# Jodrell Bank Observatory

# 1. World Heritage Property Data

### 1.1 - Name of World Heritage property

Jodrell Bank Observatory

### 1.2 - World Heritage property details

#### 1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Jodrell Bank Observatory	53.234 / -2.304	17.38	18569.22	18586.6	2019
Total (ha)		17.38	18569.22	18586.6	
1.4 - Map(s)					
Title			ſ	Date Link	to source
Jodrell Bank Observatory - Maps of the inso	cribed property		2	2019	

#### Comment

An updated map for the property, with no modifications but meeting the latest technical requirements, was provided (in printed and electronic form) to the World Heritage Centre at their request in February 2023 via the UK's Ambassador to UNESCO.

#### 1.5 - Web and Social Media data of the property (if applicable)

### 1. Jodrell Bank Discovery Centre

<sup>2.</sup> 2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)

# 2.1 - Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

		The World Heritage property (in whole or in part) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) <u>is not</u> designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.2	List of Cultural Property under Enhanced Protection (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.3	The List of Wetlands of International Importance (The Ramsar List) (Convention on Wetlands of International Importance (Ramsar Convention))		×
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme		×
2.1.5	Global Geoparks Network UNESCO Global Geoparks		×

#### 2.2 - Please provide comments on 2.1 if necessary

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?

No

2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?

No

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?

No

2.7.1	1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.2	Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.3	Convention on Wetlands of International Importance (Ramsar Convention)	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.4	Man and the Biosphere (MAB) Programme	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.5	UNESCO Global Geoparks	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	

# 2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes

2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)

2.9 - Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

No

2.10 - Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware

2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property? No

2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you aware.

### 3. Statement of Outstanding Universal Value

3.1 - Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

# Statement of Outstanding Universal Value

#### Brief synthesis

Jodrell Bank Observatory was important in the pioneering phase and later evolution of radio astronomy. It reflects scientific and technical achievements and interchanges related to the development of entirely new fields of scientific research. This led to a revolutionary understanding of the nature and scale of the Universe. The site has evidence of every stage of the history of radio astronomy, from its emergence as a new science to the present day.

Jodrell Bank Observatory is located in a rural area in northwest England. Originally, scientific activity was located at the southern end of the site, and from that time activity has moved to the north across the site with many new instruments developed and then abandoned. Remnants of early scientific instruments survive.

At the south end of the site is the location of the Mark II Telescope and it is bounded by an ensemble of modest research buildings in which much of the early work of the Observatory took place.

To the north of the Green, the site is dominated by the 76 metre diameter Lovell Telescope which sits in a working compound containing a number of engineering sheds and the Control Building. There are spaces open to the general public which include visitor facilities set around the Lovell Telescope. Other visitor facilities are outside the property to the northeast.

Jodrell Bank Observatory is the hub of the UK's national wide array of up to seven radio telescopes (e-MERLIN) including the Lovell and Mark II Telescopes.

Criterion (i): Jodrell Bank Observatory is a masterpiece of human creative genius related to its scientific and technical achievements. The adaptation and development of radar and radio frequency reflectivity to develop radically new equipment, such as the Transit Telescope and Lovell Telescope, were a key part in the development of entirely new fields of scientific research and led to a dramatic change in the understanding of the Universe. The Observatory was important in the pioneering phase and later evolution of radio astronomy.

Criterion (ii): Jodrell Bank Observatory represents an important interchange of human values over a span of time and on a global scale on developments in technology related to radio astronomy. The scientific work at Jodrell Bank was at the heart of a global collaborative network. In particular, several important technological developments such as very large paraboloidal dish telescopes and interferometer were developed at the Observatory, and were later influential in scientific endeavours in many parts of the world.

Criterion (iv): Jodrell Bank Observatory represents an outstanding example of a technological ensemble which illustrates a significant stage in human history (1940s-1960s) – the transition from optical astronomy to radio astronomy and the associated consequence for the understanding of the Universe through multi-wavelength astrophysics. The property is also associated with the peacetime development of 'Big Science' as a major change in the way in which scientific research was supported and undertaken. The surviving evidence at the property related to the evolutionary development of radio astronomy from the post-war pioneering phase through to sophisticated, large scale research activity in the field makes Jodrell Bank an outstanding example of such a technological ensemble.

Criterion (vi): Jodrell Bank Observatory is directly and tangibly associated with events and ideas of outstanding universal significance. The development of the new field of radio astronomy at the property lead to a revolutionary understanding of the Universe which was only possible through research beyond the possibilities of optical astronomy to explore the electromagnetic spectrum beyond visible light. Understanding of the nature and scale of the Universe has been dramatically changed by research in radio astronomy at the Observatory.

