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INTERNATIONAL ASTRONOMICAL UNION

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COMET P/2005 K3 (McNAUGHT)

R. H. McNaught reports his discovery of a comet (discovery position below) with the 0.5-m Uppsala Schmidt in the course of the Siding Spring Survey. On May 20.8 and 21.8 UT, there was a slightly diffuse head with a narrow tail 30'' long in p.a. 240°. On May 29.7, the appearance of the slightly diffuse head was much the same, but the tail was less obvious in the moonlight. On June 1.8, in excellent seeing, there was again a weak tail to the southwest, as well as an almost stellar central condensation.

2005 UT	α_{2000}	δ_{2000}	Mag.
May 20.79323	23 ^h 42 ^m 17.23 ^s	-11°03'31.6''	17.3

The initial astrometric observations, the following very preliminary elliptical orbital elements, and an ephemeris are given on *MPEC* 2005-L03.

$$\left. \begin{array}{l}
 T = 2005 \text{ Aug. } 22.985 \text{ TT} \quad \omega = 24^{\circ}.063 \\
 e = 0.45244 \quad \Omega = 350.221 \\
 q = 1.43611 \text{ AU} \quad i = 15.835 \\
 a = 2.62276 \text{ AU} \quad n^{\circ} = 0.232042 \quad P = 4.25 \text{ years}
 \end{array} \right\} 2000.0$$

COMET P/2005 L1 (McNAUGHT)

McNaught reports his discovery of another comet (discovery position below) with the 0.5-m Uppsala Schmidt in the course of the Siding Spring Survey. On June 2.7 UT, 60-s exposures showed a very weak, diffuse coma extending westward up to 10''. After placement on the 'NEO Confirmation Page', observations were reported by others, including S. Foglia (Osservatorio Astronomico di Suno, 0.4-m *f*/4 reflector), who described the object as diffuse. On June 3.5, McNaught described the appearance as almost stellar, with a 10'' diffuse tail to the west.

2005 UT	α_{2000}	δ_{2000}	Mag.
June 2.66008	16 ^h 43 ^m 25.63 ^s	-11°51'02.4''	16.7

The following orbital elements are from *MPEC* 2005-L30:

$$\left. \begin{array}{l}
 T = 2005 \text{ Dec. } 15.369 \text{ TT} \quad \omega = 149^{\circ}.901 \\
 e = 0.20783 \quad \Omega = 138.300 \\
 q = 3.14774 \text{ AU} \quad i = 7.745 \\
 a = 3.97358 \text{ AU} \quad n^{\circ} = 0.124432 \quad P = 7.92 \text{ years}
 \end{array} \right\} 2000.0$$