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V 810 CENTAURI

On the basis of observations available until the end of 1978, it has been proposed that the bright star V 810 Cen = HD 101947 = HR 4511 is probably an extremely long-period low-amplitude classical Cepheid (Eichendorf and Reipurth, 1978, 1979). The period is about 125 days, thus making it the hitherto longest period Cepheid known in our Galaxy. The amplitudes in the uvby-passbands are ranging from  $0^m.13$  to  $0^m.25$ . A detailed discussion of the star, which is situated in the open cluster Stock 14, is given by Eichendorf and Reipurth (1979).

Further photometric and spectroscopic observations during 1979 confirm the published results; from IUE spectra it is evident that a hot blue companion is present which probably does not affect the lightcurve.

To establish the nature of this important star and to study its pulsations in more detail, it is necessary to observe V 810 Cen photometrically and spectroscopically over at least 4-5 months from the southern hemisphere - a program most observers (including the authors) cannot undertake.

During a meeting of commission 27 at the General Assembly of the IAU at Montreal it was agreed that all observers should be urged to include V 810 Cen in their running photometric and spectroscopic measurements. Unfortunately in most cases observers will not be able to obtain enough data to publish the material themselves. We would therefore be extremely grateful to all observers involved for sending us their reduced photometric measurements or copies of spectra taken. Otherwise we would be grateful for preprints. Due to the brightness of the star observations take only few minutes.

Since the star is observable from November to July we shall include all material sent to us until the end of September 1980

in a forthcoming publication together with our own observations. Hopefully this helps to reveal the nature of V 810 Cen better than it is possible at the moment.

Please forward this information to all southern observers who might not have seen it !

Data on V 810 Cen :

	V 810 Cen	Comparison 1	Comparison 2
HD	101947	102350	101021
HR	4511	4522	4475
$\alpha$ 2000	11 <sup>h</sup> 43 <sup>m</sup> 31 <sup>s</sup>	11 <sup>h</sup> 46 <sup>m</sup> 30 <sup>s</sup>	11 <sup>h</sup> 37 <sup>m</sup> 01 <sup>s</sup>
$\delta$ 2000	-6 2 <sup>o</sup> 29'	-61 <sup>o</sup> 10'	-61 <sup>o</sup> 17'
Sp.	G0 Ia	G3 III	K1 III
V	~5 <sup>m</sup> 0	4 <sup>m</sup> 10	5 <sup>m</sup> 14

In general comparison star 1 should be used; if too bright please take comparison star 2 or use a neutral density filter. Both stars have been checked over a few years.

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References:

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