

GSC 01887-01240: A New Eclipsing Binary?

Ju Yong Han¹, Chun-Hwey Kim¹, Jae Woo Lee²,
Ho Il Kim², Wonyong Han²

¹Dept. of Astronomy & Space Science Chungbuk National University

²Korea Astronomy Observatory

During the CCD photometric observations for one of our observing program stars, AH Aur (BD +28 1116, HD 256902), it is found that GSC 01887-01240 ($\alpha_{2000}=06^{\text{h}} 26^{\text{m}} 23^{\text{s}}.89$, $\delta_{2000}=+27^{\circ} 56' 44.''2$, $V=10.75$, $B-V=0.35$), which was chosen as a check star for AH Aur, may be a new eclipsing binary. GSC 01887-01240 has been observed on five nights between January and February 2000 with a 61 cm reflector at Sobaeksan Optical Astronomy Observatory in Korea. Two eclipsing events, during the observations were obtained on Jan. 26. and Mar. 24, 2000. From our observations six times of minimum lights in three colours for the new variable star were obtained with the method of Kwee & van Woerden. By using Scargle's (1982) period-search method, two possible light elements for the star were determined as:

$$\text{Min I} = \text{JD Hel } 2451570.2363 + 1.4280\text{E} \quad (1)$$

$$\text{Min I} = \text{JD Hel } 2451570.2363 + 1.5845\text{E} \quad (2)$$

Future photometric as well as spectroscopic observations are urgently needed to reveal the properties of the light variability of GSC 01887-01240.