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SUPERNOVA IN THE URSA MAIOR CLUSTER  
OF GALAXIES

In the night of March 13, when comparing two plates of December 14, 1963 and March 12, 1964 (Zeiss Schmidt-telescope 60/90/180 cm at our mountain station), I found a supernova about 96" SE from the nucleus of the anonymous spiral galaxy at RA=11<sup>h</sup>52<sup>m</sup>2 and D=+53°32' (1855). Cloudy weather prevented me from taking the control plate this night. A plate on March 15 confirmed the object, and on March 16 the finding was communicated to Copenhagen and to the centres of the supernova search program by telegrams or telephone. The accompanying chart shows the position of the supernova and the comparison sequence, for which provisional magnitudes have been determined by transfer of the NPS on a plate obtained by B. Balázs on March 18, and measured by me with the Becker iris-photometer.



a = 10.<sup>m</sup>97;    b = 13.<sup>m</sup>35;    c = 14.<sup>m</sup>04;    d = 14.<sup>m</sup>26;    e = 15.<sup>m</sup>59  
f = 16.<sup>m</sup>05;    g = 16.<sup>m</sup>18;    h = 16.<sup>m</sup>42;    i = 17.<sup>m</sup>36;    j = 17.<sup>m</sup>43

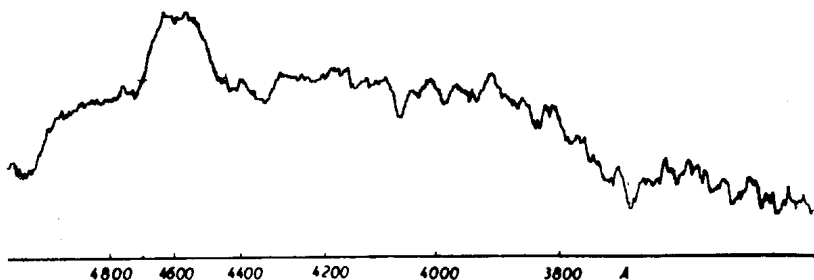
Using this sequence I obtained the following provisional magnitudes for the supernova:

Dec.	14/15, 1963	J.D. 2438377.620	>19. <sup>m</sup> 3
March	12/13, 1964	467.446	13.21
"	15/16,	470.642	13.52
"	16/17	471.450	13.47
"	18/19	473.568	13.40

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## OBJECTIVE PRISM SPECTRUM OF THE SUPERNOVA

On March 18/19 I have obtained an unwidened spectrum of the supernova with the aid of the 5° objective prism, of UBK7 glass, attached to the 60/90/180 cm Schmidt-telescope. Kodak OaO plate was used, with an exposure time of 40 minutes. In the figure a microphotometer record of the spectrum is shown; the wavelengths are only approximate. The spectrum is typical for a supernova of Type I, a few weeks after maximum light.



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Prof. B. V. KUKARKIN, to whom the discovery was communicated in the evening of March 16 by telephone, writes in a letter of March 23:

On plates taken at Abastumani Observatory the supernova was invisible on February 12 (limiting magnitude about 16), it was already 14.<sup>m</sup>0 on February 15 and 13.<sup>m</sup>6 on February 16.

The brightness of the supernova was estimated by Dr. Markarian on a plate taken on March 16 U. T. 18<sup>h</sup>40<sup>m</sup> at the Burakan Observatory as 13.<sup>m</sup>3.

EDITOR