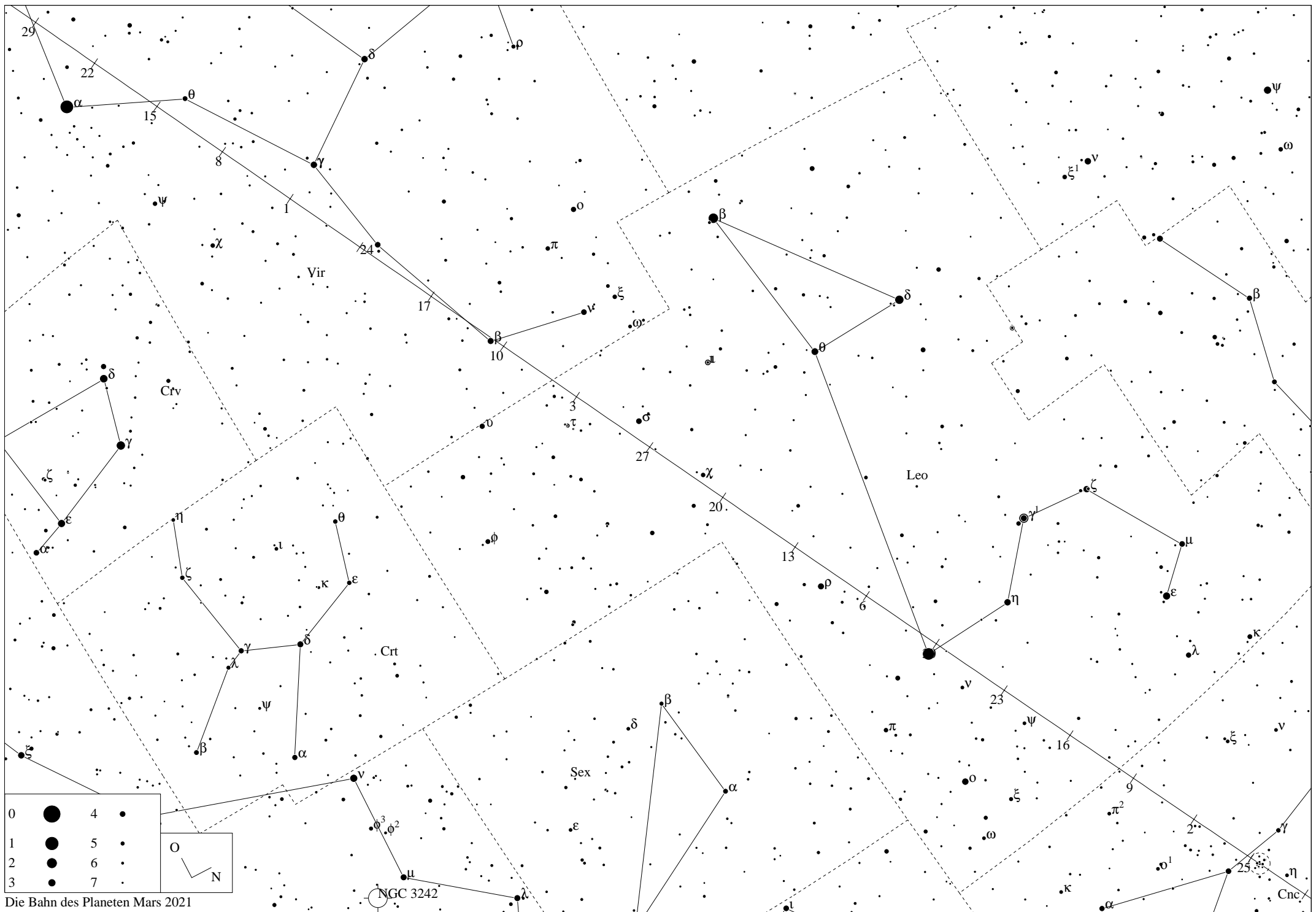
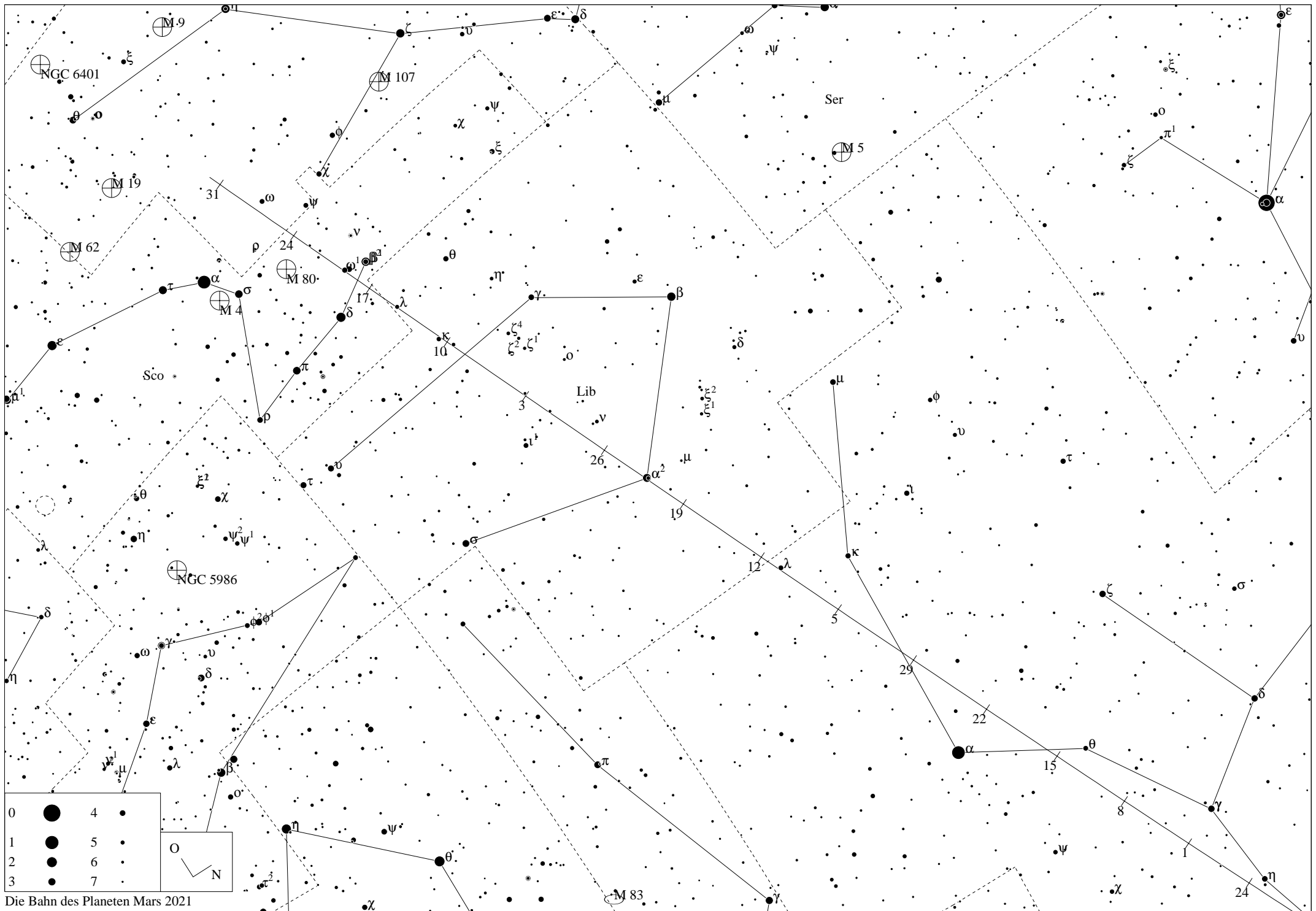


Die Bahn des Planeten Mars 2021





Die Bahn des Planeten Mars 2021

# EPHEMERIDE 2021 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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1 Jan 2021	01h39m11.46s	+11 14' 14.9"	1.5093	0.8986	-0.2	106.6	38.6	9.11	276.80	64.90	66.5	Psc
2 Jan 2021	01h40m48.85s	+11 24' 43.5"	1.5107	0.9076	-0.2	106.0	38.7	8.89	277.36	65.61	66.7	Psc
3 Jan 2021	01h42m27.46s	+11 35' 14.6"	1.5120	0.9167	-0.2	105.4	38.8	8.67	277.91	66.31	66.9	Psc
4 Jan 2021	01h44m07.26s	+11 45' 47.9"	1.5133	0.9259	-0.2	104.8	38.9	8.46	278.46	66.98	67.0	Psc
5 Jan 2021	01h45m48.24s	+11 56' 23.3"	1.5146	0.9350	-0.1	104.3	39.0	8.26	279.01	67.65	67.2	Psc
6 Jan 2021	01h47m30.37s	+12 07' 00.5"	1.5159	0.9442	-0.1	103.7	39.1	8.06	279.56	68.29	67.4	Ari
7 Jan 2021	01h49m13.64s	+12 17' 39.4"	1.5172	0.9535	-0.1	103.1	39.1	7.86	280.10	68.93	67.5	Ari
8 Jan 2021	01h50m58.04s	+12 28' 19.7"	1.5185	0.9627	-0.1	102.6	39.2	7.66	280.63	69.55	67.7	Ari
9 Jan 2021	01h52m43.54s	+12 39' 01.5"	1.5198	0.9720	-0.0	102.0	39.3	7.47	281.16	70.16	67.9	Ari
10 Jan 2021	01h54m30.14s	+12 49' 44.3"	1.5211	0.9814	-0.0	101.5	39.3	7.28	281.69	70.76	68.0	Ari
11 Jan 2021	01h56m17.81s	+13 00' 28.2"	1.5224	0.9907	0.0	100.9	39.4	7.10	282.22	71.34	68.2	Ari
12 Jan 2021	01h58m06.54s	+13 11' 13.0"	1.5237	1.0001	0.0	100.4	39.4	6.92	282.74	71.91	68.3	Ari
13 Jan 2021	01h59m56.32s	+13 21' 58.3"	1.5250	1.0095	0.0	99.8	39.5	6.74	283.26	72.47	68.5	Ari
14 Jan 2021	02h01m47.13s	+13 32' 44.2"	1.5263	1.0190	0.1	99.3	39.5	6.57	283.77	73.01	68.6	Ari
15 Jan 2021	02h03m38.95s	+13 43' 30.3"	1.5276	1.0284	0.1	98.8	39.5	6.40	284.28	73.54	68.8	Ari
