

COMMISSION 27 OF THE I. A. U.  
 INFORMATION BULLETIN ON VARIABLE STARS  
 NUMBER 330

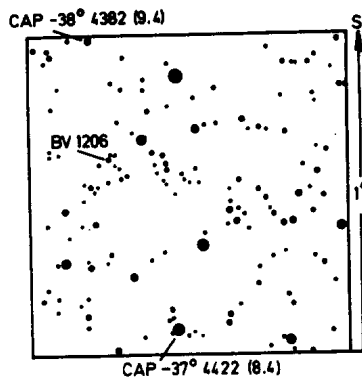
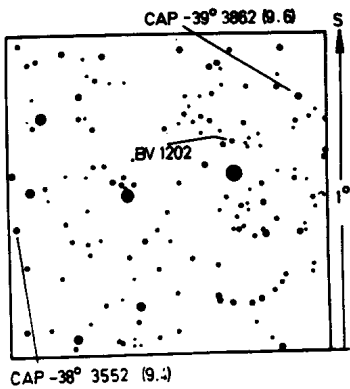
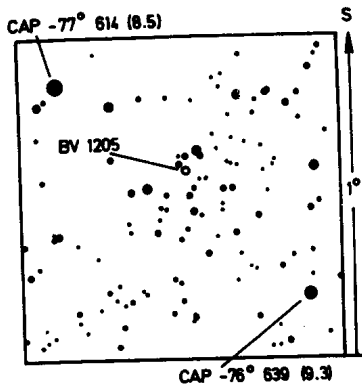
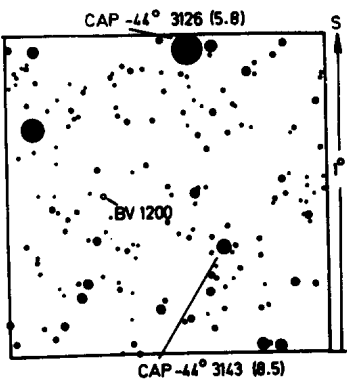
Konkoly Observatory  
 Budapest  
 1969 February 12

Veröffentlichungen der Remeis-Sternwarte Bamberg  
 Astronomisches Institut der Universität Erlangen-Nürnberg  
 Vol.VIII, Nr.82

NEW BRIGHT SOUTHERN VARIABLE STARS

The plates, which have been taken in New Zealand at Mt. John Observatory University, were exposed with the same cameras, lenses and treatment as in South-Africa at the Boyden-Observatory. We have to thank for payment of the observer (Mr. PATTERSON) by the National Science Foundation (USA). This second shipment of plates (600) comprising the declination zones  $-77^\circ$ ,  $-64^\circ$ ,  $-51^\circ$  and  $-38^\circ$  for all RA led to the following discoveries:

					App
BV 1197	Men = CAP $-79^\circ$	186 ( 8,6)	= HD 38031 (F8)		0,25
BV 1198	Pup = CAP $-34^\circ$	1162 ( 8,2)	= HD 54579 (Go)		0,25
BV 1199	Vol = CAP $-65^\circ$	967 ( 9,3)			0,40
	= CSV 1329 = S 4903				
BV 1200	Vel = CAP $-44^\circ$	3096 ( 9,8)			0,30
BV 1201	Vel = CAP $-42^\circ$	3467 ( 8,0)	= HD 79459 (Ao)		0,35
BV 1202	Ant = CAP $-39^\circ$	3853 (10,3)			0,20
BV 1203	Car = CAP $-65^\circ$	1215 ( 8,6)	= HD 87072 (Ko)		0,30
BV 1204	Car = CAP $-66^\circ$	1291 ( 7,4)	= HD 91272 (B5)		0,20
BV 1205	Chr = CAP $-77^\circ$	630 ( 9,6)	= HD 92785 (Mc)		0,45
BV 1206	Ant = CAP $-37^\circ$	4409 (10,0)			0,50
BV 1207	Cen = CAP $-50^\circ$	4110 (10,2)			1,40
BV 1208	Cen = CAP $-49^\circ$	4382 ( 9,6)			0,30
BV 1209	Mus = CAP $-69^\circ$	1617 ( 8,3)	= HD 104191 (Ao)		0,60
BV 1210	Cru = CAP $-58^\circ$	4289 ( 8,3)	= HD 108396 (Mb)		0,25
BV 1211	Cen = CoD $-40^\circ$	8057 (10 )			0,25
BV 1212	Aps = CAP $-79^\circ$	789 ( 8,9)	= HD 130338 (G5)		0,40
BV 1213	Aps = CAP $-72^\circ$	1802 ( 6,0)	= HD 137387 (B5)		0,25
BV 1214	Nor = CAP $-50^\circ$	8585 ( 9,4)			0,30
BV 1215	Ara = CAP $-46^\circ$	8391 ( 8,2)	= HD 154339 (B5)		0,40
BV 1216	Aps = CAP $-81^\circ$	787 ( 9,2)	= HD 156191 (Mb)		0,40
BV 1217	Ara = CAP $-47^\circ$	8688 (10,0)			0,50
BV 1218	Tel = CAP $-52^\circ$	11179 ( 8,9)	= HD 171379 (F2)		0,20
BV 1219	Tel = CAP $-47^\circ$	9166 (10,3)			0,90
	= CSV 4508 = S 5060				
BV 1220	Pav = CAP $-74^\circ$	1884 ( 9,2)	= HD 190912 (Ko)		0,25



