1. Record Nr. UNINA9910366635703321 Remote sensing for archaeology and cultural landscapes : best practices **Titolo** and perspectives across Europe and the Middle East / / edited by Diofantos G. Hadjimitsis, Kyriacos Themistocleous, Branka Cuca, Athos Agapiou, Vasiliki Lysandrou, Rosa Lasaponara, Nicola Masini, Gunter Schreier Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 3-030-10979-8 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (xvi, 308 pages): 213 illustrations, 180 illustrations in color Collana Springer Remote Sensing/Photogrammetry, , 2198-0721 Disciplina 621.3678094 621.367 Soggetti Remote sensing Cultural heritage Cultural policy Archaeology Regional planning Urban planning Culture Technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto PART I. POLICY PERSPECTIVE -- CHAPTER 1. Opportunities by the Copernicus Program for Archaeological Research and World Heritage Site Conservation -- CHAPTER 2. Recent Destructions in Palmyra/Syria, Looting and Illegal Antiquities Trade -- PART II. ADVANCEMENTS IN THEORY -- CHAPTER 3. Recent Destructions in Palmyra/Syria, Looting and Illegal Antiquities Trade -- CHAPTER 4. Automatic Change Detection From High Resolution Satellite Imagery -- CHAPTER 5. SAR for Archaeological Prospection in Europe and in the Middle East --

CHAPTER 6. Dense Surface Models from Airborne and Spaceborne (Multi-)Stereo Images -- PART III. ARCHAEOLOGY AND CULTURAL

LANDSCAPES -- CHAPTER 7. Active Satellite Sensors in Cultural Heritage Research: The Use of SAR for Archaeological Prospection --CHAPTER 8. Archaeological looting feature extraction by Satellite Remote Sensing: Approach and application in Syria -- CHAPTER 9. Identification of buildings damaged by natural hazards using very high resolution satellite images: The case of earthquake in L'Aquila, Italy --CHAPTER 10. Remote Sensing Roman and Byzantine Eastern Frontier Zone in Landscape: Case Studies from Syria and Turkey -- CHAPTER 11. Archaeological landscapes and built heritage: Climate risk and contribution of RS Technologies -- CHAPTER 12. Interpreting archaeological features on the Wieprza River floodplain, West Pomerania, Poland -- CHAPTER 13. Towards Early Warning for Damages to Cultural Heritage Sites: the Case of Palmyra -- CHAPTER 14. The Use Of UAVs for Cultural Heritage and Archaeology -- PART IV. ADDED VALUE OF IN-SITU DATA -- CHAPTER 15. Remote Sensing Work in Palmyra/Syria -- CHAPTER 16. Monitoring Cultural Heritage Sites Affected by Geo-Hazards Using In-Situ and SAR Data: The Choirokoitia Case Study. .

Sommario/riassunto

This book investigates the added value that satellite technologies and remote sensing could provide for a more sustainable mapping, monitoring and management of heritage sites, be it for purposes of regular maintenance or for risk mitigation in case of natural or mancaused hazards. One of the major goals of this book is to provide a clear overview on policy perspectives, regarding both space policy as well as heritage policy, and to provide possible suggestions for common ground of these two fields, in Europe and around the world. Readers will develop a good understanding of cutting-edge applications of remote sensing and geographic information science, and the challenges that affect heritage maintenance and protection. Particular attention is given to Earth observation and remote sensing techniques applied in different locations. This book brings together innovative technologies, concrete applications and policy perspectives that can lead to a more complete vision of cultural heritage as a resource for future development of our society as a whole. .