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A FLARE EVENT ON HR 2517¹

HR 2517 = SAO 114465 (spectral type B II-III, V = 6.15) was not known as a variable. It is even listed as "a photoelectric standard with confirmed long-term stability" in the Hipparcos Input Catalogue (Turon et al. 1992). The star was used for more than ten years as comparison star to the Be star V 505 Mon (Vogt & Sterken 1993) in the framework of the "Long-term Photometry of Variables" (LTPV) project (Sterken 1983). HR 2517 also figured as a standard star for the LTPV project, until 1992, when it suddenly brightened by about 0^m 10 in the y, b and v bands, and by 0^m 15 in u. As shown in Fig. 1, this flash-like activity is modulated with a period slightly longer than one month, suggesting rotation of a hot spot.

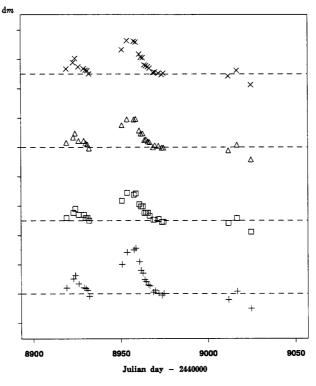


Figure 1

¹BASED ON OBSERVATIONS CARRIED OUT AT THE ESO LA SILLA OBSERVATORY

Unfortunately, this increased activity approximately coincided with the end of the observations of the star, so that only two cycles have been monitored. Only a few points have been obtained in 1993, but they show that the star was still active.

Detailed analysis of this flare and of the previous microvariability of HR 2517 is being carried out. We plan to secure more photometric and spectroscopic observations of this object in the following months. Photometric monitoring of HR 2517 by other observers, with special emphasis towards the determination of the duration of the active state, is strongly encouraged.

All data used here will become available in the course of 1995 through the CDS Data Center in Strasbourg.

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References:

Sterken, C., 1983, The Messenger 33, 10. Turon, C., Crézé, M., Egret, D. et al., 1992, *The Hipparcos Input Catalogue*, ESA SP-1136 Vogt N., Sterken C. 1993, Inf. Bull. Var. Stars, 3958