	A <sub>pg</sub>
BV 1221 Mic = CAP -40° 9420 (10 <sup>m</sup> 6)	1 <sup>m</sup> 50
BV 1222 Mic = CoD -37° 14310 ( 9,6)	1,20
= CSV 5420 = S 5124	
BV 1223 Gru = CoD -38° 15133 ( 9,9)	0,60
= CSV 5575 = S 5145	

Four of these stars are listed as Sonneberg variables but are not named. Variables given in the CSV - Catalogue, which are confirmed in Bamberg, generally get a BV number.

BV 1166. - 1196: vide Veröffentlichungen der Remeis-Sternwarte Bamberg, Vol. VII, Nr. 73 and Nr. 76. (These stars are fainter, they are not in the standard catalogues).

Stars fainter than 9<sup>m</sup>5 are given with the surrounding star fields.

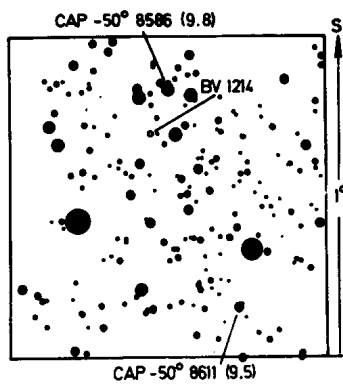
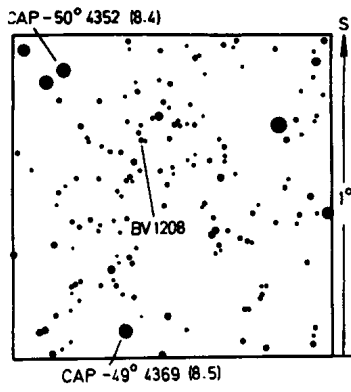
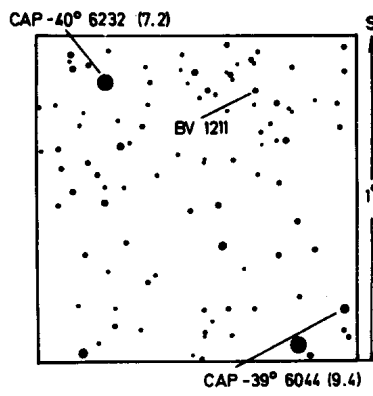
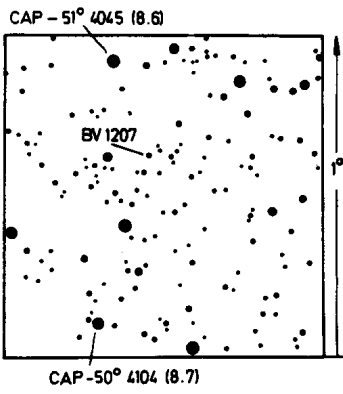
The elements for the following six eclipsing binaries have already been derived with the help of the Sonneberg sky patrol (Miss GESSNER). These are only preliminary periods.

