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A NEW FAINT W UMa TYPE VARIABLE IN THE GALACTIC HALO

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Equatorial coordinates:	Equinox:
R.A. = $23^{h}48^{m}01^{s}$ DEC. = $+00^{\circ}53'59''$	2000.0

No

Observatory and telescope:

Bohyunsan Optical Astronomy Observatory (BOAO), 1.8-m reflector

Detector: Thinned back illuminated SITe 2048×2048 chip

Filter(s):

Transformed to a standard system:

V

Type of variability: | W UMa

Availability of the data:

Electronically from the IBVS website as file 5053-t1.txt

Remarks:

A new faint $(\langle V \rangle \approx 17^{\text{m}}7)$ halo W UMa type variable star was discovered for two nights observation using the BOAO 1.8-m reflector. We carried out aperture photometry via the APPHOT program in the IRAF package in order to determine the differential photometric magnitudes. The exposure time was 300 seconds.

Acknowledgements:

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Figure 1. Finding chart of the new variable. The coordinate (2000.0) of the center marked with '+' is denoted on the upper left side. The field of view is $10' \times 10'$



Figure 2. Top: Light curve of the new variable; bottom: magnitude differences between the comparison and check stars