2nd HUANGSHAN DIALOGUE ON UNESCO SITES AND SUSTAINABLE DEVELOPMENT

"UNESCO SITES • CLIMATE CHANGE • SPACE TECHNOLOGIES"

第二届联合国教科文组织名录遗产与可持续发展黄山对话会

名录遗产 • 气候变化 • 空间技术

Huangshan Recommendation

黄山倡议

There are now more than 1,800 UNESCO designated World Heritage sites, international biosphere reserves and UNESCO Global Geoparks covering billions of hectares of terrestrial, freshwater, coastal, marine as well as human-influenced ecosystems such as urban and rural cultural landscapes. They attract millions of visitors annually, and the wider landscapes in which they are situated are homes to millions of people.

目前，全球共有 UNESCO1800 余处世界遗产地、世界生物圈保护区、UNESCO 世界地质公园，覆盖数十亿公顷的陆地、淡水、海滨地区和海洋，以及一些受人类生活影响的城市、乡村与文化景观。这些地区每年吸引数百万游客，而它们本身及周边地区更是数百万人类的家园。

These places have significant potential to contribute to a range of climate change mitigation and adaptation strategies, particularly in the implementation of the Paris Agreement on Climate Change adopted in December 2015 and as a contribution towards the 2030 Agenda and its 17 sustainable development goals (SDGs) adopted by the United Nations in September 2015. Such contributions include education and awareness, research, disaster prevention and mitigation, land and resource use change and adaptation. UNESCO designated sites have the potential to play a particularly prominent role in demonstrating new and innovative approaches to climate change adaptation in the tourism sector within the framework of the International Year of Sustainable Tourism in Development in 2017.

上述世界遗产地、世界生物保护圈和世界地质公园的存在将对制定一系列减缓和适应气候变化的战略，特别是在执行 2015 年 12 月通过的《巴黎气候变化协议》和实现联合国在 2015 年 9 月颁布的《2030 可持续发展议程行动计划》中 17 个“可持续发展目标”（简称“SDG”）方面做出重要贡献，包括教育宣传、科学研究、防灾减灾、土地资源利用等。在 2017 国际可持续旅游发展年的框架下，UNESCO 名录遗产地区拟将在旅游方面展现如何采用新的手段适应气候变化上扮演至关重要的角色。

Satellite, air and ground-based sensing technologies and their applications for gathering,

analyzing and interpreting data are becoming at once increasingly sophisticated and accessible to support research, management and planning for conservation and sustainable development of the world's natural and cultural heritage. These technologies will play a critical role in strengthening UNESCO sites contributions towards effective climate change mitigation and adaptation strategies and reaching the SDGs.

卫星、空中和地面传感技术的应用在采集、分析、解释数据上取得了高度发展，可以支撑与世界自然和文化遗产的保护和可持续发展问题的研究、管理和规划。同时，这些技术将在UNESCO 名录遗产地制定有效减缓和适应气候变化的战略和实现“可持续发展目标”方面发挥关键作用。

From 11 to 15 September 2016, over 150 experts and practitioners in space technologies, World Heritage, Biosphere Reserve and UNESCO Global Geopark policy coordination and management, as well as administrators of city and land resources agencies from nearly 30 countries gathered in Huangshan City - home to the Huangshan World Cultural and Natural Heritage site and Global Geopark. Drawing on a total of 36 presentations, as well as panel sessions and discussions, insights and ideas for future action were formulated. Participants observe that monitoring and evaluating system of tourist resorts initially developed by Mt. Huangshan Administrative Committee and its partners are noted its relevance to the achievement of the SDGs of the United Nations. The participants of the 2nd Huangshan Dialogue also committed to advancing their collaboration for the exchange of information, knowledge and experience on the use of UNESCO designated sites for climate change mitigation and adaptation.

2016 年 9 月 11 日至 15 日期间，来自全球近 30 个国家约 150 余名空间技术专家，世界遗产地、世界生物圈保护区、UNESCO 世界地质公园政策协调与管理专家及实践者，城市与国土资源机构管理人员，相聚在世界文化与自然遗产地、世界地质公园所在地——黄山市。在 36 场报告会、专题会和讨论的基础上，形成了未来行动计划的思路。与会者注意到黄山及其合作伙伴初步开发的与联合国可持续发展目标相关的可持续旅游景区评测体系。第二届黄山对话会与会人员还承诺就UNESCO 名录遗产地在减缓和适应气候变化的信息、知识和经验交流上进一步增进合作。

Experts, policy-makers and practitioners participating in the 2nd Huangshan Dialogue, on “UNESCO sites · climate change · space technologies” in Huangshan City, China, from 11 to 15 September 2016,

2016 年 9 月 11 日至 15 日，在中国黄山市参加第二届“UNESCO 名录遗产 • 气候变化 • 空间技术”黄山对话会的专家、决策者与实践者们：

Expressing their sincere appreciation to HIST (Int'l Centre on Space Technologies for Natural and

Cultural Heritage under the auspices of UNESCO), RADI (Institute of Remote Sensing and Digital Earth of the Chinese Academy of Sciences), UNESCO and the Mt. Huangshan Administrative Committee for convening the 2nd Huangshan Dialogue and the hope that they will continue their collaboration in convening future dialogues every two years.

