
SCIENCE NEWS

MADRAS OBSERVATORY: THE BEGINNING

Madras Observatory – the precursor of the Kodaikanal Observatory and the Indian Institute of Astrophysics – was set up in 1786 as a private observatory by William Petrie, an officer of the British East India Company. The main aim of the observatory was to provide navigational assistance to the company ships, and to help determine longitudes and latitudes of the company territories. The observatory was handed over to the East India Company in 1789 when Petrie left for England on one of his periodic visits. Michael Topping was appointed the Astronomer (as the Director was then called) and John Goldingham the assistant Astronomer. Topping apart from being the astronomer was engaged in survey work for the Company, and Goldingham was concurrently the civil engineer.

For the first five years of its existence the whole of the observatory was confined to a part of the Astronomer's residence. Reference meridian with respect to which all the longitudes were estimated passed through a mark on the granite step of the library, set up in two rooms of the Astronomer's house.

Records of Captain Huddart's 1787 astronomical observations, preserved at Royal Greenwich Observatory, explicitly refer to 'difference of meridians of Mr. Petrie's house at Madras and Greenwich.

In 1792 the observatory building was constructed on the banks of Cooum river, in Nungambakkam, near the Astronomer's residence. The construction was personally supervised by the assistant Astronomer, Goldingham, who described the observatory building in a manuscript volume (1793–94) (kept at the Indian Institute of Astrophysics) the first

10 and the last few pages of which have been missing. The Astronomer Topping's accounts have unfortunately not survived. The Goldingham manuscript being the only extant contemporary account, has led to the erroneous belief that the observatory was founded in 1792.

The original instruments of the observatory were donated by Petrie: (1) a sidereal clock by Shelton (2) 20" transit instrument by Stanchiffe, (3) a quadrant by Bird, (4) three identical achromatic telescopes by Dolland, of 2 $\frac{3}{4}$ " aperture and 3 $\frac{1}{2}$ ' focus. To these, Goldingham added a portable transit by Ramsden, and 12" diameter circular instrument (attazimuth) by Troughton.

Two papers by Goldingham published in 1822 in *Philosophical transactions* (pp 408–430; 431–436) refer to observations made as early as 1787, by Petrie, Topping, and Goldingham himself. But the 1787 observations are not the oldest on record. The oldest observations on record pertain to 1786, the year of the foundation of the observatory, and are recorded in the *Manuscript Observations*. On 1786 December 5, the longitude and latitude of Masulipatnam Fort Flagsleft was measured.

Thus 1792 is neither the year of setting up of the observatory (which happens to be 1786) nor the year of takeover by the East India Company (which is 1789). The observatory building was constructed in 1792; but even afterwards a part of astronomer's house continued to be used for official purposes.

The detailed paper by R. K. Kochhar of Indian Institute of Astrophysics, Bangalore will appear in the 1985 June issue of the *Bulletin of the Astronomical Society of India*.
