

OBSERVATIONS OF NOVAE, 1950, 1951 and 1952

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These observations are in continuation of similar series communicated to the Society in past years. Unless otherwise stated, they were all made with the 30-inch Hindle reflector.

Nova Aquilae (1918)

This nova is still subject to slight and irregular fluctuations, as it was before its outburst in 1918.

| Date | Mag. |
|---------------|------|
| 1950 Sept. 17 | 11.5 |
| 1951 Aug. 3 | 11.4 |
| 1952 July 24 | 11.1 |
| Aug. 10 | 11.1 |

Nova Aquilae (1936) (6)

The general fading has now ceased and the nova is sensibly constant in brightness. It was observed on 1950 September 14, 1951 September 2 and 1952 July 24, and the magnitude was estimated at 15.7 on each occasion.

Nova Aquilae (1945)

A negative observation on 1950 September 14 indicates that this nova was fainter than mag. 16.3. I have not seen it since 1949 August 30 and conclude that it has now faded beyond the reach of the 30-inch telescope.

Nova Aurigae (1892)

The brightness of this nova shows no significant change from year to year. Estimated magnitudes on 1950 November 5 and 1952 December 20 were respectively 14.7 and 14.8.

Nova Cygni (1876)

The slight and irregular variability noted in previous years by Barnard and myself is still in evidence.

| Date | Mag. | Date | Mag. |
|---------------|-------|---------------|-------|
| 1950 Sept. 14 | 14.91 | 1951 Sept. 15 | 14.66 |
| 17 | 14.86 | 21 | 14.60 |
| 20 | 14.86 | Oct. 3 | 14.58 |
| 21 | 14.86 | 9 | 14.66 |
| 22 | 14.86 | Nov. 2 | 14.66 |
| 1951 Aug. 9 | 14.65 | 1952 July 24 | 14.60 |
| 31 | 14.60 | Aug. 22 | 14.81 |
| Sept. 2 | 14.60 | | |

Nova Cygni (1920)

This nova has a pretty steady minimum. Estimates on 1951 September 2 and 1952 July 30 made it 16.1 and 16.2 respectively.

Nova Cygni (1942)

The minimum has apparently been reached, the magnitude on 1950 September 17, 1951 September 2 and 1952 July 24 being estimated at 16.3.

Nova Cygni (1948)

A negative estimate on 1952 August 22 made the magnitude < 16 , and the nova has probably faded out of range of the telescope.

Nova Geminorum (1912)

There is little or no change in the magnitude of this nova, which was estimated at 14.8 on 1952 December 20.

Nova Herculis (1934)

This nova continues to fade very slowly but is still definitely brighter than before its outburst. On 1950 May 16 it was noted that it appeared as a stellar point in the centre of a nebulous disk about four seconds of arc in diameter.

| Date | Mag. |
|--------------|------|
| 1950 May 14 | 13.8 |
| 16 | 13.6 |
| Sept. 20 | 13.6 |
| 1951 May 29 | 13.9 |
| Nov. 2 | 13.8 |
| 1952 July 26 | 13.8 |

Nova Lacertae (1910)

This object has for many years been at a sensibly steady minimum. The estimates on 1950 September 20 and 1952 August 22 were respectively 14.4 and 14.3.

Nova Lacertae (1936)

The general fading has ceased and the nova is nearly steady in its light, though perhaps a little brighter than in 1948 and 1949. The estimates on 1950 September 17, 1951 September 2 and 1952 July 24 were respectively 14.9, 14.8 and 14.8.

Nova Lacertae (1950)

The estimates in 1950 were made, up to February 7 inclusive, with the 43-mm inverting binoculars, and after that with the 3-inch Merz comet-seeker.

| Date | Mag. | Date | Mag. |
|--------------|------|---------------|------|
| 1950 Jan. 29 | 6.0 | 1950 Feb. 17 | 7.8 |
| Feb. 3 | 6.6 | 21 | 7.4 |
| 6 | 6.7 | 25 | 8.1 |
| 7 | 6.7 | Mar. 15 | 9.3 |
| 8 | 7.3 | 19 | 9.3 |
| 10 | 7.4 | 25 | 8.8 |
| 11 | 7.4 | 1951 Sept. 21 | 12.5 |
| 13 | 7.4 | 1952 July 26 | 13.4 |
| 16 | 7.5 | | |

Nova Lyrae (1919)

The nova has reverted to its normal minimum after the temporary brightening of 1949. The magnitude was estimated at 15.3 on 1952 July 30.

Nova Ophiuchi (1848)

The slight variability of this nova persists. The magnitude was estimated at 12.8 on 1950 July 27 and 12.5 on 1952 July 26.

Nova Persei (1901)

This is the most markedly and persistently variable of all the old novae. It seems never to remain of the same brightness for more than a few days together. There is no clear evidence of periodicity in the fluctuations.

