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COMETS C/2009 L3-L17, C/2009 M1, AND C/2009 M2 (SOHO)

Further to IAUC 9059, additional presumed comets have been found on SOHO website images, all being Kreutz sungrazers except for C/2009 L8 and C/2009 L13 (Kracht group). C/2009 L3 was very diffuse and slightly elongated (mag ~ 7.5). C/2009 L4 was stellar in appearance (mag ~ 6.5) in C3 images but quite large and very condensed with no visible tail in C2 images; COR2-A STEREO images show a bright starlike head and a very faint, thin tail. C/2009 L5, C/2009 L7, C/2009 L11 (also described as small), and C/2009 L15 were slightly diffuse (peak magnitudes ~ 7.5 , 7.5–8, 8, and 8, respectively). C/2009 L6 was stellar in appearance (mag ~ 6.5 –7) in C3 images, and condensed with no tail in C2 images. C/2009 L8 (mag ~ 7 –7.5) and C/2009 L13 (mag ~ 7.5 –8) were small and stellar in appearance. C/2009 L9 and C/2009 L12 were very diffuse (mag ~ 8). C/2009 L10 (slightly diffuse), C/2009 L14 (quite diffuse), and C/2009 M1 (quite diffuse) were very faint (mag ~ 8.5). C/2009 L16 was quite diffuse (mag ~ 7.5). C/2009 L17 was stellar in appearance (mag ~ 6.5) in C3 images, but quite diffuse with a short, faint tail in C2 images. C/2009 M2 was small and stellar in appearance (mag ~ 7) in C3 images, and showed a hint of a very faint tail in C2 images.

Comet	2009 UT	α_{2000}	δ_{2000}	Inst.	\mathbf{F}	MPEC
C/2009 L3	June 3.785	$4^{^{\rm h}}\!45\overset{^{ m m}}{.}2$	$+20^{\circ}33^{'}$	C2	RK	2009-O19
C/2009 L4	3.888	$4\ 48.7$	$+18\ 35$	C3/2*	BZ	2009-O19
C/2009 L5	4.893	449.3	+20~39	$C2^{'}$	RK	2009-O19
C/2009 L6	5.988	$4\ 55.2$	$+19\ 25$	C3/2	BZ	2009-O19
C/2009 L7	1.381	$4\ 35.2$	$+20\ 12$	$C2^{'}$	BZ	2009-O21
C/2009 L8	6.979	451.8	$+22\ 41$	C2	TH	2009-O21
C/2009 L9	7.229	$4\ 56.6$	$+20\ 51$	C2	GS	2009-O21
C/2009 L10	7.329	458.4	+20.57	C2	BZ	2009-O21
C/2009 L11	7.671	$5\ 00.3$	+20.56	C2	MK	2009-O21
C/2009 L12	8.893	502.7	+2054	C2	MU	2009-O22
C/2009 L13	9.185	$5\ 12.1$	$+23\ 26$	C2	RK	2009-O22
C/2009 L14	10.185	509.8	$+21\ 09$	C2	BZ	2009-O22
C/2009 L15	10.910	$5\ 12.2$	$+21\ 11$	C2	RM	2009-O22
C/2009 L16	14.393	$5\ 25.8$	$+21\ 22$	C2	MK	2009-P01
C/2009 L17	15.013	$5\ 25.0$	+20.18	C3/2	MU	2009-P01
C'/2009 M1	21.838	$5\ 55.1$	$+21\ 42$	$C2^{'}$	BZ	2009-P01
C'/2009 M2	22.238	$5\ 56.5$	+2042	C3/2	MK	2009-P01