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COMET C/2007 N1 (McNAUGHT)

R. H. McNaught reports his discovery of a comet on CCD images obtained with the 0.5-m Uppsala Schmidt telescope at Siding Spring (discovery observation tabulated below); stacked images show the object to be slightly diffuse with a diffuse tail $\sim 10''$ long in p.a. 240°. Following posting on the Minor Planet Center's 'NEOCP' webpage, A. C. Gilmore writes that his CCD images taken on July 11.64–11.70 UT with the Mt. John 1.0-m *f*/7.7 reflector show a small, condensed coma and a short fan tail in p.a. 240°. S. Casulli notes that his CCD images taken on July 12.066 with a 0.40-m *f*/4.5 reflector at the Osservatorio Astronomico Vallemare di Borbona show a coma nearly $12''$ in diameter, elongated toward p.a. 80°.

2007 UT	α_{2000}	δ_{2000}	Mag.
July 10.73325	$1^h42^m19^s.69$	$+1°10'08''.4$	17.7

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-N29.

$$T = 2007\ \text{Sept.}\ 7.236\ \text{TT} \qquad q = 2.28009\ \text{AU}$$

$$\left.\begin{array}{l} \omega = 266^\circ.796 \\ \Omega = 115.220 \\ i = 9.329 \end{array}\right\} 2000.0$$

COMET C/2006 VZ$_{13}$ (LINEAR)

M. L. Sitko, University of Cincinnati and Space Science Institute; L. Beerman, University of Cincinnati; R. W. Russell, D. K. Lynch, and R. Pearson, The Aerospace Corporation; H. B. Hammel, Space Science Institute; and W. Golisch, Infrared Telescope Facility (IRTF), NASA, report on observations made of comet C/2006 VZ$_{13}$ using the IRTF (+ BASS) on July 9 UT. The comet exhibited a continuum between 8 and 13 μm, on top of which a silicate emission band from 8.5 to 12.2 μm was observed. An underlying blackbody, normalized to the continuum fluxes at 8.1 and 12.5 μm, yielded a mean grain temperature of 275 K (estimated uncertainty $\pm$ 5 K). The derived temperature was 6 percent higher than that of an equivalent radiative equilibrium blackbody at the heliocentric distance of the comet. The feature-to-continuum ratio in the silicate band was 1.27. The measured flux between 10.0 and 11.0 μm, using the $3''.4$ circular entrance aperture of BASS, was 1.6 ± 0.2 Jy (equivalent magnitude $N = 3.5 \pm 0.1$).

Visual m_1 estimates by J. Gonzalez, Leon, Spain: June 12.05 UT, 10.3 (25×100 bin.); 23.03, 9.4; 26.11, 8.8; July 4.91, 7.9 (7×50 bin.); 10.01, 7.3.

  Daniel W. E. Green