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COMET P/2009 B3 (VAN NESS)

G. Hug, Scranton, KS, U.S.A., reports his recovery of comet P/2005 R2 (cf. *IAUC* 8597) on images obtained with the 0.56-m reflector at his Sandlot Observatory. A very faint, straight, narrow tail was observed extending at least 5′–6′ in p.a. 300°. The indicated correction to the prediction on *MPC* 62880 is $\Delta T = -0.06$ day.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Jan. 31.36200	$10^h57^m13^s.96$	$+0°44'12''.1$	20.7	Hug

The above observation and three others, together with the following linked orbital elements and an ephemeris, appear on *MPEC* 2009-C03.

$$\text{Epoch} = \text{2011 June 8.0 TT}$$
$$\begin{array}{lll} T = \text{2011 June 16.2308 TT} & \omega = 3°.3321 & \\ e = 0.379597 & \Omega = 312.6719 & 2000.0 \\ q = 2.122533\ \text{AU} & i = 10.2396 & \end{array}$$
$$a = 3.421219\ \text{AU} \quad n° = 0.1557517 \quad P = 6.33\ \text{years}$$

COMET P/2009 B4 (LINEAR)

Hug also reports his recovery of P/2002 CW_{134} (cf. *IAUC* 7858) in images taken at 25° altitude; the comet did not appear different from stellar images in the same exposures. The indicated correction to prediction on *MPC* 56802 is $\Delta T = -0.32$ day.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Jan. 31.48615	$14^h30^m50^s.15$	$-22°00'01''.1$	19.6	Hug
31.50481	14 30 51.92	−22 00 23.0	20.0	"
Feb. 1.43053	14 32 21.53	−22 17 31.7	19.3	"
1.45242	14 32 23.47	−22 17 56.4	19.5	"
1.46701	14 32 24.91	−22 18 13.5	19.6	"

The following linked orbital elements and an ephemeris appear on *MPEC* 2009-C04.

$$\text{Epoch} = \text{2009 Jan. 9.0 TT}$$
$$\begin{array}{lll} T = \text{2009 Jan. 5.6142 TT} & \omega = 190°.2682 & \\ e = 0.488719 & \Omega = 348.2590 & 2000.0 \\ q = 1.843732\ \text{AU} & i = 15.2133 & \end{array}$$
$$a = 3.606102\ \text{AU} \quad n° = 0.1439286 \quad P = 6.85\ \text{years}$$

2009 February 1 *Daniel W. E. Green*