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**SPECTRAL TYPES FOR NAMED OR SUSPECTED
VARIABLE STARS IN THE IRAS POINT-SOURCE CATALOGUE**

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Several years ago one of us (D.J.M.) determined spectral types for some 14,200 IRAS sources. These lay within about 7° of the southern galactic equator, and all had $F(12\mu\text{m}) \geq F(25\mu\text{m})$. This work was done using Kodak I-N objective-prism plates taken by him some 25 years ago with the Curtis Schmidt at CTIO at a dispersion of 3400 Å/mm at the A band; the spectral classifications were done with the support of the NASA Astrophysics Data Program. Although the results of this work have been sent to the sponsoring agency (NASA/JPL/IPAC), they do not appear to be generally known, so we are here presenting the classifications for those named or suspected variables for which such data are not given in the GCVS or NSV Catalogues. Some of the classifications have already been published by Kwok, Volk, and Bidelman (1997), but are repeated here. Also, classifications for fifteen of our stars have been published by Stephenson (1992), who used near-infrared objective-prism plates of approximately twice the dispersion. The agreement of the types is excellent.

The resulting spectral types for both the named and the suspected variables are listed in Table 1. Stars contained in Stephenson's (1984, 1989) catalogues of S-type and carbon stars respectively, are identified by their SS and CS numbers, and their spectral types are taken from these catalogues except for CS 2795=TU Car, which does not appear to be a carbon star. IBVS references are given for those variables named since publication of the 4th edition of the GCVS. An asterisk following the star name or number indicates that the type of variability is open to question in view of the assigned type.

It should be noted here that a large number of our southern suspected variables were discovered some 60 years ago by the late Willem J. Luyten, whose very substantial contributions to variable-star astronomy have not received much recent attention. And, finally, it is strongly suggested that the remarks concerning objective-prism classification of M-type stars given in IBVS 4230 be carefully noted by users of this list.

Table 1: Spectral Types for IRAS Stars

Name	Type	Catalogue No.	IBVS Ref.	Name	Type	Catalogue No.	IBVS Ref.
BU Aur	M7:			HY Cen	M9		
BV Aur	M8			IP Cen	M7		
FQ Aur	M6			KO Cen*	M7		
FX Aur	M6 (M7 CBS)			LY Cen	M9		
HK Aur	M3r			NS Cen	M9		
LZ Aur	M4:(M7 CBS)			NU Cen	M7:		
V392 Aur	S!	SS 199	3323	NW Cen	M8		
V399 Aur	early M?		4140	OQ Cen	M7		
V400 Aur	early M sg?		4140	OT Cen	M8		
XX CMa	M5			OY Cen	M8		
BP CMa	M10			PP Cen	M8		
BQ CMa	M8			PY Cen	M8		
BR CMa	M7			QQ Cen	M9		
BT CMa	M8			QU Cen	M7		
GT CMa	S-*3	SS 289		QW Cen	M9		
GX CMa	M8			V340 Cen	M8		
HT CMa	M4:		4140	V403 Cen	M6:		
HV CMa	C	CS 1540	4140	V409 Cen	M10		
HX CMa	C	CS 1601	4140	V410 Cen	M7		
WW CMi	M7			V411 Cen	M6		
WZ CMi	M6			V491 Cen	M6		
XY CMi	S-*3	SS 325		V592 Cen	<M		
TU Car	M5	(CS 2795)		V686 Cen*	M6		
VX Car	M6			V693 Cen	M10		
VZ Car	M8			V698 Cen	M8		
AN Car	M9			V702 Cen	M9		
AP Car	M3r			V704 Cen	M7:		
AZ Car	M9			V706 Cen	M7		
BC Car	M5r			V778 Cen	M9		
BI Car	M7			V780 Cen	M9		
BX Car	M7			V781 Cen	M8		
CE Car	M8			V784 Cen	<Mr		
CG Car	M7			V862 Cen	M6:		3840
FY Car	<Mr			V865 Cen	M8		3840
GK Car	<M			V866 Cen	mid-M?		3840
GY Car	M7			V875 Cen	IRAS C	CS 3124	4140
NP Car	M7			V893 Cen	M10		4471
V408 Car	M6:		2681	RV Cir*	M6		
V425 Car	late type		3323	RW Cir	M7:		
TY Cen*	M8:			SS Cir*	M7		
TZ Cen*	M7			TU Cir	M6		
AE Cen	M4:			TX Cir	M8		
AF Cen	M7			UZ Cir	M7		
BC Cen	M8			VV Cir	M10		
BN Cen	M4			VZ Cir*	M6		
CK Cen	M6			WW Cir	M7		
CM Cen	M9			WY Cir	M8		
CP Cen*	M4			AO Cir	M7		
CR Cen	M8			RS Cru	M7		
CS Cen	M9			RU Cru	M9		
CV Cen	M9			RV Cru	M6		
DL Cen*	M5			SS Cru	M9		
DQ Cen*	M6			SU Cru	<M?		
DX Cen	late M			AK Cru	M8		
EK Cen	M8:			AU Cru	<M		
ER Cen*	M6			AX Cru	M7		
ET Cen	M8			CG Cru	C	CS 3166	3840
EX Cen	M9			CM Cru	M9:		4140
HV Cen	M8			LS Gem	M6		

