

CONNECT – Building blocks for a Marine Observing System in the Maltese Islands

European Pavilion
**Digital
Ocean**
Nice | France
2 - 13 JUNE 2025

4th June 2025, Nice

LEAD PRESENTER:

Aldo Drago, Malta College of Arts, Science & Technology

[\(aldo.drago@mcast.edu.mt\)](mailto:aldo.drago@mcast.edu.mt)

And

John Schembri, Malta Meteorological Office

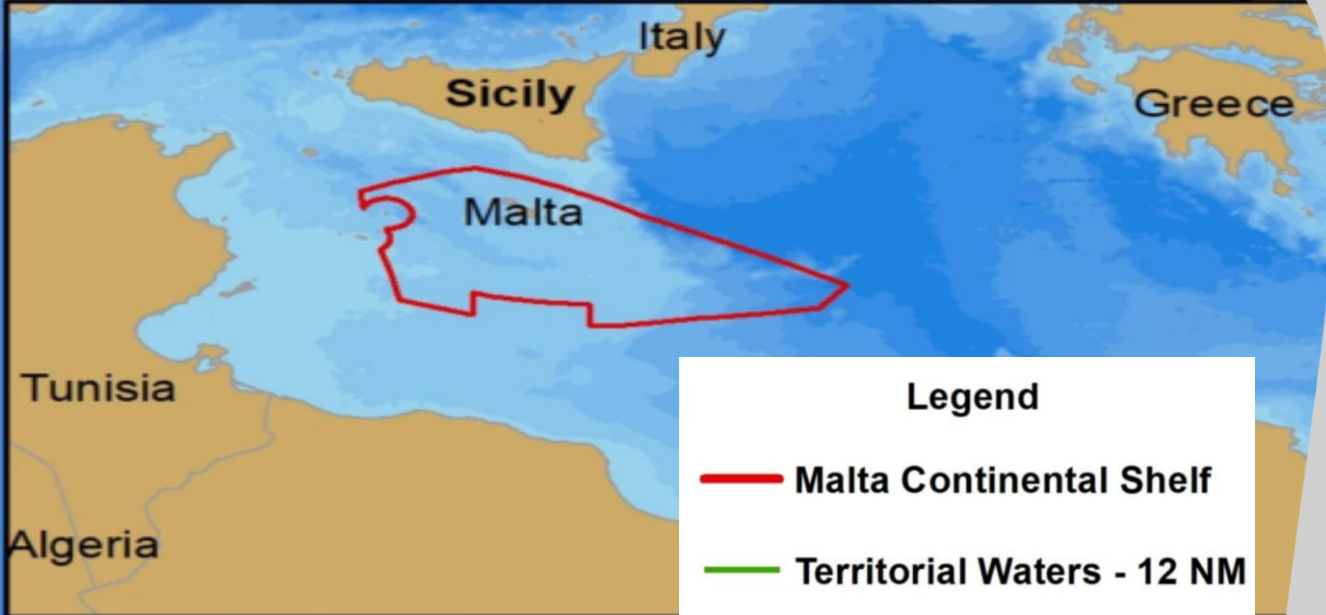
Patrizia Patti, EcoMarine Malta

Adam Gauci, University of Malta



Inspire

How to monitor the Ocean?



