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NEW SPECTRAL CLASSIFICATIONS FOR 49 RED VARIABLE STARS

Over the years spectral classifications of a great many red variables have been published from objective-prism plates taken with CWRU's Burrell Schmidt telescope and its twin, the University of Michigan's Curtis Schmidt. These plates have variously covered the photographic, visual, and infrared parts of the spectrum.

In looking through our extensive cardfiles, we have found 49 further red variables for which we have useful, apparently unpublished, spectral data. Most of the relevant plates were taken and searched many years ago in the course of our surveys for high-luminosity early-type stars. Table 1 lists the stars for which we present new data.

Table 1

Name	Catalogue Sp. Type	New Data	Remarks
TZ Aps	—	M9:e	
TU Aql	M4-9	M2e	
EM Aql	M7	M4e	
PX Aql	M5	M2e	
V434 Aql	M6	M4e	
V630 Ara	Me	M6e	
V352 Car	Me	M5e	
UV Cen	Me	M5e	
GR CrA	Me	M4e	
KM CrA	Me	M4e	
RT Lup	Me	M8e	
ST Mon	M6.5	MSe	
AZ Mon	M9	M6e	
CH Mus	Me	M5e	
CR Mus	Me	M4e	identical with FP Mus
EK Mus	Me	M8:e	
BD Nor	Me	>M5e	
FS Nor	Me	M7e	
PP Nor	Me	>M5e	
UX Oph	M4e	M1e	
V585 Oph	M5	M6e	
BZ Pup	M5	M4:e	
FO Pup	Me	M7e	
UU Pyx	Me	M4e	
GH Sgr	Me	M4e	

Table 1 (cont.)

Name	Catalogue Sp. Type	New Data	Remarks
IM Sgr	M9e	M2e	
V361 Sgr	M3 III	M3e	
V930 Sgr	M5-6		emission noted
V931 Sgr	M7-8		emission noted
V1592 Sgr	—	Me	
V1683 Sgr	M7		emission noted
V1690 Sgr	M7		emission noted
V2512 Sgr	—	M:e	
V2543 Sgr	M8ea		error in GCVS; should be M3e
RX Sco	Me	M7:e	
V880 Sco	Me	M8e	
VW Sct	M4-7	M6e	
XY Ser	M3	M3e	
BE Ser	M5	M5e	
Y TrA	S4,1		emission noted, called M6e
RS TrA	Me	M8e	
ER TrA	Me	M8e	
GY TrA	—	Me	
HK TrA	Me	M4e	
TZ Vel	—	M7:e	
NSV 4665	—	M9e:	
NSV 6929	Me	M5e	
NSV 8952	Me	M2e	
NSV 13052	—	M3e	

Two facts should be borne in mind concerning objective-prism studies of M-type variables: (1) blue-sensitive plates are the most efficient ones for the detection of emission lines; thus red and infrared plates will generally not show such features even if they are present elsewhere, and (2) objective-prism observations, made at random, of course tend to favor the brighter parts of the variables' light curves, but can occasionally refer to phases rather far from maximum light. Thus objective-prism spectral types are usually somewhat later than the variables' types at maximum light, which are those usually tabulated.

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ERRATUM

In IBVS No. 4230, the spectral type of ST Mon was incorrectly given due to an unfortunate typographic error. The new spectral type of ST Mon is M5e.

The editors