

Exploiting underwater 3D imaging in the Cultural and Creative sector



www.3dresearch.it

Prof. Fabio Bruno

Projects



Interreg 
Mediterranean
BLUEMED
BLUEMED PLUS
www.blumed.interreg-med.eu

Sail in History
ON THE ROUTE FROM GREECE TO MAGNA GRÆCIA
www.sailinhistory.eu

iMARE CULTURE
www.imareculture.eu

Science Diver
www.sciencediver.eu

NERITES
Monitoring Underwater Heritage
www.nerites.eu

DIVE IN HISTORY
UNDERWATER CULTURAL ROUTES IN GREECE AND ITALY
www.diveinhistory.com

MeDryDive
Personalized dry dive experiences for the promotion of Mediterranean Underwater Cultural Heritage sites
www.medrydive.eu

LAB4 DIVE
www.lab4dive.com

TECTONIC
www.tectonicproject.eu

REEVALUATE
www.reevaluate.eu

VISAS
www.visas-project.eu

DIVE SAFE
www.divesafe.eu

CoMAS
www.comasproject.eu

Mare BOX
www.marebox.eu

3D 4CH
Competence Centre
www.3d4ch-competencecentre.eu

CREAMARE
www.creamare.eu

ART SEA 4
Inspiring change for a healthy ocean
www.art4sea.eu

BCT hubs
www.bcthubs.eu

MOLUX
MOLUX - MUSEUM OF UNDERWATER LUXEMBOURG

InSecTT
www.insectt.eu

6 Horizon, 2 Interreg Med, 3 Creative EU, 6 EMFF, 1 PON, 1 PAC, 1 POR

Underwater photogrammetry



2018

3D Reconstruction of the Peristera Shipwreck

Location: Alonissos, Sporades, Greece

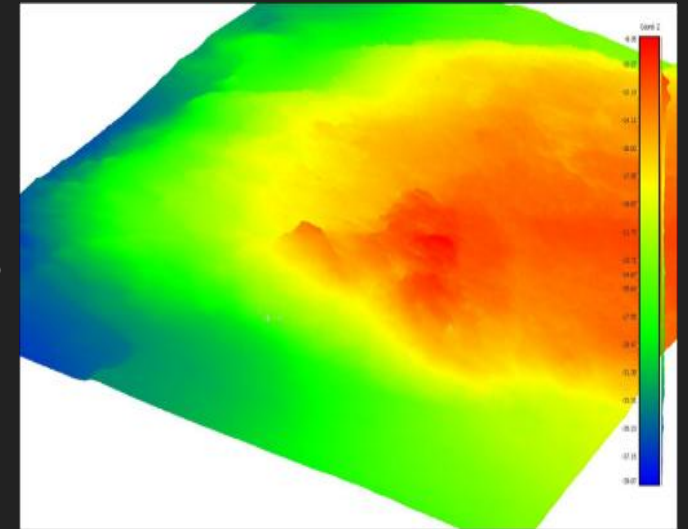
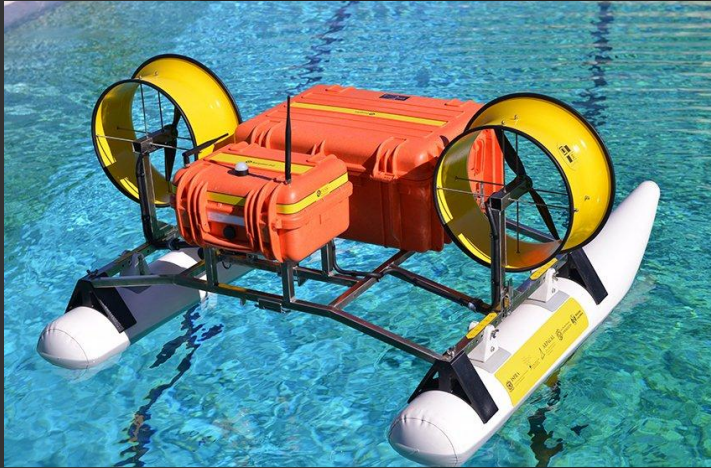
Depth: 22-28 meters.

