The favourable climatological conditions prevailing in Crete (large number of clear-sky nights per year) combined with the high mountains, place the island of Crete among the best locations in Europe for high quality astronomical observations. These facts were influential in the establishment of the Skinakas Observatory.

The Skinakas Observatory has been built as a scientific research collaboration between the University of Crete, the Foundation for Research and Technology-Hellas (FORTH) [1] and the Max-Planck-Institut für Extraterrestrische Physik [2] of Germany. It currently operates under an MOU between the Univ. of Crete and FORTH. The site of the Observatory, chosen on scientific and functional grounds, is the Skinakas summit of Mount Ida (Psiloritis), at an altitude of 1750 m and 60 km from Heraklion.

The Observatory has two telescopes: a Modified Ritchey-Chrétien [3] telescope with a 1.3m aperture (focal ratio of F 7.6) and a 30cm telescope (focal ratio F 3.2). The building for the small telescope was built in 1986, and observations started in 1987. The 1.3? telescope commenced its observations in October 1995 and remains the
The largest operational telescope in Greece to date. The optical system was manufactured by Carl Zeiss, and the mechanical parts by DFM Engineering. Power is provided by a photovoltaic station.

The instrumentation of the 1.3 Telescope includes:

- a Focal Reducer which more than doubles the field of view of the telescope.
- autoguider
- three optical CCD cameras 2048x2048 pixels of 13.5 μm pixel size and an auxiliary CCD camera 3072x2048 pixels with a 9μm pixel size
- a full set of narrow and broad-band photometric filters.
- a set of four slits of different size and 8 dispersion gratings for slit spectroscopy.
- a wide field near-infrared camera (7’ x 7’).
- a specialized optical polarimeter (Robopol).

Under construction are:

- WALOP: a high-efficiency, high-sensitivity, high-accuracy wide field optical polarimeter

The main ongoing astronomical projects at the Observatory of Skinakas include the study of:

- galaxies and Active Galactic Nuclei
- planetary nebulae
- supernovae remnants
- globular clusters
- X-ray binaries (cataclysmic variables, accreting pulsars, black-hole binaries)

For more information visit the dedicated web site of Skinakas Observatory.

Source URL: https://www.physics.uoc.gr/en/node/62

Links