

COMMISSIONS 27 AND 42 OF THE IAU  
INFORMATION BULLETIN ON VARIABLE STARS

Number 4385

Konkoly Observatory  
Budapest  
23 October 1996  
HU ISSN 0374 – 0676

**XZ Lac = NSV 14114**

During the preparation of finding charts for many neglected RR Lyr-type variable stars located in the northern hemisphere, I have found that the suspected variable NSV 14114 coincides in position with XZ Lac. This star is listed in the GCVS (Kholopov et al., 1985) as a member in the RRAB sub-class with a range of variation: 12.8-13.9 (P) and with the following coordinates (1950.0):

R.A.:  $22^{\text{h}}16^{\text{m}}58^{\text{s}}$  Decl.:  $+49^{\circ}29'8''$

these values can be precessed to the epoch 2000.0 as follow:

R.A.:  $22^{\text{h}}18^{\text{m}}58^{\text{s}}$  Decl.:  $+49^{\circ}44'9''$

the most recent information about XZ Lac was published by Gessner (1966).

NSV 14114 was discovered by Brun (1964) during the analysis of the photographic investigation of the stars in the “4 Lac” field carried out by Weber. In his paper Brun listed NSV 14114 as the No. 41 of his own catalogue of newly discovered variables and classified it as a suspected RR-type star with a range of variation: 12.7-13.8 (P); for the epoch 1900.0 he gave the following coordinates:

R.A.:  $22^{\text{h}}15^{\text{m}}03^{\text{s}}$  Decl.:  $+49^{\circ}15'0''$

precessed to the epoch 2000.0 being:

R.A.:  $22^{\text{h}}19^{\text{m}}02^{\text{s}}$  Decl.:  $+49^{\circ}45'1''$

No final designation was accepted for “Brun 41” and, on the basis of these pieces of information, it was included in the NSV Catalogue (Kholopov et al., 1982). Checking literature on variable stars, I could not find any other publication on NSV 14114 than Brun’s (1964) paper.

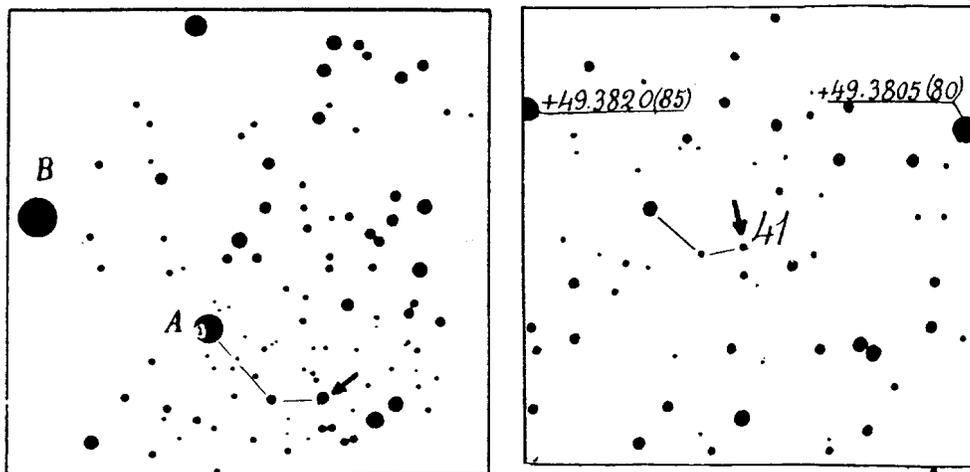


Figure 1. Identification charts for XZ Lac (left) and NSV 14114 (right)

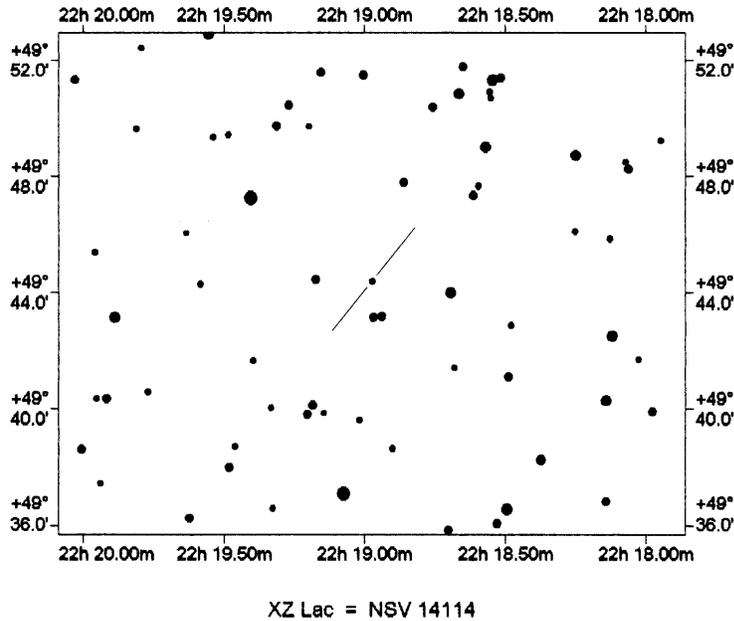


Figure 2. Field of XZ Lac = NSV 14114 = GSC 3615.2911 printed from the Guide Star Catalogue

The identification chart for XZ Lac quoted in the GCVS (Kholopov et al., 1985) was published by Hoffmeister (1928) but the original work was not available for me, so for the purposes of the present study, I used the chart published by Tsesevich and Kazanasmas (1971) reproduced in Figure 1 together with the finding chart published by Brun (1964) for NSV 14114. Comparing these two charts, it seems clear that XZ Lac is identical with NSV 14114.

The third chart presented here (see Figure 2) shows the same field reproduced from the Guide Star Catalogue (GSC).

The star marked between two lines is GSC 3615.2911 and it coincides with XZ Lac; the following coordinates for the epoch 2000.0 are given:

$$\text{R.A.: } 22^{\text{h}}18^{\text{m}}58^{\text{s}}.24 \quad \text{Decl.: } +49^{\circ}44'22''.5$$

Massimiliano MARTIGNONI  
Via Lonate Pozzolo n.128  
I-21052 Busto Arsizio, Italy

#### References:

- Brun, A.: 1964, *Journal des Observateurs*, **47**, No.3, 45  
 Gessner, H.: 1966, *Veröff der Sternw. Sonneberg*, **7**, H.2, 65  
 Hoffmeister, C.: 1928, *Mitteil. der Sternw. Sonneberg*, Nr.12  
 Kholopov, P.N. et al.: 1982, *New Catalogue of Suspected Variable Stars*, Moscow, "Nauka" Publishing House  
 Kholopov, P.N. et al.: 1985, *General Catalogue of Variable Stars*, Moscow, "Nauka" Publishing House  
 Tsesevich, V.P., Kazanasmas, M.S.: 1971, *Atlas of Finding Charts of Variable Stars*, Moscow