

EPHEMERIS OF IRIS FOR THE OPPOSITION IN 1860,

WITH CONTINUATION OF THE PERTURBATIONS.

BY ERNEST SCHUBERT.

[Communicated by Professor WINLOCK, Superintendent American Ephemeris.]

Washington Mean Midnight.

1860	⑦ α	⑦ δ	log Δ	log r	1860	⑦ α	⑦ δ	log Δ	log r
Jan. 0	10 ^h 0 ^m 6.22 ^s	+ 5 24 55.3	0.174240	0.352460	Feb. 6	9 31 42.29	+ 5 58 51.5	0.137057	
1	9 59 48.63	22 26.3	172225		7	30 38.95	6 2 47.1	137491	0.371354
2	59 29.12	20 8.7	170245	353479	8	29 35.66	6 48.4	138011	
3	59 7.69	18 2.6	168300		9	28 32.48	10 55.1	138616	372315
4	58 44.36	16 8.0	166393	354496	10	27 29.47	15 6.8	139307	
5	58 19.12	14 25.2	164526		8 11	26 26.77	19 23.1	140084	373273
6	57 51.99	12 54.1	162701	355511	12	25 24.44	23 43.6	140947	
7	57 22.99	11 34.9	160919		13	24 22.57	28 7.9	141896	374226
8	56 52.15	10 27.6	159182	356524	14	23 21.24	32 35.7	142930	
9	56 19.47	9 32.3	157494		15	22 20.53	37 6.4	144048	375177
10	55 44.99	8 48.9	155856	357534	16	21 20.53	41 39.7	145248	
11	55 8.74	8 17.5	154268		17	20 21.29	46 15.1	146529	376123
12	54 30.74	7 58.0	152733	358542	18	19 22.88	50 52.2	147891	
13	53 51.02	7 50.4	151254		19	18 25.40	6 55 30.6	149331	377066
14	53 9.64	7 54.6	149831	359545	20	17 28.92	7 0 9.9	150850	
15	52 26.61	8 10.9	148468		21	16 33.49	4 49.7	152446	378003
16	51 41.97	8 39.0	147166	360547	22	15 39.20	9 29.5	154117	
17	50 55.76	9 18.8	145929		23	14 46.10	14 9.0	155861	378938
18	50 8.03	10 10.3	144758	361546	24	13 54.24	18 47.9	157677	
19	49 18.87	11 13.4	143654		25	13 3.68	23 25.6	159562	379867
20	48 28.30	12 27.8	142619	362541	26	12 14.45	28 2.0	161515	
21	47 36.41	13 53.5	141655		27	11 26.64	32 36.5	163534	380793
22	46 43.25	15 30.2	140764	363533	28	10 40.28	37 9.1	165617	
23	45 48.89	17 17.9	139948		29	9 55.42	41 39.2	167762	381714
24	44 53.37	19 16.2	139207	364523	Mar. 1	9 12.10	46 6.6	169968	
25	43 56.76	21 25.0	138545		2	8 30.39	50 31.0	172231	382632
26	42 59.16	23 43.9	137962	365508	3	7 50.29	54 52.3	174550	
27	42 0.63	26 12.7	137460		4	7 11.81	7 59 9.9	176923	383545
28	41 1.25	28 51.1	137040	366492	5	6 34.97	8 3 23.8	179346	
29	40 1.12	31 38.8	136703		6	5 59.81	7 33.6	181820	384453
30	39 0.30	34 35.0	136449	367471	7	5 26.35	11 39.4	184341	
31	37 58.89	37 39.9	136279		8	4 54.62	15 40.6	186908	385358
Feb. 1	36 56.94	40 53.2	136193	368447	9	4 24.62	19 37.4	189519	
2	35 54.56	44 14.5	136193		10	3 56.39	23 29.4	192172	386258
3	34 51.82	47 43.2	136278	369419	11	3 29.96	27 16.4	192863	
4	33 48.81	51 19.2	136450		12	9 3 5.37	+ 8 30 58.2	0.197594	0.387154
5	9 32 45.60	+ 5 55 2.1	0.136709	0.370388					

8 1860 February 10, 20^h 27^m 45^s.2 Washington M. T. Intensity of light = 1.033.

PERTURBATIONS OF IRIS FROM 1848 JAN. 1.0, TO 1860 FEB. 9.0.

	di	$d\Omega$	$d\varphi$	$d\alpha$	$d\mu$	$fd\mu$	dM
\mathcal{Z}	- 20.14	- 570.35	+ 31.49	- 430.87	-0.34141	- 478.89	- 85.58
\mathcal{Z}_2	+ 0.56	- 17.26	- 3.02	+ 33.53	-0.01142	+ 30.46	- 54.23
$\mathcal{Z} + \mathcal{Z}_2$	- 19.58	-9 47.61	+ 28.47	-6 37.34	-0.35283	-7 28.43	-2 19.81
Correct. for the sec. var. of obliquity	- 0.17	+1 2.19		- 0.29			