

DIVISION IX/COMMISSION 41/WORKING GROUP ASTRONOMY AND WORLD HERITAGE

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1. Introduction

The WG was created in 2008 to progress UNESCO's Astronomy and World Heritage Initiative (AWHI) jointly with the World Heritage Centre, following the signing of a formal Memorandum of Understanding between the IAU and UNESCO.

The AWHI is a thematic initiative aiming to identify, safeguard and promote cultural properties connected with astronomy. The places in question do not just include sites (such as observatories) important in the development of modern scientific astronomy, but also much older constructions whose design or location relate to celestial objects and events, reflecting the ways in which ancient cultures attempted to make sense of the world—the cosmos—within which they dwelt. One of its main objectives of the WG is to help to establish guidelines for State Parties to the World Heritage Convention who wish to nominate sites for inscription on the World Heritage List on the grounds of their relationship to astronomy.

The WG is also concerned with the link between the cultural heritage of astronomy and the natural heritage of the dark night sky. For this reason, it collaborates with organisations concerned with protecting and preserving the dark night sky, such as the Starlight Initiative and the Dark Skies Advisory Group.

The WG maintains a website at <http://www.astronomicalheritage.org/>.

2. The Thematic Study

From the outset, it had been evident that it would be unproductive to try to develop an 'IAU list' of the most important astronomical heritage sites, since this could be interpreted as undermining the process by which State Parties to the World Heritage Convention identify cultural properties that they consider worthy of nomination to the World Heritage List (WHL) and their applications are considered by UNESCO and its advisory bodies.

Instead, the WG quickly identified two flagship projects. The first of these was to work with the International Council on Monuments and Sites (ICOMOS), the Advisory Body to UNESCO responsible for cultural sites, to produce a 'Thematic Study' on the Heritage Sites of Astronomy. The purpose of ICOMOS Thematic Studies is to present an overall vision of some area of cultural heritage, which helps to establish firm criteria by which nominations of sites to the WHL relating to the topic in question can be judged. This in turn encourages State Parties to identify and submit viable nominations. Case studies of particular sites form an integral part of a Thematic Study, but their purpose is simply to raise and illustrate general issues for the broader discussion; the inclusion or otherwise

of any particular site as a Case Study is understood to have no bearing on the outcome should it ever be nominated to the WHL.

Thanks to the intense efforts of 41 members of the Working Group, the ICOMOS-IAU Thematic Study on astronomical heritage, Ruggles & Cotte (2010), was published in June 2010 in time to be presented at the 2010 meeting of UNESCO's World Heritage Committee at the end of July, where it was duly approved. It was subsequently circulated officially by the WHC to all UNESCO National Commissions and is also freely available publicly.

The subject matter ranges from early prehistory to modern astrophysics and space heritage, and also prominently includes dark sky issues and modern observatory sites. In view of the existence of Wolfschmidt (2009), a report produced a year earlier following a meeting organised by ICOMOS-Germany and the University of Hamburg, it was not considered necessary to give special emphasis to classical observatories from the renaissance to the mid-twentieth century, which were treated in equal measure to 14 other cultural heritage themes.

The ICOMOS-IAU Thematic Study has been recognised to be of broader importance, being the first in any field of science heritage, and leads the way in tackling a number of broader issues that apply to science heritage in general and have impeded the successful inscription of science heritage sites.

The 2010 edition was published as an e-book; a printed version, Ruggles & Cotte (2011), followed in 2011.

3. The Astronomical Heritage Web Portal

The second flagship project is the development of an 'Astronomical Heritage Portal'. This is in every sense a "follow-up" to the Thematic Study, since it contains all the information currently presented in the Thematic Study together with more detailed site data, further case study sites, and facilities to comment upon and discuss both the sites themselves and broader issues. In other words, this is a dynamic, publicly accessible database, together with a moderated discussion forum and document-repository, concerning astronomical heritage sites throughout the world.

At the time of writing the site is being tested by WG members and Thematic Study authors with a view to launching it publicly within a timescale of weeks. Once launched, it will become the main website for UNESCO's Astronomy and World Heritage Initiative, formally supported and approved by UNESCO and carrying the UNESCO and World Heritage Centre logos, but implemented and maintained independently.

The longer-term aim is to ensure that the portal becomes 'the' place visited by National Commissions seeking further information, guidance and support once they seek to promote astronomical heritage sites (natural or cultural) to their "national tentative lists" with a view, in the longer term, to nominating them for inscription onto the World Heritage List. This means that the information on the portal must be maintained to the highest professional standards, so that constant monitoring and careful moderation of the content will be needed. This will be an ongoing process into which the WG could continue to have a vital input.

4. Extended Case Studies

Following a meeting at the UNESCO World Heritage Centre in September 2010, attended by a number of WG members together with representatives of ICOMOS and the IAU General Secretary, the WG undertook to develop a selection of the case studies

included in the Thematic Study in more detail, following the structure of actual nomination dossiers that are presented to UNESCO by State Parties. The principal aim of these ‘extended case studies’ is to develop components of potential dossiers that relate particularly to astronomical heritage aspects, this being the ‘uncharted territory’ that the Thematic Study has attempted to start to map out. In doing so, we hope to identify for further discussion and clarification some of the key general issues that can arise in the particular case of astronomical heritage sites.

Each of the eleven sites that have been chosen as extended case studies raises a particular set of issues. For example, Stonehenge is included—despite already being on the WHL—since it raises issues relating to the re-inscription of existing World Heritage Sites to give more explicit recognition of their astronomical significance. Another four of the extended case studies are cultural sites with a wide geographical and temporal span—The Royal Observatory, Cape of Good Hope, South Africa; Bayconur Space Launch Facility, Russian Federation; The seven-stone antas (a group of prehistoric dolmens) of Portugal and Spain; and the ‘thirteen towers’ of Chankillo, Peru. A further five are dark sky parks and modern observatory sites where the main concern is to preserve the natural heritage of the dark night sky. The last extended case study—the Star Clocks of Oman—brings the cultural heritage and natural heritage issues together in a very direct way. Here, modern indigenous cultural practices of star observation, linked to vital environmental issues such as water management, are threatened by the erosion of dark skies.

We are developing these extended case studies in stages, for completion by Easter 2012. They will then be discussed and finalised at a Working Group Forum to be held in New Zealand during June 2012, and presented in a report to the IAU General Assembly in Beijing in August. By agreement, the extended case studies will not be made public during this period. After that, however, the aim is to release our report publicly within the context of the Astronomy and World Heritage Initiative.

Clive Ruggles
Chair of Working Group

References

- Ruggles, C. L. N. & Cotte, M. (eds) 2010, *Heritage Sites of Astronomy and Archaeoastronomy in the Context of the UNESCO World Heritage Convention: a Thematic Study*, Electronic edition, ICOMOS–IAU, Paris.
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- Wolfschmidt, G. (ed.) 2009, *Cultural Heritage of Astronomical Observatories: from Classical Astronomy to Modern Astrophysics*, ICOMOS–Bäessler-Verlag.