



Biodiversity.aq SOOS EG-ABI

ESSENTIAL VARIABLES WORKFLOWS WORKSHOP



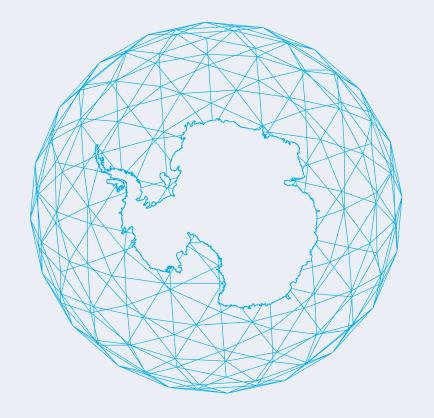






ABOUT THE ORGANISERS

SOOS SOUTHERN
OCEAN
OBSERVATION
SYSTEM



SOOS SOUTHERN OCEAN OBSERVING SYSTEM EG-ABI EXPERT
GROUP ON
ANTARCTIC
BIODIVERSITY
INFORMATICS





BIODIVERSITY.AQ-SCAR ANTARCTIC BIODIVERSITY PORTAL

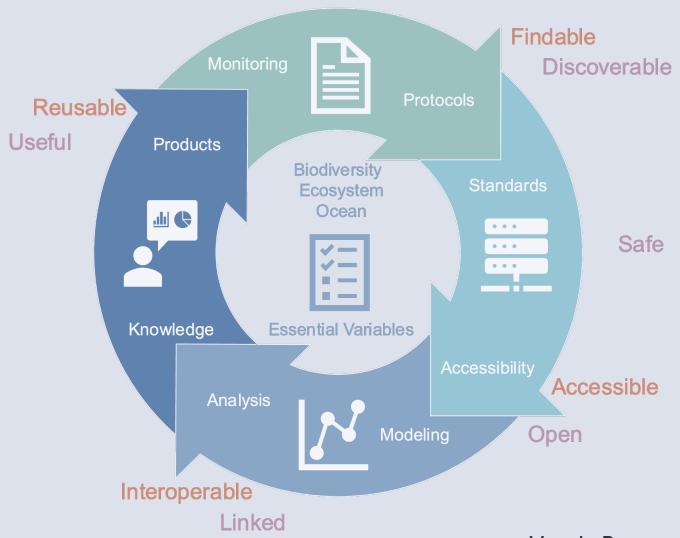




ADVANCE – ANTARCTIC BIODIVERSITY DATA INFRASTRUCTURE

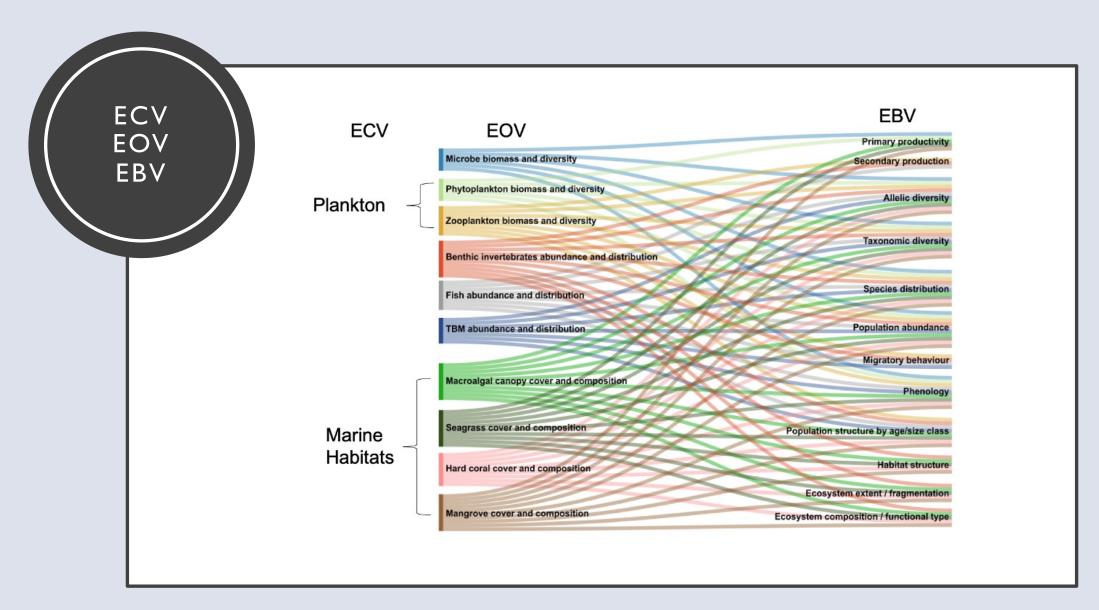






Van de Putte et al. 2021

https://doi.org/10.3389/fmars.2021.637063

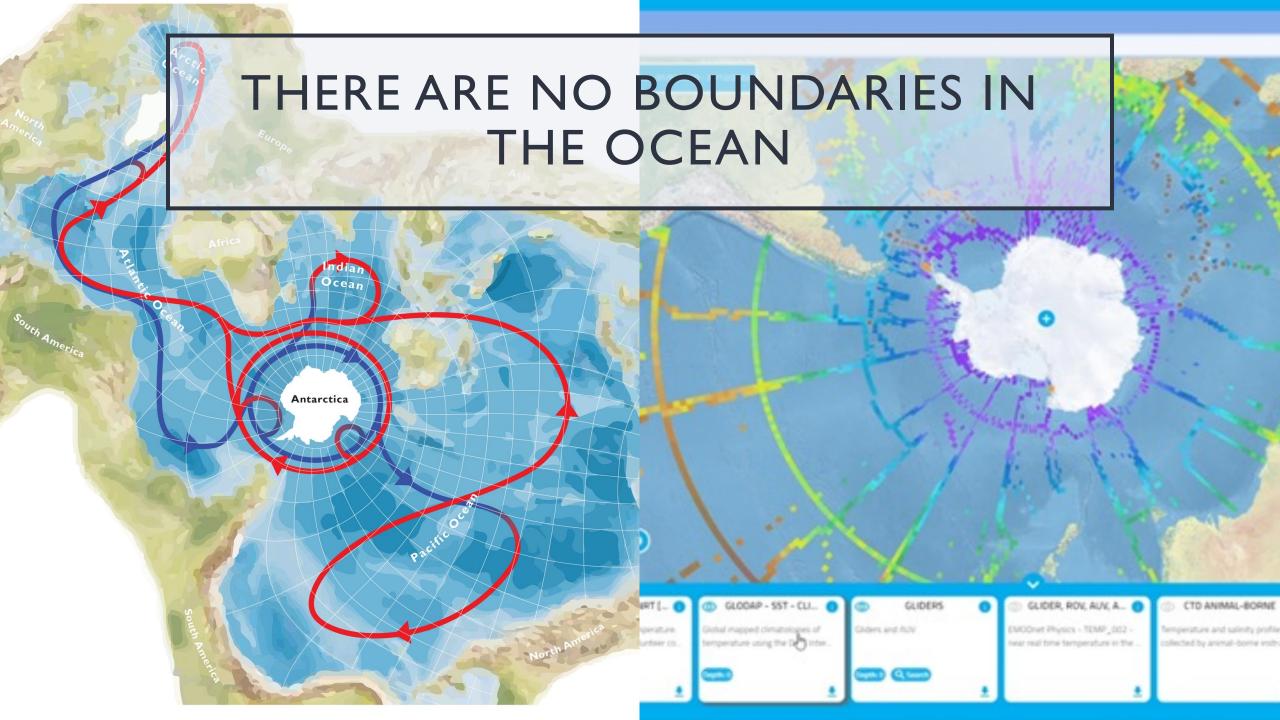


Muller-Karger et al., 2018)

