8.06 +0.55 +0.82

92-3 3/6 Landolt 1975 00 5 34 16 +00 42 36 (40.330) RI

5304

-556 7.64 0° 142

-585 7.62

-574 7.62

-566 7.65

-576 7.66

-564 7.60

-577 7.63 Tautz3

-588 7.59

-573 7.64 Bolte83

(1985.5) 02 39 20.4 -64 20 48

748 2 39 00 -6.4 .23

to 005

6.56 -722 851 -55 2.302 (210)

6.57 -724 824 -57 2.245

6.56 -722 851 -60 2.294 6 Sept (36)

6.56 -725 855 -57 2321 7 " " (40)

6.56 -724 850 -56 2302 8 " " (60)

6.55 -724 852 -59 2300 12 " " (36)

6.57 -722 859 -52 2.294 15 " (36)

6.58 -721 853 -46 2301 24 " (36)

6.58 -725 854 -50 2.305 21 July 81 (36)

6.55 -723 849 -63 2.302 24 July 81 (60)

6.56 -718 841 -55 2.296 21 July 81 (40)

6.57 -717 845 -67 2301 22 " " "

6.57 -727 852 -44 2.304 4 Sept 81

6.56 -722 853 -56 2301 5 Sept 81 (36)

6.54 -726 857 -56 2307 23 Sept (60)

6.56 -726 849 -56 2.298 28 " "

6.55 -720 840 -41 2307 25 " "

6.54 -725 849 -61 2302 20 Oct 81 (36)

6.54 -720 847 -61 2300 2 Nov 81 (60)

6.57 -721 848 -53 2300 3 Nov 81 (60)

6.57 -724 856 -60 — 23 Nov 81 (36)

6.55 -722 847 -51 2.300 24 " " "

6.55 -720 858 -56 2302 25 " " "

6.55 -719 845 -43 2.297 26 " " "

6.56 -714 834 -49 2303 25 Jan 82

6.56 -717 847 -30 2301 1 July 81

6.57 -722 849 -43 2.306 6 Aug 82 (36)

101 00 25 35 536 −00 10 07 57

621 −163 1024 −482 2104

1.278 1.061 373 Smith

Too bright for RF

167576 18 15 40 -27 43 1950

1.68 +1.25 → 18 16 09.4 -27 43 46 1986.5

7.10 1.252 0.786 0.376 ③ July 86

7.11 1.245 0.778 0.351 23 Oct 86

11 20

Y450 2 ~~4~~ ~~55~~ +03 30.5 9.01 +030

+033 9.02 15 May 74
+023 903 15 May 74
+026 8.58 19 Dec 74
+035 8.58 18 " "
+021 903 20 "
+025 9.00 ~~15~~ Sept 80
+033 902 9 " "
+030 901 10 " "
+~~33~~ 904 20 Nov 80
+024 9.04 21 "
+031 904 22
+031 9.03 ~~4~~ Nov 80
+021 9.02 7 " .

901 +033 28 Jan 87
903 +032 5 Feb 87
8.58 +033 20 Feb 87
8.58 +038 30 Nov 87
902 +027 27 Nov 87
903 +026 28 " "
9.00 +026 ~~12~~ Jan 87
9.04 +024 13 Jan 87
9.04 +033 15 May 87
8.58 +032 24 Feb 88
902 +035 14 Jan 87
902 +026 20 Jan 83

902 +037 13 Jan 83
8.58 +021 ~~5~~ Jan 88
8.58 +025 12 Jan 83
908 +010 8 Feb
902 +026 8 Feb 83

