



Ephemeriden für Sternfreunde
von Karl-Heinz Bücke

Jupiter

Januar 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_V	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:35	3.9	5.05	10.0	-1.7	39.0"	36.4"	-1.4	-1.8	-0.3"	162.9	1.2	5.41
5	11:35	3.9	4.99	9.8	-1.8	39.5"	36.9"	-1.4	-1.8	-0.3"	163.2	1.2	5.42
9	11:36	3.9	4.93	9.5	-1.8	40.0"	37.3"	-1.4	-1.9	-0.3"	163.5	1.2	5.42
13	11:35	3.9	4.87	9.1	-1.8	40.4"	37.7"	-1.4	-1.9	-0.3"	163.8	1.2	5.42
17	11:35	3.9	4.82	8.7	-1.8	40.9"	38.2"	-1.4	-1.9	-0.2"	164.1	1.2	5.42
21	11:35	4.0	4.76	8.3	-1.9	41.3"	38.5"	-1.4	-1.9	-0.2"	164.4	1.2	5.42
25	11:34	4.0	4.71	7.8	-1.9	41.8"	39.0"	-1.4	-1.9	-0.2"	164.7	1.2	5.42
29	11:33	4.1	4.67	7.2	-1.9	42.2"	39.4"	-1.5	-1.9	-0.2"	165.0	1.2	5.42

Februar 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_V	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:32	4.2	4.64	6.8	-1.9	42.5"	39.7"	-1.5	-1.9	-0.1"	165.3	1.2	5.42
5	11:31	4.4	4.60	6.2	-1.9	42.9"	40.0"	-1.5	-1.9	-0.1"	165.6	1.2	5.42
9	11:30	4.5	4.56	5.5	-2.0	43.2"	40.3"	-1.5	-1.9	-0.1"	165.9	1.2	5.42
13	11:28	4.7	4.53	4.8	-2.0	43.5"	40.6"	-1.5	-1.9	-0.1"	166.2	1.2	5.42
17	11:27	4.8	4.50	4.1	-2.0	43.8"	40.9"	-1.5	-1.9	-0.1"	166.5	1.2	5.42
21	11:25	5.0	4.48	3.3	-2.0	44.0"	41.1"	-1.5	-1.9	0.0"	166.8	1.2	5.42
25	11:23	5.2	4.46	2.5	-2.0	44.2"	41.3"	-1.6	-1.9	0.0"	167.1	1.2	5.42
29	11:21	5.4	4.45	1.7	-2.0	44.3"	41.3"	-1.6	-1.9	0.0"	167.4	1.2	5.42

März 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_V	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:21	5.5	4.44	1.5	-2.0	44.3"	41.3"	-1.6	-1.9	0.0"	167.5	1.2	5.43
5	11:19	5.7	4.44	0.7	-2.0	44.4"	41.4"	-1.6	-1.9	0.0"	167.8	1.2	5.43
9	11:17	5.9	4.43	0.1	-2.0	44.4"	41.4"	-1.6	-1.9	0.0"	168.1	1.2	5.43
13	11:15	6.1	4.44	0.9	-2.0	44.4"	41.4"	-1.6	-1.8	0.0"	168.4	1.2	5.43
17	11:13	6.3	4.44	1.8	-2.0	44.3"	41.3"	-1.6	-1.8	0.0"	168.7	1.2	5.43
21	11:11	6.5	4.46	2.6	-2.0	44.2"	41.3"	-1.6	-1.8	0.0"	169.0	1.2	5.43
25	11:10	6.7	4.47	3.4	-2.0	44.0"	41.1"	-1.7	-1.8	0.0"	169.3	1.2	5.43
29	11:08	6.8	4.50	4.1	-2.0	43.8"	40.9"	-1.7	-1.8	0.1"	169.6	1.2	5.43

April 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_V	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:07	7.0	4.52	4.7	-2.0	43.6"	40.7"	-1.7	-1.8	0.1"	169.8	1.2	5.43
5	11:05	7.1	4.55	5.4	-2.0	43.3"	40.4"	-1.7	-1.7	0.1"	170.1	1.2	5.43
9	11:04	7.3	4.58	6.1	-2.0	43.0"	40.1"	-1.7	-1.7	0.1"	170.4	1.2	5.43
13	11:03	7.4	4.62	6.7	-1.9	42.6"	39.8"	-1.7	-1.7	0.1"	170.7	1.2	5.43
17	11:02	7.5	4.66	7.3	-1.9	42.3"	39.5"	-1.7	-1.7	0.2"	171.1	1.2	5.43
21	11:01	7.6	4.70	7.8	-1.9	41.9"	39.1"	-1.8	-1.6	0.2"	171.4	1.2	5.43
25	11:00	7.7	4.75	8.4	-1.9	41.4"	38.6"	-1.8	-1.6	0.2"	171.7	1.2	5.43
29	10:59	7.8	4.80	8.8	-1.8	41.0"	38.3"	-1.8	-1.6	0.2"	172.0	1.2	5.43