16 Jan 2021	02h05m31.76s	+13 54' 16.6"	1.5289	1.0379	0.1	98.2	39.6	6.24	284.79	74.06	68.9	Ari
17 Jan 2021	02h07m25.54s	+14 05' 02.7"	1.5302	1.0475	0.1	97.7	39.6	6.07	285.29	74.56	69.1	Ari
18 Jan 2021	02h09m19.27s	+14 15' 48.6"	1.5315	1.0570	0.2	97.2	39.6	5.91	285.80	75.04	69.3	Ari
19 Jan 2021	02h11m15.95s	+14 26' 33.9"	1.5328	1.0665	0.2	96.7	39.6	5.76	286.29	75.51	69.4	Ari
20 Jan 2021	02h13m12.53s	+14 37' 18.5"	1.5341	1.0761	0.2	96.2	39.6	5.60	286.79	75.97	69.6	Ari
21 Jan 2021	02h15m10.02s	+14 48' 02.3"	1.5353	1.0857	0.2	95.6	39.6	5.45	287.28	76.41	69.7	Ari
22 Jan 2021	02h17m08.39s	+14 58' 44.9"	1.5366	1.0953	0.2	95.1	39.6	5.30	287.76	76.84	69.9	Ari
23 Jan 2021	02h19m07.62s	+15 09' 26.2"	1.5379	1.1049	0.3	94.6	39.6	5.16	288.25	77.25	70.0	Ari
24 Jan 2021	02h21m07.71s	+15 20' 06.1"	1.5392	1.1146	0.3	94.1	39.6	5.02	288.73	77.65	70.2	Ari
25 Jan 2021	02h23m08.62s	+15 30' 44.2"	1.5405	1.1242	0.3	93.6	39.6	4.88	289.21	78.05	70.4	Ari
26 Jan 2021	02h25m10.35s	+15 41' 20.5"	1.5417	1.1339	0.3	93.1	39.6	4.74	289.68	78.42	70.5	Ari
27 Jan 2021	02h27m12.89s	+15 51' 54.8"	1.5430	1.1436	0.3	92.6	39.6	4.60	290.15	78.79	70.7	Ari
28 Jan 2021	02h29m16.22s	+16 02' 26.8"	1.5443	1.1533	0.4	92.1	39.6	4.47	290.62	79.15	70.8	Ari
29 Jan 2021	02h31m20.32s	+16 12' 56.4"	1.5456	1.1630	0.4	91.7	39.6	4.34	291.09	79.49	71.0	Ari
30 Jan 2021	02h33m25.19s	+16 23' 23.5"	1.5468	1.1727	0.4	91.2	39.5	4.21	291.55	79.83	71.2	Ari
31 Jan 2021	02h35m30.81s	+16 33' 47.8"	1.5481	1.1824	0.4	90.7	39.5	4.09	292.01	80.16	71.3	Ari
1 Feb 2021	02h37m37.18s	+16 44' 09.2"	1.5494	1.1922	0.4	90.2	39.5	3.96	292.47	80.48	71.5	Ari
2 Feb 2021	02h39m44.29s	+16 54' 27.7"	1.5506	1.2019	0.5	89.7	39.5	3.84	292.92	80.80	71.7	Ari
3 Feb 2021	02h41m52.12s	+17 04' 42.9"	1.5519	1.2117	0.5	89.2	39.4	3.72	293.37	81.11	71.9	Ari
