

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

COMET AND NOVA SECTION

Announcement #11

COMET IKEYA-SEKI (1965f)

This comet, discovered on September 18, is expected to become very bright, and may be one of the brightest of the century. The following is a modification of the ephemeris supplied by Michael McCants. Note that it differs from the ephemeris listed on Announcement #10.

	1965 00h U.T.	R.A.1950		Decl.		Mag.	Angle from sun	40 N 50 N	
		h	m	o	'			Rises	
Oct.	9	10	45.3	-14	07	3.8	33	4.4	4.7
	12	11	17.1	-14	43	2.8	28	4.8	5.2
	13	11	29.0	-14	48	2.4	26	4.9	5.3
	14	11	41.7	-14	50	2.0	24	5.1	5.5
	15	11	55.1	-14	48	1.5	21	5.2	5.6
	16	12	09.3	-14	43	1.0	19	5.4	5.8
	17	12	24.2	-14	37	0.4	16	5.6	6.0
	18	12	40.2	-14	12	-0.5	13	5.8	6.1
	19	12	57.4	-13	40	-1.7	10	6.0	6.3
	20	13	16.0	-12	55	-3.2	6	6.2	6.5
	21	13	38.4	-11	20	-8.8	1	6.3	6.5
	22	13	24.9	-10	53	-4.3	5	5.8	6.1
	23	13	13.4	-11	48	-3.0	9	5.7	5.9
	24	13	04.7	-12	36	-1.7	12	5.5	5.8
	25	12	55.3	-13	21	-0.5	15	5.4	5.7
	26	12	48.2	-14	12	0.6	18	5.2	5.6
	27	12	42.9	-14	58	1.6	20	5.0	5.5
Nov.	1	12	17.7	-18	27	3.4	30	4.6	5.0
	6	11	56.9	-21	40	4.5	39	4.2	4.7
	16	11	18.5	-27	41	6.0	56	3.3	4.0
	26	10	36.9	-33	04	6.9	72	2.6	3.4
Dec.	6	09	46.6	-37	11	7.6	88	1.3	low
	16	08	50.2	-39	12	8.3	102	0.2	
	26	07	53.9	-38	33	8.9	114	22.4	

This comet is related to the Great Sun Grazing Comet of 1882 and its family. Perihelion occurs on October 21 when the comet passes less than 200,000 miles from the surface of the sun. In fact, one set of orbital elements indicates that the perihelion distance is below the solar surface, so this ephemeris is doubtful after October 21.

The magnitude is based on:

$$\text{Mag.} = 6.2 + 5 \log (\text{dist. from earth}) + 10 \log (\text{dist. from sun})$$

but the actual magnitude could be somewhat different from the listed value. It appears, however, that the comet will be brighter than Venus when near the sun.

The undersigned has determined the times of "Comet-rise" for 40° and 50° N latitude, and they are listed to the nearest tenth of an hour. Interpolate or extrapolate for other latitudes. These are local mean times. To convert to standard times, see page 12 of the OBSERVER'S HANDBOOK.

Since this comet could undergo unexpected changes, members are asked to make as many observations as possible and report them to the undersigned. Since circulation of this announcement is limited, would you please inform other members of the Society about this comet.

Hugh N.A. Maclean of the Niagara Falls Centre reports on an observation of Comet Ikeya-Seki on October 3:

"Brightness estimate was 5.0. The Comet's position at 10:30 U.T. Oct.3, was: R.A. 09h 57m; Decl. $-12^{\circ} 40'$. The nucleus was bright, but not starlike in 8" 'scope. The coma was small; I would guess around 6' to 8'."

COMET ALCOCK.(1965h)

This comet is in the evening sky during the next month and should be visible in small telescopes. The following ephemeris was obtained from I.A.U. Circular 1926, and the magnitudes were determined by the undersigned from:

$$\text{Mag.} = 8.5 + 5\log(\text{dist. from earth}) + 15\log(\text{dist. from sun}).$$

Magnitudes will be approximate, at best.

	1965	R.A.1950	Decl.	Mag.
00h U.T.				
Oct. 7	17 34.4	+27 15	10.7	
12	17 55.1	+22 50	10.6	
17	18 16.1	+18 06	10.5	
22	18 37.3	+13 12	10.4	
27	18 58.4	+08 14	10.4	
Nov. 1	19 19.2	+03 23	10.5	
6	19 39.7	-01 14	10.6	

PERIODIC COMET DeVICO-SWIFT (1678, 1844I, 1894IV, 1965e)

This comet was recovered last July, and is about three to four magnitudes fainter than predicted in "Bulletin #6", so it will not be visible in small telescopes.

NOVA HERCULIS, 1963

This nova is now declining very slowly in brightness. Mr. Maclean of the Niagara Falls Centre estimated the magnitude at 13.8 on August 24, 1965. The position of this nova is R.A. 18h 12m 46s, Decl. $41^{\circ} 50'14''$ (1950).

Members may have copies of the instruction forms upon request.

Jim Low, National Coordinator,
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