感谢 HIST（国际自然与文化遗产空间技术中心）、RADI（中国科学院遥感与数字地球研究所）、UNESCO（联合国教科文组织）、黄山风景区管委会共同举办第二届黄山对话会，并希望能够继续合作，争取未来每两年举办一次对话会。

Recognizing the potential for World Heritage sites, Biosphere Reserves and UNESCO Global Geoparks to serve as experimental and learning sites for context-specific climate change mitigation and adaptation strategies for natural and cultural heritage conservation, sustainable tourism planning, disaster prevention and monitoring, and the strengthening of links between conservation and sustainable development of regions and peoples where these sites are located.

认识到世界遗产地、生物圈保护区、UNESCO 世界地质公园作为实践及学习场所的潜力，有针对性地将其用于为自然与文化遗产保护、可持续旅游规划、灾害防御和监测、加强遗产地地区和人民之间在遗产保护与可持续发展上的交流等方面制定减缓和适应气候变化战略，

Emphasizing the potential role of space-, air- and ground-based sensing technologies and associated GIS and other applications, in reconstructing and understanding past climate change as well as to model and foresee future scenarios for UNESCO designated places and surrounding areas in the context of on-going and future climate change trends.

强调了天-空-地传感技术和相关地理信息系统及其他应用技术的作用，这些技术可以用来重建和了解历史气候变化、建模并预测现在及未来气候变化趋势下 UNESCO 名录遗产地及其周边地区的发展情况。

Call upon UNESCO, HIST, UNESCO National Commissions, UNESCO National Committees responsible for coordinating the work of the World Heritage Convention, the Man and the Biosphere Programme (MAB) and the International Geoscience and Geopark Program (IGGP) and authorities responsible for the management of UNESCO designated sites to use these sites in order to:

号召 UNESCO、HIST、UNESCO 全国委员会、UNESCO 相关计划国家委员会负责协调世界遗产公约、人与生物圈计划、国际地球科学和地质公园计划（IGGP）的工作，号召 UNESCO 名录遗产地管委会依托 UNESCO 名录遗产：

- Document and disseminate knowledge on past climate change, particularly well-illustrated in many UNESCO Global Geoparks, to raise awareness of local communities and the general

public of the causes and consequences of global climate change and their implications for people and societies;

- 记录和宣传历史气候变化的知识，尤其是可利用世界地质公园的优势很直观地展现这些变化。这样一来，可以增强当地社区和公众对全球气候变化的成因和后果及其对人民和社会的影响的认知；

- Document and disseminate information and data on the risks facing UNESCO-designated sites and their surrounding land and seascapes with regard to natural and human-induced disasters, and on predictions for climate change and related impact on future risks and vulnerabilities;

- 记录和传播 UNESCO 名录遗产及其周边陆地和海洋景观面临自然和人为灾害风险方面的信息和数据，以及预测未来气候变化及其后果对这些地区带来的风险和其脆弱程度。

- Identify cultural heritage monuments and artifacts that may face inevitable decay or disappearance due to climate change impacts or consequences (e.g. sea-level rise) and encourage the use of virtual reality and other appropriate technology to establish their 3-D images and other copies for archives to benefit future generations;

- 找出因气候变化的影响或后果（如海平面上升）导致难逃衰败或湮灭的文化遗产古迹和文物，并鼓励其使用虚拟现实和其他适合的技术来建立和存储三维图像及其他副本档案，以造福子孙后代；

- Collate, synthesize and disseminate information on on-going changes on ecosystems, habitats and species distribution patterns in UNESCO-designated sites in response to climate change, and encourage the building of scenarios and models on how management of the sites and surrounding land and seascapes could respond to such changes;

- 整理，归纳和宣传 UNESCO 名录遗产地区因气候变化导致的生态系统、栖息地和物种分布格局上正在产生的变化，并倡导其建立模型来更好地指导遗产地及其周边陆地和海洋景观应对这些变化；

- Encourage collaboration between states to develop a data and information repository for the UNESCO sites such that the information is universally available.

