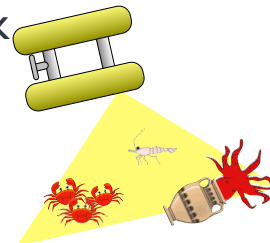


IIS International Seminar on **Underwater Archeology**

When – Friday July 31, 2015 (15:00~16:30)

& Where – Kasaoka Lounge 2F D Block

Please join us! No registration, just turn up.
Contact Blair Thornton: blair@iis.u-tokyo.ac.jp
if you need any more info.

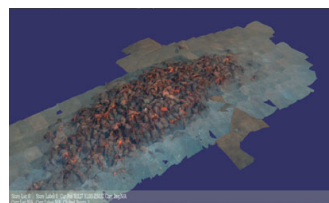


Underwater Archeology using Robotic Vision Based 3D Reconstructions - Dr. Oscar Pizarro

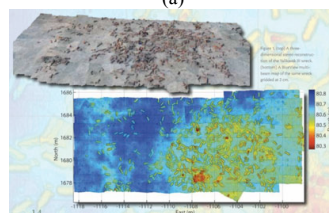
Oscar Pizarro is a research fellow at the Australian Centre for Field Robotics (ACFR) at the University of Sydney. Over the last ten years he has been involved in establishing underwater robotics as a useful tool for marine scientists in disciplines such as ecology, geology and archeology. He is also one of the co-founders of the Autonomous Underwater Vehicle (AUV) Facility of Australia's Integrated Marine Observing System (IMOS), charged with monitoring benthic reference sites across the country. Much of the research at the ACFR has focused on mapping, visualisation and automated interpretation of sensor data to assist scientists.



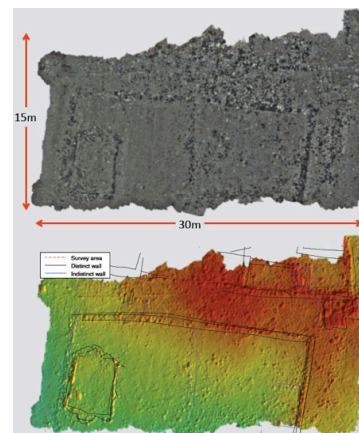
Mapping for underwater archeology presents significant challenges compared to its land-based counterpart. Human-based surveys are constrained by limited visibility and bottom time, as well as the absence of high precision GPS. Robotics and the use of visual simultaneous localisation and mapping (SLAM) techniques offer a new way of capturing the layout of an archeological site underwater. This talk discusses some of the present technological challenges and presents some results from archeological expeditions using robotic platforms to map underwater sites in the Mediterranean, including a bronze age submerged settlement and wrecks from Roman times.



(a)



(b)



(c)

Examples of archeological surveys conducted using high-resolution stereo imagery.

For more details about Oscar and his group's work, please visit the following link.
<http://marine.acfr.usyd.edu.au>