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COMET C/2008 J3 (McNAUGHT)

R. H. McNaught reports his discovery of another comet on CCD images obtained with the 0.5-m Uppsala Schmidt telescope at Siding Spring (discovery observation tabulated below), the object described as having a condensed coma of diameter 6″–8″ and a faint fan tail 30″–40″ long spanning 20° toward p.a. 240°. His images on May 11.66 UT show a coma with FWHM = 6″ and a narrow tail 45″ long in p.a. 245°; stacked images taken by McNaught on May 12.64 show a 40″ tail in p.a. 245° that appears as a fan spanning p.a. 230°–260°. Following posting on the Minor Planet Center's 'NEOCP' webpage, A. C. Gilmore and P. M. Kilmartin (Mt. John 1.0-m *f*/7.7 reflector) report that their CCD images from May 11.62–11.63 show a coma diameter of ~ 7″ and a narrow tail 25″ long in p.a. 250°; their exposures from May 12.71–12.72 show a tail 25″ long in p.a. 250°, a coma diameter of ~ 10″ with total magnitude 18.7–19.0 measured in a 12″-diameter aperture, and a starlike condensation of mag 19.9 as measured in a 5″-diameter aperture. N. Teamo, Punaauia, French Polynesia, finds a tail 15″ long in p.a. 250° on his images taken on May 12.55–12.58 with a 0.41-m *f*/8.0 reflector; J. C. Pelle measures a tail 7′ long in p.a. 240° from additional images taken by Teamo on May 12.61–12.63.

2008 UT	α_{2000}	δ_{2000}	Mag.
May 10.69282	$21^h45^m44^s.98$	$-42°44'30''.3$	18.4

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2008-J64; this comet may be of short period.

$$T = 2008\ \text{Apr.}\ 3.968\ \text{TT} \qquad \omega = 259°.341$$
$$\left.\begin{aligned}\omega &= 259°.341\\ \Omega &= 28.660\\ i &= 25.427\end{aligned}\right\}2000.0$$
$$q = 3.53197\ \text{AU}$$

COMET C/2008 J2 (BESHORE)

Further to *IAUC* 8941, J. McGaha revises his description from May 7.3 UT: 10-s exposures show a dense condensation of diameter 5″ surrounded by a coma of diameter 11″; fifteen stacked 60-s exposures show a sharp disk of diameter 21″ with no diffuseness and a bright elongation extending ~ 15″.5 from the object's center. Sixty stacked 10-s exposures from May 10.35 to 10.40 show a uniform disk of size 12″ surrounded by a faint coma of diameter 30″ and a faint 68″ tail in p.a. 261°.

2008 May 12 *Daniel W. E. Green*