

### MERKURY

M d 2013	Wsch.	Kulm.	Zach.	A	$\alpha$	$\delta$	D	F	V	$\Delta I$
	$\lambda=0$		$\varphi=50$		$0^hUT$					
	h m	h m	h m	°	h m	° ' "	"		m	°
I 0	7 22	11 18	15 13	51	17 56.1	- 24 09	4.8	0.96	-0.6	-11
4	7 36	11 30	15 23	51	18 23.3	- 24 26	4.7	0.97	-0.7	-9
8	7 47	11 42	15 36	51	18 50.9	- 24 23	4.7	0.99	-0.8	-6
12	7 56	11 54	15 52	52	19 18.9	- 23 57	4.7	0.99	-1.0	-4
16	8 03	12 06	16 10	53	19 47.2	- 23 08	4.7	1.00	-1.2	-2
20	8 08	12 19	16 31	56	20 15.5	- 21 55	4.8	1.00	-1.3	-2
24	8 10	12 32	16 54	59	20 43.8	- 20 17	4.8	0.99	-1.3	4
28	8 11	12 44	17 18	62	21 11.9	- 18 15	5.0	0.98	-1.2	7
II 1	8 09	12 56	17 44	66	21 39.5	- 15 50	5.2	0.95	-1.1	10
5	8 05	13 06	18 09	71	22 06.1	- 13 04	5.4	0.89	-1.1	13
9	7 58	13 15	18 33	76	22 30.9	- 10 04	5.8	0.80	-1.0	15
13	7 49	13 20	18 53	81	22 52.6	- 7 02	6.4	0.67	-0.8	17
17	7 36	13 20	19 05	85	23 08.9	- 4 17	7.2	0.50	-0.4	18
21	7 19	13 12	19 05	88	23 17.7	- 2 15	8.1	0.31	0.3	17
25	6 58	12 54	18 50	89	23 17.2	- 1 18	9.2	0.15	1.5	13
III 1	6 35	12 29	18 22	88	23 08.2	- 1 38	10.1	0.04	3.4	8
5	6 12	11 59	17 44	85	22 54.1	- 3 04	10.7	0.01	4.8	4
9	5 52	11 30	17 06	82	22 40.2	- 5 01	10.8	0.05	3.3	-9
13	5 36	11 05	16 33	80	22 30.9	- 6 51	10.4	0.12	2.1	-16
17	5 24	10 47	16 10	78	22 27.9	- 8 12	9.8	0.22	1.3	-21
21	5 15	10 35	15 55	77	22 31.0	- 8 55	9.1	0.31	0.8	-24
25	5 08	10 28	15 48	77	22 39.1	- 9 01	8.5	0.39	0.6	-27
29	5 02	10 25	15 47	77	22 51.2	- 8 35	7.9	0.46	0.4	-28
IV 2	4 57	10 24	15 52	79	23 06.2	- 7 39	7.4	0.52	0.3	-28
6	4 52	10 26	16 01	81	23 23.5	- 6 17	7.0	0.58	0.2	-27
10	4 47	10 30	16 13	84	23 42.7	- 4 32	6.6	0.63	0.1	-26
14	4 42	10 35	16 29	87	0 03.5	- 2 26	6.2	0.68	-0.0	-24
18	4 37	10 42	16 48	91	0 25.8	- 0 02	5.9	0.73	-0.2	-22
22	4 32	10 50	17 09	96	0 49.5	2 39	5.7	0.79	-0.4	-20
26	4 28	10 59	17 33	100	1 14.9	5 35	5.5	0.84	-0.6	-17
30	4 24	11 11	18 01	105	1 42.1	8 41	5.3	0.89	-0.9	-13
V 4	4 21	11 25	18 31	110	2 11.3	11 55	5.2	0.94	-1.3	-9
8	4 20	11 41	19 05	116	2 42.8	15 10	5.1	0.98	-1.7	-5
12	4 20	11 59	19 41	121	3 16.5	18 15	5.1	1.00	-2.3	-0
16	4 23	12 19	20 17	126	3 51.8	20 59	5.2	0.98	-1.8	5
20	4 30	12 39	20 50	129	4 27.6	23 09	5.3	0.92	-1.4	10
24	4 39	12 58	21 18	132	5 02.5	24 39	5.6	0.83	-1.0	14
28	4 50	13 15	21 39	133	5 35.2	25 27	6.0	0.73	-0.7	18
VI 1	5 03	13 28	21 53	133	6 05.0	25 37	6.4	0.63	-0.3	21
5	5 16	13 38	21 60	132	6 31.2	25 17	7.0	0.54	-0.0	23
9	5 28	13 44	21 59	131	6 53.6	24 32	7.6	0.45	0.3	24
13	5 37	13 46	21 54	129	7 11.8	23 32	8.2	0.37	0.6	24
17	5 42	13 43	21 43	127	7 25.5	22 21	9.0	0.30	0.9	24
21	5 43	13 36	21 27	124	7 34.5	21 07	9.7	0.23	1.4	22
25	5 38	13 23	21 07	122	7 38.3	19 56	10.5	0.16	1.9	19
VI 29	5 27	13 05	20 43	121	7 37.0	18 54	11.2	0.10	2.6	16

