Circular No. 8856

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 N2 = P/2002 O5 (NEAT)

Comet P/2002 O5 (cf. *IAUC* 7942) has been recovered apparently independently on CCD images obtained at three different observatories:

2007	UT	α_{2000}	δ_{2000}	Mag.	*Observer*
July	15.22509	$17^{h}05^{m}36^{s}.69$	$-12^{\circ}42'18''.5$	15.8	LINEAR
	15.23619	17 05 38.35	−12 41 00.0	16.0	〃
	15.24728	17 05 39.89	−12 39 40.4	16.6	〃
	15.25845	17 05 41.73	−12 38 23.8	15.9	〃
	15.26954	17 05 43.38	−12 37 05.8	15.9	〃
	16.00235	17 07 43.80	−11 11 33.0	16.4	Fratev
	16.00372	17 07 44.31	−11 11 26.6	17.0	Lombardi
	16.00635	17 07 44.71	−11 11 07.8	17.1	〃
	16.00872	17 07 45.02	−11 10 49.7	16.5	Fratev
	16.01498	17 07 45.87	−11 10 06.3	16.3	〃
	16.02155	17 07 46.73	−11 09 19.2	16.5	〃

LINEAR (Socorro, NM). 1.0-m $f/2.15$ reflector. Observations identified via the normal checking of data by the Minor Planet Center.

G. Lombardi and E. Pettarin (Farra d'Isonzo, Italy). 0.40-m $f/4.5$ reflector. USNO-A2.0 catalogue. Comet has a diffuse coma of diameter $\approx 10''$ and a tail $\approx 15''$ long in p.a. 135°.

F. Fratev and E. Mihaylova (Plana, Bulgaria). 0.25-m $f/3.2$ reflector. USNO-B1.0 catalogue. Coma diameter $\approx 25''$; total red mag 16.0.

The correction to the predictions on *MPC* 51823 and in the *2007 Comet Handbook* is $\Delta T = -0.36$ day. The following linked orbital elements are by B. G. Marsden, from 254 observations, 2002–2007 (mean residual $0''.7$):

Epoch = 2002 July 25.0 TT

T = 2002 Aug. 3.10144 TT ω = 15°.30571
e = 0.5973957 Ω = 282.20995 } 2000.0
q = 1.1742394 AU i = 20.39966

a = 2.9166089 AU n^{o} = 0.19787311 P = 4.98 years

Epoch = 2007 Aug. 8.0 TT

T = 2007 July 25.90695 TT ω = 15°.27124
e = 0.5976949 Ω = 282.20178 } 2000.0
q = 1.1733898 AU i = 20.40165

a = 2.9166666 AU n^{o} = 0.19786724 P = 4.98 years