#### Integrity

The property retains all attributes that document its development as a site of pioneering astronomical research. Practically all stages of development from the very beginning, with improvised, re-used or borrowed equipment, onwards are represented by buildings, physical remains or in some cases archaeological remants. Some important stages, such as represented by the large Transit Telescope, have not survived intact although traces remain. The later, large scale and far more ambitious instruments are still present at the property. This includes the iconic Lovell Telescope with its Control Building. The property also retains many quite modest structures which are, none the less, important for their research use, or which otherwise supported the work of the Observatory.

In general, all the structures are very well preserved and the property continues to be dominated by the large scale Lovell Telescope and Mark II Telescope. However, several early wooden buildings have suffered from neglect and dis-use. Their restoration is to be undertaken. The grounds are well cared for. Recent buildings have a simple and subdued character, which do not detract from the overall appreciation of the property.

The Consultation zone, buffer zone of the property, protects the scientific capabilities of the Observatory from radio emissions in its vicinity, contributing to maintenance of the functional integrity of the property.

#### Authenticity

The location of the property has continued unchanged, and the largely agricultural setting is essentially identical apart from the construction of the Square Kilometre Array building as part of the ongoing scientific use of the Observatory. The form and design has evolved through time reflecting the important development history of the property. This includes the somewhat improvised character of many structures indicative of the priority given to scientific research rather than the quality of buildings. Materials and substance have been mostly retained although there has been some replacement of deteriorated materials over time. The property retains its ongoing scientific use.

#### Protection and management requirements

Most of the attributes of Jodrell Bank Observatory have been listed under the Planning (Listed Buildings and Conservation Areas) Act 1990. The two major telescopes have been listed in the highest category, Grade 1. There are some elements which have no listing at the present time, although they are managed for their heritage values as part of the property.

In addition, World Heritage inscription affords all attributes a protection status equivalent to the highest level or Grade 1, in accordance with the National Planning Policy Framework (2012) and the spatial planning system which operates through several pieces of legislation, including the Town and Country Planning Act 1990. Any changes to listed buildings require approval.

The buffer zone is based on the Jodrell Bank Radio Telescope Consultation Zone which has operated effectively to protect the Observatory for many decades. It was established by the Town and Country Planning (Jodrell Bank Radio Telescope) Direction 1973.

The property is managed by the University of Manchester with a committee, the Jodrell Bank Site Governance Group responsible for coordination. This committee includes key internal stakeholders such as the three main site user groups. Each of the site user groups has its own well-developed and independent management and operational structures. Roles managing the heritage of the Observatory are integrated with the daily work of the Jodrell Bank Centre for Astrophysics, responsible for scientific and engineering research, telescope operations and engineering, and the Jodrell Bank Discovery Centre which is responsible for visitor management and heritage coordination. These user groups are supported by other management groups within the University. The third site user group is the Square Kilometre Array Organisation, located just outside the property within the buffer zone but within the overall Observatory.

The management of the property is based on existing University structures, to be augmented by a World Heritage Site Steering Committee which will have oversight of the property and undertake coordination between the University, users and external stakeholders. The Conservation Management Plan (2016) provides an overview of the instruments and procedures for the effective management of the property. The plan, supplemented by an extensive Site Gazetteer, is currently being updated.

The Observatory has a long experience with managing visitors. There is a current tourism management plan and enhanced presentation of the property is ongoing.

# 3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	The Landscape and Layout of the Site	×			
3.2.2	The Lovell Telescope and Mark II Telescope	×			
3.2.3	The Control Building	×			
3.2.4	The Green and associated Observatory buildings	×			
3.2.5	The site of the Transit Telescope	×			
3.2.6	Sites and remnants of other early scientific instruments	×			
3.2.7	The Botany Huts	×			
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

#### 3.3 - Comments, conclusions and/or recommendations related to Statement of Outstanding Universal Value

#### 4. Factors Affecting the Property

### 4.1. Buildings and Development

#### 4.1.1 - Housing

Relevant		X Not relevan	ıt				
4.1.2 - Commercial develop	oment						
Relevant		X Not relevan	X Not relevant				
4.1.3 - Industrial areas							
Relevant			X Not relevan	× Not relevant			
4.1.4 - Major visitor accommodation and associated infrastructure							
Relevant			X Not relevan	ıt			
4.1.5 - Interpretative and vi	sitation facilitie	es					
× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
Positive X	×			×		$\rightarrow$	
Negative							

# 4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

In 2022, a major new gallery, including a permanent exhibition describing the heritage of the property, was opened in the Buffer Zone, near to the property. The gallery has a dome structure that echoes structures from the heritage of astronomy worldwide, and is covered by a 'green roof', allowing it to blend into the landscape, with no impact on views of the property. The gallery has extremely positive impacts on the visitor experience of and engagement with the heritage of the site.

