



# Ephemeriden für Sternfreunde

von Karl-Heinz Bücke

## Saturn

Januar 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\text{Ä}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:14	-15.8	10.50	-4.4	0.4	15.8"	14.3"	35.7"	13.5"	20.9	22.2
6	15:16	-15.9	10.44	-4.6	0.4	15.9"	14.4"	36.0"	13.6"	20.9	22.3
11	15:18	-16.0	10.37	-4.9	0.4	16.0"	14.5"	36.2"	13.8"	21.0	22.3
16	15:19	-16.1	10.29	-5.1	0.3	16.1"	14.6"	36.5"	13.9"	21.0	22.4
21	15:21	-16.1	10.22	-5.3	0.3	16.2"	14.7"	36.7"	14.1"	21.1	22.5
26	15:22	-16.2	10.14	-5.5	0.3	16.3"	14.8"	37.0"	14.2"	21.1	22.5
31	15:23	-16.3	10.06	-5.6	0.3	16.5"	15.0"	37.3"	14.3"	21.2	22.6

Februar 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\text{Ä}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:23	-16.3	10.04	-5.6	0.2	16.5"	15.0"	37.4"	14.4"	21.2	22.6
6	15:24	-16.3	9.96	-5.7	0.2	16.6"	15.1"	37.7"	14.5"	21.2	22.6
11	15:25	-16.3	9.88	-5.7	0.2	16.8"	15.2"	38.0"	14.7"	21.3	22.7
16	15:26	-16.4	9.79	-5.7	0.2	16.9"	15.4"	38.3"	14.8"	21.3	22.7
21	15:26	-16.4	9.71	-5.7	0.2	17.0"	15.5"	38.7"	14.9"	21.3	22.7
26	15:26	-16.4	9.63	-5.6	0.2	17.2"	15.6"	39.0"	15.0"	21.4	22.7

März 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\text{Ä}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:26	-16.4	9.58	-5.5	0.1	17.3"	15.7"	39.2"	15.1"	21.4	22.7
6	15:26	-16.4	9.50	-5.3	0.1	17.4"	15.8"	39.5"	15.2"	21.5	22.7
11	15:26	-16.3	9.43	-5.1	0.1	17.6"	16.0"	39.8"	15.3"	21.5	22.6
16	15:26	-16.3	9.35	-4.9	0.1	17.7"	16.1"	40.1"	15.4"	21.5	22.6
21	15:25	-16.2	9.28	-4.6	0.1	17.8"	16.2"	40.4"	15.5"	21.6	22.6
26	15:25	-16.2	9.22	-4.3	0.1	17.9"	16.3"	40.7"	15.6"	21.6	22.5
31	15:24	-16.1	9.16	-3.9	0.1	18.1"	16.4"	41.0"	15.6"	21.7	22.5

April 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\text{Ä}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:24	-16.1	9.15	-3.8	0.1	18.1"	16.4"	41.0"	15.7"	21.7	22.4
6	15:23	-16.0	9.10	-3.4	0.1	18.2"	16.5"	41.3"	15.7"	21.7	22.4
11	15:22	-16.0	9.05	-3.0	0.1	18.3"	16.6"	41.5"	15.7"	21.8	22.3
16	15:20	-15.9	9.01	-2.5	0.2	18.4"	16.7"	41.7"	15.8"	21.8	22.2
21	15:19	-15.8	8.98	-2.1	0.2	18.4"	16.7"	41.8"	15.8"	21.9	22.1
26	15:18	-15.7	8.95	-1.6	0.2	18.5"	16.8"	41.9"	15.7"	21.9	22.0

### Mai 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	$D_s$	$D_e$
1	15:16	-15.6	8.93	-1.0	0.2	18.5"	16.8"	42.0"	15.7"	21.9	22.0
6	15:15	-15.5	8.92	-0.5	0.2	18.5"	16.8"	42.1"	15.7"	22.0	21.9
11	15:13	-15.4	8.92	0.0	0.3	18.6"	16.8"	42.1"	15.6"	22.0	21.8
16	15:12	-15.3	8.92	0.5	0.3	18.5"	16.8"	42.1"	15.5"	22.1	21.7
21	15:10	-15.2	8.93	1.1	0.3	18.5"	16.8"	42.0"	15.5"	22.1	21.6
26	15:09	-15.1	8.95	1.6	0.3	18.5"	16.8"	41.9"	15.4"	22.1	21.5
31	15:07	-15.0	8.98	2.1	0.4	18.4"	16.7"	41.8"	15.3"	22.2	21.4

### Juni 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	$D_s$	$D_e$
1	15:07	-15.0	8.98	2.2	0.4	18.4"	16.7"	41.8"	15.3"	22.2	21.4
6	15:06	-15.0	9.02	2.6	0.4	18.3"	16.6"	41.6"	15.2"	22.2	21.3
11	15:05	-14.9	9.06	3.1	0.4	18.3"	16.6"	41.4"	15.0"	22.3	21.3
16	15:04	-14.8	9.11	3.5	0.5	18.2"	16.5"	41.2"	14.9"	22.3	21.2
21	15:03	-14.8	9.16	3.9	0.5	18.1"	16.4"	41.0"	14.8"	22.4	21.2
26	15:02	-14.7	9.22	4.3	0.5	18.0"	16.3"	40.7"	14.7"	22.4	21.1

