

A sample page from: The American Heliocentric Ephemeris, 2001-2050

by Neil F. Michelsen

In this ephemeris, daily longitudes & latitudes of Mercury, Venus, Earth & Mars, to the nearest minute of a degree. Positions every five days for Jupiter, Saturn, Uranus, Neptune & Pluto, all to the nearest tenth of a minute of arc. Perihelia (closest to sun) & aphelia (farthest from the sun) given as "p" or "a". Also includes complete aspectarian, bimonthly heliocentric north node for each planet, monthly distances from the Sun, measured in AU (radius vector). Two months per page, oversize format.

SEPTEMBER 2050

OCTOBER 2050

DAY	♀		♀		⊕	♂		DAY	♀		♀		⊕	♂	
	LONG	LAT	LONG	LAT	LONG	LONG	LAT		LONG	LAT	LONG	LAT	LONG	LONG	LAT
1 Th	17 59	58 08	10 53	28 44	8 47	2 57	1 54	1 S	20 12	6 N 00	28 26	3 S 20	8 T 02	21 59	1 S 34
2 F	6 52	4 42	12 28	2 48	9 45	3 35	1 48	2 Su	24 27	5 43	0 T 02	3 19	9 01	22 37	1 33
3 S	11 53	4 14	14 03	2 51	10 43	4 14	1 48	3 M	28 35	5 24	1 37	3 17	10 00	23 15	1 33
4 Su	17 04	3 43	15 38	2 54	11 42	4 52	1 47	4 Tu	2 35	5 05	3 13	3 16	10 59	23 53	1 32
5 M	22 23	3 09	17 13	2 57	12 40	5 30	1 47	5 W	6 28	4 45	4 48	3 14	11 58	24 30	1 31
6 Tu	27 52	2 32	18 48	2 59	13 38	6 08	1 47	6 Th	10 14	4 24	6 24	3 12	12 57	25 08	1 31
7 W	3 29	1 52	20 23	3 02	14 36	6 46	1 46	7 F	13 54	4 02	7 59	3 10	13 56	25 46	1 30
8 Th	9 15	1 11	21 58	3 04	15 34	7 24	1 46	8 S	17 29	3 40	9 35	3 08	14 55	26 24	1 29
9 F	15 09	0 28	23 33	3 07	16 32	8 02	1 45	9 Su	20 58	3 18	11 10	3 06	15 55	27 02	1 29
10 S	21 09	0 N 16	25 08	3 09	17 31	8 40	1 45	10 M	24 22	2 56	12 46	3 04	16 54	27 39	1 28
11 Su	27 16	1 01	26 43	3 11	18 29	9 19	1 45	11 Tu	27 41	2 33	14 22	3 01	17 53	28 17	1 27
12 M	3 28	1 46	28 18	3 13	19 27	9 57	1 44	12 W	0 56	2 11	15 57	2 59	18 52	28 55	1 26
13 Tu	9 44	2 30	29 53	3 15	20 26	10 35	1 44	13 Th	4 07	1 48	17 33	2 56	19 52	29 32	1 26
14 W	16 02	3 12	31 28	3 16	21 24	11 13	1 43	14 F	7 15	1 26	19 09	2 53	20 51	0 T 10	1 25
15 Th	22 22	3 52	3 03	3 18	22 23	11 51	1 43	15 S	10 19	1 03	20 44	2 50	21 51	0 47	1 24
16 F	28 41	4 30	4 38	3 19	23 21	12 29	1 42	16 Su	13 20	0 41	22 20	2 47	22 50	1 25	1 23
17 S	4 57	5 03	6 13	3 20	24 20	13 07	1 42	17 M	16 18	0 19	23 56	2 43	23 50	2 02	1 22
18 Su	11 11	5 33	7 48	3 21	25 18	13 45	1 42	18 Tu	19 14	0 S 02	25 32	2 40	24 49	2 40	1 22
19 M	17 19	5 58	9 23	3 22	26 17	14 23	1 41	19 W	22 08	0 24	27 07	2 36	25 49	3 17	1 21
20 Tu	23 22	6 20	10 58	3 23	27 15	15 01	1 41	20 Th	25 00	0 45	28 43	2 32	26 48	3 55	1 20
21 W	29 17	6 36	12 34	3 23	28 14	15 39	1 40	21 F	27 50	1 05	0 19	2 29	27 48	4 32	1 19
22 Th	5 04	6 48	14 09	3 23	29 13	16 17	1 39	22 S	0 39	1 26	1 55	2 25	28 48	5 09	1 18
23 F	10 43	6 56	15 44	3 24	0 T 11	16 55	1 39	23 Su	3 27	1 46	3 31	2 21	29 47	5 47	1 17
24 S	16 12	7 00	17 19	3 24	1 10	17 33	1 38	24 M	6 13	2 05	5 07	2 16	0 47	6 24	1 16
25 Su	21 32	7 00	18 55	3 24	2 09	18 11	1 38	25 Tu	8 59	2 25	6 43	2 12	1 47	7 01	1 16
26 M	26 42	6 57	20 30	3 23	3 08	18 49	1 37	26 W	11 44	2 44	8 19	2 08	2 47	7 39	1 15
27 Tu	1 43	6 50	22 05	3 23	4 06	19 27	1 37	27 Th	14 29	3 02	9 55	2 03	3 46	8 16	1 14
28 W	6 34	6 41	23 40	3 22	5 05	20 05	1 36	28 F	17 14	3 20	11 31	1 59	4 46	8 53	1 13
29 Th	11 15	6 29	25 16	3 22	6 04	20 43	1 35	29 S	19 59	3 38	13 07	1 54	5 46	9 30	1 12
30 F	15 48	6 N 15	26 51	3 S 21	7 T 03	21 21	1 S 35	30 Su	22 44	3 55	14 43	1 49	6 46	10 07	1 11
31 M								31 M	25 29	4 S 11	16 19	1 54	7 46	10 T 44	1 S 10