#### 4.2. Transportation Infrastructure

# 4.2.1 - Ground transport infrastructure

Relevant	X Not relevant	
4.2.2 - Underground transport infrastructure		
Relevant	X Not relevant	
4.2.3 - Air transport infrastructure		
Relevant	X Not relevant	
4.2.4 - Marine transport infrastructure		
Relevant	X Not relevant	
4.2.5 - Effects arising from use of transportation infrastructure		
Relevant	X Not relevant	

4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively

# 4.3. Services Infrastructures

4.3.1 - Water infrastructure	
Relevant	X Not relevant
4.3.2 - Renewable energy facilities	
Relevant	X Not relevant
4.3.3 - Non-renewable energy facilities	
Relevant	X Not relevant
4.3.4 - Localised utilities	
Relevant	X Not relevant
4.3.5 - Major linear utilities	
Relevant	X Not relevant

4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

#### 4.4. Pollution

# 4.4.1 - Pollution of marine waters

Relevant	X Not relevant
4.4.2 - Ground water pollution	
Relevant	X Not relevant
4.4.3 - Surface water pollution	
Relevant	X Not relevant
4.4.4 - Air pollution	
Relevant	X Not relevant
4.4.5 - Solid waste	
Relevant	X Not relevant
4.4.6 - Input of excess energy	
Relevant	X Not relevant

# 4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

# 4.5. Biological resource use/modification

# 4.5.1 - Fishing/collecting aquatic resources

Relevant	X Not relevant
4.5.2 - Aquaculture	
Relevant	X Not relevant
4.5.3 - Land conversion	
Relevant	X Not relevant
4.5.4 - Livestock farming/Grazing of domesticated animals	
Relevant	X Not relevant
4.5.5 - Crop production	
Relevant	X Not relevant
4.5.6 - Commercial wild plant collection	
Relevant	X Not relevant
4.5.7 - Subsistence wild plant collection	
Relevant	X Not relevant
4.5.8 - Commercial hunting	
Relevant	X Not relevant
4.5.9 - Subsistence hunting	
Relevant	X Not relevant
4.5.10 - Forestry/Wood production	
Relevant	X Not relevant

4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

4.6. Physical resource extraction

### 4.6.1 - Mining

Relevant	X Not relevant
4.6.2 - Quarrying	
Relevant	X Not relevant
4.6.3 - Oil and gas	
Relevant	X Not relevant
4.6.4 - Water (extraction)	
Relevant	X Not relevant

4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

# 4.7. Local conditions affecting physical fabric

# 4.7.1 - Wind

Relevant

× Not relevant

# 4.7.2 - Relative humidity

Relevant

× Not relevant

# 4.7.3 - Temperature

Relevant	X Not relevant
4.7.4 - Radiation/Light	
Relevant	X Not relevant
4.7.5 - Dust	
Relevant	X Not relevant
4.7.6 - Water (rain/water table)	
Relevant	X Not relevant
4.7.7 - Pests	
Relevant	X Not relevant
4.7.8 - Micro-organisms	
Relevant	X Not relevant

4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

# 4.8. Social/Cultural uses of heritage

# 4.8.1 - Ritual/Spiritual/Religious and associative uses

Relevant	X Not relevant
4.8.2 - Society's valuing of heritage	
Relevant	X Not relevant
4.8.3 - Indigenous hunting, gathering and collecting	
Relevant	X Not relevant
4.8.4 - Changes in traditional ways of life and knowledge s	ystem
Relevant	X Not relevant
4.8.5 - Identity, social cohesion, changes in local population	on and community
Relevant	X Not relevant
4.8.6 - Impacts of tourism/Visitation/Recreation	
Relevant	X Not relevant
4.8.7 - Please comment as necessary on how the factors s positively	elected as relevant in 4.8 are affecting the property either negatively or
4.9. Other human activities	
4.9.1 - Illegal activities	
Relevant	X Not relevant
4.9.2 - Deliberate destruction of heritage	

4.9.2 - Deliberate destruction of heritage		
Relevant	X Not relevant	
4.9.3 - Military training		
Relevant	× Not relevant	
4.9.4 - War		
Relevant	X Not relevant	
4.9.5 - Terrorism		
Relevant	X Not relevant	

#### 4.9.6 - Civil unrest

× Not relevant

4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively

#### 4.10. Climate change and severe weather events

4.10.1 - Storms	
Relevant	X Not relevant
4.10.2 - Flooding	
Relevant	X Not relevant
4.10.3 - Drought	
Relevant	X Not relevant
4.10.4 - Desertification	
Relevant	X Not relevant
4.10.5 - Changes to oceanic waters	
Relevant	X Not relevant
4.10.6 - Temperature change	
Relevant	X Not relevant
4.10.7 - Other climate change impacts	
Relevant	× Not relevant

4.10.8 - Please comment as necessary on how the factors selected as relevant in 4.10 are affecting the property either negatively or positively

