Circular No. 8448

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COMET P/2004 WR₉ (LINEAR)

An apparently asteroidal object discovered by LINEAR, and published as 2004 WR₉ on *MPO* 120656 (discovery observation below), has been found to show cometary appearance. P. Birtwhistle, Great Shefford, U.K., reports that CCD images taken on Dec. 7.0 UT with a 0.30-m f/6.3 reflector show the object as having a tail 20" long in p.a. 235° and a very concentrated coma with a diameter of 9", while on images from Dec. 3.0, there had been a suggestion of a 10" tail in p.a. 250°. C. Hergenrother reports that *R*-band images taken with the Catalina 1.54-m reflector on Dec. 8.45 show a highly condensed coma 11" in diameter and a faint tail > 25" long in p.a. 235°.

| 2004 | UT | α_{2000} | δ_{2000} | Mag. |
|--------|---------|--------------------|-----------------------------|------|
| Nov. 2 | 2.32392 | $5^{h}31^{m}41.94$ | $+30^{\circ}19^{'}19^{''}2$ | 18.7 |

The available astrometry, the following orbital elements, and an ephemeris appear on *MPEC* 2004-X28.

| | T = 2005 Jan. 11. | 3666 TT | $\omega =$ | 70.5784 · |) |
|---|-------------------|-----------------------|------------|-----------|------------|
| | e = 0.683440 | 9 | $\Omega =$ | 25.4444 | 2000.0 |
| | q = 1.917200 AU | 1 | i = | 5.0473 · | J |
| a | = 6.056348 AU | $n^{\rm o} = 0.06612$ | 84 | P = 1 | 4.90 years |

SUPERNOVAE 2004gn AND 2004go

Further to *IAUC* 8447, W. Li reports the LOSS discovery of an apparent supernova (mag ~ 16.6) on an unfiltered KAIT image taken on Dec. 1.57 UT. SN 2004gn is located at $\alpha = 12^{h}34^{m}12^{s}10$, Decl. = $+2^{o}39'34''.4$ (equinox 2000.0), which is 55''.0 east and 21''.4 north of the nucleus of NGC 4527. A KAIT image on June 10.21 showed nothing at this position (limiting mag ~ 19.0). H. Yamaoka, Kyushu University, reports that K. Itagaki, Yamagata, Japan, has confirmed the existence of the new object at red mag ~ 16.7 in unfiltered CCD images taken on Dec. 2.806 (the position end figures given as $12^{s}10$, 34''.7).

H. Pugh and Li report the LOSS discovery of another apparent supernova on unfiltered KAIT images taken on Nov. 18.32 (at mag 16.5), 23.25 (mag 16.6), Dec. 4.32 (mag 17.3), and 5.29 UT (mag 17.3). SN 2004go is located at $\alpha = 2^{h}55^{m}41^{s}.76$, $\delta = -14^{\circ}14'14''.5$ (equinox 2000.0), which is 34''.8 west and 105''.7 south of the nucleus of IC 270. A KAIT image taken on Oct. 14.43 showed nothing at this position (limiting mag ~ 19.0).

2004 December 8

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