Mai 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	10:59	7.8	4.83	9.0	-1.8	40.8"	38.1"	-1.8	-1.6	0.3"	172.1	1.2	5.43
5	10:59	7.8	4.88	9.4	-1.8	40.3"	37.6"	-1.8	-1.6	0.3"	172.4	1.2	5.43
9	10:59	7.8	4.94	9.7	-1.8	39.9"	37.2"	-1.8	-1.6	0.3"	172.7	1.2	5.44
13	10:59	7.8	5.00	10.0	-1.8	39.4"	36.8"	-1.8	-1.6	0.3"	173.0	1.2	5.44
17	10:59	7.8	5.06	10.3	-1.7	38.9"	36.3"	-1.8	-1.6	0.3"	173.3	1.2	5.44
21	10:59	7.8	5.12	10.4	-1.7	38.5"	35.9"	-1.9	-1.5	0.3"	173.6	1.2	5.44
25	11:00	7.7	5.18	10.6	-1.7	38.0"	35.5"	-1.9	-1.5	0.3"	173.9	1.2	5.44
29	11:01	7.6	5.24	10.7	-1.7	37.6"	35.1"	-1.9	-1.5	0.3"	174.2	1.2	5.44

Juni 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:02	7.5	5.29	10.7	-1.6	37.2"	34.7"	-1.9	-1.5	0.3"	174.5	1.2	5.44
5	11:03	7.4	5.35	10.7	-1.6	36.8"	34.3"	-1.9	-1.5	0.3"	174.8	1.3	5.44
9	11:04	7.3	5.42	10.7	-1.6	36.4"	34.0"	-1.9	-1.5	0.3"	175.1	1.3	5.44
13	11:05	7.2	5.48	10.7	-1.6	36.0"	33.6"	-1.9	-1.5	0.3"	175.4	1.3	5.44
17	11:07	7.0	5.54	10.6	-1.5	35.5"	33.1"	-1.9	-1.5	0.3"	175.7	1.3	5.44
21	11:08	6.8	5.60	10.4	-1.5	35.2"	32.9"	-2.0	-1.5	0.3"	176.0	1.3	5.44
25	11:10	6.7	5.66	10.3	-1.5	34.8"	32.5"	-2.0	-1.5	0.3"	176.3	1.3	5.44
29	11:12	6.5	5.72	10.0	-1.5	34.4"	32.1"	-2.0	-1.6	0.3"	176.6	1.3	5.44

Juli 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:13	6.4	5.75	9.9	-1.5	34.2"	31.9"	-2.0	-1.6	0.3"	176.8	1.3	5.44
5	11:15	6.2	5.81	9.7	-1.4	33.9"	31.6"	-2.0	-1.6	0.2"	177.1	1.3	5.44
9	11:17	5.9	5.86	9.4	-1.4	33.6"	31.4"	-2.0	-1.6	0.2"	177.4	1.3	5.44
13	11:19	5.7	5.92	9.1	-1.4	33.3"	31.1"	-2.0	-1.6	0.2"	177.7	1.3	5.44
17	11:22	5.4	5.97	8.7	-1.4	33.0"	30.8"	-2.0	-1.6	0.2"	178.0	1.3	5.44
21	11:24	5.2	6.02	8.4	-1.4	32.7"	30.5"	-2.0	-1.6	0.2"	178.3	1.3	5.44
25	11:27	4.9	6.07	8.0	-1.3	32.5"	30.3"	-2.1	-1.6	0.2"	178.6	1.3	5.44
29	11:29	4.6	6.11	7.6	-1.3	32.2"	30.1"	-2.1	-1.7	0.1"	178.9	1.3	5.44

August 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:31	4.4	6.14	7.3	-1.3	32.0"	29.9"	-2.1	-1.7	0.1"	179.1	1.3	5.44
5	11:34	4.1	6.19	6.8	-1.3	31.8"	29.7"	-2.1	-1.7	0.1"	179.4	1.3	5.45
9	11:37	3.8	6.22	6.4	-1.3	31.6"	29.5"	-2.1	-1.7	0.1"	179.7	1.3	5.45
13	11:40	3.5	6.26	5.9	-1.3	31.5"	29.4"	-2.1	-1.7	0.1"	180.0	1.3	5.45
17	11:43	3.2	6.29	5.4	-1.3	31.3"	29.2"	-2.1	-1.8	0.1"	180.3	1.3	5.45
21	11:46	2.9	6.32	4.9	-1.2	31.1"	29.0"	-2.1	-1.8	0.1"	180.6	1.3	5.45
25	11:49	2.6	6.35	4.4	-1.2	31.0"	28.9"	-2.2	-1.8	0.0"	180.9	1.3	5.45
29	11:52	2.2	6.37	3.9	-1.2	30.9"	28.8"	-2.2	-1.8	0.0"	181.2	1.3	5.45

