



Ephemeriden für Sternfreunde

von Karl-Heinz Bücke

Saturn

Januar 2023 (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	21:40	-15.2	10.56	3.8	1.0	15.7"	14.1"	35.5"	8.4"	12.0	13.6
6	21:42	-15.0	10.62	3.5	1.0	15.6"	14.0"	35.4"	8.2"	12.0	13.4
11	21:44	-14.9	10.66	3.1	1.0	15.5"	13.9"	35.2"	8.0"	11.9	13.2
16	21:47	-14.7	10.71	2.7	1.0	15.5"	13.9"	35.1"	7.9"	11.8	12.9
21	21:49	-14.5	10.74	2.3	1.0	15.4"	13.8"	34.9"	7.7"	11.8	12.7
26	21:51	-14.3	10.77	1.9	1.0	15.4"	13.8"	34.8"	7.5"	11.7	12.5
31	21:53	-14.1	10.80	1.5	1.0	15.3"	13.8"	34.8"	7.3"	11.7	12.2

Februar 2023 (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	21:54	-14.1	10.80	1.4	1.0	15.3"	13.7"	34.8"	7.3"	11.6	12.1
6	21:56	-13.9	10.82	1.0	1.0	15.3"	13.7"	34.7"	7.1"	11.6	11.9
11	21:58	-13.7	10.83	0.5	1.0	15.3"	13.7"	34.7"	7.0"	11.5	11.6
16	22:01	-13.5	10.83	0.1	1.0	15.3"	13.7"	34.7"	6.8"	11.4	11.4
21	22:03	-13.3	10.83	-0.4	1.0	15.3"	13.7"	34.7"	6.7"	11.4	11.1
26	22:05	-13.1	10.82	-0.8	1.0	15.3"	13.7"	34.7"	6.5"	11.3	10.8

März 2023 (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	22:07	-12.9	10.81	-1.1	1.0	15.3"	13.7"	34.7"	6.4"	11.3	10.7
6	22:09	-12.7	10.79	-1.5	1.0	15.3"	13.7"	34.8"	6.3"	11.2	10.4
11	22:11	-12.5	10.77	-2.0	0.9	15.4"	13.8"	34.9"	6.2"	11.1	10.2
16	22:14	-12.3	10.74	-2.4	0.9	15.4"	13.8"	35.0"	6.0"	11.1	9.9
21	22:16	-12.2	10.70	-2.8	0.9	15.5"	13.8"	35.1"	5.9"	11.0	9.7
26	22:18	-12.0	10.66	-3.2	0.9	15.5"	13.9"	35.2"	5.8"	11.0	9.4
31	22:20	-11.8	10.61	-3.5	0.9	15.6"	14.0"	35.4"	5.7"	10.9	9.2

April 2023 (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	22:20	-11.8	10.60	-3.6	0.9	15.6"	14.0"	35.4"	5.6"	10.9	9.1
6	22:22	-11.6	10.54	-4.0	0.9	15.7"	14.0"	35.6"	5.5"	10.8	8.9
11	22:24	-11.4	10.49	-4.3	0.8	15.8"	14.1"	35.8"	5.4"	10.7	8.7
16	22:26	-11.3	10.42	-4.6	0.8	15.9"	14.2"	36.0"	5.3"	10.7	8.5
21	22:27	-11.1	10.36	-4.9	0.8	16.0"	14.3"	36.3"	5.3"	10.6	8.3
26	22:29	-11.0	10.28	-5.1	0.8	16.1"	14.4"	36.5"	5.2"	10.5	8.2

Mai 2023 (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	22:31	-10.9	10.21	-5.3	0.8	16.2"	14.5"	36.8"	5.1"	10.5	8.0
6	22:32	-10.7	10.13	-5.5	0.7	16.3"	14.6"	37.0"	5.1"	10.4	7.9
11	22:33	-10.6	10.05	-5.7	0.7	16.5"	14.7"	37.3"	5.0"	10.3	7.7
16	22:34	-10.6	9.97	-5.8	0.7	16.6"	14.8"	37.6"	5.0"	10.3	7.6
21	22:35	-10.5	9.89	-5.9	0.7	16.7"	15.0"	38.0"	5.0"	10.2	7.5
26	22:36	-10.4	9.81	-5.9	0.7	16.9"	15.1"	38.3"	5.0"	10.1	7.4
31	22:36	-10.4	9.72	-5.9	0.6	17.0"	15.2"	38.6"	5.0"	10.1	7.4

Juni 2023 (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	22:37	-10.4	9.71	-5.9	0.6	17.0"	15.2"	38.7"	5.0"	10.1	7.4
6	22:37	-10.3	9.62	-5.9	0.6	17.2"	15.4"	39.0"	5.0"	10.0	7.3
11	22:37	-10.3	9.54	-5.8	0.6	17.3"	15.5"	39.3"	5.0"	9.9	7.3
16	22:38	-10.3	9.46	-5.7	0.6	17.5"	15.6"	39.7"	5.1"	9.9	7.3
21	22:38	-10.4	9.38	-5.5	0.6	17.6"	15.8"	40.0"	5.1"	9.8	7.3
26	22:37	-10.4	9.31	-5.3	0.6	17.8"	15.9"	40.3"	5.2"	9.7	7.4