More than 3.000 amphorae (dated 420-400 BC) distributed in an area of about 25 x 12 meters

Realized in the Interreg MED BLUEMED Project for the Greek Minister of Culture and Sport, Ephorate of Underwater Antiquities



Underwater robotics and sensing technologies



Autonomous Surface Vehicle – Modular and easily configurable



Dimensions	1.15 x 1.50 x 0.75 mt
Weight	20 Kg
Propulsion	2x Thruster Bluerobotics T500
Payload max	30 Kg
Speed max	5 knots
Power	2 x Batteries LIPO 5s 20000mah 1 x Battery 12 V
Endurance	3 hours
Electronics	Autopilot Onboard PC with i7 Wifi 5Ghz Telemetry 896 Mhz



Side Scan Sonar

Multibeam



Multiparametrics
probes and
water sampler

BLUEDEPTH3D : 3D Vision for Unmanned Underwater Vehicles

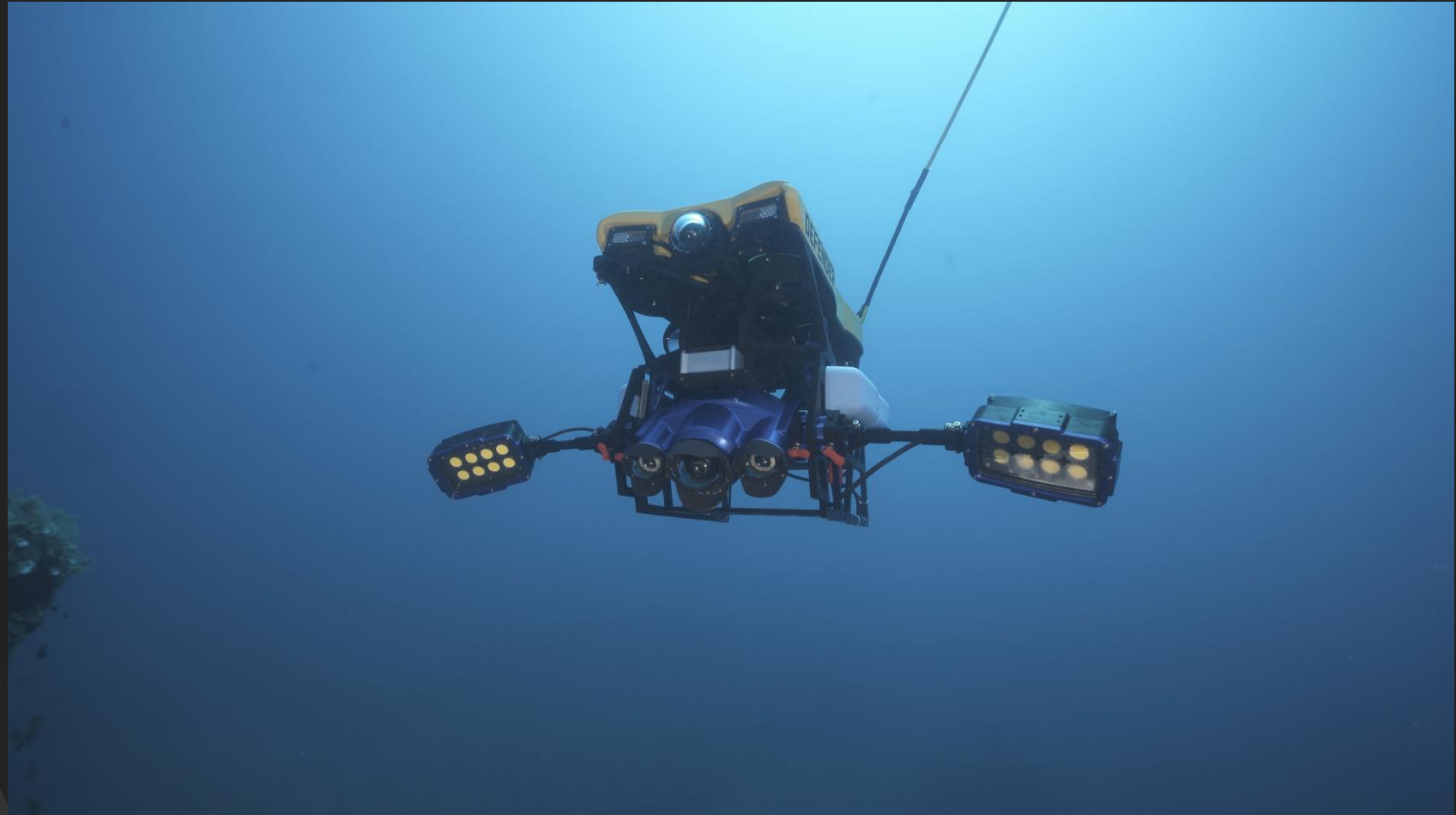


Main Sensor: 35mm Full Frame 61 MP

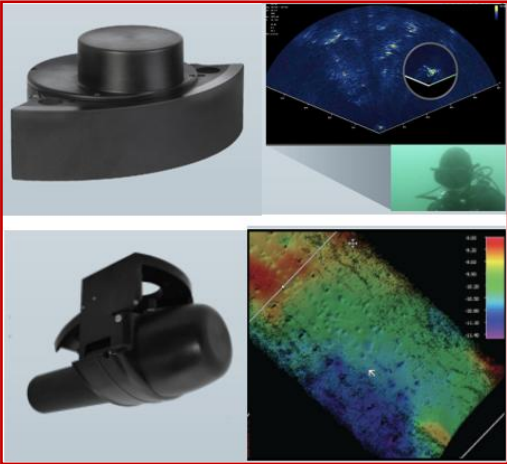
Stereocamera: Dual 1/2.6" - 8 MP

PU: Nvidia Jetson Xavier NX

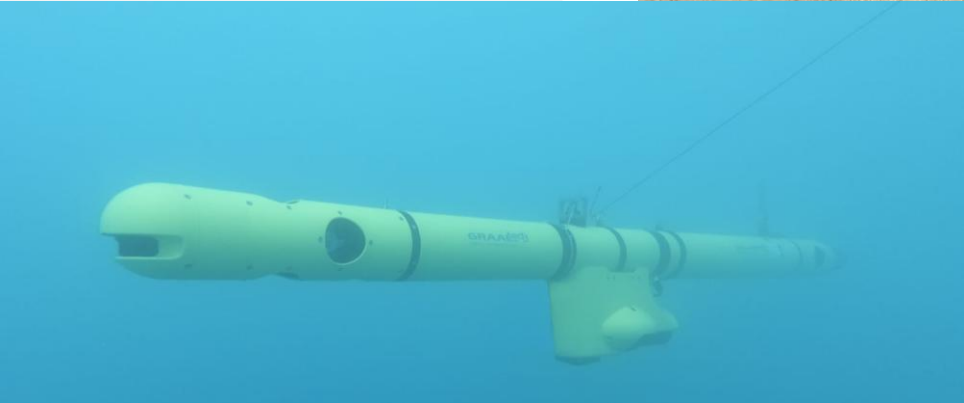
LED strobo lights: 2 x 125k / 250k lm



Multibeam Echosounder on AUV



MULTIBEAM ECHOSOUNDER

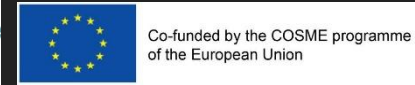


Multimedia production for virtual exhibitions and public engagement



DIVE in the PAST

The first videogame about Underwater Archaeology

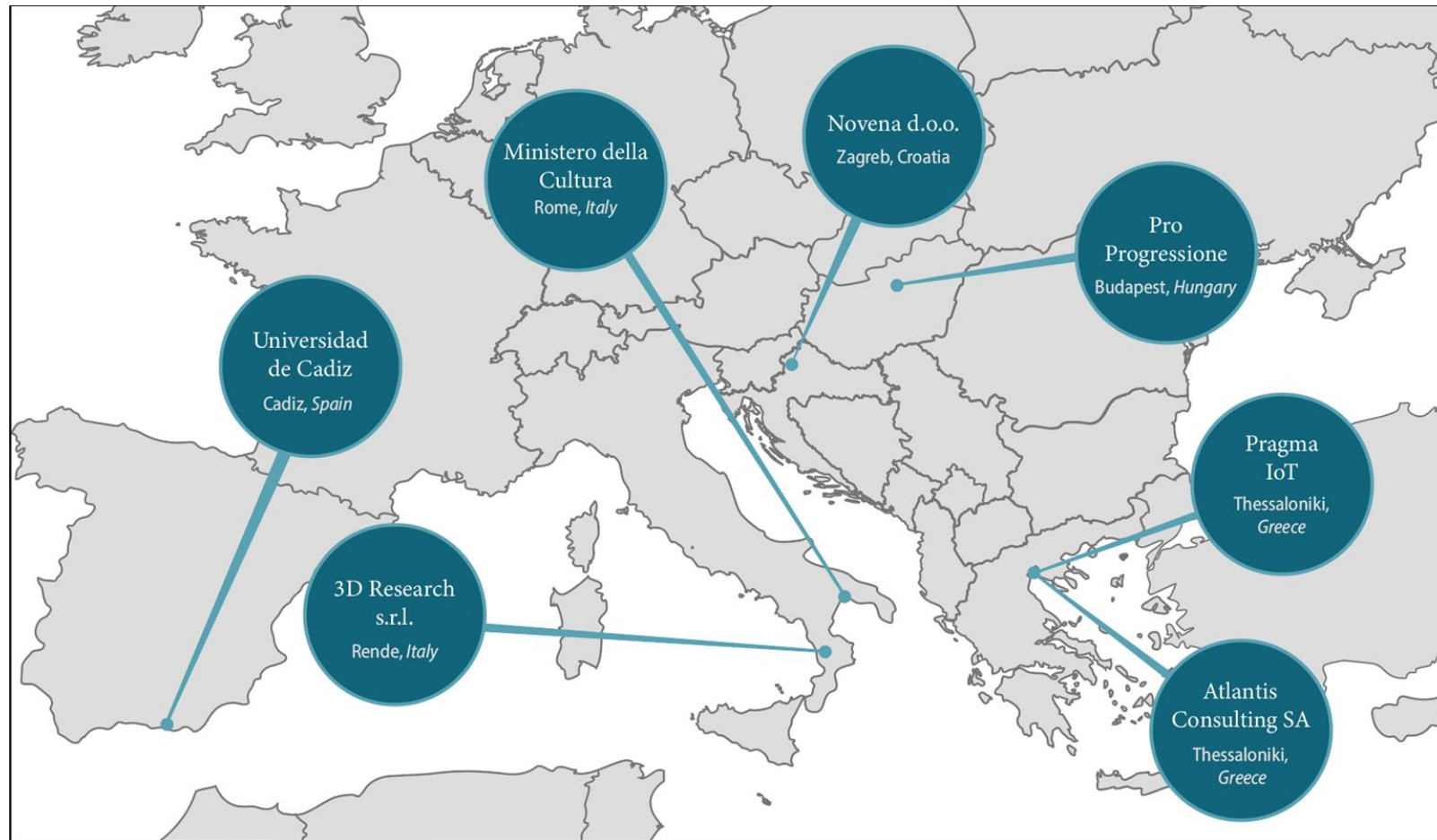


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Co-funded by
the European Union

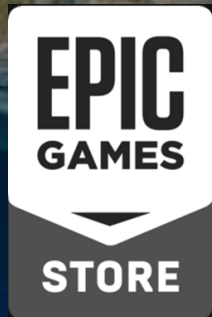
- ▶ **Call:** CREA-CULT-2021-COOP
- ▶ **Duration:** 01/06/22 - 30/05/25
- ▶ **Total Budget:** € 1.338.375,00
- ▶ 7 Partners
- ▶ 5 Countries
- ▶ 7 Additional Cultural Institutions
- ▶ 5 Creative professionals
- ▶ 1 Videogame





CREAMARE

THE GAME



 Co-funded by
the European Union





Inspiring change for a healthy ocean



Co-funded by
the European Union

- ▶ **Call:** CREA-CULT-2022-COOP
- ▶ **Duration:** 01/02/23 - 31/01/26 (36 months)
- ▶ **Total Budget:** € 1.426.786,00
- ▶ **Partners:** 7
- ▶ **Countries involved:** Italy, Malta, Greece, Spain, Albania
- ▶ **Priority:** 1 - A European Green Deal



Thanks for your attention!



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UNIVERSITÀ DELLA CALABRIA 
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