



Maritime Heritage and Blue Growth

Introduction

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What's the Connection?

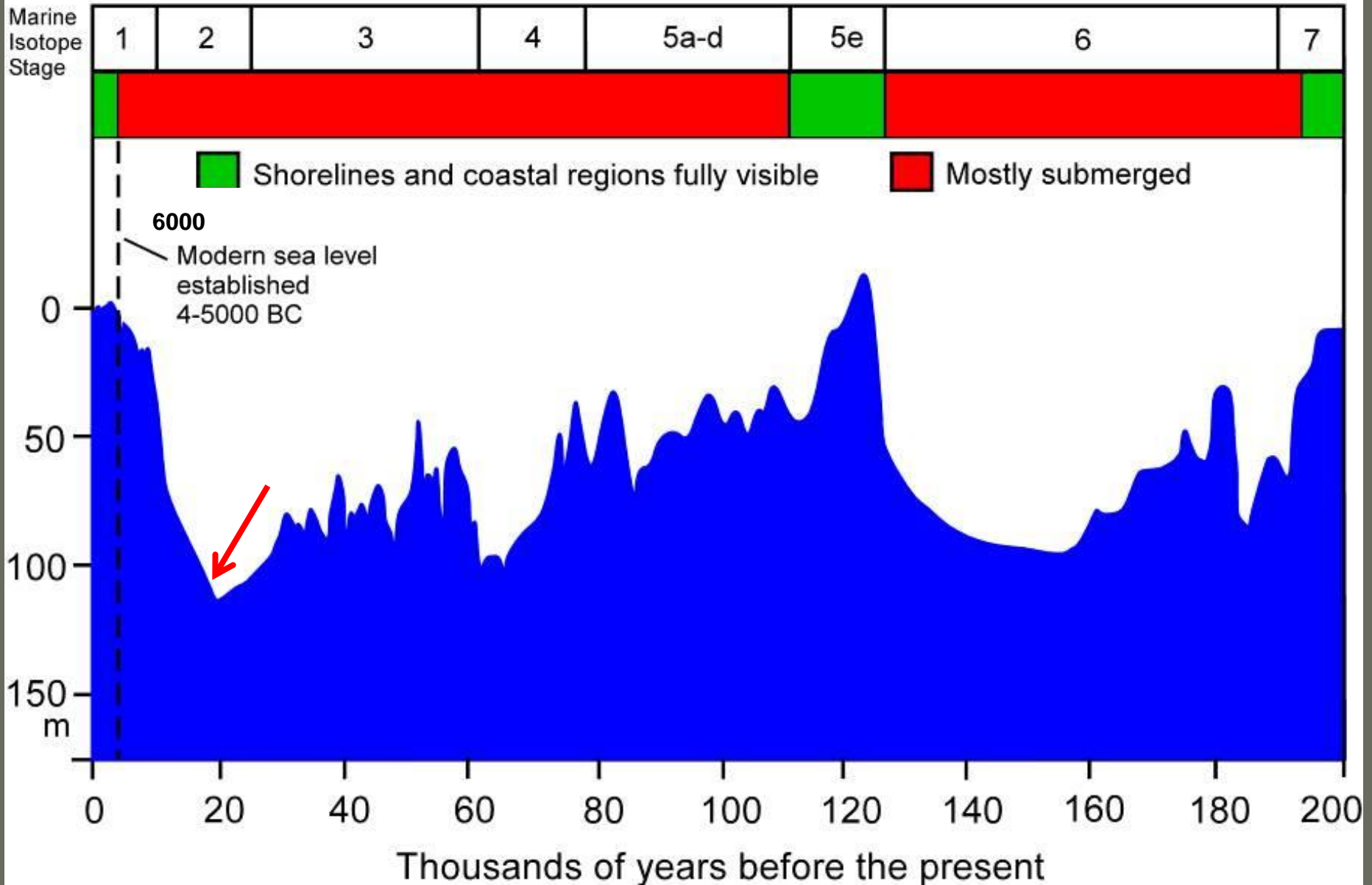
**European
Maritime
Day**

Athens

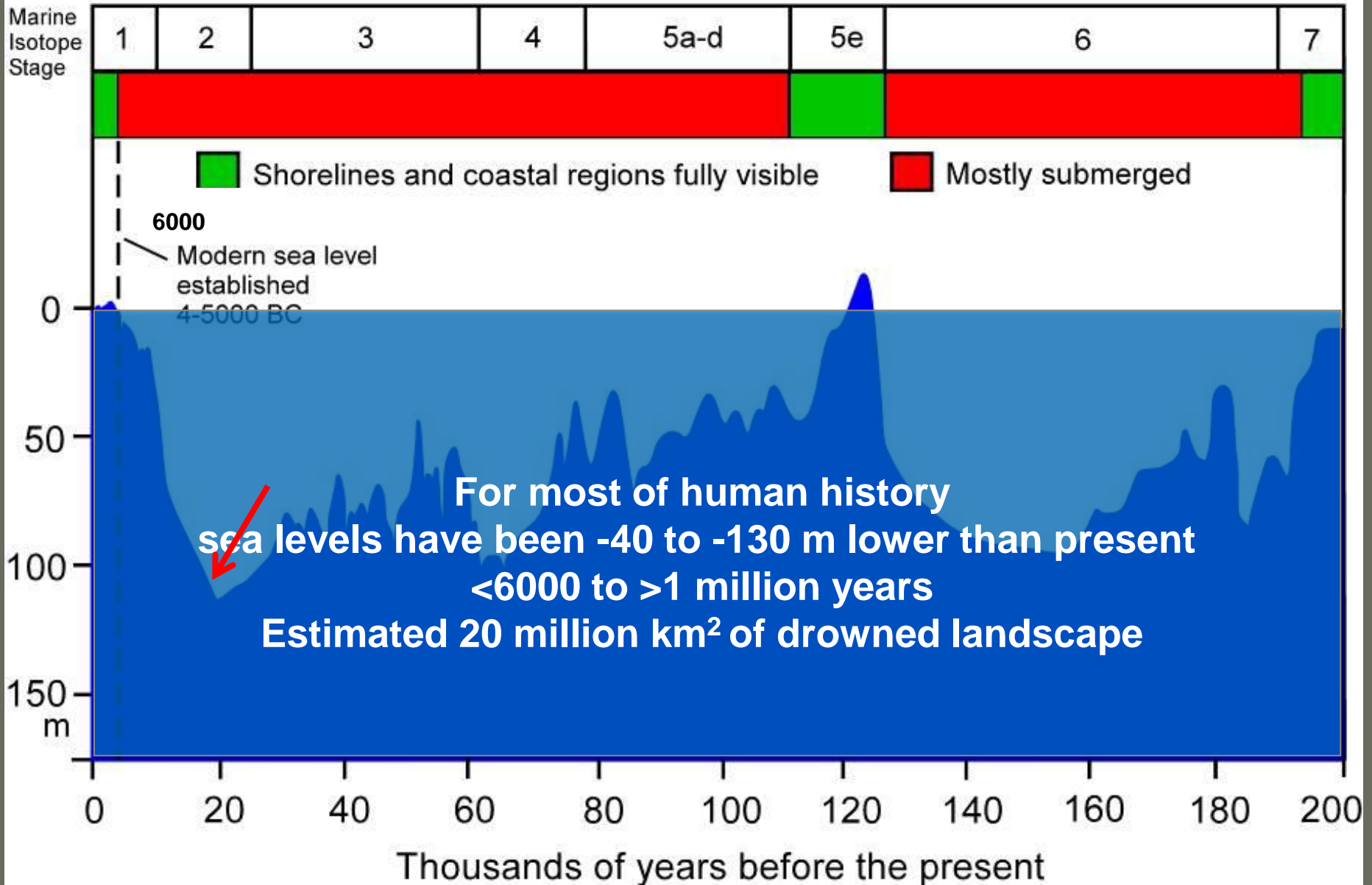
**27 May
2015**



Deep-sea isotope records of sea level change



Deep-sea isotope records of sea level change





If sea level continues to rise at the present rate

And all the ice sheets melt

What will Europe look like in 10,000 years time?

And what will archaeologists of the future make of the remains of our civilization?

Continental Shelf Prehistoric Research

What's Missing?