Juli 2023 (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	22:37	-10.4	9.24	-5.0	0.6	17.9"	16.0"	40.6"	5.3"	9.7	7.4
6	22:37	-10.5	9.17	-4.8	0.6	18.0"	16.1"	41.0"	5.4"	9.6	7.5
11	22:36	-10.6	9.10	-4.4	0.6	18.2"	16.3"	41.2"	5.5"	9.5	7.6
16	22:35	-10.7	9.04	-4.1	0.6	18.3"	16.4"	41.5"	5.6"	9.5	7.7
21	22:34	-10.8	8.99	-3.7	0.6	18.4"	16.5"	41.8"	5.7"	9.4	7.8
26	22:33	-10.9	8.94	-3.3	0.6	18.5"	16.6"	42.0"	5.8"	9.3	8.0
31	22:32	-11.0	8.90	-2.8	0.6	18.6"	16.6"	42.2"	6.0"	9.3	8.1

August 2023 (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	22:32	-11.0	8.89	-2.7	0.6	18.6"	16.7"	42.2"	6.0"	9.2	8.1
6	22:31	-11.2	8.85	-2.2	0.6	18.7"	16.7"	42.4"	6.1"	9.2	8.3
11	22:30	-11.3	8.83	-1.7	0.6	18.7"	16.8"	42.5"	6.3"	9.1	8.5
16	22:28	-11.4	8.81	-1.2	0.6	18.8"	16.8"	42.6"	6.4"	9.0	8.6
21	22:27	-11.6	8.79	-0.7	0.6	18.8"	16.8"	42.7"	6.6"	9.0	8.8
26	22:25	-11.7	8.79	-0.1	0.6	18.8"	16.9"	42.7"	6.7"	8.9	9.0
31	22:24	-11.9	8.79	0.4	0.6	18.8"	16.9"	42.7"	6.8"	8.8	9.2

September 2023 (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	22:24	-11.9	8.79	0.5	0.6	18.8"	16.9"	42.7"	6.8"	8.8	9.2
6	22:22	-12.0	8.80	1.0	0.7	18.8"	16.8"	42.7"	7.0"	8.8	9.4
11	22:21	-12.2	8.82	1.6	0.7	18.8"	16.8"	42.6"	7.1"	8.7	9.6
16	22:20	-12.3	8.84	2.1	0.7	18.7"	16.8"	42.5"	7.2"	8.6	9.7
21	22:18	-12.4	8.87	2.5	0.7	18.6"	16.7"	42.3"	7.2"	8.5	9.9
26	22:17	-12.5	8.91	3.0	0.7	18.6"	16.6"	42.1"	7.3"	8.5	10.0

Oktober 2023 (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	22:16	-12.6	8.96	3.5	0.8	18.5"	16.5"	41.9"	7.4"	8.4	10.1
6	22:15	-12.7	9.01	3.9	0.8	18.4"	16.5"	41.7"	7.4"	8.3	10.2
11	22:14	-12.8	9.07	4.2	0.8	18.2"	16.3"	41.4"	7.4"	8.3	10.3
16	22:14	-12.8	9.13	4.6	0.8	18.1"	16.2"	41.1"	7.4"	8.2	10.4
21	22:13	-12.9	9.20	4.9	0.9	18.0"	16.1"	40.8"	7.4"	8.1	10.5
26	22:13	-12.9	9.27	5.1	0.9	17.9"	16.0"	40.5"	7.4"	8.1	10.5
31	22:12	-12.9	9.34	5.4	0.9	17.7"	15.9"	40.2"	7.3"	8.0	10.5

November 2023 (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	22:12	-12.9	9.36	5.4	0.9	17.7"	15.8"	40.1"	7.3"	8.0	10.5
6	22:12	-12.9	9.44	5.6	1.0	17.5"	15.7"	39.8"	7.3"	7.9	10.5
11	22:13	-12.9	9.52	5.7	1.0	17.4"	15.6"	39.4"	7.2"	7.8	10.5
16	22:13	-12.9	9.60	5.8	1.0	17.2"	15.4"	39.1"	7.1"	7.8	10.4
21	22:13	-12.8	9.68	5.8	1.0	17.1"	15.3"	38.8"	7.0"	7.7	10.4
26	22:14	-12.7	9.76	5.8	1.0	16.9"	15.2"	38.4"	6.9"	7.6	10.3

Dezember 2023 (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	22:15	-12.7	9.85	5.7	1.1	16.8"	15.1"	38.1"	6.7"	7.6	10.2
6	22:16	-12.6	9.93	5.7	1.1	16.7"	14.9"	37.8"	6.6"	7.5	10.1
11	22:17	-12.4	10.01	5.5	1.1	16.5"	14.8"	37.5"	6.5"	7.4	9.9
16	22:18	-12.3	10.09	5.4	1.1	16.4"	14.7"	37.2"	6.3"	7.4	9.8
21	22:19	-12.2	10.16	5.2	1.1	16.3"	14.6"	36.9"	6.2"	7.3	9.6
26	22:21	-12.0	10.23	4.9	1.1	16.2"	14.5"	36.7"	6.0"	7.2	9.4
31	22:22	-11.9	10.30	4.7	1.2	16.1"	14.4"	36.4"	5.8"	7.2	9.2