



Merkur 2016

Datum	α	δ	b	Δ (AE)	E	mv	φ	\varnothing	k	q (")	$\Delta\alpha$ (h:m)	$\Delta\delta$ (')	l	r
1.01.	20:06	-21.0	-0.8	0.920	19 O	-0.3	91.3	7.30	0.488	3.74	1:23	2.0	30.6	0.325
4.01.	20:12	-20.0	0.0	0.842	18 O	0.1	107.4	7.98	0.350	5.18	1:15	2.8	48.2	0.314
7.01.	20:11	-19.1	0.9	0.771	15 O	0.9	125.8	8.72	0.208	6.91	1:01	3.4	66.6	0.308
10.01.	20:03	-18.5	1.8	0.713	10 O	2.2	145.9	9.42	0.086	8.61	0:41	3.5	85.5	0.308
13.01.	19:49	-18.3	2.7	0.677	5 O	4.1	165.5	9.92	0.016	9.76	0:14	3.3	104.2	0.313
16.01.	19:32	-18.4	3.2	0.667	5 W	4.2	165.8	10.07	0.015	9.92	-0:16	2.6	122.1	0.323
19.01.	19:17	-18.7	3.5	0.682	10 W	2.5	147.9	9.85	0.077	9.10	-0:44	1.8	138.9	0.337
22.01.	19:07	-19.2	3.3	0.716	16 W	1.4	130.8	9.39	0.173	7.77	-1:07	0.7	154.2	0.353
25.01.	19:03	-19.6	3.0	0.762	20 W	0.7	116.4	8.82	0.278	6.37	-1:24	-0.5	168.0	0.371
28.01.	19:04	-20.1	2.5	0.814	22 W	0.3	104.4	8.26	0.376	5.16	-1:35	-1.7	180.5	0.388
31.01.	19:10	-20.5	2.0	0.867	24 W	0.1	94.4	7.75	0.461	4.18	-1:42	-2.9	191.8	0.405
3.02.	19:19	-20.8	1.4	0.921	25 W	0.0	86.1	7.30	0.534	3.40	-1:45	-4.0	202.3	0.420
6.02.	19:30	-20.9	0.9	0.973	26 W	0.0	78.9	6.91	0.596	2.79	-1:46	-5.0	212.1	0.433
9.02.	19:44	-20.9	0.4	1.023	25 W	0.0	72.7	6.57	0.649	2.31	-1:44	-6.0	221.5	0.444
12.02.	19:58	-20.7	-0.1	1.070	25 W	-0.1	67.2	6.28	0.694	1.92	-1:41	-6.8	230.4	0.453
15.02.	20:14	-20.4	-0.5	1.113	24 W	-0.1	62.3	6.04	0.732	1.62	-1:37	-7.4	239.0	0.460
18.02.	20:31	-19.8	-0.9	1.153	23 W	-0.1	57.9	5.83	0.766	1.37	-1:32	-7.9	247.4	0.465
21.02.	20:48	-19.1	-1.3	1.190	22 W	-0.1	53.8	5.65	0.795	1.16	-1:26	-8.3	255.6	0.467
24.02.	21:06	-18.2	-1.5	1.223	21 W	-0.2	50.0	5.50	0.822	0.98	-1:20	-8.4	263.8	0.466
27.02.	21:24	-17.1	-1.8	1.253	20 W	-0.2	46.2	5.36	0.846	0.82	-1:13	-8.4	272.1	0.463
