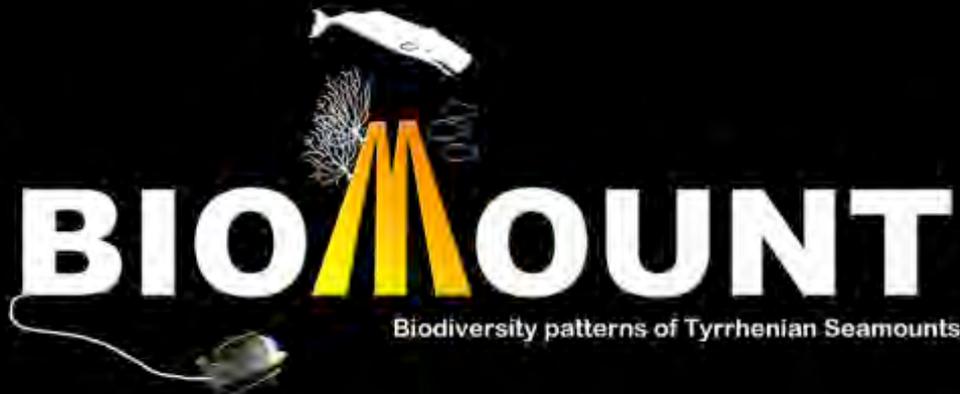




# MONTAGNE SOMMERSE

## NUOVA FRONTIERA NELL'ESPLORAZIONE PROFONDA DEL MEDITERRANEO

Marzia Bo

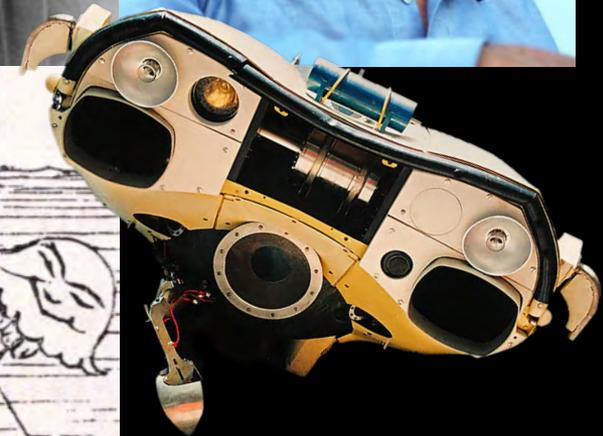
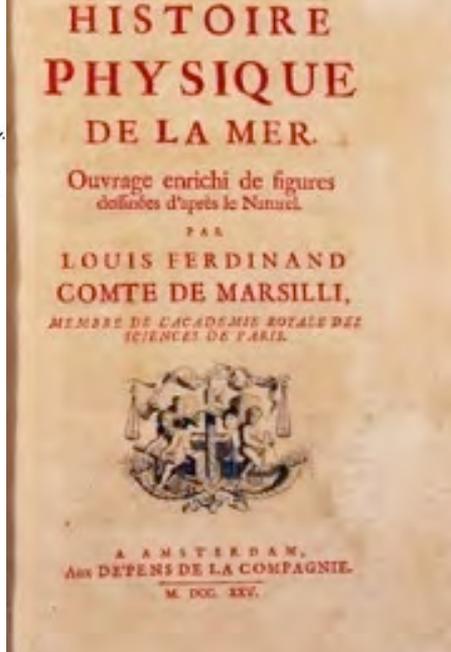
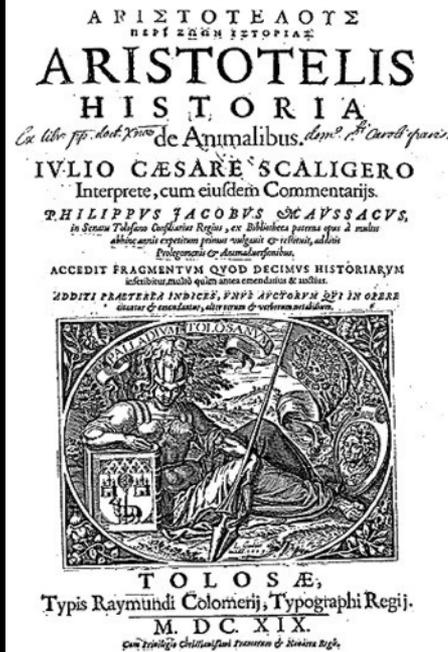


# Il Mediterraneo: uomo e mare

THE MEDITERRANEAN SEA DIVIDED INTO THE EASTERN AND WESTERN SEAS, SUBDIVIDES INTO ITS PRINCIPAL PARTS OR SEAS, IN WHICH ARE OBSERVED THEIR PRINCIPAL GULFS, CAPES, OR PROMONTORIES AND SEA-PORTS.