Table 1 (cont.)

Name	Type	Catalogue No.	IBVS Ref.	Name	Type	Catalogue No.	IBVS Ref.
WX Mon	M7			CT Pup	M6 (M9 CBS)		
XY Mon	M4 (M6 CBS)			CV Pup	M7		
AG Mon	M10			DG Pup	M7		
BS Mon	MS			DQ Pup	early Mr		
CI Mon	M9			DU Pup	M10		
CY Mon	M7			DW Pup	M8 (M6-9 CBS)		
DT Mon	M3			EF Pup	M7		
DZ Mon	M6 (M7 CBS)			ES Pup	MS (M6 CBS)		
EY Mon	M10			FL Pup	M4		
HW Mon	MS			FO Pup	M9		
IK Mon	M10			FW Pup	M6		
MW Mon	M6			GL Pup	M6		
MZ Mon	M6 (M7 CBS)			HR Pup	M7 (M6 CBS)		
NP Mon	M7			HQ Pup	M9		
QS Mon	M10			II Pup	M8		
V374 Mon	early Mrr			IM Pup	M4		
V375 Mon	M9			IY Pup	M9		
V378 Mon	M6(M7 CBS)			KN Pup	M9		
V381 Mon	M4			KS Pup	M8		
V385 Mon	M8			LZ Pup	M8		
V511 Mon	M8			MU Pup	C	CS 1934	
V516 Mon	<M			OY Pup	M10		
V522 Mon	M4			V346 Pup	C	CS 2101	3530
V525 Mon	M5			WY Py	S5,2	SS 533	4471
V529 Mon	M6 (M6, 7 CBS)			CG Tau	M10		
V531 Mon	M6			IX Tau	M10 (M9 CBS)		
V533 Mon	M6			IZ Tau	M10 (M9 CBS)		
V534 Mon	M9			V416 Tau	M7		
V575 Mon	M9			TZ Vel	M6:		
V631 Mon	M9:			VV Vel	M7		
V685 Mon	S! SS	338	3323	AD Vel	MS		
V686 Mon	MIO	3323		AG Vel	M7		
V694 Mon	M7	3840		BK Vel	M8		
V Mus	M6			BL Vel	M8		
W Mus	MS			CF Vel	M8		
X Mus	M7			CT Vel	M6		
Z Mus*	M9			DE Vel	M7		
RU Mus	M7			DG Vel	M6		
TY Mus	M6:			DI Vel	M8		
WW Mus	M7:			DV Vel	M6		
YZ Mus	M4r		=GH Mus	EK Vel	M8:		
AF Mus	M7 .			ER Vel	M6		
AN Mus	M8:			FL Vel	M6		
AX Mus	M6			FR Vel	M6		
BH Mus	M7			GM Vel	M6		
BM Mus	M7			MQ Vel	late M or S		4471
CC Mus	M7			NSV 2072	M6		
DF Mus	M7			NSV 2642	early M:		
DT Mus	M8:			NSV 2735	late R or N	CS 1109	
DW Mus*	M5:			NSV 2894	M6		
DY Mus	M7			NSV 2911	M7		
EG Mus	M8			NSV 3190	S	SS 251	
SY Pup	M6			NSV 3270	M8		
TV Pup	M6			NSV 3336	R:	CS 1513	
UW Pup	M9:(M9 CBS)			NSV 3388	M6		
UX Pup	M6 (M6 CBS)			NSV 3451	M7		
AO Pup	M10			NSV 3461	M8		
BO Pup	MS			NSV 3475	M7		
CD Pup	M10			NSV 3483	M6		

Table 1 (cont.)