- European land mass increased by 40%
 - The best territory for human settlement and dispersal at all periods
 - (ecology, climate, water supplies, soil fertility, access routeways)
-
- Early human evolution and dispersal 1my onwards
 - Development of fishing 150k ++
 - Origins of seafaring 50k ++
 - Extinction of the Neanderthals 40-25k
 - Pre-agricultural colonization of Mediterranean Islands 13k
 - Earliest Near Eastern agriculture 12k (underwater village of Atlit Yam)
 - Mediterranean farming dispersal 8k
 - Roots of Minoan and Bronze Age civilizations 5.5k (underwater town of Pavlopetri)

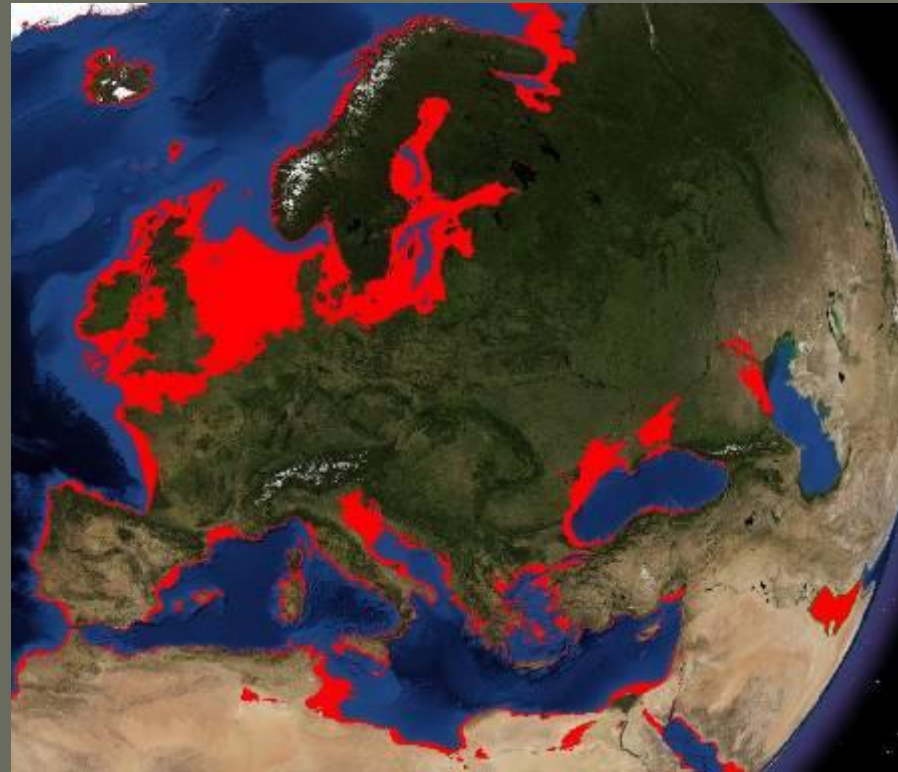


Image courtesy of Simon Fitch, Ben Geary
University of Birmingham
Data from USGS Ned & ETOPO2

What survives on the seabed?

Over 3000 sites currently known

Mostly in shallow water (final stages of sea level rise)

