Solar Observatory at Ica National University

by
Dr. Jose Ishitsuka
Geophysical Institute of Peru.
12 April 2010.

Everything began in 1997. My father Mutsumi Ishitsuka walked around Lima, looking for an adequate place to settle a 60 cm reflector telescope and to construct an Educational Astronomical Observatory. Since places near the capital Lima do not have good sky conditions, he went to Ica that is 300 km south of Lima, and found good sky conditions. He began site searching around Ica, meanwhile installed a 15 cm refractor telescope at the roof of the Faculty of Sciences of the Ica National University and began sunspots observations and training students of Physics. In 2008 the University decided to construct a Solar Observation Observatory within the University campus, designated a big land for it and finally it was concluded past march 19th, when the inauguration was celebrated. Dr. Kazunari Shibata, the Director of Kwasan and Hida Observatories of Kyoto University, was present in the ceremony that was held in front of FMT (Flare Monitoring Telescope), one of the main instruments of the Solar Observatory.

Flare Monitoring Telescope arrived to Ica Solar Station days before inauguration ceremony and was making observations in Hida Observatory until November of 2009. It was installed in Hida Observatory in 1992 and monitored the Sun during almost 17 years, producing Terabyte of information and in consequence important scientific outputs. Now it is ready to monitor the Sun from the southern hemisphere, shifted 14 hours from Hida Observatory. Hida Observatory is still monitoring the Sun with another telescope called SMART (Solar Magnetic Activity Research Telescope), so while it is night in Hida FMT will be observing the Sun and vice-verse. Installation of FMT in Peru is part of CHAIN project that aims to observe flares and filaments on the surface of the Sun 24 hours.

Solar Observatory has an extension of 4 hectares where offices and laboratories are implemented, 4 single rooms for guests are available for observers and researchers, a 9 meter tower will host the sunspot telescope and a solar spectrograph room is ready to observe solar spectrum. Solar spectrograph will be tremendously useful for education purposes. A 32 cm coelostat collects the Sunlight and redirects into spectrograph room. Optical parts of spectrograph were sent from National Astronomical Observatory of Japan - NAOJ, people of NAOJ did also refurbishing of the old coelostat. Modern meteorological measurement instruments will be installed within the Observatory.

In the same container that sent FMT, the 60 cm Reflector Telescope was shipped, which will be installed next to Flare Monitoring Telescope temporarily, until Astronomical Education Observatory would be build. The place of almost 900 hectares is decided and fixed but funds for constructions are not achieved yet. But

since Ica city starry night is no so bad, the only one 60 cm in Peru will be very useful for public outreach.

Now the joint project between Geophysical Institute of Peru and Ica National University have important instruments for education and to perform observations that will contribute to the international initiative for Space Weather research.



Flare Monitoring Telescope before Inauguration Ceremony of Ica Solar Observatory

Special thanks to people that worked hard for FMT installation:

- Geophysical Institute of Peru: Astronomy Division stuff and students
- Universidad Nacional San Luis Gonzaga de Ica: R. Loayza, R. Terrazas, L. Martínez and Y. Buleje
- Hida Observatory: S. Ueno and G. Kimura
- Nishimura Co. ltd.: M. Nishimura and M. Uemura