

NOVA HERCULIS, 1963

Position: R.A. 18h. 12m. 46.4s., Dec. 41° 50' 21"N. (1950)

Nova Herculis, 1963 was discovered independently by L.C. Peltier of Delphos, Ohio, U.S.A. on February 5, and by K.A. Thorneo and Dahlgren of Sweden on February 6. At the time of discovery, the magnitude was about 4.0.

From earlier photographs taken of this area, it was discovered that this nova was originally between magnitude 14 and 15. Then, about January 20, it started to increase in brightness until it reached a maximum of magnitude 3 about January 30. Although it was so bright, it was not discovered until February 5 --- about six days after estimated maximum brightness! The nova increased in brightness at least 11 magnitudes or about 25,000 times in only ten days! The nova decreased in brightness at the rapid rate of about 0.1 magnitude per day between January 30 and February 23, when it then increased in brightness again by about 0.25 magnitude in about four days. The magnitude then fell rapidly during the next two days, after which the decline became more gradual. By mid-April, the magnitude was declining by about 0.1 magnitude every week or two.

Here are the rounded figures for the brightness of the Nova:

<u>Date</u>	<u>Mag.</u>	<u>Date</u>	<u>Mag.</u>	<u>Date</u>	<u>Mag.</u>
Jan. 20	14.	Feb. 11	4.5	Mar. 5	5.7
21	13.	12	4.6	6	5.7
22	12.7	13	4.7	7	5.8
23	11.6	14	4.7	8	5.9
24	10.4	15	4.8	9	5.9
25	9.1	16	4.8	10	6.0
26	8.0	17	4.9	11	6.0
27	6.5	18	4.9	12	6.1
28	5.3	19	5.0	Mar. 15	6.1
29	4.0	20	5.1	20	6.3
30	3.0	21	5.1	25	6.4
31	3.1	22	5.2	30	6.4
Feb. 1	3.3	23	5.2	Apr. 4	6.5
2	3.4	24	5.2	9	6.6
3	3.6	25	5.1	14	6.6
4	3.8	26	5.0	19	
5	4.0	27	4.9	24	
6	4.0	28	5.0	29	
7	4.1	Mar. 1	5.4	May 4	
8	4.2	2	5.5	9	
9	4.3	3	5.5	14	
10	4.4	4	5.6		

Until early February, the listed values could be in error by a magnitude or more, as they are only estimations by interpolation of the few figures obtained on pre-discovery photographs. After February 5, the values should be accurate to within 0.2 magnitudes. This is based largely upon observations submitted by members of the Royal Astronomical Society of Canada.

Jim Low