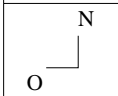


1	●	5	●
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4	●	8	●



Die Bahn des Planeten Saturn 2020

# EPHEMERIDE 2020 – SATURN

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
1 Jan 2020	19h31m18.91s	-21 43' 35.7"	10.034	10.996	0.5	11.4	1.1	-59.74	1.62	17.67	81.8	Sgr
2 Jan 2020	19h31m48.84s	-21 42' 34.8"	10.034	11.000	0.5	10.5	1.0	-59.70	3.21	17.71	81.8	Sgr
3 Jan 2020	19h32m18.82s	-21 41' 33.4"	10.034	11.002	0.5	9.6	0.9	-59.65	4.79	17.74	81.7	Sgr
4 Jan 2020	19h32m48.84s	-21 40' 31.6"	10.034	11.005	0.5	8.7	0.8	-59.58	6.37	17.76	81.7	Sgr
5 Jan 2020	19h33m18.90s	-21 39' 29.3"	10.034	11.007	0.5	7.8	0.8	-59.49	7.94	17.79	81.6	Sgr
6 Jan 2020	19h33m48.99s	-21 38' 26.6"	10.034	11.009	0.5	6.9	0.7	-59.40	9.50	17.81	81.6	Sgr
7 Jan 2020	19h34m19.12s	-21 37' 23.5"	10.034	11.011	0.5	6.0	0.6	-59.28	11.05	17.83	81.5	Sgr
8 Jan 2020	19h34m49.27s	-21 36' 19.9"	10.034	11.013	0.5	5.1	0.5	-59.16	12.59	17.85	81.5	Sgr
9 Jan 2020	19h35m19.43s	-21 35' 16.0"	10.034	11.014	0.5	4.2	0.4	-59.02	14.13	17.86	81.4	Sgr
10 Jan 2020	19h35m49.61s	-21 34' 11.6"	10.033	11.015	0.5	3.3	0.3	-58.86	15.65	17.87	81.4	Sgr
11 Jan 2020	19h36m19.81s	-21 33' 06.9"	10.033	11.016	0.5	2.4	0.2	-58.69	17.16	17.88	81.3	Sgr
12 Jan 2020	19h36m50.00s	-21 32' 01.8"	10.033	11.016	0.5	1.5	0.1	-58.51	18.66	17.89	81.3	Sgr
13 Jan 2020	19h37m20.20s	-21 30' 56.3"	10.033	11.017	0.5	0.6	0.1	-58.32	20.14	17.89	81.3	Sgr
14 Jan 2020	19h37m50.40s	-21 29' 50.5"	10.033	11.017	0.5	0.3	0.0	-58.11	21.61	17.89	81.2	Sgr
15 Jan 2020	19h38m20.58s	-21 28' 44.3"	10.033	11.016	0.5	1.2	0.1	-57.89	23.06	17.89	81.2	Sgr
16 Jan 2020	19h38m50.76s	-21 27' 37.8"	10.033	11.016	0.5	2.1	0.2	-57.66	24.50	17.88	81.1	Sgr
17 Jan 2020	19h39m20.92s	-21 26' 31.0"	10.033	11.015	0.5	3.0	0.3	-57.42	25.92	17.87	81.1	Sgr
18 Jan 2020	19h39m51.06s	-21 25' 23.9"	10.033	11.014	0.5	3.9	0.4	-57.16	27.32	17.86	81.0	Sgr
19 Jan 2020	19h40m21.17s	-21 24' 16.5"	10.033	11.013	0.5	4.8	0.5	-56.90	28.71	17.85	81.0	Sgr
20 Jan 2020	19h40m51.25s	-21 23' 08.8"	10.032	11.011	0.5	5.7	0.6	-56.62	30.08	17.83	80.9	Sgr
21 Jan 2020	19h41m21.29s	-21 22' 00.8"	10.032	11.009	0.5	6.6	0.6	-56.33	31.44	17.81	80.9	Sgr
22 Jan 2020	19h41m51.29s	-21 20' 52.6"	10.032	11.007	0.5	7.5	0.7	-56.03	32.77	17.79	80.9	Sgr
23 Jan 2020	19h42m21.24s	-21 19' 44.2"	10.032	11.005	0.5	8.4	0.8	-55.72	34.09	17.76	80.8	Sgr
24 Jan 2020	19h42m51.14s	-21 18' 35.5"	10.032	11.002	0.6	9.3	0.9	-55.40	35.39	17.74	80.8	Sgr
25 Jan 2020	19h43m20.99s	-21 17' 26.7"	10.032	10.999	0.6	10.2	1.0	-55.07	36.68	17.70	80.7	Sgr
26 Jan 2020	19h43m50.76s	-21 16' 17.6"	10.032	10.996	0.6	11.1	1.1	-54.73	37.94	17.67	80.7	Sgr
27 Jan 2020	19h44m20.47s	-21 15' 08.4"	10.032	10.993	0.6	12.0	1.2	-54.38	39.19	17.63	80.7	Sgr
28 Jan 2020	19h44m50.11s	-21 13' 59.0"	10.032	10.989	0.6	12.9	1.3	-54.02	40.42	17.59	80.6	Sgr
29 Jan 2020	19h45m19.67s	-21 12' 49.4"	10.031	10.985	0.6	13.8	1.3	-53.65	41.64	17.54	80.6	Sgr
30 Jan 2020	19h45m49.14s	-21 11' 39.8"	10.031	10.981	0.6	14.7	1.4	-53.28	42.83	17.49	80.5	Sgr
31 Jan 2020	19h46m18.52s	-21 10' 30.0"	10.031	10.976	0.6	15.6	1.5	-52.89	44.01	17.44	80.5	Sgr
1 Feb 2020	19h46m47.81s	-21 09' 20.1"	10.031	10.972	0.6	16.5	1.6	-52.50	45.17	17.39	80.4	Sgr
2 Feb 2020	19h47m17.00s	-21 08' 10.1"	10.031	10.967	0.6	17.4	1.7	-52.10	46.32	17.33	80.4	Sgr
3 Feb 2020	19h47m46.09s	-21 07' 00.1"	10.031	10.962	0.6	18.3	1.8	-51.70	47.45	17.27	80.4	Sgr
4 Feb 2020	19h48m15.07s	-21 05' 50.0"	10.031	10.956	0.6	19.2	1.9	-51.28	48.56	17.21	80.3	Sgr
5 Feb 2020	19h48m43.94s	-21 04' 39.9"	10.031	10.951	0.6	20.1	1.9	-50.86	49.66	17.15	80.3	Sgr
6 Feb 2020	19h49m12.69s	-21 03' 29.8"	10.031	10.945	0.6	21.0	2.0	-50.44	50.74	17.08	80.2	Sgr
7 Feb 2020	19h49m41.32s	-21 02' 19.6"	10.031	10.938	0.6	21.9	2.1	-50.00	51.81	17.01	80.2	Sgr
8 Feb 2020	19h50m09.82s	-21 01' 09.5"	10.030	10.932	0.6	22.8	2.2	-49.56	52.87	16.94	80.2	Sgr
9 Feb 2020	19h50m38.20s	-20 59' 59.4"	10.030	10.925	0.6	23.7	2.3	-49.12	53.90	16.86	80.1	Sgr
10 Feb 2020	19h51m06.44s	-20 58' 49.4"	10.030	10.919	0.6	24.6	2.3	-48.67	54.93	16.78	80.1	Sgr
11 Feb 2020	19h51m34.54s	-20 57' 39.4"	10.030	10.911	0.6	25.5	2.4	-48.21	55.94	16.70	80.1	Sgr
12 Feb 2020	19h52m02.50s	-20 56' 29.5"	10.030	10.904	0.6	26.4	2.5	-47.75	56.94	16.62	80.0	Sgr
13 Feb 2020	19h52m30.31s	-20 55' 19.7"	10.030	10.897	0.6	27.3	2.6	-47.28	57.92	16.54	80.0	Sgr
