Circular No. 9048

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COMET C/2009 K4 (GIBBS)

A. R. Gibbs reports his discovery of a comet on unfiltered CCD images obtained at low altitude in astronomical twilight with the Catalina 0.68-m Schmidt telescope (discovery observation tabulated below); four co-added 15-s exposures show a $5'' \times 9''$ coma, elongated in the direction of motion, with a "fuzzy halo" $11''$ across. Four co-added 30-s follow-up images obtained by R. E. Hill on May 28.2 UT with the 1.5-m reflector at Mt. Lemmon show a coma $20''$–$24''$ in diameter with no obvious tail. After posting on the Minor Planet Center's 'NEOCP' webpage, other CCD astrometrists have also commented on the object's cometary appearance. J. Young (Table Mountain 0.61-m reflector, May 27.2 and 28.2, low altitude; nearby faint galaxies were problematical) reports a very diffuse coma of diameter $12''$ with little central condensation and no tail. M. Pietschnig (Alter Satzberg, Vienna, Austria, 0.35-m reflector, May 27.84–27.86) measures a $15''$ coma. M. Jäger (Stixendorf, Austria, 0.20-m reflector, May 27.9) reports a coma of diameter $1'$–$1'.5$ of total mag $\sim$ 16 with a nuclear condensation of mag $\sim$ 17.5. E. Guido and G. Sostero, Castellammare di Stabia, Italy, report that twenty-one co-added 120-s unfiltered images obtained remotely on May 28.2 with a 0.25-m reflector near Mayhill, NM, U.S.A., show a sharp central condensation $\sim 6''$ in diameter surrounded by an extremely faint outer coma nearly $40''$ in diameter. C. Hergenrother, Lunar and Planetary Laboratory, reports that a co-added 11-min R-band exposure with the Kuiper 1.54-m reflector shows a circular coma $17''$ in diameter.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
May 27.14873	$7^h57^m43^s.63$	$+46^\circ02'11''.6$	17.0	Gibbs

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2009-K63.

$$
\begin{array}{llll}
T = 2009\ \text{June}\ 18.433\ \text{TT} & \omega = 126^\circ.837 & \\
 & \Omega = 29.747 & \Big\}\ 2000.0 \\
q = 1.56252\ \text{AU} & i = 34.820 &
\end{array}
$$

V5581 SAGITTARII = NOVA SAGITTARII 2009 No. 1

N. Samus reports that the GCVS team has assigned the designation V5581 Sgr to the nova announced on *IAUC* 9041.

2009 May 28 *Daniel W. E. Green*