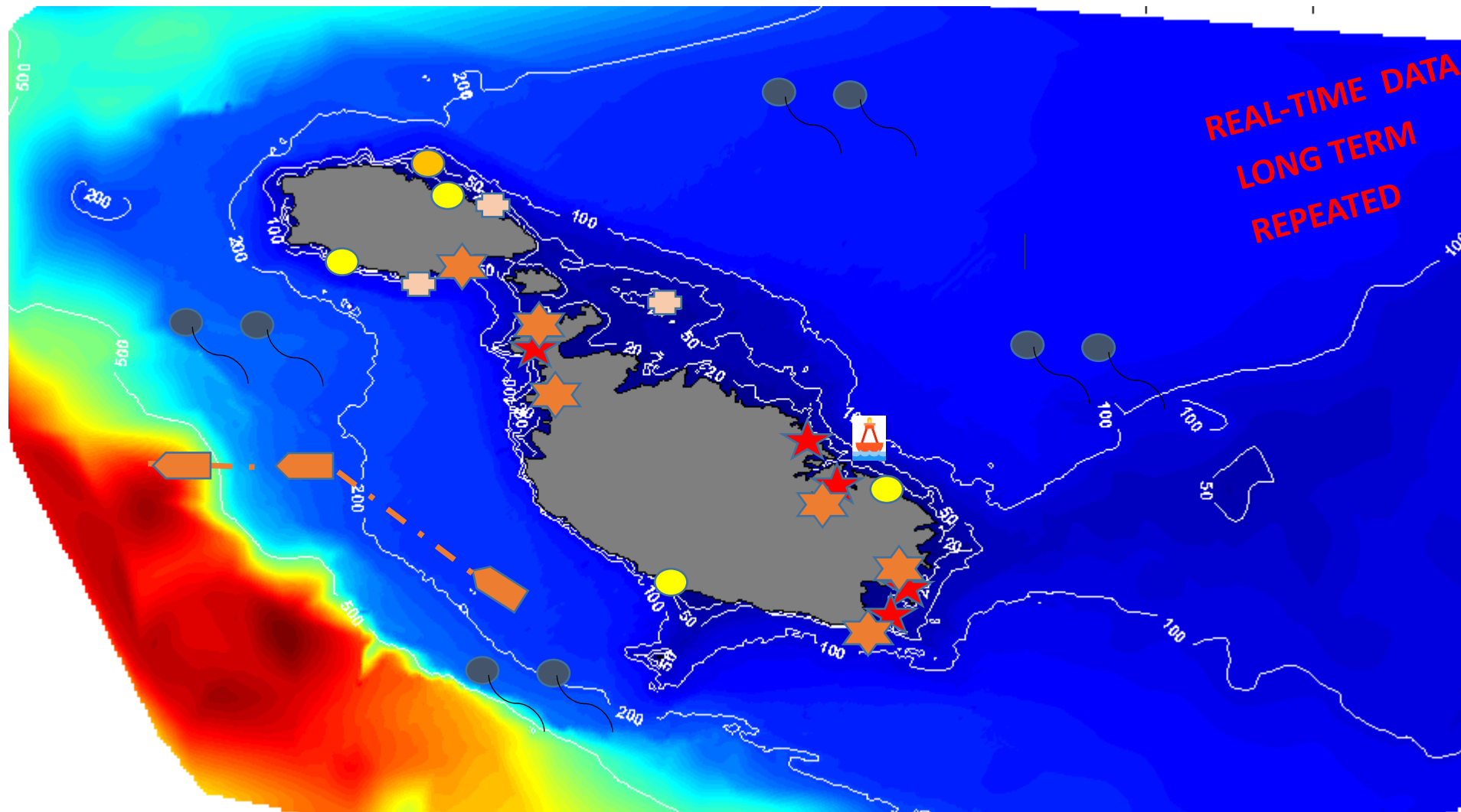
THE MALTESE ISLANDS









CHALLENGE OF A SMALL ISLAND STATE

Up to 12 nm the territorial waters are 14 times the size of the land



formidable challenge to measure, monitor and manage coastal waters



-  HFR STATION
-  SEA LEVEL
-  METEOROLOGY
-  TEMPERATURE PROFILES
-  SEA WAVES
-  DRIFTERS
-  SEA GLIDERS
-  BUOY

EXPERIENCE WITH MARINE OBSERVATIONS IN THE MALTESE ISLANDS



NEW CONCEPT FOR DIGITAL SERVICES

View & Get data on popular media

Added value derived data

Simplified system without losing quality and value

Free, on-demand and individualised service

Alerts on personal threshold exceedance/subscedance

Operational and climatological data

Easy data formats

***Innovation in STREAM
Zoom, select and get
satellite data where and
when you need***



www.stream-srf.com

Exploiting Earth Observations to Benefit Society

01

Satellites are not just for research – they cover data at each point on earth, on land, at sea and in the atmosphere, monitoring change and delivering applications and services to society.

Look for



**STREAM
THINK
Malta**



**STREAM
SRF**

Exploiting Earth Observations to Benefit Society

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CALYPSO HF Radar Network

2nd June 2025



pire

to monitor the Ocean?

Malta Airport Meteorological Office



JOSEPH SCHEMBRI

MET OFFICE MANAGER

MALTA AIRPORT
METOFFICE 

Malta International Airport plc
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Malta



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How to monitor the Ocean?