79.2372 12 05.8 +29 03

-048 -012

-09 +022

Olsson, W. Thesis Yale 1971 19

45-48	0.31	E(B-V)	3.54
42-45	0.23	E	2.34
41-42	0.07		0.66
38-42	~~0.33~~		0.315
35-38	0.32		3.09

1133 782 441 382

11 44.1 −60 53 G3 III G0 II

4522 +8 +9

102350

4.10 +0.90 +0.58 L

359

3.76 +0.30 3 mem

462

HM 535 335 343

3.00

376 300 000

−0.00365 −0.0156 F150 −3.5a G5II

+33

57.7
−152
327
3.8

−0276 17

4.04 +0.60 +0.99

+034 +0.91

−0266 −0152

016 286 161 089
000 300 158 091

X UMa 11 43.4 +48 04 K0 III
4518 3.72 +1.18 +1.16 45
102224

```
   R.A.  :   11.750
   DEC.  :  -60.900
1. R.A.  :  -54.700
1. DEC.  :  -15.200
ISTANCE  :    3.270
IODULUS  :   45
). VEL.  :   -3.500

 q1 (U)  :   -0.875
 q2 (U)  :    0.227
 q3 (U)  :   -0.427
     dU  :   94.040
      U  :    5.735

 q1 (V)  :    0.417
 q2 (V)  :   -0.093
 q3 (V)  :   -0.904
     dV  :  -45.884
      V  :    1.096

 q1 (W)  :    0.245
 q2 (W)  :    0.970
 q3 (W)  :    0.013
     dW  : -100.709
      W  :   -4.585
```

1019 358669-5B 00.3 -26 02

-25°40'24 12 03.0 -26 19 sdF-G

A 13^m 2" 10.5 10.39 ±0.47

B 23°12" 105°44 12.17 ±0.66

13.17 ±0.66 (5.35)

+121.06

5.8 -11.9

-255 -250 Yale

Rest 2777 1959.42	32.5	7.24	3B	135	12.14	10.3	DPM
1935.32	255.3	1.94	3 Rst				-0704 -7466
1940.47	315.2	1.70	4 Rst				
1950.82	28.6	1.90	3 Rst				074-266
1945.34	39.4	9.00	3B	177.7	10.37	AC 3B	306
1946.01	35.9	9.52	3B	176.7	10.24	3B	266
1964.39	39.3	8.82	4B				
1960.30	37.3	7.45	4B	179.6	10.93	4B	KP

