

**Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION**

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COMET P/2007 R3 (GIBBS)

A. R. Gibbs reports his discovery of another comet on unfiltered CCD images obtained with the 1.5-m reflector in the course of the Mt. Lemmon Survey (“discovery” observation tabulated below); the four co-added 30-s frames show a well-condensed 8'' coma and a faint, narrow tail 20'' long in p.a. 240°, while four co-added 80-s frames taken around Sept. 14.37 UT show a condensed 11'' coma and a faint 30'' tapered tail in p.a. 240°. Four co-added 30-s exposures by Gibbs on Sept. 15.24–15.27 show a condensed 8'' coma and a faint 10'' tail in p.a. 225°, while four co-added 80-s frames taken around Sept. 15.35–15.36 show a condensed 10'' coma and a narrow 40'' tail in p.a. 245°. Following posting on the Minor Planet Center’s ‘NEOCP’ webpage, numerous other CCD astrometric observers have also commented on the object’s cometary appearance. G. Hug (Scranton, KS, 0.30-m reflector) writes that the object appeared diffuse on his images from Sept. 15.3. J. G. Ries (McDonald Observatory 0.76-m reflector) notes that her images from Sept. 15.4 show a coma and a faint tail $\approx 23''$ long toward the southwest. V. Gonano, E. Guido, and G. Sostero (Remanzacco, Italy, 0.45-m reflector) report that fourth co-added 60-s exposures taken around Sept. 16.0 show a diffuse coma nearly 15'' in diameter with a broad tail nearly 25'' long in p.a. 260°. P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m *f*/6 reflector) writes that his images from Sept. 16.0 show a 10'' coma with a 30'' tail in p.a. 240°.

2007 UT	α_{2000}	δ_{2000}	Mag.
Sept.14.29338	0 ^h 41 ^m 55 ^s .38	+1°26'12.0	18.9

The available astrometry, the following preliminary elliptical orbital elements, and an ephemeris appear on *MPEC* 2007-S02.

$$\left. \begin{array}{l}
 T = 2007 \text{ June } 6.477 \text{ TT} \quad \omega = 292.699 \\
 e = 0.53777 \quad \Omega = 33.711 \\
 q = 2.20125 \text{ AU} \quad i = 3.165 \\
 a = 4.76219 \text{ AU} \quad n^\circ = 0.094840 \quad P = 10.4 \text{ years}
 \end{array} \right\} 2000.0$$

COMET C/2007 N3 (LULIN)

The following revised parabolic orbital elements for this comet (cf. *IAUC* 8857) are from *MPEC* 2007-R56: $T = 2009 \text{ Jan. } 10.7452 \text{ TT}$, $q = 1.211903 \text{ AU}$, $\omega = 136^\circ 8430$, $\Omega = 338^\circ 4873$, $i = 178^\circ 3716$ (equinox 2000.0).