



Ephemeriden für Sternfreunde

von Karl-Heinz Bücke

Saturn

Januar 2024 (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	22:23	-11.8	10.32	4.6	1.2	16.0"	14.4"	36.4"	5.8"	7.1	9.2
6	22:24	-11.7	10.38	4.3	1.2	15.9"	14.3"	36.2"	5.6"	7.1	9.0
11	22:26	-11.5	10.44	4.0	1.2	15.8"	14.2"	36.0"	5.5"	7.0	8.7
16	22:28	-11.3	10.50	3.7	1.2	15.8"	14.1"	35.8"	5.3"	6.9	8.5
21	22:30	-11.1	10.55	3.3	1.2	15.7"	14.0"	35.6"	5.1"	6.9	8.3
26	22:32	-10.9	10.59	2.9	1.2	15.6"	14.0"	35.4"	4.9"	6.8	8.0
31	22:34	-10.7	10.63	2.5	1.2	15.6"	13.9"	35.3"	4.8"	6.7	7.8

Februar 2024 (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	22:35	-10.7	10.64	2.4	1.2	15.6"	13.9"	35.3"	4.7"	6.7	7.7
6	22:37	-10.4	10.67	2.0	1.2	15.5"	13.9"	35.2"	4.6"	6.6	7.4
11	22:39	-10.2	10.69	1.6	1.2	15.5"	13.8"	35.1"	4.4"	6.6	7.2
16	22:41	-10.0	10.71	1.1	1.2	15.4"	13.8"	35.0"	4.2"	6.5	6.9
21	22:44	-9.8	10.73	0.7	1.2	15.4"	13.8"	35.0"	4.0"	6.4	6.6
26	22:46	-9.5	10.73	0.3	1.2	15.4"	13.8"	35.0"	3.9"	6.4	6.3

März 2024 (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	22:48	-9.4	10.73	-0.1	1.2	15.4"	13.8"	35.0"	3.7"	6.3	6.1
6	22:50	-9.1	10.73	-0.5	1.1	15.4"	13.8"	35.0"	3.5"	6.2	5.8
11	22:52	-8.9	10.72	-1.0	1.1	15.4"	13.8"	35.0"	3.4"	6.2	5.5
16	22:55	-8.7	10.70	-1.4	1.1	15.5"	13.8"	35.1"	3.2"	6.1	5.3
21	22:57	-8.5	10.68	-1.9	1.1	15.5"	13.8"	35.2"	3.1"	6.0	5.0
26	22:59	-8.3	10.65	-2.3	1.1	15.5"	13.9"	35.3"	2.9"	5.9	4.7
31	23:01	-8.0	10.61	-2.7	1.1	15.6"	13.9"	35.4"	2.8"	5.9	4.5

April 2024 (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	23:02	-8.0	10.60	-2.8	1.1	15.6"	13.9"	35.4"	2.7"	5.9	4.4
6	23:04	-7.8	10.56	-3.2	1.1	15.7"	14.0"	35.5"	2.6"	5.8	4.2
11	23:06	-7.6	10.51	-3.5	1.0	15.7"	14.1"	35.7"	2.4"	5.7	3.9
16	23:08	-7.4	10.46	-3.9	1.0	15.8"	14.1"	35.9"	2.3"	5.6	3.7
21	23:10	-7.2	10.40	-4.2	1.0	15.9"	14.2"	36.1"	2.2"	5.6	3.5
26	23:11	-7.1	10.34	-4.6	1.0	16.0"	14.3"	36.3"	2.1"	5.5	3.3