-25° 9024 12 03.0 -26 19 F8 10.4 +1213 ±1.7

1050054 g 122 3 Deeming

97160

12.18 +46
12.76 +47
10.39 +47

10.37 372

-295 -254
+2 +6
-293 -248
+2
-246

158p°

-0214 -244

-218
+2
-216

-873 +412 -265 | +.1994 -4804 | +790 +113.6 -32.1 = +81.5
+456 +484 -945 | -.6272 -5667 | -.1939 -188.6 -90.4 -279.0
+179 +770 +611 | -.2462 -8978 | -.1440 -180.8 +74.1 -106.7

```
      R.A. :    12.050
     DEC. :   -26.300
PM. R.A. : -306.000
PM. DEC. : -266.000
DISTANCE :     6.000
  MODULUS :   158
RAD. VEL. :   121.000

   q1 (U) :     -0.872
   q2 (U) :      0.399
   q3 (U) :     -0.285
       dU :   630.857
        U :    65.555

   q1 (V) :      0.457
   q2 (V) :      0.452
   q3 (V) :     -0.766
       dV : %-1163.60
        V :  -277.142

   q1 (W) :      0.177
   q2 (W) :      0.798
   q3 (W) :      0.576
       dW : %-1236.3
        W :  -126.249
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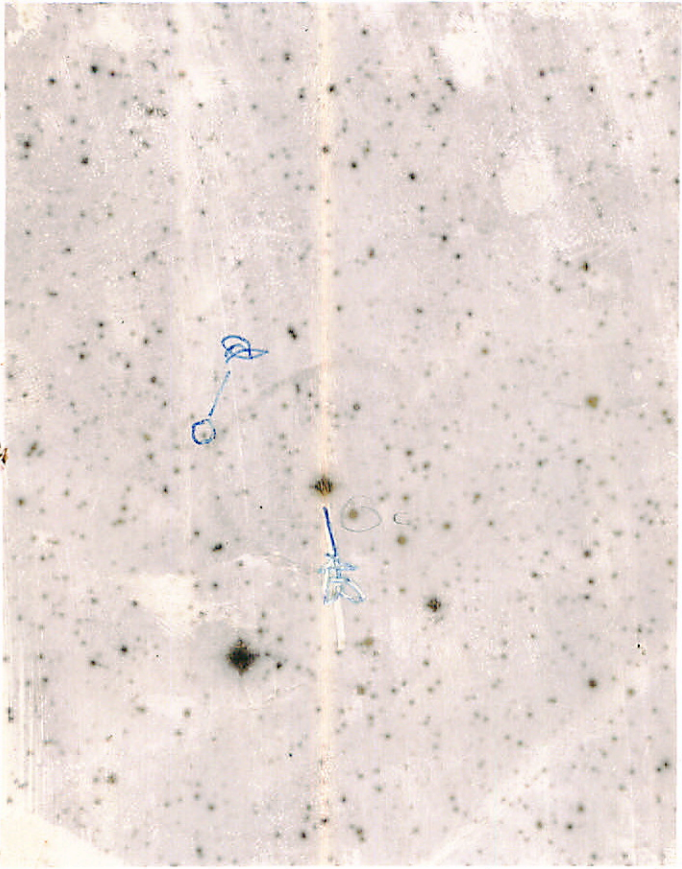
-8^{0} 4352 16 52.8 -8 15' 1550

Wolf 630 53.3 16 1542



Circular No. 3749

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

Postal Address: Central Bureau for Astronomical Telegrams
Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.

TWX 710-320-6842 ASTROGRAM CAM Telephone 617-864-5758

SUPERNOVAE

P. Wild, Astronomical Institute, Berne University, reports his discovery of a supernova in an anonymous galaxy located at $\alpha = 2^h37^m.4$, $\delta = +32°03'$ (equinox 1950.0). The offset from the nucleus is 4" west, 16" north. On Nov. 22 the photographic magnitude was 15.2 (measured with respect to Selected Area 46). The discoverer confirmed the supernova on Nov. 23.

R. W. Argyle and A. T. Sinclair, Royal Greenwich Observatory, have accurately measured the position of the above supernova, as well as of the one in NGC 1187 (cf. IAUC 3739), as follows:

α_{1950}	δ_{1950}	Offset from nucleus	
$2^h37^m18^s.30$	$+32°03'08''.6$	3" west	14" north
3 00 25.89	−23 02 45.4	27" east	61" north

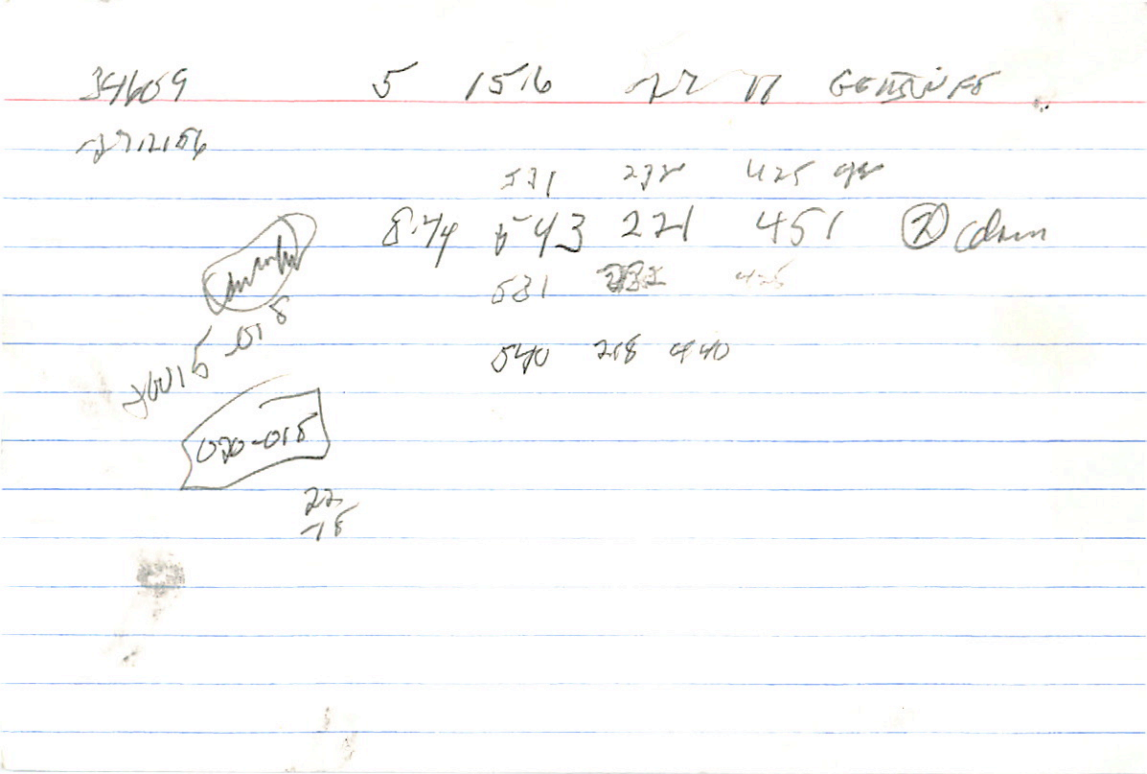
CPD −48°1577