# 4.11. Sudden ecological or geological events

#### 4.11.1 - Volcanic eruption

Relevant	X Not relevant
4.11.2 - Earthquake	
Relevant	X Not relevant
4.11.3 - Tsunami/Tidal wave	
Relevant	X Not relevant
4.11.4 - Avalanche/Landslide	
Relevant	X Not relevant
4.11.5 - Erosion and siltation/Deposition	
Relevant	X Not relevant
4.11.6 - Fire (wildfire)	
Relevant	X Not relevant

4.11.7 - Please comment as necessary on how the factors selected as relevant in 4.11 are affecting the property either negatively or positively

# 4.12. Invasive/alien species or hyper-abundant species

### 4.12.1 - Translocated species

Relevant	X Not relevant
4.12.2 - Invasive/Alien terrestrial species	
Relevant	× Not relevant

### 4.12.3 - Invasive/Alien freshwater species

Relevant	X Not relevant
4.12.4 - Invasive/Alien marine species	
Relevant	X Not relevant
4.12.5 - Hyper-abundant species	
Relevant	X Not relevant
4.12.6 - Modified genetic material	
Relevant	X Not relevant

4.12.7 - Please comment as necessary on how the factors selected as relevant in 4.12 are affecting the property either negatively or positively

# 4.13. Management and institutional factors

# 4.13.1 - Management system/Management plan

			Not relevant				
Impact	mpact Orig			Trend of impact			
4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	S Decreasing	⇒ Stable	Increasing	
×		×			$\rightarrow$		
			Not relevant				
Impact C		Origin		Trend of impact			
4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	S Decreasing	⇒ Stable	Increasing	
×			×		$\rightarrow$		
			Not relevant				
	Current X	Impact     Impact       Impact     Impact	Impact     Impact     Impact     Impact     Impact	Impact       Origin         Impact       Impact       Impact       Impact         Impact       Impact       Impact       Impact         Impact       Impact       Origin       Impact         Impact       Impact       Impact       Impact         Impact       Impa	Impact       Origin       Trend of impact         Impact       Impact       Impact       Decreasing         Impact       Impact       Impact       Impact       Impact         Impact       Origin       Impact       Impact       Impact         Impact       Impact       Origin       Impact       Impact         Impact       Impact       Impact       Impact       Impact       Impact	Impact       Origin       Trend of impact         Impact	

	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×		×			<b>→</b>	
Negative							

# 4.13.4 - Management activities

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×		×			$\rightarrow$	
Negative							

# 4.13.5 - Financial resources

X Relevant	Not relevant						
	Impact Orig		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×		×			<b>→</b>	
Negative							

#### 4.13.6 - Human resources

X Relevant			1	lot relevant				
	Impact	Origin Trend of im			Trend of impact	f impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×		×			$\rightarrow$		
Negative								

### 4.13.7 - Low impact research/monitoring activities

X Relevant			1	Not relevant			
	Impact Origin			n Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Secreasing	⇒ Stable	Increasing
O Positive X	×		×			<b>→</b>	
Negative							

# 4.13.8 - High impact research/monitoring activities

Relevant X Not relevant

# 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

The Site Management Plan is operating well, providing an excellent framework for the management of the property & engagement with visitors. The Legal Framework continues to provide protection as anticipated. Governance is effective and includes all site stakeholders. Management activities are excellent & enable continued scientific research on the site, whilst protecting all attributes. Financial & Human Resources are adequate. There are daily surveys of attributes & weekly visitor analysis.

#### 4.14. Other factor(s)

# 4.14.1 - Other factor(s)

4.15. Factors Summary Table

#### 4.15.1 - Factors Summary Table

Name	Impact	:	Origin		Trend
4.1 Buildings and Development					
4.1.5 Interpretative and visitation facilities	٢	4		Ċ	<b>→</b>
4.13 Management and institutional factors					
4.13.1 Management system/Management plan	٢	4	٢		<b>→</b>
4.13.2 Legal framework	٢	4		۴	<b>→</b>
13.3 Governance		4	٢		<b>→</b>
3 Governance					
4.13.4 Management activities	٢	4	٢		<b>→</b>
4.13.5 Financial resources	٢	4	٢		<b>→</b>
4.13.6 Human resources	٥	9	٢		<b>→</b>
4.13.7 Low impact research/monitoring activities	٢	4	۹		<b>→</b>

Legend	4 Current	Potential	Negative	O Positive	Inside	C Outside			
4.16. Assessi	ment of current and	l potential positive a	nd negative factors						
4.16.1 - Assessment of current and potential negative and positive factors									
4.1 Buildings and	Development								

Name		Impact	:	Origin		Trend
4.1.5 Inte	1.5 Interpretative and visitation facilities		9		Ċ	<b>→</b>
Spatial s	cale - Area affected by the factor					
×	Restricted					
^	Localised					
	Extensive					
<b>T</b>	Widespread					
rempora	I scale - Occurrence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact -	Impact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Managen	nent response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - D	Developement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