Mai 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\text{Ä}}$	$\varnothing_{\text{P}}$	$R\text{-}\varnothing_{\text{g}}$	$R\text{-}\varnothing_{\text{k}}$	D_s	D_e
1	23:13	-6.9	10.28	-4.8	1.0	16.1"	14.4"	36.5"	2.0"	5.4	3.1
6	23:15	-6.8	10.21	-5.1	1.0	16.2"	14.5"	36.8"	1.9"	5.4	2.9
11	23:16	-6.6	10.13	-5.3	0.9	16.3"	14.6"	37.0"	1.8"	5.3	2.7
16	23:17	-6.5	10.06	-5.5	0.9	16.5"	14.7"	37.3"	1.7"	5.2	2.6
21	23:19	-6.4	9.98	-5.7	0.9	16.6"	14.8"	37.6"	1.6"	5.1	2.4
26	23:20	-6.3	9.90	-5.8	0.9	16.7"	14.9"	37.9"	1.5"	5.1	2.3
31	23:21	-6.2	9.82	-5.9	0.9	16.9"	15.0"	38.2"	1.5"	5.0	2.2

Juni 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\text{Ä}}$	$\varnothing_{\text{P}}$	$R\text{-}\varnothing_{\text{g}}$	$R\text{-}\varnothing_{\text{k}}$	D_s	D_e
1	23:21	-6.2	9.80	-5.9	0.9	16.9"	15.1"	38.3"	1.5"	5.0	2.2
6	23:22	-6.1	9.72	-6.0	0.8	17.0"	15.2"	38.6"	1.4"	4.9	2.1
11	23:22	-6.1	9.63	-6.0	0.8	17.2"	15.3"	39.0"	1.4"	4.8	2.0
16	23:23	-6.0	9.55	-6.0	0.8	17.3"	15.5"	39.3"	1.4"	4.8	2.0
21	23:23	-6.0	9.47	-5.9	0.8	17.5"	15.6"	39.6"	1.4"	4.7	2.0
26	23:24	-6.0	9.39	-5.8	0.8	17.6"	15.7"	40.0"	1.4"	4.6	2.0

Juli 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\text{Ä}}$	$\varnothing_{\text{P}}$	$R\text{-}\varnothing_{\text{g}}$	$R\text{-}\varnothing_{\text{k}}$	D_s	D_e
1	23:24	-6.0	9.31	-5.6	0.8	17.8"	15.9"	40.3"	1.4"	4.6	2.0
6	23:24	-6.1	9.23	-5.4	0.8	17.9"	16.0"	40.7"	1.4"	4.5	2.0
11	23:23	-6.1	9.16	-5.2	0.7	18.1"	16.1"	41.0"	1.5"	4.4	2.1
16	23:23	-6.2	9.09	-4.9	0.7	18.2"	16.2"	41.3"	1.5"	4.3	2.1
21	23:22	-6.3	9.02	-4.6	0.7	18.3"	16.4"	41.6"	1.6"	4.3	2.2
26	23:22	-6.3	8.96	-4.3	0.7	18.5"	16.5"	41.9"	1.7"	4.2	2.3
31	23:21	-6.5	8.90	-3.9	0.7	18.6"	16.6"	42.2"	1.8"	4.1	2.4

August 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\text{Ä}}$	$\varnothing_{\text{P}}$	$R\text{-}\varnothing_{\text{g}}$	$R\text{-}\varnothing_{\text{k}}$	D_s	D_e
1	23:21	-6.5	8.89	-3.8	0.7	18.6"	16.6"	42.2"	1.8"	4.1	2.5
6	23:20	-6.6	8.84	-3.4	0.7	18.7"	16.7"	42.5"	1.9"	4.0	2.6
11	23:19	-6.7	8.80	-2.9	0.7	18.8"	16.8"	42.7"	2.1"	4.0	2.8
16	23:18	-6.9	8.76	-2.4	0.7	18.9"	16.9"	42.8"	2.2"	3.9	2.9
21	23:16	-7.0	8.73	-1.9	0.7	19.0"	16.9"	43.0"	2.3"	3.8	3.1
26	23:15	-7.1	8.71	-1.4	0.7	19.0"	17.0"	43.1"	2.5"	3.7	3.3
31	23:14	-7.3	8.69	-0.9	0.8	19.0"	17.0"	43.2"	2.6"	3.7	3.5

