



Figure 14.1: *Aerial view of Marseille Observatory (Marc Heller, 1997, ©Région Provence-Alpes-Côte d'Azur – Inventaire général)*

14. The Marseille Observatory: the Final Move – A Case Study in the Conservation of Astronomical Heritage

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The ‘Observatoire de Sainte Croix’ began operations in 1702, during the reign of Louis XIV, as a Jesuit observatory financed by the French naval ministry. It was located in the heart of the old city. By 1750 it was called simply ‘Observatoire de Marseille’. The naval ministry continued to finance the observatory, even after the suppression of the Jesuits in the 1760s; but during the French Revolution control was transferred to the newly-created Bureau des Longitudes. In the middle of the 19th century, responsibility for Marseille and other state observatories passed to the education ministry (this continues to the present day). In the 1860s, the Marseille Observatory was transferred to the Plateau Longchamp, about 3 km away. There, for a decade, it was run as an annexe to the Paris Observatory. Léon Foucault’s 80 cm diameter telescope, then the world’s largest with a silvered-glass mirror, was installed in the new site. Many instruments and archives were transferred from the old site; these now constitute the core of the observatory’s historical heritage.

Becoming independent again in the 1870s, the Marseille Observatory was equipped with the standard observatory instruments of the late 19th century, including an equatorial refractor of diameter 26 cm, clocks, and a large meridian circle. At the end of the 19th century the Marseille observatory was officially attached to the University of Aix-Marseille.

The first half of the twentieth century was a less prosperous period for the observatory; relatively few new instruments were acquired. But the years following the second world war brought a complete change. Observing activities were shifted almost entirely to the Observatoire de Haute-Provence, about 100 km to the north. This modern observatory for visiting astronomers had been established before the war by the CNRS (Centre national de la recherche scientifique). But even as on-site observing came to a halt, the ‘OM’ received increased funding and staff. The astronomers were divided into research groups, one of which, that concerning observations from space, spun off in the 1960s, founding the CNRS’s *Laboratoire d’Astronomie Spatiale* (LAS), some 7 km away.

In the second half of the 20th century, the Observatory and the LAS, with dozens of researchers (rather

than just a handful), produced a volume of astronomical research that dwarfs all that was done previously. The historical remains of this modern period are quite different from those from the days when observations were made in-house: auxiliary instrumentation rather than telescopes, but a vast quantity of archives.

In 1990, several colleagues collected many of the historical instruments in the former director’s office on the ground floor of the Observatory’s *Maison des Astronomes* – the building begun in the 1860s to house the observatory director and his assistants. A decade later this Museum was extended to most of the ground floor (the former library), with additional instruments and the observatory archives up to ca 1950.

The present crisis concerning the astronomical heritage was triggered in 2000 by the (re-)merger of the Marseille Observatory and the LAS, to form the *Laboratoire d’Astrophysique de Marseille* (LAM). Finally, in the spring of 2008, these two components merged physically in a new building even farther from the city centre. This move presented an opportunity to assemble the more recent historical heritage of the two establishments. Indeed, this was a necessity, as the new building’s volume is smaller than the sum of those of the buildings being abandoned. The plan was to store all of this material in the Marseille Observatory, no longer used for astronomical research, but which was to remain under the control of our university. A new establishment, the *Institut Méditerranéen de Recherches Avancées* (IMéRA), associated with the three local universities, began moving into the Marseille Observatory, but was not expected to use the totality of the space available, so that there was expected to be room for storage and exhibition space for our Museum – although not in the *Maison des Astronomes* we had originally planned to use. Also, the astronomical public outreach activities (run by an association called *Andromède*), will almost certainly be permitted to remain on the Observatory site.

The (modern) historical heritage of LAS, extremely voluminous and disorganized, was in fact transported for temporary storage to the Saint-Charles site of our university – the instruments in the old chemistry building and the archives in the university library. It is not



Figure 14.2: *Marseille Observatory composite image (1702 and today) (James Caplan)*

clear how long the university will agree to this storage. The modern heritage (post 1950) of the Observatory has been stored in the basement of the Astrophysics building, which we intended to convert to museum and archive storage. Unfortunately, since the upper floors of this building, which have been attributed to IMÉRA, are to undergo conversion to offices and living quarters, we must remove all our material for the duration of the construction work. The destination of this material is not yet defined.

As for the older heritage, in our Museum located in the *Maison des Astronomes*, everything must be removed. Due to this material's great value (some twenty objects are officially 'protected' as historical monuments, and the archives must be stored in conformity with the rules of the Archives de France), they cannot be stored other than under good, well-protected conditions, while awaiting the availability of storage and exposition areas at the Observatory. The probable partial solution to this problem is as follows. Since March 2009, more than half of the old collection of the Museum has been exhibited in the Natural History Museum, 200 m from the Observatory, in the temporary exhibition *Telescopium* designed jointly by the Natural History Museum and the *Observatoire Astronomique de Marseille-Provence*. We hope that the exhibition can be shown in other museum environments elsewhere in France over the next few years, until we can return to the Observa-

tory site. A secure storage solution for the instruments *not* in the exhibition has not yet been resolved. As for the old archives (18th century to mid20th century), they will be transferred to a secure site in Aix-en-Provence where they will be digitised. They will be returned to the Observatory after the construction work. Thus our archives will soon be available for consultation by all, on the Web.

The final configuration of our Museum is hard to predict, but I have every hope that within a few years, through collaborations with the university, the city of Marseille (owner of the land), IMÉRA (whose interdisciplinary cultural programme is consistent with the presence of astronomical heritage and history) and other institutions, the historical Museum of the Marseille Observatory will become a permanent feature of the Longchamp Plateau in Marseille.

Where is the 'Observatoire de Marseille' today? Administratively, it still exists – for the moment! – as the astronomy unit of the University of Provence, but is now called the *Observatoire Astronomique Marseille-Provence*, which federates the LAM (the merged Marseille Observatory plus LAS) along with the *Observatoire de Haute-Provence*. Will the name 'Observatoire de Marseille' disappear to general indifference? Possibly, but we hope that the name will continue to designate the site on the Plateau Longchamp that has been devoted to astronomy for over 140 years.



Figure 14.3: *Foucault telescope, Marseille Observatory (Marc Heller, 1997, ©Région Provence-Alpes-Côte d'Azur – Inventaire général)*