



Ephemeriden für Sternfreunde

von Karl-Heinz Bücke

Saturn

Januar 2016 (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	16:39	-20.5	10.88	-2.7	0.5	15.2"	13.9"	34.5"	15.2"	25.7	26.1
6	16:42	-20.6	10.84	-3.1	0.5	15.3"	14.0"	34.6"	15.3"	25.8	26.2
11	16:44	-20.7	10.79	-3.4	0.4	15.3"	14.0"	34.8"	15.4"	25.8	26.2
16	16:46	-20.7	10.74	-3.8	0.4	15.4"	14.1"	35.0"	15.4"	25.8	26.2
21	16:48	-20.8	10.68	-4.1	0.4	15.5"	14.2"	35.2"	15.5"	25.8	26.2
26	16:50	-20.8	10.61	-4.4	0.4	15.6"	14.3"	35.4"	15.7"	25.8	26.3
31	16:52	-20.9	10.55	-4.7	0.3	15.7"	14.3"	35.6"	15.8"	25.9	26.3

Februar 2016 (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	16:52	-20.9	10.53	-4.7	0.3	15.7"	14.4"	35.6"	15.8"	25.9	26.3
6	16:54	-20.9	10.46	-5.0	0.3	15.8"	14.5"	35.9"	15.9"	25.9	26.3
11	16:55	-20.9	10.39	-5.2	0.3	15.9"	14.6"	36.1"	16.0"	25.9	26.3
16	16:57	-21.0	10.31	-5.4	0.3	16.1"	14.7"	36.4"	16.1"	25.9	26.3
21	16:58	-21.0	10.23	-5.5	0.2	16.2"	14.8"	36.7"	16.3"	25.9	26.3
26	16:59	-21.0	10.15	-5.6	0.2	16.3"	14.9"	37.0"	16.4"	26.0	26.3

März 2016 (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	17:00	-21.0	10.08	-5.6	0.2	16.4"	15.0"	37.2"	16.5"	26.0	26.3
6	17:00	-21.0	10.00	-5.7	0.2	16.6"	15.1"	37.6"	16.6"	26.0	26.3
11	17:01	-21.0	9.91	-5.7	0.2	16.7"	15.3"	37.9"	16.8"	26.0	26.3
16	17:01	-21.0	9.83	-5.6	0.1	16.8"	15.4"	38.2"	16.9"	26.0	26.3
21	17:02	-21.0	9.75	-5.5	0.1	17.0"	15.5"	38.5"	17.1"	26.0	26.3
26	17:02	-21.0	9.67	-5.4	0.1	17.1"	15.6"	38.8"	17.2"	26.1	26.3
31	17:02	-21.0	9.59	-5.2	0.1	17.3"	15.8"	39.1"	17.3"	26.1	26.3

April 2016 (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	17:02	-21.0	9.58	-5.2	0.1	17.3"	15.8"	39.2"	17.4"	26.1	26.3
6	17:01	-21.0	9.50	-4.9	0.1	17.4"	15.9"	39.5"	17.5"	26.1	26.3
11	17:01	-21.0	9.43	-4.7	0.1	17.5"	16.0"	39.8"	17.6"	26.1	26.2
16	17:00	-20.9	9.37	-4.4	0.1	17.7"	16.2"	40.1"	17.7"	26.1	26.2
21	16:59	-20.9	9.31	-4.0	0.1	17.8"	16.3"	40.3"	17.8"	26.1	26.2
26	16:58	-20.9	9.25	-3.7	0.1	17.9"	16.4"	40.6"	17.9"	26.2	26.2

Mai 2016 (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	16:57	-20.9	9.20	-3.3	0.1	18.0"	16.4"	40.8"	18.0"	26.2	26.2
6	16:56	-20.8	9.15	-2.8	0.1	18.1"	16.5"	41.0"	18.1"	26.2	26.2
11	16:55	-20.8	9.12	-2.4	0.1	18.1"	16.6"	41.2"	18.2"	26.2	26.2
16	16:53	-20.8	9.09	-1.9	0.1	18.2"	16.6"	41.3"	18.2"	26.2	26.2
21	16:52	-20.7	9.06	-1.4	0.2	18.3"	16.7"	41.4"	18.2"	26.2	26.1
26	16:51	-20.7	9.05	-0.9	0.2	18.3"	16.7"	41.5"	18.3"	26.2	26.1
31	16:49	-20.6	9.04	-0.4	0.2	18.3"	16.7"	41.5"	18.3"	26.3	26.1

Juni 2016 (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	16:49	-20.6	9.04	-0.3	0.2	18.3"	16.7"	41.5"	18.3"	26.3	26.1
6	16:47	-20.6	9.04	0.3	0.2	18.3"	16.7"	41.5"	18.3"	26.3	26.1
11	16:46	-20.6	9.04	0.8	0.2	18.3"	16.7"	41.5"	18.2"	26.3	26.1
16	16:44	-20.5	9.06	1.3	0.3	18.3"	16.7"	41.4"	18.2"	26.3	26.1
21	16:43	-20.5	9.08	1.8	0.3	18.2"	16.7"	41.3"	18.1"	26.3	26.0
26	16:41	-20.4	9.11	2.3	0.3	18.2"	16.6"	41.2"	18.1"	26.3	26.0

