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THE PROPER MOTION OF THE AGK3 VARIABLE STARS. V:

Z Del and NSV 12844

This is the fifth note on a program conducted to re-determine the proper motion of those AGK3 variable stars for which the published values seem to be affected by spurious errors. On the previous notes (e.g. Lopez 1986, Lopez and Torres 1987) only red variables were discussed. The results obtained there are in agreement with Stephenson's (1978) hypothesis referred to the systematic errors of the AGK3 reddest stars. Due to the importance of the AGK3 and the variable stars in general in the coming satellite missions, it seems to be convenient to include in this program all kinds of variables or suspected variables without regard to magnitude, spectral characteristics or type of variability.

In this note Z Del = AGK3 +17 2218 and NSV 12844 = AGK3 +5 2903 are presented. The AGK3 proper motion of these stars is:  $\mu\alpha=+0''.096$ ,  $\mu\delta=-0''.029$  for Z Del and  $\mu\alpha=+0''.009$ ,  $\mu\delta=-0''.163$  for NSV 12844.

First-epoch positions were obtained from the re-reduction of the published plate material of the Astrographic Catalogue (AC) (see Table I). Second-epoch positions were derived from new plates taken with the Yale Southern Observatory double astrograph. First and second-epoch plates were reduced using AGK3 stars as reference system. The average mean error for the first-epoch positions is  $\pm 0''.32$

in both RA and DEC while for the second-epoch positions it is  $\pm 0''.28$ . The resulting proper motions are affected by  $\pm 0''.005$  (me) in both coordinates.

Table II summarizes the values obtained in this note.

Table I. Astrographic Catalogue Plate Material.

Star	AC	Plate No.	Center h m	Zone ( $^{\circ}$ )	Object No.	Epoch
NSV 12844	Toulouse	151	20 04	+05	110	1897.65
Z Del	Bordeaux	522	20 28	+17	68	1900.62

Table II. New Positions and Proper Motions.

Star	RA (1950) h m s	DEC $^{\circ}$ ' "	$\mu\alpha$ (" / yr)	$\mu\delta$ (" / yr)	Epoch
NSV 12844	20 07 16.74	+05 21 37.8	-0.007	-0.003	1986.68
Z Del	20 30 21.71	+17 16 49.0	-0.013	-0.009	1986.43

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