4 Feb 2021	02h44m00.68s	+17 14' 54.8"	1.5531	1.2215	0.5	88.8	39.4	3.60	293.82	81.41	72.0	Ari
5 Feb 2021	02h46m09.96s	+17 25' 03.3"	1.5544	1.2312	0.5	88.3	39.3	3.49	294.26	81.71	72.2	Ari
6 Feb 2021	02h48m19.96s	+17 35' 08.3"	1.5556	1.2410	0.5	87.8	39.3	3.38	294.70	82.00	72.4	Ari
7 Feb 2021	02h50m30.65s	+17 45' 09.5"	1.5568	1.2508	0.6	87.4	39.3	3.26	295.14	82.29	72.6	Ari
8 Feb 2021	02h52m42.06s	+17 55' 07.0"	1.5581	1.2606	0.6	86.9	39.2	3.15	295.58	82.57	72.7	Ari
9 Feb 2021	02h54m54.15s	+18 05' 00.5"	1.5593	1.2704	0.6	86.4	39.2	3.05	296.01	82.85	72.9	Ari
10 Feb 2021	02h57m06.94s	+18 14' 49.9"	1.5605	1.2802	0.6	86.0	39.1	2.94	296.44	83.12	73.1	Ari
11 Feb 2021	02h59m20.40s	+18 24' 35.1"	1.5618	1.2901	0.6	85.5	39.1	2.83	296.86	83.38	73.3	Ari
12 Feb 2021	03h01m34.54s	+18 34' 15.9"	1.5630	1.2999	0.6	85.1	39.0	2.73	297.28	83.64	73.5	Ari
13 Feb 2021	03h03m49.33s	+18 43' 52.3"	1.5642	1.3097	0.7	84.6	38.9	2.63	297.70	83.89	73.7	Ari
14 Feb 2021	03h06m04.79s	+18 53' 24.0"	1.5654	1.3195	0.7	84.1	38.9	2.53	298.12	84.14	73.8	Ari
15 Feb 2021	03h08m20.88s	+19 02' 50.9"	1.5666	1.3293	0.7	83.7	38.8	2.43	298.54	84.37	74.0	Ari
16 Feb 2021	03h10m37.60s	+19 12' 12.8"	1.5678	1.3392	0.7	83.2	38.7	2.33	298.95	84.60	74.2	Ari
17 Feb 2021	03h12m54.95s	+19 21' 29.7"	1.5690	1.3490	0.7	82.8	38.7	2.24	299.35	84.82	74.4	Ari
18 Feb 2021	03h15m12.91s	+19 30' 41.3"	1.5702	1.3588	0.7	82.3	38.6	2.14	299.76	85.03	74.6	Ari
19 Feb 2021	03h17m31.46s	+19 39' 47.5"	1.5714	1.3686	0.8	81.9	38.5	2.05	300.16	85.24	74.8	Ari
20 Feb 2021	03h19m50.61s	+19 48' 48.2"	1.5726	1.3784	0.8	81.5	38.4	1.96	300.56	85.44	75.0	Ari
21 Feb 2021	03h22m10.34s	+19 57' 43.2"	1.5738	1.3882	0.8	81.0	38.4	1.87	300.96	85.63	75.2	Ari
22 Feb 2021	03h24m30.63s	+20 06' 32.4"	1.5749	1.3980	0.8	80.6	38.3	1.78	301.35	85.82	75.4	Ari
