

1. Record Nr.	UNINA9910337919303321
Titolo	3D recording and interpretation for maritime archaeology // edited by John K. McCarthy, Jonathan Benjamin, Trevor Winton, Wendy van Duivenvoorde
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-03635-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XII, 237 p.) : 160 illus., 119 illus. in color.)
Collana	Coastal Research Library, , 2211-0577 ; ; 31
Disciplina	910.285 930.102804
Soggetti	Remote sensing Archaeology Coasts Application software Geophysics Three-dimensional imaging in archaeology Underwater archaeology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Calibration of Camera Systems for Underwater Photogrammetry -- Presenting Photogrammetric 3D Recording Essays in the Submerged Harbour Infrastructure of the Ancient and Medieval Harbour of Kyllene/Glarentza -- Using Digital Visualisation of Archival Sources to Enhance Archaeological Interpretation of the 'Life History' of Ships -- Presenting Computer Vision Photogrammetry (CVP) for Maritime Archaeology Research and Public Outreach -- High-Resolution Sub-Seabed Survey and Visualisation -- From Integration to Explanation: Moving from 3 to 4 Dimensions -- 3D Scanning and Mapping of the City of Adelaide -- Recent 3D Survey Work in Egypt -- Innomar's Parametric Sub-Bottom Profiler (SBP) Survey of Sub-Seabed Viking Fortifications in the Baltic -- Early Results of the High-Resolution Imaging of HMAS Sydney and HSK Kormoran -- Underwater Archaeology using Riegl Bathymetric Lidars -- The 17th/18th Century

Drumbeg Shipwreck in Scotland -- James Matthews Trial Sub-Bottom Profile Survey -- Image-Based 3D Underwater Recording and Ocularcentrism -- 3D Photogrammetry for an by the Public -- Integration of Topographical and Bathymetrical Surveys in High-Resolution Textured 3D Prints.

Sommario/riassunto

This open access peer-reviewed volume was inspired by the UNESCO UNITWIN Network for Underwater Archaeology International Workshop held at Flinders University, Adelaide, Australia in November 2016. Content is based on, but not limited to, the work presented at the workshop which was dedicated to 3D recording and interpretation for maritime archaeology. The volume consists of contributions from leading international experts as well as up-and-coming early career researchers from around the globe. The content of the book includes recording and analysis of maritime archaeology through emerging technologies, including both practical and theoretical contributions. Topics include photogrammetric recording, laser scanning, marine geophysical 3D survey techniques, virtual reality, 3D modelling and reconstruction, data integration and Geographic Information Systems. The principal incentive for this publication is the ongoing rapid shift in the methodologies of maritime archaeology within recent years and a marked increase in the use of 3D and digital approaches. This convergence of digital technologies such as underwater photography and photogrammetry, 3D sonar, 3D virtual reality, and 3D printing has highlighted a pressing need for these new methodologies to be considered together, both in terms of defining the state-of-the-art and for consideration of future directions. As a scholarly publication, the audience for the book includes students and researchers, as well as professionals working in various aspects of archaeology, heritage management, education, museums, and public policy. It will be of special interest to those working in the field of coastal cultural resource management and underwater archaeology but will also be of broader interest to anyone interested in archaeology and to those in other disciplines who are now engaging with 3D recording and visualization.
