

TABLE 3 (continued).

B.D.	α 1950 ^o	δ 1950 ^o	dependences
103 + 3 ^o 1983	8 ^h 25 ^m 19 ^s .06	+ 3 ^o 23' 5".3	+1'3579+1'3581
+ 3'1990	8 27 11'76	+ 3 21 30'6	+1'2733-1'2720
+ 3'1994	8 28 4'18	+ 2 51 24'0	+ '9154+ '9139
104 + 2'1970	8 23 43'80	+ 2 39 23'6	'2408 '2399
+ 3'1983	8 25 19'06	+ 3 23 5'3	'5278 '5300
+ 3'1988	8 26 52'07	+ 3 15 41'9	'2314 '2301
105 + 4'1998	8 30 17'31	+ 4 21 29'8	'4648 '4640
[+ 5'1998]	8 31 47'73	+ 4 49 22'0	'2794 '2792
[+ 5'2010]	8 34 7'45	+ 4 43 51'0	'2558 '2568
106 - 18'145	0 51 6'55	-18 7 20'5	'1039 '1070 '1148
- 18'150	0 52 36'97	-17 42 49'6	'4841 '4815 '4741
- 19'143	0 53 20'67	-18 48 8'5	'4121 '4115 '4111
107 - 17'35	0 16 9'42	-17 18 32'4	+ '7695 + '7667
- 16'45	0 16 26'69	-16 16 29'2	+ '7278 + '7257
- 17'38	0 17 32'18	-16 32 18'5	- '4974 - '4924

Table 2 contains: (1) the plate number; (2) the observer, where dK stands for Mr. DE KORT and vH for VAN HERK; (3) the date and universal time of the middle of the exposure time; (4) the exposure time in seconds; (5) the right ascension of the planet for 1950^o; (6) the logarithm of the parallax factor in α ; (7) the declination of the planet for 1950^o; (8) the logarithm of the parallax factor in δ ; (9) the reference to the set of stars used in the reduction of the plate and given in Table 3; (10) the estimated magnitude of the planet; (11) the grating used; (12) the position of the instrument, where 1 denotes that the photographic tube was at the lower end, and 2 the reversed position.

In the column of the remarks, first an indication is given about the plate; E means: Eastman 40, 16 \times 16; I: Imperial S.S. 16 \times 16; g: Guilleminot Supraguil 9 \times 12; G: Guilleminot Supr. 16 \times 16.

Then follow the estimated magnitudes of the reference stars not entered in the H.D.C. e.g. *1:10^o0 (magn.). Unsteadiness is sometimes abbreviated to u. The remarks of the measurer are given in italics.

Table 3 contains the sets of reference stars. The B.D. numbers are given, the positions used, and the dependences in the order of the exposure times.

Additional list of double stars of which one component is variable, by *L. Plaut*.

(Supplement to *B. A. N.* No. 257).

The following list is a supplement to the list of double stars of which one or more components are variable (*B. A. N.* No. 257, list 1). The columns are the same as in the original list, viz.:

Column	1: name of the star as a variable,
"	2: name of the star as a double star, with the letter of the variable component,
"	3: number in <i>A. D. S.</i> and other sources of literature,
"	4, 5: right ascension and declination for 1900,
"	6, 7: catalogue visual magnitude for both components,
"	8: spectral type of both components or of the combined light, if written in the middle of the column,

Column	9, 10: position angle and distance from the last observation found,
"	11: maximum magnitude of the variable component, generally in photographic magnitudes, v = visual, l = photo-electric,
"	12: range of the light variation,
"	13, 14: approximate period and type of the light variation,
"	15: remarks.

The material has been gathered from a comparison of SCHNELLER'S *Katalog und Ephemeriden veränderlicher Sterne für 1939* with AITKEN'S *Double Star Catalogue*, INNES' *Southern Double Star Catalogue* and all publications containing lists of new double stars, edited later than those two catalogues and available at the library of the Leiden Observatory.