23 Feb 2021	03h26m51.49s	+20 15' 15.7"	1.5761	1.4078	0.8	80.1	38.2	1.69	301.74	86.00	75.6	Ari
24 Feb 2021	03h29m12.89s	+20 23' 52.8"	1.5773	1.4176	0.8	79.7	38.1	1.60	302.13	86.17	75.8	Tau
25 Feb 2021	03h31m34.84s	+20 32' 23.7"	1.5784	1.4273	0.9	79.3	38.0	1.51	302.51	86.34	76.0	Tau
26 Feb 2021	03h33m57.31s	+20 40' 48.2"	1.5796	1.4371	0.9	78.8	37.9	1.42	302.90	86.50	76.2	Tau
27 Feb 2021	03h36m20.31s	+20 49' 06.3"	1.5808	1.4469	0.9	78.4	37.9	1.34	303.27	86.66	76.4	Tau
28 Feb 2021	03h38m43.82s	+20 57' 17.7"	1.5819	1.4566	0.9	78.0	37.8	1.25	303.65	86.81	76.6	Tau
1 Mar 2021	03h41m07.84s	+21 05' 22.4"	1.5830	1.4664	0.9	77.6	37.7	1.16	304.02	86.96	76.9	Tau
2 Mar 2021	03h43m32.36s	+21 13' 20.3"	1.5842	1.4761	0.9	77.1	37.6	1.08	304.40	87.11	77.1	Tau
3 Mar 2021	03h45m57.38s	+21 21' 11.2"	1.5853	1.4858	0.9	76.7	37.5	0.99	304.76	87.26	77.3	Tau
4 Mar 2021	03h48m22.89s	+21 28' 55.2"	1.5864	1.4955	1.0	76.3	37.4	0.91	305.13	87.40	77.5	Tau
5 Mar 2021	03h50m48.90s	+21 36' 31.9"	1.5875	1.5052	1.0	75.9	37.3	0.83	305.49	87.54	77.7	Tau
6 Mar 2021	03h53m15.38s	+21 44' 01.5"	1.5887	1.5149	1.0	75.4	37.2	0.74	305.85	87.68	78.0	Tau
7 Mar 2021	03h55m42.35s	+21 51' 23.7"	1.5898	1.5246	1.0	75.0	37.1	0.66	306.21	87.82	78.2	Tau
8 Mar 2021	03h58m09.80s	+21 58' 38.5"	1.5909	1.5343	1.0	74.6	37.0	0.58	306.56	87.96	78.4	Tau
9 Mar 2021	04h00m37.72s	+22 05' 45.8"	1.5920	1.5439	1.0	74.2	36.9	0.49	306.92	88.09	78.6	Tau
10 Mar 2021	04h03m06.11s	+22 12' 45.6"	1.5931	1.5536	1.0	73.8	36.8	0.41	307.26	88.22	78.9	Tau
11 Mar 2021	04h05m34.95s	+22 19' 37.6"	1.5941	1.5632	1.0	73.4	36.7	0.33	307.61	88.35	79.1	Tau
12 Mar 2021	04h08m04.25s	+22 26' 21.8"	1.5952	1.5728	1.1	73.0	36.6	0.25	307.95	88.48	79.3	Tau