14 Feb 2020	19h52m57.98s	-20 54' 10.0"	10.030	10.889	0.6	28.2	2.7	-46.80	58.89	16.45	80.0	Sgr
15 Feb 2020	19h53m25.49s	-20 53' 00.4"	10.030	10.881	0.6	29.1	2.7	-46.33	59.85	16.36	79.9	Sgr
16 Feb 2020	19h53m52.84s	-20 51' 51.0"	10.030	10.872	0.6	30.0	2.8	-45.84	60.80	16.26	79.9	Sgr
17 Feb 2020	19h54m20.02s	-20 50' 41.7"	10.029	10.864	0.6	30.9	2.9	-45.36	61.73	16.17	79.9	Sgr
18 Feb 2020	19h54m47.04s	-20 49' 32.7"	10.029	10.855	0.6	31.8	3.0	-44.86	62.65	16.07	79.8	Sgr
19 Feb 2020	19h55m13.88s	-20 48' 23.8"	10.029	10.846	0.6	32.7	3.1	-44.37	63.57	15.96	79.8	Sgr
20 Feb 2020	19h55m40.54s	-20 47' 15.2"	10.029	10.837	0.6	33.7	3.1	-43.87	64.47	15.86	79.8	Sgr
21 Feb 2020	19h56m07.02s	-20 46' 06.7"	10.029	10.828	0.6	34.6	3.2	-43.36	65.36	15.75	79.7	Sgr
22 Feb 2020	19h56m33.31s	-20 44' 58.6"	10.029	10.818	0.6	35.5	3.3	-42.86	66.24	15.64	79.7	Sgr
23 Feb 2020	19h56m59.41s	-20 43' 50.7"	10.029	10.808	0.6	36.4	3.4	-42.34	67.11	15.52	79.7	Sgr
24 Feb 2020	19h57m25.30s	-20 42' 43.2"	10.029	10.798	0.6	37.3	3.4	-41.83	67.97	15.40	79.6	Sgr
25 Feb 2020	19h57m51.00s	-20 41' 35.9"	10.029	10.788	0.6	38.2	3.5	-41.31	68.83	15.28	79.6	Sgr
26 Feb 2020	19h58m16.48s	-20 40' 29.0"	10.028	10.778	0.7	39.1	3.6	-40.79	69.67	15.16	79.6	Sgr
27 Feb 2020	19h58m41.75s	-20 39' 22.4"	10.028	10.767	0.7	40.0	3.6	-40.26	70.51	15.03	79.6	Sgr
28 Feb 2020	19h59m06.81s	-20 38' 16.2"	10.028	10.756	0.7	40.9	3.7	-39.73	71.34	14.90	79.5	Sgr
29 Feb 2020	19h59m31.64s	-20 37' 10.4"	10.028	10.745	0.7	41.8	3.8	-39.20	72.16	14.77	79.5	Sgr
1 Mar 2020	19h59m56.25s	-20 36' 05.1"	10.028	10.734	0.7	42.7	3.8	-38.67	72.97	14.64	79.5	Sgr
2 Mar 2020	20h00m20.63s	-20 35' 00.1"	10.028	10.722	0.7	43.6	3.9	-38.13	73.77	14.50	79.4	Sgr
3 Mar 2020	20h00m44.77s	-20 33' 55.6"	10.028	10.711	0.7	44.5	4.0	-37.59	74.57	14.36	79.4	Sgr
4 Mar 2020	20h01m08.68s	-20 32' 51.6"	10.028	10.699	0.7	45.4	4.0	-37.05	75.36	14.22	79.4	Sgr
5 Mar 2020	20h01m32.35s	-20 31' 48.0"	10.028	10.687	0.7	46.3	4.1	-36.51	76.15	14.08	79.4	Sgr
6 Mar 2020	20h01m55.77s	-20 30' 45.0"	10.027	10.675	0.7	47.2	4.2	-35.96	76.93	13.93	79.4	Sgr
7 Mar 2020	20h02m18.94s	-20 29' 42.5"	10.027	10.662	0.7	48.1	4.2	-35.42	77.70	13.78	79.3	Sgr
8 Mar 2020	20h02m41.86s	-20 28' 40.5"	10.027	10.650	0.7	49.1	4.3	-34.87	78.47	13.63	79.3	Sgr
9 Mar 2020	20h03m04.52s	-20 27' 39.1"	10.027	10.637	0.7	50.0	4.3	-34.31	79.23	13.48	79.3	Sgr
10 Mar 2020	20h03m26.92s	-20 26' 38.3"	10.027	10.624	0.7	50.9	4.4	-33.76	79.98	13.32	79.3	Sgr
11 Mar 2020	20h03m49.06s	-20 25' 38.0"	10.027	10.611	0.7	51.8	4.5	-33.20	80.73	13.16	79.3	Sgr
12 Mar 2020	20h04m10.94s	-20 24' 38.4"	10.027	10.598	0.7	52.7	4.5	-32.65	81.48	13.00	79.2	Sgr
13 Mar 2020	20h04m32.54s	-20 23' 39.4"	10.027	10.584	0.7	53.6	4.6	-32.09	82.22	12.84	79.2	Sgr
14 Mar 2020	20h04m53.87s	-20 22' 41.1"	10.027	10.571	0.7	54.5	4.6	-31.53	82.96	12.68	79.2	Sgr

# EPHEMERIDE 2020 – SATURN

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
15 Mar 2020	20h05m14.92s	-20 21' 43.4"	10.026	10.557	0.7	55.4	4.7	-30.96	83.69	12.51	79.2	Sgr
16 Mar 2020	20h05m35.69s	-20 20' 46.4"	10.026	10.543	0.7	56.3	4.7	-30.40	84.42	12.34	79.2	Sgr
17 Mar 2020	20h05m56.17s	-20 19' 50.1"	10.026	10.529	0.7	57.3	4.8	-29.83	85.15	12.17	79.2	Sgr
18 Mar 2020	20h06m16.37s	-20 18' 54.6"	10.026	10.515	0.7	58.2	4.8	-29.27	85.87	11.99	79.2	Sgr
19 Mar 2020	20h06m36.26s	-20 17' 59.8"	10.026	10.501	0.7	59.1	4.9	-28.70	86.59	11.81	79.2	Sgr
20 Mar 2020	20h06m55.86s	-20 17' 05.7"	10.026	10.487	0.7	60.0	4.9	-28.13	87.31	11.63	79.2	Sgr
21 Mar 2020	20h07m15.15s	-20 16' 12.5"	10.026	10.472	0.7	60.9	5.0	-27.57	88.02	11.45	79.1	Sgr
22 Mar 2020	20h07m34.14s	-20 15' 20.0"	10.026	10.457	0.7	61.8	5.0	-27.00	88.73	11.26	79.1	Cap
23 Mar 2020	20h07m52.81s	-20 14' 28.3"	10.026	10.443	0.7	62.8	5.1	-26.42	89.44	11.08	79.1	Cap
24 Mar 2020	20h08m11.17s	-20 13' 37.5"	10.025	10.428	0.7	63.7	5.1	-25.85	90.15	10.89	79.1	Cap
25 Mar 2020	20h08m29.21s	-20 12' 47.6"	10.025	10.413	0.7	64.6	5.2	-25.28	90.85	10.69	79.1	Cap
26 Mar 2020	20h08m46.93s	-20 11' 58.5"	10.025	10.397	0.7	65.5	5.2	-24.71	91.56	10.50	79.1	Cap
27 Mar 2020	20h09m04.32s	-20 11' 10.3"	10.025	10.382	0.7	66.4	5.2	-24.14	92.26	10.30	79.1	Cap
28 Mar 2020	20h09m21.38s	-20 10' 23.0"	10.025	10.367	0.7	67.4	5.3	-23.56	92.96	10.10	79.1	Cap
29 Mar 2020	20h09m38.11s	-20 09' 36.7"	10.025	10.351	0.7	68.3	5.3	-22.99	93.65	9.90	79.1	Cap
30 Mar 2020	20h09m54.51s	-20 08' 51.3"	10.025	10.336	0.7	69.2	5.3	-22.42	94.35	9.70	79.2	Cap
