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Y CYGNI

For the star Y Cygni exhibiting apsidal rotation R.S. Dugan published in 1931 (Princ. Contr. No. 12) the following elements:

$$\text{"Even" } t_{\min} = \text{J.T.} 240\ 9534.3195 + 2^{\text{d}}.996\ 3331 n + 0^{\text{d}}.1380 \sin 0^{\circ}.06266 n - 0^{\text{d}}.0074 \sin 0^{\circ}.12532 n$$

$$\text{"Odd" } t_{\min} = \text{J.T.} 240\ 9635.8175 + 2^{\text{d}}.996\ 3331 n - 0^{\text{d}}.1380 \sin 0^{\circ}.06266 n - 0^{\text{d}}.0074 \sin 0^{\circ}.12532 n$$

According to these elements the minima shall reach their extreme positions in 1967, the even minima passing through a negative, the odd minima through a positive maximum.

The correction of these apparently rather accurate elements (s. A.N. 287, 186, 1963 = Mitt. Potsdam Nr. 106) will only be worth, after a great number of exact moments will be obtained for the even and likewise for the odd minima in the next years, from 1964 to about 1970.

Therefore I give in the Table below the moments of the minima for the time interval 1964 August 12 - December 18 calculated by using Dugan's elements. Only the first sinusoidal term was taken into account. The minima given here are those for  $n = 9704$  to  $n = 9750$ . In this interval the period will increase from  $2^{\text{d}}.996\ 277$  to  $2^{\text{d}}.996\ 284$  for the even minima and diminish from  $2^{\text{d}}.996\ 390$  to  $2^{\text{d}}.996\ 382$  for the odd minima. Hereby, the odd minima will occur at the beginning of the interval mentioned  $1^{\text{d}}.754$  and at the end of it  $1^{\text{d}}.759$  later than the even ones. A similar table for 1965 will be given later. The even minima are not listed here since they occur in the afternoon hours.

J.D.M.A.T.G.

U.T.

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619. 597	1964. Aug.	12 <sup>d</sup>	2.3
622. 593		15	2.2
625. 589		18	2.2
628. 586		21	2.1
631. 582		24	2.0
634. 578		27	1.9
637. 574		30	1.8
640. 571	Sept.	2	1.7
643. 567		5	1.6
646. 563		8	1.5
649. 560		11	1.4
652. 556		14	1.3
655. 552		17	1.2
658. 548		20	1.2
661. 545		23	1.1
664. 541		26	1.0
667. 537		29	0.9
670. 534	Oct.	2	0.8
673. 530		5	0.7
676. 526		8	0.6
679. 522		11	0.5
682. 519		14	0.4
685. 515		17	0.4
688. 511		20	0.3
691. 507		23	0.2
694. 504		26	0.1
697. 500		29	0.0
700. 496		31	23.9
703. 492	Nov.	3	23.8
706. 489		6	23.7
709. 485		9	23.6
712. 481		12	23.6
715. 478		15	23.5
718. 474		18	23.4
721. 470		21	23.3
724. 467		24	23.2
727. 463		27	23.1
730. 459		30	23.0
733. 455	Dec.	3	22.9
736. 452		6	22.8
739. 448		9	22.8
742. 444		12	22.7
745. 440		15	22.6
748. 437		18	22.5

Astrophysikalisches Observatorium Potsdam, July 30, 1964.

H. SCHNELLER