

new sites

Leh : A High Altitude Site Survey Observatory

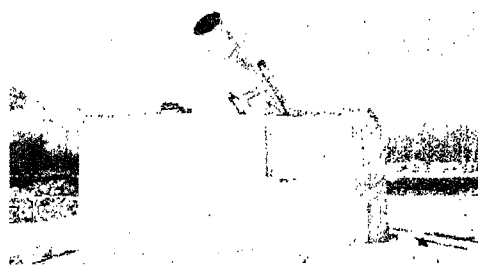
Situated in the state of Jammu and Kashmir in the Ladakh region, at an altitude of about 3300 m above sea level, the High Altitude Site Survey Observatory at Leh functions under the auspices of the Department of Science and Technology (DST). The following reasons favoured the choice of this site. (1) It is a high altitude desert with low atmospheric moisture content resulting in low infrared absorption. (2) The monsoon never reaches this part of the Himalayan ranges resulting in clear skies when rest of the country is cloudy. (3) Air travel to Leh is possible during the winter months when the roads may be closed. (4) There are several peaks in the region, ranging up to heights over 4000 m, from which the final site may be chosen in future for a full-fledged observatory.

The possibility of an astronomical site at Leh was first envisaged by M.K.V. Bappu and Homi J. Bhabha. A national committee was formed by DST and the station inaugurated in October 1984. IIA is among the institutions which have shown a keen interest in the project. It has provided a 50 cm reflector equipped with a photoelectric photometer and has been sending observers regularly both for site survey observations and serious astronomical observations.

A major problem faced in photoelectric observations was the malfunctioning of the electronics due to low ambient temperature (-28°C in winter). Incorporating heater elements in the system, it is now possible to observe at ambient temperatures reaching -10°C .

Bhavnagar Telescope

The 50 cm (20-inch) reflector at Leh has an interesting history. It is a Grubb telescope purchased during the last decade of the nineteenth century for an observatory in Poona, partially funded by, and named after, Maharaja Takhtasinghji of Bhavnagar. After the demise of K.D. Naegamvala, the director, the observatory was closed in 1912 and the instruments transferred to Kodaikanal observatory through a government order.



Due to various reasons the telescope was not commissioned at Kodaikanal until A.K. Das took keen interest in it in 1951. During the subsequent years, it was used for observing Mars. M.K.V. Bappu equipped it with a spectrograph in the sixties, and the 'Bhavnagar telescope' served as a major facility in the country for stellar spectroscopy for nearly a decade.