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COMET C/2009 K1 (GIBBS)

A. R. Gibbs reports his discovery of a comet with a well-condensed 5″ coma and a faint 7″ tapered tail in p.a. 100° on four co-added 30-s unfiltered CCD exposures taken in fair seeing with the Mt. Lemmon 1.5-m reflector (discovery observation tabulated below); four co-added 45-s exposures on May 18.2 UT reveal a 5″ diffuse coma around a brighter core, with a faint 8″ tapered tail in p.a. 100°. After posting on the Minor Planet Center's 'NEOCP' webpage, S. Foglia (Novara Veveri, Italy) writes that 18 stacked 60-s CCD exposures taken by R. Holmes with a 0.61-m *f*/4 astrograph at Charleston, IL, U.S.A., on May 18.1 show a diffuse, 10″ coma.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
May 16.15486	$8^h29^m18^s.24$	$+18^\circ27'43''.1$	18.7	Gibbs

The available astrometry (including Apr. 24 Mt. Lemmon prediscovery observations identified by T. Spahr), the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2009-K12. The comet appears to be periodic, but the orbital period is highly uncertain.

$$T = 2009\ \text{June}\ 15.505\ \text{TT} \qquad \left.\begin{array}{rcl}\omega &=& 17^\circ.426 \\ \Omega &=& 167.890 \\ i &=& 6.150\end{array}\right\}2000.0$$

$$q = 1.49392\ \text{AU}$$

COMET 19P/BORRELLY

B. Häusler, Maidbronn, Germany, writes that he found a secondary condensation or knot in comet 19P, located 13″ from the primary condensation in p.a. 310°, on CCD images obtained with a 0.3-m Schmidt-Cassegrain reflector on May 7.91 UT. Informed of Häusler's report, F. Kugel (Banon, France, 0.5-m telescope) notes that his unfiltered CCD exposures on May 10.87 show the secondary to be separated from the primary by 8″ in p.a. 305°. G. Sostero, P. Camilleri, E. Prosperi, and E. Guido teamed up to obtain images of 19P remotely using a 0.61-m Cassegrain reflector at the Sierra Stars Observatory near Maarkleville, CA, U.S.A., on May 15.21, showing a tailward, diffuse secondary condensation or knot situated $\sim 4''.7$ from the primary in p.a. 301°, which is ~ 1.5 mag fainter than the primary central condensation. Sostero *et al.* add that their observations on May 17.21 show that the secondary has significantly weakened, being more diffuse and elongated than on May 15, with its ambiguous optocenter being essentially unchanged in offset with respect to the primary.

2009 May 18 *Daniel W. E. Green*