1.03.	21:43	-15.8	-2.0	1.280	18 W	-0.3	42.3	5.25	0.870	0.68	-1:06	-8.3	280.6	0.457
4.03.	22:02	-14.3	-2.1	1.304	16 W	-0.4	38.3	5.15	0.892	0.55	-0:58	-7.9	289.5	0.449
7.03.	22:21	-12.6	-2.2	1.325	14 W	-0.5	34.1	5.07	0.914	0.44	-0:50	-7.4	298.7	0.439
10.03.	22:41	-10.7	-2.2	1.341	12 W	-0.7	29.6	5.01	0.935	0.33	-0:42	-6.7	308.4	0.426
13.03.	23:00	-8.6	-2.1	1.353	10 W	-0.9	24.8	4.97	0.954	0.23	-0:33	-5.8	318.7	0.412
16.03.	23:20	-6.4	-2.0	1.360	8 W	-1.1	19.4	4.94	0.972	0.14	-0:24	-4.7	329.7	0.396
19.03.	23:41	-4.0	-1.8	1.361	5 W	-1.4	13.3	4.94	0.987	0.07	-0:14	-3.5	341.7	0.379
22.03.	0:02	-1.4	-1.5	1.355	2 W	-1.7	6.6	4.96	0.997	0.02	-0:04	-2.1	354.8	0.362
25.03.	0:23	1.3	-1.1	1.340	2 O	-1.9	4.7	5.01	0.998	0.01	0:06	-0.6	9.3	0.345
28.03.	0:45	4.1	-0.7	1.316	4 O	-1.8	13.3	5.11	0.987	0.07	0:17	1.1	25.2	0.329
31.03.	1:07	7.0	-0.2	1.280	7 O	-1.6	24.2	5.25	0.956	0.23	0:28	2.7	42.4	0.317
3.04.	1:29	9.7	0.4	1.232	11 O	-1.4	36.4	5.45	0.903	0.53	0:39	4.3	60.6	0.310
6.04.	1:50	12.4	0.9	1.173	13 O	-1.2	49.3	5.73	0.826	1.00	0:49	5.8	79.4	0.308
9.04.	2:10	14.8	1.5	1.106	16 O	-0.9	62.7	6.08	0.730	1.64	0:59	7.1	98.2	0.311
12.04.	2:29	16.8	2.0	1.031	18 O	-0.6	75.9	6.52	0.622	2.46	1:06	8.1	116.4	0.319
15.04.	2:45	18.5	2.4	0.954	19 O	-0.3	88.7	7.04	0.512	3.44	1:11	8.7	133.6	0.332
18.04.	2:59	19.8	2.7	0.879	20 O	0.1	100.9	7.65	0.406	4.55	1:14	8.9	149.4	0.348
21.04.	3:10	20.7	2.9	0.807	20 O	0.6	112.4	8.32	0.309	5.75	1:13	8.8	163.7	0.365
24.04.	3:17	21.2	2.8	0.743	19 O	1.1	123.5	9.05	0.224	7.02	1:10	8.2	176.6	0.383
27.04.	3:21	21.2	2.6	0.686	17 O	1.8	134.2	9.79	0.151	8.31	1:02	7.3	188.3	0.400
30.04.	3:22	20.9	2.3	0.639	14 O	2.6	144.9	10.52	0.091	9.57	0:52	6.0	199.0	0.415