Just the beginning

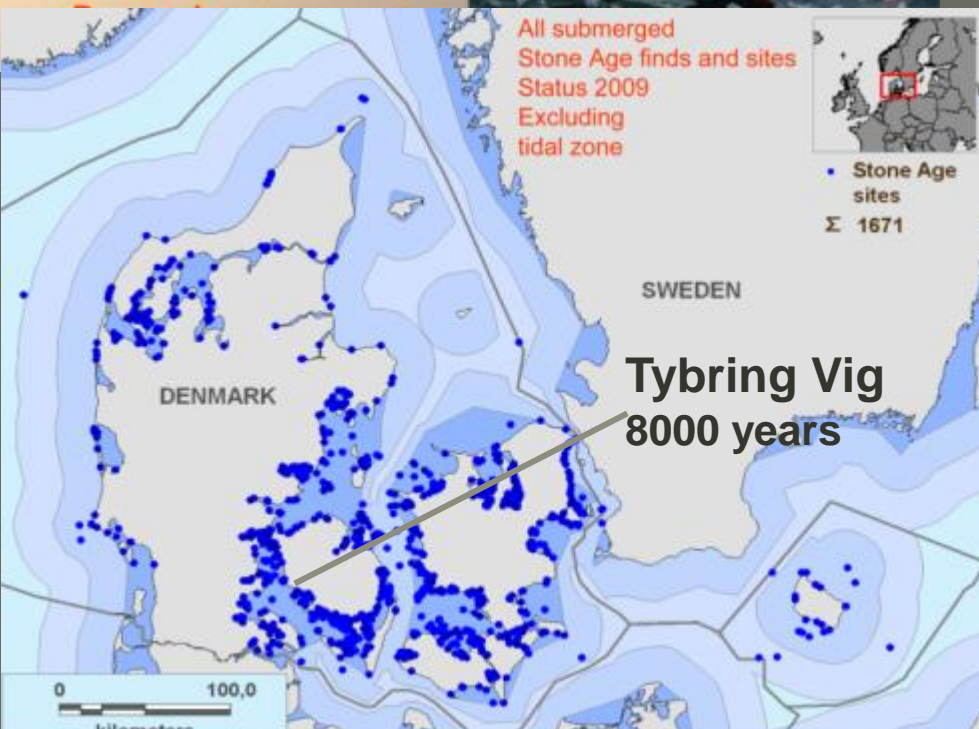




Anders Fischer



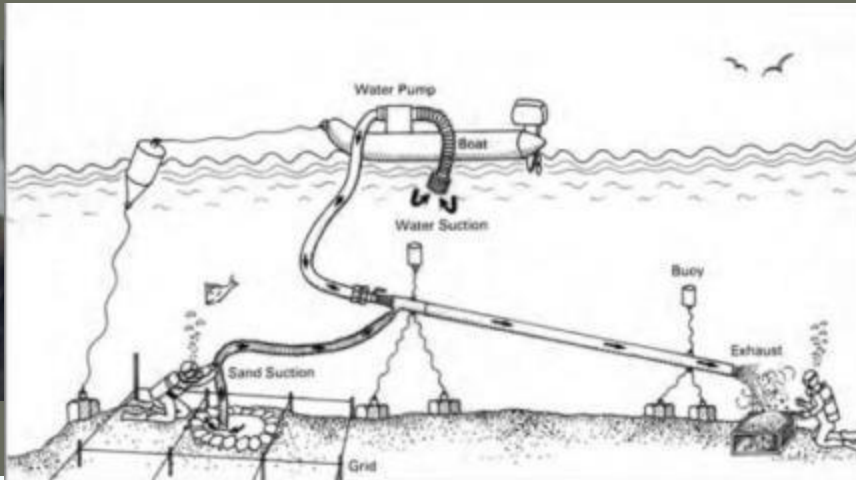
Ole Grøn





Ehud Galili

Site of Atlit Yam



Domestic crops

Wheat
Barley
Lentils
Flax



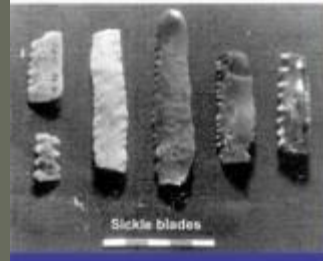
Domestic wheat



Fig and wheat seeds

Wild fruit

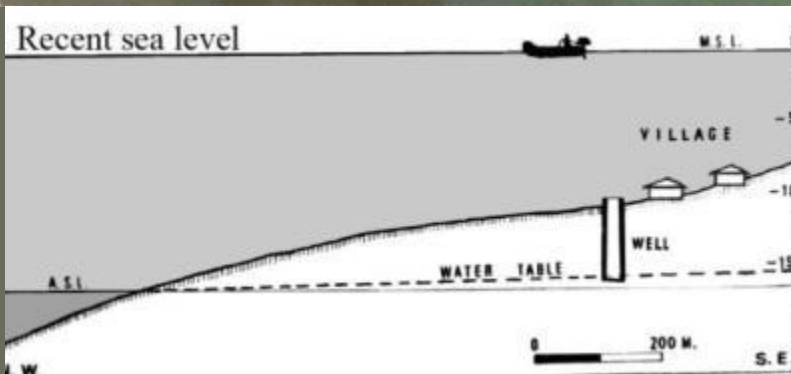
Fig
Almond
Date
Grape
Raspberry



Sickle blades



Flax fibers



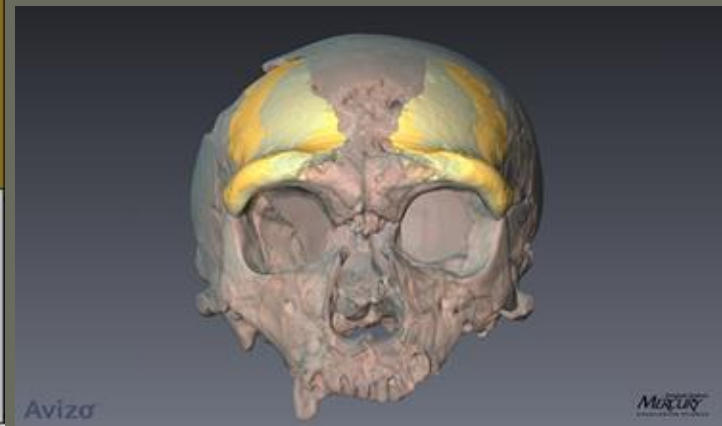
Trigger fish (*Balistes carolinensis*)



