

**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)

SUPERNOVA 2005ab IN NGC 4617

S. Nakano, Sumoto, Japan, reports the discovery by Koichi Itagaki (Teppo-cho, Yamagata, Japan) of an apparent supernova (red mag 16.7) on numerous unfiltered CCD frames taken around Feb. 5.638 UT with a 0.30-m $f/7.8$ reflector. The new object is located at $\alpha = 12^{\text{h}}41^{\text{m}}05^{\text{s}}.18$, $\delta = +50^{\circ}22'56''.2$ (equinox 2000.0), which is $7''$ west and $40''$ south of the center of NGC 4617. Nothing was visible at this location on CCD frames taken by Itagaki back to 2001 (limiting mag 19.5) or on the Digitized Sky Survey. Nakano adds that K. Kadota (Ageo, Saitama-ken, Japan) has confirmed the presence of a new star (mag 16.8) at position end figures 05^s.19, 55^{''}.8 on a CCD frame taken with a 0.25-m reflector on Feb. 5.771.

SUPERNOVA 2005ac

Further to *IAUC* 8476, J. Burket and W. Li report the LOSS discovery of an apparent supernova on unfiltered KAIT images taken on Feb. 4.50 (at mag 18.0) and 5.56 UT (mag 18.2). SN 2005ac is located at $\alpha = 13^{\text{h}}39^{\text{m}}55^{\text{s}}.82$, $\delta = +0^{\circ}52'15''.0$ (equinox 2000.0), which is $2''.2$ west and $0''.9$ south of the nucleus of a compact galaxy. A KAIT image taken on Jan. 22.51 also showed the new object at mag ~ 18.5 , while an image taken on 2004 June 20.21 showed nothing at this position (limiting mag 19.5).

1999 HF₁

P. Pravec, P. Kušnirák and L. Šarounová, Ondřejov Observatory, report that their photometric observations — obtained during 2002 Mar. 31–May 16 — confirm that 1999 HF₁ is a binary system as suggested by Pravec *et al.* (2002, *Icarus* **158**, 276). They derive an orbital period of the system of 14.03 hr, the primary's rotation period of 2.3192 hr, and a secondary-to-primary mean-diameter ratio of 0.23 ± 0.03 . Further observations, e.g. during March–July 2005 (orbit on *MPO* 66084) are desirable.

COMET C/2004 U1 (LINEAR)

Total-magnitude estimates (visual unless otherwise noted): 2004 Nov. 22.74 UT, 17.3 (K. Kadota, Ageo, Saitama, Japan, 0.25-m reflector + CCD); Dec. 2.64, 13.8 (Kadota); 5.98, 13.2 (P. Guzik, Krosno, Poland, 0.20-m reflector); 13.04, 13.1 (J. J. Gonzalez, Asturias, Spain, 0.20-m reflector); 2005 Jan. 8.53, 13.4 (S. Yoshida, Ibaraki, Japan, 0.40-m reflector); 14.94, 13.5 (R. J. Bouma, Groningen, The Netherlands, 0.31-m reflector).