# Mediterraneo: la storia della biologia marina



# Osservatori storici – 1850-1910



CNRS • SORBONNE UNIVERSITÉ  
Station Biologique  
de Roscoff

MARINE  
STATION  
WITH  
PLYMOUTH  
UNIVERSITY



Musée  
océanographique  
de Monaco



STATION MARINE  
DE CONCARNEAU



OBSERVATOIRE  
Océanologique  
de Banyuls/Mer  
1882

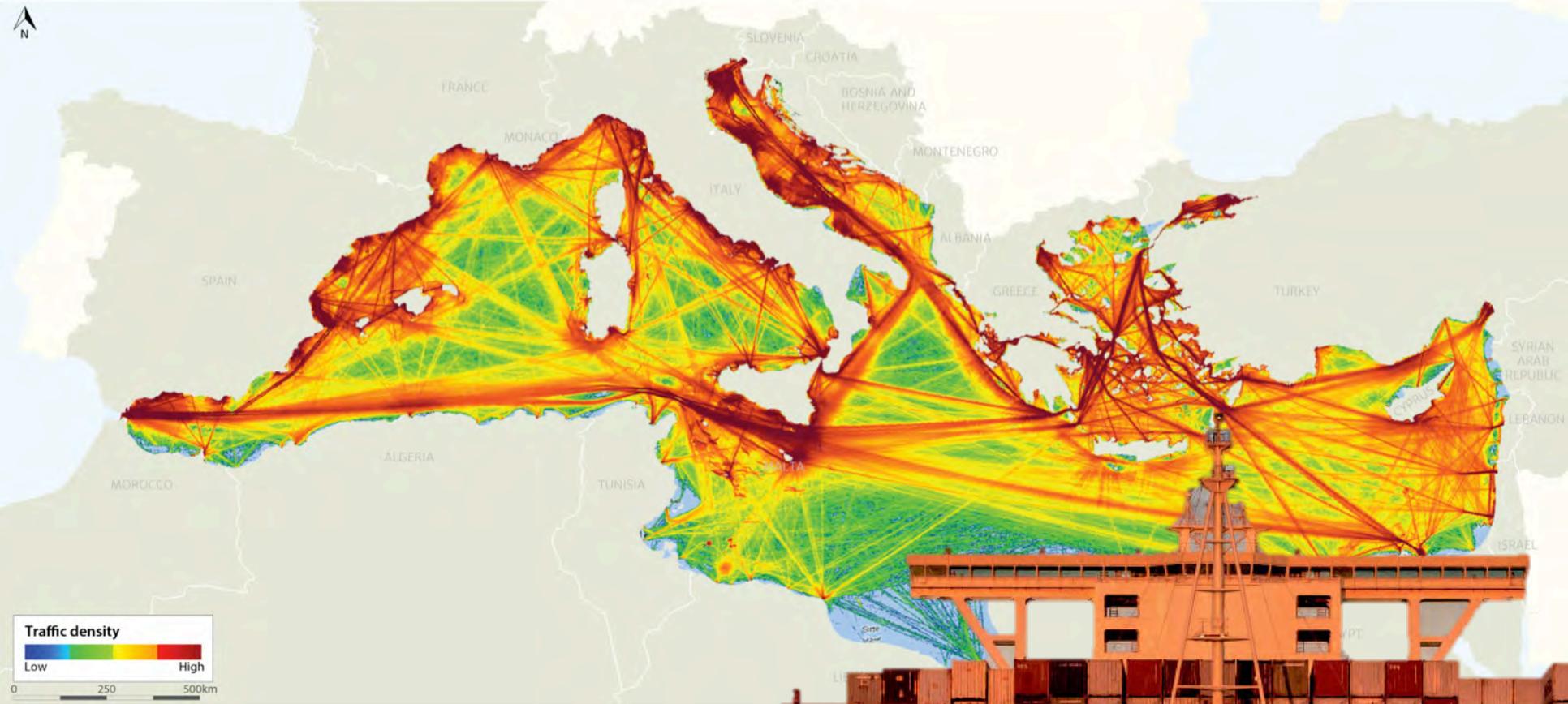


*Mare nostrum*



# Perdere la notte



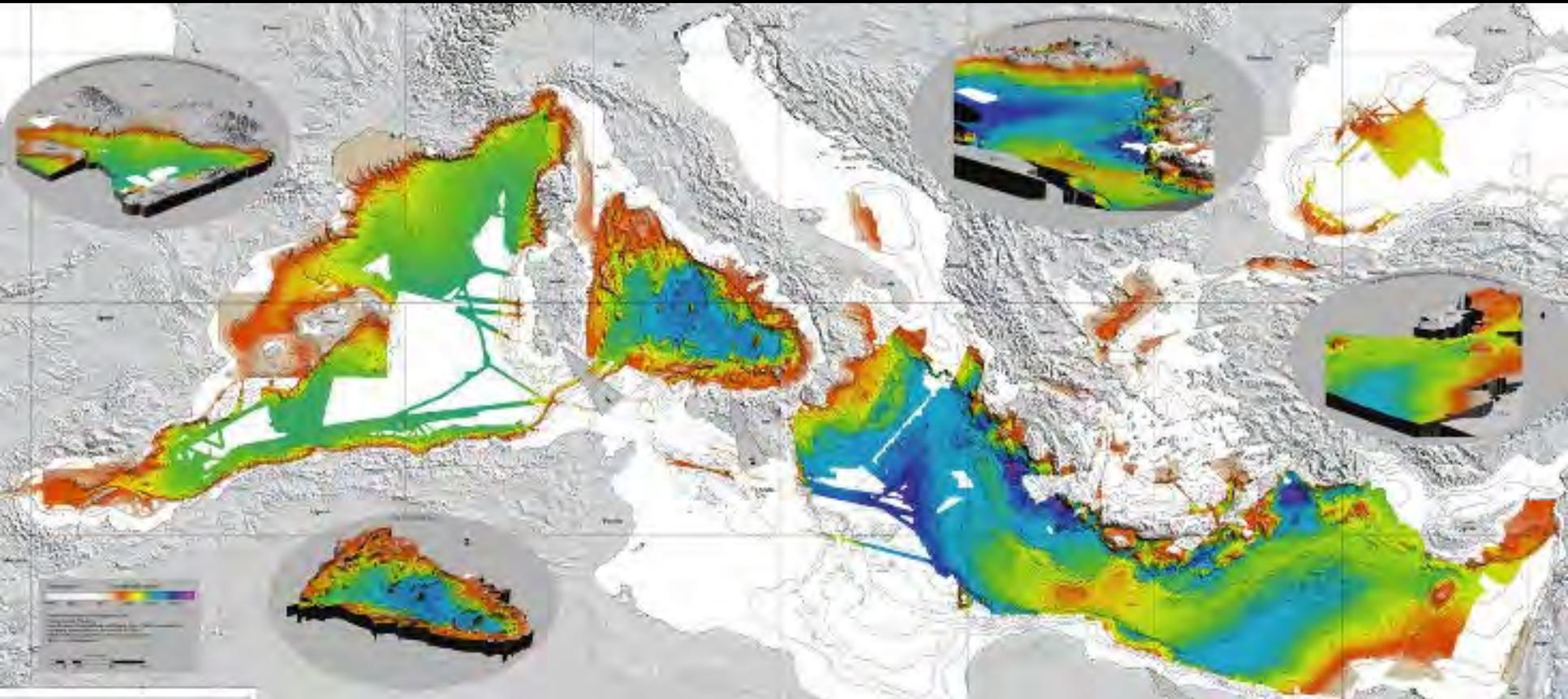


**Le rotte del commercio  
globale**

# La pesca: un fragile equilibrio tra tradizioni e sostenibilità



# Mediterraneo: un immenso laboratorio di geologia marina



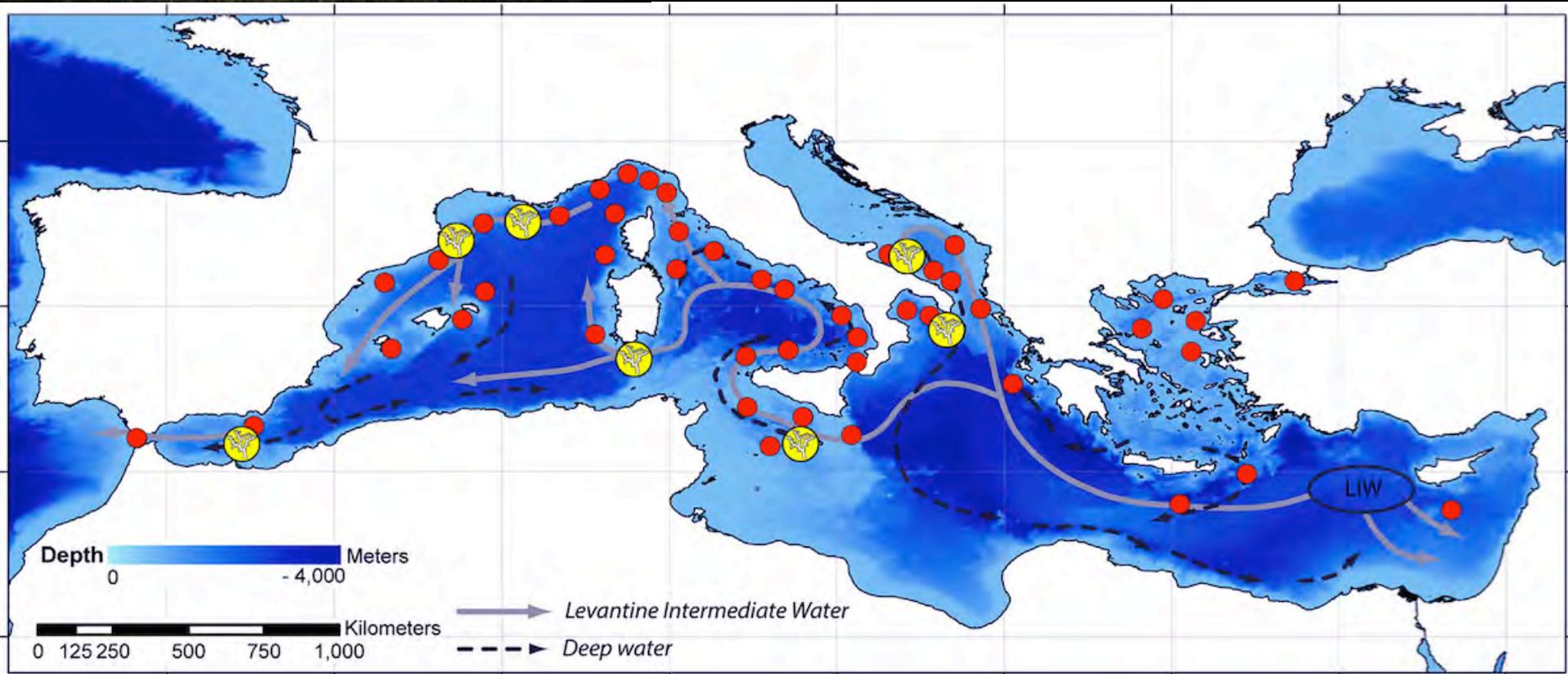
# Mediterraneo: un immenso laboratorio di oceanografia marina



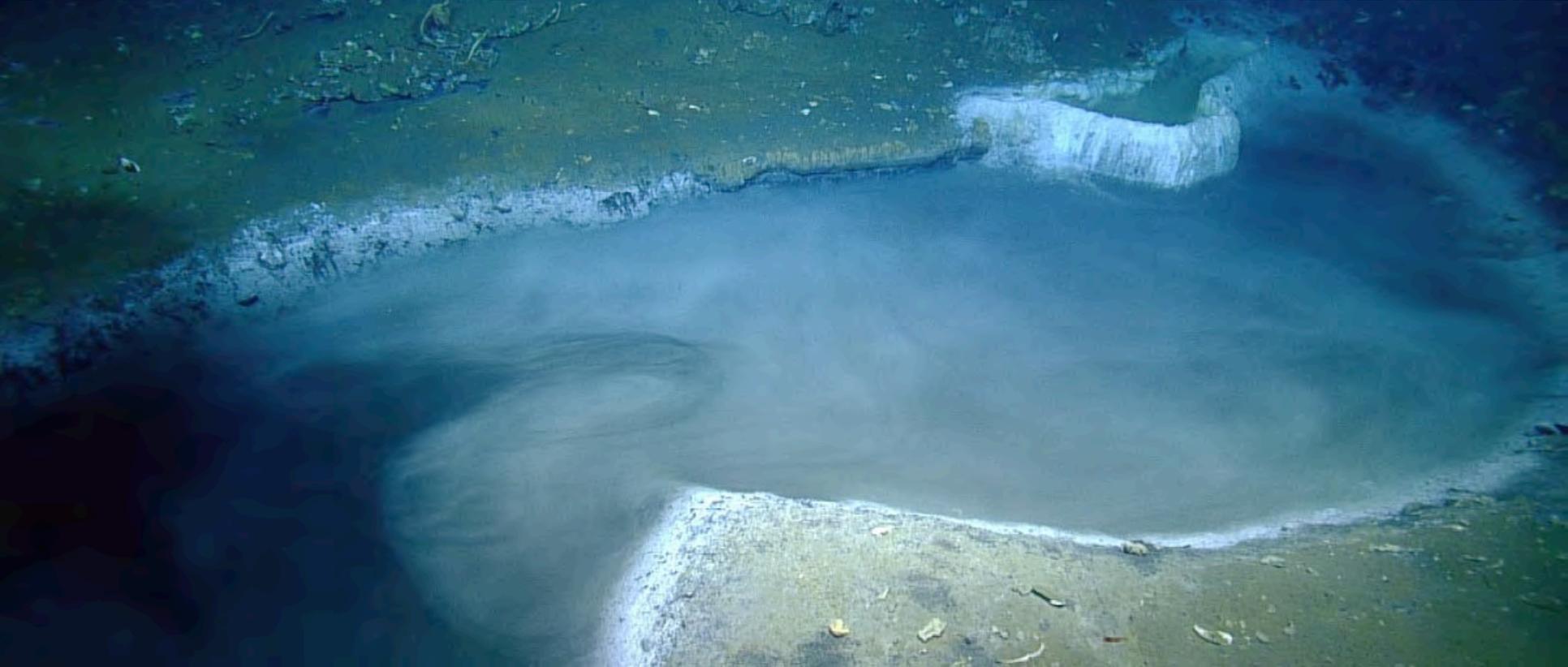
# Mediterraneo: un immenso laboratorio di biologia marina



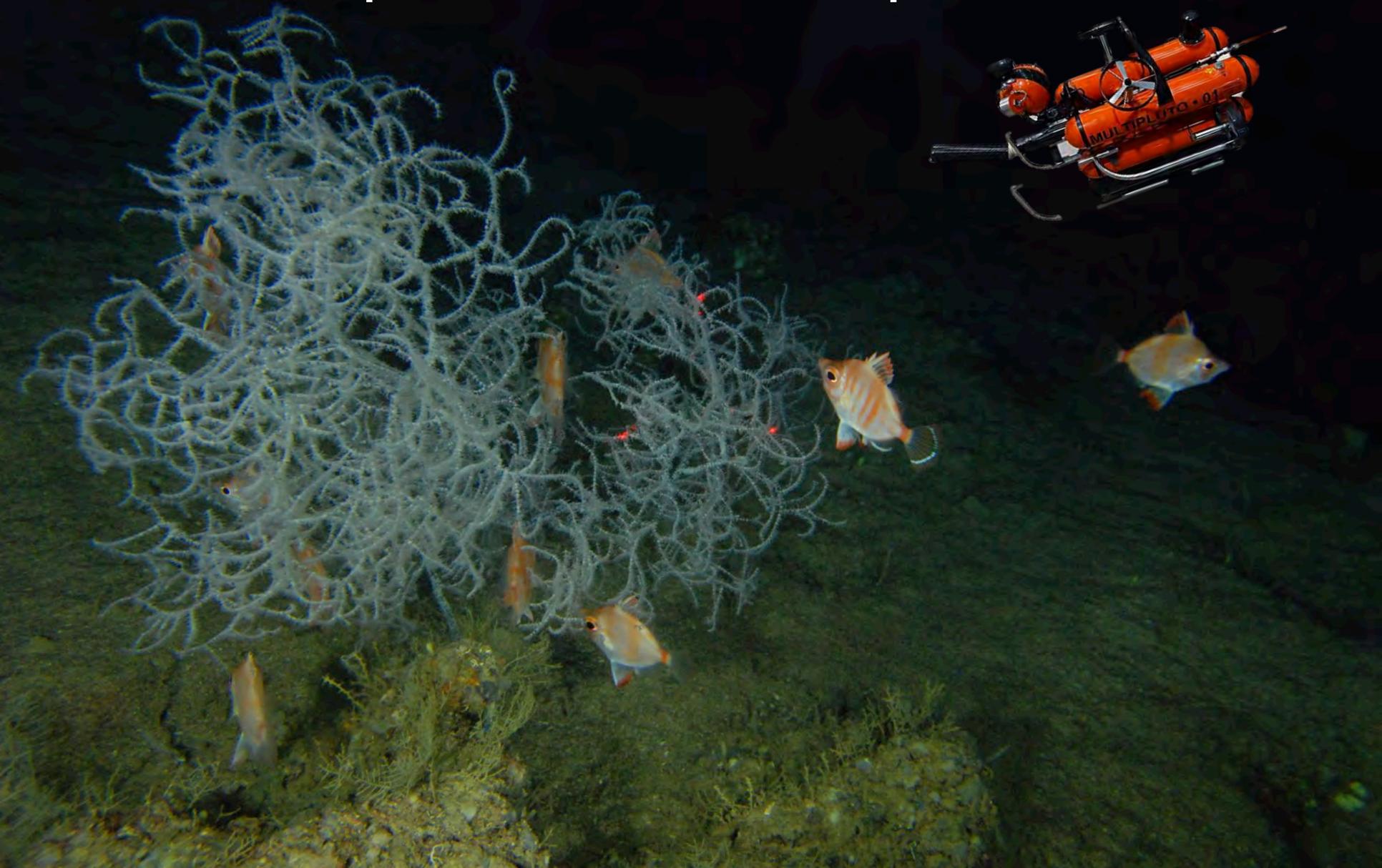
# Biologia marina profonda del Mediterraneo: i coralli bianchi di Santa Maria di Leuca



