

# SPACE-BASED TECHNOLOGIES FOR THE PRESERVATION OF WORLD HERITAGE SITES

Extended 45th session of the World Heritage Committee

**Tuesday 12 September 2023 / 13H-14h30 / AL AHSA OASIS ROOM**

This side event aims at discussing how the use of space-based technologies can help World Heritage practitioners (in particular site managers) better identify and prevent potential threats to sites, respond and recover from natural and anthropogenic hazards. It will do so by raising further awareness of existing collaborative opportunities with relevant partners (e.g., HIST UNESCO Category 2 Centre and the Copernicus programme) for the use of space-based technologies and analysis tools for the monitoring of the state of conservation of World Heritage sites (focus on Earth Observation applications).

<p><b>13:00 – 13:15</b></p>	<p><b>Welcoming remarks</b></p> <ul style="list-style-type: none"> <li>• <b>Mr Guy Debonnet, UNESCO, Chief of Unit, Natural Heritage</b></li> <li>• <b>Prof. Xinyuan Wang, Deputy Director, HIST</b></li> <li>• <b>Mr. Mauro Facchini, Head of Unit, Earth Observation, DG DEFIS, European Commission (video message)</b></li> </ul>
<p><b>13:15 – 13:30</b></p>	<p><b>Space-based technologies for the preservation of World Heritage sites (Mr Guy Debonnet, UNESCO, Chief of Unit, Natural Heritage)</b></p> <ul style="list-style-type: none"> <li>- <i>UNESCO and Advisory Bodies (ICCROM, IUCN, ICOMOS) activities on space-based technologies</i></li> <li>- <i>Relevance of space-based technologies in times of changing climate</i></li> <li>- <i>Impacts of climate change on state of conservation of World Heritage sites</i></li> <li>- <i>Challenges and needs for the use of space-based technologies for the preservation of World Heritage sites</i></li> </ul>
<p><b>13:30 – 13:45</b></p>	<p><b>HIST operational capabilities in monitoring the state of World Heritage sites (Prof. Xinyuan Wang, Deputy Director, HIST)</b></p> <ul style="list-style-type: none"> <li>- <i>Introduction to HIST</i></li> <li>- <i>HIST global network and partnerships</i></li> <li>- <i>SDGSAT-1, the world's first science satellite for SDGs</i></li> <li>- <i>Space technologies for World Heritage at HIST</i></li> </ul>
<p><b>13:45 – 14:00</b></p>	<p><b>Copernicus' operational capabilities in monitoring the state of World Heritage sites (Dr. Andreas Brink, Senior Scientific and Technical Project Officer, European Commission)</b></p> <ul style="list-style-type: none"> <li>- <i>Introduction to the Global Component of the Copernicus Land Monitoring Service</i></li> <li>- <i>From global indicators for biodiversity and conservation monitoring to local Hot Spot assessments</i></li> <li>- <i>Copernicus for World Heritage (cultural and natural)</i></li> </ul>
<p><b>14:00 – 14:20</b></p>	<p><b>Q&amp;A and Discussion</b></p> <ul style="list-style-type: none"> <li>- <i>How to ensure that World Heritage practitioners have access to space-based technologies?</i></li> <li>- <i>How to ensure that World Heritage practitioners have the capacity to use space-based technologies and interpret them?</i></li> <li>- <i>How to move towards an international coordination mechanism on emergency monitoring and assessment of World Heritage sites?</i></li> </ul>
<p><b>14:20 – 14:30</b></p>	<p><b>Closing of the event by the moderator</b></p>