



The stars were found distinctly below normal brightness as follows:

A on two plates, viz, from J. D. 2425720·520 and ·541, on which the variable is perhaps $1^m\cdot5$ fainter than normal. The star was of normal brightness the night before and 11 days later.

B on four plates, viz. two from J. D. 2425738·489

and ·512 and two plates from J. D. 2425832·278 and ·299. The star was of normal brightness on the nights before and after those, on which it was found faint. The H. D. spectrum of the star is A0 and it is bright enough to be estimated on Harvard plates of the A M-series.

C shows the beginning of a minimum on J. D. 2425445. On the six plates taken on this night the variable was estimated as follows:

d	s	m	d	s	m
·3570	·46	·10	·4234	2·09	·47
·3792	1·32	·30	·4462	2·95	·67
·4013	1·75	·39	·4684	2·90	·66

The brightnesses in steps adopted for the 3 comparison stars indicated on the accompanying diagram are $a: 5^s\cdot00$, $b: 1^s\cdot65$ and $c: 3^s\cdot11$. From measures made by C. KOOREMAN with the Schilt photometer one step is in this case found to be equal to about $m\cdot23$. The normal brightness of the variable in the scale of provisional magnitudes is $-m\cdot04$ and the range observed therefore about $m\cdot7$.

The fractions of the day given in this note are heliocentric.

The situation of the star C is shown on the accompanying diagram.

Provisional Ephemeris of RS Normae, by *W. E. Kruytbosch*.

I estimated RS Normae = C. P. D. $-53^{\circ}7039$ on 239 plates taken by H. VAN GENT at Johannesburg with the Franklin-Adams instrument. The variability of the star was found independently in the blink-microscope here in Leiden by comparison of 2 plates with an interval of only 3 days.

The comparison stars used were:

	C. P. D.	red. to intern. scale			
a	$-53^{\circ}7024$	$9\cdot6$	$10\cdot6$	$3\cdot00$	$0\cdot00$
b	$-53^{\circ}7027$	$10\cdot0$	$11\cdot1$	$3\cdot61$	$0\cdot78$
c	$-53^{\circ}7034$	$10\cdot2$	$11\cdot4$	$8\cdot57$	$1\cdot29$

The differences in magnitude between the comparison stars were determined by C. KOOREMAN from 3 plates taken with a coarse grating placed in front of the objective. In the scale of steps the difference between the stars b and c was found $1\cdot35$ steps greater than that between a and b , while in the scale of magnitudes $m_c - m_b$ is $m\cdot27$ smaller than $m_b - m_a$.

TABLE I.

number of plates	phase	brightness
	P	s
10	·014	1·53
10	·064	2·97
10	·120	3·56
10	·146	3·78
9	·180	4·13
10	·219	4·12
10	·270	6·04
10	·322	5·20
10	·373	5·84
10	·442	6·80
10	·469	6·79
10	·500	6·43
10	·556	5·54
10	·622	2·90
10	·643	1·56
10	·660	1·36
10	·719	— ·65
10	·780	— 1·43
10	·801	— ·94
10	·839	— ·60
10	·905	·64
10	·950	·87
10	·973	1·18
10	·992	1·72