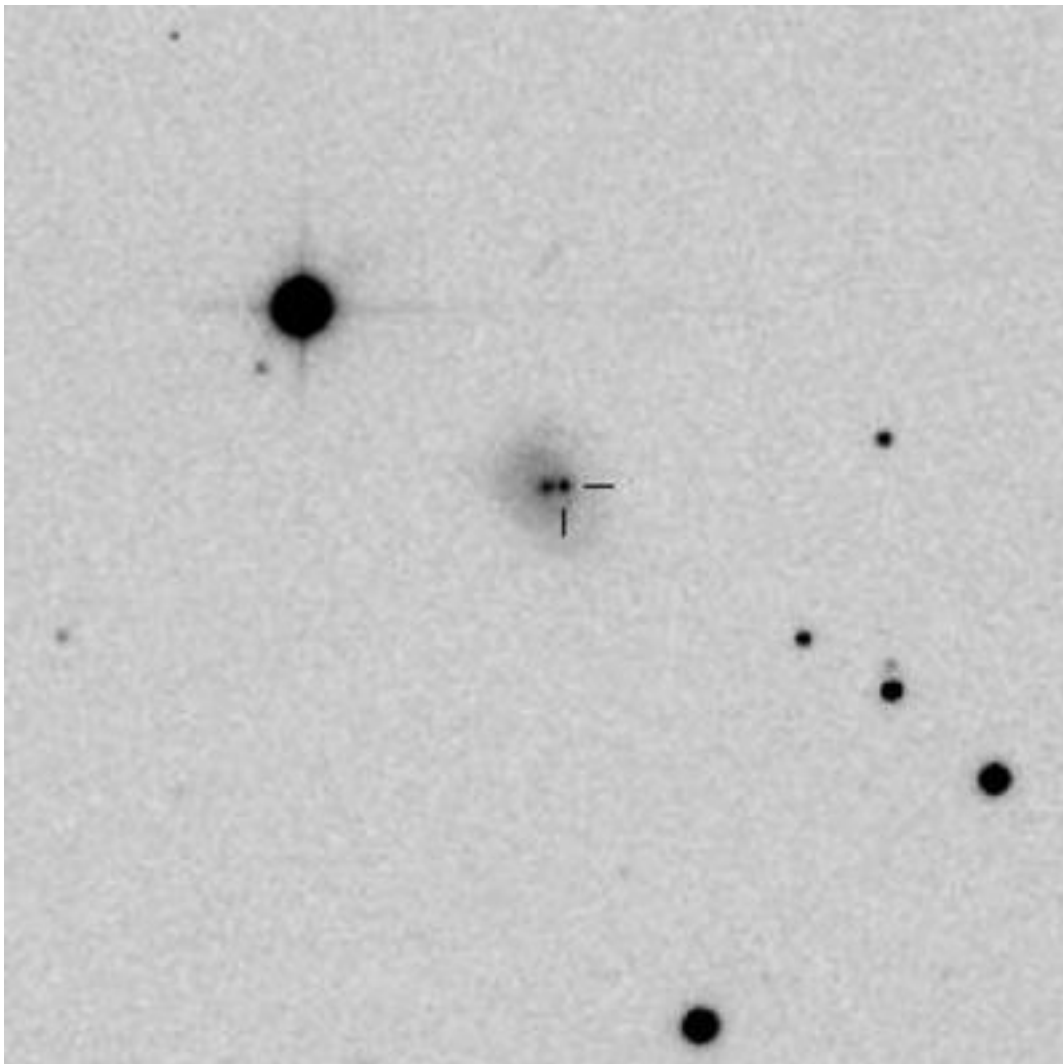


[SN 2012fs in IC 35](#) (A.R. 00 37 39.38, Dec. +10 21 29.0), scoperta il 7 ottobre 2012 nella galassia IC 35 (offset 6W 1N), magnitudine 16.5, tipo IIP ([Atel 4474](#)).

SN scoperta da A. Dimai con il telescopio SC "Maioni" da 28cm dell'Osservatorio del Col Druscìe (Cortina d'Ampezzo).



