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INTERNATIONAL ASTRONOMICAL UNION

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COMET P/2008 T3 = 1892 T1 (BARNARD-BOATTINI)

Following a suggestion by M. Meyer (Limburg, Germany) that comet P/2008 T3 (cf. *IAUC* 8993) may be identical to the long-lost comet D/1892 T1 = 1892e = 1892 V (Barnard), G. V. Williams (Smithsonian Astrophysical Observatory) has collected 41 astrometric observations from the literature in 1892 and re-reduced them for analysis. The resulting orbital calculations by Williams and by S. Nakano (Sumoto, Japan) confirm the identity. Nakano notes that the comet made 20 revolutions between 1892 and 2008, passing ~ 0.3 – 0.4 AU of Jupiter in 1922 Oct., 1934 Aug., and 2005 Aug. The following orbital elements are by Williams, from 90 observations spanning 1892 Oct. 16–2008 Oct. 8 (22 of which are from 1892; mean residual $1''.4$):

$$\begin{array}{l}
 \text{Epoch} = 1892 \text{ Dec. } 8.0 \text{ TT} \\
 \left. \begin{array}{l}
 T = 1892 \text{ Dec. } 11.2241 \text{ TT} \quad \omega = 170.0322 \\
 e = 0.588534 \quad \Omega = 208.0355 \\
 q = 1.431937 \text{ AU} \quad i = 31.2616
 \end{array} \right\} 2000.0 \\
 a = 3.480083 \text{ AU} \quad n^\circ = 0.1518167 \quad P = 6.49 \text{ years} \\
 \\
 \text{Epoch} = 2008 \text{ Oct. } 21.0 \text{ TT} \\
 \left. \begin{array}{l}
 T = 2008 \text{ Oct. } 25.0966 \text{ TT} \quad \omega = 181.4238 \\
 e = 0.646433 \quad \Omega = 204.1371 \\
 q = 1.145243 \text{ AU} \quad i = 32.9309
 \end{array} \right\} 2000.0 \\
 a = 3.239112 \text{ AU} \quad n^\circ = 0.1690695 \quad P = 5.83 \text{ years}
 \end{array}$$

G. Sostero, E. Guido, and P. Camilleri report that sixteen 60-s remotely acquired unfiltered CCD images obtained with a 35-cm reflector at Trunkey, N.S.W., on Oct. 8.4 UT show a compact coma $\sim 8''$ in diameter and a tail $\sim 15''$ long in p.a. 255° .

COMET C/2008 R3 (LINEAR)

Elliptical orbital elements for this comet (cf. *IAUC* 8973) from *MPEC* 2008-T97:

$$\left. \begin{array}{l}
 T = 2008 \text{ Nov. } 22.467 \text{ TT} \quad \omega = 84.139 \\
 e = 0.89537 \quad \Omega = 270.568 \\
 q = 1.90883 \text{ AU} \quad i = 43.238
 \end{array} \right\} 2000.0 \\
 a = 18.24389 \text{ AU} \quad n^\circ = 0.012648 \quad P = 77.92 \text{ years}$$