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SPECTROGRAPHIC OBSERVATIONS OF THE SUSPECTED DELTA SCUTI  
 VARIABLE STAR 2 LYNCIS (HR 2238)

In a recent paper (Antonello et al., 1978) we have published the results of eighteen spectrographic observations of the suspected variable star 2 Lyn, obtained with the Zeiss prism spectrograph of the Merate Observatory. The equivalent width ( $W_\lambda$ ) and the radial velocity (RV) of spectral lines of this star were found to be variable, with a period of about 0<sup>d</sup>.04 for the RV, and 0<sup>d</sup>.3 for the  $W_\lambda$ . Moreover smaller variations of  $W_\lambda$ , superimposed on the greater ones and partially in accordance with the RV were found.

At the beginning of 1978 thirteen new spectra of 2 Lyn were taken with the electronic camera of the Astronomical Observatory of Haute Provence (Reseau holographique, dispersion: 18.7 Å/mm; 152 cm telescope). Unfortunately the spectra are slightly underexposed. The methods of reduction are the same as in the previous paper, and the values obtained are listed in Table 1. The Figures 1 and 2 show the new results compared with some of the old ones reported in the previous paper.

Table 1

J.D.	RV (Km/s)	$W_\lambda$ (Å)	$W_\lambda$ (Å)
	MgII $\lambda$ 4481	MgII $\lambda$ 4481	H $\gamma$
2443519.332	-8.3	0.42	14.11
.344	15.5	0.87	14.80
.359	7.1	0.62	13.68
.371	-15.2	0.48	13.75
.387	6.7	0.76	12.61
.398	- 5.0	0.50	14.94
.414	- 0.7	0.40	12.76
.426	0.9	0.46	13.18
.441	1.7	-	-
.457	13.4	0.41	15.05
.469	- 3.2	0.48	12.52
.484	- 6.7	0.48	13.25
.496	2.9	0.43	14.96