CBET 3278: 20121101 : SUPERNOVA 2012fs IN IC 35 = PSN J00373938+1021290

Electronic Telegram No. 3278
Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

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SUPERNOVA 2012fs IN IC 35 = PSN J00373938+1021290

A. Dimai, Cortina d'Ampezzo, Italy, reports his discovery, in the course of the Italian Supernovae Search Project (ISSP), of an apparent supernova (mag about 16.5) on two unfiltered CCD images (limiting mag about 18.0) taken with the 0.28-m telescope of the Col Drusci Observatory on Oct. 7.960 UT. The new object is located at R.A. = 0h37m39s.38, Decl. = +10d21'29".0 (equinox 2000.0), which is 6" west and 1" north of the nucleus of the galaxy IC 35. ISSP images of the same field taken on Sept. 24.9 (limiting mag about 18.0) showed nothing at this position, nor do Palomar Sky Survey infrared, red, and blue plates.

The variable was designated PSN J00373938+1021290 when it was posted at the Central Bureau's TOCP webpage and is here designated SN 2012fs based on the spectroscopic confirmation reported below. Additional CCD magnitudes for 2012fs (unfiltered unless noted otherwise): Oct. 8.935, 16.5 (Dimai; limiting mag about 18.0; Takahashi TOA-150 telescope at the Nerpio Observatory in Spain); 9.224, 16.3 (Planewave 43-cm CDK telescope, Mayhill, NM, U.S.A.; image posted at URL http://www.cortinastelle.it/PSNJ00373938_1021290_20121009.jpg); 10.211, 17.4 (J. Brimacombe, Cairns, Australia; luminance filter; position end figures 39s.5, 28".5); 10.914, 18.1 (Federica Luppi and Luca Buzzi, Varese, Italy; position end figures 39s.52, 29".1; image posted at website URL http://www.astrogeo.va.it/pub/TOCP/PSN_IC35.jpg); 10.919, 16.6 (P. Camilleri, New Castle, Australia; three 60-s images remotely taken with a 0.43-m f/4.5 telescope at Observatoire du Mas des Gres, Moydans, France; position end figures 39s.50 +/- 0".3, 28.5" +/- 0".3; NOMAD reference stars); 16.024, 16.6 (Xavier Bros, Ager, Spain; 35-cm f/4.6 telescope; position end figures 39s.57, 28".8; UCAC2 reference stars; image posted at website URL http://www.anysillum.com/PSN_IC35.jpg); 23.906, 16.7 (S. Foglia and G. Galli, Pogliano Milanese, Italy; 0.28-m f/6.8 Schmidt-Cassegrain telescope + ST8XME camera; position end figures 39s.48, 29".6; UCAC-3 reference stars). Brimacombe's image is posted at the following website URL: <http://www.flickr.com/photos/43846774@N02/8076469943/>.

C. Inserra, S. J. Smartt, M. Fraser, D. Young, and K. Smith, Queen's University, Belfast; F. Cellier-Holzem and P. El-Hage, Laboratoire de Physique Nucleaire et de Hautes Energies, Paris; Y.-C. Pan, University of Oxford; M. Sullivan, University of Southampton; I. Arcavi, A. Gal-Yam, and O. Yaron, Weizmann Institute of Science; S. Benetti, A. Pastorello, and S. Valenti, Istituto Nazionale di Astrofisica, Padova; and S. Taubenberger, A. Sternberg, and S. Benitez-Herrera, Max-Planck-Institute fuer Astrophysik, Garching, on behalf of the PESSTO collaboration (see Valenti et al., posted at website URL <http://www.astronomerstelegam.org/?read=4037>), report that optical

spectroscopy (range 360-910 nm), obtained on Oct. 9 with the New Technology Telescope (+ EFOSC2), show that PSN J00373938+1021290 = SN 2012fs is a type-IIP supernova at redshift $z = 0.015$; the best fit is to the spectrum of SN 2004et within a few days from explosion. PESSTO classification spectra can be obtained from website URL <http://www.pessto.org/>; classification is made via SNID (Blondin and Tonry 2007, Ap.J. 666, 1024) and GELATO (Harutyunyan et al. 2008, A.Ap. 488, 383).

NOTE: These 'Central Bureau Electronic Telegrams' are sometimes superseded by text appearing later in the printed IAU Circulars.

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(CBET 3278)

Daniel W. E. Green