

Technical University of Denmark



## GRS 1915+105 and Hercules X-1

**Brandt, Søren; Castro-Tirado, A. J.; Lund, Niels**

*Published in:*  
International Astronomical Union Circulars (IAUC)

*Publication date:*  
1993

*Document Version*  
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

*Citation (APA):*  
Brandt, S., Castro-Tirado, A. J., & Lund, N. (1993). GRS 1915+105 and Hercules X-1. International Astronomical Union Circulars (IAUC), (5779).

## DTU Library

Technical Information Center of Denmark

---

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Central Bureau for Astronomical Telegrams  
INTERNATIONAL ASTRONOMICAL UNION  
Postal Address: Central Bureau for Astronomical Telegrams  
Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.  
Telephone 617-495-7244/7440/7444 (for emergency use only)  
TWX 710-320-6842 ASTROGRAM CAM EASYLINK 62794505  
MARSDEN@CFA or GREEN@CFA (.SPAN, .BITNET or .HARVARD.EDU)

**SUPERNOVA 1993J IN NGC 3031**

A. C. Porter, Kitt Peak National Observatory, reports: "Nightly low-resolution (about 0.8 nm) spectroscopic monitoring of SN 1993J in the range 400-750 nm has been carried out on the KPNO 2.1-m telescope (+ Goldcam spectrograph) on Apr. 15-19 UT by J. Stocke, E. Perlman, and E. Ellingson (University of Colorado); on Apr. 20-22 by T. Lauer (KPNO) and M. Postman (Space Telescope Science Institute); and on Apr. 24-30 by F. Owen (National Radio Astronomy Observatory) and M. Ledlow (University of New Mexico and NRAO). An absorption feature in the peak of the broad H-alpha emission line, which first became visible on about Apr. 19, has grown into a prominent notch about 10 nm wide on Apr. 30. Continued and higher-resolution spectroscopic and polarimetric observations of this feature are urged. Observers are also advised that instrumentation schedules may prevent regular JHK photometry or near-infrared spectroscopy (800-1000 nm, including the calcium triplet) from being done at KPNO during May. Other observatories should make a special effort to fill in these gaps."

**GRS 1915+105 AND HERCULES X-1**

S. Brandt, A. J. Castro-Tirado, and N. Lund, Danish Space Research Institute, report: "The x-ray transient GRS 1915+105 ([IAUC 5590](#), [5619](#)) has been observed by the WATCH experiment on EURECA from Apr. 27.25 to 29.90 UT during the first of four offset pointings of the satellite. After nearly one year, the source is still very bright (580 +/- 60 mCrab at 6-12 keV; 160 +/- 30 mCrab at 12-20 keV). This strengthens the case for an association between the x-ray transient and the variable radio source recently reported ([IAUC 5773](#)). The x-ray source Her X-1 was observed during the same pointing with average fluxes 170 +/- 30 mCrab at 6-12 keV and 280 +/- 50 mCrab at 12-20 keV."

**HR 1469 = NSV 1671**

U. Bastian, Heidelberg, reports that a photograph taken by D. Becker, Schongau, Germany, shows a star trail of HR 1469 (cf. [IAUC 5656](#), [5675](#)) at its normal brightness from 1992 Nov. 7.906 to 7.917 UT, suggesting that the fading reported on [IAUC 5656](#) (if real) lasted < 3.3 days.