13 Mar 2021	04h10m33.99s	+22 32' 58.1"	1.5963	1.5824	1.1	72.5	36.4	0.17	308.30	88.60	79.5	Tau
14 Mar 2021	04h13m04.17s	+22 39' 26.5"	1.5973	1.5920	1.1	72.1	36.3	0.08	308.63	88.72	79.8	Tau
15 Mar 2021	04h15m34.77s	+22 45' 46.7"	1.5984	1.6015	1.1	71.7	36.2	-0.00	308.97	88.84	80.0	Tau

# EPHEMERIDE 2021 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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16 Mar 2021	04h18m05.80s	+22 51' 58.7"	1.5995	1.6111	1.1	71.3	36.1	-0.08	309.30	88.95	80.2	Tau
17 Mar 2021	04h20m37.23s	+22 58' 02.5"	1.6005	1.6206	1.1	70.9	36.0	-0.17	309.63	89.06	80.5	Tau
18 Mar 2021	04h23m09.06s	+23 03' 57.8"	1.6015	1.6301	1.1	70.5	35.9	-0.25	309.96	89.16	80.7	Tau
19 Mar 2021	04h25m41.27s	+23 09' 44.7"	1.6026	1.6396	1.1	70.1	35.7	-0.33	310.29	89.26	81.0	Tau
20 Mar 2021	04h28m13.87s	+23 15' 22.9"	1.6036	1.6490	1.2	69.7	35.6	-0.42	310.61	89.36	81.2	Tau
21 Mar 2021	04h30m46.83s	+23 20' 52.5"	1.6046	1.6585	1.2	69.3	35.5	-0.50	310.93	89.45	81.4	Tau
22 Mar 2021	04h33m20.15s	+23 26' 13.4"	1.6056	1.6679	1.2	68.9	35.4	-0.59	311.25	89.53	81.7	Tau
23 Mar 2021	04h35m53.82s	+23 31' 25.3"	1.6066	1.6773	1.2	68.5	35.3	-0.67	311.57	89.62	81.9	Tau
24 Mar 2021	04h38m27.82s	+23 36' 28.3"	1.6076	1.6866	1.2	68.1	35.1	-0.76	311.88	89.70	82.2	Tau
25 Mar 2021	04h41m02.15s	+23 41' 22.3"	1.6086	1.6960	1.2	67.7	35.0	-0.85	312.19	89.78	82.4	Tau
26 Mar 2021	04h43m36.79s	+23 46' 07.2"	1.6096	1.7053	1.2	67.3	34.9	-0.93	312.50	89.85	82.7	Tau
27 Mar 2021	04h46m11.74s	+23 50' 43.0"	1.6106	1.7146	1.2	66.9	34.7	-1.02	312.81	89.92	82.9	Tau
28 Mar 2021	04h48m46.99s	+23 55' 09.4"	1.6116	1.7239	1.3	66.5	34.6	-1.11	313.11	89.99	83.2	Tau
29 Mar 2021	04h51m22.52s	+23 59' 26.6"	1.6125	1.7331	1.3	66.1	34.5	-1.20	313.42	90.06	83.4	Tau