# 4.13 Management and institutional factors

Name		Impact				Trend	
.13.1 Management system/Management plan		9		۲		<b>→</b>	
Spatial scale - Area affected by the factor							
Restricted							
Localised							
Extensive							

×	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	apact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	Int response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact	ł	Origin	Trend	
4.13.2 Legal framework	٢	4		Ċ	<b>→</b>

Spatial scale - Area affected by the	factor
opatial scale - Alea allected by the	actor

opatial see	
	Restricted
	Localised
	Extensive
×	Widespread
Temporal	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
×	Medium capacity

	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact	:	Origin		Trend
4.13.3 Governance	٢	9	۲		<b>→</b>

# Spatial scale - Area affected by the factor

opatial sea	
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact	Impact		Origin		Trend
4.13.4 Management activities	٢	9		۲		<b>→</b>

# Spatial scale - Area affected by the factor

Restricted
Localised
Extensive

×	Widespread				
Temporal	I scale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - In	npact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	ent response - Capacity of management to respond				
×	High capacity				
	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - De	velopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				

ame		Impact			Origin	
4.13.5 Financial resources		9		٢		<b>→</b>

Spatial scale - Area	affected b	y the factor

Spatial sca	ale - Area affected by the factor
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity

	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

ne		ct		Origin		Trend
4.13.6 Human resources		9		۲		<b>→</b>

# Spatial scale - Area affected by the factor

Spatial Sca	ale - Area anected by the factor				
	Restricted				
	Localised				
×	Extensive				
	Widespread				
Temporal s	cale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - Im	pact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
×	High capacity				
	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - Dev	velopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				

Impact			Origin		Trend	
٢	4		۲		<b>→</b>	
Spatial scale - Area affected by the factor						

	Restricted
	Localised
×	Extensive

	Widespread			
Temporal s	Temporal scale - Occurence of the impact			
	One off or rare			
	Intermittent or sporadic			
	Frequent			
×	On-going			
Impact - Im	pact on the attributes			
	Insignificant			
	Minor			
×	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
×	High capacity			
	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - Dev	velopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			

#### 4.17. Serial inscriptions (national or transnational)

# 4.17.1 - If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor

#### 4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.

# 4.18.1 - Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	The Landscape and Layout of the Site	×			
4.18.1.2	The Lovell Telescope and Mark II Telescope	×			
4.18.1.3	The Control Building	×			
4.18.1.4	The Green and associated Observatory buildings	×			
4.18.1.5	The site of the Transit Telescope	×			

# 5. Protection and Management of the Property

#### 5.1. Boundaries and Buffer Zones

#### 5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value? The boundaries are adequate to maintain the property's Outstanding Universal Value

#### 5.1.2 - Are the boundaries of the World Heritage property known and recognised?

The boundaries are known by both the management authority and local communities/landowners

### 5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value? The buffer zones are **adequate** to maintain the property's Outstanding Universal Value

### 5.1.4 - Are the boundaries of the buffer zones known and recognised?

The buffer zones of the World Heritage property are known and recognised by both the management authority and local communities/landowners

#### 5.1.5 - Comments, conclusions and/or recommendations related to boundaries and buffer zones of the World Heritage property

#### 5.2. Protective Measures

#### 5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).

#### Comment

Please refer to the State Party's Section I questionnaire for a list of national legislation relevant to UK World Heritage Sites.

# 5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

2017 / Cheshire East Local Plan Strategy 2010-2030 / Local spatial planning / https://www.cheshireeast.gov.uk/pdf/planning/local-plan/local-plan-strategy-web-version-1.pdf

2021 / Cheshire East Local Plan Jodrell Bank Observatory Supplementary Planning Document / Spatial planning / https://moderngov.cheshireeast.gov.uk/ec/linutes/documents/s89966/Draft%20JBO%20SPD%20Nov21%20007.pdf

# 5.2.3 - Is the legal framework (i.e. legislation and/or regulation including spatial planning) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an adequate basis for effective management and protection

# 5.2.4 - Is the legal framework (i.e. legislation and/or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The legal framework in the buffer zone for the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an adequate basis for effective management and protection

# 5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for

maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property? The legal framework for the broader setting of the World Heritage property provides an adequate basis for effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and/or Integrity

#### 5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?

There is adequate capacity/resources to enforce legislation and/or regulation in the World Heritage property

5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice

# 5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property

#### 5.3. Management System/Management Plan

5.3.1 - Please check the box which most closely match the character of the governance and management system of the property Other

# If 'Other', please specify

University management

#### 5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.

A management plan
An annual work plan or business plan
A visitor/visitation management plan

5.3.3 - Please give a brief description of the management system currently in place at your property

#### 5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Management Plan	N/A	Available	2019	

5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best practices for the protection of this property?

