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COMET P/2005 T5 (BROUGHTON)

John Broughton, Reedy Creek, Qld., Australia, reports his discovery of a comet on CCD images taken with a 0.51-m f/2.7 reflector (discovery observation below). Other observers have confirmed the object's cometary appearance from their own CCD images, including J. Young (Table Mountain, 0.6-m reflector, co-added exposures taken on Oct. 24.2 UT; prominent, round 8" coma with a 16" tail spanning p.a. $20^{\circ}-30^{\circ}$), R. H. McNaught (Siding Spring, 1.0-m reflector, 60-s exposures taken on Oct. 24.45; very strongly condensed condensation of size 2".5 FWHM with a faint 12" tail in p.a. 40°), and J. E. McGaha (Tucson, 0.62-m reflector, five 180-s co-added frames taken on Oct. 25.2; round, bright inner coma of diameter $\sim 7''$ and a very faint outer coma extending to $\sim 20''$, no tail).

2005 UT	α_{2000}	δ_{2000}	Mag.
Oct. 9.57058	$0^{^{\mathrm{h}}}\!06^{^{\mathrm{m}}}\!38.05$	$-27^{\circ}22^{'}54\overset{''}{.2}$	18.5

The available astrometry (prediscovery observations back to Aug. 26), the following orbital elements, and an ephemeris appear on MPEC~2005-U53.

SUPERNOVAE 2005hc, 2005hd, 2005he

Three supernovae have been reported: 2005hc in MCG +00-6-3 by J. Frieman (Fermilab and University of Chicago), on behalf of the Sloan Digitial Sky Survey II collaboration; 2005hd by the "Nearby Supernova Factory" collaboration; and 2005he in MCG +06-49-68 by D. R. Madison and W. Li on unfiltered LOSS/KAIT images (cf. IAUC 8616).

SN	2005 UT	α_{2000}	δ_{2000}	Mag.	$O\!f\!f\!set$
2005 hc	Oct. 12	$1^{^{\mathrm{h}}}\!56^{^{\!\mathrm{m}}}\!47^{^{\!\mathrm{s}}}\!94$	$-0^{\circ}12^{\prime}49^{\prime\prime}2$	18.5	8".4 W, 3".9 S
2005 hd	Oct. 21.5	$4\ 16\ 12.37$	$-13\ 13\ 11.6$	17.8	_
2005he	Oct. 24.23	$22\ 39\ 45.44$	$+34\ 22\ 43.0$	18.6	1".3 W. 5".5 S

SN 2005hc is a type-Ia supernova (details on CBETs 259 and 260). SN 2005hd is a type-II supernova (details on CBET 263). Additional KAIT magnitudes for 2005he: Sept. 29.24 UT, [19.5; Oct. 16.22, [18.5; 25.22, 18.7.