A sample page from **The American Ephemeris Series**
Revised and Expanded **THIRD** *Edition*

This series includes:
The New American Ephemeris for the 20th century at Noon (*100 years, Michelsen Memorial*)
The New American Ephemeris for the 20th century at Midnight (*100 years, Michelsen Memorial*)
The New American Ephemeris for the 21st century at Noon (*100 years, Michelsen Memorial*)
The New American Ephemeris for the 21st century at Midnight (*100 years, Michelsen Memorial*)
The New American Ephemeris for the 21st century at Noon, revised & expanded 3rd edition, 2000-2050
The New American Ephemeris for the 21st century at Midnight, revised & expanded 3rd edition, 2000-2050

This page shown FULL SIZE. Two months per page, positions given to the nearest tenth of a minute of a degree (sun & moon to the nearest second of a minute of a degree), moon given twice daily, true node. Chiron given monthly. Declinations only when crossing the solar/earth equators, aspectarian does not include lunar aspects. Shows last lunar aspect & lunar ingress (eg, void of course), lunar phases. Shaded areas, which did not scan well, show retrogrades. This page shows one solar eclipse (look really hard).

New in the 3rd / Michelsen Memorial editions: Ceres given daily. Pallas, Juno Vesta & Eris given monthly.

November 2050 — LONGITUDE

Day	Sid.Time	☉	0 hr ☽	Noon ☽	True ☊	☿	♀	♂	♃	♄	♅	♆	♇
1 Tu	14 43 55	9♏15 31	3♊43 02	10♊42 13	11♏44.6	24♏43.5	16♎16.9	0♓18.1	11♎05.6	2♍07.6	2♒50.0	23♍59.2	27♉27.1	8♓33.5
2 W	14 47 51	10 15 32	17 35 18	24 22 07	11 44.8	26 11.8	16R 05.1	0 47.1	11 32.1	2 15.9	2 52.6	24 02.1	27R 25.5	8R 33.0
3 Th	14 51 48	11 15 34	1♋02 39	7♋37 02	11R 45.0	27 39.5	15 55.7	1 16.3	11 58.6	2 24.1	2 55.3	24 05.0	27 23.9	8 32.5
4 F	14 55 44	12 15 39	14 05 28	20 28 17	11 45.0	29 06.7	15 48.8	1 45.9	12 25.1	2 32.1	2 58.1	24 07.8	27 22.2	8 32.1
5 Sa	14 59 41	13 15 46	26 45 53	2♌58 44	11D 44.9	0♐33.3	15 44.5	2 15.7	12 51.5	2 40.0	3 01.0	24 10.6	27 20.6	8 31.6
6 Su	15 03 37	14 15 55	9♌07 21	15 12 17	11 44.9	1 59.3	15D 42.5	2 45.9	13 17.8	2 47.7	3 04.0	24 13.4	27 19.0	8 31.2
7 M	15 07 34	15 16 06	21 14 05	27 13 22	11 45.0	3 24.6	15 43.1	3 16.3	13 44.1	2 55.3	3 07.1	24 16.1	27 17.3	8 30.9
8 Tu	15 11 30	16 16 19	3♍10 42	9♍06 40	11 45.3	4 49.2	15 46.0	3 47.0	14 10.4	3 02.8	3 10.2	24 18.8	27 15.7	8 30.5
9 W	15 15 27	17 16 34	15 01 51	20 56 46	11 45.8	6 13.1	15 51.3	4 18.0	14 36.6	3 10.2	3 13.5	24 21.5	27 14.0	8 30.2
