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NEW VARIABLE STAR IN THE OPEN CLUSTER NGC 7128

The star No.5 of the Hoag et al. (1961, Publ. Naval Obs. Vol. XVII, Part VII.) catalogue located exactly in the centre of the open cluster NGC 7128 has been found as variable during photographic observations of the Nova Cephei 1971 between July 18, 1971 and April 20, 1972 with the Schmidt camera (80/120, f=240 cm) of Hamburg Observatory. This star, denoted in our list as HBV 478, RA= 21^h42^m13^s.88, D= +53°29'32".2 (1950, Cygnus) was measured on 18 plates in the V (Kodak 103a-D + GG11) and B (Kodak IIa-O + GG13) international system, giving the following results:

JD _{hel}	V	B	JD _{hel}	V	B
244 1151.489	12 ^m .57	-	244 1207.46	12.14	12.99
1172.380	12.34	-	1240.36	12.13	13.07
1181.508	-	12 ^m .98	1266.27	12.35	13.17
1183.427	12.43	-	1331.26	12.36	13.06
1183.513	-	13.00	1394.62	12.60	13.43
1187.487	12.53	-	1428.58	12.26	12.86

Mean \bar{V} =12.37, \bar{B} =13.07

The mean deviation of one measurement, $\pm 0^m.17$ both in V and B, is about three times larger than the corresponding measuring errors, which strongly supports the variability of that star. The amplitude of about 0.5 mag. in both colours could be suspected. Our mean \bar{V} and \bar{B} values are in close agreement with those given by Hoag et al., V= 12.35, B-V= +0.78, U-B= 0.00.

The determination of the type of variability and further studies of this star could be very useful because of the fact that HBV 478 = 7128 - 5 is an early-type star (B2 V - Hoag, Applegate 1965, ApJ Suppl.No.107,215) and a physical member of the cluster.