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PHOTOGRAPHIC OBSERVATIONS OF DELTA CEPHEI VARIABLES

An investigation of 17 cepheids was carried out on blue plates of the Bamberg Sky Survey by the Argelander step method. From time intervals of about 1000<sup>d</sup> to 4000<sup>d</sup> all observations were taken into a mean curve. From these curves the values of Table 1 were determined. The magnitudes of the comparison stars were determined with nearby Selected Areas (1) or - in the case of the Cassiopeiae-variables - taken from the AGK 3 - Catalogue (2). For the calculation of the mean curves, the period values of the GCVS 1969 (3) were used.

Table 1 : Results

	Maximum (J.D.)	O-C	$\Delta m_{pg}$	$\frac{M-m}{P}$	N	Remarks
RX Aur	2426219. <sup>d</sup> 80 ± 0. <sup>d</sup> 05	+0. <sup>d</sup> 16	0.8	0. <sup>d</sup> 45	104	
	26997.79	-0.67	1.1	0.46	115	
	36542.00	+0.14	0.9	0.48	53	
SY Aur	26221.88	-0.43	1.1	0.44	102	
	27368.30	-0.32	1.0	0.49	103	
UY Car	38444.16	-0.02	0.8:	0.37	95	1
	39231.32	-0.07	1.2	0.35	104	
UZ Car	38444.23	+0.05	1.0	0.36	92	
	39235.00	-0.29	1.0	0.31	111	
AQ Car	38445.36	+0.35	0.7	0.58	93	
	39236.58	+0.29	0.8	0.52	113	
GX Car	38445.41	+0.32	1.1	0.27	96	2
RW Cas	25557.29	-2.06	1.2	0.29	98	
	26223.87	-1.43	1.1	0.32	92	
RY Cas	26165.68	-0.19	1.5	0.37	92	
SW Cas	25747.31	+0.06	1.1	0.38	95	
	26269.45	-0.19	1.1	0.33	94	
	26873.58	+0.06	1.1	0.38	96	
SY Cas	26932.82	-0.04	-	0.36:	49	
XY Cas	25854.91	+0.11	0.9	0.40:	95	
DL Cas	26163.82	+0.52	-	0.38	94	
FM Cas	26933.83:	-1.29	0.9	0.32	46	

	Maximum (J.D.)	O-C	$m_{pg}$	$\frac{M-m}{P}$	N	Remarks
V Lac	2425746. <sup>d</sup> 61±0. <sup>d</sup> 05	+0. <sup>d</sup> 02	1.7	0. <sup>P</sup> 29	97	
	26872.97	+0.12	1.5	0.36	96	
X Lac	25744.43	+0.24	1.1	0.36	98	3
	26931.54	+0.32	0.9	0.38	97	
Z Lac	25747.37	±0.00	1.5	0.37	96	
	26879.52	+0.02	1.4	0.42	96	
RR Lac	26870.80	-0.15	1.4	0.23	94	
	25747.99	-0.13	1.5	0.27	97	

Remarks: N = Number of plates; 1) small number of maximum-observations; 2) may be a classical cepheid from the light-curve; 3) used period P=5.44506 days, periods given in the GCVS-remarks for this time interval do not represent the observations.

All O-C values are calculated with the elements of the GCVS 1969 (3).

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References:

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- (2) Dieckvoss - AGK 3, Hamburg-Bergedorf (1975)
- (3) Kukarkin et al. - General Catalogue of Variable Stars, 3rd Edition, Moscow (1970)