

GCVS Names for Interesting Young Variable Stars

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New GCVS names are announced for several young variable stars of special astrophysical interest. These stars will enter the 80th Name List of Variable Stars but are given GCVS names now in order to make it possible for investigators to use permanent names in their publications.

1 Introduction

Permanent designations in the system of the General Catalogue of Variable Stars (GCVS) are regularly announced in the so-called Name Lists of Variable Stars. Currently in preparation is the 80th Name List, the first part of it (right ascensions between 0^h and 6^h) has recently been published (Kazarovets et al. 2011).

In the recent years, very many variable stars are being discovered. Large lists of variable stars, mainly from automatic or semi-automatic surveys, remain outside the GCVS because of problems of accurate coordinates and/or detailed classification awaiting their solution. Regular Name Lists have already become quite lengthy (the 80th Name List will contain, in its complete form, about 6000 variable stars), and their preparation, with all needed verification procedures, takes much time and effort. As a result, rather many variable stars of special astrophysical interest do not get their permanent designations for years, and their provisional, often lengthy and clumsy, names have to be used in publications.

For more than a decade, the GCVS team and the Central Bureau of Astronomical Telegrams (CBAT) follow an agreement that GCVS names are being quickly (within days) assigned to Novae announced in the IAU Circulars by the GCVS team upon request from the CBAT. These GCVS names are then repeated in the next Name List. Novae are definitely objects of special astrophysical interest. However, the IAU Circulars announcement sometimes remains, for years, the only publication about a Nova that uses its permanent GCVS name.

Another type of variable stars of special astrophysical interest are young variable stars with strong brightenings, resembling FU Ori or EX Lup. New discoveries of such stars usually cause a flow of publications with provisional names. Upon suggestion from one of the authors (B.R.), we decided to compile a short list of especially interesting young variable stars, to be included into the next Name Lists, and to announce their GCVS names now. These names will be repeated and confirmed in the second and third parts of the 80th Name List.

The GCVS team wishes to accompany the present publication with a note that this special announcement does not mean that we are ready to announce GCVS names upon requests of observers who often tend to believe that the object they are studying now is the most important one. This paper is an experiment, and a very well prepared one; before starting our joint work on the paper, one of the coauthors (B.R.) has compiled a detailed list of suggestions, then scrutinized by the GCVS team.

2 The List of New Names

Below we present the list of new designations in the short format (GCVS name, coordinates, type, provisional designation, reference). Complete GCVS data for the stars in question will appear in the second part of the 80th Name List of Variable Stars. Variability types in the table correspond to the classification system introduced in the 4th edition of the GCVS; among the stars tabulated as INT, there are variables resembling EX Lup (EXors or probable EXors, using the current term) and other unusual, high-amplitude young variables.

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References:

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 Wils, P., Greaves, J., Catelan, M., et al., 2009, *Astron. Tel.*, No. 2307

Table 1: GCVS names for young variable stars

Name		Coordinates (J2000.0)		Type	Provisional name	Reference
V1180	Cas	02 ^h 33 ^m 01 ^s .54	+72°43'27".3	INT	HA 11	[1]
V2775	Ori	05 42 48.48	−08 16 34.7	FU:	216-2	[2]
V0899	Mon	06 09 19.32	−06 41 55.4	INT	IRAS 06068−0641	[3]
V0646	Pup	07 50 35.59	−33 06 23.9	FU:	BBW 76	[4]
GM	Cha	11 09 29.4	−76 33 28	INT	ISO Cha I 192	[5]
V2675	Oph	16 26 36.81	−24 19 00.2	INT	AOC J162636.81−241900.2	[6]
V2492	Cyg	20 51 26.23	+44 05 23.9	INT	IRAS 20496+4354	[7]
V2493	Cyg	20 58 17.03	+43 53 43.4	FU	HBC 722	[8]
V2494	Cyg	20 58 21.4	+52 29 27.0	FU	HH 381 IRS	[9]
V2495	Cyg	21 00 25.4	+52 30 16	FU:	Braid star	[10]

References to the Table. 1. Kun et al. (2011). 2. Caratti o Garatti et al. (2011). 3. Wils et al. (2009). 4. Reipurth et al. (2002). 5. Perci et al. (2007). 6. Alves de Oliveira & Casali (2008). 7. Itagaki (2010). 8. Semkov & Peneva (2010). 9. Aspin et al. (2009). 10. Movsessian et al. (2006).