Datum	α	δ	b	Δ (AE)	E	mv	φ	\emptyset	k	q (")	$\Delta\alpha$ (h:m)	$\Delta\delta$ (')	l	r
3.05.	3:20	20.1	1.7	0.601	10 O	3.5	155.8	11.18	0.044	10.69	0:38	4.4	209.0	0.429
6.05.	3:15	19.1	0.9	0.575	6 O	4.6	166.8	11.70	0.013	11.54	0:22	2.5	218.5	0.441
9.05.	3:09	17.8	0.1	0.559	1 O	5.9	177.7	12.02	0.000	12.02	0:04	0.4	227.6	0.451
12.05.	3:02	16.4	-0.8	0.555	4 W	5.2	171.5	12.11	0.005	12.04	-0:14	-1.8	236.3	0.458
15.05.	2:57	15.2	-1.6	0.561	8 W	4.1	161.3	11.98	0.027	11.66	-0:32	-3.8	244.7	0.464
18.05.	2:53	14.1	-2.3	0.577	13 W	3.2	151.7	11.65	0.060	10.95	-0:48	-5.5	252.9	0.466
21.05.	2:51	13.4	-2.9	0.601	16 W	2.5	142.7	11.19	0.102	10.05	-1:01	-6.9	261.1	0.466
24.05.	2:52	13.0	-3.4	0.632	19 W	2.0	134.4	10.63	0.150	9.04	-1:13	-7.8	269.4	0.464
27.05.	2:54	12.9	-3.6	0.670	21 W	1.5	126.6	10.03	0.202	8.01	-1:22	-8.4	277.8	0.459
30.05.	3:00	13.1	-3.8	0.714	23 W	1.2	119.2	9.42	0.256	7.01	-1:29	-8.7	286.6	0.452
2.06.	3:07	13.7	-3.7	0.762	24 W	0.9	112.0	8.82	0.313	6.06	-1:34	-8.5	295.7	0.442
5.06.	3:17	14.5	-3.6	0.814	24 W	0.6	105.0	8.26	0.370	5.20	-1:36	-8.1	305.2	0.431
8.06.	3:29	15.5	-3.4	0.869	24 W	0.4	98.1	7.74	0.430	4.41	-1:37	-7.4	315.3	0.417
11.06.	3:43	16.6	-3.0	0.926	23 W	0.1	91.0	7.26	0.491	3.69	-1:35	-6.5	326.0	0.402
14.06.	3:59	17.9	-2.6	0.985	22 W	-0.1	83.5	6.82	0.557	3.02	-1:32	-5.4	337.7	0.385
17.06.	4:17	19.2	-2.1	1.045	20 W	-0.3	75.3	6.43	0.627	2.40	-1:26	-4.2	350.4	0.367
20.06.	4:37	20.5	-1.5	1.105	18 W	-0.6	66.3	6.08	0.701	1.82	-1:18	-2.9	4.5	0.350
23.06.	5:00	21.8	-1.0	1.163	16 W	-0.8	56.2	5.78	0.778	1.28	-1:08	-1.7	19.9	0.334
26.06.	5:24	22.8	-0.4	1.217	13 W	-1.1	45.2	5.52	0.852	0.81	-0:56	-0.5	36.7	0.321
29.06.	5:51	23.6	0.2	1.262	10 W	-1.4	33.3	5.32	0.918	0.44	-0:42	0.4	54.7	0.312
2.07.	6:18	24.1	0.7	1.298	6 W	-1.7	21.1	5.18	0.966	0.17	-0:27	1.1	73.3	0.308
5.07.	6:47	24.1	1.1	1.320	3 W	-2.0	9.4	5.09	0.993	0.03	-0:11	1.4	92.1	0.309
8.07.	7:15	23.8	1.5	1.331	2 O	-2.1	5.8	5.05	0.997	0.01	0:05	1.3	110.6	0.316
11.07.	7:43	23.0	1.7	1.329	5 O	-1.7	15.3	5.06	0.982	0.09	0:21	0.9	128.2	0.328
14.07.	8:10	21.9	1.8	1.317	8 O	-1.3	24.9	5.10	0.953	0.24	0:35	0.3	144.5	0.343
17.07.	8:35	20.5	1.8	1.297	11 O	-1.0	33.5	5.18	0.917	0.43	0:48	-0.6	159.2	0.360
20.07.	8:58	18.9	1.7	1.270	14 O	-0.8	41.0	5.29	0.878	0.65	0:59	-1.7	172.6	0.377
23.07.	9:20	17.2	1.5	1.240	17 O	-0.6	47.5	5.42	0.838	0.88	1:09	-2.9	184.6	0.394
26.07.	9:40	15.3	1.3	1.206	19 O	-0.4	53.3	5.57	0.799	1.12	1:17	-4.1	195.6	0.410
29.07.	9:59	13.4	1.0	1.170	21 O	-0.2	58.6	5.75	0.760	1.38	1:24	-5.3	205.9	0.425
1.08.	10:16	11.4	0.6	1.131	23 O	-0.1	63.6	5.94	0.722	1.65	1:30	-6.6	215.5	0.437
4.08.	10:32	9.4	0.2	1.090	24 O	0.0	68.4	6.16	0.684	1.95	1:34	-7.8	224.7	0.448
7.08.	10:47	7.4	-0.3	1.048	25 O	0.1	73.1	6.41	0.646	2.27	1:38	-8.9	233.5	0.456
10.08.	11:00	5.5	-0.8	1.006	26 O	0.2	77.7	6.68	0.606	2.63	1:40	-10.0	242.0	0.462
13.08.	11:13	3.7	-1.3	0.963	27 O	0.2	82.5	6.98	0.566	3.03	1:41	-10.9	250.3	0.466
16.08.	11:23	2.0	-1.8	0.920	27 O	0.3	87.4	7.31	0.522	3.49	1:40	-11.7	258.5	0.467
19.08.	11:33	0.4	-2.3	0.876	27 O	0.4	92.8	7.67	0.476	4.02	1:38	-12.3	266.7	0.465
22.08.	11:40	-1.0	-2.8	0.833	27 O	0.5	98.8	8.07	0.424	4.65	1:35	-12.7	275.1	0.461
25.08.	11:46	-2.1	-3.3	0.789	26 O	0.7	105.5	8.51	0.366	5.40	1:29	-12.8	283.7	0.454
28.08.	11:49	-3.0	-3.8	0.747	24 O	0.9	113.3	8.99	0.302	6.27	1:22	-12.6	292.7	0.446
31.08.	11:49	-3.4	-4.1	0.709	21 O	1.2	122.1	9.48	0.234	7.26	1:11	-11.9	302.1	0.435



