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NEW CCD-LIGHTCURVE AND IMPROVED ELEMENTS OF IT HERCULIS

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Name of the object:
IT Herculis = GSC2112.1845

Equatorial coordinates:	**Equinox:**
R.A.= $18^h45^m47^s$ **DEC.**= $+25°20'21''$	J2000.0

Observatory and telescope:
R. Szafraniec Observatory, Metzerlen, Switzerland; 35 cm RC reflector

Detector:	SBIG ST6 CCD camera
Filter(s):	None
Comparison star(s):	GSC2112.1621
Check star(s):	Anon. 0.5 NW of IT Her
Transformed to a standard system:	No
Type of variability:	EW

Remarks:

During 19 nights from JD2450925 to JD2451077, 91 observations of IT Herculis were obtained. These measurements were subjected to a PDM period search algorithm (Stellingwerf, 1978). In good agreement with the finding of Schmidt and Seth (1996), the following new elements of variation for this EW-type eclipsing binary have been found:

$$\mathrm{JD(min,hel)} = 2450946.363(3) + 0^d.339366(10) \times E. \qquad (1)$$

Figure 1 shows our data folded with these elements. Both minima show a time of constant brightness of $0^d.025$ (± 0.003) day duration.

Acknowledgements:

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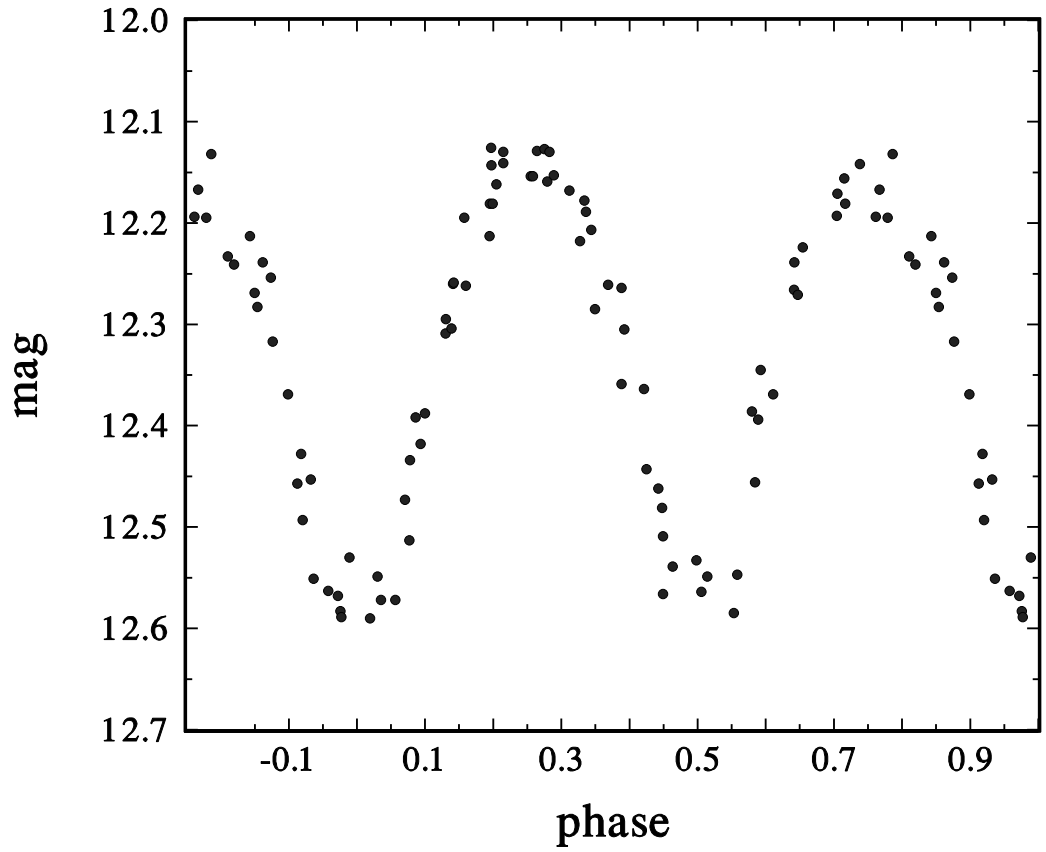

Figure 1. CCD light curve of IT Herculis using the elements (1)

References:

Schmidt, E.G., Seth, A., 1996, *AJ* **112**, 2769
Stellingwerf, R.F., 1978, *ApJ* **224**, 953