

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 1412

Konkoly Observatory
Budapest
1978 April 19

CONFIRMATION OF THE δ Sct-TYPE VARIABILITY OF θ^2 TAURI

Recently Horan (1977) announced that θ^2 Tau (= HR 1412) is a δ Sct variable with an amplitude of $0.^m03$ and a period of 0.07 days, on the basis of a three-hour V run using θ^1 Tau for comparison. Here we present the results of a six-hour UBV run, using 80 Tau as comparison star. Observations were obtained with the same single channel photometer, attached to the 40 cm Cassegrain telescope on Tortugas Mountain. A dry ice cooled 1P21 multiplier was used, the signal was fed to a VFC and a counter. For each colour three 10^8 integrations were averaged into a single observation, and a sequence CVVC was taken for the derivation of one brightness difference. The instrumental magnitude differences are given in the accompanying table and figure. The variability discovered by Horan was found to exist at all wavelengths ($\Delta u = 0.^m03$; $\Delta b = 0.^m02$, $\Delta v = 0.^m02$). The period was determined to $P = 0.080 \pm 0.002$ days.

H. W. DUERBECK
Observatorium Hoher List
der Universitäts-Sternwarte Bonn
5568 Daun/Elzfel, F.R.G.
and
Department of Astronomy
New Mexico State University
Las Cruces, NM 88001, U.S.A.

Reference :

Horan, S. 1977, Inf. Bull. Var. Stars 1232

Table 1. Magnitude differences (variable - comparison)

J.D.hel. (2 443 483+)	ΔU	ΔB	ΔV	J.D.hel. (2 443 483+)	ΔU	ΔB	ΔV
.6746	-2.217	-2.288	-2.157	.8138	-2.252	-2.314	-2.183
.6906	-2.274	-2.310	-2.172	.8253	-2.224	-2.296	-2.174
.7048	-2.275	-2.316	-2.185	.8357	-2.225	-2.294	-2.166
.7197	-2.255	-2.314	-2.176	.8461	-2.227	-2.301	-2.169
.7308	-2.241	-2.311	-2.174	.8565	-2.232	-2.303	-2.176
.7427	-2.215	-2.298	-2.161	.8670	-2.245	-2.313	-2.180
.7538	-2.221	-2.294	-2.164	.8774	-2.244	-2.306	-2.179
.7701	-2.257	-2.306	-2.173	.8871	-2.252	-2.311	-2.180
.7808	-2.251	-2.311	-2.184	.8969	-2.245	-2.298	-2.168
.8017	-2.257	-2.309	-2.184	.9086	-2.236	-2.293	-2.165

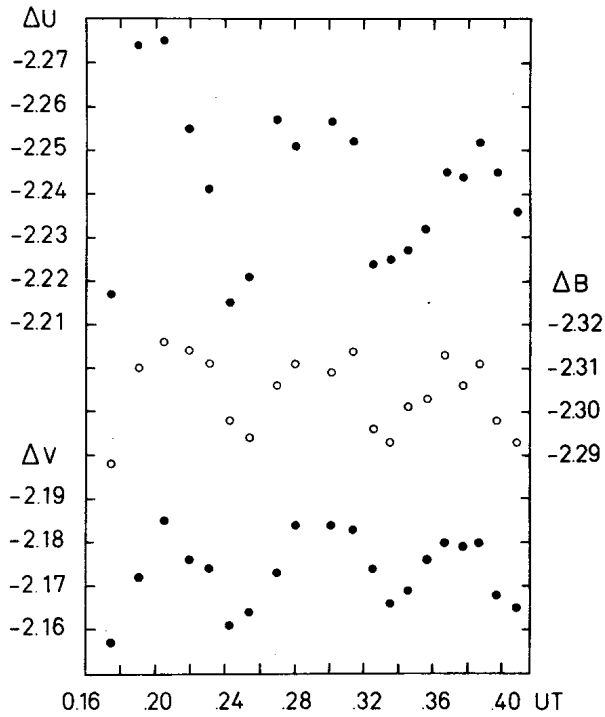


Figure 1.
Brightness differences of θ^2 Tau relative to 80 Tau on
1977 December 6 (UT)