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 C/2010 B1 (CARDINAL)

As first announced on *CBET* 2141, an apparently asteroidal object discovered by R. D. Cardinal (Rothney Astrophysical Observatory, University of Calgary, 0.50-m *f*/1.0 reflector; discovery observation tabulated below), and placed on the 'NEO Confirmation Page', has been reported as cometary by several CCD astrometrists. Y. Ikari (Moriyama, Shiga-Ken, Japan, 0.26-m reflector) notes that some of his exposures on Jan. 22.6 UT showed a coma of diameter 0'.2. D. Chestnov, Moscow, writes that three stacked 300-s unfiltered exposures on Jan. 22.8 by T. Kryachko (Engelhardt Observatory, Zelenchukskaya Station, 0.3-m reflector) showed that the object appeared "softer" than the surrounding stars, having a 0'.1–0'.2 coma with a strong condensation but no tail. J. M. Aymami (Tiana, Spain, 0.25-m reflector) remarks that 39 co-added images totaling 3900 seconds, taken around Jan. 22.9, showed a compact-but-nebulous object displaying what seemed to be a faint coma measuring 7''.5.

2010 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Jan. 19.22247	$8^h12^m28^s.90$	$+73°42'01''.1$	17.7	Cardinal

The following parabolic orbital elements from *MPEC* 2010-B54 are from observations spanning Jan. 19–26:

$$T = 2011 \text{ Feb. } 6.807 \text{ TT} \qquad \omega = 211^\circ.674$$
$$\Omega = 277.262 \quad \text{(2000.0)}$$
$$q = 2.93361 \text{ AU} \qquad i = 101.937$$

COMETS C/2009 M6, C/2009 M7, C/2009 M8, C/2009 N1 (SOHO)

Additional presumed comets have been found on SOHO website images — Kreutz sungrazers except for C/2009 M8 and C/2009 N1 (non-group). C/2009 M6 was very faint (mag ~ 8.5) and slightly diffuse. C/2009 M7 was diffuse (mag ~ 8). C/2008 M8 was appeared stellar, appearing quite bright (mag ~ 6.5–7) but fading fast in C2 images. C/2009 N1 was slightly diffuse (mag ~ 7) in C3 images, and a faint, diffuse streak in C2 images.

Comet	2009 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2009 M6	June 25.604	$6^h09^m.9$	$+21°52'$	C2	MU	2009-P02
C/2009 M7	26.908	6 15.3	+21 48	C2	BZ	2009-P20
C/2009 M8	30.071	6 32.4	+25 58	C3/2	RK	2009-P20
C/2009 N1	July 2.596	6 42.8	+26 41	C3/2	BZ	2009-P20

  Daniel W. E. Green