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Nota di contenuto	Introduction -- Chapter 1. Earth Observation Technologies.-1. Remote sensing for Earth observation -- 2. Quantitative analysis of research literature on space observation of cultural heritage -- 3. Summary -- Chapter 2. Archaeology and Its Advances.-1. Origin of western archaeology.-2. Birth of archaeology in China.-3. Advances of archaeology in China -- 4. Basic techniques and methods in archaeology.-5. Theoretical developments of archaeology -- Chapter 3. Theory and Methods of Space Archaeology -- 1. Spatiotemporal features of archaeology.-2. Electromagnetic spectrum.-3. Applicability of space archaeology.-Chapter 4. Remote Sensing for Archaeological Survey.-1. Optical remote sensing for archaeological survey.-2. Microwave remote sensing for archaeological survey.-3. LiDAR remote sensing for archaeological survey.-Chapter 5. Integrated Technologies

for Space Archaeology.-1. Geophysical technology.-2. Virtual reality.-technology.-3. Web technology.-4. Global navigation satellite system.-5. Geographical information system.-6. Big data.-Chapter 6. Interpretation of world cultural heritage sites from space.-1. Asia.-2. Europe.-3. Africa.-4. Americas -- Chapter 7. Interpretation of cultural heritage sites in China.-1. Silk Road.-2. Grand Canal.-3. Great Wall.-Chapter 8. Future of Space Archaeology.-1. Development of archaeology.-2. From archaeology to space archaeology.-3. Research agenda in space archaeology.-4. Disciplinary development and education in space archaeology.-5. Broad outlook of space archaeology for cultural heritage sites.-Appendix 1. International organizations on space archaeology.-Appendix 2. Major conferences on space archaeology.

Sommario/riassunto

This book presents the basic principles and the latest advances in space archaeology. Following general reviews of the state of the art of Earth observation technologies and archaeology, the book introduces the principles and methods of space archaeology, remote sensing methods for archaeological survey, and integrated archaeological survey methods including geophysics, virtual reality, web technologies, global positioning systems (GPS), geographical information systems (GIS), and big data. The book then presents two chapters on case studies of word heritage sites in Asia, Europe, Africa, and Americas, including three major world heritage sites in China: The Great Wall, Grand Canal, and Silk Road. The last chapter of the book discusses the future of space archaeology. This book has an interdisciplinary appeal and scholars with an interest in cultural heritage and remote sensing technologies for Earth value its contribution.