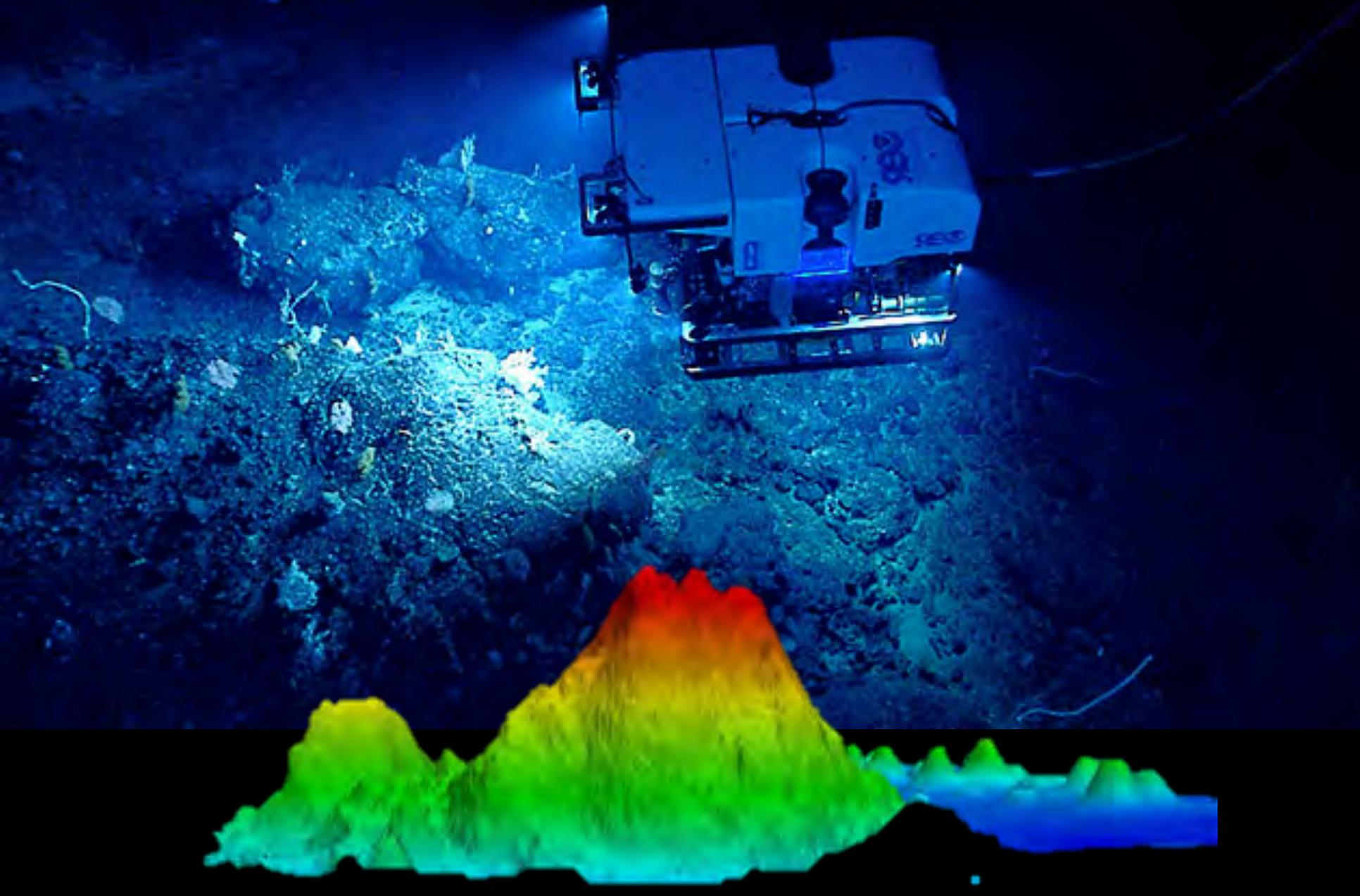
# Biologia marina profonda del Mediterraneo: cold seeps e bacini ipersalini



