Azores)

Theme 3: Translating Science

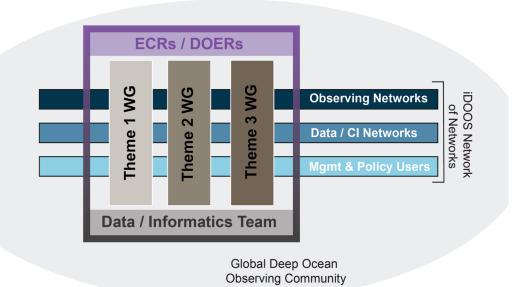
- Raise awareness among policy-makers
- Creation of briefs and other outreach materials
- Represent DOOS in UN Decade activities

Cross-Cutting Themes

ECRs/DOERs

Data/Informatics

- Working Group Support
- Early Career Researcher Trainings
- Hackathon







Deep Ocean Early-career Researchers

GOAL: Foster the next generation of leaders in deep ocean observing

- Collaborative early career mentoring program
- Diverse, inclusive, cross-disciplinary, international cohort of 50-60 ECRs
- 4y program with quarterly (2-hr) virtual professional development events
 - Y1: Leading international, interdisciplinary projects
 - Y2: FAIR data principles training
 - Y3: Create a DOOS Demonstration Project
 - Y4: Communicating science to diverse audiences
- Networking opportunities across iDOOS
- Integration into iDOOS working groups and elevation to leadership roles
- Honoraria and travel funding available for some representatives from developing countries

The program kicks off this fall!!

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