

Saw	Dec 5	4.7 (Teramo 4.41)	0.29 faint
	19	4.65 (Preston 4.38, St Andrews 4.42)	0.25 faint
Alcock	Dec 23	4.70 (St Andrews 5.16)	0.46 bright
	28	5.28 (Preston 5.01)	0.27 faint
Gainsford	Dec 30	5.04 (St Andrews 5.24)	0.20 bright
Carter	Dec 25	4.82 (St Andrews 5.34)	0.52 bright
Allen	Dec 19	4.06 (4.38, 4.42 above)	0.34 bright
	28	5.60 (Preston 5.01)	0.59 faint
Lomas	Dec 23	4.66 (St Andrews 5.16)	0.50 bright
Cohen	Dec 25	5.10 (5.34 above)	0.24 bright

This listing is not fair, since I have chosen a few of the worst examples to show that even reliable observers can differ. People will certainly point out flaws in my argument, such as my reliance on one photoelectric result as a comparison. But surely these results give food for thought? Why are experienced observers differing by up to half a magnitude? Is it due to rapid fluctuations of the nova? It certainly varies by 0.3 or 0.4 mag in 48 hours (sometimes much faster - Ed), and there are plenty of photoelectric observations to bear this out. What, then, is the objection to a variation within one or two hours? This would, in part, explain the divergence of results. - 1 Milverton Drive, Ickenham, Uxbridge, Middlesex.

(It would be rash to place too much reliance on the photoelectric results, as Robin Scagell points out; the significant point is that experienced observers are disagreeing. The most extraordinary discrepancy is between Carter and Alcock on the morning of Feb 4. Carter (Feb 3, 18.10 GMAT) gives 3.43, while Alcock (Feb 4, 06.15 UT) gives 4.3! Can we suppose that a fluctuation of 0.9 mag occurred in five minutes? - Ed)

Comet Ikeya-Seki 1967n

Gainsford Allen
Pearce

M J Gainsford Due to the very poor observing conditions, this 8½" spec x35 object has been seen only twice since my last report, as follows:

Feb 23, 23.50, seeing good but lowish. No tail seen, quite condensed, with nucleus. Coma diameter still about 3', magnitude about 8.3.

Feb 25, 23.30, seeing fair, hazy. No definite tail, possible

elongation in p direction. Coma diameter 3'-4'; nucleus seen.

Although the magnitudes are taken from the image sizes in Atlases Eclipticalis and Borealis, and are therefore somewhat rough and ready, it does seem that the comet is not as bright as the mag 7.1 expected at this time. On Feb 25, the comet was compared with 3 stars marked in Borealis, obtaining a result in the range 7.76-8.25. - 2 Derwent Way, Nuneaton.

D A Allen Feb 26, 05.25, 10x45 monocular. Diameter about 5'; slight nucleus; little elongated. Mag 7.1.

Mar 4, 00.02, 12" OG x80, sky bright and hazy. Diameter 5', somewhat elongated. Mag 7.6 (?). - 1 Adams Road, Cambridge.

G S Pearce I was interested in Mr Alcock's remark, quoted in 10" spec TA 46, that the comet may have a tail. After several attempts, I was able to obtain a crude photograph of the comet through my 10" reflector at the prime focus, and a faint tail-like object is shown on the original negative (at about PA 0° - Ed). I am trying for a better photograph. - 1 Valletort Cottages, Millbridge, Plymouth. (The photograph was taken on Feb 9, 06.25-06.40, using HP3. - Ed)

Solar activity in February

R W Argyle

ACTIVITY IN FEBRUARY has again been pronounced, with a giant group visible at the beginning of the month. This group was the one described in last month's report, and on Feb 2 was approximately 45° west of the CM. The MDF for February was 6.00, 3.11 in the north and 2.89 in the south.

On Feb 2, there was great activity yielding a very high spot count. The large group consisted of a large penumbra and five umbrae (two medium). A stream of small spots intermingled with wisps of penumbra followed this, and the group was probably about 150,000 miles long overall. Following in the wake of the large group were five areas in the region +15°-+25° and approximately 55° east of the CM to the CM itself (Lo=127). These consisted of a lone small spot, a medium umbra and penumbra plus a medium double umbra and penumbra, a small spot, two medium small spots, and a medium small spot. In the south were two small spots in the SW quadrant and three small spots in the SE quadrant, all within -10°--25°.

Activity had dropped slightly by the next day (Lo=115), but was still very high. Due to bad weather, observations could not be resumed until Feb 17, when activity was considerably lower. A small group was visible in the north, with four small spots and a small group in the south (Lo=291). The next day (Lo=277) the small group in the south had disappeared.