

....HYPOX partner institutions

Partner 13:

UPAT (Patras, Greece)



....HYPOX partner institutions: UPAT

Department of Geology

University of Patras

Laboratory of Marine Geology &
Physical Oceanography (M.G.P.O)

www.gaiaocean.geology.upatras.gr/marine_geology



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The Laboratory of Marine Geology & Physical Oceanography (M.G.P.O) in brief (1/2)

The aims of the Laboratory:

to train undergraduate and postgraduate students in Marine Sciences

to carry out fundamental research in the fields of Marine Geology, Physical Oceanography, Palaeoclimatology/Palaeoceanography and Oceanographical Archaeology

to offer high quality scientific and engineering service and consultation to Governmental Agencies, Local Authorities and Private Industry

(harbors, pipelines, u/w power and telecommunication cables, e.t.c)

HYPOX-related groups and role in HYPOX

I.N.G.V

> field studies (Amvrakikos Gulf, Aetoliko Lagoon, Katakolo bay-WP7) and WP1,WP4

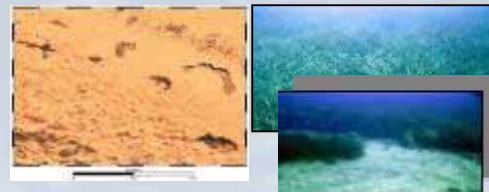
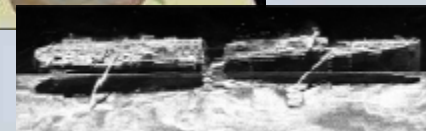
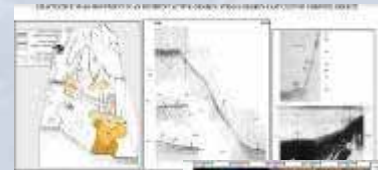
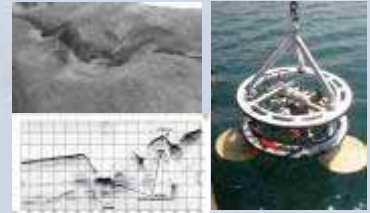


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The Laboratory of Marine Geology & Physical Oceanography (M.G.P.O) in brief (2/2)