No use has been made of the 2011 Recommendation on the Historic Urban Landscape

5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

No use has been made of the World Heritage Policy for Climate Change

5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts of Climate Change on the property:

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ? No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state; local/municipal etc.) involved in the management of the World Heritage property There is adequate coordination between all bodies/levels involved in the management of the property

#### **5.3.12 - Is the management system/plan adequate to maintain the property's Outstanding Universal Value?** The management system/plan is **fully adequate** to maintain the property's Outstanding Universal Value

5.3.13 - Is the management system being implemented?

The management system is being fully implemented and monitored

5.3.14 - Is there an annual work/action plan and is it being implemented?

An annual work/action plan exists and all of its activities are being implemented and monitored

5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities			×		
5.3.15.2	Local authorities				×	
5.3.15.3	Landowners in the property and the buffer zone			×		
5.3.15.4	Indigenous peoples	×				
5.3.15.5	Women				×	
5.3.15.6	Other specific groups				×	
	If you selected, 'Other specific groups' please specify	Astronomers w	orking at and with the Observa	atory.		

# 5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups

		Not applicable	Non-existent	Poor	Fair	Good
5.3.16.1	Local communities					×
5.3.16.2	Local/Municipal authorities					×
5.3.16.3	Indigenous peoples	×				
5.3.16.4	Landowners				×	
5.3.16.5	Women					×
5.3.16.6	Youth/Children					×
5.3.16.7	Researchers					×
5.3.16.8	Local Visitors/Tourists					×
5.3.16.9	National/International tourists					×
5.3.16.10	Tourism Industry					×
5.3.16.11	Local businesses and industries					×
5.3.16.12	NGOs					×
5.3.16.13	Other specific groups	×				
	If you selected 'Other specific groups', please specify					

5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the *World Heritage Convention* 

		Not applicable	No contribution	Limited	Significant	Full achievement
5.3.17.1	The management system of the property contributes to gender equality				×	
5.3.17.2	The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)	×				
5.3.17.3	The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status				×	
5.3.17.4	The management system of the property integrates a human rights-based approach				×	
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood				×	
5.3.17.6	The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property			×		

### 5.3.18 - Please provide further details on the ratings of the management system given in the table above

### 5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan

### 6. Financial and Human Resources

#### 6.1. Funding

# 6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.6	Governmental (national/federal)	20 %	0 %
6.1.1.7	Governmental (regional/provincial/state)	0 %	0 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	65 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	10 %	0 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	5 %	0 %
6.1.1.12	Other	0 %	100 %
		Total 100 %	Total 100 %

#### 6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above

The ongoing cost of conservation is provided by the Site owner, the University of Manchester.

#### 6.1.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is adequate for effective management of the World Heritage property

#### 6.1.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding are secure over both the medium- and long-term

#### 6.1.5 - Comments, conclusion, and/or recommendations related to finance and infrastructure

# 6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.

		From local communities %	From elsewhere %
6.1.6.1	Men	75 %	60 %
6.1.6.2	Women	25 %	40 %
		Total 100 %	Total 100 %

#### 6.1.7 - Are available human resources adequate to manage the World Heritage property?

Human resources are adequate for management needs

# 6.1.8 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

# 6.1.9 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

Conservation	Fair
Environmental sustainability	Not applicable
Community participation and inclusion	Fair
Risk preparedness	Good
Capacity development and education	Good
Administration	Fair
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Fair
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Not applicable

#### 6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?

No use has been made of the World Heritage Strategy for Capacity Building

6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.

# 6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and fully implemented; all technical skills are being transferred to those managing the property locally

#### 6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training

Site-based capacity building is in place and fully implemented. Technical work is carried out by internal staff. However, some technical skills are brought in from external consultants for specific projects.

#### 7. Scientific Studies and Research Projects

7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained? Knowledge about the values and attributes of the World Heritage property is **adequate** 

7.2 - Is there a planned programme of research at the property which is directed towards management needs and/or improving understanding of Outstanding Universal Value?

There is a small amount of research, but it is not planned

#### 7.3 - Are results from research programmes publicly available and disseminated?

Research results are shared widely with active outreach to local communities and national and international audiences

#### 7.4 - Comments, conclusions and/or recommendations related to scientific studies and research projects

#### 8. Education, Information and Awareness Building

# 8.1 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities	Good
Local/municipal authorities	Good
Indigenous peoples	Not applicable
Landowners	Fair
Women	Good
Youth/children	Good
Researchers	Good
Local visitors	Good
National/international tourists	Good
Tourism industry	Good
Local businesses and industries	Good
NGOS	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please describe	

8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue? There is a planned and effective education and awareness programme for children and youth that contributes to the protection of the World Heritage property

8.3 - Who are the target audiences for education and awareness programmes at your property?

