

TABLE XV.

*Local mean (astronomical<sup>1</sup>) time of the culminations and elongations of Polaris in the year 1897.*

[Adapted<sup>2</sup> for latitude 39° north and longitude 75° or 5 h. west of Greenwich.]

Date.	East Elongation.	Upper Culmination.	West Elongation.	Lower Culmination.
1887.	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
January 1....	0 38.9	6 33.9	12 28.7	18 32.0
15....	23 39.7	5 38.6	11 33.4	17 36.7
February 1....	22 32.6	4 31.5	10 26.3	16 29.6
15....	21 37.3	3 36.2	9 31.1	15 34.3
March 1....	20 42.1	2 41.0	8 35.8	14 39.1
15....	19 47.1	1 46.0	7 40.7	13 44.0
April 1....	18 40.1	0 38.9	6 33.7	12 37.0
15....	17 45.1	23 40.0	5 38.7	11 41.9
May 1....	16 42.2	22 37.1	4 35.9	10 39.0
15....	15 47.3	21 42.2	3 41.0	9 44.1
June 1....	14 40.6	20 35.6	2 34.3	8 37.5
15....	13 45.7	19 40.7	1 39.4	7 42.6
July 1....	12 43.1	18 38.1	0 36.8	6 40.0
15....	11 48.2	17 43.2	23 38.0	5 45.1
August 1....	10 41.7	16 36.7	22 31.4	4 38.6
15....	9 46.8	15 41.8	21 36.5	3 43.7
September 1....	8 40.2	14 35.2	20 29.9	2 37.1
15....	7 45.3	13 40.3	19 35.0	1 42.2
October 1....	6 42.4	12 37.4	18 32.1	0 39.3
15....	5 47.4	11 42.4	17 37.1	23 40.5
November 1....	4 40.6	10 35.6	16 30.3	22 33.7
15....	3 45.4	9 40.4	15 35.2	21 38.5
December 1....	2 42.4	8 37.4	14 32.2	20 35.5
15....	1 47.1	7 42.1	13 37.0	19 40.2

<sup>1</sup>The *astronomical* day begins 12 hours *after* the civil day, *i. e.* commences at noon on the civil day of same date. The hours are counted from noon, from 0 to 24.

<sup>2</sup>The table was obtained from the one given in Bulletin 14 of the Coast and Geodetic Survey or in App. 1, C. and G. S. Report for 1891 by applying the following corrections: + 2.7 m. to refer to the year 1897, this correction being furnished me by the Coast and Geodetic Survey; + 0.16 m. to make table apply to 75° west; + 0.13 m. and - 0.13 m. to times of west and east elongations respectively, to refer table to latitude 39°. Although the table, as stated on top, has been especially adapted for latitude 39° and longitude 75° west, it may be used over the entire state without committing a greater error on this account than 0.1 minute.—I. A. B.