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INTERNATIONAL ASTRONOMICAL UNION**

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*COMET C/2007 T4 (GIBBS)*

A. R. Gibbs reports his discovery of a comet on unfiltered CCD images obtained with the 0.68-m Schmidt telescope at Catalina (discovery observation tabulated below), with four co-added 30-s exposures showing a compact coma of size  $8''.5 \times 6''$  with a tapered  $25''$  tail in p.a.  $305^\circ$ . Four 30-s images taken by R. A. Kowalski with the Mt. Lemmon 1.5-m reflector on Oct. 14.5 UT show a coma of diameter  $\approx 10''$  with a straight tail  $\approx 25''$  long in p.a.  $300^\circ$ . Following posting on the Minor Planet Center's 'NEOCP' webpage, J. Y. Young writes that his CCD images taken with the Table Mountain 0.61-m telescope on Oct. 15.5 show a round,  $6''$ -diameter, diffuse coma with a small bright central core and a  $30''$  tail in p.a.  $290^\circ$ .

2007 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.
Oct. 12.46227	$9^{\text{h}}57^{\text{m}}24.47^{\text{s}}$	$+34^\circ12'33.6''$	18.4

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-T113.

$$\left. \begin{array}{l} T = 2007 \text{ Aug. } 11.396 \text{ TT} \\ q = 2.19536 \text{ AU} \end{array} \right\} \begin{array}{l} \omega = 49.967 \\ \Omega = 41.159 \\ i = 24.007 \end{array} \left. \vphantom{\begin{array}{l} T \\ q \end{array}} \right\} 2000.0$$

*COMET C/2007 T5 (GIBBS)*

Gibbs also reports his discovery of another comet with a diffuse  $15''$  coma and a brighter  $6''$ -diameter center (no visible tail) on four co-added 30-s unfiltered Catalina Sky Survey exposures (discovery observation tabulated below). Kowalski adds that four co-added 60-s exposures at Mt. Lemmon on Oct. 14.5 UT show a strongly condensed coma of diameter  $30''$ ; his four co-added 75-s exposures on Oct. 15.5 show a condensed coma  $\approx 12''$  across and an extended coma  $\approx 25''$  across with no visible tail in poor seeing. Young found a very faint diffuse round coma of diameter  $26''$  with no tail and very little central condensation on his images from Oct. 15.5.

2007 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.
Oct. 13.45523	$8^{\text{h}}16^{\text{m}}28.09^{\text{s}}$	$+19^\circ11'10.5''$	18.2

The available astrometry, preliminary parabolic orbital elements ( $T = 2008$  Feb. 13.463 TT,  $q = 4.40844$  AU,  $\omega = 17^\circ415$ ,  $\Omega = 110^\circ115$ ,  $i = 44^\circ126$ , equinox 2000.0), and an ephemeris appear on *MPEC* 2007-T114.