10 Th	15 19 24	18 16 50	26 51 58	2♎47 55	11 46.5	7 36.1	15 58.9	4 49.2	15 02.8	3 17.4	3 16.8	24 24.1	27 12.3	8 29.9
11 F	15 23 20	19 17 09	8♎45 05	14 43 53	11 47.3	8 58.3	16 08.8	5 20.7	15 28.9	3 24.5	3 20.3	24 26.7	27 10.7	8 29.6
12 Sa	15 27 17	20 17 30	20 44 42	26 47 50	11 47.9	10 19.5	16 20.9	5 52.5	15 55.0	3 31.4	3 23.8	24 29.2	27 09.0	8 29.4
13 Su	15 31 13	21 17 52	2♏53 36	9♏02 15	11R 48.2	11 39.6	16 35.1	6 24.5	16 21.0	3 38.2	3 27.4	24 31.7	27 07.3	8 29.2
14 M	15 35 10	22 18 17	15 13 57	21 28 52	11 48.1	12 58.4	16 51.4	6 56.7	16 46.9	3 44.8	3 31.1	24 34.1	27 05.6	8 29.0
15 Tu	15 39 06	23 18 43	27 47 07	4♐08 47	11 47.3	14 16.0	17 09.8	7 29.2	17 12.8	3 51.3	3 34.9	24 36.5	27 03.9	8 28.8
16 W	15 43 03	24 19 10	10♐33 54	17 02 27	11 46.0	15 32.0	17 30.0	8 01.9	17 38.6	3 57.6	3 38.7	24 38.9	27 02.2	8 28.6
17 Th	15 46 59	25 19 39	23 34 27	0♑09 50	11 44.2	16 46.4	17 52.2	8 34.8	18 04.4	4 03.8	3 42.7	24 41.2	27 00.5	8 28.5
18 F	15 50 56	26 20 10	6♑48 34	13 30 35	11 42.1	17 58.8	18 16.2	9 08.0	18 30.1	4 09.8	3 46.7	24 43.5	26 58.9	8 28.4
19 Sa	15 54 53	27 20 42	20 15 46	27 04 04	11 40.2	19 09.0	18 42.0	9 41.3	18 55.7	4 15.7	3 50.8	24 45.7	26 57.2	8 28.3
20 Su	15 58 49	28 21 15	3♒55 23	10♒49 37	11 38.8	20 16.8	19 09.5	10 14.9	19 21.3	4 21.4	3 55.0	24 47.9	26 55.5	8 28.3
21 M	16 02 46	29 21 49	17 46 38	24 46 19	11D 38.0	21 21.8	19 38.6	10 48.6	19 46.8	4 26.9	3 59.3	24 50.0	26 53.8	8D 28.3
22 Tu	16 06 42	0♐22 24	1♓48 31	8♓53 03	11 38.2	22 23.6	20 09.3	11 22.6	20 12.2	4 32.3	4 03.6	24 52.1	26 52.1	8 28.3
23 W	16 10 39	1 23 01	15 59 42	23 08 13	11 39.1	23 21.9	20 41.6	11 56.7	20 37.6	4 37.6	4 08.1	24 54.1	26 50.4	8 28.3
24 Th	16 14 35	2 23 38	0♈18 18	7♈29 34	11 40.4	24 16.0	21 15.3	12 31.0	21 02.8	4 42.6	4 12.6	24 56.1	26 48.7	8 28.3
25 F	16 18 32	3 24 17	14 41 37	21 53 58	11 41.8	25 05.5	21 50.4	13 05.5	21 28.1	4 47.5	4 17.1	24 58.1	26 47.0	8 28.4
26 Sa	16 22 28	4 24 57	29 06 06	6♉17 27	11R 42.6	25 49.8	22 27.0	13 40.2	21 53.2	4 52.2	4 21.8	25 00.0	26 45.3	8 28.5
27 Su	16 26 25	5 25 38	13♉27 26	20 35 25	11 42.5	26 28.2	23 04.8	14 15.0	22 18.3	4 56.8	4 26.5	25 01.8	26 43.7	8 28.7
28 M	16 30 22	6 26 21	27 40 48	4♊43 00	11 41.0	26 59.9	23 43.9	14 49.9	22 43.2	5 01.2	4 31.3	25 03.6	26 42.0	8 28.8
29 Tu	16 34 18	7 27 04	11♊41 29	18 35 44	11 38.3	27 24.2	24 24.3	15 25.1	23 08.2	5 05.4	4 36.2	25 05.3	26 40.3	8 29.0
30 W	16 38 15	8 27 49	25 25 23	2♋10 05	11 34.4	27 40.2	25 05.9	16 00.3	23 33.0	5 09.5	4 41.1	25 07.0	26 38.7	8 29.2

