

Sixty years of Norikura Solar Observatory

Takashi Sakurai

National Astronomical Observatory of Japan

Abstract. Norikura Solar Observatory was built in 1949 at the top of Mt. Norikura, one of the peaks in the Japan Alps, 2876m above sea level. A 10cm-aperture coronagraph made by Nikon was installed there in 1950, and routine observations of the coronal green-line intensity had been continued till today. In 1971 a 25cm-aperture coronagraph (also built by Nikon) equipped with a large spectrograph in the coude room was installed. A notable achievement of the photographic era was the observation of the spectra of white-light flares. In 1989 a CCD system was installed and had been mainly used for the spectroheliograms of He 10830 Angstrom line (1989-2001). A cooled CCD (Photometrics CH250) was introduced in 1992 and spectroscopic observations of the coronal emission lines had been undertaken intensively since then, in cooperation with Yohkoh. The 10cm coronagraph was converted into a fully-automatic system with a CCD in 1989. In 1997 a tunable Lyot-filter system (called NOGIS) was installed and two-dimensional imaging and Doppler-shift measurements of the coronal green line have become possible. Despite of these developments, heavy burden in the winter-time operations, retirement of supporting staff, and budget reduction forced us to close the observatory during the winter time since 1998, and the final decision was made to shut down the observatory in 2009. Now a possibility is being sought for to convert the observatory into a research base of high altitude meteorology. We would like to thank all of the people and the organizations who contributed and supported the safe and successful operation of the observatory for sixty years.