

Design and Development of Telescope Cover Structure for 3.6m Telescope at ARIES

The 3.6 m optical telescope of ARIES is installed at Devasthal site for astronomical observations. Need for additional protection of telescope apart from that provided by its dome was felt to avoid any minute water leaks from dome roof, accumulation of dust on the mirrors and also to minimize effect of humidity on telescope during rainy season. A telescope cover structure has been designed to cover the telescope inside its dome. It was designed as a permanent structure that will be integrated with dome's existing structure. Structure will allow movement of two 10 MT under slung cranes in dome as well as periodic health run of the telescope during rainy season. Prototype of telescope cover structure was prepared and its assembly was tested with dome structure. Components for manual version of the telescope cover structure were fabricated in-house, assembled with dome and tested successfully at site with plastic covers. Presently further work on up-gradation of telescope cover structure with retractable water proof and fire resistant fabric is under progress.