

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

CBAT Director: D. W. E. Green, Room 209; Department of
Earth and Planetary Sciences; Harvard University;
20 Oxford St.; Cambridge, MA 02138; U.S.A.

CBAT@IAU.ORG; CBATIAU@EPS.HARVARD.EDU

URL <http://www.cfa.harvard.edu/iau/cbat.html> ISSN 0081-0304

COMET C/2010 G1 (BOATTINI)

A. Boattini, Lunar and Planetary Laboratory, University of Arizona, reports his discovery of a comet on Catalina Sky Survey CCD images taken with the 0.68-m Schmidt telescope (discovery observation tabulated below), the object described as diffuse with a strong, condensed coma about 40" in size, and a fainter coma out to a diameter about 2' that fades into the background; the coma is slightly elongated in p.a. 50-55 deg. After posting on the Minor Planet Center's 'NEOCP' webpage, other CCD astrometrists have commented on the object's cometary appearance during Apr. 5.2-6.1 UT, including A. R. Gibbs with the Mt. Lemmon 1.5-m reflector (four co-added 5-s exposures at altitude 20 deg show a core surrounded by 'fuzziness', of size 16" x 23"), R. Ligustri (Udine, Italy, 0.35-m reflector; sixteen 60-s exposures; 30" coma), E. Pettarin (Farra d'Isonzo, Italy, 0.40-m reflector; elongated 10"-15" coma), F. Castellani and C. Marangoni (Malcesine, Italy, 0.4-m reflector; 37" coma and a 1'16" tail in p.a. 70 deg), P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m reflector, bright twilight; coma diameter 15" and tail 30" long in p.a. 65 deg), L. Buzzi (Varese, Italy, 0.60-m reflector; stacked exposures totally 10 min; condensed coma elongated in p.a. about 35-40 deg and extending to a diameter of at least 60"), and J. E. McGaha (Tucson, AZ, U.S.A., 0.36-m reflector; ten stacked 30-s exposures; 7" bright nuclear condensation with a round 20" coma and a 10"-wide tail 45" long in p.a. 40 deg).

| 2010 UT | R.A. (2000) | Decl. | Mag. | Observer |
|--------------|-------------|-------------|------|----------|
| Apr. 5.12030 | 4 08 50.37 | +27 39 02.3 | 13.9 | Boattini |

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on [MPEC 2010-G27](#).

| | | |
|------------------------|-----------------|--------|
| T = 2010 Apr. 6.688 TT | Peri. = 172.955 | |
| | Node = 287.856 | 2000.0 |
| q = 1.20110 AU | Incl. = 76.780 | |

COMET C/2010 F4 (MACHHOLZ)

Further to [IAUC 9132](#), images by McGaha (see above) on Mar. 27.5 UT show a bright central nuclear condensation 10" in diameter with a round coma 40" in diameter. Additional visual total-magnitude and coma-diameter estimates: Mar. 27.18, 10.7, 1'.5 (J. Gonzalez, Asturias, Spain, 0.20-m reflector); 27.528, 11.3, 3' (D. Machholz, Colfax, CA, 0.47-m refl.).

(C) Copyright 2010 CBAT
(9133)

2010 April 6

Daniel W. E. Green