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INTERNATIONAL ASTRONOMICAL UNION**

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COMET P/2009 T2 (LA SAGRA)

R. Stoss, Visnjan, Croatia, reports the discovery of a diffuse comet with no obvious tail on CCD images taken by J. Nomen in the course of the “La Sagra Sky Survey” with a 0.45-m $f/2.8$ reflector (discovery observation tabulated below). Thirty stacked 90-s follow-up CCD exposures with a 0.40-m $f/10$ reflector at La Sagra on Oct. 12.94–12.96 UT show a drop-shaped coma elongated to the southwest with a $20''$ tail in p.a. 240° ; the coma is very condensed, almost asteroidal, and the tail is much fainter. Following posting on the Minor Planet Center’s ‘NEOCP’ webpage, R. Miles (Stourton Caundle, Dorset, England, 0.28-m $f/9.4$ Schmidt-Cassegrain reflector) writes that 127 stacked 30-s CCD frames taken on Oct. 13.0 show weak cometary appearance with a narrow tail $25''$ long in p.a. 230° .

2009	UT	α_{2000}	δ_{2000}	Mag.	Observer
Oct. 12.87132		$1^{\text{h}}44^{\text{m}}15.82^{\text{s}}$	$+21^\circ49'42.0''$	17.0	Nomen

The available astrometry (including pre-discovery Catalina astrometry from Sept. 18, 25, and Oct. 9 found by MPC staff), the following preliminary elliptical orbital elements, and an ephemeris appear on *MPEC* 2009-T39.

$$\begin{array}{ll}
 T = 2010 \text{ Jan. } 12.815 \text{ TT} & \omega = 215.448 \\
 e = 0.76875 & \Omega = 215.987 \\
 q = 1.75499 \text{ AU} & i = 28.102 \\
 a = 7.58906 \text{ AU} & n^\circ = 0.047144 \quad P = 20.9 \text{ years}
 \end{array}
 \left. \vphantom{\begin{array}{l} T \\ e \\ q \\ a \end{array}} \right\} 2000.0$$

COMET P/2009 Q4 (BOATTINI)

Additional astrometry have shown that this comet (cf. *IAUC* 9069) is of short period, as indicated by the following elements from *MPEC* 2009-T18: $T = 2009 \text{ Nov. } 19.9438 \text{ TT}$, $e = 0.578664$, $q = 1.320671 \text{ AU}$, $\omega = 320.0361$, $\Omega = 127.6603$, $i = 10.9681$ (equinox 2000.0), $P = 5.55 \text{ years}$.

COMET P/2009 Q5 (McNAUGHT)

Additional astrometry have shown that this comet (cf. *IAUC* 9070) is of short period, as indicated by the following elements from *MPEC* 2009-T19: $T = 2009 \text{ Sept. } 8.5621 \text{ TT}$, $e = 0.609033$, $q = 2.918346 \text{ AU}$, $\omega = 209.2727$, $\Omega = 160.1369$, $i = 40.9012$ (equinox 2000.0), $P = 20.39 \text{ years}$.

2009 October 13

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