Name	Type	Catalogue No.	IBVS Ref.	Name	Type	Catalogue No.	IBVS Ref.
NSV 3540	C	CS 1658		NSV 4989	M8		
NSV 3552	M8			NSV 5005	M6		
NSV 3627	S	SS 362		NSV 5026	M8		
NSV 3630	M3			NSV 5029	M4r or S:		
NSV 3676	N	CS 1819		NSV 5046	M7		
NSV 3743	M8			NSV 5061	MS		
NSV 3759	M6			NSV 5095	M9		
NSV 3798	M6			NSV 5131	M8		
NSV 3807	M7			NSV 5194	M6		
NSV 3818	M6			NSV 5218	M9		
NSV 3819	M7			NSV 5301	M8		
NSV 3840	M9			NSV 5330	M8		
NSV 3860*	M4			NSV 5340	M6		
NSV 3868	M6			NSV 5342	M7:		
NSV 3875	N	CS 2016		NSV 5343	M6		
NSV 3885	N	CS 2021		NSV 5361	M9		
NSV 3921	M6			NSV 5383	M3		
NSV 3928	M7			NSV 5473	M4		
NSV 3944	C	CS 2109		NSV 5616	M6		
NSV 3948	M8			NSV 5657	mid-M		
NSV 3964	M7			NSV 5670	<M		
NSV 4011	M8			NSV 5739	M8		
NSV 4075	early Mr			NSV 5779	M5		
NSV 4116	M10			NSV 5793	M8		
NSV 4129	M9			NSV 5840	M9		
NSV 4353	M9			NSV 5878	M7		
NSV 4370	M7			NSV 5892	M9		
NSV 4388	M9			NSV 5992	M9		
NSV 4403	M8			NSV 6051	M8:		
NSV 4424	M7			NSV 6066	M4		
NSV 4554	M6			NSV 6100	M7:		
NSV 4560	M4			NSV 6112*	M4r		
NSV 4592	M7			NSV 6122	M8		
NSV 4600	M7			NSV 6126	<M		
NSV 4640	M9			NSV 6132	M10		
NSV 4655	M9			NSV 6169	M4		
NSV 4663*	<Mr			NSV 6189	M7		
NSV 4729	M8			NSV 6202*	M7		
NSV 4754	M9			NSV 6237	M6		
NSV 4760	M8			NSV 6262	M6		
NSV 4769	M4			NSV 6438	M9		
NSV 4780	M7			NSV 6447	M8		
NSV 4789	M7:			NSV 6464	M9		
NSV 4805	M7			NSV 6518	M8		
NSV 4814	M8			NSV 6581	M9		
NSV 4853	M8			NSV 6641	M9:p		
NSV 4893	M7			NSV 6668	M6		
NSV 4919	M10						

References:

- Kwok, S., Volk, K., and Bidelman, W.P., 1997, ApJS 112, 557
Stephenson, C.B., 1984, Publ. Warner and Swasey Obs. Vol. 3, No. 1
Stephenson, C.B., 1989, Publ. Warner and Swasey Obs. Vol. 3, No. 2
Stephenson, C.B., 1992, IBVS No. 3800

ERRATUM

[From IBVS 4750]

In the Table of IBVS No. 4612 all spectral types MS should read M5. Therefore M 5 spectral type is assigned to XX CMa, TU Car, DL Cen, BS Mon, HW Mon, W Mus, BO Pup, ES Pup, AD Vel, and NSV 5061. The original manuscript was correct. The errors occurred when the OCR software was utilized. With our apologies

THE EDITORS