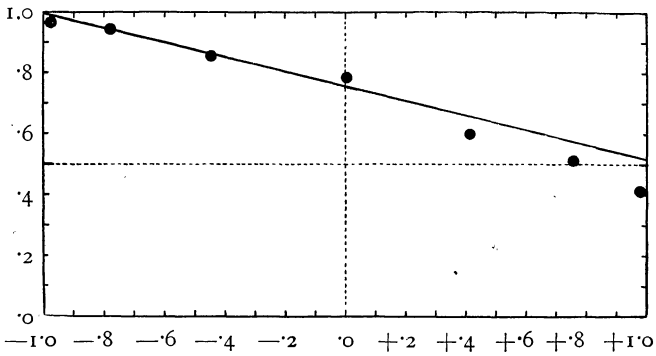
TABLE 5.

mean phase	mean magn.	mean phase	mean magn.	difference in magn. from maximum	ε	
				Δm	l^2	cos 2ϑ
P [1])	m	P	m	m		
— ·0019	+ ·352					
— ·0485	·425	± ·0337	·439	·481	·4123	+ ·9777
+ ·0506	·539					
— ·0915	·387					
+ ·1014	·440	·1126	·323	·365	·5105	+ ·7600
— ·1450	·141					
+ ·1641	·194					
— ·1747	·327	·1825	·236	·278	·5992	+ ·4115
— ·2086	·187					
+ ·2301	·074					
— ·2507	·142	·2497	·090	·132	·7842	+ ·0019
+ ·2684	·053					
— ·3059	·066					
+ ·3240	·029	·3233	·042	·084	·8566	— ·4444
— ·3399	·031					
+ ·3736	+ ·034					
— ·3790	— ·027	·3926	— ·009	·033	·9410	— ·7808
+ ·4033	+ ·001					
— ·4143	— ·043					
+ ·4393	— ·015					
— ·4483	— ·029	·4635	— ·022	·020	·9638	— ·9738
+ ·4779	— ·022					
— ·4886	— ·021					

[1]) phase = ·03221 (J. D. — 2420000) — ·472.

1912), to be rectilinear as long as no eclipse takes place and the variation is only due to ellipticity of the stars. The relation in question is shown graphically on Figure 3, which much resembles the corresponding diagram for V W Cephei given in *B. A. N.* 175, 92. The straight line tentatively drawn in Figure 3 corresponds to $\varepsilon^2 \sin^2 i = ·48$, where ε is the excentricity of the equatorial section of the stars and i the inclination of the orbit. If the variability of C. P. D. — 59° 2855 is at all to be explained by duplicity it appears from the above that the components are nearly in contact with each other and strongly elliptical.

FIGURE 4.



Variations in light of a regular or semiregular character in a short period, as shown by C. P. D. — 59° 2855, were not known before in the case of a star with a spectrum of the P Cygni type. The star forming the object of this note is therefore of special interest and deserves further attention.

Especially spectroscopic observations are wanted to see, if doubling of the lines occurs. In that case, assuming the total mass of the system to be about 10 times that of the sun, a maximum separation of the order of 100 km/s between the lines of the two components is to be expected.

If no doubling of the spectral lines is found, the hypothesis of two equal components of the star has to be abandoned.

I want to thank Professor HERTZSPRUNG for his help and many suggestions.

Note on three eclipsing variable stars, which seem to be only rarely in minimum,

by *W. E. Kruytbosch.*

Among the plates taken by H. VAN GENT at Johannesburg with the Franklin-Adams instrument is a series of 255 plates with the centre at $16^h.1$, — 55° (1875) and covering 100 square degrees, chiefly situated in the constellation Norma.

The 3 variables forming the object of the present note are:

star	C P. D.	m	α (1875)	δ (1875)	number of plates	number of nights	faint on plates	faint on nights
			h m s	° ′				
A	— 58°6334	9·7	15 38 59	— 58 36·3	248	90	2	1
B	— 51°8888	8·4	15 54 45	— 51 11·7	252	90	4	2
C			16 17 33	— 52 ·1	246	89	4	1

The variability of the star B was discovered by H. VAN GENT.