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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)
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COMET C/2010 A3 (HILL)

R. E. Hill reports his discovery of another comet with the Catalina 0.68-m Schmidt telescope (discovery observation tabulated below); four co-added 30-s CCD exposures show a well-condensed nuclear condensation $4''$–$5''$ across with a possible $2''$ coma beyond that and a broad, diffuse tail $10''$–$15''$ long in p.a. 80°. Four follow-up co-added 30-s CCD exposures by A. Boattini with the Mt. Lemmon 1.5-m reflector on Jan. 8.16–8.17 show a well-condensed comet with a coma $\sim 5''$–$6''$ wide and a broad, fan-shaped tail $\sim 15''$ long in p.a. 75°. Following posting on the Minor Planet Center's 'NEOCP' webpage, other CCD astrometrists have also noted the object's cometary appearance. A. Novichonok, Kondopoga, Russia, reports that five stacked 300-s images taken remotely by T. Kryachko with the 0.3-m f/8 Astrotel reflector at Zelenchukskaya Station on Jan. 8.7 UT show a round, diffuse coma of diameter $10''$ and a wide, faint $15''$ tail in p.a. 280°. H. Sato (Ota-ku, Tokyo, Japan, remotely using an RAS Observatory 0.25-m *f*/3.4 reflector near Mayhill, NM, U.S.A.; Jan. 9.1 UT) finds a $10''$ coma elongated toward p.a. 95°. W. H. Ryan (Magdalena Ridge Observatory, 2.4-m *f*/8.9 reflector; Jan. 9.12–9.15) notes a coma and a faint tail in p.a. $\sim 80°$ on *R*-band images. E. Guido (Castellammare di Stabia, Italy) reports that he and G. Sostero co-added eighteen 120-s unfiltered exposures taken remotely as done by Sato (above) on Jan. 9.14–9.16, showing a coma nearly $10''$ in diameter, slightly elongated toward p.a. 50°. K. Kadota (Ageo, Saitama-ken, Japan, 0.25-m *f*/5 reflector; Jan. 9.5) reports the comet to be diffuse with central condensation, with a coma diameter of $0'.4$ and a faint tail $1'.5$ long in p.a. 80°.

2010 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Jan. 8.09596	$1^h44^m01^s.92$	$+8°13'15''.6$	17.3	Hill

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2010-A48.

$$T = 2010\ \text{Mar.}\ 27.292\ \text{TT} \qquad \left.\begin{aligned}\omega &= 38°.455\\ \Omega &= 63.847\\ i &= 15.064\end{aligned}\right\}2000.0$$
$$q = 1.65798\ \text{AU}$$

COMET 217P/2009 F3 (LINEAR)

Visual total-magnitude estimates by M. Goiato (Aracatuba, Brazil, 22-cm reflector): Nov. 13.12 UT, 10.6; Dec. 6.06, 10.9:; 18.21, 12.1.

  Daniel W. E. Green