
Circular No. 8588

**Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION**

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
URL <http://cfa-www.harvard.edu/iau/cbat.html> ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET C/2005 P3 (SWAN)

Preliminary parabolic orbital elements from the CCD astrometry on
IAUC 8587 (predicted magnitudes from $H = 11.0$, $n = 3$):

$$\begin{aligned} T &= 2005 \text{ Aug. } 9.638 \text{ TT} & \omega &= 30^\circ 616 \\ q &= 0.51554 \text{ AU} & \Omega &= 245.145 \\ && i &= 89.482 \end{aligned} \left. \right\} 2000.0$$

| 2005 TT | α_{2000} | δ_{2000} | Δ | r | ϵ | β | Mag. |
|---------|-------------------------------------|-----------------|----------|-------|------------|---------|------|
| Aug. 23 | 11 ^h 34 ^m .05 | +36°05'.2 | 1.162 | 0.604 | 31°3 | 60°5 | 9.7 |
| | 25 | 11 33.88 | +37 46.5 | 1.181 | 0.629 | 32.2 | 58.8 |
| | 27 | 11 33.41 | +39 20.4 | 1.199 | 0.656 | 33.2 | 57.4 |
| | 29 | 11 32.71 | +40 47.6 | 1.215 | 0.685 | 34.3 | 56.2 |
| | 31 | 11 31.82 | +42 09.1 | 1.230 | 0.715 | 35.5 | 55.2 |
| Sept. 2 | 11 30.79 | +43 25.6 | 1.243 | 0.746 | 36.9 | 54.3 | 10.5 |
| | 4 | 11 29.65 | +44 38.0 | 1.254 | 0.777 | 38.3 | 53.5 |
| | 6 | 11 28.43 | +45 46.8 | 1.264 | 0.810 | 39.8 | 52.8 |
| | 8 | 11 27.13 | +46 52.8 | 1.272 | 0.842 | 41.4 | 52.2 |
| | 10 | 11 25.78 | +47 56.5 | 1.279 | 0.876 | 43.0 | 51.7 |
| | 12 | 11 24.37 | +48 58.4 | 1.285 | 0.909 | 44.7 | 51.2 |
| | | | | | | | 11.2 |

Visual-magnitude and coma-diameter estimates: Aug. 26.14 UT, 10.5, 3' (A. Hale, Cloudcroft, NM, 0.20-m reflector); 26.46, 9.0, 1' (J. Kobayashi, Kumamoto, Japan, 20×100 binoculars).

SUPERNOVA 2005dl IN NGC 2276

A. Dimai, Cortina, Italy; and M. Migliardi, Tour Tour, France, report discovery of an apparent supernova (mag 17.1) in the course of the CROSS program (cf. *IAUC* 7373) on four unfiltered CCD images taken on Aug. 25.1 UT with the 0.5-m 'Ullrich' telescope at Cortina d'Ampezzo, Italy. The new object, which was confirmed at mag 16.8 on three images taken on Aug. 26.13, is located at $\alpha = 7^{\text{h}}27^{\text{m}}31^{\text{s}}.75$, $\delta = +85^\circ 45' 15''$ (equinox 2000.0), which is 18'' east and 1'' south of the nucleus of NGC 2276. Nothing is visible at this position on images taken on Feb. 17 (limiting mag ~ 19.0) by F. Manzini and on May 19 (limiting mag ~ 18.5), and it is absent from Palomar Sky Survey red and blue plates.