December 2050 — LONGITUDE

Day	Sid.Time	☉	0 hr ☽	Noon ☽	True ☊	☿	♀	♂	♃	♄	♅	♆	♇
1 Th	16 42 11	9♐28 36	8♋49 39	15♋23 56	11♏29.8	27♐47.2	25♎48.6	16♓35.7	23♎57.8	5♍13.3	4♒46.1	25♍08.7	26♉37.0	8♓29.4
2 F	16 46 08	10 29 24	21 52 58	28 16 51	11R 25.1	27R 44.4	26 32.4	17 11.3	24 22.4	5 17.0	4 51.2	25 10.3	26R 35.4	8 29.7
3 Sa	16 50 04	11 30 13	4♌35 45	10♌49 59	11 20.9	27 31.1	27 17.2	17 46.9	24 47.0	5 20.6	4 56.4	25 11.8	26 33.8	8 30.0
4 Su	16 54 01	12 31 03	16 59 56	23 06 00	11 17.7	27 06.7	28 03.1	18 22.7	25 11.5	5 23.9	5 01.6	25 13.3	26 32.1	8 30.3
5 M	16 57 58	13 31 55	29 08 44	5♍08 39	11D 15.9	26 31.2	28 49.9	18 58.7	25 35.9	5 27.1	5 06.9	25 14.7	26 30.5	8 30.6
6 Tu	17 01 54	14 32 48	11♍06 22	17 02 28	11 15.5	25 44.6	29 37.7	19 34.7	26 00.3	5 30.0	5 12.2	25 16.1	26 28.9	8 31.0
7 W	17 05 51	15 33 43	22 57 37	28 52 26	11 16.4	24 47.5	0♏26.4	20 10.9	26 24.5	5 32.8	5 17.6	25 17.5	26 27.3	8 31.4
8 Th	17 09 47	16 34 38	4♎47 34	10♎43 39	11 18.0	23 41.0	1 15.9	20 47.2	26 48.6	5 35.4	5 23.1	25 18.7	26 25.8	8 31.8
9 F	17 13 44	17 35 35	16 41 17	22 41 04	11 19.8	22 26.9	2 06.3	21 23.7	27 12.7	5 37.9	5 28.6	25 20.0	26 24.2	8 32.2
10 Sa	17 17 40	18 36 33	28 43 33	4♏49 13	11R 21.1	21 07.2	2 57.5	22 00.2	27 36.6	5 40.1	5 34.2	25 21.1	26 22.7	8 32.7
11 Su	17 21 37	19 37 33	10♏58 31	17 11 50	11 21.1	19 44.6	3 49.4	22 36.8	28 00.5	5 42.1	5 39.9	25 22.2	26 21.1	8 33.2
12 M	17 25 33	20 38 33	23 29 28	29 51 40	11 19.4	18 21.8	4 42.1	23 13.6	28 24.2	5 44.0	5 45.6	25 23.3	26 19.6	8 33.7
13 Tu	17 29 30	21 39 34	6♐18 32	12♐50 08	11 15.7	17 01.7	5 35.5	23 50.5	28 47.9	5 45.6	5 51.4	25 24.3	26 18.1	8 34.2
14 W	17 33 27	22 40 37	19 26 25	26 07 13	11 10.1	15 46.8	6 29.5	24 27.5	29 11.4	5 47.1	5 57.2	25 25.3	26 16.6	8 34.8
15 Th	17 37 23	23 41 40	2♑52 19	9♑41 22	11 03.1	14 39.4	7 24.2	25 04.6	29 34.8	5 48.4	6 03.1	25 26.1	26 15.1	8 35.4
16 F	17 41 20	24 42 43	16 34 02	23 29 49	10 55.4	13 41.1	8 19.6	25 41.7	29 58.2	5 49.5	6 09.0	25 27.0	26 13.7	8 36.0
17 Sa	17 45 16	25 43 47	0♒28 17	7♒28 55	10 48.1	12 53.1	9 15.5	26 19.0	0♏21.4	5 50.4	6 15.0	25 27.8	26 12.3	8 36.6
18 Su	17 49 13	26 44 52	14 31 15	21 34 48	10 42.0	12 15.9	10 12.0	26 56.4	0 44.5	5 51.1	6 21.1	25 28.5	26 10.8	8 37.3
19 M	17 53 09	27 45 57	28 39 08	5♓43 53	10 37.7	11 49.8	11 09.1	27 33.8	1 07.4	5 51.6	6 27.1	25 29.2	26 09.4	8 37.9
20 Tu	17 57 06	28 47 02	12♓48 43	19 53 20	10D 35.5	11D 34.6	12 06.7	28 11.4	1 30.3	5 51.9	6 33.3	25 29.8	26 08.1	8 38.6
21 W	18 01 02	29 48 07	26 57 32	4♈01 07	10 35.2	11 29.8	13 04.9	28 49.0	1 53.0	5R 52.0	6 39.5	25 30.3	26 06.7	8 39.4
22 Th	18 04 59	0♑49 13	11♈03 57	18 05 54	10 36.1	11 34.8	14 03.5	29 26.7	2 15.6	5 51.9	6 45.7	25 30.8	26 05.4	8 40.1
23 F	18 08 56	1 50 19	25 06 51	2♉06 42	10R 37.1	11 48.7	15 02.6	0♈04.5	2 38.1	5 51.6	6 52.0	25 31.2	26 04.1	8 40.9
24 Sa	18 12 52	2 51 25	9♉05 18	16 02 29	10 37.3	12 10.9	16 02.2	0 42.3	3 00.5	5 51.1	6 58.3	25 31.6	26 02.8	8 41.7
25 Su	18 16 49	3 52 31	22 58 04	29 51 50	10 35.5	12 40.5	17 02.3	1 20.2	3 22.7	5 50.5	7 04.7	25 32.0	26 01.5	8 42.5
26 M	18 20 45	4 53 37	6♊43 32	13♊32 51	10 31.3	13 16.8	18 02.8	1 58.2	3 44.8	5 49.6	7 11.1	25 32.2	26 00.3	8 43.4
27 Tu	18 24 42	5 54 44	20 19 31	27 03 13	10 24.5	13 59.1	19 03.7	2 36.3	4 06.8	5 48.5	7 17.6	25 32.4	25 59.0	8 44.2
28 W	18 28 38	6 55 51	3♋43 39	10♋20 33	10 15.4	14 46.7	20 05.0	3 14.3	4 28.6	5 47.3	7 24.1	25 32.6	25 57.8	8 45.1
29 Th	18 32 35	7 56 58	16 53 41	23 22 51	10 04.7	15 39.0	21 06.8	3 52.5	4 50.3	5 45.8	7 30.6	25 32.7	25 56.7	8 46.0
30 F	18 36 31	8 58 06	29 47 56	6♌08 54	9 53.6	16 35.5	22 08.9	4 30.7	5 11.9	5 44.2	7 37.2	25R 32.8	25 55.5	8 47.0
31 Sa	18 40 28	9 59 14	12♌25 47	18 38 41	9 43.0	17 35.7	23 11.4	5 09.0	5 33.3	5 42.4	7 43.8	25 32.7	25 54.4	8 47.9

