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COMET 8P/TUTTLE

J. K. Harmon, M. C. Nolan, and E. S. Howell, Arecibo Observatory; and J. D. Giorgini, Jet Propulsion Laboratory, obtained 300-m-resolution radar imaging of comet 8P/Tuttle on Jan. 2–4 using the Arecibo Observatory 12.6-cm planetary radar. The nucleus is a strongly bifurcated object, possibly a contact binary, with two roughly spherical lobes measuring 3 and 4 km in diameter (± 25 percent). Following the changing rotation aspect from night to night and within the 2.5-hr observing sessions gives a preliminary estimate of 7.7 ± 0.2 hr for the rotation period. In addition to the nucleus echo, there is a weak echo component from large (> cm-sized) coma grains.

Visual total-magnitude and coma-diameter estimates by J. J. Gonzalez, Asturias, Spain: 2007 Dec. 26.77, 6.1, 15′ (6×30 binoculars); 30.79, 5.6, 25′ (naked eye); 2008 Jan. 3.79, 5.1, 30′ (naked eye); 6.78, 5.2, 30′ (4×30 monocular); 9.84, 5.3, 30′ (naked eye).

COMET C/2008 A1 (McNAUGHT)

R. H. McNaught reports his discovery of a comet (discovery observation tabulated below) on CCD images taken with the 0.5-m Uppsala Schmidt telescope at Siding Spring Observatory; the comet shows a moderately condensed circular of diameter 30″. Following posting on the Minor Planet Center's 'NEOCP' webpage, other astrometric CCD observers have commented on the object's cometary appearance, including J. Young (Table Mountain Observatory, 0.61-m *f*/16 Cassegrain reflector), who reported a 12″ round coma in poor seeing conditions on Jan. 11.3 UT. E. Guido and G. Sostero, Castellammare di Stabia, Italy, write that their 27 co-added 60-s unfiltered exposures from Jan. 11.3 (remotely using a 0.25-m *f*/3.4 reflector near Mayhill, NM, U.S.A.) show a broad fan-shaped coma of diameter nearly 30″, elongated toward the northeast.

2008 UT	α_{2000}	δ_{2000}	Mag.
Jan. 10.57306	$6^h35^m32^s.46$	$-43°45'47''.5$	15.2

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2008-A48.

$$
\begin{array}{lll}
T = 2008\ \text{Nov.}\ 3.860\ \text{TT} & \omega = 337^\circ.102 & \\
 & \Omega = 285.853 & \Big\}\ 2000.0 \\
q = 1.51069\ \text{AU} & i = 88.620 &
\end{array}
$$

  Daniel W. E. Green