

**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)  
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Phone 617-495-7440/7244/7444 (for emergency use only)

*COMET C/2008 S1 (McNAUGHT)*

R. H. McNaught reports his discovery of a comet (discovery position tabulated below) with a 15'' circular coma and possible extension in p.a.  $\sim 30^\circ$  on CCD images obtained with the 0.5-m Uppsala Schmidt telescope; additional stacked images from Sept. 18.38 UT show a 30'' coma extended to the north and a condensation with FWHM = 5''. Following posting on the 'NEOCP' webpage, other CCD observers have also reported cometary appearance. D. Mayes and J. Young (Table Mountain 0.6-m reflector, Sept. 18.1; low altitude) report a round coma with an 8''-diameter central condensation and a possible thin tail  $\approx 20''$  long in p.a.  $55^\circ$ – $60^\circ$ . E. Guido, G. Sostero, and P. Camilleri (0.25-m reflector at Moorook, Australia, remotely, Sept. 18.5; 31 co-added exposures) find a coma diameter of  $\sim 12''$ . A. Herring measures a 9''.9 tail in p.a.  $59^\circ.4$  on exposures taken by R. Holmes (Charleston, IL, U.S.A., 0.61-m astrograph, Sept. 18.05–18.06).

2008 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.
Sept.17.40807	16 <sup>h</sup> 21 <sup>m</sup> 33 <sup>s</sup> .37	–24°29'41".3	16.6

The available astrometry, preliminary parabolic orbital elements ( $T = 2008$  Sept. 21.089 TT,  $q = 1.35320$  AU,  $\omega = 192^\circ.082$ ,  $\Omega = 104^\circ.558$ ,  $i = 17^\circ.974$ , equinox 2000.0), and an ephemeris appear on *MPEC* 2008-S10.

*S/2008 (35107) 1*

W. J. Merline, Southwest Research Institute (SwRI); A. R. Conrad, W. M. Keck Observatory (WMKO); J. D. Drummond, Starfire Optical Range, AFRL; P. M. Tamblyn, Binary Astronomy, Dillon, CO, and SwRI; C. Dumas and B. Carry, European Southern Observatory; R. D. Campbell and R. W. Goodrich, WMKO; C. R. Chapman, SwRI; and W. M. Owen, Jet Propulsion Laboratory, report the first-ever near-infrared imaging of a close-approaching binary minor planet: on Aug. 9 UT, over a span of  $\sim 1$  hr, they obtained  $J$ -,  $H$ -, and  $K_p$ -band images — using the 10-m Keck II Telescope (+ NIRC2/AO adaptive-optics system) on Mauna Kea — of clearly-separated components of (35107) 1991 VH, which was first suspected as a binary by Pravec *et al.* (it IAUC 6607). On Aug. 9.236 the satellite, designated S/2008 (35107) 1, was 0''.08 (projected separation 3.1 km) in p.a.  $105^\circ$  from the primary (the smallest angular and physical separations yet for a binary minor planet using adaptive optics). The brightness difference was  $\Delta K_p \approx 2.0$  mag. The observed separation and size ratio are consistent with the parameters derived by Pravec *et al.* (2006, *Icarus* **181**, 63).