

HIGH SPEED CCD PHOTOMETRY

Sun-Youp Park and Yong-Ik Byun

Department of Astronomy, Yonsei University

Traditionally high speed photometry was the domain of photoelectric photometry. The slow readout time of CCD makes it impossible to carry out time-series observations that require very fast response. We introduce here an observational method that can be used to monitor the variation of stellar brightness at a time resolution well below 1 second. Our technique, called "Trailed Mode Photometry", allows the target star and nearby stars to trail across CCD and extract highly resolved light curves from each of the stellar trails. We present the details of this technique and the results of our preliminary test observations for flare stars using a small telescope with a 2K CCD.