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GSC 4540_1553 IS A NEW BINARY STAR

CCD images taken at the Bohyunsan Optical Astronomy Observatory (BOAO) with the 1.8-m telescope and at the Kyung Hee Astronomy Observatory (KHAO) with the 0.76-m telescope on Jan. 21-Mar. 5, 1997 show that the star GSC 4540_1553 (V=15.22), located at R.A.=$08^{h}11^{m}42^{s}.66$, Decl.=$+76°04'53''.22$ (equinox 2000.0) varies in magnitude. From the preliminary analysis of the light curve, I derive the period of 1.1799 day with 0.52 mag (in R) variation in primary and 0.45 mag (in R) variation in secondary minimum using GSC 4540_2581 and GSC 4540_1931 as the comparisons. It is considered as an Algol type eclipsing binary star. The light curve shown is the combined data of Jan. 21-22, 24, 1997 and Feb. 1, 1997 using GSC 4540_2581 as a comparison. The average B−V colour index of this new variable is $0^{m}.03$ out of minima.

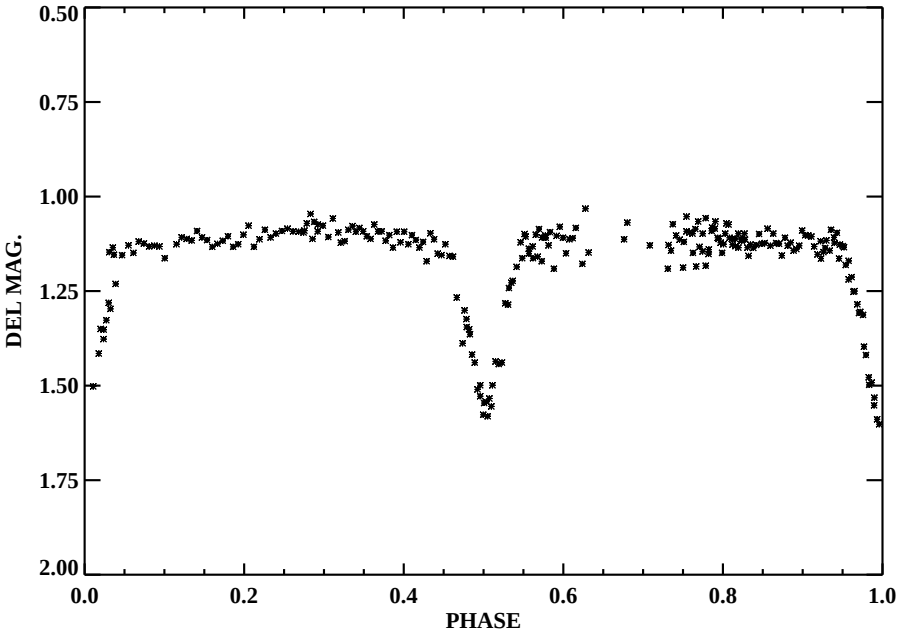

Figure 1. Light curve of the new variable. *R* filter data

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