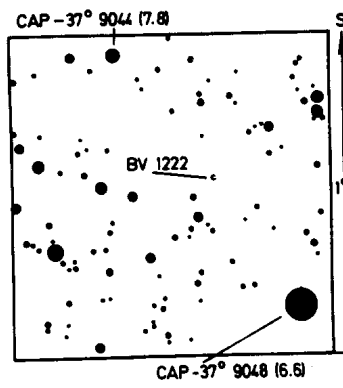
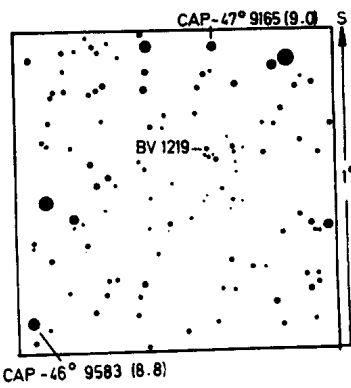
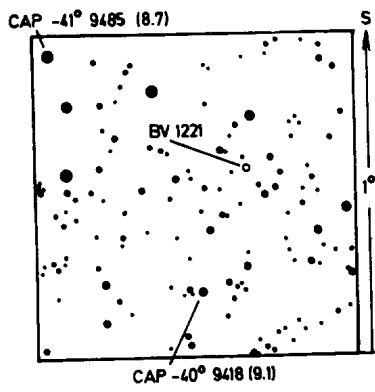
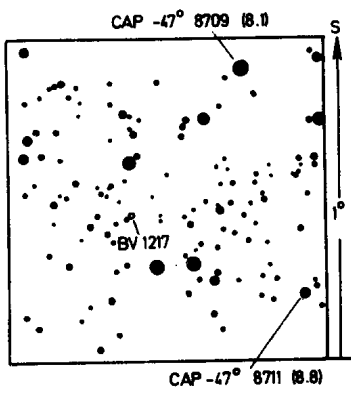
S = Sonneberg plates, NZ = New Zealand plates, and all other minima; South-Africa (Bamberg) plates.

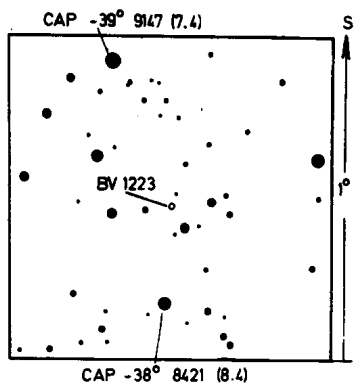
S 4903 = CSV 1329 = CAP -65° 967 (9<sup>m</sup>3) = BV 1199

Min = JD 242 8485.575 + 2<sup>d</sup>694 185 . E

M i n i m a	E	O - C
242 8485,585 (S)	0	+0,010
8682,237 (S)	73	-0,013
8811,627 (S)	121	+0,056
8892,451 (S)	151	+0,054
243 4485,484 (S)	2227	-0,041
8381,494 (½)	3673	+0,178
8435,359 (½)	3693	+0,159
8443,354	3696	+0,071
,399 (½)	3696	+0,116
8505,217	3719	-0,032
8739,551 (¾)	3806	-0,092
8785,428 +	3823	-0,016
8812,315	3833	-0,071
9173,333	3967	-0,074
,372 +	3967	-0,035
9181,330 (½)	3970	-0,159
,375 (½)	3970	-0,114







M i n i m a	E	O - C
243 9200,262 ( $\frac{3}{4}$ )	3977	-0,087
,309 +	3977	-0,040
9235,230 ( $\frac{1}{2}$ )	3990	-0,143
9526,364 +	4098	+0,019
,410 ( $\frac{3}{4}$ )	4098	+0,065
9553,321	4108	+0,034
9935,885 (NZ)+	4250	+0,024

Ampl.  $0^m50$ , without secondary minimum, EA

C.HOFFMEISTER, Erg AN 12, Nr.1 (1949): EA

BV 1201 = CAP  $-42^\circ 34'67$  ( $8^m0$ ) = HD 79 459 (Ao)

Min = JD 243 8379,575 +  $1^d475$  205 . E

M i n i m a	E	O - C
243 8379,542	0	-0,033
8382,545	2	+0,020
8385,543 ( $\frac{3}{4}$ )	4	+0,067
8441,399 ( $\frac{3}{4}$ )	42	-0,135
8490,272	75	+0,057
8841,292	313	-0,022
8844,293	315	+0,029
8869,233	332	-0,110
8872,227	334	-0,066
9118,543	501	-0,110
9198,313	555	-0,001
9201,311	557	+0,047
9232,237	578	-0,006
9235,230	580	+0,036
9862,101 (NZ)	1005	-0,055
9907,964 (NZ)	1036	+0,077
9915,976 (NZ)	1041,5	-0,025

Ampl.  $0^m45$ , with a weak secondary minimum, EA

BV 1209 = CAP  $-69^{\circ} 1617$  ( $8^m 3$ ) = HD 104 191 (Ao)