Datum	α	δ	b	Δ (AE)	E	mv	φ	\emptyset	k	q (")	$\Delta\alpha$ (h:m)	$\Delta\delta$ ($^{\circ}$)	l	r
3.09.	11:47	-3.4	-4.3	0.676	18 O	1.7	132.3	9.95	0.164	8.32	0:58	-10.8	312.0	0.422
6.09.	11:41	-2.8	-4.4	0.651	14 O	2.5	143.8	10.33	0.097	9.33	0:41	-9.1	322.5	0.407
9.09.	11:33	-1.7	-4.1	0.637	9 O	3.5	156.5	10.55	0.041	10.11	0:22	-6.9	333.8	0.391
12.09.	11:23	0.0	-3.6	0.638	4 O	4.7	168.7	10.53	0.010	10.43	0:02	-4.1	346.2	0.373
15.09.	11:14	1.8	-2.9	0.657	5 W	4.4	166.3	10.23	0.014	10.08	-0:19	-1.1	359.8	0.356
18.09.	11:06	3.7	-1.9	0.695	9 W	2.8	150.9	9.67	0.063	9.06	-0:37	1.9	14.8	0.339
21.09.	11:03	5.1	-0.9	0.752	14 W	1.5	133.7	8.94	0.155	7.56	-0:51	4.5	31.2	0.325
24.09.	11:05	5.9	0.0	0.824	16 W	0.5	116.3	8.16	0.278	5.89	-0:60	6.4	48.8	0.314
27.09.	11:12	6.0	0.8	0.905	18 W	-0.1	99.4	7.43	0.418	4.32	-1:04	7.7	67.2	0.308
30.09.	11:23	5.4	1.3	0.989	18 W	-0.6	83.4	6.79	0.558	3.00	-1:03	8.3	86.1	0.308
3.10.	11:38	4.2	1.7	1.072	17 W	-0.8	68.6	6.27	0.683	1.99	-0:59	8.3	104.7	0.313
6.10.	11:55	2.6	1.9	1.148	15 W	-1.0	55.3	5.85	0.785	1.26	-0:53	7.8	122.6	0.323
9.10.	12:13	0.7	1.9	1.216	13 W	-1.1	43.6	5.53	0.862	0.76	-0:46	7.0	139.4	0.337
12.10.	12:32	-1.4	1.9	1.274	11 W	-1.1	33.6	5.28	0.917	0.44	-0:38	6.0	154.6	0.354
15.10.	12:51	-3.6	1.7	1.321	9 W	-1.2	25.1	5.09	0.953	0.24	-0:31	5.0	168.4	0.371
18.10.	13:09	-5.8	1.5	1.359	7 W	-1.2	17.9	4.94	0.976	0.12	-0:23	3.9	180.8	0.389
21.10.	13:28	-8.0	1.2	1.389	5 W	-1.3	11.7	4.84	0.990	0.05	-0:15	2.8	192.2	0.405
24.10.	13:47	-10.1	0.9	1.411	3 W	-1.3	6.3	4.76	0.997	0.01	-0:08	1.7	202.6	0.420
27.10.	14:06	-12.1	0.6	1.427	1 W	-1.4	1.7	4.71	1.000	0.00	-0:01	0.7	212.4	0.433
30.10.	14:24	-14.1	0.3	1.437	1 O	-1.3	3.3	4.68	0.999	0.00	0:06	-0.2	221.8	0.445
2.11.	14:43	-15.9	-0.1	1.440	3 O	-1.1	7.3	4.67	0.996	0.02	0:13	-1.1	230.7	0.454
5.11.	15:02	-17.6	-0.4	1.439	5 O	-0.9	11.2	4.67	0.991	0.04	0:20	-1.9	239.3	0.460
8.11.	15:21	-19.2	-0.7	1.433	7 O	-0.8	14.8	4.69	0.983	0.08	0:27	-2.6	247.6	0.465
11.11.	15:39	-20.6	-1.1	1.422	9 O	-0.7	18.4	4.73	0.974	0.12	0:34	-3.2	255.8	0.467