31 Mar 2020	20h10m10.56s	-20 08' 06.8"	10.025	10.320	0.7	70.1	5.4	-21.84	95.05	9.49	79.2	Cap
1 Apr 2020	20h10m26.28s	-20 07' 23.3"	10.025	10.304	0.7	71.1	5.4	-21.27	95.74	9.29	79.2	Cap
2 Apr 2020	20h10m41.65s	-20 06' 40.8"	10.024	10.288	0.7	72.0	5.4	-20.69	96.44	9.08	79.2	Cap
3 Apr 2020	20h10m56.67s	-20 05' 59.3"	10.024	10.273	0.7	72.9	5.5	-20.12	97.13	8.87	79.2	Cap
4 Apr 2020	20h11m11.34s	-20 05' 18.9"	10.024	10.257	0.7	73.8	5.5	-19.55	97.82	8.66	79.2	Cap
5 Apr 2020	20h11m25.66s	-20 04' 39.4"	10.024	10.240	0.7	74.8	5.5	-18.97	98.52	8.44	79.3	Cap
6 Apr 2020	20h11m39.63s	-20 04' 01.1"	10.024	10.224	0.6	75.7	5.6	-18.40	99.21	8.23	79.3	Cap
7 Apr 2020	20h11m53.24s	-20 03' 23.7"	10.024	10.208	0.6	76.6	5.6	-17.83	99.90	8.01	79.3	Cap
8 Apr 2020	20h12m06.50s	-20 02' 47.5"	10.024	10.192	0.6	77.6	5.6	-17.25	100.59	7.79	79.4	Cap
9 Apr 2020	20h12m19.39s	-20 02' 12.3"	10.024	10.175	0.6	78.5	5.6	-16.68	101.29	7.57	79.4	Cap
10 Apr 2020	20h12m31.92s	-20 01' 38.2"	10.024	10.159	0.6	79.4	5.6	-16.11	101.98	7.35	79.4	Cap
11 Apr 2020	20h12m44.08s	-20 01' 05.3"	10.023	10.143	0.6	80.3	5.7	-15.54	102.68	7.13	79.5	Cap
12 Apr 2020	20h12m55.87s	-20 00' 33.4"	10.023	10.126	0.6	81.3	5.7	-14.97	103.37	6.91	79.5	Cap
13 Apr 2020	20h13m07.30s	-20 00' 02.7"	10.023	10.110	0.6	82.2	5.7	-14.40	104.07	6.68	79.6	Cap
14 Apr 2020	20h13m18.34s	-19 59' 33.2"	10.023	10.093	0.6	83.2	5.7	-13.84	104.77	6.45	79.7	Cap
15 Apr 2020	20h13m29.01s	-19 59' 04.8"	10.023	10.076	0.6	84.1	5.7	-13.27	105.47	6.22	79.7	Cap
16 Apr 2020	20h13m39.30s	-19 58' 37.6"	10.023	10.060	0.6	85.0	5.7	-12.70	106.17	5.99	79.8	Cap
17 Apr 2020	20h13m49.21s	-19 58' 11.6"	10.023	10.043	0.6	86.0	5.7	-12.14	106.87	5.76	79.9	Cap
18 Apr 2020	20h13m58.73s	-19 57' 46.8"	10.023	10.027	0.6	86.9	5.7	-11.58	107.58	5.52	80.0	Cap
19 Apr 2020	20h14m07.86s	-19 57' 23.2"	10.022	10.010	0.6	87.8	5.7	-11.02	108.28	5.29	80.1	Cap
20 Apr 2020	20h14m16.61s	-19 57' 00.8"	10.022	9.993	0.6	88.8	5.8	-10.46	108.99	5.05	80.2	Cap
21 Apr 2020	20h14m24.96s	-19 56' 39.7"	10.022	9.976	0.6	89.7	5.8	-9.90	109.70	4.81	80.3	Cap
22 Apr 2020	20h14m32.92s	-19 56' 19.8"	10.022	9.960	0.6	90.7	5.8	-9.34	110.41	4.57	80.5	Cap
23 Apr 2020	20h14m40.48s	-19 56' 01.1"	10.022	9.943	0.6	91.6	5.8	-8.79	111.13	4.33	80.7	Cap
24 Apr 2020	20h14m47.64s	-19 55' 43.7"	10.022	9.926	0.6	92.6	5.8	-8.24	111.84	4.09	80.8	Cap
25 Apr 2020	20h14m54.41s	-19 55' 27.6"	10.022	9.910	0.6	93.5	5.8	-7.69	112.56	3.85	81.1	Cap
26 Apr 2020	20h15m00.78s	-19 55' 12.8"	10.022	9.893	0.6	94.5	5.7	-7.14	113.29	3.61	81.3	Cap
27 Apr 2020	20h15m06.74s	-19 54' 59.2"	10.022	9.876	0.6	95.4	5.7	-6.59	114.01	3.36	81.6	Cap
28 Apr 2020	20h15m12.31s	-19 54' 47.0"	10.021	9.860	0.6	96.4	5.7	-6.05	114.74	3.12	81.9	Cap
29 Apr 2020	20h15m17.47s	-19 54' 36.0"	10.021	9.843	0.6	97.3	5.7	-5.51	115.47	2.88	82.3	Cap
30 Apr 2020	20h15m22.23s	-19 54' 26.3"	10.021	9.827	0.6	98.3	5.7	-4.97	116.21	2.63	82.8	Cap
1 Mai 2020	20h15m26.58s	-19 54' 17.9"	10.021	9.810	0.6	99.2	5.7	-4.44	116.95	2.39	83.3	Cap
2 Mai 2020	20h15m30.53s	-19 54' 10.9"	10.021	9.794	0.6	100.2	5.7	-3.90	117.69	2.14	84.0	Cap
3 Mai 2020	20h15m34.08s	-19 54' 05.1"	10.021	9.777	0.6	101.1	5.7	-3.37	118.43	1.90	84.9	Cap
4 Mai 2020	20h15m37.22s	-19 54' 00.7"	10.021	9.761	0.6	102.1	5.6	-2.85	119.18	1.66	86.1	Cap
5 Mai 2020	20h15m39.96s	-19 53' 57.5"	10.021	9.745	0.6	103.0	5.6	-2.32	119.93	1.41	87.6	Cap
6 Mai 2020	20h15m42.30s	-19 53' 55.7"	10.020	9.728	0.6	104.0	5.6	-1.80	120.69	1.17	89.7	Cap
7 Mai 2020	20h15m44.24s	-19 53' 55.2"	10.020	9.712	0.5	105.0	5.6	-1.29	121.45	0.94	93.0	Cap
8 Mai 2020	20h15m45.77s	-19 53' 56.0"	10.020	9.696	0.5	105.9	5.6	-0.78	122.22	0.70	98.4	Cap
9 Mai 2020	20h15m46.89s	-19 53' 58.1"	10.020	9.680	0.5	106.9	5.5	-0.27	122.99	0.48	109.1	Cap
10 Mai 2020	20h15m47.62s	-19 54' 01.6"	10.020	9.664	0.5	107.9	5.5	0.24	123.76	0.30	134.4	Cap
11 Mai 2020	20h15m47.94s	-19 54' 06.3"	10.020	9.648	0.5	108.8	5.5	0.74	124.54	0.27	185.0	Cap
12 Mai 2020	20h15m47.85s	-19 54' 12.4"	10.020	9.633	0.5	109.8	5.4	1.24	125.32	0.41	219.4	Cap
13 Mai 2020	20h15m47.37s	-19 54' 19.7"	10.020	9.617	0.5	110.8	5.4	1.73	126.11	0.63	233.3	Cap
14 Mai 2020	20h15m46.47s	-19 54' 28.4"	10.019	9.601	0.5	111.7	5.4	2.22	126.90	0.86	240.0	Cap
15 Mai 2020	20h15m45.18s	-19 54' 38.4"	10.019	9.586	0.5	112.7	5.3	2.70	127.70	1.09	243.8	Cap
16 Mai 2020	20h15m43.48s	-19 54' 49.7"	10.019	9.571	0.5	113.7	5.3	3.18	128.50	1.33	246.3	Cap
