
Universiteit
Leiden
The Netherlands

Photo-electric observations of Nova Lacertae 1950

Schmidt, M.

Citation
Schmidt, M. (1950). Photo-electric observations of Nova Lacertae 1950. *Bulletin Of The Astronomical Institutes Of The Netherlands*, *11*, 224. Retrieved from https://hdl.handle.net/1887/6181

Version:	Not Applicable (or Unknown)
License:	Leiden University Non-exclusive license
Downloaded from:	https://hdl.handle.net/1887/6181

Note: To cite this publication please use the final published version (if applicable).

1950BAN....11..224S

PHOTOELECTRIC OBSERVATIONS OF NOVA LACERTAE 1950,

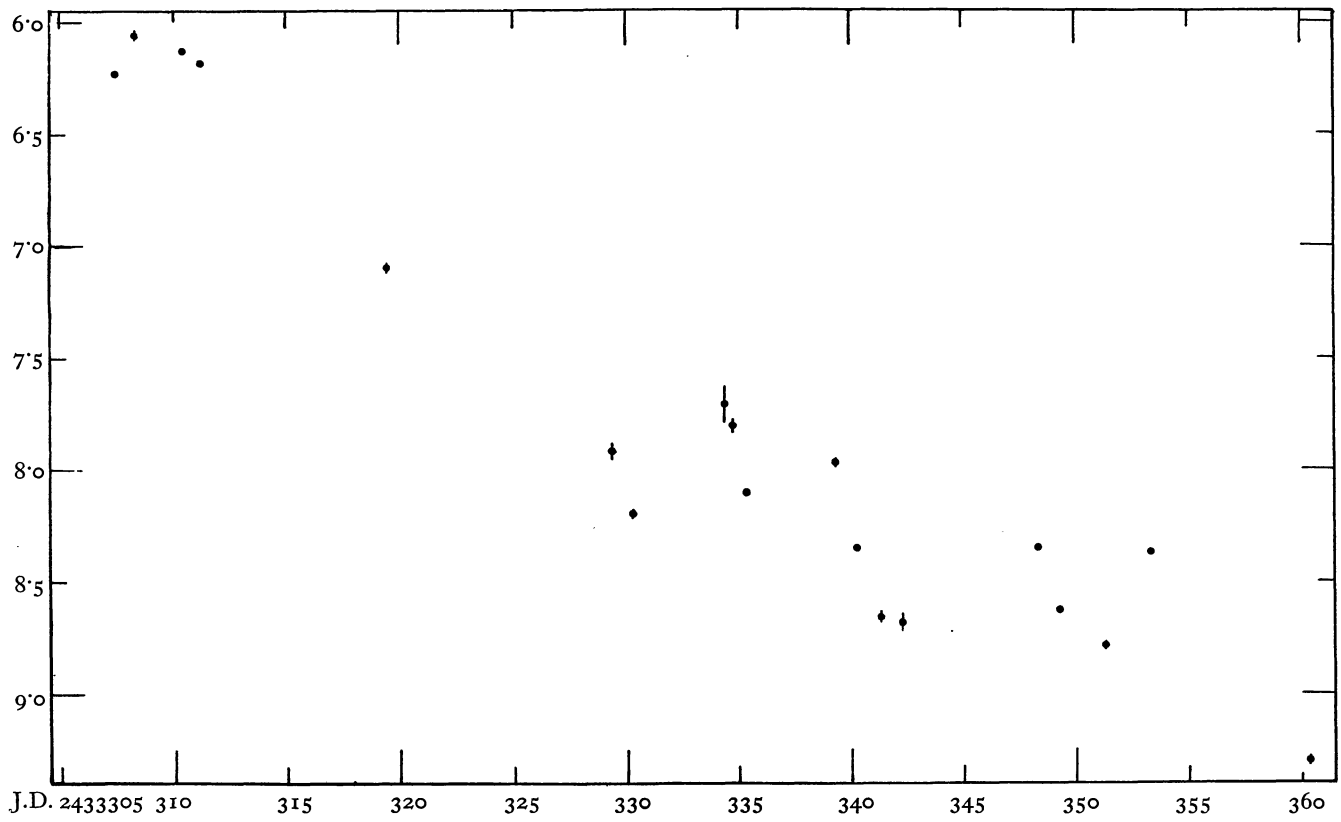
BY M. SCHMIDT

Photographic magnitudes of the Nova and of three comparison stars, observed with a photoelectric photometer, have been derived.

The observations have been carried out with a photoelectric photometer at the Zunderman reflector. Use has been made of two filters which yielded effective wave lengths λλ 4200 and 4550. All magnitude differences have been reduced to photographic ones and have been corrected for twice the Potsdam visual extinction [1]). The following comparison stars have been used:

A	HD 215869	AG 7921
B	216057	7935
C	216413	7960

FIGURE 1



These stars have been compared with each other and one, A, has been compared with BD 82°540 and BD 82°572, of which magnitudes are given in the Mount Wilson Polar Catalogue [1]). This yielded

$$m_A = \quad 7{\cdot}04 \pm {\cdot}06 \text{ (m.e.)}$$
$$m_B - m_A = -\ 1{\cdot}07 \pm {\cdot}01 \text{ (m.e.)}$$
$$m_C - m_A = +\ 1{\cdot}44 \pm {\cdot}01 \text{ (m.e.)}$$

The resulting magnitudes, which have been used further, are given in Table 1, as well as the values given in the Henry Draper Catalogue and the Rutherfurd Zone Catalogue [2]).

[1]) FREDERICK H. SEARES, FRANK E. ROSS and MARY C. JOYNER, "Magnitudes and Colors of Stars North of + 80°", *Carnegie Inst. of Washington Publ.* No. 532, 1941.
[2]) *Contr. Rutherfurd Obs.* No. 31, 1938.

TABLE 1

Photographic magnitudes of the comparison stars

	HD	Rutherfurd	Leiden
A	6·77	7·11	7·04
B	6·03	5·87	5·97
C	8·0	8·43	8·48

Table 2 contains the photographic magnitudes of the Nova with their mean error, and the comparison stars used. The mean errors, computed from a few observations only, differ greatly because the observations sometimes had to be made under most unfavourable conditions.

[1]) *Publ. Astrophys. Obs. Potsdam* **3**, 285, 1883.

© Astronomical Institutes of The Netherlands • Provided by the NASA Astrophysics Data System