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BV PHOTOMETRY OF SX Phe BLUE STRAGGLERS IN THE GLOBULAR CLUSTER NGC 5466

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Name of the object:		
Blue stragglers NH 27, NH 29,	NH 35, NH 38, NH 39	, NH 49 in the globular cluster
NGC 5466.		

Equatorial coordinates:	Equinox:
$R.A. = 14^{h}03^{m}2$ $DEC. = +28^{\circ}46'$	1950

	Observatory and telescope:
ĺ	The images were obtained with the No. 1 0.9-meter telescope at Kitt Peak National
	Observatory.

Detector:	The 800×800 TI#2 CCD with a pixel scale of 0.43 arcsec	
	(1991) and the 2048×2048 T2KA CCD with a pixel scale	
	of 0.69 arcsec (1992, 1993, 1995, 1997).	

Filter(s):	The Harris B and V filters were used, with exposure times	
	of 300 s for the V frames and 500 s for the B frames.	

Comparison star(s):	Four stars in the field were selected as local magnitude	
	standards for relative photometry (185, 272, 276, and 281	
	Buonanno et al. 1984).	

Transformed to a standard system:	UBV
Standard stars (field) used:	Twenty-nine standard stars select-
	ed from Landolt (1983) with a
	range in $(B-V)$ from -0.186 to
	+2.527 mag were observed.

Availability of the data:

Through IBVS Web-site as 4708-t1.txt, 4708-t2.txt, 4708-t3.txt, 4708-t4.txt, 4708-t5.txt, and 4708-t6.txt.

Type of variability:	SX Phe

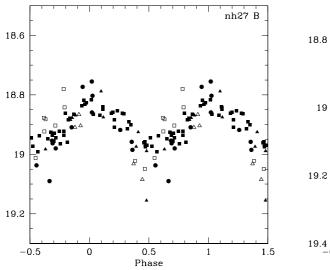
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Remarks:

We present a new photometric study of the six SX Phe blue stragglers in NGC 5466 discussed by Nemec et al. (1994). The images used in this study were obtained during May 1991, May 1992, April 1993, June 1995, and June 1997. The raw data frames were processed and reduced following standard procedures using ALLSTAR in DAOPHOTX in IRAF. The resulting ephemerides for maxima are: NH 27: 0.050697 day, epoch 2448383.934 \pm 0.005 days; NH 29: 0.040295 day, epoch 2450618.753 \pm 0.005 day; NH 35: 0.049848 day, epoch 2448383.921 \pm 0.002 days; NH 38: 0.055078 day, epoch 2448383.760 \pm 0.005 day; NH 39: 0.050480 day, epoch 2448382.686 \pm 0.002 day; and NH 49: 0.045070 day, epoch 2448383.668 \pm 0.005 day.

The light curves are for the *B* data. The filled squares are 1991 data, open squares are 1992 data, filled triangles are 1993 data, open triangles are 1995 data, and filled circles are 1997 data. The finding chart is published in Nemec and Harris (1987).

Figure 2.



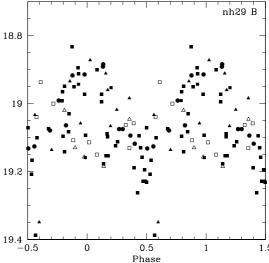


Figure 1.

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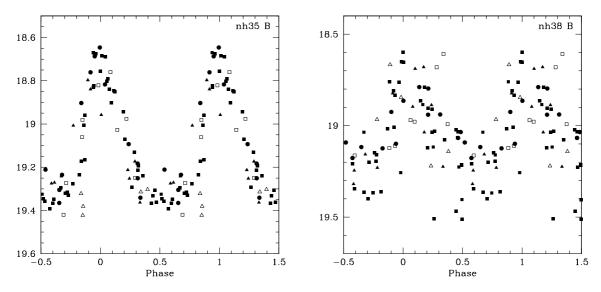
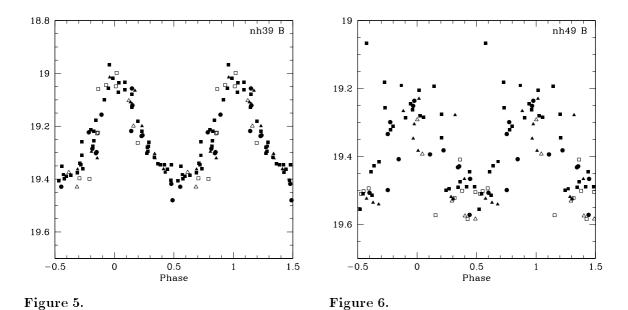


Figure 3. Figure 4.



References:

Buonanno, R., Buscema, G., Corsi, C., Iannicola, G., and Fusi Pecci, F. 1984, $A \mathcal{E} A S$, 56, 79

Landolt, A. 1983, AJ, 88, 439

Nemec, J., Nemec, A., and Lutz, T. 1994, AJ, 108, 222

Nemec, J. and Harris, H. 1987, ApJ, $\mathbf{316}$, 172