17 Mai 2020	20h15m41.38s	-19 55' 02.3"	10.019	9.555	0.5	114.6	5.3	3.65	129.31	1.57	248.0	Cap
18 Mai 2020	20h15m38.87s	-19 55' 16.2"	10.019	9.540	0.5	115.6	5.2	4.12	130.13	1.81	249.2	Cap
19 Mai 2020	20h15m35.97s	-19 55' 31.3"	10.019	9.525	0.5	116.6	5.2	4.59	130.94	2.05	250.2	Cap
20 Mai 2020	20h15m32.67s	-19 55' 47.8"	10.019	9.510	0.5	117.6	5.1	5.05	131.77	2.29	250.9	Cap
21 Mai 2020	20h15m28.97s	-19 56' 05.5"	10.019	9.496	0.5	118.5	5.1	5.50	132.60	2.53	251.6	Cap
22 Mai 2020	20h15m24.88s	-19 56' 24.5"	10.018	9.481	0.5	119.5	5.0	5.95	133.43	2.77	252.1	Cap
23 Mai 2020	20h15m20.39s	-19 56' 44.8"	10.018	9.466	0.5	120.5	5.0	6.39	134.27	3.01	252.5	Cap
24 Mai 2020	20h15m15.51s	-19 57' 06.3"	10.018	9.452	0.5	121.5	4.9	6.82	135.11	3.24	252.8	Cap
25 Mai 2020	20h15m10.24s	-19 57' 29.1"	10.018	9.438	0.5	122.5	4.9	7.25	135.97	3.48	253.2	Cap
26 Mai 2020	20h15m04.59s	-19 57' 53.1"	10.018	9.424	0.4	123.4	4.8	7.68	136.82	3.71	253.4	Cap
27 Mai 2020	20h14m58.55s	-19 58' 18.3"	10.018	9.410	0.4	124.4	4.8	8.09	137.68	3.94	253.7	Cap

# EPHEMERIDE 2020 – SATURN

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
28 Mai 2020	20h14m52.14s	-19 58' 44.7"	10.018	9.396	0.4	125.4	4.7	8.50	138.55	4.17	253.9	Cap
29 Mai 2020	20h14m45.35s	-19 59' 12.3"	10.018	9.383	0.4	126.4	4.7	8.91	139.43	4.39	254.1	Cap
30 Mai 2020	20h14m38.19s	-19 59' 41.1"	10.017	9.369	0.4	127.4	4.6	9.30	140.31	4.62	254.2	Cap
31 Mai 2020	20h14m30.66s	-20 00' 11.1"	10.017	9.356	0.4	128.4	4.6	9.69	141.19	4.84	254.4	Cap
1 Jun 2020	20h14m22.76s	-20 00' 42.1"	10.017	9.343	0.4	129.4	4.5	10.07	142.08	5.06	254.5	Cap
2 Jun 2020	20h14m14.50s	-20 01' 14.4"	10.017	9.330	0.4	130.4	4.4	10.45	142.98	5.27	254.7	Cap
3 Jun 2020	20h14m05.89s	-20 01' 47.7"	10.017	9.318	0.4	131.4	4.4	10.81	143.88	5.49	254.8	Cap
4 Jun 2020	20h13m56.93s	-20 02' 22.1"	10.017	9.305	0.4	132.3	4.3	11.17	144.79	5.70	254.9	Cap
5 Jun 2020	20h13m47.61s	-20 02' 57.6"	10.017	9.293	0.4	133.3	4.2	11.52	145.71	5.91	255.0	Cap
6 Jun 2020	20h13m37.96s	-20 03' 34.2"	10.017	9.281	0.4	134.3	4.2	11.87	146.63	6.12	255.1	Cap
7 Jun 2020	20h13m27.96s	-20 04' 11.8"	10.016	9.269	0.4	135.3	4.1	12.20	147.55	6.32	255.2	Cap
8 Jun 2020	20h13m17.62s	-20 04' 50.5"	10.016	9.258	0.4	136.3	4.0	12.53	148.48	6.52	255.3	Cap
9 Jun 2020	20h13m06.95s	-20 05' 30.1"	10.016	9.246	0.4	137.3	3.9	12.84	149.42	6.72	255.4	Cap
10 Jun 2020	20h12m55.95s	-20 06' 10.7"	10.016	9.235	0.4	138.3	3.9	13.15	150.36	6.92	255.5	Cap
11 Jun 2020	20h12m44.63s	-20 06' 52.4"	10.016	9.224	0.3	139.3	3.8	13.45	151.31	7.11	255.6	Cap
12 Jun 2020	20h12m32.99s	-20 07' 34.9"	10.016	9.213	0.3	140.3	3.7	13.74	152.27	7.30	255.6	Cap
13 Jun 2020	20h12m21.03s	-20 08' 18.4"	10.016	9.203	0.3	141.3	3.6	14.02	153.22	7.49	255.7	Cap
14 Jun 2020	20h12m08.77s	-20 09' 02.8"	10.016	9.192	0.3	142.3	3.6	14.29	154.19	7.67	255.8	Cap
15 Jun 2020	20h11m56.20s	-20 09' 48.0"	10.015	9.182	0.3	143.4	3.5	14.55	155.16	7.85	255.8	Cap
16 Jun 2020	20h11m43.33s	-20 10' 34.2"	10.015	9.172	0.3	144.4	3.4	14.81	156.13	8.03	255.9	Cap
17 Jun 2020	20h11m30.17s	-20 11' 21.2"	10.015	9.163	0.3	145.4	3.3	15.05	157.11	8.20	256.0	Cap
18 Jun 2020	20h11m16.72s	-20 12' 08.9"	10.015	9.153	0.3	146.4	3.2	15.28	158.10	8.37	256.0	Cap
19 Jun 2020	20h11m02.99s	-20 12' 57.5"	10.015	9.144	0.3	147.4	3.1	15.50	159.09	8.54	256.1	Cap
20 Jun 2020	20h10m48.99s	-20 13' 46.9"	10.015	9.135	0.3	148.4	3.0	15.71	160.08	8.70	256.1	Cap
21 Jun 2020	20h10m34.72s	-20 14' 37.0"	10.015	9.126	0.3	149.4	3.0	15.91	161.08	8.86	256.2	Cap
22 Jun 2020	20h10m20.19s	-20 15' 27.8"	10.015	9.118	0.3	150.4	2.9	16.10	162.08	9.01	256.2	Cap
23 Jun 2020	20h10m05.41s	-20 16' 19.2"	10.014	9.110	0.3	151.4	2.8	16.28	163.09	9.16	256.3	Cap
24 Jun 2020	20h09m50.38s	-20 17' 11.4"	10.014	9.102	0.3	152.5	2.7	16.45	164.10	9.30	256.3	Cap
25 Jun 2020	20h09m35.12s	-20 18' 04.2"	10.014	9.094	0.3	153.5	2.6	16.61	165.11	9.44	256.4	Cap
26 Jun 2020	20h09m19.63s	-20 18' 57.5"	10.014	9.087	0.2	154.5	2.5	16.75	166.13	9.57	256.4	Cap
27 Jun 2020	20h09m03.92s	-20 19' 51.5"	10.014	9.080	0.2	155.5	2.4	16.89	167.15	9.70	256.5	Cap
28 Jun 2020	20h08m48.00s	-20 20' 46.0"	10.014	9.073	0.2	156.5	2.3	17.01	168.17	9.82	256.5	Cap
29 Jun 2020	20h08m31.87s	-20 21' 41.0"	10.014	9.067	0.2	157.5	2.2	17.12	169.20	9.94	256.6	Cap
30 Jun 2020	20h08m15.54s	-20 22' 36.5"	10.014	9.060	0.2	158.6	2.1	17.22	170.23	10.05	256.6	Cap
1 Jul 2020	20h07m59.03s	-20 23' 32.4"	10.013	9.054	0.2	159.6	2.0	17.31	171.26	10.16	256.7	Cap