Astro Data	Dy Hr Mn
☿ D	6 18:46
☽0S	9 10:52
♃℞	10 8:31
☊0S	20 0:07
♇ D	21 22:13
☽0N	23 7:31
☿ R	1 17:21
☽0S	6 19:16
♃℞	12 2:17
☽0N	20 13:41
☿ D	21 11:33
♃ R	21 13:18
♂0N	24 10:24
☿ R	30 18:45

Planet Ingress	Dy Hr Mn
☿ ♐	5 2:45
☉ ♐	22 3:08
♀ ♏	6 23:03
♇ ♏	16 13:53
☉ ♑	21 16:40
♂ ♈	23 9:10

Last Aspect	Dy Hr Mn	☽ Ingress	Dy Hr Mn
2 11:24	☿ □	♋	2 22:07
5 1:08	☿ ☌	♌	5 6:14
7 12:08	☿ □	♍	7 17:35
10 0:43	☿ △	♎	10 6:21
11 14:52	♀ ☌	♏	12 18:19
14 22:40	☿ ☍	♐	15 4:11
17 2:00	☿ □	♑	17 11:42
19 12:32	☉ ☌	♒	19 17:09
21 20:27	☉ □	♓	21 20:55
23 18:11	☿ ☌	♈	23 23:29
25 17:37	☿ △	♉	26 1:30
27 22:22	☿ ☌	♊	28 3:57
30 3:51	☿ ☍	♋	30 8:08

Last Aspect	Dy Hr Mn	☽ Ingress	Dy Hr Mn
2 8:49	♆ ☌	♑	2 15:15
4 22:30	♀ ☌	♒	5 1:42
7 7:06	♆ △	♓	7 14:17
9 11:34	☿ ☌	♈	10 2:31
12 5:22	☿ ☍	♉	12 12:16
14 10:45	♂ □	♊	14 18:55
16 16:42	♆ △	♋	16 23:11
18 21:27	☉ ☌	♌	19 2:17
21 4:16	☉ □	♍	21 5:10
22 0:47	☿ △	♎	23 8:23
25 5:19	☿ ☍	♏	25 12:14
27 9:18	♂ □	♐	27 17:17
29 16:46	☿ ☌	♑	30 0:23

☽ Phases & Eclipses	Dy Hr Mn	
	6 9:58	☾ 14♎11
	14 13:43	● 22♏23
	14 13:30:53	☿ P 0.887
	21 20:27	☽ 29♒43
	28 15:11	○ 6♊34
	6 6:29	☾ 14♍19
	14 5:19	● 22♐24
	21 4:16	☽ 29♓28
	28 5:17	○ 6♋39

Astro Data
1 November 2050
Julian Day # 55092
SVP 4♓32'49"
GC 27♐33.0 ♀ 7♍04.8
Eris 0♉57.2R ⚷ 22♎21.0
♁ 10♐58.6 ⚳ 19♏21.6
☽ Mean ☊ 11♏51.2
1 December 2050
Julian Day # 55122
SVP 4♓32'44"
GC 27♐33.0 ♀ 19♍18.2
Eris 0♉40.6R ⚷ 2♏39.2
♁ 14♐28.4 ⚳ 5♐30.7
☽ Mean ☊ 10♏15.9