# Biologia marina profonda del Mediterraneo: la piattaforma continentale profonda



# Un gap conoscitivo: le montagne sottomarine

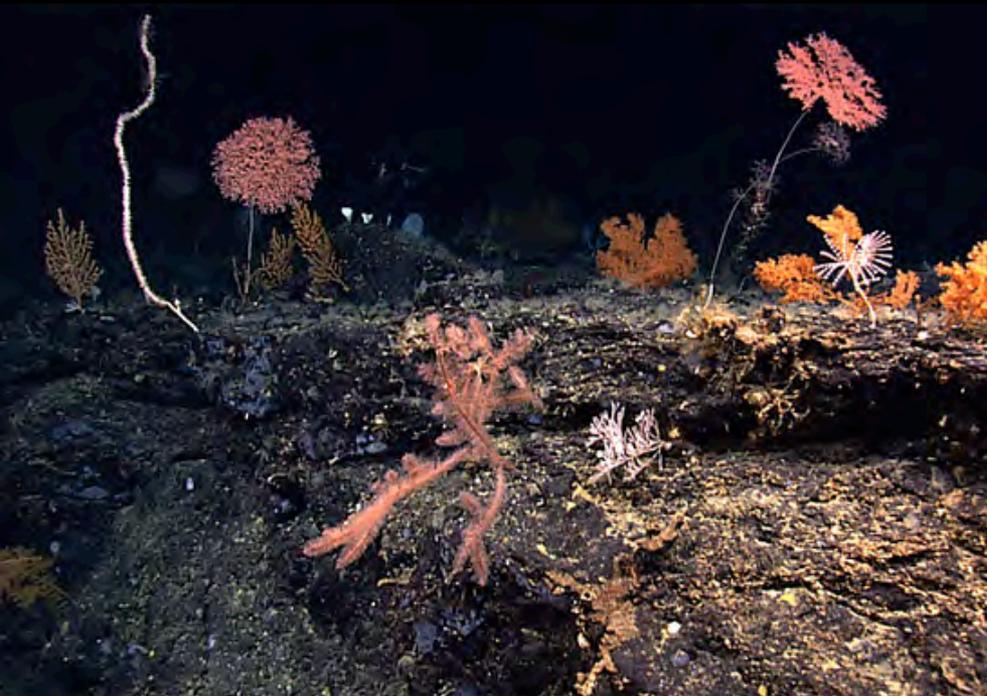




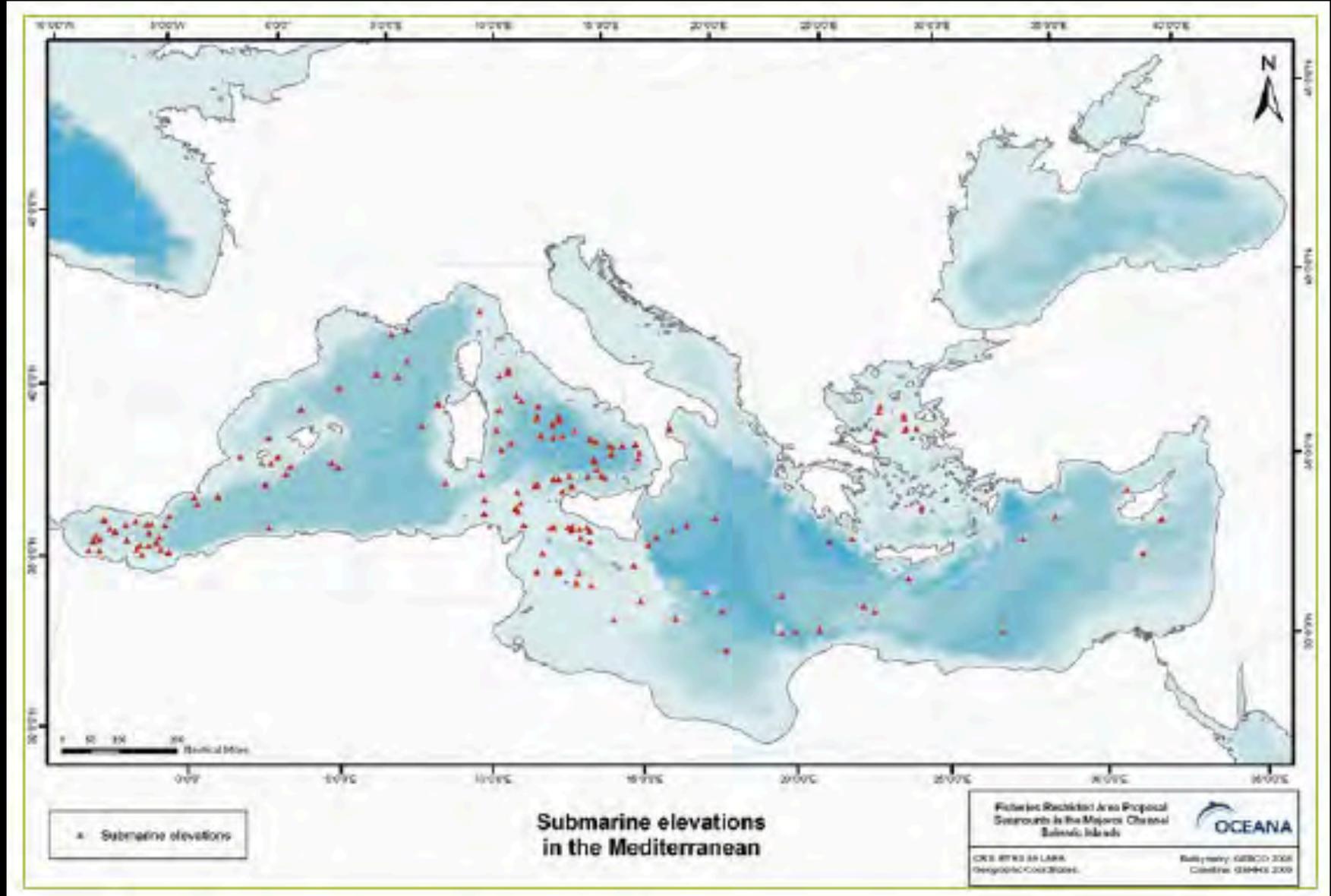


**L'importanza di una montagna  
in mare**

# L'esperienza oceanica



# Le montagne sommerse del Mediterraneo

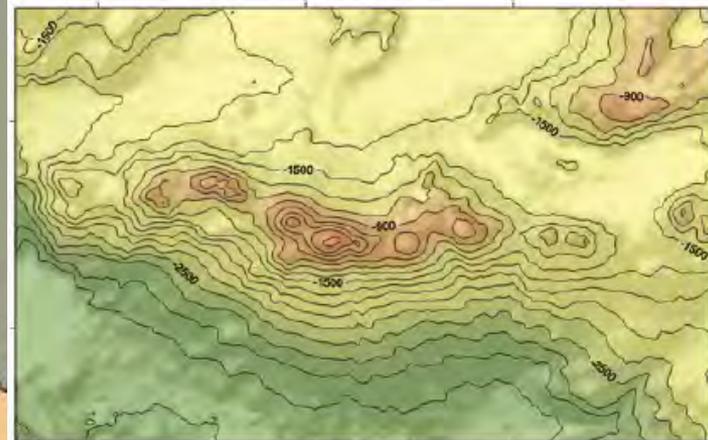




# Palinuro - Strabo Seamount

Location: 39.48455°N – 14.82892°E

▲ Peak depth (m): 70-80 ▮ Base depth (m): 1570-1580



La situazione tirrenica

# Life on and around the seamounts

## Life on and around the Seamount

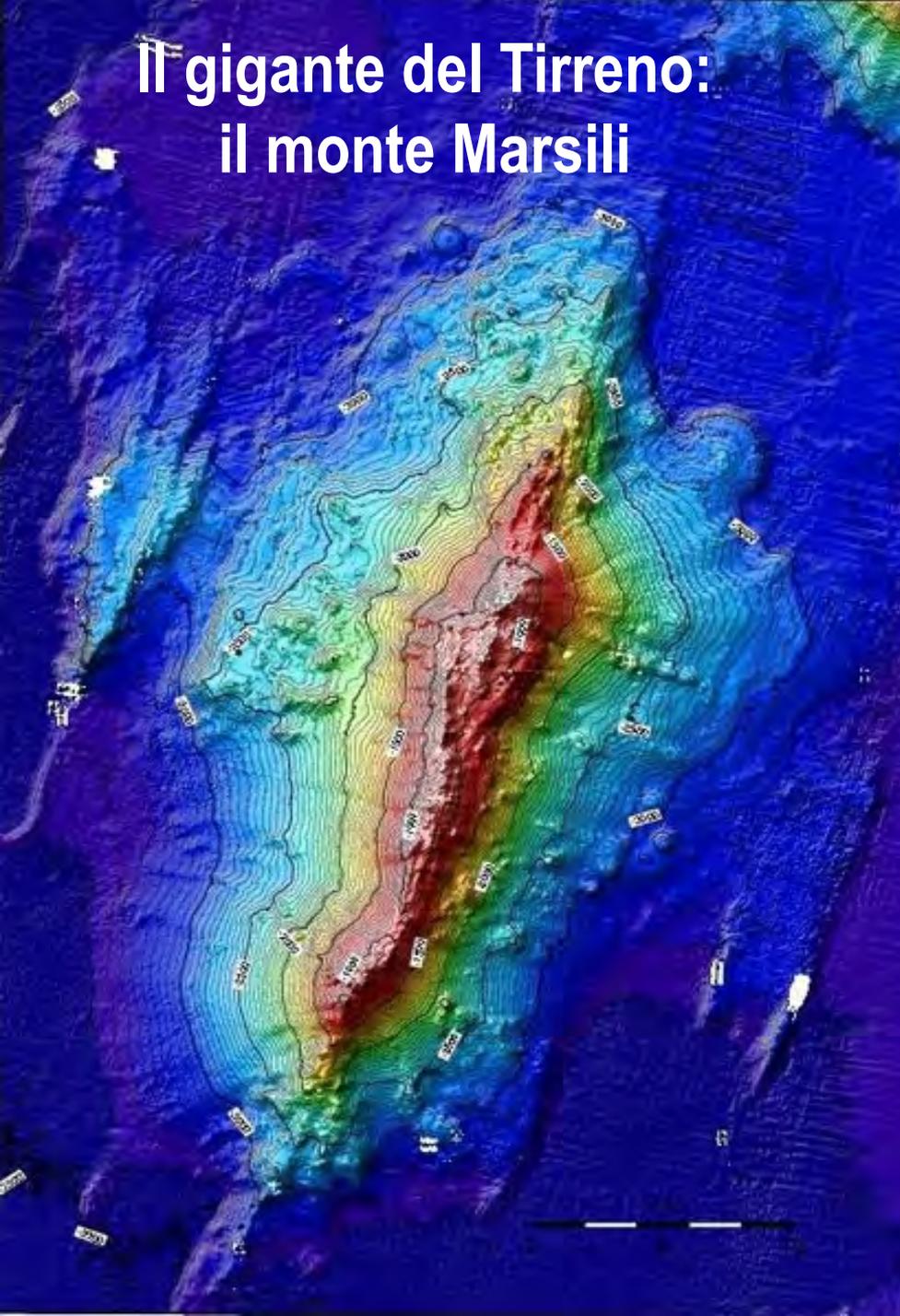
No information about the benthic and pelagic communities of the Los Martines and Riba Seamounts has been found in the scientific literature.



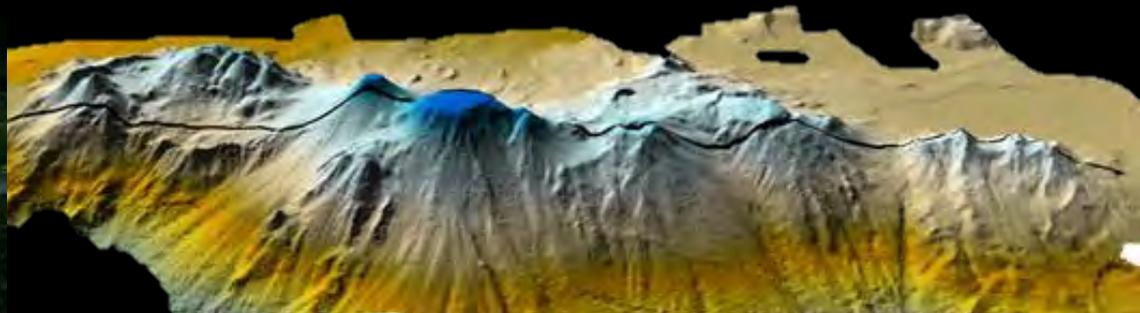
# Il monte delle spugne di pietra



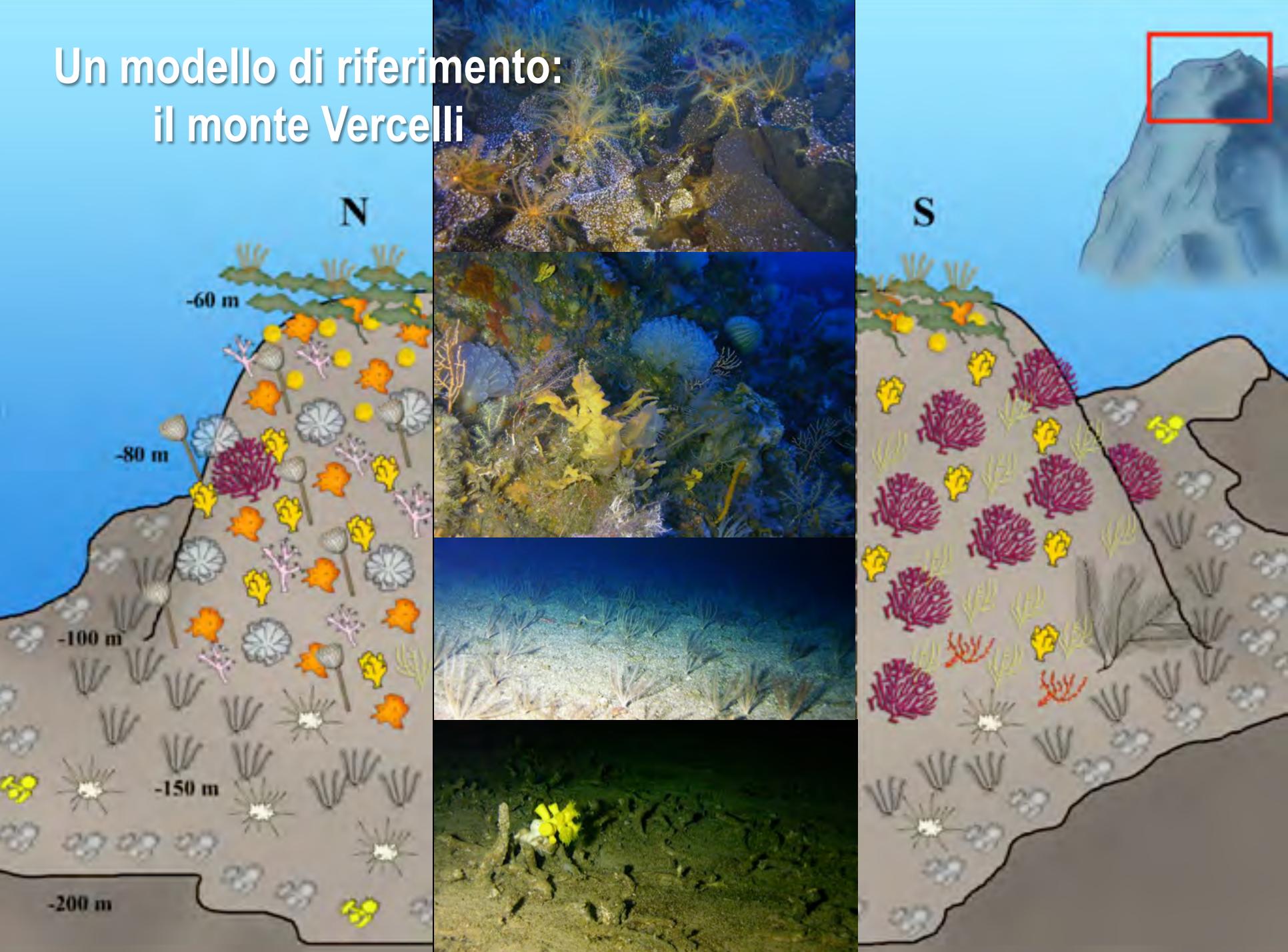
# Il gigante del Tirreno: il monte Marsili



# Nelle profondità calabresi: il monte Palinuro



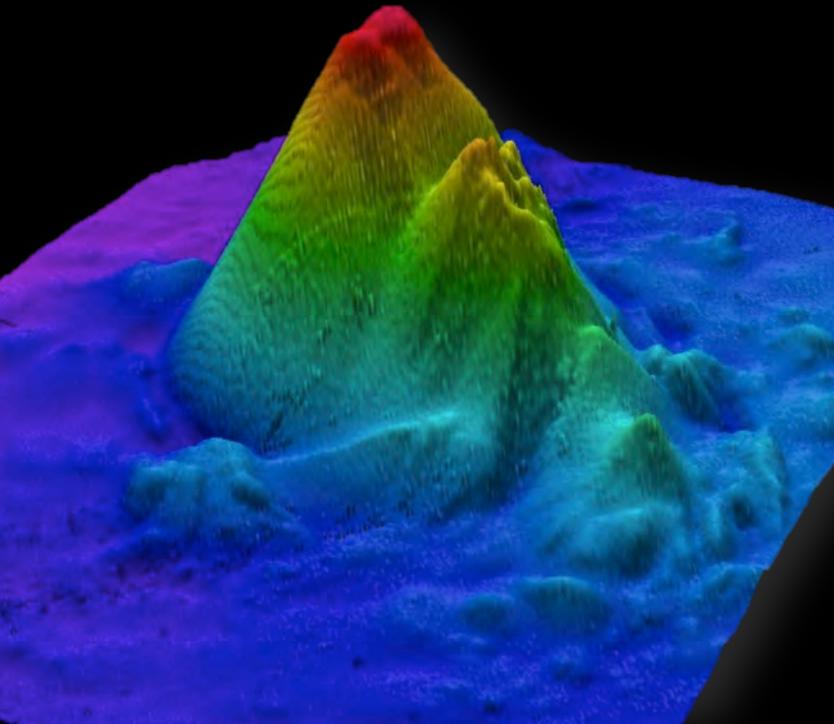
# Un modello di riferimento: il monte Vercelli