**MERKURY (c.d.)**

M d 2013	Wsch.	Kulm.	Zach.	A	$\alpha$	$\delta$	D	F	V	$\Delta I$
	$\lambda=0$		$\varphi=50$		$0^hUT$					
VII 3	5 09	12 43	20 16	119	7 31.0	18 07	11.7	0.05	3.5	11
7	4 47	12 18	19 48	119	7 21.5	17 39	11.9	0.01	4.6	6
11	4 21	11 51	19 22	119	7 10.9	17 33	11.7	0.01	4.8	-5
15	3 55	11 27	18 60	119	7 01.8	17 48	11.1	0.04	3.7	-9
19	3 31	11 07	18 43	120	6 56.8	18 20	10.3	0.09	2.5	-14
23	3 12	10 53	18 34	122	6 57.5	19 02	9.4	0.18	1.6	-17
27	2 59	10 45	18 31	123	7 04.8	19 47	8.4	0.28	0.8	-19
31	2 54	10 44	18 34	124	7 18.8	20 24	7.5	0.41	0.1	-20
VIII 4	2 57	10 49	18 41	124	7 39.3	20 41	6.8	0.55	-0.4	-19
8	3 09	11 00	18 50	124	8 05.3	20 27	6.1	0.70	-0.8	-16
12	3 29	11 15	18 59	122	8 35.4	19 33	5.7	0.83	-1.2	-13
16	3 56	11 31	19 05	119	9 07.6	17 57	5.3	0.92	-1.4	-9
20	4 25	11 48	19 09	115	9 40.0	15 45	5.1	0.98	-1.7	-5
24	4 55	12 03	19 10	110	10 11.3	13 05	5.0	1.00	-1.9	-2
28	5 24	12 17	19 08	106	10 40.9	10 08	4.9	0.99	-1.6	3
IX 1	5 52	12 29	19 04	101	11 08.6	7 03	4.9	0.98	-1.2	7
5	6 17	12 39	18 59	96	11 34.7	3 55	4.9	0.95	-0.8	10
9	6 41	12 48	18 53	91	11 59.2	0 49	5.0	0.93	-0.6	13
13	7 03	12 55	18 46	86	12 22.6	- 2 13	5.1	0.90	-0.4	16
17	7 23	13 01	18 38	82	12 44.9	- 5 08	5.2	0.87	-0.3	18
21	7 42	13 07	18 30	78	13 06.3	- 7 55	5.4	0.83	-0.2	20
25	7 60	13 12	18 22	73	13 26.9	- 10 32	5.6	0.80	-0.1	22
29	8 16	13 15	18 14	70	13 46.6	- 12 56	5.8	0.76	-0.1	23
X 3	8 30	13 18	18 05	66	14 05.4	- 15 07	6.1	0.71	-0.0	25
7	8 42	13 20	17 56	63	14 22.8	- 17 01	6.5	0.65	-0.0	25
11	8 50	13 19	17 47	61	14 38.2	- 18 35	6.9	0.58	0.0	25
15	8 53	13 15	17 37	59	14 50.6	- 19 43	7.5	0.49	0.1	24
19	8 47	13 06	17 25	58	14 58.5	- 20 17	8.1	0.38	0.4	22
23	8 30	12 51	17 11	59	14 59.6	- 20 05	8.9	0.25	0.9	19
27	7 59	12 26	16 55	61	14 52.1	- 18 51	9.6	0.11	2.0	13
31	7 14	11 55	16 37	65	14 36.6	- 16 30	10.0	0.01	4.3	4
XI 4	6 25	11 21	16 19	70	14 18.5	- 13 36	9.8	0.02	4.0	-5
8	5 46	10 54	16 03	73	14 06.2	- 11 18	9.0	0.14	1.5	-13
12	5 26	10 38	15 51	74	14 04.6	- 10 24	8.0	0.33	0.2	-17
16	5 21	10 32	15 41	73	14 12.8	- 10 51	7.1	0.52	-0.4	-19
20	5 28	10 32	15 34	71	14 28.0	- 12 13	6.4	0.66	-0.6	-19
24	5 41	10 35	15 29	68	14 47.4	- 14 02	5.9	0.77	-0.7	-18
28	5 58	10 42	15 24	65	15 09.3	- 16 01	5.5	0.85	-0.7	-17
XII 2	6 17	10 50	15 22	62	15 32.9	- 17 58	5.2	0.90	-0.7	-15
6	6 36	10 59	15 20	59	15 57.5	- 19 46	5.0	0.93	-0.7	-13
10	6 56	11 09	15 21	56	16 23.0	- 21 22	4.9	0.96	-0.7	-11
14	7 15	11 19	15 23	54	16 49.2	- 22 43	4.8	0.97	-0.8	-8
18	7 32	11 30	15 28	52	17 15.9	- 23 45	4.7	0.99	-0.8	-6
22	7 49	11 42	15 35	51	17 43.2	- 24 29	4.7	0.99	-1.0	-4
26	8 03	11 54	15 45	50	18 11.0	- 24 52	4.6	1.00	-1.1	-2
30	8 15	12 06	15 58	50	18 39.1	- 24 52	4.7	1.00	-1.2	-2
2014 I 3	8 25	12 19	16 13	51	19 07.5	- 24 30	4.7	1.00	-1.1	3