Juli 2016 (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	16:40	-20.4	9.15	2.7	0.4	18.1"	16.5"	41.0"	18.0"	26.3	26.0
6	16:39	-20.4	9.19	3.2	0.4	18.0"	16.5"	40.9"	17.9"	26.4	26.0
11	16:37	-20.4	9.24	3.6	0.4	17.9"	16.4"	40.6"	17.8"	26.4	26.0
16	16:36	-20.4	9.29	4.0	0.4	17.8"	16.3"	40.4"	17.7"	26.4	26.0
21	16:36	-20.3	9.35	4.3	0.5	17.7"	16.2"	40.2"	17.6"	26.4	26.0
26	16:35	-20.3	9.41	4.6	0.5	17.6"	16.1"	39.9"	17.5"	26.4	26.0
31	16:34	-20.3	9.48	4.9	0.5	17.4"	15.9"	39.6"	17.4"	26.4	26.0

August 2016 (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	16:34	-20.3	9.50	5.0	0.5	17.4"	15.9"	39.5"	17.3"	26.4	26.0
6	16:34	-20.3	9.57	5.2	0.6	17.3"	15.8"	39.2"	17.2"	26.4	26.0
11	16:34	-20.3	9.65	5.4	0.6	17.2"	15.7"	38.9"	17.1"	26.4	26.0
16	16:34	-20.4	9.72	5.5	0.6	17.0"	15.6"	38.6"	17.0"	26.5	26.0
21	16:34	-20.4	9.80	5.7	0.6	16.9"	15.4"	38.3"	16.8"	26.5	26.1
26	16:34	-20.4	9.89	5.7	0.7	16.7"	15.3"	38.0"	16.7"	26.5	26.1
31	16:35	-20.5	9.97	5.8	0.7	16.6"	15.2"	37.7"	16.6"	26.5	26.1

September 2016 (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	16:35	-20.5	9.99	5.8	0.7	16.6"	15.1"	37.6"	16.6"	26.5	26.1
6	16:36	-20.5	10.07	5.7	0.7	16.4"	15.0"	37.3"	16.4"	26.5	26.2
11	16:36	-20.6	10.15	5.7	0.7	16.3"	14.9"	37.0"	16.3"	26.5	26.2
16	16:37	-20.6	10.23	5.6	0.7	16.2"	14.8"	36.7"	16.2"	26.5	26.2
21	16:39	-20.7	10.31	5.5	0.7	16.0"	14.7"	36.4"	16.1"	26.5	26.3
26	16:40	-20.7	10.39	5.3	0.7	15.9"	14.6"	36.1"	16.0"	26.5	26.3

Oktober 2016 (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	16:41	-20.8	10.47	5.1	0.7	15.8"	14.5"	35.9"	15.9"	26.5	26.4
6	16:43	-20.8	10.54	4.9	0.8	15.7"	14.4"	35.6"	15.8"	26.6	26.4
11	16:45	-20.9	10.61	4.6	0.8	15.6"	14.3"	35.4"	15.8"	26.6	26.4
16	16:46	-21.0	10.68	4.3	0.8	15.5"	14.2"	35.2"	15.7"	26.6	26.5
21	16:48	-21.0	10.74	4.0	0.8	15.4"	14.1"	35.0"	15.6"	26.6	26.5
26	16:50	-21.1	10.79	3.7	0.7	15.3"	14.0"	34.8"	15.5"	26.6	26.6
31	16:53	-21.2	10.84	3.4	0.7	15.3"	14.0"	34.6"	15.5"	26.6	26.6

November 2016 (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	16:53	-21.2	10.85	3.3	0.7	15.2"	13.9"	34.6"	15.5"	26.6	26.6
6	16:55	-21.3	10.90	2.9	0.7	15.2"	13.9"	34.4"	15.4"	26.6	26.6
11	16:58	-21.3	10.94	2.5	0.7	15.1"	13.8"	34.3"	15.4"	26.6	26.7
16	17:00	-21.4	10.97	2.1	0.7	15.1"	13.8"	34.2"	15.4"	26.6	26.7
21	17:02	-21.5	11.00	1.7	0.7	15.0"	13.8"	34.1"	15.3"	26.6	26.7
26	17:05	-21.5	11.02	1.3	0.7	15.0"	13.7"	34.1"	15.3"	26.6	26.7

Dezember 2016 (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	17:07	-21.6	11.04	0.8	0.7	15.0"	13.7"	34.0"	15.3"	26.6	26.8
6	17:10	-21.6	11.05	0.4	0.7	15.0"	13.7"	34.0"	15.3"	26.7	26.8
11	17:12	-21.7	11.05	0.0	0.6	15.0"	13.7"	34.0"	15.3"	26.7	26.8
16	17:15	-21.8	11.05	-0.5	0.6	15.0"	13.7"	34.0"	15.3"	26.7	26.8
21	17:17	-21.8	11.04	-0.9	0.6	15.0"	13.7"	34.0"	15.3"	26.7	26.8
26	17:20	-21.8	11.02	-1.3	0.6	15.0"	13.7"	34.1"	15.4"	26.7	26.8
31	17:22	-21.9	11.00	-1.8	0.5	15.0"	13.8"	34.1"	15.4"	26.7	26.8