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COMET P/2009 S2 (McNAUGHT)

R. H. McNaught reports his discovery of a comet (discovery observation tabulated below) with a suggested westward tail $\sim 10''$ long on Sept. 20 UT on CCD images taken with the 0.5-m Uppsala Schmidt telescope; his images on Sept. 24.7 show the object to be slightly diffuse in good seeing with a several-arcsec extension to the west. After posting on the 'NEOCP' webpage, other CCD astrometrists have noted the object's cometary appearance. E. Guido and G. Sostero (0.25-m reflector near Mayhill, NM, U.S.A., remotely; Sept. 24.4) write that co-added unfiltered exposures show a coma nearly $10''$ in diameter, elongated toward a narrow tail $\sim 14''$ long in p.a. 255°. W. H. Ryan (Magdalena Ridge 2.4-m reflector; Sept. 24.45–24.48) finds the object to be diffuse with a faint tail at p.a. $\sim 280°$.

2009	UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Sept.	20.67787	$3^{h}33^{m}06\overset{s}{.}64$	$-24°36'16\overset{''}{.}8$	18.7	McNaught

The available astrometry (with Aug. 3 pre-discovery observations), elliptical orbital elements (T = 2009 June 23.6201 TT, e = 0.470488, q = 2.203599 AU, $\omega = 230°.3660$, $\Omega = 121°.6146$, $i = 28°.4493$, equinox 2000.0; P = 8.49 years), and an ephemeris appear on *MPEC* 2009-S90.

1999 XY_{143}, 1999 RY_{214}, AND 2002 VT_{130}

K. S. Noll, Space Telescope Science Institute (STSI); W. M. Grundy, Lowell Observatory; S. D. Benecchi, STSI; and H. A. Levison, Southwest Research Institute, report the detection of three new transneptunian binaries. All of the observations were made with the Wide Field Planetary Camera 2 on the Hubble Space Telescope. In each instance, the pair of objects was detected in each of four dithered, 260-s exposures made through the F606W (wide-V bandpass) filter. The companion to 1999 XY_{143} (cf. *MPEC* 1999-Y19) was fainter by 0.38 magnitude, and was located $-0''.024 \pm 0''.001$ in α and $-0''.082 \pm 0''.002$ in δ, relative to the primary, in observations commencing on 2008 Sept. 19.1313 UT. The companion to 1999 RY_{214} (cf. *MPECs* 2000-A26, 2000-T17) was fainter by 1.09 magnitude, and was located $+0''.053 \pm 0''.006$ in α and $+0''.017 \pm 0''.004$ in δ, relative to the primary in observations commencing on 2008 Sept. 20.3703. The companion to 2002 VT_{130} (cf. *MPECs* 2002-X10 and 2004-B32) was fainter by 0.44 magnitude, and was located $+0''.042 \pm 0''.001$ in α and $+0''.071 \pm 0''.002$ in δ, relative to the primary in observations commencing on 2008 Sept. 21.9111.

