

**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/2009 E1 (ITAGAKI)*

H. Yamaoka, Kyushu University, reports the discovery of a comet with coma diameter  $\sim 70''$  on CCD images taken by Koichi Itagaki (Yamagata, Japan) with a 21-cm  $f/3$  reflector (diameter of field  $2^\circ 2'$ ) located at Takanezawa, Tochigi, Japan, using software by H. Kaneda (Sapporo, Japan) to detect moving objects automatically. The original times for the two discovery images (as well as the first four follow-up images taken at the same location with a 30-cm  $f/7.8$  reflector) were later corrected and relayed by S. Nakano (Sumoto, Japan) and are tabulated below; they were measured by Kaneda. Nakano adds that the comet is diffuse with weak condensation and a hint of tail toward the south, measuring total mag 11.9 from an image taken on Mar. 14.424 UT.

2009	UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.	Observer
Mar.	14.41509	$2^{\text{h}}48^{\text{m}}07^{\text{s}}.10$	$+8^{\circ}23'31''.0$	12.8	Itagaki
	14.41522	2 48 06.88	+8 23 33.3	12.8	"
	14.42556	2 48 05.43	+8 24 19.4		"
	14.42872	2 48 05.06	+8 24 34.2		"
	14.43199	2 48 04.57	+8 24 47.3		"
	14.44446	2 48 02.82	+8 25 45.6		"

Available CCD astrometry, including that sent to the Central Bureau after posting on the Minor Planet Center's NEOCP webpage, was published on *CBET* 1721, with most of the astrometrists reporting on the object's cometary appearance: R. Holmes (Charleston, IL, USA, 0.61-m  $f/4.5$  astrograph; measurer H. Devore; Mar. 15.0) reports that ten co-added exposures reveal a nuclear condensation  $28''$  in diameter and a diffuse coma  $54''.8$  in diameter with no tail. E. Guido, G. Sostero, and P. Camilleri (observing remotely with a 0.25-m  $f/3.4$  reflector near Mayhill, NM, USA; Mar. 15.12) write that thirty co-added 30-s unfiltered exposures show a bright inner coma with diameter of  $\sim 1'.4$ , and a faint external halo nearly  $4'$  in diameter (total mag  $\sim 11.0$ ). J. E. McGaha (Tucson, AZ, USA, 0.36-m  $f/10$  Schmidt-Cassegrain reflector, Mar. 15.4) relates that fifteen stacked 30-s images show a  $42''$ -diameter bright coma with a fan-shaped tail spanning  $60^\circ$  ( $90''$  long at p.a.  $70^\circ$ , the center of the fan); red magnitudes from single 30-s exposures within specific photometric apertures:  $30''$ , 14.1;  $60''$ , 13.1;  $90''$ , 12.2;  $180''$ , 11.3. K. Kadota (Ageo, Saitama-ken, Japan, 0.25-m  $f/5$  reflector; Mar. 15.41) reports a bright coma of diameter  $3'.8$  and total mag 10.8, with strong central condensation and no tail.