Local communities
Women
Youth/children
Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries

8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building

Visitor centre	Good
Site museum	Good
Information booths	Not needed
Guided tours	Good
Trails/routes	Good
Printed information materials	Good
Online (website, social media, etc.)	Good
Transportation facilities	Poor
Other	Not needed
If 'Other' is selected, please specify	

#### 8.5 - Comments, conclusions and/or recommendations related to education, information and awareness building

#### 9. Visitor Management

#### 9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report

89686 / 40020 / 26262 / 133222 / 180414 /

#### 9.2 - What information sources are used to collect visitor statistics?

Entry tickets and registries

#### 9.3 - What is the average length stay of a visitor to the World Heritage property?

One to three hours

### 9.4 - Please provide the source of information

Internal site data

# 9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)

0 / 4.30 / 4.50 / 13.70 / 2.66 / 2.63 /

#### 9.6 - Please provide the source of information

Internal site data

# 9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?

There is a planned and effective strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property

#### 9.8 - Please provide any comments relating to the answer provided above in question 9.7

9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property? Visitor use of the World Heritage property is effectively managed and does not impact its Outstanding Universal Value

#### 9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, using a different system

#### If a different system, please specify

Internal System

# 9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?

There is good cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation

#### 9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted? The Outstanding Universal Value of the property is adequately presented and interpreted

# 9.13 - At how many locations is the World Heritage emblem displayed at the property?

In many locations and easily visible to visitors

9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property? Fees are collected and make a substantial contribution to the management of the World Heritage property

9.15 - Are there locally driven sustainable tourism initiatives? Not applicable

If 'Yes', please specify

9.16 - Are the benefits of tourism shared with local communities? Not applicable

If 'Yes', please specify

9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

#### 10. Monitoring

10.1 - Is there a monitoring programme at the property directed towards management needs and/or towards improving the understanding of the Outstanding Universal Value?

There is a **comprehensive**, integrated programme of monitoring, which is relevant to management needs and/or improving understanding of the Outstanding Universal Value

10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is **adequate and key indicators have been defined** for measuring the state of conservation and **are being used in monitoring** of how the Outstanding Universal value of the property is being maintained

#### 10.3 - Are key indicators defined and in place for the following principal aspects of the property?

	Extend of indicators	Not applicable	No indicators	Indicators have been defined but are not yet in use	Indicators are in place and in use since the last Periodic Reporting cycle
10.3.1	State of conservation				×
10.3.2	Effectiveness of the management system				×
10.3.3	Character of governance				×
10.3.4	Appropriate synergy with other conservation designations	×			
10.3.5	Contribution to sustainable development	×			
10.3.6	Capacity development	×			

#### 10.4 - Please provide information on relevant key indicators adopted at the property

#### 10.5 - Please rate the level of involvement in monitoring of the following groups:

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Good
Local communities	Good
Indigenous peoples	Not applicable
Landowners	Fair
Women	Good
Researchers	Good
Tourism industry	Good
Local businesses and industry	Good
NGOs	Not applicable
Other specific groups	Not applicable
If you selected 'Other specific groups', please specify	

#### **10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?** Implementation is underway

### 10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

Implementation is underway for the recommendations made when the World Heritage Committee inscribed the Property in 2019. The COVID pandemic slowed some of the work on this, as there were staffing reductions etc over the last few years. However, recruitment is now in train and the work has recommenced.

#### 10.8 - Comments, conclusions and/or recommendations related to Monitoring

#### 11. Identification of Priority Management Needs

### 11.1 - Identification of Priority Management Needs

5.3	Management System/Management Plan	
5.3.5	No use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	×
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	×
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	×
5.3.17	• In a limited manner, the management system of the World Heritage property does contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property	×
6.1	Funding	
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	×
7	Scientific Studies and Research Projects	
7.2	There is a small amount of research in the World Heritage property but it is not planned	×

Please save this question to reflect changes

# 12. Summary and Conclusions

# 12.1. Summary - Factors affecting the Property

#### 12.1.1 - Summary - Factors affecting the Property

You have not marked any factor as current and negative/positive, therefore this assessment table is empty. Summary - Factors affecting the Property **completed** 

# 12.2. Summary - Management Needs

#### 12.2.1 - Summary - Management Needs

# 5.3 Management System/Management Plan

		Actions	Timeframe	Lead agency (and others involved)	More info / comment	
5.3.5	No use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	The Historic Urban Landscape Recommendation is not relevant to this property.	not relevant	University of Manchester (site owner)	The property is not within an Historic Urban Landscape and this Recommendation is therefore not relevant.	
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Review of the Policy Document on the Impacts of Climate Change is to be undertaken	2023-2025	University of Manchester (Site Owner)	N/A	
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Review of the Strategy for Reducing Risks from Disasters at World Heritage Properties is to be undertaken	2023-2025	University of Manchester (Site Owner)	N/A	
5.3.17	<ul> <li>In a limited manner, the management system of the World Heritage property does contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property</li> </ul>	Site activities include raising awareness of issues relevant to conflict prevention. This is to be reviewed and developed further.	2023 - ongoing	University of Manchester (Site Owner)	N/A	
6.1	Funding					
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	Current activity in this area is covered by local and national strategies. The ways in which this can be supported by the World Heritage Strategy for Capacity Development will be explored.		University of Manch	ester (Site Owner) N/A	
7 5	Scientific Studies and Research Projects					

Summary - Management Needs completed

#### 12.3. Conclusions on the State of Conservation of the Property

12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property? The Authenticity of the World Heritage property has been preserved

### **12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property?** The Integrity of the World Heritage property is **intact**

# 12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

The World Heritage property's Outstanding Universal Value has been maintained.

