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COMET C/2008 Q1 (MATIČIČ)

A moving object of stellar appearance discovered by Stanislav Matičič on four 40-s *R*-band CCD images taken with the 60-cm *f*/3.3 Cichocki robotic telescope in strong moonlight in the course of the Comet and Asteroid Search Program at Črni Vrh Observatory (discovery observation tabulated below) has been found by other observers to show cometary appearance. H. Mikuž adds that a series of 1-min unfiltered exposures obtained with the same telescope around Aug. 19.816 UT under darker sky conditions show that the object has a somewhat-diffuse appearance (coma diameter $\sim 10''$) with strong condensation. Following posting on the Minor Planet Center's 'NEOCP' webpage, other CCD observers have also noted the object's cometary appearance. R. Ligustri (Talmassons, Udine, Italy, 0.35-m *f*/5 reflector, Aug. 19.9) reports that twenty 120-s co-added images show a short tail elongation $\sim 18''$ long. R. Holmes and H. Devore (Charleston, IL, U.S.A., 0.81-m *f*/4.0 astrograph, Aug. 20.07–20.08) report that the object appears diffuse with a wide tail extending $37''.3$ in p.a. $87^\circ.9$. K. Sárneczky (0.60-m Schmidt telescope at Konkoly Observatory, Aug. 20.8, 360-s co-added image) writes that the comet shows a $8''$ coma and a tail $10''$ long in p.a. 120°. J. M. Aymami (Tiana, Spain, 0.25-m *f*/4.3 Schmidt-Cassegrain reflector, Aug. 20.8) notes that co-added images show a distinctly nebulous object with slight oval shape ($\sim 9''$ long along its major axis). V. Gonano, E. Guido, and G. Sostero (Remanzacco, Italy, 0.45-m *f*/4.4 reflector, Aug. 20.8) write that sixteen 60-s co-added unfiltered exposures show a coma diameter of $\sim 10''$ and a broad tail $15''$ long toward p.a. 122°. S. Foglia (Novara Veveri, Italy, 0.40-m *f*/4 reflector, Aug. 20.8) reports that images obtained by P. Concari, D. Crespi, G. Galli, O. Lesca, S. Minuto, and himself show the comet to be diffuse with a $10''$ coma.

2008 UT	α_{2000}	δ_{2000}	Mag.
Aug. 18.81364	$19^h02^m50^s.20$	$+50^\circ51'19''.5$	17.8

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2008-Q12.

$$T = 2009 \text{ Jan. } 2.546 \text{ TT} \qquad \left.\begin{array}{l}\omega = 105^\circ.645 \\ \Omega = 9.460 \\ i = 118.672\end{array}\right\} 2000.0$$
$$q = 2.94139 \text{ AU}$$

2008 August 20 *Daniel W. E. Green*