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Dolphin Talk: Decoding Ocean
Conversations with Technology

4 June 2025



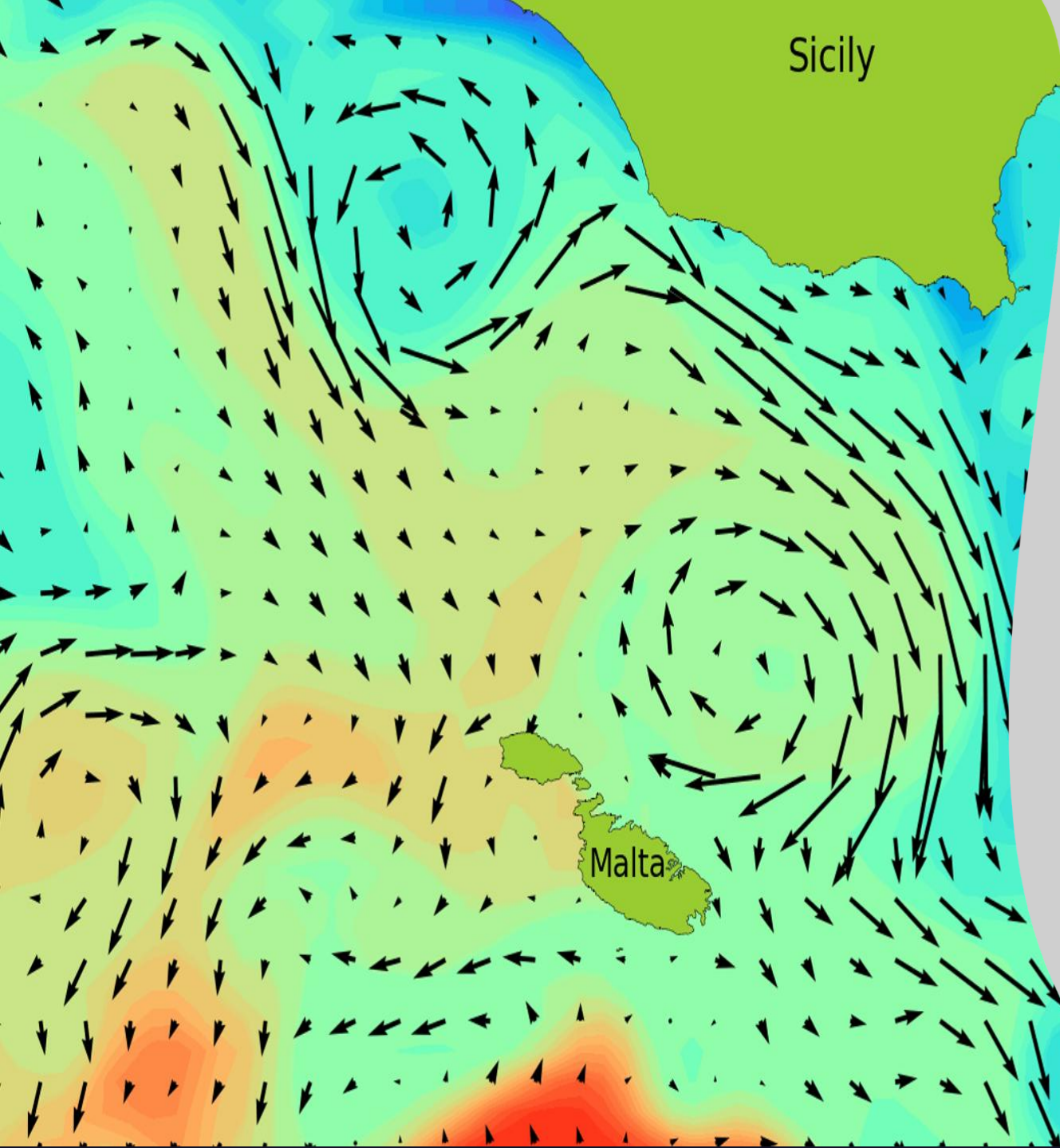
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How to monitor the Ocean?

