## [ID23] SNUQSO 의 측광관측연구

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이 연구에서는 SNUQSO(Seoul National University Bright Quasar Survey in Optical) 의 일환으로 진행된, 지난해 7월과 8월 Maidanak Observatory에서 관측한 퀘이사들의 측광 결과를 제시한다. 데이터들은 모두 IRAF 패키지를 사용하여 처리되었으며 bias subtraction, flat fielding, fringe pattern removal, aperture extraction, airmass 보정을 거쳐 표준화되었다. 이 과정에서 날씨 차이 등으로 인한 문제를 보정하고 효과적인 fringe pattern 의 제거를 위하여, fringe frame의 amplitude를 조절하는 방법을 사용하였다. fringe pattern 으로 인한 차이는 sky value 의 5% 미만으로 유지되었으며, 이렇게 구해진 7월과 8월에 공통으로 관측된 6개의 퀘이사의 I band 등급을 비교해 보았을 때, 모두 0.1 등급 이내에서 일치하는 결과를 보여주었다.

## [ID24] Development of KASI Imaging Spectrograph

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We have successfully developed the KASI (Korea Astronomy and Space Science Institute) Solar Imaging Spectrograph (KSIS), which has been originally upgraded from the KASI solar spectrograph that was able to record solar spectra for a given slit region and to inspect the response function of narrow band filters. A prototype KSIS was developed in 2004 by using a scanning mirror in front of the spectrograph slit and a SBIG ST-8XE CCD camera. Its main disadvantage is that it took a long time (about 13 minutes) to scan a whole active region (145″×217″). In this work, we have upgraded the KSIS by installing a much faster Dalsa 1M15 CCD camera, which gives a data acquisition time of about 2.5 minutes. The software for KSIS was also improved for the new CCD camera on the basis of component-based development method. We have successfully made a test observation for a simple and small active region (AR10910) using the improved KSIS system. Our observations show that H-alpha images for several wavelengths have typical features in a sunspot as well as a H-alpha centerline image is quite similar to a BBSO H-alpha image, demonstrating the capability of the KSIS system.