



Ephemeriden für Sternfreunde

von Karl-Heinz Bücke

Saturn

Januar 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\dot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:06	-22.5	11.05	-0.9	0.6	15.0"	13.7"	34.0"	15.2"	26.6	26.6
6	18:09	-22.5	11.04	-1.3	0.6	15.0"	13.7"	34.0"	15.2"	26.6	26.5
11	18:11	-22.5	11.01	-1.7	0.6	15.0"	13.7"	34.1"	15.2"	26.5	26.4
16	18:13	-22.5	10.99	-2.1	0.5	15.1"	13.8"	34.2"	15.2"	26.5	26.4
21	18:16	-22.5	10.95	-2.5	0.5	15.1"	13.8"	34.3"	15.2"	26.5	26.3
26	18:18	-22.5	10.91	-2.9	0.5	15.2"	13.9"	34.4"	15.2"	26.5	26.2
31	18:20	-22.5	10.86	-3.3	0.5	15.2"	13.9"	34.6"	15.2"	26.5	26.2

Februar 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\dot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:21	-22.5	10.85	-3.4	0.5	15.2"	13.9"	34.6"	15.2"	26.5	26.2
6	18:23	-22.5	10.80	-3.7	0.4	15.3"	14.0"	34.8"	15.3"	26.5	26.1
11	18:25	-22.4	10.74	-4.1	0.4	15.4"	14.1"	34.9"	15.3"	26.5	26.0
16	18:27	-22.4	10.68	-4.4	0.4	15.5"	14.2"	35.2"	15.4"	26.5	26.0
21	18:29	-22.4	10.61	-4.6	0.4	15.6"	14.2"	35.4"	15.4"	26.5	25.9
26	18:31	-22.4	10.54	-4.9	0.3	15.7"	14.3"	35.6"	15.5"	26.4	25.8

März 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\dot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:32	-22.4	10.50	-5.0	0.3	15.8"	14.4"	35.8"	15.6"	26.4	25.8
6	18:33	-22.3	10.42	-5.2	0.3	15.9"	14.5"	36.0"	15.6"	26.4	25.7
11	18:34	-22.3	10.34	-5.4	0.3	16.0"	14.6"	36.3"	15.7"	26.4	25.7
16	18:36	-22.3	10.26	-5.5	0.3	16.1"	14.7"	36.6"	15.8"	26.4	25.6
21	18:37	-22.3	10.18	-5.6	0.2	16.3"	14.8"	36.9"	15.9"	26.4	25.6
26	18:38	-22.3	10.10	-5.7	0.2	16.4"	15.0"	37.2"	16.0"	26.4	25.6
31	18:38	-22.3	10.01	-5.7	0.2	16.5"	15.1"	37.5"	16.2"	26.4	25.5

April 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\dot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:38	-22.3	10.00	-5.7	0.2	16.6"	15.1"	37.6"	16.2"	26.4	25.5
6	18:39	-22.3	9.91	-5.6	0.2	16.7"	15.2"	37.9"	16.3"	26.4	25.5
11	18:39	-22.2	9.83	-5.6	0.2	16.8"	15.4"	38.2"	16.4"	26.3	25.5
16	18:39	-22.2	9.75	-5.5	0.2	17.0"	15.5"	38.5"	16.6"	26.3	25.5
21	18:39	-22.2	9.67	-5.3	0.1	17.1"	15.6"	38.8"	16.7"	26.3	25.5
26	18:39	-22.2	9.60	-5.1	0.1	17.2"	15.7"	39.1"	16.8"	26.3	25.5

Mai 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\ddot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D _S	D _E
1	18:39	-22.3	9.52	-4.9	0.1	17.4"	15.9"	39.4"	17.0"	26.3	25.5
6	18:38	-22.3	9.45	-4.6	0.1	17.5"	16.0"	39.7"	17.1"	26.3	25.5
11	18:38	-22.3	9.39	-4.3	0.1	17.6"	16.1"	40.0"	17.2"	26.3	25.5
16	18:37	-22.3	9.33	-4.0	0.1	17.7"	16.2"	40.2"	17.4"	26.3	25.6
21	18:36	-22.3	9.27	-3.6	0.1	17.8"	16.3"	40.5"	17.5"	26.2	25.6
26	18:35	-22.3	9.22	-3.2	0.1	17.9"	16.4"	40.7"	17.6"	26.2	25.7
31	18:34	-22.3	9.18	-2.7	0.1	18.0"	16.5"	40.9"	17.7"	26.2	25.7

Juni 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\ddot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D _S	D _E
1	18:33	-22.3	9.17	-2.6	0.1	18.0"	16.5"	40.9"	17.8"	26.2	25.7
6	18:32	-22.4	9.14	-2.2	0.2	18.1"	16.5"	41.1"	17.9"	26.2	25.8
11	18:30	-22.4	9.11	-1.7	0.2	18.2"	16.6"	41.2"	18.0"	26.2	25.8
16	18:29	-22.4	9.09	-1.2	0.2	18.2"	16.6"	41.3"	18.0"	26.2	25.9
21	18:27	-22.4	9.08	-0.7	0.2	18.2"	16.7"	41.4"	18.1"	26.1	26.0
26	18:26	-22.5	9.07	-0.2	0.2	18.2"	16.7"	41.4"	18.2"	26.1	26.0

