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COMET C/2005 K1 (SKIFF)

B. A. Skiff, Lowell Observatory, reports his discovery of a comet on images taken by himself with the 0.59-m LONEOS Schmidt telescope (discovery observation below). The object has a 16″ moderately condensed coma, and a narrow fan-shaped tail extends about 90″ in p.a. 325°. Following posting on the 'NEO Confirmation Page', R. Trentman (Louisburg, KS, 0.75-m reflector) writes that his CCD images from May 17.3 show a coma extended 1′.3 in p.a. 305°. Also, P. Birtwhistle (Great Shefford, Berkshire, U.K., 0.30-m *f*/6.3 Schmidt-Cassegrain reflector) writes that his CCD images taken on May 17.91 UT show a moderately condensed 12″ coma and a broad, 20″-long tail in p.a. 320° (possibly extending to 50″).

2005 UT	α_{2000}	δ_{2000}	Mag.
May 16.33803	$17^h54^m16^s.68$	$+65°15'46''.2$	16.9

The available astrometry, very uncertain parabolic orbital elements (T = 2005 Nov. 15.68 TT; $\omega = 128°.25$, $\Omega = 102°.11$, $i = 79°.58$, equinox 2000.0; $q = 4.2242$ AU), and an ephemeris appear on *MPEC* 2005-K15.

COMET 9P/TEMPEL

L.-M. Lara, Instituto de Astrofisica de Andalucia (IAA); H. Böhnhardt, Max-Planck Institut für Sonnensystem Forschung; R. Gredel, Calar Alto Observatory; and P. J. Gutierrez, J.-L. Ortiz, R. Rodrigo, and M. Jesus Vidal-Nuñez, IAA, report that their monitoring observations of comet 9P (in support of the Deep Impact mission) at the Calar Alto and Sierra Nevada Observatories since January show increasing dust production and coma evolution. The $Af\rho$ value (cf. *IAUC* 7342) varies with heliocentric distance as $r^{-6.71}$; slightly enhanced $Af\rho$ (above the $r^{-6.71}$ curve) was observed from mid-February until the end of March, when fan-shaped structures appeared in the coma for the first time. Since April, four straight jet features have been observed in the coma's southern hemisphere at approximately constant position angles, suggesting the presence of at least two active regions on the nucleus. On Apr. 14, $Af\rho = 287$ cm within an aperture representing 5000 km at the comet. Clear CN and C_3 emissions are detected on the same date, the production rates being 2.26×10^{25} and 1.32×10^{24} s^{-1}, respectively. Radial-brightness profiles follow log $B \sim$ log ρ^{-m}, with $1.30 \leq m \leq 1.47$ in the north-south direction. The reflectivity slope of the dust coma is ~ 30 percent over 100 nm.

2005 May 20 *Daniel W. E. Green*