September 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_v	$\varnothing_{\text{Ä}}$	$\varnothing_{\text{P}}$	$R\text{-}\varnothing_{\text{g}}$	$R\text{-}\varnothing_{\text{k}}$	D_s	D_e
1	23:13	-7.3	8.69	-0.8	0.8	19.0"	17.0"	43.2"	2.6"	3.7	3.5
6	23:12	-7.5	8.68	-0.2	0.8	19.1"	17.0"	43.2"	2.8"	3.6	3.7
11	23:11	-7.6	8.68	0.3	0.8	19.1"	17.0"	43.2"	2.9"	3.5	3.9
16	23:09	-7.8	8.69	0.9	0.8	19.0"	17.0"	43.2"	3.0"	3.4	4.0
21	23:08	-7.9	8.71	1.4	0.8	19.0"	17.0"	43.1"	3.2"	3.4	4.2
26	23:06	-8.1	8.73	1.9	0.8	19.0"	16.9"	43.0"	3.3"	3.3	4.4

Oktober 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	$\varnothing_P$	$R\text{-}\varnothing_g$	$R\text{-}\varnothing_k$	D_s	D_e
1	23:05	-8.2	8.76	2.4	0.9	18.9"	16.9"	42.9"	3.4"	3.2	4.5
6	23:04	-8.3	8.79	2.9	0.9	18.8"	16.8"	42.7"	3.5"	3.1	4.7
11	23:03	-8.4	8.84	3.3	0.9	18.7"	16.7"	42.5"	3.6"	3.1	4.8
16	23:02	-8.5	8.89	3.8	0.9	18.6"	16.6"	42.2"	3.6"	3.0	4.9
21	23:01	-8.6	8.94	4.2	1.0	18.5"	16.5"	42.0"	3.7"	2.9	5.0
26	23:00	-8.7	9.00	4.5	1.0	18.4"	16.4"	41.7"	3.7"	2.9	5.1
31	23:00	-8.7	9.07	4.8	1.0	18.2"	16.3"	41.4"	3.7"	2.8	5.2

November 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	$\varnothing_P$	$R\text{-}\varnothing_g$	$R\text{-}\varnothing_k$	D_s	D_e
1	23:00	-8.7	9.08	4.9	1.0	18.2"	16.3"	41.3"	3.7"	2.8	5.2
6	22:59	-8.7	9.16	5.2	1.1	18.1"	16.1"	41.0"	3.7"	2.7	5.2
11	22:59	-8.8	9.23	5.4	1.1	17.9"	16.0"	40.7"	3.7"	2.6	5.2
16	22:59	-8.7	9.31	5.6	1.1	17.8"	15.9"	40.3"	3.7"	2.5	5.2
21	22:59	-8.7	9.39	5.7	1.1	17.6"	15.7"	40.0"	3.6"	2.5	5.2
26	22:59	-8.7	9.47	5.8	1.2	17.5"	15.6"	39.6"	3.6"	2.4	5.2

Dezember 2024 (0^h UT)

Tag	α	δ	Δ	φ	m_V	$\varnothing_{\text{Ä}}$	$\varnothing_P$	$R\text{-}\varnothing_g$	$R\text{-}\varnothing_k$	D_s	D_e
1	23:00	-8.6	9.55	5.8	1.2	17.3"	15.5"	39.3"	3.5"	2.3	5.1
6	23:00	-8.6	9.63	5.9	1.2	17.2"	15.3"	39.0"	3.4"	2.3	5.0
11	23:01	-8.5	9.72	5.8	1.2	17.0"	15.2"	38.6"	3.3"	2.2	4.9
16	23:02	-8.4	9.80	5.7	1.2	16.9"	15.1"	38.3"	3.2"	2.1	4.8
21	23:03	-8.2	9.88	5.6	1.3	16.7"	15.0"	38.0"	3.1"	2.0	4.6
26	23:04	-8.1	9.96	5.5	1.3	16.6"	14.8"	37.7"	2.9"	2.0	4.5
31	23:05	-8.0	10.03	5.3	1.3	16.5"	14.7"	37.4"	2.8"	1.9	4.3