In cerca di un lauto pasto



# Grandi predatori delle profondità



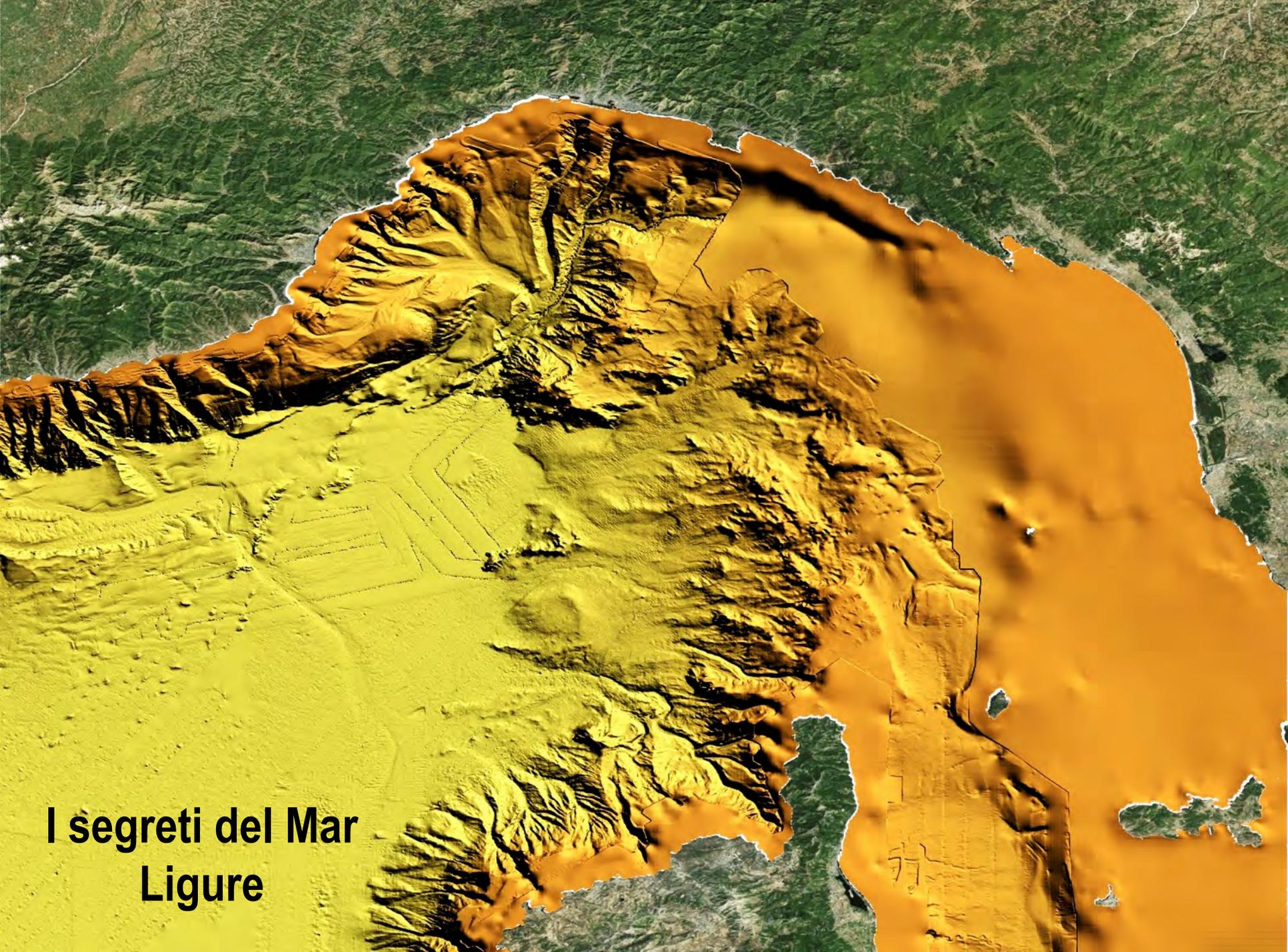
Ulisse Seamount, '70s, Andreino Croce  
1 palamito with 70 ami, 450kg  
20 *P. americanus*, 3 *H. griseus*



# BIO MOUNT PROJECT

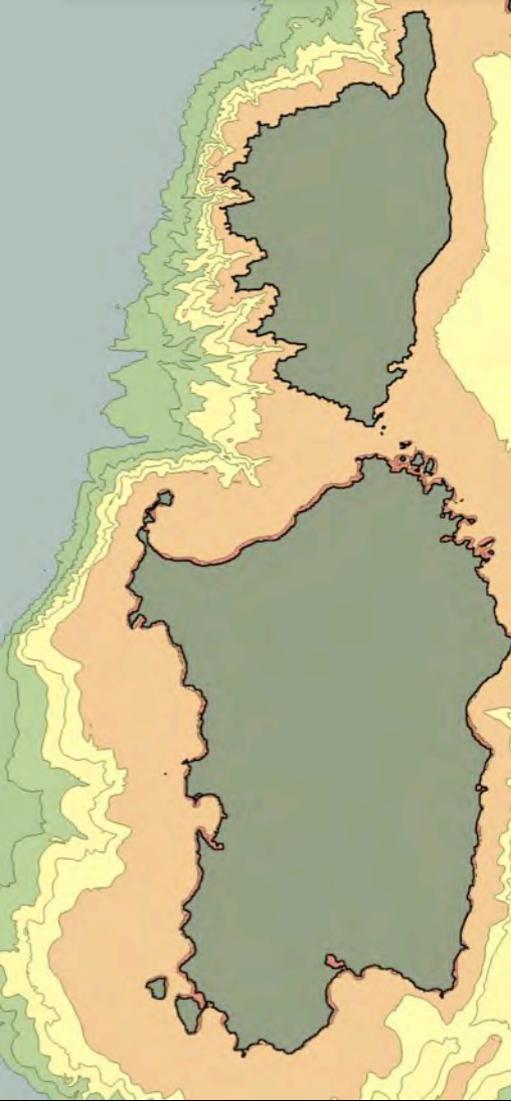
Biodiversity patterns of Tyrrhenian and Ligurian  
seamounts





