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://cfa-www.harvard.edu/iau/cbat.html ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET C/2007 E1 (GARRADD)

G. J. Garradd reports the discovery of a comet with a 35″ coma on Siding Spring Survey exposures taken with the 0.5-m Uppsala Schmidt telescope (discovery observation tabulated below). Following posting on the Minor Planet Center's 'NEOCP' webpage, numerous CCD observers have reported on the object's cometary appearance, including A. Lepardo, V. Santini, and G. Sostero (Remanzacco, Italy, 0.45-m reflector, Mar. 14.1 UT, co-addition of 60 unfiltered 60-s exposures reveals a diffuse coma of mag 15.2 almost 30″ in diameter, elongated toward p.a. 290°); P. Birtwhistle (Great Shefford, Berkshire, U.K., 0.40-m reflector, Mar. 14.1, poor seeing at low altitude; coma diameter 20″ with only moderately condensed center, with 20″ elongation of the coma in p.a. 300°); E. Guido (Castellammare di Stabia, Italy, remotely using a 0.25-m reflector at Mayhill, NM, Mar. 14.4, coma diameter almost 30″); D. Tibbets and G. Hug (Eskridge, KS, 0.7-m reflector, Mar. 14.4, obvious coma about 15″ wide extending more toward p.a. ~ 280°); J. Young (Table Mountain Observatory, 0.61-m reflector, Mar. 14.4, round, 12″ coma with bright central condensation and a hint of a poorly defined faint, broad tail structure spanning p.a. 240°–310°, extending for 40″ in very long exposures); D. Mayes (Table Mountain Observatory, 0.4-m reflector, Mar. 14.44–14.46, bright round coma with a 7″-diameter central condensation, with an ill-defined 8″ tail in p.a. 265°–275°); J. E. McGaha (Tucson, AZ, 0.62-m reflector, Mar. 14.5, bright central coma with a faint 60″ outer coma elongated at p.a. 275°); J. G. Ries (McDonald Observatory, 0.76-m reflector + R filter, Mar. 14.5, object diffuse and ≈ 15″ in diameter, slightly elongated toward the northwest).

2007 UT	α_{2000}	δ_{2000}	Mag.
Mar. 13.71914	$15^h25^m49^s.16$	$-26°24'42''.2$	14.6

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-E70.

$$
\begin{array}{llll}
T = 2007\ \text{May}\ 22.701\ \text{TT} & \omega = 3^{\circ}.341 & & \\
 & \Omega = 152.260 & \Big\} & 2000.0 \\
q = 1.31547\ \text{AU} & i = 174.495 & &
\end{array}
$$

2007 March 14 *Daniel W. E. Green*