MARINE OBSERVATIONS AND DATA

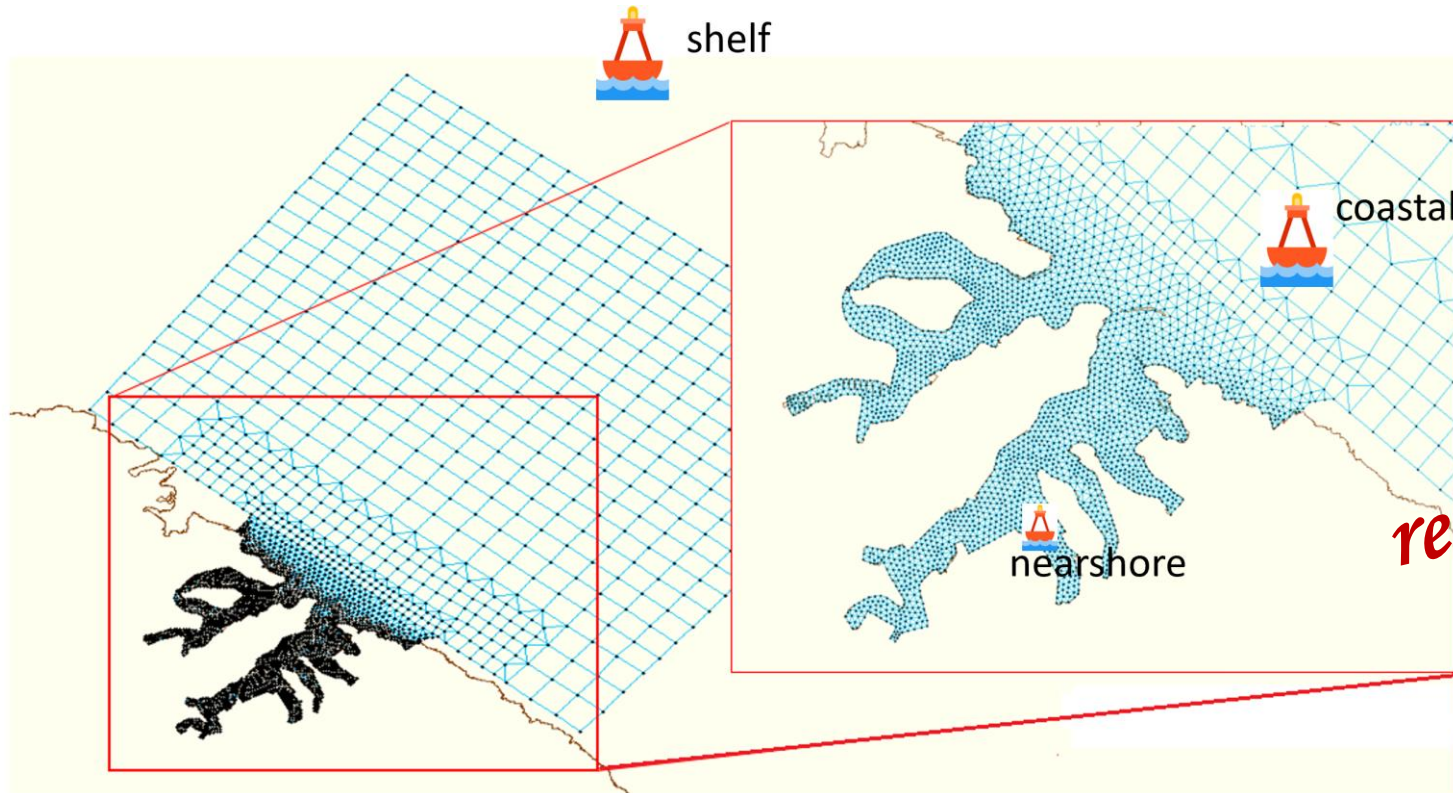
Quality, reliability, consistency,
long term