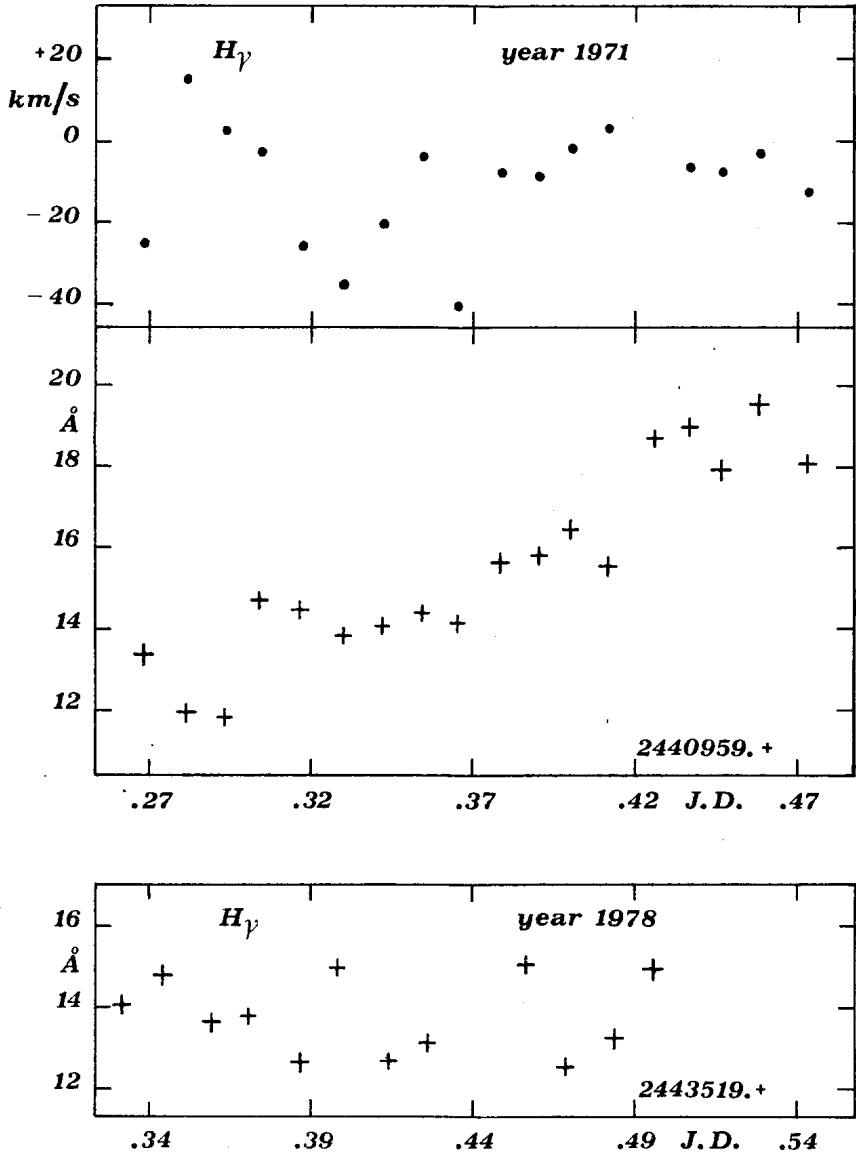


Fig.1. Radial velocities and equivalent widths of H $\gamma$  line versus Julian Days.

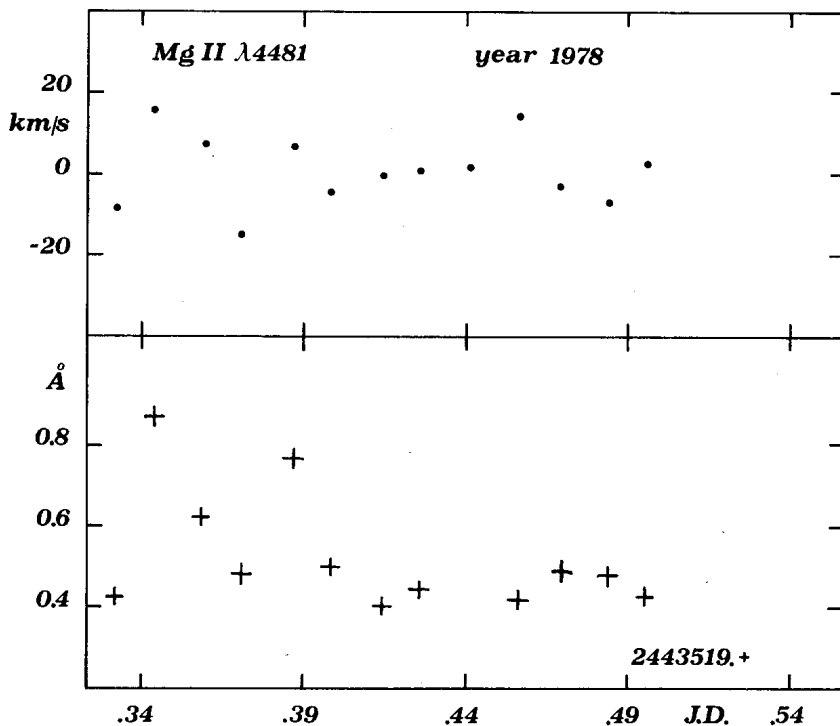
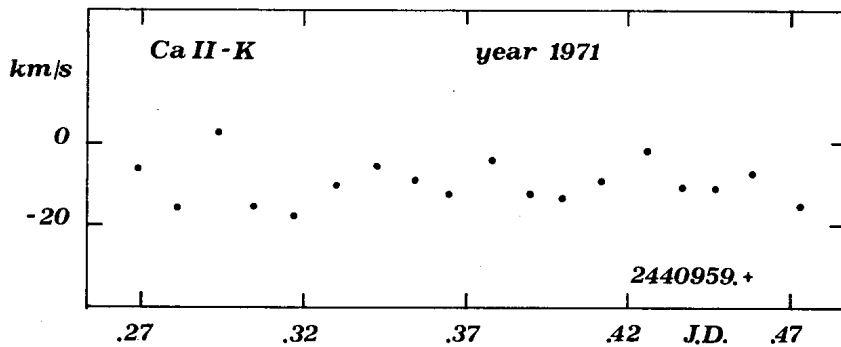


Fig.2. Radial velocities and equivalent widths of Ca II - K and Mg II  $\lambda 4481$  lines versus Julian Days.

As regards the short period variations, one can see that the present results are in agreement with the old ones, both for RV and for  $W_\lambda$ . However, these results are not sufficient to confirm (but neither to exclude) the longer period variation.

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Reference:

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