14.11.	15:59	-21.9	-1.4	1.406	10 O	-0.6	22.0	4.78	0.963	0.17	0:40	-3.6	264.0	0.466
17.11.	16:18	-23.0	-1.6	1.385	12 O	-0.6	25.8	4.85	0.950	0.24	0:47	-4.0	272.3	0.463
20.11.	16:37	-24.0	-1.9	1.358	13 O	-0.5	29.8	4.95	0.934	0.33	0:54	-4.2	280.9	0.457
23.11.	16:57	-24.7	-2.1	1.326	15 O	-0.5	34.1	5.07	0.914	0.44	1:01	-4.4	289.7	0.449
26.11.	17:16	-25.3	-2.2	1.289	16 O	-0.5	38.9	5.21	0.889	0.58	1:08	-4.3	299.0	0.438
29.11.	17:35	-25.7	-2.4	1.246	18 O	-0.5	44.2	5.39	0.858	0.76	1:14	-4.2	308.7	0.426
2.12.	17:54	-25.8	-2.4	1.197	19 O	-0.5	50.2	5.61	0.820	1.01	1:20	-3.9	319.0	0.412
5.12.	18:12	-25.8	-2.4	1.142	20 O	-0.5	57.1	5.88	0.771	1.34	1:25	-3.4	330.1	0.396
8.12.	18:29	-25.5	-2.2	1.081	20 O	-0.5	65.3	6.21	0.709	1.81	1:29	-2.8	342.0	0.379
11.12.	18:44	-25.1	-2.0	1.014	21 O	-0.4	75.1	6.63	0.629	2.46	1:31	-2.0	355.2	0.361
14.12.	18:56	-24.4	-1.6	0.941	20 O	-0.3	86.9	7.14	0.527	3.38	1:29	-1.2	9.8	0.344
17.12.	19:03	-23.7	-1.0	0.866	19 O	0.0	101.1	7.76	0.404	4.63	1:24	-0.3	25.7	0.329
20.12.	19:05	-22.9	-0.3	0.795	17 O	0.5	117.9	8.46	0.266	6.21	1:12	0.6	43.0	0.317
23.12.	19:00	-22.1	0.7	0.734	12 O	1.6	137.2	9.16	0.133	7.94	0:53	1.4	61.2	0.310
26.12.	18:47	-21.3	1.6	0.691	7 O	3.3	158.2	9.72	0.036	9.37	0:27	2.0	80.0	0.308
29.12.	18:30	-20.8	2.5	0.674	3 W	4.8	172.0	9.96	0.005	9.91	-0:03	2.5	98.8	0.311

Die Ephemeriden gelten für 0 Uhr Weltzeit.

Geozentrische Koordinaten:

α und δ : Rektaszension und Deklination zum Äquinoktium des Datums. b: ekliptikale Breite; Δ : Abstand von der Erde.
E: Elongation (Winkel zwischen Planet und Sonnenmitte); mv: visuelle Helligkeit; φ : Phasenwinkel

Physische Ephemeriden (für Beobachtungen am Teleskop):

\emptyset : scheinbarer Durchmesser;
k: beleuchteter Teil; q: Phasendefekt (Beleuchtungsdefekt)

Koordinaten für Tagesbeobachtungen:

$\Delta\alpha$ und $\Delta\delta$: Rektaszensions- und Deklinationsdifferenzen (Venus minus Sonne)

Heliozentrische Koordinaten:

l: Länge zum Äquinoktium des Datums; r: Abstand von der Sonne.