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COMET C/2005 M1 (CHRISTENSEN)

E. J. Christensen, Lunar and Planetary Laboratory, reports his discovery of a comet on images taken with the 1.5-m f/2 reflector in the course of the Mount Lemmon Survey (discovery observation given below). On four co-added 90-s CCD images from June 17.4 UT, Christensen noted a 5" coma and a 10" tail in p.a. 230°–240°; images taken in improved seeing on June 18.4 showed a 15" tail in p.a. 230° and a compact coma of diameter ≈ 7 " (four co-added 60-s exposures). Following posting on the 'NEO Confirmation Page', A. C. Gilmore found a moderately condensed, circular coma of diameter ~ 15 " (but no tail) on four co-added 120-s CCD frames taken on June 19.7 with the 1.0-m f/7.7 reflector at Mount John University Observatory.

2005	UT	$lpha_{2000}$	δ_{2000}	Mag.
June 17.	41206	$22^{^{\mathrm{h}}}41^{^{\mathrm{m}}}08.59$	$-7^{\circ}52^{'}07^{''}_{.8}$	19.9

The available astrometry, the following very preliminary parabolic orbital elements, and an ephemeris appear on $MPEC\ 2005$ -M33.

COMETS C/2005 G7, C/2005 H2, AND C/2005 H3 (SOHO)

Following are the initial positions for additional comets found on SOHO website images (continuation to IAUC 8546); C/2005 H2 belongs to the Meyer group, the others being Kreutz sungrazers. K. Battams writes that C/2005 G7 had a diffuse 'teardrop' shape, reaching mag ~ 7.5 at $7.1R_{\odot}$ (Apr. 14.085 UT). C/2005 H2 was elongated and faint, but Battams notes that this may or may not have been a tail, adding that it is not uncommon to see stars appear "diagonally elongated" in the SOHO images; it peaked in brightness at mag ~ 7.8 at $7.0R_{\odot}$ (Apr. 17.726). C/2005 H3 was partly obscured by the pylon in the C3 coronagraph, but in C2 images it reached mag ~ 5.2 at $6.6R_{\odot}$ on Apr. 22.368, when its tail length was 93".

Comet	2005 UT	α_{2000}	δ_{2000}	Inst.	\mathbf{F}	MPEC
	Apr. 14.171	$1^{^{\rm h}}\!38\overset{^{ m m}}{.}4$	$+8^{\circ}36^{'}$	C2	$_{\mathrm{HS}}$	2005 - K43
C/2005 H2	17.629	$1\ 48.2$	+12~06	C2	$_{\mathrm{HS}}$	2005-K43
C/2005 H3	21.779	$2\ 14.4$	$+10\ 16$	C3/2	HS	2005-K43