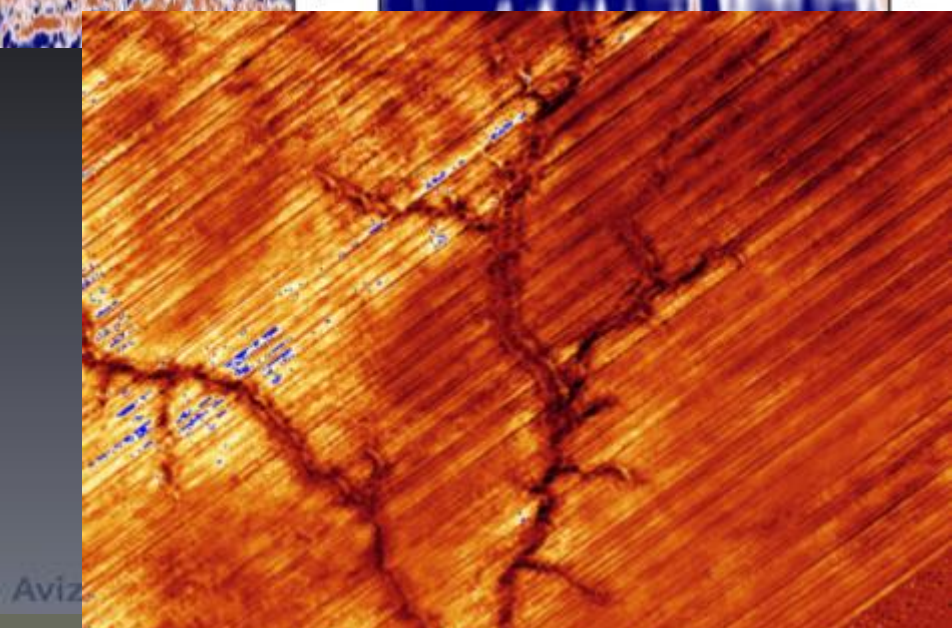
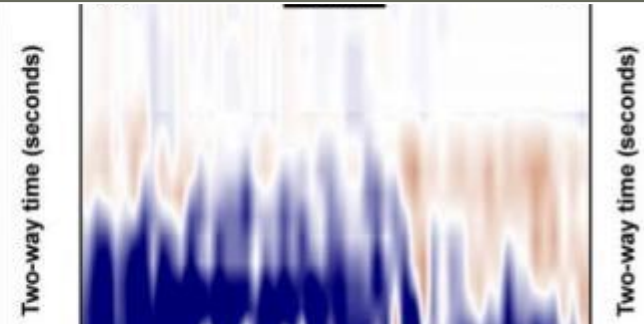
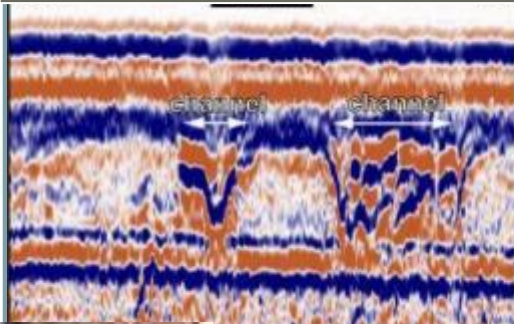
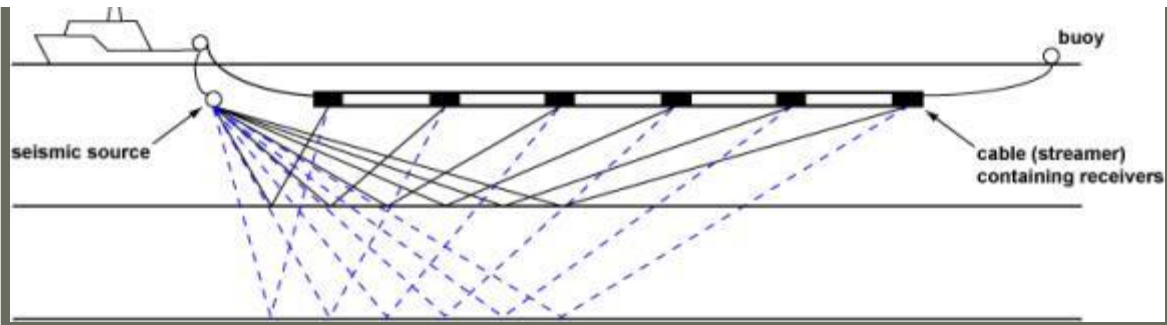
Ancient stone weights used for fishing

