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COMET P/2009 S4 (CATALINA-LINEAR)

J. Scotti, Lunar and Planetary Laboratory, reports his recovery of comet P/2004 EW_{38} (cf. *IAUC* 8322), noting only stellar appearance, on CCD images taken with the 1.8-m Spacewatch telescope at Kitt Peak.

2009	UT	α_{2000}	δ_{2000}	Mag.
Sept.	21.37293	$2^h47^m29^s.46$	$+13^\circ09'41''.3$	22.0
	23.33491	2 46 55.91	+13 08 18.5	
	28.44718	2 45 04.37	+13 03 17.8	21.9

The indicated correction to the orbit prediction on *MPC* 59600 is $\Delta T = +0.02$ day. Additional astrometry, the following linked orbital elements, residuals, and an ephemeris appear on *MPEC* 2009-S126.

Epoch = 2010 Sept. 1.0 TT

T = 2010 Sept. 3.7086 TT ω = $90^\circ.1359$
e = 0.500013 Ω = 49.8835 } 2000.0
q = 1.794822 AU i = 6.5249

a = 3.589741 AU n^o = 0.1449137 P = 6.80 years

COMETS C/2009 E2–E5, C/2009 F8, AND C/2009 F9 (SOHO)

Further to *IAUCs* 9065 and 9070, additional presumed comets have been found on SOHO website images — all Kreutz sungrazers except for C/2009 E3 (Meyer group). C/2009 E2 (also found by B. Zhou) was small and slightly diffuse (mag ∼ 7). C/2009 E3 was tiny and stellar in appearance (mag ∼ 7.5–8), and it faded rapidly. C/2009 E4 was small and slightly diffuse (mag ∼ 6.5–7) in C3 images; in C2 images it was faint, diffuse, and slightly elongated. C/2009 E5 was very diffuse (mag ∼ 8). C/2009 F8 was slightly diffuse (mag ∼ 7–7.5) in C3 images, and small and elongated in C2 images. C/2009 F9 was very small and condensed (mag ∼ 7.5) in C3 images, and slightly elongated (but stellar in appearance) in C2 images.

Comet	2009	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2009 E2	Mar.	1.221	$23^h07^m.6$	$-8^\circ16'$	C3	MK	2009-N01
C/2009 E3		7.463	23 17.1	− 3 27	C2	EB	2009-N01
C/2009 E4		10.138	23 44.8	− 5 09	C3/2	WX	2009-N01
C/2009 E5		10.229	23 30.5	− 4 49	C2	BZ	2009-N29
C/2009 F8		16.862	0 04.1	− 2 09	C3/2	MU	2009-N29
C/2009 F9		28.471	0 44.4	+ 2 17	C3/2	HS	2009-N29

