

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

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*COMET C/2007 Y1 (LINEAR)*

An apparently asteroidal object discovered by the LINEAR survey (discovery observation tabulated below), and posted on the Minor Planet Center's 'NEOCP' webpage, has been reported to show cometary appearance by several CCD astrometrists. K. Sárneczky writes that a 960-s co-added unfiltered image taken with the 0.60-m Schmidt telescope at Konkoly Observatory on Dec. 17.15 UT shows a 10'' coma and a 15''-long tail in p.a. 220°. E. Guido and G. Sostero (Castellammare di Stabia, Italy) report that thirty co-added 60-s unfiltered exposures obtained remotely using a 0.25-m *f*/3.4 reflector near Mayhill, NM, U.S.A., on Dec. 17.41–17.47 show a compact coma nearly 8'' in diameter, slightly elongated toward the southwest; a similar co-adding of exposures from Dec. 18.46–18.47 shows the presence of a coma nearly 10'' in diameter. J. G. Ries writes that, in images obtained in less-than-ideal conditions with the McDonald Observatory 0.76-m reflector (+ prime-focus corrector) on Dec. 18.45–18.47, the object seems extended, showing a slight asymmetry toward the southwest.

2007 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.
Dec. 16.37807	$10^{\text{h}}04^{\text{m}}42^{\text{s}}.65$	$-15^{\circ}05'40''.6$	18.8

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-Y22.

$$\left. \begin{array}{l}
 T = 2008 \text{ Mar. } 10.736 \text{ TT} \\
 q = 3.38036 \text{ AU}
 \end{array} \right\} \begin{array}{l}
 \omega = 354.944 \\
 \Omega = 133.191 \\
 i = 110.137
 \end{array} 2000.0$$

*V458 VULPECULAE*

T. R. Prater, R. J. Rudy, D. K. Lynch, T. R. Prater, and S. Mazuk, The Aerospace Corporation; R. B. Perry, Langley Research Center, NASA; and R. C. Puetter, University of California, San Diego, report on 0.47- to 2.5- $\mu\text{m}$  spectroscopy of V458 Vul (cf. *IAUC* 8861, 8863, 8883) that was obtained on Dec. 15 UT using VNIRIS on the Lick 3-m telescope. The object's emission spectrum has moved rapidly to higher excitation and shows weak unidentified novae lines and strong He I and II lines. Also present were [Fe VII] lines at 572.1 and 608.7 nm. The spectrum showed a variety of line profiles: Gaussian, flat-topped, and doubled.