30 Mar 2021	04h53m58.34s	+24 03' 34.3"	1.6135	1.7423	1.3	65.7	34.4	-1.29	313.72	90.13	83.7	Tau
31 Mar 2021	04h56m34.43s	+24 07' 32.7"	1.6144	1.7515	1.3	65.4	34.2	-1.39	314.02	90.19	84.0	Tau
1 Apr 2021	04h59m10.79s	+24 11' 21.5"	1.6154	1.7607	1.3	65.0	34.1	-1.48	314.31	90.26	84.2	Tau
2 Apr 2021	05h01m42.42s	+24 15' 00.8"	1.6163	1.7698	1.3	64.6	34.0	-1.57	314.61	90.33	84.5	Tau
3 Apr 2021	05h04m24.30s	+24 18' 30.5"	1.6172	1.7789	1.3	64.2	33.8	-1.67	314.90	90.39	84.7	Tau
4 Apr 2021	05h07m01.43s	+24 21' 50.6"	1.6181	1.7880	1.3	63.8	33.7	-1.76	315.19	90.46	85.0	Tau
5 Apr 2021	05h09m38.82s	+24 25' 01.0"	1.6191	1.7971	1.3	63.4	33.5	-1.86	315.48	90.53	85.2	Tau
6 Apr 2021	05h12m16.44s	+24 28' 01.7"	1.6200	1.8061	1.3	63.0	33.4	-1.96	315.77	90.60	85.5	Tau
7 Apr 2021	05h14m54.30s	+24 30' 52.6"	1.6209	1.8151	1.4	62.7	33.3	-2.06	316.05	90.66	85.8	Tau
8 Apr 2021	05h17m32.38s	+24 33' 33.7"	1.6218	1.8241	1.4	62.3	33.1	-2.16	316.33	90.73	86.0	Tau
9 Apr 2021	05h20m10.68s	+24 36' 04.9"	1.6226	1.8330	1.4	61.9	33.0	-2.26	316.62	90.79	86.3	Tau
10 Apr 2021	05h22m49.19s	+24 38' 26.2"	1.6235	1.8419	1.4	61.5	32.8	-2.37	316.89	90.85	86.5	Tau
11 Apr 2021	05h25m27.90s	+24 40' 37.5"	1.6244	1.8508	1.4	61.1	32.7	-2.47	317.17	90.91	86.8	Tau
12 Apr 2021	05h28m06.80s	+24 42' 38.9"	1.6252	1.8597	1.4	60.7	32.6	-2.58	317.45	90.97	87.1	Tau
13 Apr 2021	05h30m45.88s	+24 44' 30.2"	1.6261	1.8685	1.4	60.4	32.4	-2.69	317.72	91.03	87.3	Tau
14 Apr 2021	05h33m25.13s	+24 46' 11.4"	1.6269	1.8772	1.4	60.0	32.3	-2.80	318.00	91.08	87.6	Tau
15 Apr 2021	05h36m04.54s	+24 47' 42.6"	1.6278	1.8860	1.4	59.6	32.1	-2.91	318.27	91.13	87.9	Tau
16 Apr 2021	05h38m44.10s	+24 49' 03.5"	1.6286	1.8947	1.4	59.2	32.0	-3.02	318.54	91.18	88.1	Tau
17 Apr 2021	05h41m23.80s	+24 50' 14.3"	1.6294	1.9034	1.4	58.9	31.8	-3.13	318.80	91.23	88.4	Tau
