

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 1008

Konkoly Observatory
Budapest
1975 June 17

NEW VARIABLE STARS IN A FIELD AROUND 38 ° Per

For an investigation of the variable star content of the stellar association Per OB 2 a total of 76 blue patrol plates covering about 6 x 6 square degrees of the central part of the association have been obtained with the astrograph of Hoher List observatory (Sonnefeld four lens system, F = 1500 mm, F/5). The plates, taken between September 1969 and October 1973, are centered on 38 ° Per, slightly north of the T-association Per T 1, which is a member of Per OB 2. About half the plates have a limiting magnitude of 17^m5, on most plates of the rest it is about 16^m8.

The search for variable stars resulted in the discovery of 6 new variables and the rediscovery of the suspected variable CSV 327=Ross 18 which has the number 3 in the Table below. The only note on this star is that of F.E. Ross (1927, Astron.Journal 37, 155), who supposed that this object may also be an asteroid.

The limits of variability of these seven objects were estimated with a number of selected comparison stars around each variable, which were calibrated with a secondary standard sequence near the center of the plate. This sequence itself has been derived by means of photographic transfer of a UBV-sequence in the galactic cluster NGC 1778 (Hoag, A. et.al. 1961, Publ. US Naval Obs. Vol. 17 part 7).

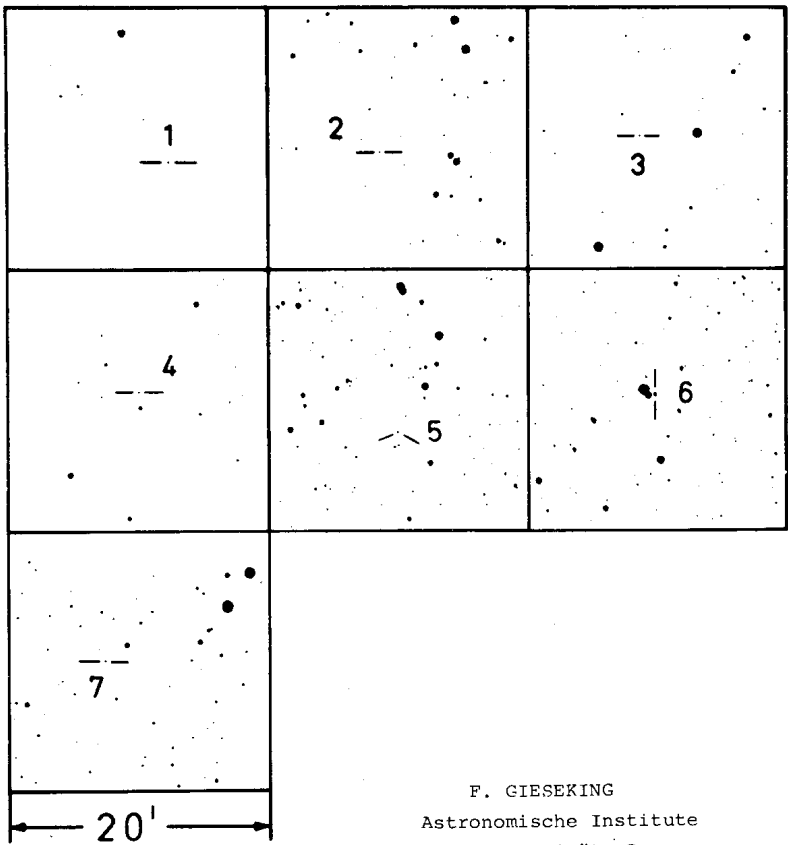
The position of each variable relative to at least 3 surrounding AGK₃-stars were measured with a Zeiss coordinate measuring machine. With these positions the corresponding coordinates were calculated using Schlesinger's dependences method.

Finally, an estimate of the colour of the variables on the blue and red print of the Palomar Sky Survey shows that except stars No. 1 and No. 6, which have approximately equal brightness on both prints, all stars are rather red objects.

The identification charts of the variables, which have north up and west to the right, are enlargements from two original plates and have a limiting magnitude of about 16^m5.

Details will be published elsewhere.

No.	α (1950)	δ (1950)	Max	Min
1	03 ^h 28 ^m 23 ^s .9	+30°20'45"	14 ^m 0	15 ^m 5
2	03 35 18.3	+34 30 29	15.9	16.5
3	03 35 54.3	+32 42 45	14.7	(17.5
4	03 41 34.9	+33 05 51	14.9	15.9
5	03 42 30.3	+34 37 11	15.1	17.2
6	03 44 30.2	+34 51 30	13.9	14.7
7	03 49 54.0	+31 45 02	14.8	16.0



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