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COMETS C/2008 B1–B4, C/2008 C3–C5, AND C/2008 E4 (SOHO)

Further to *IAUC* 8932, additional apparent comets have been found on SOHO website images; all are Kreutz sungrazers except for C/2008 C3 (no known group) and C/2008 E4 (Kracht group). In the tabulated column for instrument below, an asterisk (*) indicates that astrometry was also measured and reduced from HI1 images aboard the STEREO-A spacecraft. C/2008 B1 was tiny, stellar, and faint (mag $\sim$ 7). C/2008 B2 reached mag $\sim$ 6 in H1A and C3 images and was just barely visible with a thin, faint tail in C2 images. C/2008 B3, C/2008 B4, and C/2008 C4 were very faint (mag 7.5), the first and third being slightly diffuse and the second being quite diffuse. C/2008 C3 was stellar in appearance and brightened slowly and gradually, reaching mag $\sim$ 7 as it left the field-of-view. C/2008 C5 was also stellar in appearance, reaching mag $\sim$ 6.5.

C/2008 E4 is described by K. Battams as "typically [for a Kracht-group object] small, stellar, and faint (maybe peaking at mag 7 as it entered the C2 coronagraph), fading fast as it neared the sun". R. Kracht suggested the identity of the Kracht group comets C/2002 Q8 and C/2008 E4 on the basis of the *MPEC* 2002-Q46 measurements of the former and his own measurements of the latter; Kracht gave the previous perihelion date T = 1997 Feb. 14.9 but was unable to locate the comet on C2 images from that time. Linked orbital elements (P = 5.52 yr) for 2002 and 2008 by B. G. Marsden appear on *MPEC* 2008-F32.

Comet	2008	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2008 B1	Jan.	26.221	$20^{h}46^{m}.1$	$-21^{\circ}03'$	C3	HS	2008-G59
C/2008 B2		27.138	21 00.0	−21 43	C3/2*	AK	2008-G59
C/2008 B3		28.696	20 57.9	−19 43	C3	HS	2008-G59
C/2008 B4		29.904	21 03.8	−19 33	C3	BZ	2008-G59
C/2008 C3	Feb.	3.146	21 02.9	−18 12	C2	RK	2008-G60
C/2008 C4		3.821	21 22.3	−18 16	C3*	HS	2008-G60
C/2008 C5		5.738	21 33.9	−17 30	C3*	AK	2008-G60
C/2008 E4	Mar.	3.254	23 02.6	− 5 18	C2	HS	2008-F32

COMET C/2008 E1 (CATALINA)

Prediscovery astrometry (*MPEC* 2008-F36) shows this comet (*IAUC* 8923) to be of intermediate period; elements from *MPEC* 2008-G33: epoch 2008 Aug. 2.0 TT, T = 2008 Aug. 11.284 TT, q = 4.82971 AU, e = 0.54759, $\omega = 269^{\circ}.910$, $\Omega = 189^{\circ}.035$, $i = 35^{\circ}.038$ (equinox 2000.0), P = 34.9 years.

2008 April 10 *Daniel W. E. Green*