| Date | Mag. | Date | Mag. |
|-------------|-------|--------------|-------|
| 1950 Jan. 9 | 13.31 | 1951 Apr. 14 | 12.74 |
| 18 | 12.64 | 15 | 12.69 |
| Sept. 13 | 13.26 | 19 | 12.95 |
| 14 | 13.29 | 20 | 13.05 |
| 17 | 12.95 | 21 | 13.10 |
| 18 | 13.20 | 22 | 12.90 |
| 20 | 13.47 | 23 | 12.95 |
| 21 | 13.00 | Aug. 3 | 12.84 |
| 22 | 13.41 | 9 | 12.90 |
| Oct. 5 | 13.00 | 10 | 12.78 |
| 8 | 13.47 | 12 | 12.74 |
| 12 | 13.05 | 16 | 12.64 |
| 19 | 13.00 | 22 | 12.53 |
| Nov. 3 | 12.95 | 31 | 12.84 |
| 5 | 12.90 | Sept. 2 | 12.53 |
| 11 | 12.64 | 13 | 12.69 |
| 12 | 12.64 | 15 | 12.64 |
| 13 | 12.69 | 21 | 12.84 |
| 14 | 12.59 | 23 | 12.69 |
| 17 | 12.43 | 26 | 12.53 |
| Dec. 1 | 11.95 | 28 | 12.48 |
| 5 | 11.91 | 29 | 12.32 |
| 7 | 11.81 | Oct. 1 | 12.32 |
| 15 | 11.71 | 3 | 12.32 |
| 28 | 12.64 | 5 | 12.32 |
| 1951 Jan. 7 | 13.00 | 6 | 12.48 |
| 13 | 13.05 | 7 | 12.64 |
| 14 | 12.84 | 8 | 12.64 |
| 15 | 12.84 | 9 | 12.69 |
| 24 | 12.84 | 10 | 13.10 |
| 27 | 12.84 | 11 | 12.84 |
| Feb. 6 | 13.00 | 17 | 12.84 |
| 19 | 13.05 | 19 | 12.74 |
| 23 | 12.90 | 20 | 12.84 |
| Mar. 1 | 12.90 | 21 | 12.95 |
| 2 | 12.84 | Nov. 1 | 12.90 |
| 3 | 12.95 | 2 | 12.53 |
| 4 | 12.95 | 3 | 12.43 |
| 7 | 12.90 | 4 | 12.64 |
| 12 | 12.79 | 7 | 12.48 |
| 20 | 12.84 | 15 | 12.48 |
| 23 | 12.69 | 16 | 12.32 |
| 24 | 12.69 | 17 | 12.32 |
| 27 | 12.58 | 19 | 12.53 |
| 30 | 12.69 | 21 | 12.53 |
| Apr. 2 | 12.32 | 25 | 12.48 |
| 4 | 12.32 | 26 | 12.53 |
| 11 | 12.32 | 27 | 12.64 |

| Date | Mag. | Date | Mag. |
|--------------|-------|--------------|-------|
| 1951 Nov. 28 | 12·64 | 1952 Apr. 23 | 12·69 |
| Dec. 1 | 12·32 | July 24 | 13·41 |
| 2 | 12·12 | 26 | 13·51 |
| 8 | 12·95 | 30 | 13·41 |
| 9 | 12·95 | Aug. 10 | 12·84 |
| 10 | 12·84 | 14 | 12·84 |
| 21 | 12·64 | 22 | 12·79 |
| 29 | 12·64 | 23 | 12·95 |
| 30 | 12·64 | 25 | 12·90 |
| 1952 Jan. 3 | 12·48 | 29 | 12·74 |
| 12 | 12·53 | Sept. 17 | 12·58 |
| 16 | 12·43 | 25 | 12·69 |
| 18 | 12·11 | 26 | 12·64 |
| 19 | 12·64 | 27 | 12·54 |
| 26 | 12·78 | Oct. 8 | 12·74 |
| 31 | 12·53 | 11 | 12·74 |
| Feb. 1 | 12·64 | 14 | 12·95 |
| 2 | 12·64 | 24 | 12·79 |
| 9 | 12·74 | 25 | 12·84 |
| 15 | 12·74 | 26 | 12·74 |
| 21 | 12·59 | Nov. 7 | 12·74 |
| 22 | 12·69 | 8 | 12·84 |
| Mar. 1 | 12·69 | 11 | 12·79 |
| 5 | 12·84 | 17 | 12·38 |
| 10 | 12·74 | 22 | 12·38 |
| 15 | 12·84 | 23 | 12·48 |
| 16 | 13·10 | 24 | 12·90 |
| 22 | 12·74 | 25 | 13·00 |
| 25 | 12·84 | Dec. 3 | 12·84 |
| Apr. 2 | 12·59 | 4 | 12·43 |
| 4 | 12·48 | 5 | 12·58 |
| 5 | 12·53 | 6 | 12·84 |
| 16 | 12·84 | 8 | 12·95 |
| 17 | 12·95 | 20 | 12·64 |
| 18 | 12·74 | 21 | 12·43 |

Nova Sagittae (1913)

After its second observed outburst in 1946 the nova seemed to have reached a stationary minimum of mag. 14·4 in 1948 and 1949, but it has since faded a little further. On 1950 September 17 the magnitude was estimated at 14·6 and on 1952 August 22 at 14·8.

Nova Scuti (1952)

This nova was discovered by Arend at Uccle in 1952 July. Its position for 1952·0 is R.A. 18^h 55^m 43^s, Dec. -5° 27' 59".

| Date | Mag. | Date | Mag. |
|--------------|------|--------------|------|
| 1952 July 24 | 12·0 | 1952 Aug. 25 | 12·7 |
| 26 | 11·8 | 29 | 12·9 |
| 30 | 12·0 | Sept. 17 | 13·3 |
| Aug. 10 | 11·0 | 25 | 13·4 |
| 13 | 11·8 | 27 | 13·4 |
| 14 | 12·1 | Oct. 8 | 13·7 |
| 22 | 12·8 | 11 | 13·7 |
| 23 | 13·0 | 14 | 13·9 |

Cambridge :

1952 February 24.