### Juli 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	$D_s$	$D_e$
1	15:01	-14.7	9.28	4.6	0.6	17.8"	16.2"	40.5"	14.6"	22.4	21.1
6	15:00	-14.7	9.35	4.9	0.6	17.7"	16.1"	40.2"	14.5"	22.5	21.1
11	15:00	-14.7	9.42	5.2	0.6	17.6"	15.9"	39.9"	14.3"	22.5	21.1
16	15:00	-14.7	9.49	5.4	0.7	17.4"	15.8"	39.5"	14.2"	22.6	21.1
21	15:00	-14.7	9.57	5.6	0.7	17.3"	15.7"	39.2"	14.1"	22.6	21.1
26	15:00	-14.7	9.65	5.7	0.7	17.1"	15.6"	38.9"	14.0"	22.6	21.1
31	15:00	-14.8	9.73	5.8	0.7	17.0"	15.4"	38.6"	13.9"	22.7	21.2

### August 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	$D_s$	$D_e$
1	15:00	-14.8	9.75	5.8	0.7	17.0"	15.4"	38.5"	13.9"	22.7	21.2
6	15:00	-14.8	9.83	5.8	0.8	16.8"	15.3"	38.2"	13.8"	22.7	21.2
11	15:01	-14.9	9.91	5.8	0.8	16.7"	15.1"	37.9"	13.7"	22.8	21.3
16	15:02	-15.0	10.00	5.8	0.8	16.6"	15.0"	37.5"	13.7"	22.8	21.4
21	15:03	-15.0	10.08	5.7	0.8	16.4"	14.9"	37.2"	13.6"	22.8	21.4
26	15:04	-15.1	10.16	5.6	0.8	16.3"	14.8"	36.9"	13.6"	22.9	21.5
31	15:05	-15.2	10.24	5.5	0.8	16.2"	14.7"	36.7"	13.5"	22.9	21.6

### September 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	$D_s$	$D_e$
1	15:05	-15.2	10.26	5.5	0.8	16.1"	14.6"	36.6"	13.5"	22.9	21.6
6	15:06	-15.4	10.33	5.3	0.8	16.0"	14.5"	36.3"	13.5"	23.0	21.8
11	15:08	-15.5	10.41	5.1	0.8	15.9"	14.4"	36.1"	13.4"	23.0	21.9
16	15:09	-15.6	10.48	4.8	0.8	15.8"	14.3"	35.8"	13.4"	23.0	22.0
21	15:11	-15.7	10.54	4.5	0.8	15.7"	14.3"	35.6"	13.4"	23.1	22.1
26	15:13	-15.9	10.61	4.2	0.8	15.6"	14.2"	35.4"	13.4"	23.1	22.2

### Oktober 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:15	-16.0	10.67	3.9	0.8	15.5"	14.1"	35.2"	13.4"	23.1	22.4
6	15:17	-16.1	10.72	3.6	0.8	15.4"	14.0"	35.0"	13.4"	23.2	22.5
11	15:19	-16.3	10.77	3.2	0.8	15.4"	14.0"	34.9"	13.4"	23.2	22.6
16	15:21	-16.4	10.81	2.8	0.8	15.3"	13.9"	34.7"	13.4"	23.3	22.8
21	15:23	-16.6	10.85	2.4	0.8	15.2"	13.9"	34.6"	13.5"	23.3	22.9
26	15:25	-16.7	10.88	2.0	0.8	15.2"	13.8"	34.5"	13.5"	23.3	23.1
31	15:28	-16.9	10.91	1.6	0.7	15.2"	13.8"	34.4"	13.5"	23.4	23.2

### November 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:28	-16.9	10.92	1.5	0.7	15.2"	13.8"	34.4"	13.6"	23.4	23.2
6	15:31	-17.1	10.93	1.1	0.7	15.1"	13.8"	34.3"	13.6"	23.4	23.4
11	15:33	-17.2	10.95	0.7	0.7	15.1"	13.8"	34.3"	13.7"	23.4	23.5
16	15:35	-17.3	10.95	0.2	0.7	15.1"	13.8"	34.3"	13.7"	23.5	23.6
21	15:38	-17.5	10.95	-0.2	0.7	15.1"	13.8"	34.3"	13.8"	23.5	23.7
26	15:40	-17.6	10.95	-0.7	0.6	15.1"	13.8"	34.3"	13.9"	23.5	23.9

### Dezember 2014 (0<sup>h</sup> UT)

Tag	$\alpha$	$\delta$	$\Delta$	$\varphi$	$m_V$	$\varnothing_{\dot{A}}$	$\varnothing_P$	R- $\varnothing_g$	R- $\varnothing_k$	D <sub>s</sub>	D <sub>e</sub>
1	15:43	-17.8	10.93	-1.1	0.6	15.1"	13.8"	34.3"	14.0"	23.6	24.0
6	15:45	-17.9	10.92	-1.5	0.6	15.2"	13.8"	34.4"	14.0"	23.6	24.1
11	15:47	-18.0	10.89	-1.9	0.6	15.2"	13.8"	34.5"	14.1"	23.6	24.2
16	15:50	-18.1	10.86	-2.4	0.5	15.2"	13.9"	34.6"	14.2"	23.7	24.3
21	15:52	-18.2	10.82	-2.8	0.5	15.3"	13.9"	34.7"	14.3"	23.7	24.4
26	15:54	-18.4	10.78	-3.1	0.5	15.4"	14.0"	34.8"	14.4"	23.8	24.5
31	15:56	-18.5	10.73	-3.5	0.4	15.4"	14.1"	35.0"	14.5"	23.8	24.6