2 Jul 2020	20h07m42.33s	-20 24' 28.8"	10.013	9.049	0.2	160.6	1.9	17.39	172.29	10.26	256.7	Cap
3 Jul 2020	20h07m25.46s	-20 25' 25.6"	10.013	9.043	0.2	161.6	1.8	17.46	173.33	10.36	256.8	Cap
4 Jul 2020	20h07m08.43s	-20 26' 22.7"	10.013	9.038	0.2	162.6	1.7	17.51	174.36	10.46	256.8	Sgr
5 Jul 2020	20h06m51.24s	-20 27' 20.2"	10.013	9.033	0.2	163.7	1.6	17.55	175.40	10.55	256.8	Sgr
6 Jul 2020	20h06m33.91s	-20 28' 18.0"	10.013	9.029	0.2	164.7	1.5	17.58	176.44	10.63	256.9	Sgr
7 Jul 2020	20h06m16.43s	-20 29' 16.1"	10.013	9.024	0.2	165.7	1.4	17.60	177.48	10.71	256.9	Sgr
8 Jul 2020	20h05m58.81s	-20 30' 14.4"	10.013	9.020	0.2	166.7	1.3	17.61	178.52	10.78	257.0	Sgr
9 Jul 2020	20h05m41.08s	-20 31' 13.0"	10.012	9.017	0.2	167.8	1.2	17.60	179.57	10.85	257.0	Sgr
10 Jul 2020	20h05m23.22s	-20 32' 11.8"	10.012	9.013	0.2	168.8	1.1	17.58	180.61	10.92	257.1	Sgr
11 Jul 2020	20h05m05.26s	-20 33' 10.7"	10.012	9.010	0.2	169.8	1.0	17.55	181.65	10.97	257.1	Sgr
12 Jul 2020	20h04m47.20s	-20 34' 09.8"	10.012	9.007	0.1	170.8	0.9	17.51	182.69	11.03	257.1	Sgr
13 Jul 2020	20h04m29.05s	-20 35' 09.0"	10.012	9.005	0.1	171.9	0.8	17.46	183.73	11.08	257.2	Sgr
14 Jul 2020	20h04m10.82s	-20 36' 08.2"	10.012	9.002	0.1	172.9	0.7	17.40	184.77	11.12	257.2	Sgr
15 Jul 2020	20h03m52.52s	-20 37' 07.6"	10.012	9.000	0.1	173.9	0.6	17.32	185.81	11.15	257.3	Sgr
16 Jul 2020	20h03m34.15s	-20 38' 06.9"	10.011	8.9986	0.1	174.9	0.5	17.23	186.85	11.19	257.3	Sgr
17 Jul 2020	20h03m15.73s	-20 39' 06.2"	10.011	8.9972	0.1	176.0	0.4	17.13	187.88	11.21	257.3	Sgr
18 Jul 2020	20h02m57.27s	-20 40' 05.6"	10.011	8.9961	0.1	177.0	0.3	17.02	188.92	11.23	257.4	Sgr
19 Jul 2020	20h02m38.77s	-20 41' 04.8"	10.011	8.9954	0.1	178.0	0.2	16.89	189.95	11.24	257.4	Sgr
20 Jul 2020	20h02m20.25s	-20 42' 04.0"	10.011	8.9949	0.1	179.0	0.1	16.76	190.98	11.25	257.5	Sgr
21 Jul 2020	20h02m01.72s	-20 43' 03.0"	10.011	8.9947	0.1	179.8	0.0	16.61	192.00	11.25	257.5	Sgr
22 Jul 2020	20h01m43.18s	-20 44' 01.9"	10.011	8.9948	0.1	178.9	0.1	16.45	193.03	11.25	257.5	Sgr
23 Jul 2020	20h01m24.65s	-20 45' 00.6"	10.011	8.9952	0.1	177.9	0.2	16.28	194.05	11.24	257.6	Sgr
24 Jul 2020	20h01m06.13s	-20 45' 59.1"	10.010	8.9959	0.1	176.8	0.3	16.10	195.07	11.22	257.6	Sgr
25 Jul 2020	20h00m47.65s	-20 46' 57.4"	10.010	8.9970	0.1	175.8	0.4	15.91	196.08	11.20	257.6	Sgr
26 Jul 2020	20h00m29.19s	-20 47' 55.4"	10.010	8.9983	0.1	174.8	0.5	15.71	197.09	11.17	257.7	Sgr
27 Jul 2020	20h00m10.79s	-20 48' 53.1"	10.010	8.9999	0.1	173.7	0.6	15.49	198.10	11.13	257.7	Sgr
28 Jul 2020	19h59m52.44s	-20 49' 50.5"	10.010	9.002	0.1	172.7	0.7	15.27	199.10	11.09	257.7	Sgr
29 Jul 2020	19h59m34.15s	-20 50' 47.5"	10.010	9.004	0.1	171.7	0.8	15.03	200.10	11.05	257.8	Sgr
30 Jul 2020	19h59m15.94s	-20 51' 44.2"	10.010	9.007	0.1	170.7	0.9	14.79	201.10	11.00	257.8	Sgr
31 Jul 2020	19h58m57.82s	-20 52' 40.5"	10.009	9.009	0.1	169.6	1.0	14.53	202.09	10.94	257.8	Sgr
1 Aug 2020	19h58m39.78s	-20 53' 36.3"	10.009	9.012	0.1	168.6	1.1	14.27	203.07	10.88	257.9	Sgr
2 Aug 2020	19h58m21.84s	-20 54' 31.7"	10.009	9.016	0.2	167.6	1.3	13.99	204.06	10.81	257.9	Sgr
3 Aug 2020	19h58m04.02s	-20 55' 26.7"	10.009	9.019	0.2	166.5	1.4	13.70	205.03	10.74	257.9	Sgr
4 Aug 2020	19h57m46.31s	-20 56' 21.1"	10.009	9.023	0.2	165.5	1.5	13.41	206.00	10.66	258.0	Sgr
5 Aug 2020	19h57m28.73s	-20 57' 15.1"	10.009	9.028	0.2	164.5	1.6	13.10	206.97	10.58	258.0	Sgr
6 Aug 2020	19h57m11.28s	-20 58' 08.5"	10.009	9.032	0.2	163.5	1.7	12.79	207.93	10.49	258.0	Sgr
7 Aug 2020	19h56m53.98s	-20 59' 01.3"	10.009	9.037	0.2	162.4	1.8	12.46	208.89	10.40	258.0	Sgr
8 Aug 2020	19h56m36.82s	-20 59' 53.6"	10.008	9.042	0.2	161.4	1.9	12.13	209.84	10.31	258.1	Sgr
9 Aug 2020	19h56m19.83s	-21 00' 45.3"	10.008	9.047	0.2	160.4	1.9	11.79	210.79	10.20	258.1	Sgr

# EPHEMERIDE 2020 – SATURN

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
10 Aug 2020	19h56m03.01s	-21 01' 36.4"	10.008	9.053	0.2	159.4	2.0	11.43	211.73	10.10	258.1	Sgr
11 Aug 2020	19h55m46.36s	-21 02' 26.8"	10.008	9.059	0.2	158.3	2.1	11.07	212.66	9.98	258.2	Sgr
12 Aug 2020	19h55m29.90s	-21 03' 16.6"	10.008	9.065	0.2	157.3	2.2	10.71	213.59	9.87	258.2	Sgr
13 Aug 2020	19h55m13.64s	-21 04' 05.7"	10.008	9.072	0.2	156.3	2.3	10.33	214.52	9.74	258.2	Sgr
14 Aug 2020	19h54m57.57s	-21 04' 54.1"	10.008	9.079	0.2	155.3	2.4	9.95	215.43	9.62	258.2	Sgr
15 Aug 2020	19h54m41.72s	-21 05' 41.8"	10.007	9.086	0.2	154.2	2.5	9.55	216.35	9.48	258.3	Sgr