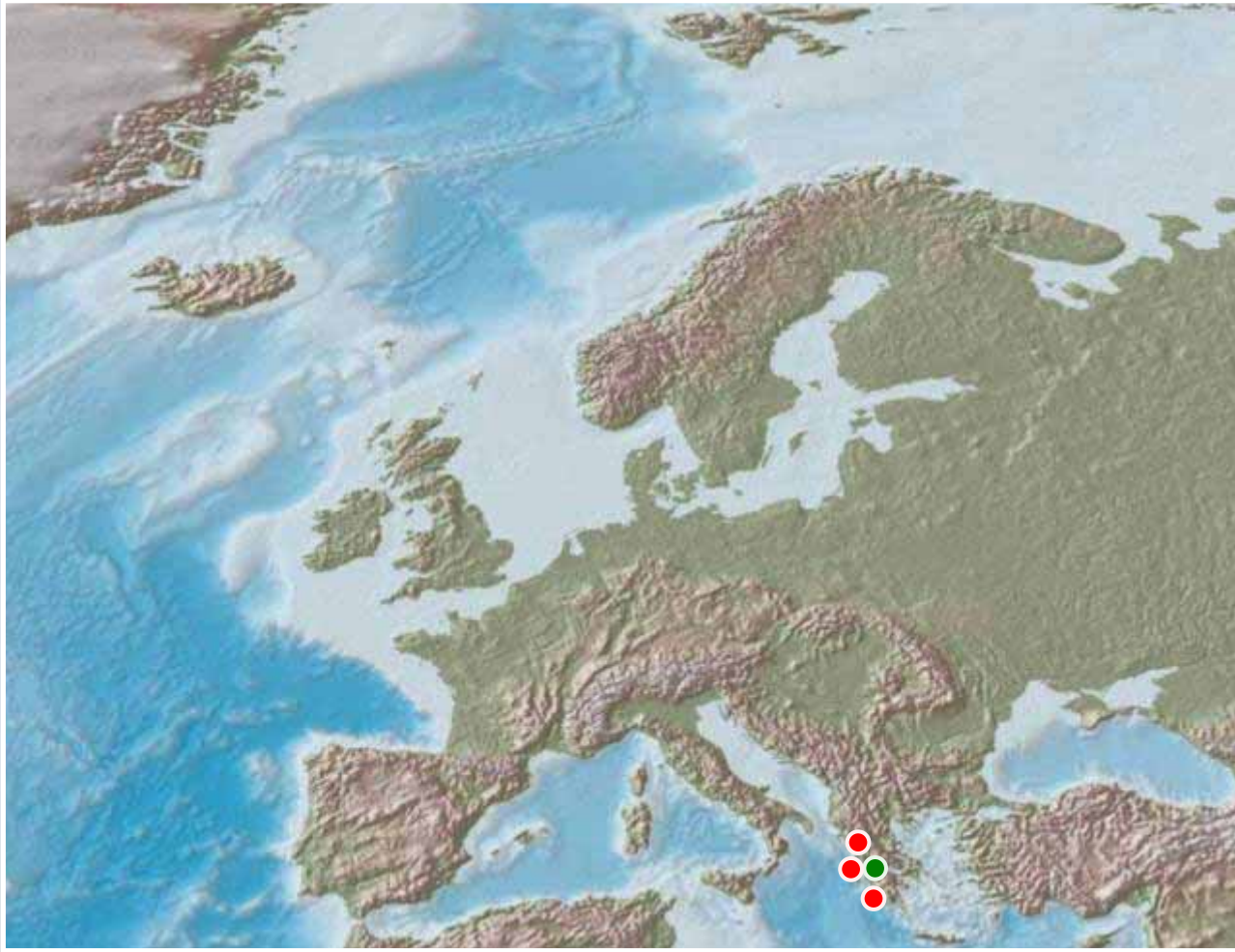
The Laboratory has been involved in a wide range of scientific topics:

- from gas charged sediments to pockmarks monitoring
- from submarine landslides to submarine faults and tsunamis
- from heavy metals and NORM/Cs in marine sediments to marine litter
- from palaeoceanography to reconstruction of coastal and underwater archaeological sites
- Habitat mapping from *Posidonia oceanica* to coralline algae formations



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Institute & main study sites location



Laboratory of Marine
Geology & Physical
Oceanography
(UPAT)

Amvrakikos Gulf

Aetoliko Lagoon

Katakolo Bay

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Infrastructure (1/4)



3.5 kHz ORE Pinger
 with 4 and 9
 transducers

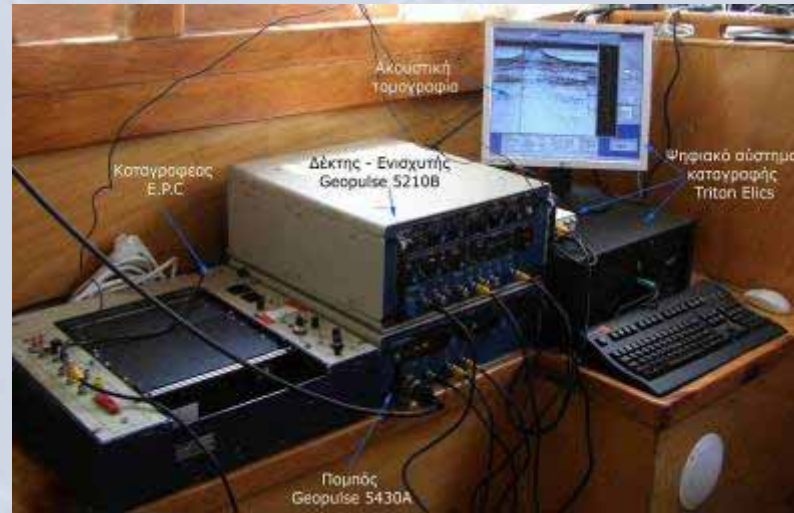


S.I.G. Hydrophones:
 1 channel, 4 cells.
 1 channel, 8 cells
 2 channels, 4, 8, 12 cells

