Session title: **Space Technologies Facilitating the Sustainable Development of World Heritages**

Session Organizer: **International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO; Urban Heritage, Climate Change & Disaster Risk Management, ICCROM**

Short Description

Even though space technologies (ST) was not developed intentionally for world heritage (WH) protection, it provides an advanced set of innovative and flexible tools that integrate scientific research into heritage science, which forms the evidential basis to support measures for the protection of WH sites. The ST also opens up paths of methodological innovation to facilitate future conservation of cultural and natural properties with new paradigms. Based on a half-century review of the applications of ST in the field of WH, we find that the ST has effectively reshaped our means for WH conservation in four major domains of application: mapping, monitoring, modeling and management of the WH.

Objectives

To share and communicate the recent advances, emerging challenges, and future prospects of employing space technologies to safeguard world's natural and cultural heritage and to discuss how joint research activities within natural and cultural heritage should be developed to promote the achievement of heritage-related SDG goals, targets and indicators.

Expected Results

HIST and ICCROM, has been active in applying space technologies for promoting the conservation and sustainable development of natural and cultural heritage during the last decade. Most important Chinese and international conservationist have been invited and early-stage scientist are presenting latest results. Discussion about future direction of collaboration is discussed and roadmap formed.

Agenda

Time 17:00~18:30, September 7th 2023 Room: 305 B

Moderators:

LUO Lei

Associate Researcher

International Centre on Space Technologies for Natural and Cultural Heritage (HIST), UNESCO

International Research Center of Big Data for Sustainable Development Goals (CBAS), China

Lei LUO is an associate professor of CBAS. He is also serving as the Head of First Research Department of International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO (HIST), member of International Council on Monuments and Sites (ICOMOS), and member of International Scientific Committee on Aerospace Heritage. His research interests include natural and cultural heritage and sustainability, remote sensing of biodiversity and conservation, and space archaeology. His current work also focuses on adopting multidisciplinary approaches to meet the needs of scientific cognition and evaluation of the Sustainable Development Goals (SDG11 and 15). He has published 70 papers and won 10 awards.

Rohit JIGYASU

Project Manager

Urban Heritage, Climate Change & Disaster Risk Management, ICCROM

Rohit Jigyasu is a conservation architect and risk management professional from India, currently working at ICCROM as Project Manager on Urban Heritage, Climate Change and Disaster Risk Management. He is also at present the vice president of ICOMOS International Scientific Committee of Risk Preparedness (ICORP). Rohit served as UNESCO Chair holder professor at the Institute for Disaster Mitigation of Urban Cultural Heritage at Ritsumeikan University, Kyoto, Japan, where he was instrumental in developing and teaching International Training Course on Disaster Risk Management of Cultural Heritage. He was the elected President of ICOMOS-India from 2014-2018 and president of ICOMOS International Scientific Committee on Risk Preparedness (ICORP) from 2010-2019. Rohit served as the Elected Member of the Executive Committee of ICOMOS since 2011 and was its Vice President from 2017-2020. Before joining ICCROM, Rohit has been working with several national and international organizations such as UNESCO, UNDRR, Getty Conservation Institute and World Bank for consultancy, research and training on Disaster Risk Management of Cultural Heritage. He is also the main author UNESCO Resource Manual on Managing Disaster Risks for World Heritage and the co-editor of recently published Routledge book on Good Practices for Disaster Risk Management of Cultural Heritage. He also co-authored the revised draft of the UNESCO Policy on climate action for World Heritage Properties that is currently under discussion by the States Parties of the World Heritage Convention.

Participants

Event 1 (17:00~17:15, 90 minutes, 12+3min presentations)

Space-eye Sensing the Sustainability of World Cultural Heritage Sites

CHEN Fulong
Researcher
CBAS, China; HIST, UNESCO

Event 2 (17:15~17:30)

Harnessing the power of space technologies for reducing risks and building resilience of World Heritage Properties: Global Challenges and Opportunities

Rohit JIGYASU
Project Manager
Urban Heritage, Climate Change & Disaster Risk Management, ICCROM

Event 3 (17:30~17:45)

Earth observation for monitoring climate change impacts on natural World Heritage sites

Tales Carvalho RESENDE
Project Officer
World Heritage Centre, UNESCO

Event 4 (17:45~18:00)

UNESCO-designated heritage spatial information platform construction

HUO Sijia
Manager
International Centre on Space Technologies for Natural and Cultural Heritage, UNESCO

Event 5 (18:00~18:15)

Observed Olympic effects on reshaping urban greenspace of host cities

TU Ying

Research Assistant

Tsinghua University &The University of Hong Kong, China

Event 6 (18:15~18:30)

The role of space technologies for safeguarding World Heritage

LUO Lei

Associate Researcher

CBAS, China; HIST, UNESCO