16 Aug 2020	19h54m26.09s	-21 06' 28.8"	10.007	9.093	0.2	153.2	2.6	9.15	217.25	9.35	258.3	Sgr
17 Aug 2020	19h54m10.69s	-21 07' 15.0"	10.007	9.100	0.2	152.2	2.7	8.75	218.16	9.20	258.3	Sgr
18 Aug 2020	19h53m55.52s	-21 08' 00.5"	10.007	9.108	0.2	151.2	2.8	8.33	219.05	9.06	258.3	Sgr
19 Aug 2020	19h53m40.60s	-21 08' 45.1"	10.007	9.116	0.2	150.1	2.9	7.91	219.94	8.90	258.3	Sgr
20 Aug 2020	19h53m25.93s	-21 09' 29.0"	10.007	9.125	0.2	149.1	3.0	7.48	220.83	8.75	258.4	Sgr
21 Aug 2020	19h53m11.53s	-21 10' 12.0"	10.007	9.133	0.2	148.1	3.1	7.04	221.71	8.59	258.4	Sgr
22 Aug 2020	19h52m57.39s	-21 10' 54.2"	10.007	9.142	0.3	147.1	3.1	6.60	222.58	8.42	258.4	Sgr
23 Aug 2020	19h52m41.53s	-21 11' 35.6"	10.006	9.151	0.3	146.1	3.2	6.15	223.45	8.25	258.4	Sgr
24 Aug 2020	19h52m29.95s	-21 12' 16.1"	10.006	9.161	0.3	145.1	3.3	5.70	224.31	8.08	258.4	Sgr
25 Aug 2020	19h52m16.66s	-21 12' 55.7"	10.006	9.170	0.3	144.0	3.4	5.23	225.17	7.90	258.4	Sgr
26 Aug 2020	19h52m03.67s	-21 13' 34.4"	10.006	9.180	0.3	143.0	3.5	4.77	226.02	7.72	258.4	Sgr
27 Aug 2020	19h51m50.98s	-21 14' 12.2"	10.006	9.190	0.3	142.0	3.6	4.29	226.87	7.53	258.4	Sgr
28 Aug 2020	19h51m38.60s	-21 14' 49.1"	10.006	9.201	0.3	141.0	3.6	3.81	227.71	7.34	258.5	Sgr
29 Aug 2020	19h51m26.54s	-21 15' 25.1"	10.006	9.211	0.3	140.0	3.7	3.33	228.55	7.15	258.5	Sgr
30 Aug 2020	19h51m14.79s	-21 16' 00.1"	10.005	9.222	0.3	139.0	3.8	2.84	229.38	6.96	258.5	Sgr
31 Aug 2020	19h51m03.37s	-21 16' 34.2"	10.005	9.233	0.3	137.9	3.9	2.35	230.21	6.76	258.5	Sgr
1 Sep 2020	19h50m52.28s	-21 17' 07.4"	10.005	9.244	0.3	136.9	3.9	1.85	231.03	6.56	258.5	Sgr
2 Sep 2020	19h50m41.52s	-21 17' 39.5"	10.005	9.255	0.3	135.9	4.0	1.34	231.85	6.35	258.5	Sgr
3 Sep 2020	19h50m31.11s	-21 18' 10.7"	10.005	9.267	0.3	134.9	4.1	0.83	232.66	6.15	258.5	Sgr
4 Sep 2020	19h50m21.03s	-21 18' 40.9"	10.005	9.279	0.3	133.9	4.2	0.32	233.47	5.94	258.5	Sgr
5 Sep 2020	19h50m11.31s	-21 19' 10.2"	10.005	9.291	0.3	132.9	4.2	-0.20	234.28	5.73	258.5	Sgr
6 Sep 2020	19h50m01.94s	-21 19' 38.4"	10.004	9.303	0.3	131.9	4.3	-0.72	235.08	5.51	258.5	Sgr
7 Sep 2020	19h49m52.93s	-21 20' 05.6"	10.004	9.316	0.3	130.9	4.4	-1.25	235.87	5.30	258.4	Sgr
8 Sep 2020	19h49m44.28s	-21 20' 31.8"	10.004	9.328	0.3	129.9	4.4	-1.78	236.66	5.08	258.4	Sgr
9 Sep 2020	19h49m36.00s	-21 20' 57.0"	10.004	9.341	0.4	128.9	4.5	-2.31	237.45	4.85	258.4	Sgr
10 Sep 2020	19h49m28.09s	-21 21' 21.2"	10.004	9.354	0.4	127.9	4.6	-2.85	238.23	4.63	258.4	Sgr
11 Sep 2020	19h49m20.56s	-21 21' 44.3"	10.004	9.367	0.4	126.9	4.6	-3.39	239.01	4.40	258.4	Sgr
12 Sep 2020	19h49m13.41s	-21 22' 06.4"	10.004	9.380	0.4	125.9	4.7	-3.93	239.79	4.17	258.3	Sgr
13 Sep 2020	19h49m06.64s	-21 22' 27.5"	10.003	9.394	0.4	124.9	4.7	-4.48	240.56	3.94	258.3	Sgr
14 Sep 2020	19h49m00.26s	-21 22' 47.5"	10.003	9.408	0.4	123.9	4.8	-5.03	241.33	3.71	258.2	Sgr
15 Sep 2020	19h48m54.27s	-21 23' 06.4"	10.003	9.421	0.4	122.9	4.8	-5.58	242.09	3.47	258.1	Sgr
16 Sep 2020	19h48m48.68s	-21 23' 24.3"	10.003	9.435	0.4	121.9	4.9	-6.14	242.85	3.23	258.1	Sgr
17 Sep 2020	19h48m43.49s	-21 23' 41.1"	10.003	9.450	0.4	120.9	4.9	-6.70	243.61	2.99	258.0	Sgr
18 Sep 2020	19h48m38.70s	-21 23' 56.9"	10.003	9.464	0.4	119.9	5.0	-7.26	244.37	2.75	257.8	Sgr
19 Sep 2020	19h48m34.31s	-21 24' 11.6"	10.003	9.478	0.4	118.9	5.0	-7.82	245.12	2.50	257.7	Sgr
20 Sep 2020	19h48m30.34s	-21 24' 25.1"	10.002	9.493	0.4	117.9	5.1	-8.39	245.87	2.26	257.5	Sgr
21 Sep 2020	19h48m26.77s	-21 24' 37.6"	10.002	9.508	0.4	116.9	5.1	-8.95	246.62	2.01	257.3	Sgr
22 Sep 2020	19h48m23.62s	-21 24' 49.0"	10.002	9.523	0.4	115.9	5.2	-9.52	247.36	1.77	257.0	Sgr
23 Sep 2020	19h48m20.88s	-21 24' 59.3"	10.002	9.538	0.4	114.9	5.2	-10.09	248.11	1.52	256.6	Sgr
24 Sep 2020	19h48m18.55s	-21 25' 08.6"	10.002	9.553	0.4	113.9	5.3	-10.67	248.85	1.27	256.1	Sgr
25 Sep 2020	19h48m16.65s	-21 25' 16.7"	10.002	9.568	0.4	113.0	5.3	-11.24	249.59	1.02	255.2	Sgr
26 Sep 2020	19h48m15.15s	-21 25' 23.7"	10.002	9.583	0.4	112.0	5.3	-11.82	250.32	0.77	253.9	Sgr
27 Sep 2020	19h48m14.08s	-21 25' 29.6"	10.001	9.599	0.4	111.0	5.4	-12.39	251.06	0.53	251.2	Sgr
28 Sep 2020	19h48m13.42s	-21 25' 34.5"	10.001	9.614	0.5	110.0	5.4	-12.97	251.79	0.28	243.9	Sgr
29 Sep 2020	19h48m13.18s	-21 25' 38.2"	10.001	9.630	0.5	109.0	5.4	-13.55	252.52	0.08	184.5	Sgr
30 Sep 2020	19h48m13.36s	-21 25' 40.8"	10.001	9.645	0.5	108.0	5.5	-14.13	253.26	0.24	97.7	Sgr