H. Böhnhardt, H. Drechsel, J. Rahe and W. Wargau, Remeis Observatory, Bamberg; G. Klare, O. Stahl and B. Wolf, Landessternwarte Heidelberg-Königstuhl; and J. Krautter, European Southern Observatory, Garching, report that high- and low-dispersion spectra in the range 120–320 nm were obtained with IUE during Nov. 17.55–17.80 UT. The fine-error-sensor (520 nm) mag was 9.5 ± 0.1. As suspected by Garrison et al. (IAUC 3730) from optical data, the star reveals a spectrum characteristic of cataclysmic variables. The ultraviolet spectra are similar to those of novalike objects or dwarf novae during active stages. The continuum flux rises strongly toward shorter wavelengths, exhibiting the minor amount of reddening of E(B−V) = 0.02. Broad and asymmetric absorption features with high ionization level are present, e.g., N V, Si III, Si IV, He II, Al III and Fe III. C IV (155 nm) has a P-Cyg profile, with a terminal velocity of ~ 2000 km/s. If CPD −48°1577 proves to be a novalike object or dwarf nova, it is the brightest known object of its class.

PERIODIC COMET D'ARREST (1982e)

Total visual magnitude estimates: Nov. 6.99 UT, 9.8 (J. Bortle, Stormville, NY, 0.32-m reflector); 8.00, 9.9 (C. S. Morris, Harvard, MA, 0.25-m reflector); 15.98, 10.: (Bortle).

1982 November 29 Brian G. Marsden



P.Y. 1 Hee

2.758 201 184 845 2681 7.42 479
2.758 175 193 887 89 2.280 148 157 911
2.757 184 220 946
~~2.756 185 246~~

0.1 2.780 185 170 910 2.781 204 143 905
0.2 2.787 222 175 850 2.777 187 164 925
0.3 2.712 226 150 770 2.779 153 215 893
0.4 2.695 230 212 760

2.737 223 176 765
2.737 222 175 884

0.35 2.702 235 207 741
0.15 2.758 187 199 890

2.712 221 175 797
2.712 232 204 745

104 422
2.705 216 248 737 2.729 230 185 863 2.695 255 195 775
2.702 249 169 739 2.695 203 230 742
2.699 241 195 747

5270 14 01 30 +9 48.

14 01 49.6 +9 45 23 (1986.5)

6.22 -88 819 -294 2084 (10)

6.09 -88 821 -283 2085 21 [illegible]

6.22 -084 824 -295 2.079 24 [illegible]

6.26 -088 816 -291 2081 25 [illegible]

6.20 -083 827 -296 2.088 28 [illegible]

6.22 -085 824 -300 2.082 29 "

6.23 083 824 -294 2.082 30 "

6.23 -085 821 -293 2.076 31 "