9000 years

North Sea Palaeolandscapes Project: Vince Gaffney et al. seismic records from the North Sea oil and gas industry (University of Birmingham)



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COST Action TD0902 SPLASHCOS: 2009-2013 www.splashcos.org

Originating from Project Deukalion established in 2008 by Nic Flemming

Submerged Prehistoric Archaeology and LANDscapeS of tHe COntinental Shelf

Chair: Geoff Bailey, University of York; Vice-Chair: Dimitris Sakellariou, Hellenic Centre for Marine Research



- Research coordination and planning; 25 European States; >100 members
- Archaeologists, marine geoscientists, heritage managers, industry representatives
- 8 workshops and meetings; 6 training schools for Early Stage Researchers
- Website with reports on techniques, facilities, collaboration with industry, outreach
- Publications
- Stimulated 23 projects and €20 million – Inter-Reg, FP7, ERC, national, bilateral
- Critical mass on threshold of creating new discipline
- Databases linked to EMODNET and Geo Seas web portals

“...our submerged cultural heritage is not a renewable resource; it is a unique, irreplaceable cultural asset, which can provide answers to many research questions about our prehistoric ancestors, landscapes and climate”

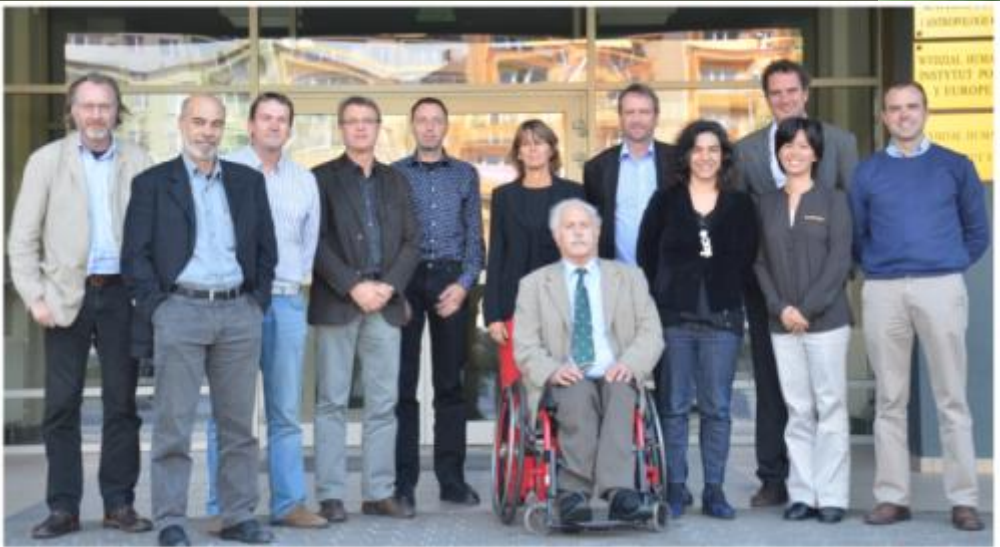
October 2014



Land Beneath the Waves

Submerged landscapes and sea level change

A joint geoscience-humanities strategy
for European Continental Shelf Prehistoric Research
Position Paper 21



marineboard.eu

UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage

The Legal Protection of Underwater Cultural Heritage

The UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage



- International community's response to destruction of submerged archaeological sites
- Ensures the same protection to underwater heritage as that accorded to land-based heritage
- Encourages preservation, research and public access

Inter-Reg V Archaeology of the Two Seas Project



Inter-Reg V Archaeology of the Two Seas Project



Summary

- Most of human prehistory lies on the seabed and research is needed to fill this huge gap in our understanding
- This will also provide better data and insights into sea-level change and its human impact – past, present and future
- The challenges require scientific, archaeological, governmental and industrial collaboration on an international scale
- Intensifying coastal and offshore industrial and commercial activity presents both threats and opportunities
- International treaties impose obligations to manage this underwater cultural heritage (UNESCO convention)
- Public interest in this theme is very high and further strengthens the case