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ONCE AGAIN: NGC 2346 - NO "ECLIPSES" BEFORE 1982

The central star of the planetary nebula NGC 2346 has been much observed and discussed in the last time because of its drastic light variations occur-

Table I				
Date	J.D. minus 2440000	m	Pg	
1981 Jan.	23	4628.304	11. ^m 3	
	26	4631.369	11.3	
	28	4633.398	11.4	
	29	4634.391	11.4	
	30	4635.378	11.3	
	31	4636.400	11.3	
Feb.	1	4637.378	11.0	
	1	4637.422	10.9	
	2	4638.379	11.0	
March	26	4662.349	11.1	
	27	4691.345	11.4	
	29	4693.327	11.1	
Apr.	1	4696.333	11.0	
	6	4701.326	11.1	
	7	4702.326	11.1	
Dec.	28	4967.430	11.1	
1982 Jan.	14	4984.349	11.3	
	15	4985.368	11.3	
Feb.	19	5020.334	11.2	
	20	5021.349	11.5	
	21	5022.362	12.5	
March	15	5044.348	12.4	
	16	5045.327	12.6	
	19	5048.254	11.7	
	23	5052.308	11.8	
	24	5053.317	12.3	
	27	5056.347	fainter than 13.3 (comp. star e)	
Apr.	22	5082.350	11.1	
Sept.	25	5238.615	12.7	
Oct.	25	5268.547	13.0	
1983 Feb.	18	5384.310	fainter than 13.3	
	18	5384.346	fainter than 13.3	
	March	3	5397.344	fainter than 13.3
		9	5403.323	12.9
		12	5406.344	fainter than 13.3
		13	5407.347	fainter than 13.3

ing since 1982. In I.B.V.S. No. 2281 Schaefer reports on the search for early eclipses on old photographic plates of Harvard College Observatory, with negative results.

I repeated this sort of examination on a much larger number of Sonneberg Sky Patrol plates and checked the star on 680 exposures taken between 1928 and 1983. The brightness of the comparison stars were taken from Kohoutek (I.B.V.S. No. 2113). My observations confirm the findings of Schaefer: The star does not show large variability before 1982.

Only rather small, obviously irregular, changes in brightness with an amplitude below 1 mag are observed around a mean magnitude of about $11^m.1$ pg.

The determination of the brightness was, of course, disturbed by the surrounding planetary nebula. Therefore the mean error is ± 0.3 mag and may be even larger for magnitudes below $12^m.0$.

Table I gives a sample of my observations on our plates.

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