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NOTES ON FOUR VARIABLES

V 379 Cas. Strohmeier discovered this variable (=BV 223) and supposed that it is an eclipsing variable between 9^m20 and 10^m15 phg. (Kleine Veröff. Remeis-Sternwarte Bamberg Nr.24.1958.) According to Nikulina the star is an irregular variable. (Astr.Cirk.No.207.16.1959).

I examined this star on our sky patrol plates ($n=120$, JD 2436985 - 40483) and on 62 short-exposure photos (1971 July 26, July 27, Oct. 24, Oct. 26) and confirmed the irregular light variability. V 379 Cas probably belongs to the type Isb.

ET Hya. Hoffmeister, who discovered the variable, found short-periodic light variations (Astr. Nachr. 242.131.1931). Preliminary elements were given by (Tsesevich Astr. Cirk.32. 1944):

$$\text{Max.hel.} = \text{J.D. } 2431164.14 + 0^d.408. \text{ E (RR)}$$

A light curve is not yet published.

I examined the star on 387 sky patrol plates of Sonneberg Observatory (JD 35786 - 40531) and confirmed the RR Lyr-type. 22 maxima were obtained and yielded the preliminary elements:

$$\text{Max.hel.} = \text{J.D. } 2435921.386 + 0^d.685519. \text{ E}$$

$$\text{RRab, } 10^m9 - 12^m00 \text{ phg, } M - m = 0^P.12$$

Observed maxima:

J.D.hel.24...	Epoch	O - C	J.D.hel.24...	Epoch	O - C
35860.390	- 89	+0 ^d .015	38753.356	+ 4277	+0 ^d .005
5875.469	- 67	+ .013	9055.585	4572	+ .006
5899.404	- 32	- .045	9057.667	4575	+ .032
5921.381	0	- .005	9070.647	4594	- .013
7375.351	+ 2121	- .021	9180.381	4754	+ .038
7651.626	2524	- .010	9500.493	5221	+ .012
8318.626	3497	- .020	9592.378	5355	+ .038
8388.565	3599	- .004	9945.381	5870	- .002
8406.415	3625	+ .023	40149.659	6168	- .008
8410.500	3631	- .005	0204.491	6248	- .018
8739.552	4111	- .003	0513.660	6699	- .018

EU Hya = 71.1931 = P 566 = BD -6°2694 is an eclipsing binary, discovered by Hoffmeister (Astr.Nachr.242.131.1931). Elements were published by Kordylewski (Roczn. astr. Obs. Krakov 18.1947 and 24.1953). Further observations were obtained by Kordylewski (Roczn.astr.Obs. Krakov 29.1958; IBVS Nr.46) Diethelm and Locher (Orion 14.112.81; 113.109.1969).

From 474 observations on Sonneberg sky patrol plates (JD 2435787 - 40531) I obtained 12 minima and the improved elements:

$$\text{Min.hel.} = \text{J.D. } 2438359.786 + 0.^{\text{d}}778212. \text{ E}$$

$$\text{EA, } 10.^{\text{m}}15 - 10.^{\text{m}}80/10.^{\text{m}}25 \text{ phg, } D=0.^{\text{P}}14$$

Observed minima:

J.D.hel.24... Epoch 0 - C Obs.		J.D.hel.24... Epoch 0 - C Obs.	
30470.310	-10138 +0.037 K.	39507.640ph	+1475 - .009 B.
34126.336	5440 + .023 K.	39536.458ph	1512 + .015 B.
35862.497ph	3209 - .007 B.	39915.424ph	1999 - .008 B.
35876.525ph	3191 + .013 K.	40290.514v	2481 - .016 D.
37403.351ph	1229 - .012 B.	40319.313v	2518 - .011 D.
37669.503ph	887 - .009 B.	.322v	2518 - .002 L.
38321.666ph	49 + .012 B.	.343ph	2518 + .019 B.
38449.285v +	115 + .005 K.	40322.412v	2522 - .025 L.
38473.383ph	146 - .022 B.	.426v	2522 - .011 D.
38852.398ph	633 - .006	40326.335ph	2527 + .007 B.

B=Busch, D=Diethelm, K=Kordylewski, L=Locher

Details will be published in "Mitteilungen der Bruno-H.-Bürgel-Sternwarte Hartha, Heft 4".

Bruno-H.-Bürgel-Sternwarte

DDR

H. BUSCH

EX Vul = GR 34 was discovered by Romano. It is an eclipsing binary (11.^m3 - 14.^m0 phg). The elements given by the discoverer (Coelum Vol. XXVI.11-12.1958) are:

$$\text{Min.} = \text{J.D. } 2436096.34 + 8.^{\text{d}}0684. \text{ E}$$

Elements and light curve are not yet published.

I examined this star on 342 plates of Sonneberg Observatory (JD 2427543 - 40477). It turned out that the period should be doubled.

The improved elements are:

Min. = J.D. 2427931.768 + 16^d.135211. E

EA, 11^m.59 - 14^m.20 phg, D=0^p.10; d=0^p.03

Observed minima:

J.D.hel.24...	Epoch	O - C	J.D.hel.24...	Epoch	O - C
27931.528	0	- 0 ^d .240	36757.513	547	- 0 ^d .215
28286.580	22	- .172	37871.455	616	+ .397
432.401	31	+ .442	38226.425	638	+ .392
29109.425	73	- .210	258.412	640	+ .109
30545.439	162	- .233	290.391	642	- .182
33095.465	320	+ .430	323.290	644	+ .446
36725.454	545	- .003	371.244	647	- .006

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