Min = JD 243 4315,550 +  $3^d 247 625$  . E

M i n i m a	E	O - C
243 4315,597 (S)	0	+0,047
4419,434 (S)	32	-0,040
8206,220 ++	1198	+0,015
8521,251 +	1295	+0,027
,296	1295	+0,072
8547,198 ++	1303	-0,007
,242 +	1303	+0,037
8560,198 +	1307	+0,002
,242 +	1307	+0,046
8901,213 +	1412	+0,017
,258	1412	+0,062
8904,287 ( $\frac{1}{2}$ )	1413	-0,157
8914,208 +	1416	+0,021
,254 +	1416	+0,067
9268,214 +	1525	+0,036
,259 ( $\frac{3}{4}$ )	1525	+0,081
9294,208 +	1533	+0,049
9972,889 (NZ)	1742	-0,024
,934 (NZ)	1742	+0,021
9998,872 (NZ) ++	1750	-0,022
,917 (NZ) ++	1750	+0,023

Ampl.  $0^m 60$ , without remarkable secondary minimum, EA

BV 1214 = CoD  $-59^{\circ} 9829$  ( $9^m 9$ ) = CAP  $-50^{\circ} 8585$  ( $9^m 4$ )

Min = JD 242 8004.250 +  $15^d 758$  . E

M i n i m a	E	O - C
242 8004,310 (S)	0	+0,060
8334,419 (S)	21	-0,749
8366,320 (S)	23	-0,364
8666,334 (S)	42	+0,248
,366 (S)	42	+0,280
8902,610 (S)	57	+0,154
243 8498,433	666	-0,645
,456	666	-0,622
8530,424 +	668	-0,170
8577,290	671	-0,578
8877,491 +	690	+0,221
8940,312	694	+0,010



M i n i m a	E	O - C
243 9318,226	718	-0,268
,271+	718	-0,223
9319,264	718	+0,770
9342,219+	719,5	+0,088
43,219	719,5	+1,088
9618,451+	737	+0,555
9680,878 (NZ)	741	-0,050
244 0026,892 (NZ)	763	-0,712
,938 (NZ)	763	-0,666
27,911 (NZ)+	763	+0,307
,954 (NZ)	763	+0,350

Ampl.  $0^m30$ , with very deep secondary minimum, EB or EA

BV 1215 = CoD  $-46^\circ11218$  ( $9^m0$ ) = HD 154 339 (B5)

Min = JD 242 8716.400 +  $4^d995$  25 . E

M i n i m a	E	O - C
242 8716.244(S)	0	-0,156
8726.590(S)	2	+0,200
8781,265(S)	13	-0,073
243 8202,405+	1899	+0,025
8222,383++	1903	+0,022
8227,303++	1904	-0,053
8252,223+	1909	-0,109
8257,221	1910	-0,107
8262,223	1911	-0,100
8499,579	1958,5	-0,018
8524,477	1963,5	-0,096
8529,469+	1964,5	-0,100
8549,419	1968,5	-0,131
8584,336	1975,5	-0,180
8619,257	1982,5	-0,226
8634,218	1985,5	-0,251
8916,438( $\frac{3}{4}$ )	2042	-0,268
9291,389+	2117	+0,045
9301,375+	2119	+0,040
9346,222+	2128	-0,072
9356,233	2130	-0,050
9680,927(NZ)	2195	-0,047
9973,122(NZ)	2253,5	-0,074
244 0003,062(NZ)	2259,5	-0,105

Ampl.  $0^m40$ , with a deep secondary minimum, EB

S 5145 = CoD  $-38^{\circ}15'13.3(0^m9)$  = BV 1223 (CSV 5575)

Min = JD 242 7994.600 + 2 $\frac{1}{2}$ 296 720 . E

M i n i m a	E	O - C
242 7994.590(S)	0	-0,010
8047,579(S)	23	+0,155
8364,562(S)	161	+0,190
8667,614(S)	293	+0,071
8699,525(S)	307	-0,168
8720,535(S)	316	+0,171
8774,410(S)	339,5	+0,074
8784,434(S)	344	-0,238
8806,305(S)	353,5	-0,185
8813,316(S)	356,5	-0,065
8891,300(S)	390,5	-0,169
243 4541,552(S)	2850,5	+0,152
4573,478(S)	2864,5	-0,076
8318,280	4495	-0,076
8643,401	4636,5	+0,059
8697,251+	4660	-0,064
,295+	4660	-0,020
9380,419	4957,5	-0,170
9680,167(NZ)	5088	-0,144
244 0043,167(NZ)	5246	-0,026

Ampl.  $0^m60$ , with similar deep secondary minimum as the primary minimum, EB

C.HOFFMEISTER, Erg AN 12, Nr,1 (1949): EA

Remeis-Observatory Bamberg  
Mt. John-Observatory New Zealand  
1969 February 10

W.STROHMEIER and I.PATTERSON