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COMET P/2005 N2 (HERGENROTHER)

D. Herald, Kambah (near Canberra, A.C.T.), reports his recovery of comet P/1998 W2 on CCD images obtained with a 0.36-m f/3.9 Schmidt-Cassegrain reflector on July 4 and 5 (with astrometry, the following orbital elements, and an ephemeris published on *MPEC* 2005-N28). Herald notes that stacking fifteen 5-min frames shows a tail of length $\approx 20''$ in p.a. 270°. The indicated correction to the predictions on *MPC* 45658 and in the *2005 Comet Handbook* is $\Delta T = +0.27$ day.

$$\text{Epoch} = 2005 \text{ Nov. } 6.0 \text{ TT}$$

$$\begin{array}{lll} T = 2005 \text{ Nov. } 2.4811 \text{ TT} & \omega = 13^\circ.8784 & \\ e = 0.607511 & \Omega = 356.5030 & \Big\} 2000.0 \\ q = 1.425773 \text{ AU} & i = 21.8941 & \end{array}$$

$$a = 3.632648 \text{ AU} \qquad n^\circ = 0.1423538 \qquad P = 6.924 \text{ years}$$

COMET C/2005 N3 (LARSON)

S. Larson reports his discovery of a comet (discovery observation given below) on CCD images taken in the course of the Mt. Lemmon Survey, the object showing a $4''$ coma and a $10''$ tail in p.a. 230° on July 5.4 UT. R. H. McNaught obtained confirming CCD images with the 1.0-m f/8 reflector at Siding Spring on July 5.6 that show a condensation merging into a tail $15''$ long in p.a. 240°.

2005 UT	α_{2000}	δ_{2000}	Mag.
July 5.38079	$21^h23^m26^s.08$	$-14^\circ08'44''.7$	20.2

The astrometry (including prediscovery observations from Mount Lemmon on July 3.4), the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2005-N29. The comet is quite likely to be of short period.

$$\begin{array}{lll} T = 2005 \text{ Dec. } 18.860 \text{ TT} & \omega = 98^\circ.198 & \\ & \Omega = 300.859 & \Big\} 2000.0 \\ q = 1.25088 \text{ AU} & i = 8.243 & \end{array}$$

COMET 21P/GIACOBINI-ZINNER

Total visual magnitude estimates by J. J. Gonzalez (Leon, Spain, 0.20-m refl.): May 18.12 UT, 11.2; June 2.09, 10.5; 6.11, 10.2; July 3.11, 9.4.

2005 July 5 *Daniel W. E. Green*