

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
 IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
 CBAT@CFA.HARVARD.EDU (science)
 URL <http://www.cfa.harvard.edu/iau/cbat.html> ISSN 0081-0304
 Phone 617-495-7440/7244/7444 (for emergency use only)

COMET P/2007 T3 (SHOEMAKER-LEVY)

R. H. McNaught reports his recovery of comet P/1990 V1 (= 1990o = 1990 XV; cf. *IAUC* 5135) on CCD images taken with the 0.5-m Uppsala Schmidt telescope at Siding Spring; the comet shows a 10'' coma and no tail on Oct. 12, and McNaught's astrometric measures are given below:

2007	UT	α_{2000}	δ_{2000}	Mag.
Oct.	12.44402	18 ^h 51 ^m 51.48 ^s	-50°45'12.6"	18.2
	12.45295	18 51 53.13	-50 45 08.6	18.2
	12.46192	18 51 54.50	-50 45 02.2	18.3
	12.47080	18 51 56.16	-50 44 57.5	18.5
	12.51989	18 52 04.55	-50 44 28.4	18.0
	13.41858	18 54 40.98	-50 35 47.2	18.1

The indicated correction to the orbital elements on *MPC* 51824 is $\Delta T = +4.5$ days. Orbital elements by B. G. Marsden from 36 observations spanning 1990–2007 (mean residual 0''.8; ephemeris $H_{10} = 15.0$):

Epoch = 1990 Sept. 26.0 TT

$$\left. \begin{array}{ll} T = 1990 \text{ Sept. } 18.5921 \text{ TT} & \omega = 310.6225 \\ e = 0.771949 & \Omega = 52.0443 \\ q = 1.524077 \text{ AU} & i = 24.3335 \end{array} \right\} 2000.0$$

$$a = 6.683058 \text{ AU} \quad n^\circ = 0.0570481 \quad P = 17.28 \text{ years}$$

Epoch = 2007 Dec. 6.0 TT

$$\left. \begin{array}{ll} T = 2007 \text{ Dec. } 17.3371 \text{ TT} & \omega = 312.8443 \\ e = 0.773589 & \Omega = 51.6501 \\ q = 1.460069 \text{ AU} & i = 24.5612 \end{array} \right\} 2000.0$$

$$a = 6.448748 \text{ AU} \quad n^\circ = 0.0601854 \quad P = 16.38 \text{ years}$$

2007 TT	α_{2000}	δ_{2000}	Δ	r	ϵ	β	Mag.
Oct. 7	18 ^h 36 ^m .70	-51°33'.4	1.487	1.703	84.0	35.7	18.2
	17 19 05.32	-49 58.8	1.495	1.645	79.9	36.6	18.0
	27 19 36.79	-47 54.2	1.502	1.593	76.3	37.3	17.9
Nov. 6	20 09.99	-45 13.4	1.509	1.548	73.2	37.8	17.8
	16 20 43.88	-41 52.6	1.518	1.512	70.6	38.1	17.7
	26 21 17.54	-37 51.4	1.531	1.484	68.3	38.2	17.6
Dec. 6	21 50.30	-33 13.1	1.551	1.467	66.4	38.0	17.6
	16 22 21.81	-28 04.2	1.581	1.460	64.6	37.5	17.6