*Best effort is not enough
.....A national
commitment is required*



CUSTOMISED DESIGN OF A MARINE OBSERVING SYSTEM FOR THE MALTESE ISLANDS

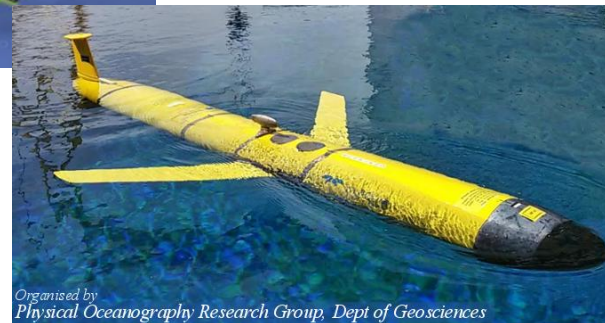
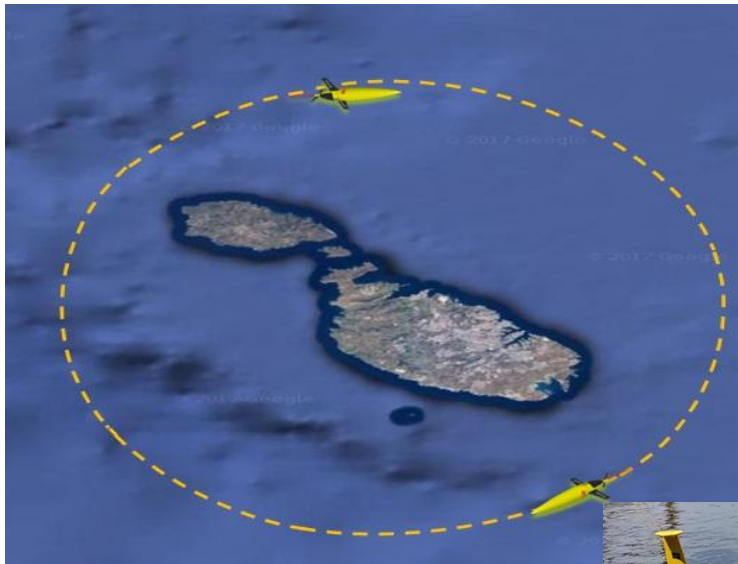
- Low cost systems in the near shore
- Main long term offshore platforms
- Measure offshore and model extrapolate onshore
- Surface, water column and benthic measurements



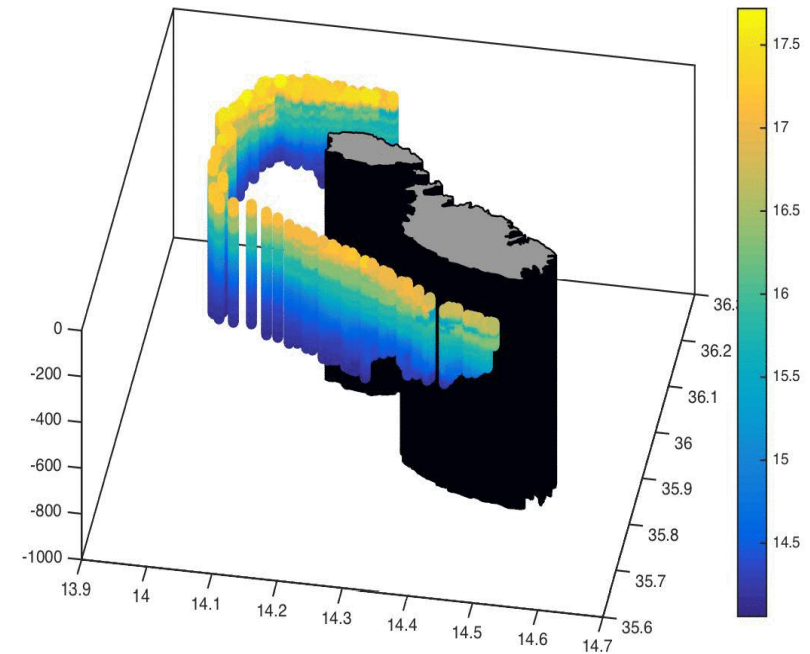
resolving coastal and nearshore scales by integration to numerical models

CUSTOMISED DESIGN OF A MARINE OBSERVING SYSTEM FOR THE MALTESE ISLANDS

- Adaptive observations using gliders
- Synoptic observations by satellites for constant watch and model assimilation



Organised by
Physical Oceanography Research Group, Dept of Geosciences





Pillars of the CONNECT project

CONNECTING THE STAKEHOLDERS

CLUSTERING OF INFRASTRUCTURE
CAPITALISING ON PAST RESEARCH
BUILDING THE NATIONAL MARINE CORE DATA PLATFORM

- Discussion and co-design between stakeholders
- Plan national conference on the subject
- Build a common plan and design for marine observations in Malta
- Integrate marine core data into the national data ecosystem
- Promote awareness on needs and benefits for marine observations
- Submit plans to government for uptake and funding under a national governance framework



MCAST



GOVERNMENT OF MALTA
MINISTRY FOR EDUCATION, SPORT,
YOUTH, RESEARCH AND INNOVATION

PARLIAMENTARY SECRETARIAT
FOR YOUTH, RESEARCH AND INNOVATION



MEET IN MALTA

National Conference

Marine data and information are essential ingredients not only for sea-based research, climate studies, the monitoring of the state of health of the sea and the management of its resources. Indeed, the marine data value chain in the evolving information age targets new avenues, reaching out to industry and fuelling innovative applications that can raise economic levels to new heights that perhaps we cannot yet fully grasp.