DAY	♃		♄		♅		♆		♁		♁p. 353723	♁a. 373077
	LONG	LAT	LONG	LAT	LONG	LAT	LONG	LAT	LONG	LAT		
1 Th	17 24.7	0 N 46	6 38.6	0 S 32	20 59.1	0 N 46	26 28.5	1 S 43	9 33.8	13 S 01	♁p. 728221	♁a. 726698
6 Tu	17 48.5	0 47	6 47.8	0 33	21 03.0	0 46	26 30.3	1 43	9 34.8	13 01	♁p. 1.00935	♁a. 1.00139
11 Su	18 12.3	0 47	6 57.0	0 33	21 06.9	0 46	26 32.2	1 43	9 35.9	13 02	♁p. 1.38140	♁a. 1.38516
16 F	18 36.0	0 48	7 06.2	0 34	21 10.7	0 46	26 34.0	1 43	9 36.9	13 02	♁p. 5.32310	♁a. 5.33231
21 W	18 59.8	0 48	7 15.4	0 34	21 14.6	0 46	26 35.8	1 43	9 38.0	13 02	♁p. 9.94821	♁a. 9.94315
26 M	19 23.5	0 48	7 24.7	0 34	21 18.5	0 46	26 37.7	1 43	9 39.1	13 02	♁p. 18.2831	♁a. 18.2831
											♁p. 29.8168	♁a. 29.8168
											♁p. 41.5875	♁a. 41.6064
											♁p. Ω	♁a. Perihelia
1 S	19 47.2	0 49	7 33.9	0 35	21 22.4	0 46	26 39.5	1 43	9 40.1	13 02	♁p. 18° 0' 56"	♁a. 18° 11' 15"
6 Th	20 10.9	0 49	7 43.1	0 35	21 26.3	0 46	26 41.3	1 43	9 41.2	13 03	♁p. 17° 11' 08"	♁a. 12° 16' 15"
11 Tu	20 34.6	0 50	7 52.3	0 36	21 30.2	0 46	26 43.2	1 43	9 42.2	13 03	♁p.	♁a. 12° 16' 20"
16 Su	20 58.3	0 50	8 01.5	0 36	21 34.1	0 46	26 45.0	1 43	9 43.3	13 03	♁p. 19° 0' 57"	♁a. 6° 11' 58"
21 F	21 22.0	0 51	8 10.7	0 36	21 37.9	0 46	26 46.8	1 43	9 44.3	13 03	♁p. 11° 5' 01"	♁a. 16° 16' 24"
26 W	21 45.6	0 51	8 20.0	0 37	21 41.8	0 46	26 48.7	1 43	9 45.4	13 03	♁p. 4° 21' 55"	♁a. 3° 5' 55"
31 M	22 09.2	0 51	8 29.2	0 37	21 45.7	0 46	26 50.5	1 43	9 46.4	13 04	♁p. 12° 11' 16"	♁a. 20° 10' 57"
											♁p. 9 45.4	♁a. 26° 0' 25"
											♁p. 21° 5' 04"	♁a. 14° 11' 11"

