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PHOTOELECTRIC OBSERVATIONS OF THE FLARE STAR BY Dra IN 1980

Continuous photoelectric monitoring of the flare star BY Dra has been carried out at the Stephanion Observatory ($\alpha = -22^{\circ}49'44''$, $\delta = +37^{\circ}45'15''$) during the year 1980, using the 30-inch Cassegrain reflector of the Department of Geodetic Astronomy, University of Thessaloniki. Observations have been made with a Johnson dual channel photoelectric photometer in the 8 colour of the international UBV system. The telescope, the photometer and the observational procedure have been described elsewhere (Mavridis et al., 1981). Here we mention only that the transformation of our instrumental ubv system to the international UBV system is given by the following equations:

$$\begin{aligned} V &= v_0 + 0.011(b-v)_0 + 3.191 , \\ B-V &= 0.569 + 1.022(b-v)_0 , \\ U-B &= -1.858 + 0.962(u-b)_0 . \end{aligned}$$

The monitoring intervals in UT as well as the total monitoring time for each night are given in the Table I. Any interruption of more than one minute has been noted.

During the 30.93 hours of the monitoring time no flare was observed.

Table I

Monitoring Intervals in 1980

Date 1980	Monitoring Intervals (U.T.)	Total Monitoring Time
July		
4	21 ^h 04 ^m - 21 ^h 34 ^m , 21 ^h 37 ^m - 22 ^h 03 ^m .	00 ^h 56 ^m
5	20 35 - 21 24.	00 49
6	20 27 - 20 49, 20 58 - 21 36, 21 40 -22 13 .	01 33
7	20 42 - 21 09, 21 13 - 21 45 .	00 59
9	19 52 - 20 23, 20 26 - 21 06, 21 07 -21 56 .	02 00
10	20 40 - 21 09, 21 11 - 21 42, 21 45 -22 32 .	01 47
24	21 35 - 22 05, 22 08 - 22 35, 22 38 -23 12 .	01 31
26	20 24 - 20 52, 20 55 - 21 33, 21 35 -21 38 , 21 39 - 22 19 .	01 49
27-28	20 07 - 20 46, 20 49 - 21 22, 21 25 -21 56 , 22 11 - 22 42, 22 45 - 23 18, 23 24 -23 56 , 00 06 - 00 32, 00 47 - 01 20.	04 18
28	20 21 - 21 16, 21 19 - 21 58, 22 00 -22 36 .	02 10
29	20 06 - 20 29, 20 37 - 20 59, 21 02 -21 34 .	01 17
August		
16	19 18 - 19 45, 19 48 - 20 16, 20 22 -20 31 , 20 37 - 20 47 .	01 14
19	19 53 - 20 08 .	00 15
21	20 05 - 20 38, 20 42 - 21 13.	01 04
22	19 23 - 19 57, 20 00 - 20 34, 20 51 -21 31 , 21 34 - 22 07 .	02 21
24-25	21 00 - 21 34, 21 38 - 22 13, 22 40 -23 17 , 23 20 - 23 53, 00 21 -00 57, 01 01 -01 24 .	03 18
26	19 40 - 20 13, 20 17 -20 51, 21 05 -21 38 , 21 41 - 22 24 .	02 23
27	19 27 - 19 51, 19 57 -20 28, 20 44 -21 14 , 21 18 - 21 49, 22 05 -22 33, 22 35 -23 07 .	03 08
31	20 47 - 21 14 .	00 27

Total 1980

30^h 56^m = 30^h.93

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Reference:

Mavridis, L.N., Asteriadis, G., and Mahmoud, F.M.: 1982, in E. Marioopoulos, P.S. Theocaris, and L.N. Mavridis (Editors) Compendium in Astronomy, D. Reidel, Dordrecht-Holland, p. 253.