

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

Number 2565

Konkoly Observatory
 Budapest
 30 July 1984
 HU ISSN 0374-0676

NEW NON-STABLE STARS IN ORION

Continuing photographic survey with the help of the wide-field
 70/100/210-cm Meniscus-type telescope of the Abastumani Astrophysical Observ-
 atory in 1982-1984 8 new flare stars (Table I) and 9 repeated flares (Table II)

Table I

No	RA(1900)	D(1900)	m _{pg}	Δm_{pg}	Date
132	5 ^h 30 ^m 30 ^s	-4 ^o 15.9	17. ^m 4	1. ^m 5	17.11.1979
133	5 31 17	-6 14.2	16.3	1.1	26.10.1981
134	5 27 49	-3 47.0	17.3	1.8	11.12.1982
135	5 22 46	-4 10.3	18.7	2.4	18.12.1982
136	5 30 19	-5 34.8	15.9	1.0	19.01.1983
137	5 36 13	-5 45.3	17.5	1.0	02.02.1983
138	5 29 51	-4 27.1	18.2	2.2	08.02.1983
139	5 30 50	-4 30.0	16.9	0.8	09.02.1983
140	5 30 26	-4 21.1	16.8	1.1	09.02.1983
141	5 33 18	-6 45.2	20.1	4.2	11.02.1983

Table II

No	RA(1900)	D(1900)	m _{pg}	Δm_{pg}	Date	Ident.
1	5 ^h 26 ^m 27 ^s	-4 ^o 41.5	16. ^m 7	4. ^m 3	12.12.1982	A 59
2	5 33 03	-6 28.2	14.6	1.2	12.12.1982	B 22
3	5 28 15	-5 03.3	17.7	1.1	17.12.1982	T 13
4	5 28 17	-4 55.8	17.2	1.3	24.12.1982	Ab 43
5	5 29 06	-6 40.3	18.2	2.7	03.02.1983	T 177
6	5 34 54	-6 28.1	16.5	1.2	09.02.1983	T 173
7	5 29 51	-5 01.7	18.0	1.4	09.02.1983	T 149
8	5 25 09	-4 27.6	17.4	1.0	11.02.1983	T 124
9	5 31 32	-7 19.8	19.3	4.1	20.03.1984	Ab 102

around Orion Trapezium have been found. In order to detect variable stars in
 the same field the whole accumulated material of 1978-1984 has been reexamined
 and 2 new flare stars and 28 variables (Table III), which have not been known
 as variables, were found. For these variables it is impossible to tell the
 type of variability, but according to their behaviour they all are probably
 RW Aurigae-type stars. They may not have shown variability for some time, and
 probably they had not shown it at all, and entered into activity phase not
 long ago. This can be especially said in the case of star No. 24, which is

