

COMMISSION 27 OF THE I. A. U.
 INFORMATION BULLETIN ON VARIABLE STARS
 NUMBER 371

Konkoly Observatory
 Budapest
 1969 August 18

UBV OBSERVATIONS OF NOVA DELPHINI 1967 (=HR Del)
 AND NOVA VULPECULAE 1968 No.1

The series of observation of both novae at Ondrejov Observatory (1,2,3) was discontinued in April, 1969. Since no new observations are planned, it was decided to publish the remaining data without further delay. Comparison stars for HR Del and Nova Vul 1968 No.1 were published in (1) and (3), respectively. There is also described the method of observation and reduction. EMI 6256 unrefrigerated photomultiplier attached to the 65 cm reflector was used and differential extinction and conversion to the international UBV system was always applied. Quality q (3 is the best) is approximately proportional to the number of individual observation in a given night.

Nova HR Delphini

JD hel.	V	B-V	U-B	q
2440...				
286.689	7.53	0.63	-0.52	1
287.677	7.55	0.54	-0.49	2
319.619	7.68	0.60	-0.59	2
321.623	7.73	0.63	-0.54	1
326.611	7.68	0.67	-0.50	2

Comparison stars e and f from (1) were used

Nova Vulpeculae 1968 No.1

JD hel.	V	B-V	U-B	q
2440...				
286.682	11.04	1.60	0.32	3
287.656	11.04	1.54	0.32	3
319.598	11.22	1.56	0.39	2
321.603	11.69	1.52	-	1
326.595	11.33	1.56	0.40	2

Comparison stars e and f from (3) were used

The V magnitudes of both novae are considerably brighter (about -0.7^m) than those obtained by Tempesti (4,5) in about the same time. Only minor part of the difference may be explained by colour terms in the equations of transformation that were apparently not known in Tempesti's measurements (at least one of his comparison stars was of late spectral type K0). However, the differences caused by emission features of the nova may be significant, but even this effect seems to be insufficient to explain the large shift of both magnitude scales.

References

- (1) Grygar, J., Kohoutek, L., Harmanec, P., 1968, Bull. Astr. Inst. Csl. 19, 101.
- (2) Grygar, J., Kohoutek, L., 1969, Bull. Astr. Inst. Csl. 20, 156.
- (3) Grygar, J., Kohoutek, L., 1969, Bull. Astr. Inst. Csl. 20, No.4 (in press).
- (4) IAU Circ No.2139, 1969.
- (5) IAU Circ No.2154, 1969.

J.GRYGAR

Astronomical Institute of the Czechoslovak
Academy of Sciences,
Observatory Ondrejov,
Czechoslovakia