EEOVS

Constable et al. 2016 https://doi.org/10.1016/i.imarsys.2016.05.003

Nutrients			9		8		S 1		1 6			
Oxygen	1											
pH pH										_		
Sea ice Thickness	_											
Concentration	Satellite											
Benthic	Surcinic											
Sediment			1									
Biogenic habitats												
Land-based Colonies												
Weather	- ;											
Snow cover												
2. Benthic species												
Sessile taxa	•									Haul		
Sessere tana			200						578	reports		
Mobile									5	Haul		
invertebrates										reports		
Fish	*		*							Haul		
										reports		
3. Pelagic & sea ice taxa												
Primary Producers	Colour	Genomics	Underway/									
	spectrum (e.g.		under-ice									
	Chl a), underway/		image analysis									
70	under-ice net		unutysas									
22	and bottle											
	sampling, CPR											
	-		5									
		net/bottle										
		sampling HPLC										
		THEE										
Krill A	Acoustics, nets		Net sampling		Isotope					Haul		
Zacalankton	C100	CDD	The second second		signature					reports		
Zooplankton	CPR nets	CPR Genomics	CPR Nets		Isotope signature							
Mesopelagic fish A	Acoustics, nets	Net sampling	Net		Isotope					Haul		
mesupengie iisii	iconorder recto	rice annipring	sampling		signature					reports		
Other fish	Net surveys		1000000		Isotope					Haul		
			-		signature					reports		
4. Marine mammals												
and birds												
- 11-11-11-11-11-11-11-11-11-11-11-11-11	ounts -ground	Ground	CEMP A1;	Trackers;	Isotope	Remote	CEMP A2					
Gentoo (Pygoscelis	aerial, UAVs	observations	CEMP A6;		signature;	camera	CEMP A4					
spp) penguins	CEMP A3		CEMP A7	CEMP A5	CEMP A8	observations; CEMP A9						
	satellite					CERT AS						
Ving Emparer	ounts around	Crownd		Teachorn	Isosono	Pomoro						
(Aptenodytes spp)	ounts -ground aerial, UAVs	Ground observations		Trackers	Isotope signature	Remote camera						
penguins	satellite					observations						
Humpback (baleen) V	/isual surveys	Visual curupus		Trackers	Isotono							
whales	isom surveys	Visual surveys	4	Hackers	Isotope signature							
	atellite, UAVs				Isotope							
seals				TOWNSON OF THE	signature			TO COLUMN				
Antarctic fur and Co	ounts -ground			Trackers;	Isotope	Remote	CEMP C1	CEMP C2				
southern elephant (Land-based) seals	aerial, UAVs			CEMP C1	signature	camera observations						
	satellite					The state of the s						
Flying birds	CEMP B1;				CEMP B4;		CEMP B2;					
	CEMP B5				CEMP T1		CEMP B3; CEMP B6					
5. Human pressures												
Fisheries	Effort			Effort						Haul		
				locations						reports		
Pollution C	Coastal point-		7 17	Spread pf						1000	Discharge	
d	source, lumping, spills			coastal point-							reports	
	therefor about			source,								
				dumping,								
				spills								





VARIOUS INITIATIVES

- SOOS
- OBIS
- Decade for ocean science
 - Marinelife2030
- Lifewatch
- BON
 - GEO-BON
 - MBON
 - EUROPABON
- Digital Twin of the Ocean

WORKSHOP GOALS



CREATE AN
INVENTORY OF
ESSENTIAL
VARIABLES
RELEVANT FOR THE
SOUTHERN OCEAN
BASED ON EXISTING
EFFORTS BY GEOBON AND MBON.



IDENTIFY DATA
REQUIREMENTS AND
DATA GAPS FOR
CALCULATING SUCH
EVS



PRIORITIZE EVS TO WORK ON



IDENTIFY EXISTING WORKFLOWS AND TOOLS



DEVELOP A
FRAMEWORK FOR
DEVELOPING THE
WORKFLOWS
REQUIRED TO TURN
PUBLIC SO
BIODIVERSITY DATA
INTO RELEVANT
ESSENTIAL
VARIABLES.

SIMPLIFIED EV WORKFLOW

Data

Workflow & tools

Essential variable

REOURCES

- Github repo https://github.com/biodiversity-aq/SO-essential_variables
- Google Drive
- https://drive.google.com/drive/folders/INFOKET0gvAIJPK0djQUQJ803vus_9JIE?usp=drive_link

Input

https://drive.google.com/drive/folders/IoCqsKqynhI32ZGT7rP8HHgOrwxEidjDx?usp=sharing

AGENDA DAY I

Day 1: Priority Essential Variables and data gaps						
Introduction (15 min)						
Round Table (45 min)						
Overview EVs (30 min)						
	Break 10:30 - 11:00					
Priority Variables						
Introduction (15 min)						
Online templates/Breakouts (75 min)						
	Lunch 12:30 - 13:30					
Data gaps						
Introduction (15 min)						
Online templates/Breakouts (75 min)						
	Break 15:00-15:30					
Reporting back (60 min)						
Summary-closing (15 min)						

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LETS GET TO KNOW EACH OTHER