CORONAL INTENSITY EVOLUTION FROM LONG-TERM GREEN LINE DATA

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A coronagraph and a filter instrument attached to the Norikura Green Line Imaging System: NOGIS, which observe the intensity and Doppler shift of the coronal green line (Fe XIV 530.3 nm), had been used at the Norikura Solar Observatory (NAO) untill 2009. After the closure of Norikura Solar Observatory, the coronagraph and the NOGIS instrument was relocated to the Lijiang Station of the Yunnan Observatories of CAS in October 2013 and the observation of the solar corona has been resumed. The name should then be changed to YOGIS (Yunnan Observatory Green-line Imaging System). The YOGIS instrument can observe not only coronal plasma motions but also velocity fields. Such observations are important in researches on coronal heating, flares, coronal mass ejections and space weather. In this talk we will introduce the YOGIS instrument and discuss the continuity of coronal green-line data between Norikura and Lijiang observations, as well as the long-term evolution analysis of the coronal green line observations.