Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A. IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions) CBAT@CFA.HARVARD.EDU (science)

URL http://www.cfa.harvard.edu/iau/cbat.html ISSN 0081-0304 Phone 617-495-7440/7244/7444 (for emergency use only)

COMET C/2008 S2 = C/2001 D1 = C/2004 X7 (SOHO)

Further to *IAUC* 8985, an additional near-sun presumed comet has been found by R. Kracht on SOHO website images (discovery observation tabulated below). C/2008 S2 has been identified by Kracht as apparently identical with C/2001 D1 (cf. *IAUC* 7936) and C/2004 X7 (cf. *IAUC* 8466), a linkage that has been verified by B. G. Marsden (see *MPEC* 2008-S81 and 2008-S82). K. Battams writes that C/2008 S2 was tiny and stellar in appearance (mag 7.5–8.0) and appeared even fainter on the far side of the sun. In remeasuring the positions of C/2001 D1, Battams notes that it was then very faint and tiny (mag ~ 8), and was slightly brighter when visible on the far side of the sun.

Comet	2008	UT	α_{2000}	δ_{2000}	Inst.	\mathbf{F}	MPEC
C/2008 S2	Sept.	17.814	$11^{h}50.0$	$+ 1^{\circ}36^{'}$	C2	$\mathbf{R}\mathbf{K}$	2008-S81

COMET C/2008 S3 (BOATTINI)

A. Boattini reports his discovery of a comet on CCD images obtained with the 1.5-m reflector at Mt. Lemmon (discovery observation tabulated below), the comet having strong condensation with a coma ~ 10" wide but elongated ~ 15" at p.a. $\approx 115^{\circ}$. Following posting on the Minor Planet Center's 'NEOCP' webpage, D. T. Durig (Sewanee, TN, U.S.A., 0.30-m f/2.5 Schmidt-Cassegrain reflector, Sept. 30.4 UT) reports a tail ~ 10" long in p.a. 90°. E. Guido (Castellammare di Stabia, Italy) writes that G. Sostero, P. Camilleri, and he co-added fifty 60-s unfiltered exposures that were obtained remotely with a 0.25-m f/3.4 reflector near Mayhill, NM, U.S.A., on Sept. 30.4, showing a coma of diameter ~ 8" with a central condensation and slight elongated toward the northwest. J. Young (Table Mountain 0.61-m f/16 Cassegrain reflector, Sept. 30.5) finds a bright, diffuse coma of diameter 6" with a very short tail ~ 16" long in p.a. 140°–160°, curving to the east.

2008	UT	α_{2000}	δ_{2000}	Mag.
Sept.29	9.49105	$4^{h}42^{m}49.71$	$+18^{°}29^{'}48^{''}_{3}$	18.4

The available astrometry, the very uncertain parabolic orbital elements (T = 2011 Apr. 4.172 TT, q = 3.12838 AU, $\omega = 95^{\circ}199$, $\Omega = 56^{\circ}737$, $i = 157^{\circ}926$, equinox 2000.0), and an ephemeris appear on *MPEC* 2008-Sxx.

2008 September 30 (c) Copyright 2008 CBAT Daniel W. E. Green