The conference is precisely planned to bring national stakeholders, responsible entities, the research community, operators and private enterprise to discuss, design, streamline and plan marine observations in the Maltese Islands for monitoring, ecosystem services, research and security. This is a very much needed national strategic reflection that we have to make as we endeavour to more systematically depend on the oceans, and we further look at the sea as a resource for the blue economy and the green transition.

No more disjointed efforts. Individual project-based, ad hoc initiatives relying on singular best effort deliveries do not work. We need a coordinated effort, a financed enduring strategy with a political commitment to achieve and sustain a national marine observing system for the needs of a nation that works to meet challenges and looks beyond the horizon.

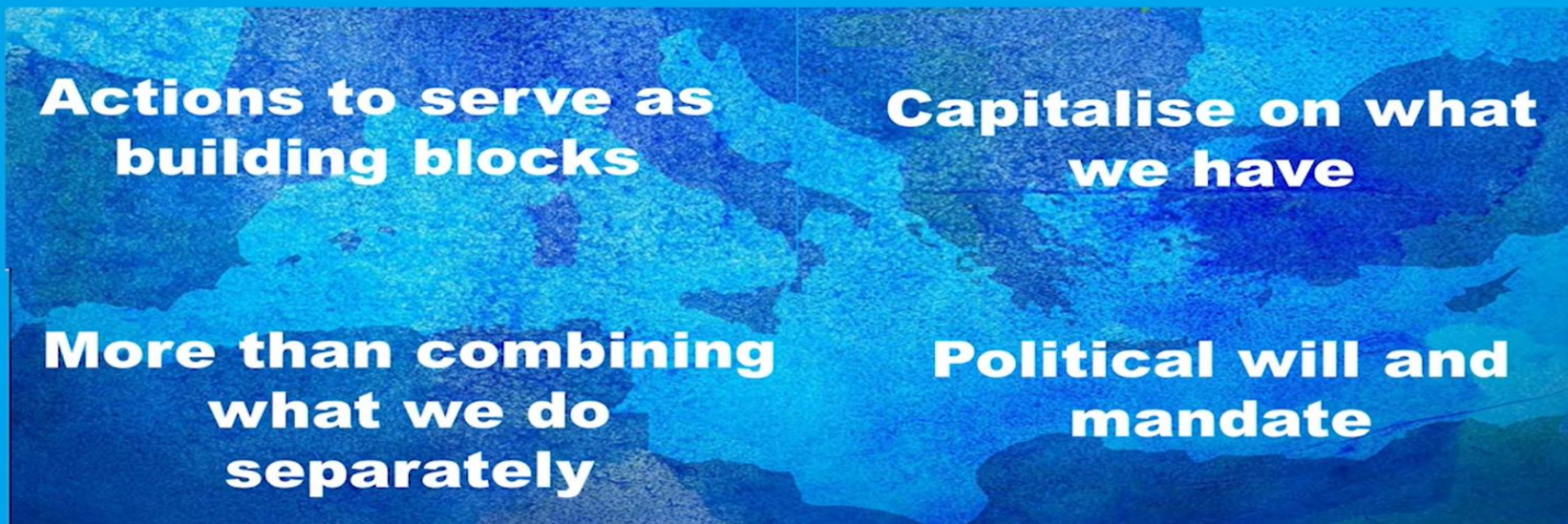
<https://backend.stream-srf.com/connect/>

You can **REGISTER** free

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*CONNECT is led by the Malta College of Arts, Science & Technology,
and financed by the Parliamentary Secretariat for Youth, Research and Innovation*

CONNECTING EFFORTS AND IDEAS



.....et d'un effort transformateur pour agir ensemble afin d'atteindre des objectifs globaux partout dans le monde, de manière efficace et efficiente.

WATCH THE CONNECT VIDEO AT THE EU DIGITAL OCEAN PAVILION

<https://www.digitaloceanpavilion.eu/content/engage-contributors>

OR <https://backend.stream-srf.com/connect/>



CONNECTing with you

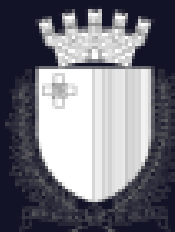


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GRAZZI

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