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Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

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COMET C/2005 S2 (SKIFF)

B. Skiff, Lowell Observatory, reports his discovery of a comet (discovery observation tabulated below) on CCD images taken with the LONEOS 0.59-m Schmidt telescope, the object showing a moderately condensed 6" coma and a fan-shaped tail extending perhaps 15" toward the southwest (in the direction of motion). A 5-min exposure taken by Skiff with the Perkins 1.8-m telescope (+ PRISM camera + 'VR' filter) shows the coma diameter as $\sim 5"$ and the tail extending at least 36" in p.a. $\sim 240^{\circ}$. Following posting on the 'NEO Confirmation Page', J. Young reports that six stacked CCD images taken on Sept. 30.23–30.28 UT with the 0.6-m Cassegrain reflector at Table Mountain show the comet to have a 4" coma with a 12" tail in p.a. 260°, and E. J. Christensen reports that four 45-s co-added frames taken with the 1.5-m Catalina reflector on Sept. 30.3 show an 8" coma and a 20" tail in p.a. 230°–240°.

2005 UT	α_{2000}	δ_{2000}	Mag.
Sept.29.27649	$0^{ m h}55^{ m m}25.^{ m s}73$	$+3^{\circ}48^{'}39^{''}_{9}$	19.1

The available astrometry (including Sept. 25 prediscovery Spacewatch observations), the following very indeterminate parabolic orbital elements, and an ephemeris appear on *MPEC* 2005-S78.

T = 2010 Feb. 12.081 TT	$\omega = 306.165$
	$ \begin{array}{l} \omega &= 306.165\\ \Omega &= 201.227\\ i &= 166.711 \end{array} \} 2000.0 $
q = 3.29967 AU	i = 166.711 J

SUPERNOVA 2005ee IN PGC 73054

M. Modjaz, R. Kirshner, and P. Challis, Harvard-Smithsonian Center for Astrophysics, report that a spectrogram (range 340–740 nm) of SN 2005ee (cf. *IAUC* 8603), obtained by N. Martimbeau on Sept. 25.32 UT with the F. L. Whipple Observatory 1.5-m telescope (+ FAST), shows it to be a type-II supernova. The spectrum consists of a flat continuum, a P-Cyg profile of H α , and absorption troughs of H β and other lines. Adopting the recession velocity of 9730 km/s for the host galaxy, as measured from H α emission of an H II region in the host galaxy, the supernova expansion velocity derived from the minimum of the H β line is ~ 11000 km/s.

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