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COMET C/2008 C1 (CHEN-GAO)

J. Beize, Beijing Technology and Business University, reports the discovery of a comet by Tao Chen (Suzhou City, Jiangsu province, China) on a CCD image taken on Feb. 1 by Xing Gao (Urumqi, Xinjiang province) with a wide-field 7-cm, 200-mm-f.l., *f*/2.8 camera lens (+ Canon 350D camera) at Gao's Xingming Observatory, Mt. Nanshan, in the course of a nova survey; subsequent images of the comet were identified on earlier exposures that had been taken by Gao on Jan. 30 (when the comet appeared at mag 14.0) and Jan. 31 (mag 13.5), and Gao obtained confirming images on Feb. 2 (showing that its brightness increase had continued to mag 12.0). The astrometry tabulated below are only approximate measures of the positions from the poor-scale Xingming images (computer problems has prevented use of an astrometry program to derive better positions, which should follow later). Following posting on the Minor Planet Center's 'NEOCP' webpage, numerous CCD astrometrists have commented on the comet's appearance, including J. Lacruz, Madrid, Spain (0.40-m Ritchey-Chretien reflector, Feb. 2.8 UT; condensed inner coma of diameter 20″; outer coma of diameter 50″, slightly elongated in p.a. 35°); L. Buzzi and F. Luppi, Varese, Italy (0.60-m f/4.64 reflector, Feb. 2.9; coma at least 2′.5 wide, elongated in p.a. ~ 30°); T. Kryachko, Moscow, Russia (0.30-m f/7.7 Ritchey-Chretien 'Astrotel-Caucasus' telescope in Karachay-Cherkessia, Russia, operated remotely, Feb. 2.89; 1′.2 round coma with central condensation, possibly elongated in p.a. 50° or 320°; communicated by D. Denisenko); M. Pietschnig, Vienna, Austria (0.35-m f/7 Schmidt-Cassegrain reflector, Feb. 2.95; coma diameter ~ 2′); and P. C. Sherrod, Conway, AR, U.S.A. (0.51-m *f*/4 Schmidt-Cassegrain reflector, Feb. 3.04–3.06, with high clouds present; coma diameter about 22″, quite uniform in both intensity and in symmetry, with a very distinct stellar condensation of mag 16.4 and some indications of a tail in p.a. ~ 40°).

2008 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Jan. 30.91573	$22^h50^m58^s$	$+62^\circ15'.2$	14.0	Gao
31.92406	22 57 08	+62 13.9	13.5	"
Feb. 1.66713	23 03 48	+62 12.4	13.0	"
2.64737	23 09 34	+62 11.6	12.0	"

The available observations, *very* preliminary parabolic orbital elements (T = 2008 Apr. 17.216 TT, q = 1.26927 AU, $\omega = 180^\circ.781$, $\Omega = 307^\circ.451$, $i = 61^\circ.943$, equinox 2000.0), and an ephemeris appear on *MPEC* 2008-C16.

2008 February 3 *Daniel W. E. Green*