September 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	11:54	2.0	6.39	3.5	-1.2	30.8"	28.7"	-2.2	-1.9	0.0"	181.5	1.3	5.45
5	11:57	1.7	6.41	3.0	-1.2	30.7"	28.7"	-2.2	-1.9	0.0"	181.8	1.3	5.45
9	12:00	1.3	6.42	2.4	-1.2	30.7"	28.7"	-2.2	-1.9	0.0"	182.1	1.3	5.45
13	12:03	1.0	6.44	1.9	-1.2	30.6"	28.6"	-2.2	-1.9	0.0"	182.4	1.3	5.45
17	12:07	0.6	6.44	1.3	-1.2	30.6"	28.6"	-2.2	-2.0	0.0"	182.7	1.3	5.45
21	12:10	0.3	6.45	0.7	-1.2	30.5"	28.5"	-2.2	-2.0	0.0"	183.0	1.3	5.45
25	12:13	0.0	6.45	0.2	-1.2	30.5"	28.5"	-2.2	-2.0	0.0"	183.3	1.3	5.45
29	12:16	-0.4	6.45	0.4	-1.2	30.5"	28.5"	-2.3	-2.1	0.0"	183.6	1.3	5.45

Oktober 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	12:18	-0.6	6.45	0.7	-1.2	30.5"	28.5"	-2.3	-2.1	0.0"	183.7	1.3	5.45
5	12:21	-0.9	6.44	1.2	-1.2	30.6"	28.6"	-2.3	-2.1	0.0"	184.0	1.3	5.45
9	12:24	-1.2	6.43	1.8	-1.2	30.6"	28.6"	-2.3	-2.2	0.0"	184.3	1.3	5.45
13	12:27	-1.6	6.42	2.3	-1.2	30.7"	28.7"	-2.3	-2.2	0.0"	184.6	1.3	5.45
17	12:30	-1.9	6.40	2.9	-1.2	30.8"	28.7"	-2.3	-2.2	0.0"	184.9	1.3	5.45
21	12:33	-2.2	6.38	3.4	-1.2	30.9"	28.8"	-2.3	-2.2	0.0"	185.2	1.3	5.45
25	12:36	-2.6	6.36	4.0	-1.2	31.0"	28.9"	-2.3	-2.3	0.0"	185.5	1.3	5.45
29	12:40	-2.9	6.33	4.5	-1.2	31.1"	29.0"	-2.3	-2.3	0.0"	185.8	1.3	5.45

November 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	12:42	-3.1	6.31	4.9	-1.2	31.2"	29.1"	-2.3	-2.3	-0.1"	186.1	1.3	5.45
5	12:45	-3.5	6.28	5.4	-1.3	31.4"	29.3"	-2.4	-2.4	-0.1"	186.4	1.3	5.45
9	12:48	-3.8	6.24	5.9	-1.3	31.6"	29.5"	-2.4	-2.4	-0.1"	186.7	1.3	5.45
13	12:51	-4.1	6.20	6.3	-1.3	31.7"	29.6"	-2.4	-2.4	-0.1"	187.0	1.3	5.45
17	12:53	-4.4	6.16	6.8	-1.3	32.0"	29.9"	-2.4	-2.5	-0.1"	187.3	1.3	5.45
21	12:56	-4.6	6.12	7.2	-1.3	32.2"	30.1"	-2.4	-2.5	-0.1"	187.6	1.3	5.45
25	12:59	-4.9	6.07	7.7	-1.3	32.4"	30.2"	-2.4	-2.5	-0.1"	187.9	1.3	5.45
29	13:01	-5.2	6.02	8.0	-1.3	32.7"	30.5"	-2.4	-2.6	-0.2"	188.2	1.3	5.45

Dezember 2016 (0^h UT)

Tag	α	δ	Δ	φ	m_v	\varnothing_A	\varnothing_P	D_s	D_e	q	I	b	r
1	13:03	-5.3	6.00	8.2	-1.4	32.8"	30.6"	-2.4	-2.6	-0.2"	188.3	1.3	5.45
5	13:05	-5.6	5.95	8.6	-1.4	33.1"	30.9"	-2.4	-2.6	-0.2"	188.6	1.3	5.45
9	13:07	-5.8	5.89	8.9	-1.4	33.4"	31.2"	-2.4	-2.6	-0.2"	188.9	1.3	5.45
13	13:10	-6.0	5.83	9.2	-1.4	33.8"	31.5"	-2.5	-2.7	-0.2"	189.2	1.3	5.45
17	13:12	-6.3	5.78	9.5	-1.4	34.1"	31.8"	-2.5	-2.7	-0.2"	189.5	1.3	5.45
21	13:14	-6.5	5.72	9.7	-1.5	34.5"	32.2"	-2.5	-2.7	-0.2"	189.8	1.3	5.45
25	13:16	-6.6	5.65	9.9	-1.5	34.8"	32.5"	-2.5	-2.8	-0.3"	190.1	1.3	5.45
29	13:17	-6.8	5.59	10.1	-1.5	35.2"	32.9"	-2.5	-2.8	-0.3"	190.4	1.3	5.45