

Japan Astronomical Heritage: The First Two Years

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Abstract. The Astronomical Society of Japan has started authorization of Japan Astronomical Heritage since 2018. The society certifies two or three sites/materials/literature every year not only for preservation but also for utilization. The certification influences citizens and local governments, and stimulates various movements. The idea of national astronomical heritage will help to preserve valuable properties of each country and to promote the utilization.

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1. ASJ and the Japan Astronomical Heritage

The Astronomical Society of Japan (ASJ, <https://www.asj.or.jp/en/>) has started authorization of Japan Astronomical Heritage, recognizing that the preservation, inheriting, notification and utilization is one of the most important missions of the society. ASJ, which is founded in 1908, has about 2,200 regular members, and is supported by many associate members, such as amateur astronomers, educators, etc., of about 1,100. Every year, ASJ calls to the members for candidates of heritage. The committee of Japan Astronomical Heritage selects a few from them, and the representatives of the society finally approve the Japan Astronomical Heritages of the year.

Japan Astronomical Heritage has three categories, which are 1) historic sites and buildings, including observational facilities, 2) materials, such as telescopes and instruments involved in an important astronomical discovery, and 3) literature, such as astronomy-related documents of historical significance. Those include National Treasures of historic era but also local heritages which are not well known nationwide and modern equipment that should be preserved.

The certification of heritage is presented to the owner or the managing organization at the next spring meeting of the society, though the latest was postponed to September due to COVID-19. The press release of heritages is made public by not only national media but also many local media such as newspapers and broadcasters.

2. The first two years of Japan Astronomical Heritage

The first call for candidate was August 2018, and two heritages were selected: 明月記 (“Meigetsuki”), a diary of a famous medieval poet which includes description of astronomical phenomena such as the supernova explosion, SN1054, now known as crab nebula (Duyvendak (1942), Fig. 1), and 会津日新館天文台跡 (“Aizu Nisshinkan Tenmondai-Ato”, Fig. 2), a historic site of an early 19th-century observatory at which observation for making luni-solar calendar was done (Watanabe (2016)). The historic site is being prepared by the local government to construct information center for visitors.



Figure 1. HST image of the supernova remnant of SN1054 (Crab Nebula) by courtesy of NASA, ESA, and J. Hester (Arizona State University).



Figure 2. Historic site of early 19th-century observatory at Aizu. Image courtesy of Aizuwakamatsu City Board of Education.

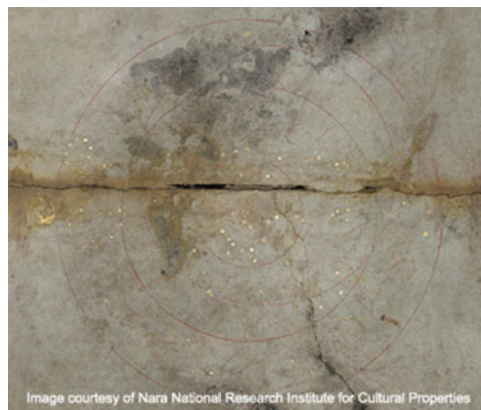


Figure 3. Star chart drawn in late 7th–early 8th century. Image courtesy of Nara National Research Institute for Cultural Properties.



Figure 4. Observation site of 1887 total solar eclipse at Niigata. Image courtesy of Committee of Japan Astronomical Heritage.



Figure 5. 6m millimeter radio telescope made in 1970. Image courtesy of Committee of Japan Astronomical Heritage.

The second call of 2019 results in three heritages: one is キトラ古墳天井壁画 (“Kitora Kofun Tenjo Hekiga”, Fig. 3), a fine mural of star chart drawn on the ceiling of late 7th- or early 8th-century tomb (Sōma (2016)), another is 明治 20 年皆既日食観測地及び観測日食碑 (“Meiji-20nen Kaiki-Nisshoku Kansokuchi oyobi Kansoku-Nisshoku-Hi”, Fig. 4), a historic site where the first modern observation of total solar eclipse was done in 1887 (Arai (1888)), and the other is 6m ミリ波電波望遠鏡 (“6m Mili-Ha Denpa Bouenkyou”, Fig. 5), the cornerstone telescope of Japanese radio astronomy made in 1970 (Akabane et al. (1974)). The news of the historic sites has reminded citizens of the value of the heritages and the pioneering astronomers.

3. The goals of Japan Astronomical Heritage

Japan Astronomical Heritage advances the recognition of historically important properties and promotes the utilization such as in the astronomical community and the local community. ASJ will continue to authorize Japan Astronomical Heritage in order to make citizens and professionals re-recognize the value of the sites/materials/literature not only

for preservation but also for utilization such as education of astronomy, regional history, etc. The activity will also contribute to the project of World Astronomical Heritage.

We believe that the idea of national astronomical heritage helps to preserve valuable properties of each country and to promote the utilization.

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