6.23 -93 835 -300 2.082 25 [illegible]

6.22 -82 813 -297 2.085 29 [illegible]

6.24 -83 832 -296 2.084 9 [illegible]

6.21 -90 834 -300 2.090 9 " " "

6.24 -83 822 -301 2.087 [illegible]

6.24 -95 835 -294 2.083 10 [illegible]

6.21 -95 822 -285 2.078 30 [illegible]

6.21 -94 830 -304 2.082 29 [illegible]

6.20 -88 821 -301 2.083 [illegible]

6.20 -104 821 -312 2.081 [illegible]

[illegible] -84 818 -295 2.083 [illegible]

6.19 -80 819 -301 2.081 9 [illegible]

6.21 -92 831 -295 2.084 31 [illegible]

6.21 -83 820 -281 2.084 4 [illegible]

6.24 -85 813 -295 2.079 10 [illegible]

6.25 -80 820 -278 2.078 11 [illegible]

6.23 -91 819 -296 2.084 12 [illegible]

6.21 -84 816 -295 2.085 16 [illegible]

6.22 -80 819 -295 2.083 " "

-482- 1126 333 2.218 2f86

7542 19 47 30 +10 38.5

6.46 -114 974 -142 2.162 (4)

6.44 -106 972 -177 2.166 7 Aug 72
6.48 -119 985 -156 2.167 9 Aug 72
6.47 -112 974 -166 2.169 24 Aug 73
6.46 -113 974 -161 2.164 18 Aug 73

(D-330) R-I
7-63 -573

92-336 (1985.5) 00 54 19.7 +00 42 43.2
+0.542
1+0 5319

7.64 -582 23Oct86

80 3.076 14.570

52.27
1 49.20
0 52 27.466 +0 31 10.24

53 94.60

53 94.70

Ap. J. 174, 647

$\overline{V}$ = .276 ±.006 4 tim :: I ~ 10

G51-15 8 28 07 +26 52 1781 + 2.06

68 51.5

M_5 = 1.106

M_8 = -.614

(RI)

-2.40

12.30 +1.815 18 Jan 75

12.32 +1.77 20 Jan 76

12.31 +1.79

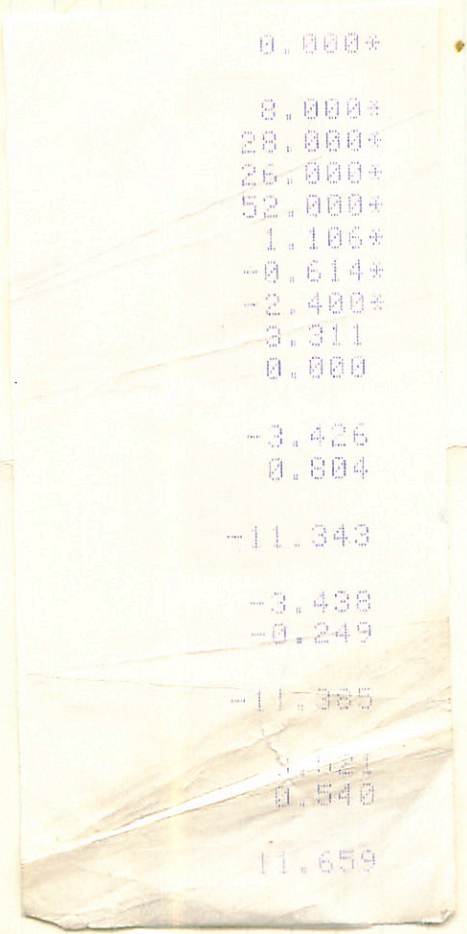
10.57

1143 148 1

9.43

12 11.93

9.63


0.000*
0.000*
28.000*
26.000*
52.000*
1.106*
-0.614*
-2.400*
3.311
0.000
-3.426
0.804
-11.343
-3.438
-0.249
0.540
11.659

120559 13 50 15 -57 19 ~~280~~ -667

7.72 -661

-664 15 May 78	-657 7.70 19 Apr 81
7.73 -668 20 Apr 79	-661 7.73 19 July 81
7.73 -670 15 Jun 79	-659 7.70 16 July 81
7.71 -660 17 Jun 79	-661 7.74 17 July 81
7.75 -649 21 Jun 79	-658 7.72 18 July 81
-655 27 May 78	-653 7.69 19 July 81
7.69 -664 20 July 79	-659 7.73 24 Aug 81
7.70 -664 18 Aug 79	-657 7.77 6 Feb 82
7.74 -663 19 " "	(-630) 7.81 20 Feb 82
7.68 -655 20 " "	-658 7.74 19 Mar 82
7.74 -658 23 Jan 80	7.85 1 Feb 82
7.76 -646 11 July 80	-658 7.71 17 Mar 83
7.73 -667 19 Aug 80	-661 7.74 29 Apr 84