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NEW CCD-LIGHTCURVE AND IMPROVED ELEMENTS OF TY Ari

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Name of the object:
TY Ari = GSC 1761.1085

Equatorial coordinates:	**Equinox:**
R.A.= $02^{h}08^{m}40^{s}.28$ **DEC.**= $+25°13'07''.1$	2000.0

Observatory and telescope:
Private Station in Busto Arsizio, 0.21-m Newton (F/5.0)

Detector:	DTA Seti 245C CCD Camera

Filter(s):	None

Comparison star(s):	GSC 1761.0989

Check star(s):	GSC 1761.0901

Transformed to a standard system:	No

Availability of the data:
Through IBVS Web-site as 4804-t1.txt

Type of variability:	RRC

Remarks:

The variability of TY Ari (= S 3543 = 218.1943 = CSV 193) was discovered by Hoffmeister (1944) and first observed by Meinunger (1966) who found a possible RR Lyrae nature and gave an approximate period of variation. First elements and type determination of variability were given by Schmidt and Seth (1996). We observed TY Ari during 1998 and obtained 307 measures on 6 nights from JD 2451134 to JD 2451200. Using the period search algorithm Lancelot (Gaspani, 1995), in agreement with the period found by Schmidt and Seth, we derived the following new elements of variation:

$$\text{Max} = \text{HJD } 2451166.333(3) + 0^{d}.329715(3) \times E.$$

Figure 1 shows data folded with these elements.

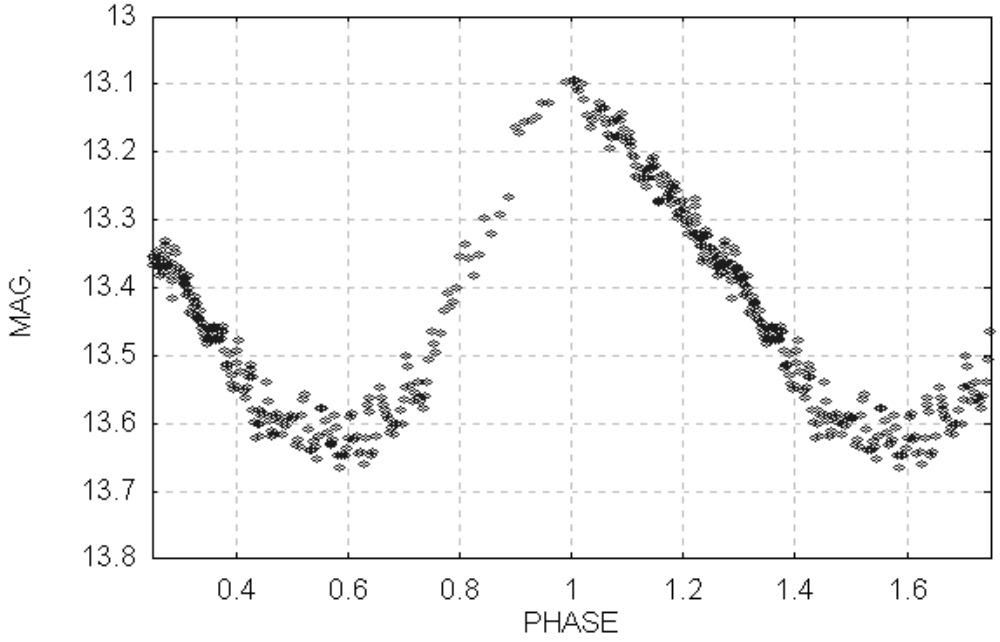

Figure 1. CCD-lightcurve of TY Ari folded with elements given in the text

References:

Gaspani, A., 1995, GEOS FT 78
Hoffmeister, C., 1944, MVS 52
Meinunger, L., 1966, MVS 3, 220
Schmidt, E.G., Seth, A., 1996, AJ 112, 2769