Juli 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\ddot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D _S	D _E
1	18:24	-22.5	9.07	0.3	0.2	18.2"	16.7"	41.4"	18.2"	26.1	26.1
6	18:23	-22.5	9.08	0.9	0.3	18.2"	16.7"	41.4"	18.2"	26.1	26.1
11	18:21	-22.5	9.09	1.4	0.3	18.2"	16.6"	41.3"	18.2"	26.1	26.2
16	18:20	-22.5	9.12	1.9	0.3	18.1"	16.6"	41.2"	18.2"	26.1	26.3
21	18:18	-22.6	9.15	2.3	0.3	18.1"	16.5"	41.0"	18.2"	26.0	26.3
26	18:17	-22.6	9.18	2.8	0.4	18.0"	16.5"	40.9"	18.1"	26.0	26.4
31	18:16	-22.6	9.23	3.2	0.4	17.9"	16.4"	40.7"	18.1"	26.0	26.4

August 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\ddot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D _S	D _E
1	18:15	-22.6	9.24	3.3	0.4	17.9"	16.4"	40.6"	18.1"	26.0	26.4
6	18:14	-22.6	9.29	3.7	0.4	17.8"	16.3"	40.4"	18.0"	26.0	26.5
11	18:13	-22.6	9.34	4.1	0.5	17.7"	16.2"	40.2"	17.9"	26.0	26.5
16	18:13	-22.7	9.40	4.4	0.5	17.6"	16.1"	39.9"	17.8"	26.0	26.5
21	18:12	-22.7	9.47	4.7	0.5	17.5"	16.0"	39.6"	17.7"	25.9	26.6
26	18:12	-22.7	9.54	5.0	0.5	17.3"	15.9"	39.4"	17.6"	25.9	26.6
31	18:11	-22.7	9.61	5.2	0.6	17.2"	15.7"	39.1"	17.5"	25.9	26.6

September 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\ddot{A}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D _S	D _E
1	18:11	-22.7	9.63	5.2	0.6	17.2"	15.7"	39.0"	17.5"	25.9	26.6
6	18:11	-22.7	9.71	5.4	0.6	17.0"	15.6"	38.7"	17.3"	25.9	26.6
11	18:11	-22.7	9.78	5.5	0.6	16.9"	15.5"	38.4"	17.2"	25.9	26.6
16	18:11	-22.7	9.87	5.6	0.6	16.8"	15.3"	38.1"	17.1"	25.8	26.6
21	18:12	-22.8	9.95	5.7	0.7	16.6"	15.2"	37.7"	16.9"	25.8	26.6
26	18:12	-22.8	10.03	5.7	0.7	16.5"	15.1"	37.4"	16.8"	25.8	26.6

Oktober 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:13	-22.8	10.11	5.7	0.7	16.4"	15.0"	37.1"	16.6"	25.8	26.6
6	18:14	-22.8	10.20	5.6	0.7	16.2"	14.8"	36.8"	16.5"	25.8	26.6
11	18:15	-22.8	10.28	5.5	0.7	16.1"	14.7"	36.5"	16.3"	25.7	26.6
16	18:16	-22.8	10.36	5.4	0.7	16.0"	14.6"	36.2"	16.2"	25.7	26.6
21	18:18	-22.8	10.43	5.2	0.7	15.9"	14.5"	36.0"	16.1"	25.7	26.5
26	18:19	-22.8	10.51	5.0	0.8	15.7"	14.4"	35.7"	15.9"	25.7	26.5
31	18:21	-22.8	10.58	4.8	0.8	15.6"	14.3"	35.5"	15.8"	25.7	26.4

November 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:21	-22.8	10.59	4.7	0.8	15.6"	14.3"	35.4"	15.8"	25.7	26.4
6	18:23	-22.8	10.66	4.4	0.8	15.5"	14.2"	35.2"	15.6"	25.6	26.4
11	18:25	-22.8	10.73	4.1	0.8	15.4"	14.1"	35.0"	15.5"	25.6	26.3
16	18:27	-22.7	10.78	3.8	0.8	15.3"	14.0"	34.8"	15.4"	25.6	26.3
21	18:29	-22.7	10.84	3.5	0.8	15.3"	14.0"	34.6"	15.3"	25.6	26.2
26	18:32	-22.7	10.89	3.1	0.8	15.2"	13.9"	34.5"	15.2"	25.6	26.1

Dezember 2018 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	\varnothing_P	R- \varnothing_g	R- \varnothing_k	D_s	D_e
1	18:34	-22.7	10.93	2.7	0.7	15.1"	13.8"	34.3"	15.1"	25.5	26.1
6	18:36	-22.7	10.97	2.3	0.7	15.1"	13.8"	34.2"	15.0"	25.5	26.0
11	18:39	-22.6	11.00	1.9	0.7	15.0"	13.7"	34.1"	14.9"	25.5	25.9
16	18:41	-22.6	11.02	1.5	0.7	15.0"	13.7"	34.1"	14.8"	25.5	25.8
21	18:44	-22.6	11.04	1.1	0.7	15.0"	13.7"	34.0"	14.7"	25.4	25.7
26	18:46	-22.5	11.06	0.6	0.7	15.0"	13.7"	34.0"	14.7"	25.4	25.6
31	18:49	-22.5	11.06	0.2	0.7	15.0"	13.7"	33.9"	14.6"	25.4	25.5