**I segreti del Mar  
Ligure**

# Le spedizioni

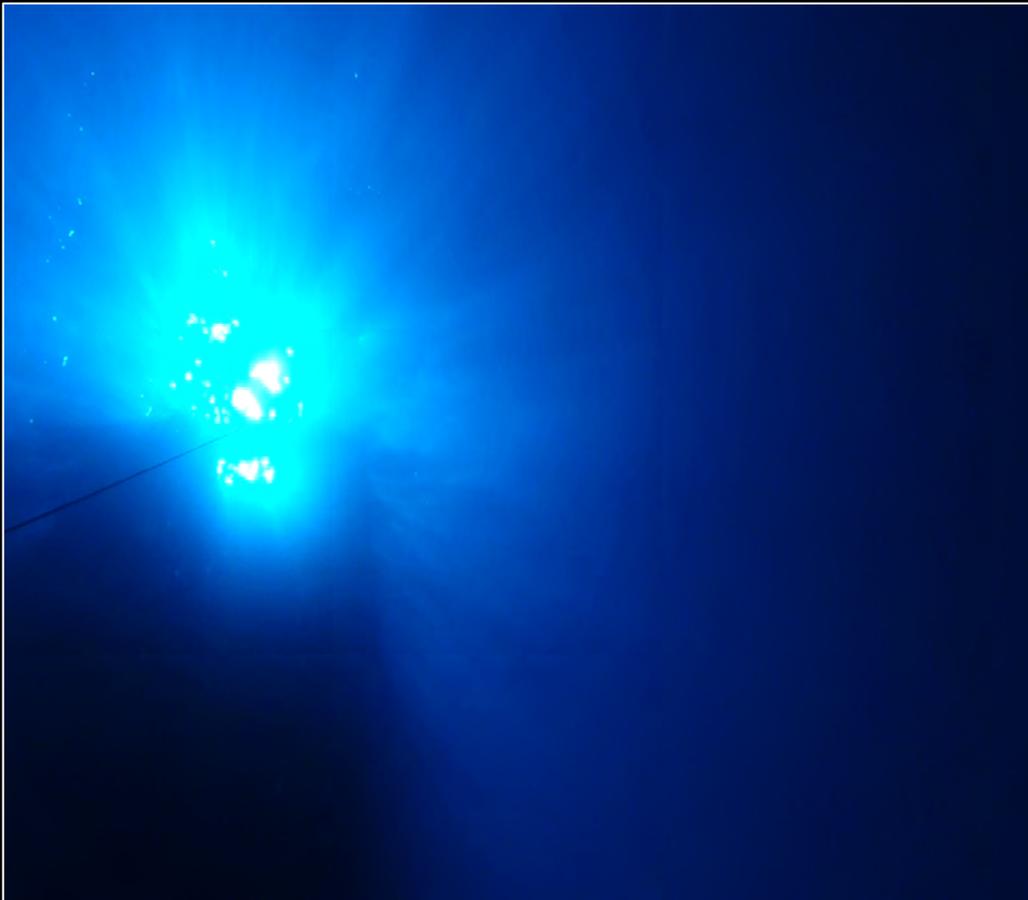




## Le operazioni a bordo del *Deadalus*



# Studiare la biodiversità e la vulnerabilità dei monti



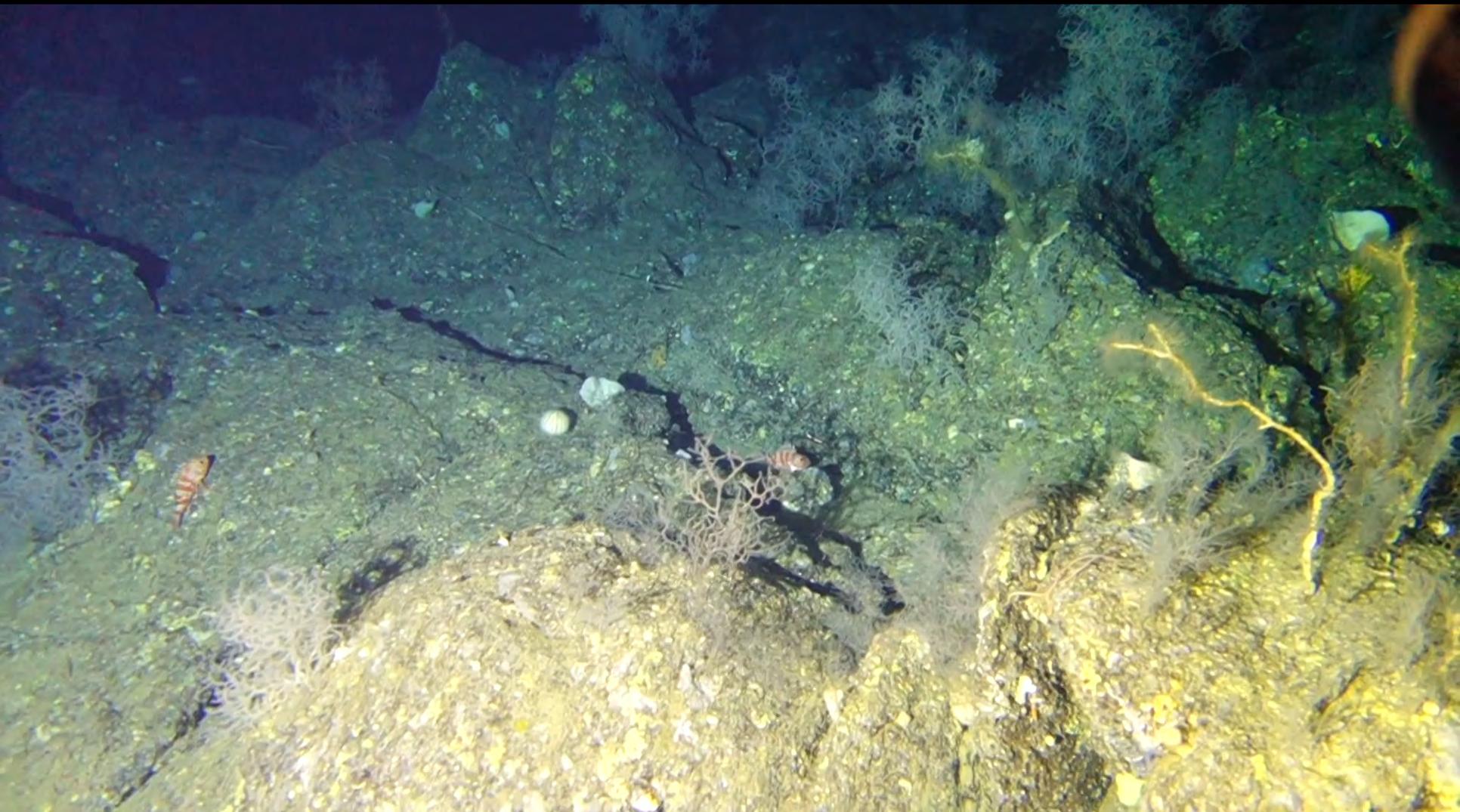
**Superficiale, 20-60m  
na**

**Mesofotico, 60-200m  
S. Lucia**

**Batiale superiore, 200-500m,  
Ulisse, Penelope, Occhiali**

**Batiale inferiore 500-1000m  
Janua**

# La biodiversità dei monti liguri



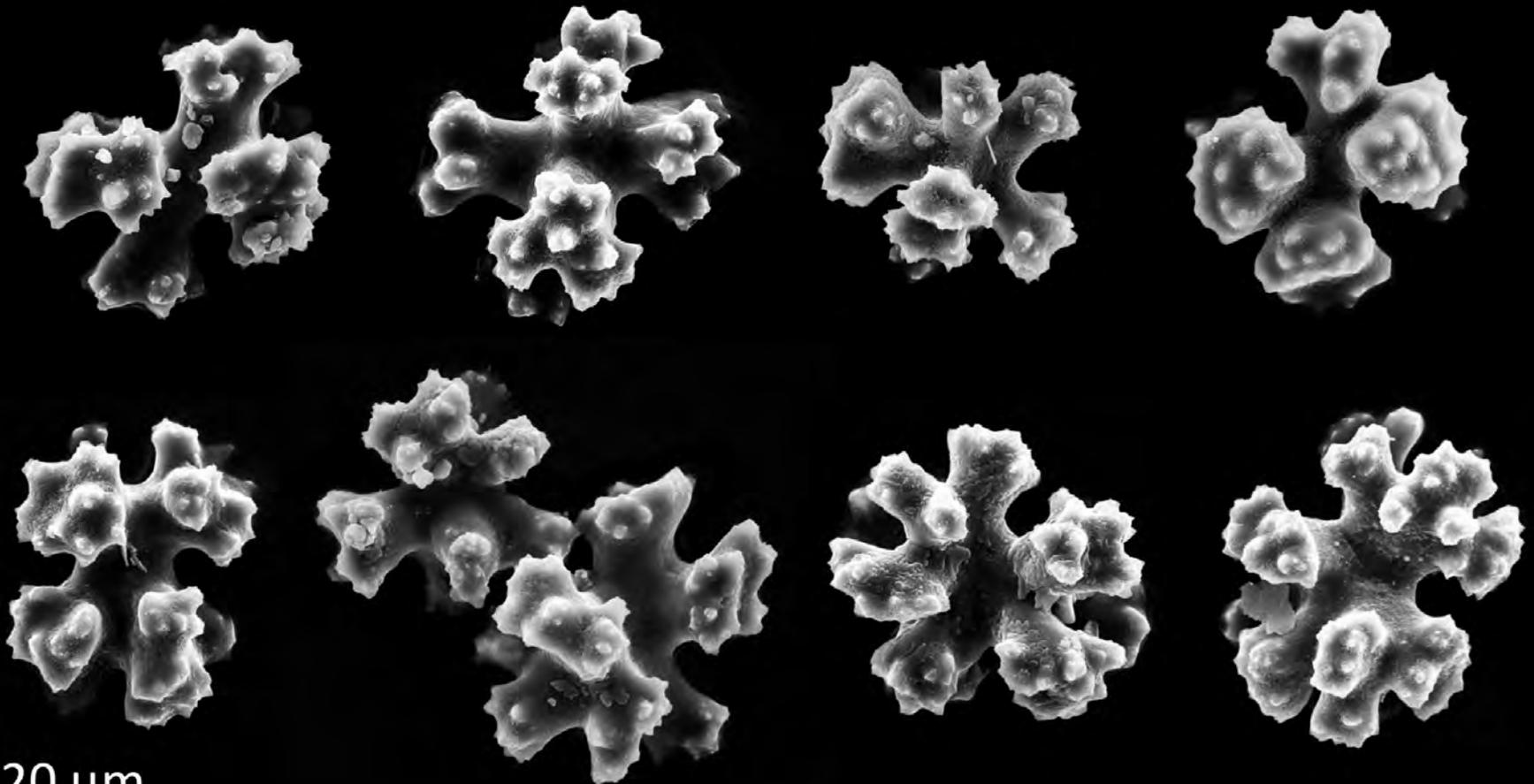
# Specie commerciali e predatori apicali



# Bloom profondi di plancton gelatinoso

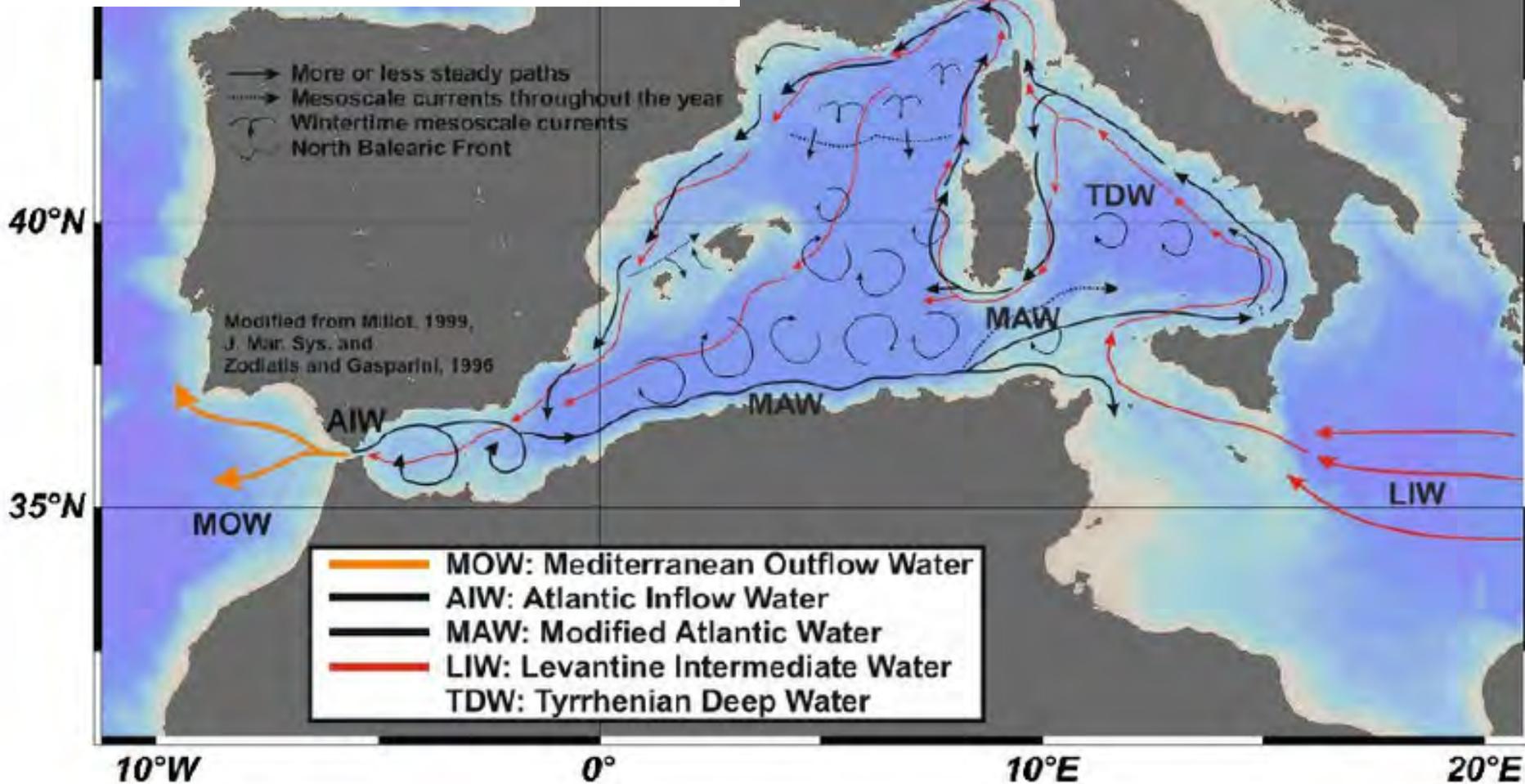
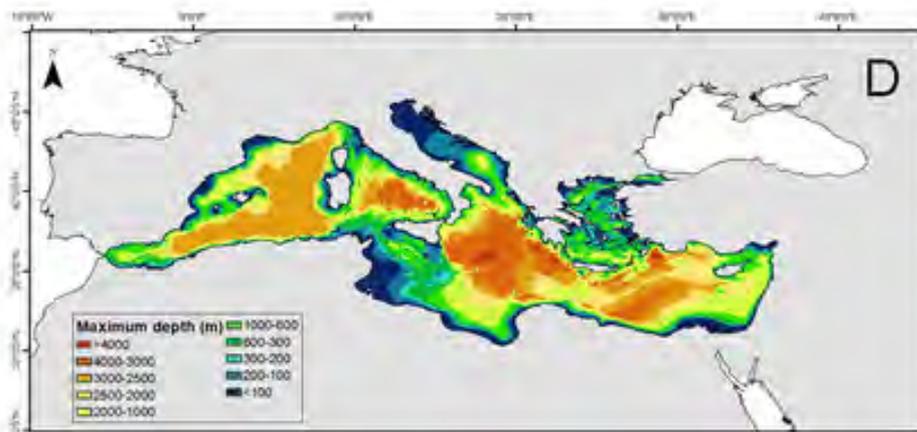


