1901	α app.	δ app.	log r	log Δ
Mai 25	16h 30m 36s	−4° 11′6		
27	29 5	4 5·4	0.5114	0.3551
29	27 33	3 59·6		
31	26 1	3 54·3	0.5105	0.3541
Juni 2	24 29	3 49·5		
4	22 58	3 45·1	0.5096	0.3539
6	21 27	3 41·3		
8	16 19 57	−3 38·1	0.5086	0.3546
Juni 10	16h 18m 29s	−3° 35′5		
12	17 3	3 33·4	0.5077	0.3560
14	15 39	3 31·9		
16	14 16	3 30·9	0.5067	0.3582
18	12 56	3 30·5		
20	11 40	3 30·7	0.5058	0.3611
22	10 27	3 31·5		
24	16 9 17	−3 32·8	0.5048	0.3648

Gr. = 13.2. AR. ±1m, Decl. ∓1′3.

Berlin, Kgl. Recheninstitut, 1901 Jan. 26. *A. Berberich.*

New Variable Star 71.1901 Aurigae.

BD. +42°1295 5h 18m 19s5 +42° 18′5 (1855).

The above star (BD. mag. = 9.3) is a short period variable, having a period of less than a day. The observations are satisfactorily represented by the following elements.

Period 0d7925 = 19h 1m 12s
Ep. Max. 1901 Mar. 3 (2415447) 13h 0m Greenw. M. T.
Limits of variation 8m75 to 9m65
Max. to Min. 14h 13m
Min. to Max. 4h 48m
Ratio increase to decrease 0.34.

The following table contains the observations arranged according to the interval by which they follow the last preceding maximum. This interval is given in the third column in decimals of a day. The observations without any distinguishing mark were made with a $2^3/_4$ in. refractor, power 75. Those marked with a »p« were estimated from photographs, and the resulting magnitudes diminished by 0.55 mag. in order to make them comparable with the visual observations.*) Observations marked »pv« are the means of both photographic and visual determinations.

Date	Greenw. M. T.	Dist. from last max.	Mag.	O—C
1901 Mar. 3	13h 0m	0d00	8.72 pv	−0m04
» 26	12 55	0.02	8.9	+0.14
Febr. 20	13 0	0.09	8.76 pv	−0.10
Mar. 27	10 10	0.10	8.9	+0.03
» 31	10 0	0.14	9.0	+0.03
» 27	11 55	0.18	8.9	−0.14
April 4	9 50	0.18	9.2	+0.15
Febr. 13	13 0	0.23	9.2	+0.05
Mar. 12	11 40	0.23	9.0	−0.15
» 24	11 0	0.31	9.4	+0.10
» 1	12 15	0.35	9.4	+0.04
» 28	11 0	0.35	9.3	−0.06
April 1	10 0	0.35	9.3	−0.06
1900 Mar. 30	12 0	0.36	9.25 p	−0.13
1901 » 28	12 30	0.41	9.3	−0.14
April 1	12 0	0.43	9.45	−0.02
1901 Mar. 13	12h 15m	0d46	9.7	+0m17
Febr. 6	15 30	0.47	9.3	−0.23
Jan. 14	16 30	0.49	9.52 p	−0.03
Mar. 29	10 15	0.52	9.55	−0.04
Jan. 22	15 35	0.53	9.80 p	+0.20
Mar. 25	11 30	0.54	9.5	−0.11
» 21	12 45	0.55	9.6	−0.02
Febr. 11	13 30	0.63	9.7 pv	+0.08
Mar. 18	11 10	0.65	9.5	−0.06
1900 April 20	10 0	0.67	9.65 p	+0.20
1901 Mar. 22	10 30	0.67	9.5	+0.04
1900 » 20	12 25	0.68	9.35 p	−0.05
1901 » 26	10 10	0.69	9.2	−0.14
1900 » 1	13 18	0.73	9.22 p	+0.14
1901 » 26	11 55	0.77	9.0	+0.15
Jan. 31	15 0	0.78	8.8±	+0.02

The observations are distributed pretty uniformly, and give a good idea of the form of the light curve. The last column contains the residuals resulting from comparison of the observations with the light curve. The observations extend from 1900 March 1 to 1901 April 4.

The variable is in close proximity to BD. +42°1297 (9m5), which forms a very convenient comparison star. On the photographs, taken with a 4.4 inch portrait lens, the two stars form a close double star, the variable at maximum being slightly brighter than the other component, but at minimum much fainter. Visually the variable is slightly fainter than the comparison star at minimum, but at maximum it is a full half magnitude brighter, the two stars then forming a very unequal pair.

Hove, 1901 April 10. *A. Stanley Williams.*

*) A uniform correction of −0.55 mag. has been applied to the photographic observations, but it is probable that the photographic range of variation is greater than the visual, and that this correction is too small for the lower magnitude. It would seem that the star is redder when faint than it is when bright.