#### 12.3.4 - What is the current state of the property's other values?

Other important cultural and/or natural values and the state of conservation of the World Heritage property are intact

#### 12.3.5 - Comments. conclusions and/or recommendations related to the state of conservation of the property.

### 13. Impact of World Heritage Status

#### 13.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

Conservation	Positive
Research and monitoring	Positive
Management effectiveness	Positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Very positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	Very positive
Legal/Policy framework	No impact
Advocacy	Positive
Institutional coordination	Positive
Security	No impact
Gender equality	No impact
Provision of ecosystem services/ benefits to local communities	No impact
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	No impact
Fostering inclusive local economic development and enhancing livelihood	Positive
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	No impact
Other	Not applicable
If 'Other', please specify	

#### 13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

#### 14. Good Practice in the Implementation of the World Heritage Convention

#### 14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

A project has been undertaken to conserve and restore the Grade-1 listed Lovell Telescope, a key attribute of the property, together with creating a gallery to engage the public with the heritage of the site and transmit its values to future generations. In total, this work cost £37million, £21million of which was provided by the site owners, the University of Manchester. The recent phase of this project included the complete restoration of the original surface of the Lovell Telescope dish (first installed in the 1950s), with the guidance of Historic England. A replacement surface was designed by JBO and consultant engineers which replicated the function, form and appearance of the original surface panels, could be readily installed and would be durable for decades to come. It was a like-for-like replacement in all aspects, including both the steel panels and the supporting steel girders which also needed to be replaced. This work is part of a significant programme of conservation work at Jodrell Bank Observatory requiring an overall investment of circa £16million, provided by the site owner, the University of Manchester, and took place between 2015 and 2020. Alongside this, a new gallery building, the First Light Pavilion, together with a new car park and visitor arrival area, was constructed in the site buffer zone (in an area also owned by the site owners). This work began in 2014 and the building was opened in June 2022. The gallery and associated structures cost £23million and was funded by £11million from the UK National Lottery Heritage Fund, £4million from the UK Treasury and £5million from the site owners, together with contributions from other funders. The gallery is home to a new immersive permanent exhibition, which uses the original fabric of the Telescope dish (removed during the conservation process). Both the architecture and the exhibition have won prestigious awards since opening.

#### 14.2 - Define which topics are covered by this example of best practice at the property level

State of Conservation

Management

# 15. Assessment of the Periodic Reporting Exercise

15.1. Relevance of Periodic Reporting

#### 15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

The World Heritage Convention

Management effectiveness to maintain the Outstanding Universal Value

Monitoring and reporting

# 15.1.2 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

State Party	Not needed
Site Managers	Not needed
UNESCO World Heritage Centre	Not needed
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Not needed

#### 15.2. Use of Data

#### 15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?

Revision of priorities/strategies/policies for the protection, management and conservation of heritage

#### 15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

15.3. Timing and resources

#### 15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage

Site Manager/Coordinator World Heritage property staff

Local communities

**15.3.2** - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire? Gender balance is explicitly considered and effectively implemented in the process.

15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire? Yes

#### 15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

60 / 30 / 30 /

### 15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources	×	

#### 15.4. Format and content of the Periodic Report

#### 15.4.1 - How accessible was the information required to complete this questionnaire? All required information was accessible.

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# 15.4.2 - Was the questionnaire easy to use and clear to understand?

		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire		×		
15.4.2.2	Clarity of questions			×	

#### 15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

#### 15.5. Training and Guidance

#### 15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Fair
UNESCO (other sectors/field offices)	Not applicable
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

#### 15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities

UNESCO World Heritage Centre	Good
State Party Representative (national Focal Point)	Good
UNESCO other sectors (e.g. field office)	Not applicable
National Commission for UNESCO	Fair
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable
IUCN International	Not applicable

# 15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?

Yes

#### 15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented?

15.6. Actions that will require formal consideration by the World Heritage Committee

#### 15.6.1 - Summary of actions that will require formal consideration by the World Heritage Committee

# • Map(s)

Reason for update: An updated map for the property, with no modifications but meeting the latest technical requirements, was provided (in printed and electronic form) to the World Heritage Centre at their request in February 2023 via the UK's Ambassador to UNESCO.

Changes to these items will need to go through the proper processes.

#### 15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.