Circular No. 9051

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 221P/2009 L1 (LINEAR)

L. Elenin, Lyubertsy (Moscow region), Russia, reports the recovery of comet P/2002 JN_{16} (cf. *IAUC* 7907) on CCD images obtained remotely with a 0.36-m $f/3.8$ Maksutov-Newtonian telescope near Mayhill, NM, USA (first observation tabulated below). The recovery was confirmed by M. Schwartz with a 0.81-m $f/7$ reflector near Rio Rico, AZ, USA, whose images clearly show a tail of length $\sim 35''$ in p.a. 248°.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
June 1.39819	$23^h26^m08^s.23$	$+8^\circ37'27''.6$	20.5	Elenin

The correction to the predictions on *MPC* 56802 and in the *2008/2009 Comet Handbook* is $\Delta T = -0.2$ day. Additional information, the available astrometry, the following revised orbital elements, residuals, and an ephemeris appear on *CBET* 1831. The permanent number 221P has been assigned to this comet (cf. *MPC* 66145).

$$\text{Epoch} = 2009\ \text{Jan. } 9.0\ \text{TT}$$

$$\begin{array}{llll} T = 2009\ \text{Jan. } 24.88878\ \text{TT} & \omega = 39^\circ.69673 & \\ e = 0.4872673 & \Omega = 230.03375 & \left.\right\} 2000.0 \\ q = 1.7836977\ \text{AU} & i = 11.41862 & \end{array}$$

$$a = 3.4788059\ \text{AU} \qquad n^\circ = 0.15190035 \qquad P = 6.49\ \text{years}$$

COMETS C/2008 E10, C/2008 Y16, AND C/2008 Y17 (STEREO)

Further to *IAUCs* 9025 and 9036, additional slightly diffuse and somewhat elongated Kreutz sungrazers have been found on STEREO/SECCHI HI-1A images (the elongation is partly due to the long exposure times, $\sim$ 40 min). Approximate peak magnitudes: C/2008 E10, 11–12; C/2008 Y16, 10–11; C/2008 Y17, 10. K. Battams notes that Kreutz comets in the HI-1 images generally initially appear out of the background noise at mag $\sim$ 13.5, and they are still in the process of brightening as they leave the field-of-view; he adds that their rates of initial brightening vary — some making very abrupt appearances, while others gradually come into view.

Comet	2008 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2008 E10	Mar. 7.850	$1^h01^m.8$	$+ 2^\circ32'$	HI*	AW	2009-F31
C/2008 Y16	Dec. 31.794	22 05.1	-15 04	HI*	AW	2009-F31
C/2008 Y17	Dec. 31.905	22 07.4	-15 32	HI*	KB	2009-F31

2009 June 7 *Daniel W. E. Green*