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A POSSIBLE NOVA IN CYGNUS

A possible Nova was discovered by Wakuda in Cygnus on Aug. 4 on the patrol film taken with a camera of focal length 40cm. The brightness was then 9.1. The star was in the field of photos taken by Huru-hata for CI Cyg, and some brightnesses around the outburst were measured. All the photos were taken with Kodak Tri-X films with the yellow-green filter which gives brightness very close to visual magnitude. The results are shown in Table I and Figure 1. In the table, observer F is S. Fujino (Hamamatsu).

Table I.

1986(U.T.)	m_V	Obs.	1986(U.T.)	m_V	Obs.	1986(U.T.)	m_V	Obs.
July 18.47	[13.5	H	Aug. 6.55	9.6	H	Aug. 9.71	9.0	H
28.59	13.0:	H	.72	9.7	W	10.40	10.0	F
29.69	[11.1	W	7.71	8.8	W	.60	10.2	W
31.47	10.6	H	8.48	8.6	F	.70	10.7	H
.75	11.0	W	.63	8.5	W	11.68	10.9	H
Aug. 4.72	9.1	W	.73	9.6	H	13.64	10.5	H
5.45	9.7	H	9.49	8.7	W	.74	9.9	W
.47	9.7	W	.50	8.9	H			
6.48	9.4	F	.62	8.5	F			

It is noticeable that very rapid fluctuations were observed sometimes, amounting to more than one magnitude in a few hours.

Three spectra with objective prisms were taken by Wakuda on Aug. 5.6, 8.6, and 9.6, using the cameras of focal lengths 20 and 47.5cm. They all showed continuous spectra without any emission lines. Approximate blue magnitude measured photographically by Huru-hata on Aug. 8.7 was 9.5.

The star was examined on some seven hundred photos taken by Huru-hata since July, 1979 around CI Cyg, and no image brighter than $13^m.0$ could not be found. This suggests that the star would not be an common UG type.

Preliminary visual magnitudes of comparison stars determined by Huru-hata are shown in Table II.

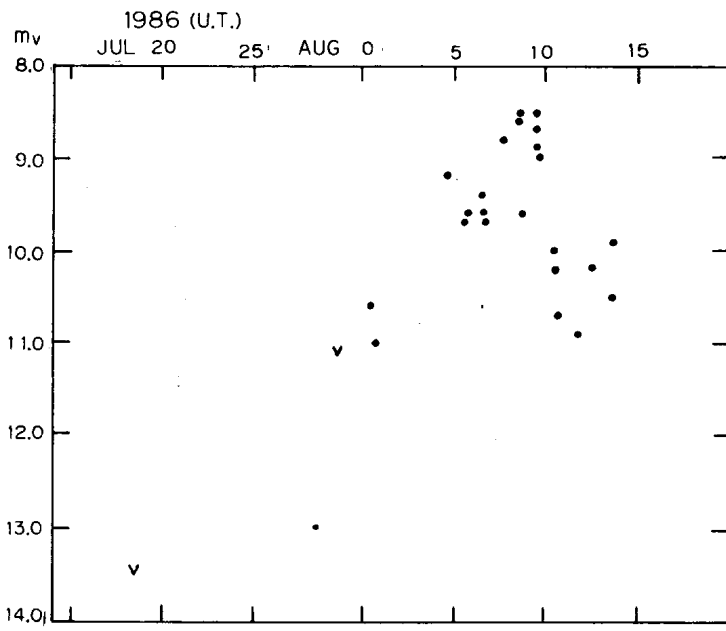


Fig. 1.

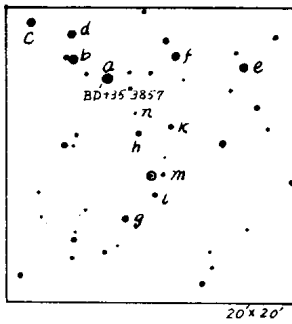


Fig. 2. Finding chart.

Table II.

<i>a</i>	8.7	<i>g</i>	11.1
<i>b</i>	9.4	<i>h</i>	11.8
<i>c</i>	9.6	<i>k</i>	11.8
<i>d</i>	9.7	<i>l</i>	12.2
<i>e</i>	9.8	<i>m</i>	12.3
<i>f</i>	10.8	<i>n</i>	13.5

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