# Hotspot di biodiversità ... si ma atlantica!

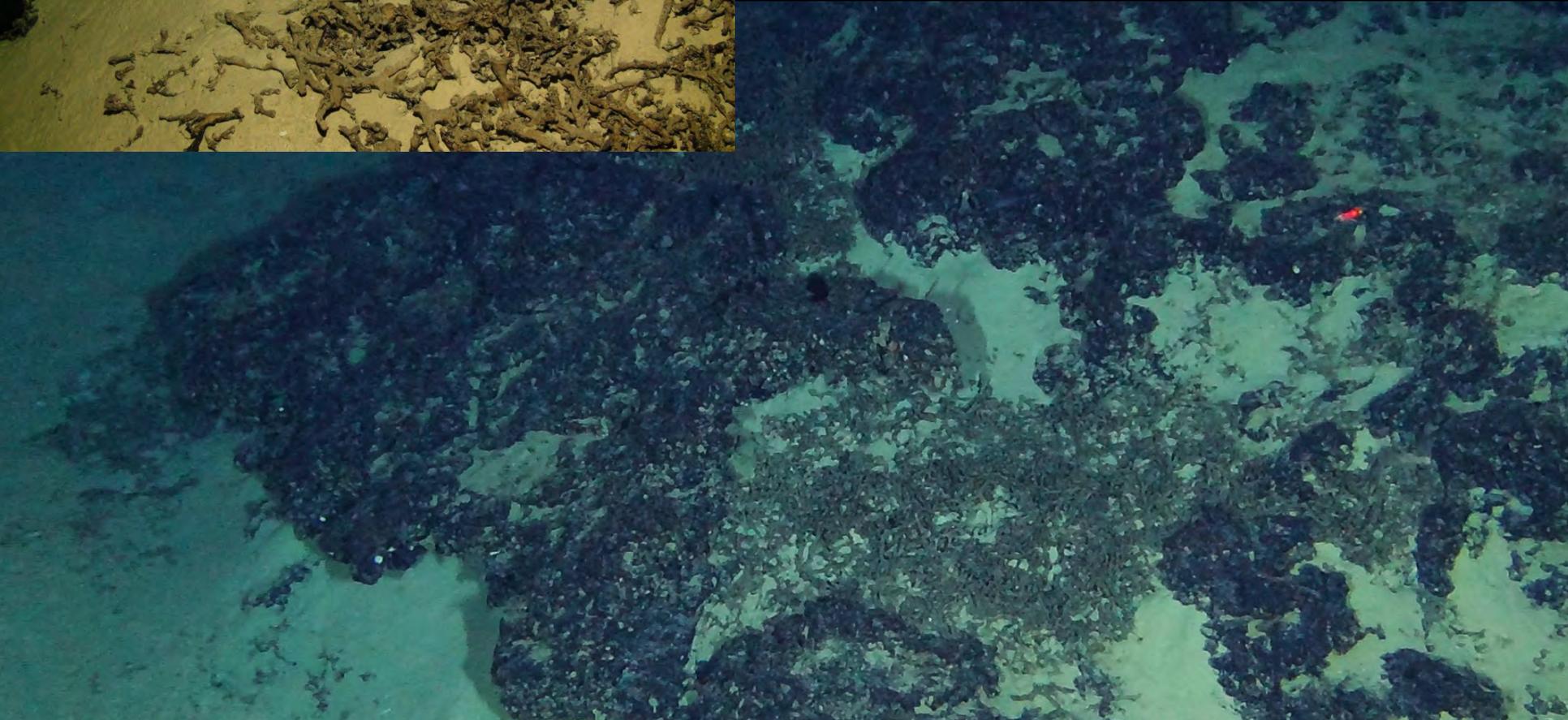


20  $\mu\text{m}$

# Una questione di corrente ...

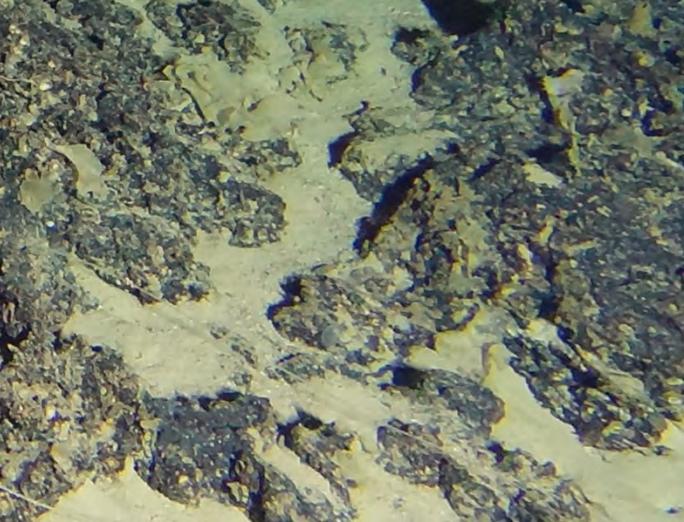
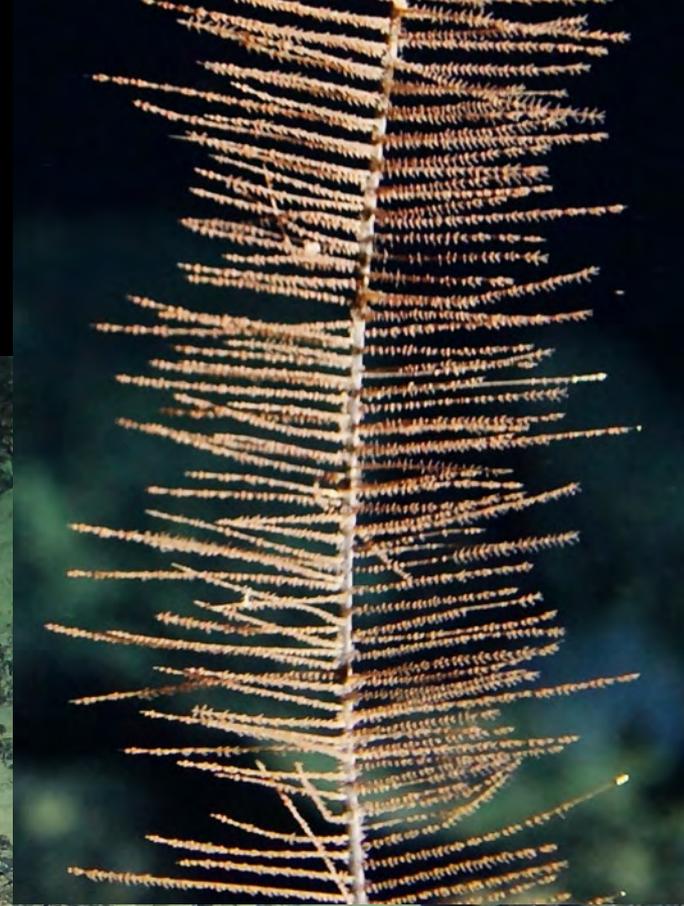
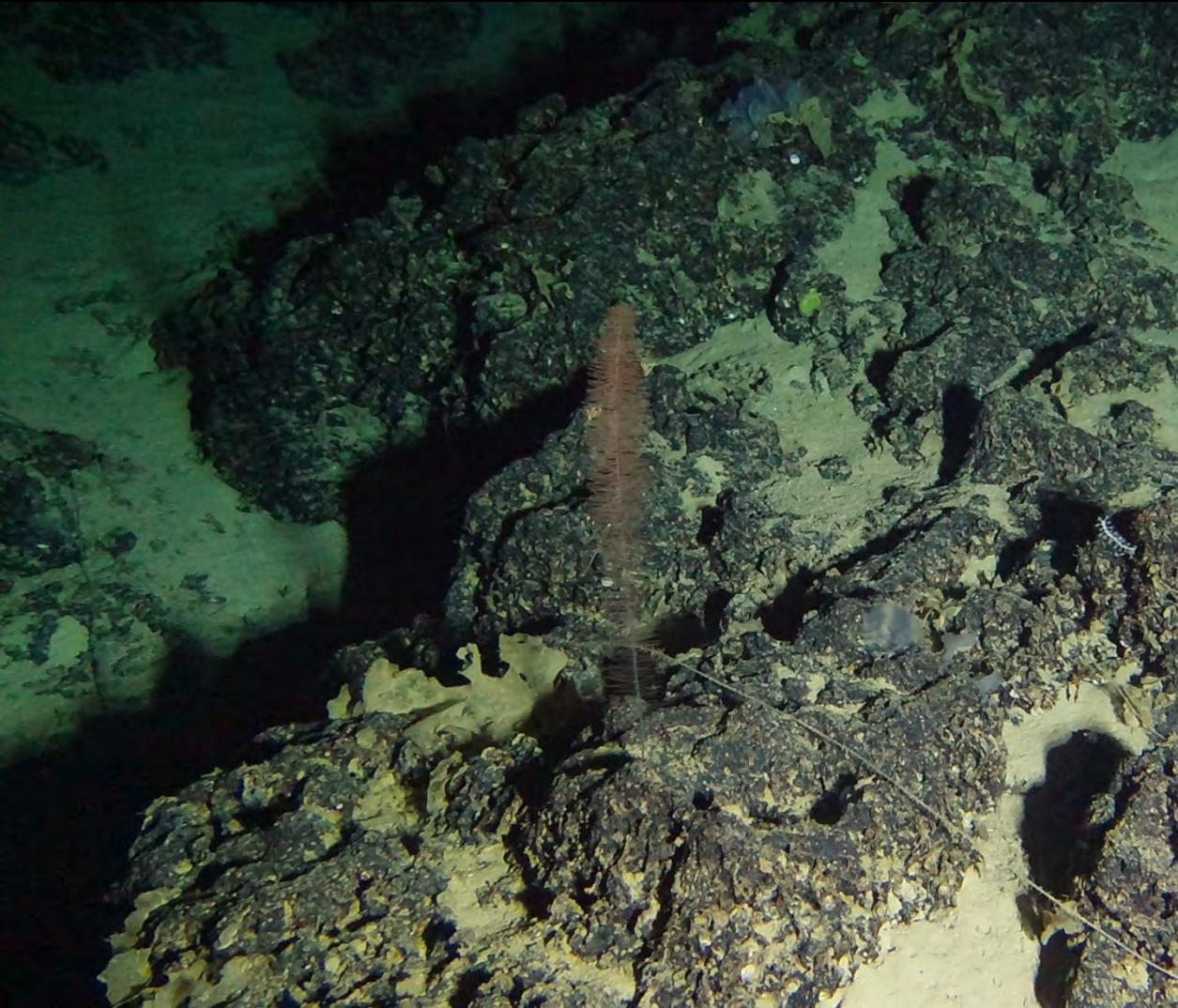


# Antichi reef che testimoniano i fasti del passato

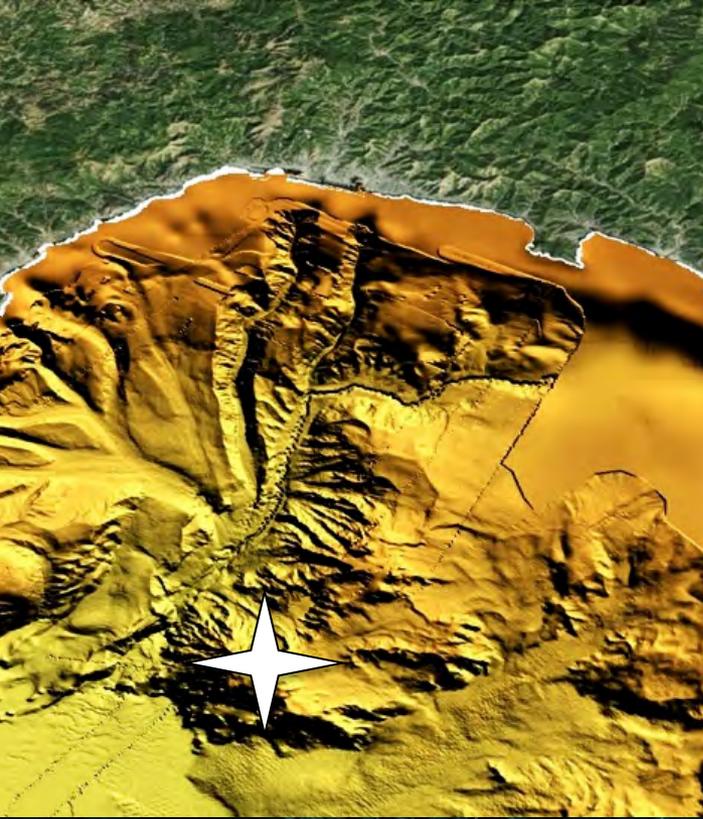


# Unicità

## Il caso di *Parantipathes* n. sp.



# Effetto canyon



Ad ognuno il suo ...