Name	Authority	α (1900 \circ)	δ (1900 \circ)	m_A	m_B	Sp_A Sp_B	p	d	m_{max}	Ampl.	Period	Type	Remarks
γ Gas	A.D.S. 782	0 50.7	+ 60 10	2.3	11.0	Bop	254	2.2	1.6 v	0.7	d	irreg	1
ϵ UMi	P.A.S.P. 49, 202	1 22.6	+ 88 46	2.7	2.9	cF7v	250	0.24	2.54	0.17	3.969	δ Cep	2
S For	Mem.R.A.S. 65, III	3 41.9	- 24 42	8.8	9.0	F8	332	0.25	7.9 v	1.1	?	?	
U Men	Mem.R.A.S. 65, III	4 18.6	- 82 06	9.4	10.4		71	0.6	9.9	1.0	?	longp	
S Ori	B.D.S. 2767	5 24.1	- 4 46	8.5	9.5		228	45.8	7.5 v	6.0	406	longp	
VY CMa	A.D.S. 6033; S.D.S.	7 18.8	- 25 35	7.7	11.5	Ma	168	0.5	9.5	2.0	—	irreg	3, = A-B = AB-C = AB-D
AW Pup	Mem.R.A.S. 65, II	8 20.6	- 28 30	9.5	11.7		347	2.9	10.3	0.8	0.681	Algol	
V380 Cen	B.A.N. No. 241	13 20.8	- 61 21	10.0	14.0	B8	258	3.7	9.5	0.68	1.087	δ Lyr	
V412 Cen	S.D.S.	13 50.7	- 57 13	7.6	9.1	Mb	102	58.2	8.5	1.1	—	irreg	
— Lup	S.D.S.	15 17.9	- 32 41	9.6	10.2	Ao	305	10.0	9.6	5	—	?	4
HH Nor	S.D.S.	15 36.1	- 51 31	9.9	11.4	Fo	98	10.1	8.0	3.2	8.580	Algol	
SY Nor	Mem.R.A.S. 65, III	15 46.9	- 54 16	9.7	12.8		148	12.6	8.0	1.8	12.642	δ Cep	
SW Oph	Mem.R.A.S. 66, I	16 11.1	- 6 44	var	11.8	Ao	93	2.1	10.2	1.2	2.446	Algol	
WX Sgr	Mem.R.A.S. 65, III	17 53.6	- 17 23	var	12.5	Ao	88	0.4	9.3 v	1.8	2.129	Algol	
UY Dra	A.D.S. 10937	17 54.6	+ 58 14	var	10.0	M5c	228	14.3	10.0 v	2.2	—	var?	
DQ Her	P.A.S.P. 41, 230	18 04.9	+ 45 51	—	—	Pec	131	0.21	1.3 v	—	—	Nova	
δ Sgr	A.D.S. 11581	18 07.8	- 21 05	4.0	11.0	cB8	260	17.1	4.0 l	0.14	18.045	Algol	
δ Sct	A.D.S. 11581	18 36.8	- 9 09	5.5	10.0	Fo	130	52.5	4.7 l	0.23	0.194	—	
SU Sgr	Mem.R.A.S. 65, III	18 57.7	- 22 51	9.0	13.5	M7	240	1.0	8.3 v	0.8	88	?	
V727 Sgr	B.A.N. No. 288	18 58.7	- 16 02	var	var		108	25	14.2	0.7	—	irreg	7
V728 Sgr	B.A.N. No. 288	18 58.7	- 16 02	var	var		108	25	14.5	1.1	—	RR Lyr	
V342 Aql	A.D.S. 12259	19 12.3	+ 9 10	8.5	9.1	Ko	14	19.3	9.5 v	3.5	0.438	Algol	
V368 Aql	A.N. 261, 119	19 21.7	+ 7 24	var	—	Pec	140	0.17	5.9	—	3.392	Nova	
U Aql	P.A.S.P. 46, 188	19 24.0	+ 7 15	var	11.7	G3v	230	1.7	6.3 v	0.7	7.024	δ Cep	1
σ Aql	A.D.S. 12737	19 34.3	+ 5 10	5.5	12.4	B8nk	328	47.8	5.0	0.18	1.950	δ Lyr	2, 8
QS Aql	P.A.S.P. 46, 359	19 36.5	+ 13 35	6.5	6.7	B3	137	0.18	6.1	0.11	2.513	Algol	
V346 Aql	A.D.S. 13438	20 05.2	+ 10 03	9.0	11.3	Ao	261	3.0	9.0 v	1.4	1.106	Algol	
SZ Cep	Lyon Bull. 13, 151	20 13.0	+ 76 53	var	12.3	Se	263	24.9	9.3 v	> 5	326	longp	
ZZ Cyg	Ann. Obs. Belg. II, 13,	20 20.7	+ 46 36	var	11.6	A?	43	8.5	10.7 v	1.3	0.629	Algol	
RR Cyg	B.D.S. 10521 [296	20 42.6	+ 29 48	8.5	12.5	M?	58	18.1	12.9	0.9	217?	irreg?	9
V389 Cyg	A.D.S. 14682	21 04.4	+ 29 48	6.0	8.0	B8	309	3.5	5.6	2.0	1.129?	?	
UU Cyg	A.D.S. 15209	21 35.6	+ 42 49	8.2	10.7	A2	352	3.4	9	2.0	—	?	
CE Cas	A.J. 47, 100 } L.O.B. No. 450 }	23 53.1	+ 60 39	10 } 10.9 }	10 } 11.1 }		84 } 268 }	2.2 } 2.4 }	10.3 }	1.8 }	0.480	?	10