1 Okt 2020	19h48m13.96s	-21 25' 42.4"	10.001	9.661	0.5	107.1	5.5	-14.72	253.99	0.49	88.4	Sgr
2 Okt 2020	19h48m14.98s	-21 25' 42.8"	10.001	9.677	0.5	106.1	5.5	-15.30	254.71	0.74	85.4	Sgr
3 Okt 2020	19h48m16.42s	-21 25' 42.1"	10.001	9.693	0.5	105.1	5.5	-15.88	255.44	0.98	83.9	Sgr
4 Okt 2020	19h48m18.27s	-21 25' 40.4"	10.000	9.709	0.5	104.1	5.6	-16.47	256.17	1.23	83.0	Sgr
5 Okt 2020	19h48m20.55s	-21 25' 37.5"	10.000	9.725	0.5	103.1	5.6	-17.05	256.90	1.49	82.4	Sgr
6 Okt 2020	19h48m23.25s	-21 25' 33.5"	10.000	9.742	0.5	102.2	5.6	-17.64	257.62	1.74	82.0	Sgr
7 Okt 2020	19h48m26.36s	-21 25' 28.5"	10.000	9.758	0.5	101.2	5.6	-18.22	258.35	1.99	81.7	Sgr
8 Okt 2020	19h48m29.90s	-21 25' 22.3"	10.000	9.774	0.5	100.2	5.6	-18.81	259.08	2.24	81.4	Sgr
9 Okt 2020	19h48m33.85s	-21 25' 15.0"	10.000	9.790	0.5	99.3	5.7	-19.39	259.80	2.49	81.2	Sgr
10 Okt 2020	19h48m38.22s	-21 25' 06.7"	10.000	9.807	0.5	98.3	5.7	-19.98	260.53	2.74	81.1	Sgr
11 Okt 2020	19h48m43.01s	-21 24' 57.2"	9.999	9.823	0.5	97.3	5.7	-20.56	261.26	2.99	81.0	Sgr
12 Okt 2020	19h48m48.22s	-21 24' 46.6"	9.999	9.840	0.5	96.3	5.7	-21.15	261.98	3.24	80.8	Sgr
13 Okt 2020	19h48m53.85s	-21 24' 34.9"	9.999	9.856	0.5	95.4	5.7	-21.73	262.71	3.49	80.7	Sgr
14 Okt 2020	19h48m59.89s	-21 24' 22.2"	9.999	9.873	0.5	94.4	5.7	-22.32	263.44	3.73	80.7	Sgr
15 Okt 2020	19h49m06.36s	-21 24' 08.3"	9.999	9.889	0.5	93.4	5.7	-22.90	264.17	3.98	80.6	Sgr
16 Okt 2020	19h49m13.23s	-21 23' 53.3"	9.999	9.906	0.5	92.5	5.7	-23.49	264.91	4.23	80.5	Sgr
17 Okt 2020	19h49m20.52s	-21 23' 37.2"	9.999	9.922	0.5	91.5	5.7	-24.07	265.64	4.48	80.5	Sgr
18 Okt 2020	19h49m28.23s	-21 23' 20.0"	9.998	9.939	0.5	90.6	5.7	-24.66	266.38	4.72	80.4	Sgr
19 Okt 2020	19h49m36.34s	-21 23' 01.8"	9.998	9.956	0.5	89.6	5.7	-25.24	267.11	4.97	80.3	Sgr
20 Okt 2020	19h49m44.86s	-21 22' 42.4"	9.998	9.972	0.5	88.6	5.7	-25.82	267.85	5.21	80.3	Sgr
21 Okt 2020	19h49m53.79s	-21 22' 21.9"	9.998	9.989	0.5	87.7	5.7	-26.40	268.60	5.45	80.2	Sgr
22 Okt 2020	19h50m03.12s	-21 22' 00.4"	9.998	10.005	0.6	86.7	5.7	-26.98	269.34	5.70	80.2	Sgr

# EPHEMERIDE 2020 – SATURN

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
23 Okt 2020	19h50m12.85s	-21 21' 37.7"	9.998	10.022	0.6	85.8	5.7	-27.56	270.09	5.93	80.2	Sgr
24 Okt 2020	19h50m22.98s	-21 21' 14.0"	9.998	10.038	0.6	84.8	5.7	-28.13	270.84	6.17	80.1	Sgr
25 Okt 2020	19h50m33.51s	-21 20' 49.1"	9.997	10.055	0.6	83.8	5.7	-28.71	271.59	6.41	80.1	Sgr
26 Okt 2020	19h50m44.43s	-21 20' 23.2"	9.997	10.071	0.6	82.9	5.7	-29.28	272.35	6.64	80.0	Sgr
27 Okt 2020	19h50m55.73s	-21 19' 56.3"	9.997	10.088	0.6	81.9	5.6	-29.85	273.11	6.87	80.0	Sgr
28 Okt 2020	19h51m07.42s	-21 19' 28.2"	9.997	10.104	0.6	81.0	5.6	-30.42	273.87	7.10	80.0	Sgr
29 Okt 2020	19h51m19.50s	-21 18' 59.1"	9.997	10.121	0.6	80.0	5.6	-30.99	274.64	7.33	79.9	Sgr
30 Okt 2020	19h51m31.95s	-21 18' 28.9"	9.997	10.137	0.6	79.1	5.6	-31.56	275.41	7.56	79.9	Sgr
31 Okt 2020	19h51m44.79s	-21 17' 57.6"	9.997	10.153	0.6	78.1	5.6	-32.13	276.19	7.78	79.9	Sgr
1 Nov 2020	19h51m57.99s	-21 17' 25.3"	9.996	10.169	0.6	77.2	5.6	-32.69	276.97	8.01	79.8	Sgr
2 Nov 2020	19h52m11.57s	-21 16' 51.9"	9.996	10.186	0.6	76.2	5.5	-33.25	277.76	8.23	79.8	Sgr
3 Nov 2020	19h52m25.51s	-21 16' 17.5"	9.996	10.202	0.6	75.3	5.5	-33.81	278.55	8.45	79.8	Sgr
4 Nov 2020	19h52m39.82s	-21 15' 42.0"	9.996	10.218	0.6	74.4	5.5	-34.36	279.35	8.67	79.8	Sgr
5 Nov 2020	19h52m54.50s	-21 15' 05.5"	9.996	10.234	0.6	73.4	5.5	-34.92	280.15	8.88	79.7	Sgr
6 Nov 2020	19h53m09.53s	-21 14' 27.9"	9.996	10.249	0.6	72.5	5.4	-35.47	280.96	9.10	79.7	Sgr
7 Nov 2020	19h53m24.92s	-21 13' 49.3"	9.995	10.265	0.6	71.5	5.4	-36.02	281.77	9.31	79.7	Sgr
8 Nov 2020	19h53m40.66s	-21 13' 09.6"	9.995	10.281	0.6	70.6	5.4	-36.56	282.59	9.52	79.6	Sgr
9 Nov 2020	19h53m56.75s	-21 12' 28.9"	9.995	10.297	0.6	69.6	5.3	-37.11	283.42	9.73	79.6	Sgr
10 Nov 2020	19h54m13.18s	-21 11' 47.2"	9.995	10.312	0.6	68.7	5.3	-37.65	284.26	9.94	79.6	Sgr
11 Nov 2020	19h54m29.96s	-21 11' 04.4"	9.995	10.327	0.6	67.8	5.3	-38.18	285.10	10.15	79.6	Sgr
12 Nov 2020	19h54m47.09s	-21 10' 20.6"	9.995	10.343	0.6	66.8	5.2	-38.72	285.95	10.35	79.5	Sgr
13 Nov 2020	19h55m04.54s	-21 09' 35.8"	9.995	10.358	0.6	65.9	5.2	-39.25	286.81	10.55	79.5	Sgr
14 Nov 2020	19h55m22.34s	-21 08' 49.9"	9.994	10.373	0.6	65.0	5.1	-39.78	287.67	10.75	79.5	Sgr
15 Nov 2020	19h55m40.46s	-21 08' 03.1"	9.994	10.388	0.6	64.0	5.1	-40.30	288.55	10.95	79.4	Sgr
16 Nov 2020	19h55m58.90s	-21 07' 15.2"	9.994	10.403	0.6	63.1	5.1	-40.82	289.43	11.14	79.4	Sgr