- 鼓励国家之间展开合作建立 UNESCO 名录遗产地数据信息库，实现信息全球共享。

- Use UNESCO-designated sites in globally and regionally critical ecosystems, e.g. “the Third Pole” or the Himalayan Range to record on-going climate-driven changes and predict their potential future trajectories and their consequences for economies and people;

- 利用处于全球和地区关键生态系统中的 UNESCO 名录遗产地，例如用 UNESCO 名录中世界“第三极”或“喜马拉雅山脉”记录正在发生的气候变化，并预测其未来潜在的发展轨

迹及其对经济和人民造成的影响;

- Explore the possibilities for linking the Digital Belt and Road (DBAR) of RADI to create digital databases and other educational and information products for a selected number of UNESCO-designated sites in the countries along Continental and Maritime Silk Road;

- 探讨将 RADI 提出的“数字丝路”（DBAR）联系起来的可能性，为“陆上与海上丝绸之路”沿线国家的 UNESCO 名录遗产建立数字数据库，并提供其他教育及信息产品

- Initiate and/or contribute to discussions and seminars and workshops and launch projects and special initiatives during the International Year of Sustainable Tourism in Development in 2017 to illustrate the role space technologies could play in addressing site-specific and regional impacts of tourism practice and in identifying potential UNESCO-designated sites where the tourism sector could launch new initiatives to demonstrate green and low carbon development;

- 发起或助力在 2017 国际可持续旅游发展年期间举办研讨会和学习班、开展项目和特别行动计划，用来展现如何利用空间技术改善旅游对特定地方或区域造成的不良影响，以及 UNESCO 名录遗产地区在旅游方面可以实施的绿色低碳发展新举措；

- demonstrate how data and analysis systems can be used for evidence based decision making and participative site management to harmonize conflicting laws and policies hence lead to good governance at various levels;

- 展示如何利用数据和分析系统进行循证决策和参与式遗产地管理，以协调矛盾的法律和政策，从而在各个层面实现妥善管理。

- Promote the use of UNESCO sites as models of sustainable and resilient societies for delivering 2030 Agenda as part of the local and national development plans;

- 将 UNESCO 名录遗产提升为为可持续和适应性社会的典范，使 2030 议程成为制定地方和国家发展计划的组成部分。

- Liaise with institutions responsible for infrastructure, construction, trade and transport sector development along China’s One Belt One Road (OBOR) initiative and use UNESCO designated places to launch studies and initiatives to minimize impacts and threats to concerned UNESCO-designated sites as well as to promote “people-to-people” scientific and cultural exchanges between site authorities and other concerned stakeholders;

- 与基础设施、建筑工程、贸易运输等部门合作，在中国“一带一路”方针的指导下在 UNESCO 名录遗产地区开展研究和筹划，以最大限度地降低某些原因对其造成的不良影响和威胁，并促进这些遗产地管理当局和其他相关部门之间“民间”科学与文化交流；

- Work with interested UNESCO-designated sites to develop new and innovative communication resources derived from space technologies - including maps, satellite images,

3D imaging and animation – introducing visitors to the particular climate change impacts facing each site;

- 与 UNESCO 名录遗产地合作，开发空间技术衍生的创新通讯资源，包括地图，卫星影像，三维成像和动画等， 让到访者了解特定气候变化对任一遗产地区的影响;

- Institute a systematic mechanism by which the rich experience on the application of space technologies to cultural and natural heritage is systematically fed into the management and monitoring processes through UNESCO and the States Parties concerned;

- 在联合国教科文组织及有关缔约国范围内，将空间技术应用在文化和自然遗产上的成熟经验和对其的管理与监测相结合，建立一种系统机制；

- Promote Synergies in the application of remote sensing techniques for education, research, conservation and management activities in UNESCO sites with multiple designations.

- 在具有多项 UNESCO 名录遗产桂冠的名录遗产地，要协调好遥感应用与教育、科研、保护和管理等活动之间的关系；

- Link to concerned UN bodies, e.g. UN Framework Convention on Climate Change (UNFCCC) and associate financial (Green Climate Fund) and research (Global Green Growth Institute) organizations to explore the launching of projects and initiatives on the use of UNESCO-designated sites for climate change mitigation and adaptation with the use of space technology and other relevant modern technology applications.

- 与联合国其他有关机构，例如与联合国气候变化框架公约（UNFCCC）、联合国相关金融机构（绿色气候基金）和科研机构（全球绿色增长研究所）合作，探索利用空间技术和其他相关现代技术在 UNESCO 名录遗产地区开展针对减缓和适应气候变化的项目和计划。

（注：本倡议原文为英文，中文译文如有疑义，请参考英文）。

Huangshan City, Anhui Province, China

14 September 2016

二零一六年九月十四日

中国安徽省黄山市