1 Th	♁♃	2am 9	8 ♁♂	1am 23	16 ♁♄	5am 3	24 ♁♅	5am 57	♁♆	1pm 21	M ♁♁	4pm 59	Th ♁♂	7 14
	♁♃	5 33			F ♁♄	7pm 3	S ♁♅	6 50	♁♆	11 10			♁♂	11 27
	♁♃	6pm 24	9 ♁♂	6am 42	17 ♁♄	6am 29	S ♁♅	7 4	♁♆	11 32	11 ♁♁	5am 26	21 ♁♂	6pm 24
	♁♃	7 15	F ♁♂	11 47	S ♁♄	8 25	S ♁♅	1pm 46	♁♆	4 7	T ♁♁	5pm 4		
	♁♃	11 5	F ♁♂	3pm 11	S ♁♄	2pm 10	S ♁♅	10 55	♁♆	12pm 47				
2 F	♁♃	1pm 1	10 ♁♂	4pm 28	18 ♁♄	1am 33	Su ♁♅	6am 26	♁♆	4 7	13 ♁♁	5pm 46	23 ♁♂	1am 21
	♁♃	5 14	S ♁♂	9 3	Su ♁♄	11 10	Su ♁♅	11pm 39	♁♆	8am 26	Th ♁♁	6 34	23 ♁♂	5 5
	♁♃	10 7	S ♁♂	9 20	19 ♁♄	3am 37	M ♁♅	3 43	♁♆	8am 26	F ♁♁	10 57	24 ♁♂	1am 59
3 S	♁♃	2pm 35			19 ♁♄	3am 37	M ♁♅	3 43	♁♆	8am 26			M ♁♁	8 56
	♁♃	2am 44	11 ♁♂	10am 36	M ♁♄	6 4	T ♁♅	0am 38	♁♆	6am 30	14 ♁♁	5am 40	24 ♁♂	1am 4
	♁♃	2pm 25	Su ♁♂	10 59	M ♁♄	7 33	T ♁♅	5 30	♁♆	3pm 20	F ♁♁	4pm 53	M ♁♁	5pm 58
	♁♃	5 58	Su ♁♂	11 30	M ♁♄	3pm 28	T ♁♅	9 42	♁♆	5 4	S ♁♁	7 19	M ♁♁	11 34
5 M	♁♃	8am 13	12 ♁♂	1pm 32	20 ♁♄	5am 6	T ♁♅	2pm 44	♁♆	8pm 27	15 ♁♁	2am 27	25 ♁♂	1am 4
	♁♃	9 41	M ♁♂	11 30	T ♁♄	1pm 3	T ♁♅	2pm 44	♁♆	8pm 27	W ♁♁	12pm 23	T ♁♁	6 41
	♁♃	6pm 6	13 ♁♂	1am 50	T ♁♄	2 23	W ♁♅	4am 38	♁♆	9am 26	S ♁♁	7am 34	T ♁♁	7 34
	♁♃	10 27	T ♁♂	3 35	T ♁♄	6 51	W ♁♅	3pm 45	♁♆	8pm 20	S ♁♁	11 59	T ♁♁	9pm 41
	♁♃	2pm 3			21 ♁♄	2am 57	Th ♁♅	8pm 59	♁♆	0am 17	M ♁♁	9pm 30	T ♁♁	4am 10
6 T	♁♃	9 11	14 ♁♂	7am 41	W ♁♄	6 20	F ♁♅	0am 17	♁♆	11am 17	M ♁♁	9 46	T ♁♁	10am 28
	♁♃	2am 23	W ♁♂	9 14	22 ♁♄	5am 0	F ♁♅	12pm 13	♁♆	11am 17	S ♁♁	4pm 3	T ♁♁	10 52
	♁♃	7 14	W ♁♂	4pm 15	Th ♁♄	9 25	F ♁♅	9 42	♁♆	8pm 8	T ♁♁	6 39	T ♁♁	3pm 26
	♁♃	10 27			Th ♁♄	9 25			♁♆	8pm 8		7 33	T ♁♁	6 10
	♁♃	10 49			Th ♁♄	7pm 21			♁♆	8pm 8		7 33	T ♁♁	11 34
	♁♃	2pm 3			Th ♁♄	7 23			♁♆	8pm 8		7 33	T ♁♁	6am 26
	♁♃	3 25			Th ♁♄									