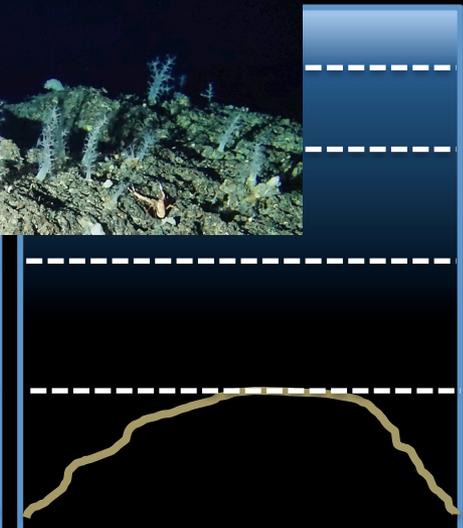
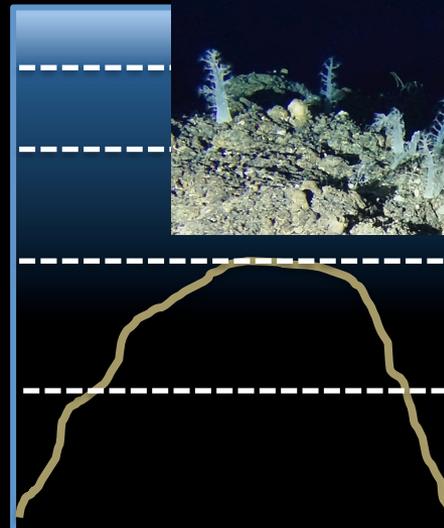
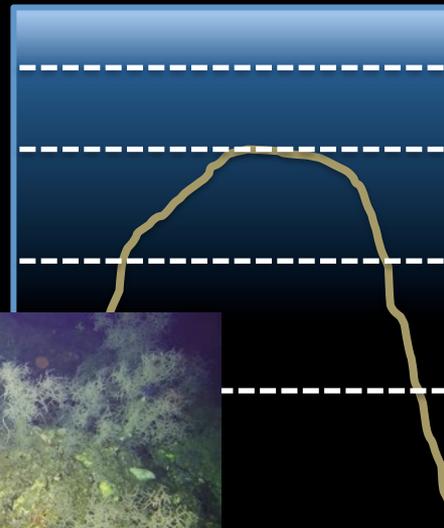
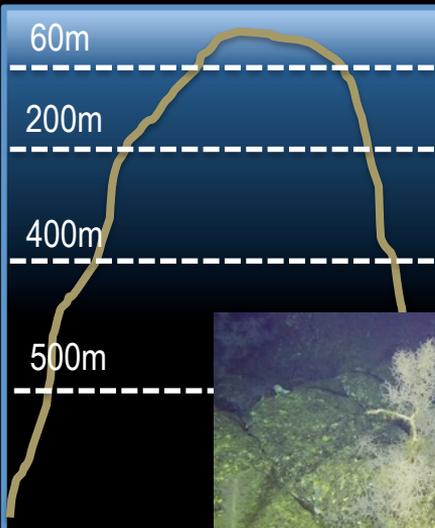


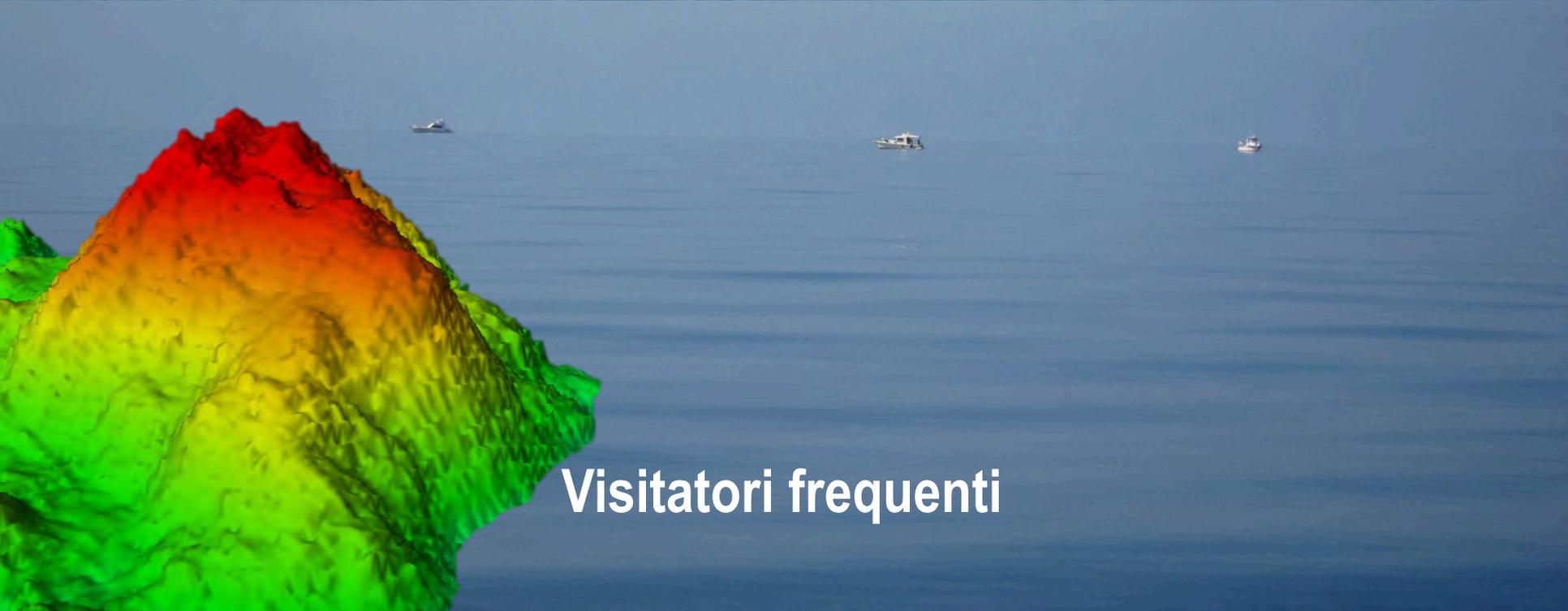
**Eufotici**

**Mesofotici**

**Batiali superiori**

**Batiali inferiori**





Visitatori frequenti

# Tracce antropiche in profondità



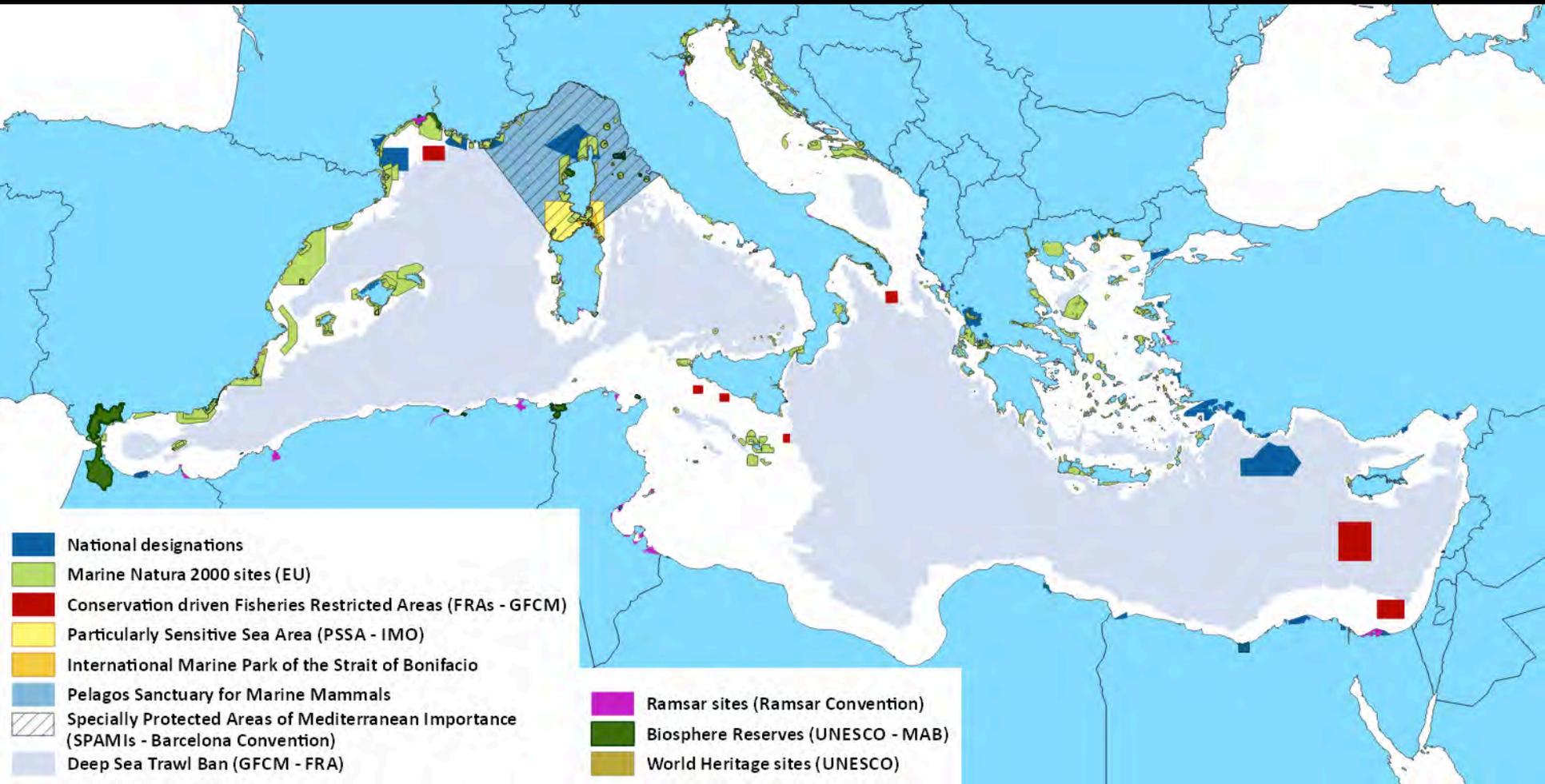
# Troppo lontani dagli occhi ...



I seamount Vercelli e Palinuro sono stati recentemente proposti come aree vulnerabili off-shore nell'ambito della ReteNatura2000



# Conservazione delle zone off-shore e zone di restrizione alla pesca



**Space .... The final  
frontier?**

