

Cerro Armazones Observatory

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Abstract. A new small observatory in an area of 52700 hectares in the Atacama Desert, and located about 40 km east of Paranal will be dedicated to long-term observing campaigns of variable objects. The implementation of new instruments will be available in a near future according to the agreement between our Universidad Catolica del Norte and Bochum University, Germany.

The Cerro Armazones Observatory was inaugurated on 1995 December 2 with the installation of an 84-cm Newtonian telescope. At present we also have a small 41-cm Schmidt-Cassegrain telescope and we plan to set up in the near future the 1.5-m Hexapod telescope (HPT) (in collaboration with the University of Bochum) on Cerro Armazones; this telescope has been tested at the Bochum University. The HPT is a prototype of a unique design concept for future telescopes with the support, pointing and guiding structure consisting of six high-precision struts of variable lengths, and with active optics for the primary mirror (Chini 2000).

This observatory is located in the sector of Sierra Vicuña Mackenna (70° 11' West, 23° 35' South) at about 140 km southeast of Antofagasta city and at an altitude of 2745 m above sea level, where the basic infrastructure is available. Cerro Armazones, with an elevation of 3064 m, shows very similar meteorological conditions to Cerro Paranal (VLT-ESO), a region which has about 320 clear nights per year (Woltjer 1983, Ardeberg & Lindgren 1983). In view of the favourable conditions at Cerro Armazones Observatory and considering the equipment, consisting of CCD-cameras for imaging purposes, we have as a main goal the support of long-term observing campaigns of different astronomical objects, for instance variable stars.

Telescope	Schmidt-Cassegrain	Newtonian
Primary Mirror	415.9 mm	839 mm
Focal length	4064 mm	3015 mm
Focal ratio	f/10	f/3.6

The Instituto de Astronomia (IA) of our university was inaugurated on 1996 April 23 as a branch of the Faculty of Sciences. The IA is responsible for the coordination of the astronomical activities at UCN, including the Cerro Armazones Observatory. This project has been possible due to the collaboration with the Bochum University (which started about three years ago) and the valuable support of institutions like the European Southern Observatory (ESO),

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References

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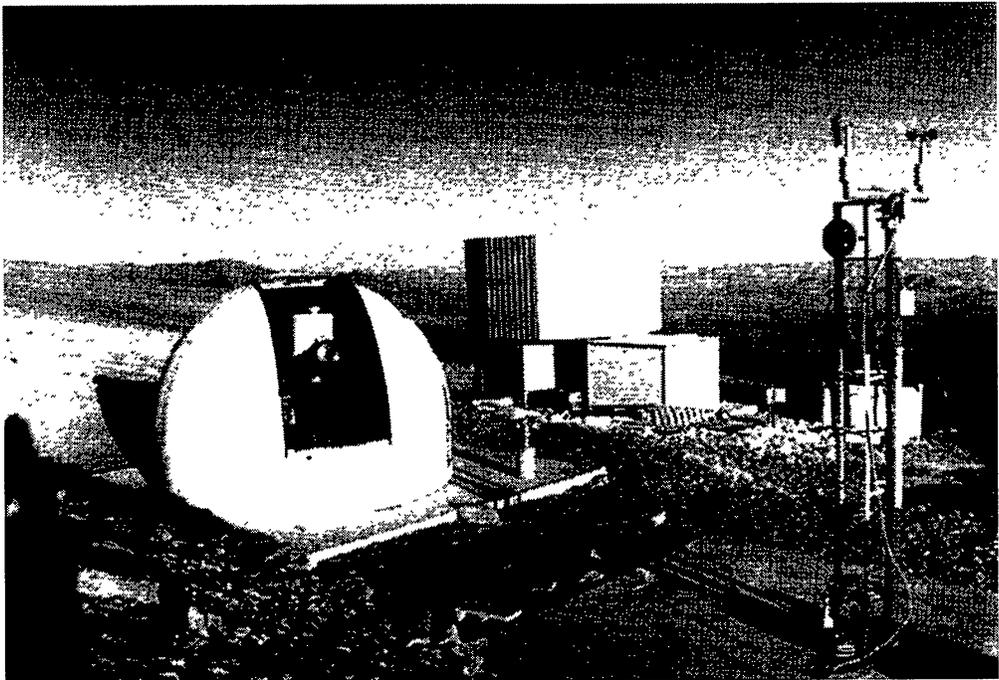


Figure 1. Armazones Observatory in Northern Chile.