S.I.G. Sparker
 2000A και 2000B
 Geopulse Receiver
 Triton Elics Digital
 Acquisition system



SUBBOTOM PROFILER
 3.5kHz Pinger, O.R.E.-Geopulse
SPARKER (SIG Sparker System 2000AB)



Geopulse Transceiver/Receiver Triton Elics Digital Acquisition system

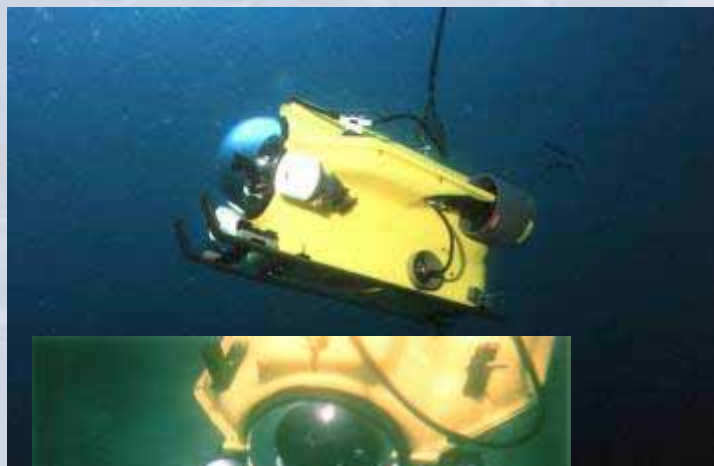


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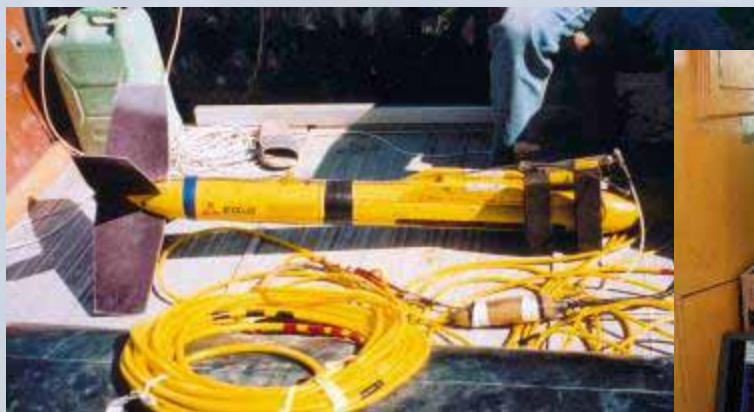
Infrastructure (2/4)

REMOTE OPERATED VEHICLE
Benthos MKII (R.O.V)

Operational depth 300 m



SIDE SCAN SONAR EG&G
272TD towfish Edgetech 4100-
P digital recording unit



MARINE MAGNETOMETER

Overhouse type

SeaSPY (Marine Magnetics)



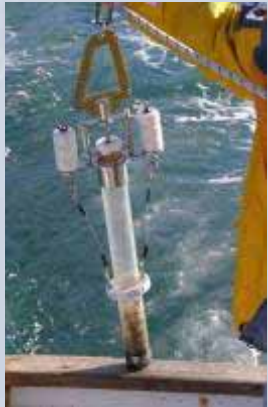
...HYPOX partner institutions: UPAT Infrastructure (3/4)



Benthos Gravity Corer



Box Corer



KC Kajak Corer



Day-Grab



Van-Veen Grab



Multi-parameter seawater sensors YSI 600XL



Multi-parameter seawater sensor and current meter Aanderaa RCM9 MK II.



Multi-parameter seawater sensors Insitu troll 9500



Water Sampler HydroBios



Methane Sensor METS Franatech

...HYPOX partner institutions: UPAT Infrastructure (4/4)

Sieves



particle size analyzer
(MasterSizer 2000)



Perkin Elmer 3100 Atomic
Absorption Spectrometer



ICP-MS Perkin Elmer



Microscope sediments
analysis



shear box

Microwave digestion MLS 1200 mega

