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NEW H $\alpha$  - EMISSION STARS IN THE REGIONS  
NGC 7000, IC 5068 AND IC 5070

During June and September 1979 we observed the NGC 7000, IC5068 and IC5070 regions in order to search for new H $\alpha$  emission stars. In these regions about 300 emission stars have been found (Merill and Burwell, 1949, 1950; Herbig 1958; Welin 1973; Tsvetkov 1975, Tsvetkov, and Tsvetkova 1978).

When observing these regions, we had two intentions:

1. To find new H $\alpha$  - emission stars.
2. To find variation of the H $\alpha$  intensity on already known emission stars.

In the present paper the results of 33 new H $\alpha$  - emission stars are presented.

The observations have been carried out with the 40" Schmidt telescope of the Byurakan Astrophysical Observatory. The spectral plates have been obtained by the 4 $^{\circ}$  objective prism ( 1100 Å/mm at H $\alpha$  ) on Kodak 103 aE and II aF emulsions through an RG 610 filter. The average limiting magnitude was about 18 $^m$ .5 (pg).

33 new H $\alpha$  emission stars were found which have not been included in the references at the end of this note. In Table I the results for these stars are presented. In the columns of Table I the following data are presented respectively: the serial number of the star, coordinates(1950.0), magnitude at minimum and intensity of H $\alpha$  - emission.

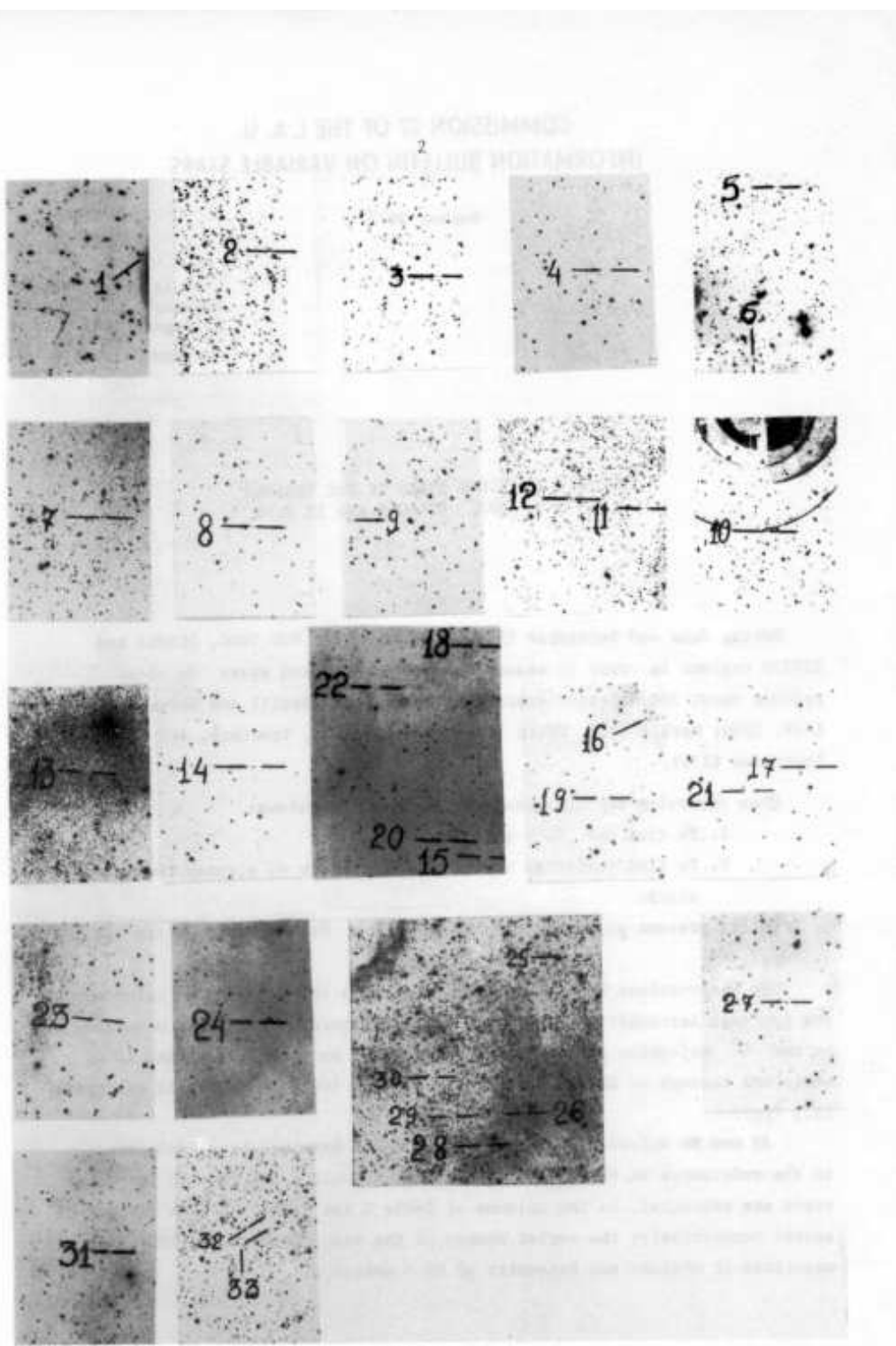


Figure 1

Table I

New H $\alpha$ - emission stars in the regions NGC7000, IC5068, IC5070

N	$\alpha$ (1950.0)	$\delta$	m(pg)	IH $\alpha$	N	$\alpha$ (1950.0)	$\delta$	m(pg)	IH $\alpha$
1	20 <sup>h</sup> 32 <sup>m</sup> 01 <sup>s</sup>	43 27.3	18.1	m	18	20 <sup>h</sup> 49 <sup>m</sup> 26 <sup>s</sup>	42 37.1	17.5	m
2	32 13	45 31.0	16.6	s	19	49 33	44 01.9	17.9	m
3	32 29	44 36.5	16.9	s	20	49 51	42 01.1	16.0	s
4	36 37	43 25.1	18.5	m	21	49 52	44 30.9	18.5	m
5	36 46	42 18.3	18.0	s	22	51 00	42 27.9	18.5	m
6	36 59	41 57.0	16.5	ss	23	20 52 44	44 28.5	18.5	m
7	41 01	44 50.6	17.2	m	24	53 51	42 02.3	16.5	w
8	41 16	44 16.6	17.6	s	25	55 30	44 53.8	15.8	w
9	43 08	42 59.4	17.0	m	26	55 53	44 38.3	17.7	m
10	46 17	42 49.4	17.8	m	27	56 02	43 53.4	16.0	w
11	47 17	44 55.7	18.7	s	28	56 15	44 35.2	18.5	s
12	48 07	44 56.7	18.0	ss	29	56 32	44 38.3	17.6	s
13	48 32	43 46.6	18.3	m	30	56 40	44 41.3	17.5	m
14	48 44	43 29.6	17.0	m	31	57 55	42 12.0	16.2	m
15	49 10	41 58.3	18.5	m	32	58 42	44 11.6	17.1	m
16	49 11	44 09.7	17.4	s	33	58 43	44 09.6	18.2	w
17	49 18	44 33.4	17.4	s					

The identification charts for the 33 new H $\alpha$  - emission stars are given in Figure 1.

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