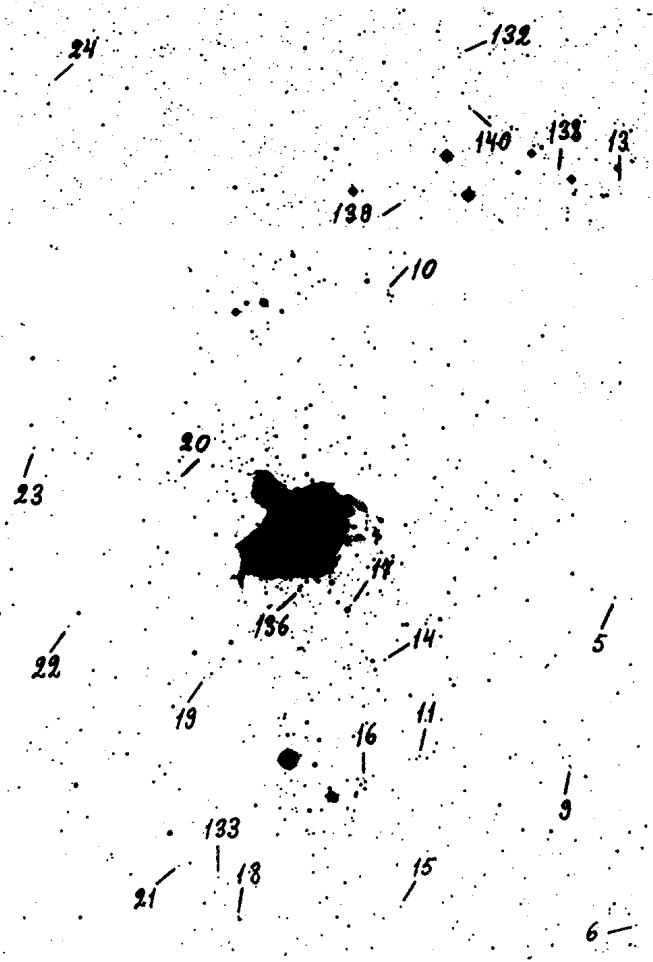


Figure 1

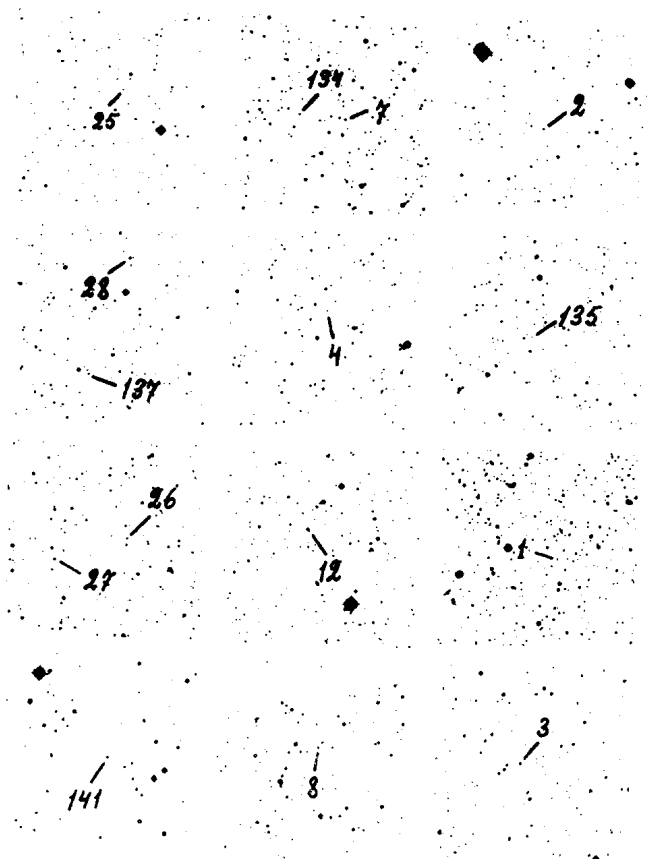


Figure 2

Table III

No	RA(1900)	D(1900)	m_{\min}	Δm	Date
1	5 ^h 22 ^m 20 ^s	-5°21'5	17.8pg	2.3pg	12.12.1982, 11.10.1981
2	5 24 01	-3 38.7	16.0pg	3.5pg	02.02.1983, 20.03.1984
3	5 24 44	-6 34.1	18.0pg	1.4pg	11.10.1978, 28.01.1979
4	5 26 38	-6 13.1	17.2U	1.2U	25.02.1982, 29.01.1981
5	5 27 21	-5 39.3	17.4pg	0.9pg	11.12.1982, 28.10.1979
6	5 27 22	-6 25.2	17.1pg	1.2pg	27.11.1978, 02.02.1983
7	5 27 27	-3 47.5	16.4pg	1.1pg	18.12.1982, 08.02.1983
8	5 27 45	-7 38.7	17.5B	1.2B	14.12.1982, 12.12.1982
9	5 27 53	-6 02.3	18.3B	0.8B	14.12.1982, 12.12.1982
10	5 29 16	-4 54.1	18.4B	1.0B	29.01.1981, 14.12.1982
11	5 29 18	-5 59.4	17.6pg	1.3pg	26.11.1979, 12.02.1983
12	5 29 27	-6 58.4	18.0U	1.4U	25.02.1982, 29.01.1981
13	5 29 28	-4 28.0	17.5pg	0.7pg	26.10.1981, 04.10.1981
14	5 29 34	-5 45.6	16.7pg	1.1pg	26.11.1979, 23.12.1982
15	5 29 35	-6 20.2	17.1pg	0.7pg	11.10.1981, 25.02.1981
16	5 29 50	-6 02.1	18.3pg	1.0pg	11.10.1981, 27.09.1981
17	5 29 50	-5 37.6	18.4pg	2.1pg	20.03.1984, 11.10.1981
18	5 31 07	-6 19.9	15.4pg	0.9pg	27.09.1981, 11.10.1981
19	5 31 16	-5 46.2	17.9B	1.2B	14.12.1982, 29.01.1981
20	5 31 25	-5 18.4	18.5B	1.3B	29.01.1981, 14.12.1982
21	5 31 39	-6 12.1	16.3pg	0.9pg	22.10.1981, 18.12.1982
22	5 32 32	-5 37.6	17.4pg	1.0pg	10.10.1978, 06.03.1978
23	5 32 44	-5 12.2	17.3pg	0.8pg	08.02.1983, 23.02.1982
24	5 33 07	-4 20.2	18.5U	4.2U	18.12.1982, 06.02.1981
25	5 33 32	-4 06.1	17.7pg	1.6pg	28.10.1979, 23.12.1982
26	5 35 13	-6 32.6	16.5pg	0.8pg	26.11.1979, 18.12.1982
27	5 35 48	-6 34.3	16.6pg	1.5pg	08.02.1983, 19.01.1983
28	5 35 57	-5 33.6	16.1pg	1.1pg	24.10.1981, 25.02.1981

characterized by Fuor-like variability in smaller scale and at maximum it has a very strong H α emission. The identification charts of the new flare and variable stars are also given. We are continuing Abastumani (Ab) numbering (Natsvlshvili, 1982) for new flare stars. Stellar magnitudes have been determined on the plates, obtained either without filter (pg) by multiple exposure method or with UG2 (U) and GG13 (B) filters in combination with Kodak 103a0 emulsion. In Table III the dates of maximum and minimum luminosity of the new variable stars are also given.

R.Sh. NATSVLISHVILI
Abastumani Observatory,
Georgia, USSR

Reference:

Natsvlshvili, R.Sh., 1982, I.B.V.S. No. 2231