17 Nov 2020	19h56m17.67s	-21 06' 26.3"	9.994	10.418	0.6	62.1	5.0	-41.33	290.32	11.34	79.4	Sgr
18 Nov 2020	19h56m36.75s	-21 05' 36.5"	9.994	10.432	0.6	61.2	5.0	-41.84	291.22	11.53	79.3	Sgr
19 Nov 2020	19h56m56.15s	-21 04' 45.6"	9.994	10.447	0.6	60.3	4.9	-42.35	292.13	11.71	79.3	Sgr
20 Nov 2020	19h57m15.85s	-21 03' 53.7"	9.994	10.461	0.6	59.3	4.9	-42.85	293.05	11.90	79.3	Sgr
21 Nov 2020	19h57m35.85s	-21 03' 07.9"	9.993	10.475	0.6	58.4	4.8	-43.35	293.98	12.08	79.2	Sgr
22 Nov 2020	19h57m56.15s	-21 02' 00.0"	9.993	10.489	0.6	57.5	4.8	-43.85	294.92	12.26	79.2	Sgr
23 Nov 2020	19h58m16.75s	-21 01' 12.2"	9.993	10.503	0.6	56.6	4.7	-44.34	295.87	12.43	79.2	Sgr
24 Nov 2020	19h58m37.63s	-21 00' 16.5"	9.993	10.517	0.6	55.6	4.7	-44.82	296.84	12.61	79.2	Sgr
25 Nov 2020	19h58m58.79s	-20 59' 19.7"	9.993	10.531	0.6	54.7	4.6	-45.30	297.81	12.78	79.1	Sgr
26 Nov 2020	19h59m20.23s	-20 58' 22.1"	9.993	10.544	0.6	53.8	4.6	-45.77	298.80	12.94	79.1	Sgr
27 Nov 2020	19h59m41.95s	-20 57' 23.4"	9.992	10.557	0.6	52.9	4.5	-46.24	299.80	13.11	79.1	Sgr
28 Nov 2020	20h00m03.94s	-20 56' 23.9"	9.992	10.570	0.6	51.9	4.5	-46.70	300.81	13.27	79.0	Sgr
29 Nov 2020	20h00m26.19s	-20 55' 23.4"	9.992	10.583	0.6	51.0	4.4	-47.16	301.83	13.43	79.0	Sgr
30 Nov 2020	20h00m48.70s	-20 54' 21.9"	9.992	10.596	0.6	50.1	4.3	-47.61	302.87	13.59	79.0	Sgr
1 Dez 2020	20h01m11.47s	-20 53' 19.6"	9.992	10.609	0.6	49.2	4.3	-48.05	303.92	13.75	78.9	Sgr
2 Dez 2020	20h01m34.49s	-20 52' 16.4"	9.992	10.621	0.6	48.2	4.2	-48.49	304.98	13.90	78.9	Sgr
3 Dez 2020	20h01m57.76s	-20 51' 12.2"	9.992	10.634	0.6	47.3	4.2	-48.92	306.06	14.05	78.9	Sgr
4 Dez 2020	20h02m21.27s	-20 50' 07.2"	9.991	10.646	0.6	46.4	4.1	-49.34	307.15	14.20	78.8	Sgr
5 Dez 2020	20h02m45.03s	-20 49' 01.2"	9.991	10.658	0.6	45.5	4.0	-49.76	308.25	14.34	78.8	Sgr
6 Dez 2020	20h03m09.01s	-20 47' 54.4"	9.991	10.669	0.6	44.6	4.0	-50.17	309.37	14.48	78.8	Sgr
7 Dez 2020	20h03m33.23s	-20 46' 46.7"	9.991	10.681	0.6	43.6	3.9	-50.57	310.51	14.63	78.7	Sgr
8 Dez 2020	20h03m57.68s	-20 45' 38.1"	9.991	10.692	0.6	42.7	3.8	-50.97	311.66	14.76	78.7	Sgr
9 Dez 2020	20h04m22.34s	-20 44' 28.6"	9.991	10.703	0.6	41.8	3.8	-51.35	312.82	14.90	78.7	Sgr
10 Dez 2020	20h04m47.23s	-20 43' 18.3"	9.990	10.714	0.6	40.9	3.7	-51.73	314.00	15.03	78.6	Sgr
11 Dez 2020	20h05m12.33s	-20 42' 07.2"	9.990	10.725	0.6	40.0	3.6	-52.10	315.20	15.16	78.6	Sgr
12 Dez 2020	20h05m37.64s	-20 40' 55.2"	9.990	10.736	0.6	39.0	3.6	-52.46	316.41	15.29	78.6	Sgr
13 Dez 2020	20h06m03.15s	-20 39' 42.4"	9.990	10.746	0.6	38.1	3.5	-52.81	317.63	15.41	78.5	Sgr
14 Dez 2020	20h06m28.86s	-20 38' 28.7"	9.990	10.756	0.6	37.2	3.4	-53.15	318.88	15.54	78.5	Sgr
15 Dez 2020	20h06m54.77s	-20 37' 14.2"	9.990	10.766	0.6	36.3	3.3	-53.49	320.13	15.65	78.5	Sgr
16 Dez 2020	20h07m20.86s	-20 35' 59.1"	9.990	10.776	0.6	35.4	3.3	-53.81	321.41	15.77	78.4	Cap
17 Dez 2020	20h07m47.14s	-20 34' 42.9"	9.989	10.785	0.6	34.5	3.2	-54.12	322.70	15.88	78.4	Cap
18 Dez 2020	20h08m13.59s	-20 33' 26.1"	9.989	10.794	0.6	33.6	3.1	-54.42	324.01	15.99	78.3	Cap
19 Dez 2020	20h08m40.22s	-20 32' 08.4"	9.989	10.803	0.6	32.7	3.0	-54.71	325.33	16.10	78.3	Cap
20 Dez 2020	20h09m07.01s	-20 30' 50.1"	9.989	10.812	0.6	31.7	3.0	-55.00	326.66	16.20	78.3	Cap
21 Dez 2020	20h09m33.97s	-20 29' 30.9"	9.989	10.821	0.6	30.8	2.9	-55.27	328.02	16.30	78.2	Cap
22 Dez 2020	20h10m01.08s	-20 28' 11.1"	9.989	10.829	0.6	29.9	2.8	-55.52	329.38	16.40	78.2	Cap
23 Dez 2020	20h10m28.34s	-20 26' 50.5"	9.988	10.837	0.6	29.0	2.7	-55.77	330.76	16.49	78.2	Cap
24 Dez 2020	20h10m55.75s	-20 25' 29.1"	9.988	10.845	0.6	28.1	2.7	-56.01	332.16	16.58	78.1	Cap
25 Dez 2020	20h11m23.30s	-20 24' 07.1"	9.988	10.853	0.6	27.2	2.6	-56.23	333.57	16.67	78.1	Cap
26 Dez 2020	20h11m50.98s	-20 22' 44.4"	9.988	10.860	0.6	26.3	2.5	-56.44	334.99	16.75	78.1	Cap
27 Dez 2020	20h12m18.80s	-20 21' 21.0"	9.988	10.867	0.6	25.4	2.4	-56.64	336.43	16.84	78.0	Cap
28 Dez 2020	20h12m46.75s	-20 19' 57.0"	9.988	10.874	0.6	24.5	2.3	-56.82	337.88	16.91	78.0	Cap
29 Dez 2020	20h13m14.81s	-20 18' 32.3"	9.987	10.881	0.6	23.6	2.3	-57.00	339.34	16.99	78.0	Cap
30 Dez 2020	20h13m42.99s	-20 17' 06.9"	9.987	10.888	0.6	22.7	2.2	-57.15	340.81	17.07	77.9	Cap
31 Dez 2020	20h14m11.29s	-20 15' 40.9"	9.987	10.894	0.6	21.8	2.1	-57.30	342.29	17.14	77.9	Cap
1 Jan 2021	20h14m39.70s	-20 14' 14.3"	9.987	10.900	0.6	20.8	2.0	-57.43	343.78	17.21	77.8	Cap