18 Apr 2021	05h44m03.62s	+24 51' 14.9"	1.6302	1.9120	1.5	58.5	31.7	-3.25	319.07	91.28	88.7	Tau
19 Apr 2021	05h46m43.56s	+24 52' 05.3"	1.6310	1.9206	1.5	58.1	31.5	-3.37	319.34	91.32	88.9	Tau
20 Apr 2021	05h49m23.61s	+24 52' 45.3"	1.6318	1.9292	1.5	57.8	31.4	-3.48	319.60	91.36	89.2	Tau
21 Apr 2021	05h52m03.75s	+24 53' 15.1"	1.6326	1.9377	1.5	57.4	31.2	-3.61	319.86	91.40	89.5	Tau
22 Apr 2021	05h54m43.97s	+24 53' 34.6"	1.6334	1.9462	1.5	57.0	31.1	-3.73	320.13	91.44	89.7	Tau
23 Apr 2021	05h57m24.26s	+24 53' 43.8"	1.6341	1.9546	1.5	56.6	30.9	-3.85	320.39	91.47	90.0	Tau
24 Apr 2021	06h00m04.62s	+24 53' 42.6"	1.6349	1.9631	1.5	56.3	30.8	-3.98	320.65	91.51	90.3	Tau
25 Apr 2021	06h02m45.02s	+24 53' 31.1"	1.6356	1.9714	1.5	55.9	30.6	-4.11	320.90	91.54	90.5	Gem
26 Apr 2021	06h05m25.47s	+24 53' 09.3"	1.6364	1.9798	1.5	55.5	30.5	-4.24	321.16	91.57	90.8	Gem
27 Apr 2021	06h08m05.96s	+24 52' 37.0"	1.6371	1.9881	1.5	55.2	30.3	-4.37	321.42	91.60	91.1	Gem
28 Apr 2021	06h10m46.47s	+24 51' 54.5"	1.6379	1.9963	1.5	54.8	30.2	-4.50	321.67	91.63	91.4	Gem
29 Apr 2021	06h13m27.01s	+24 51' 01.5"	1.6386	2.0046	1.5	54.4	30.0	-4.64	321.93	91.67	91.6	Gem
30 Apr 2021	06h16m07.56s	+24 49' 58.3"	1.6393	2.0127	1.5	54.1	29.8	-4.77	322.18	91.70	91.9	Gem
1 Mai 2021	06h18m48.12s	+24 48' 44.6"	1.6400	2.0209	1.6	53.7	29.7	-4.91	322.44	91.73	92.2	Gem
2 Mai 2021	06h21m28.68s	+24 47' 20.7"	1.6407	2.0290	1.6	53.4	29.5	-5.05	322.69	91.77	92.4	Gem
3 Mai 2021	06h24m09.25s	+24 45' 46.4"	1.6414	2.0371	1.6	53.0	29.4	-5.20	322.94	91.80	92.7	Gem
4 Mai 2021	06h26m49.81s	+24 44' 01.8"	1.6420	2.0451	1.6	52.6	29.2	-5.34	323.19	91.84	93.0	Gem
5 Mai 2021	06h29m30.35s	+24 42' 06.9"	1.6427	2.0531	1.6	52.3	29.1	-5.49	323.44	91.88	93.2	Gem
6 Mai 2021	06h32m10.88s	+24 40' 01.7"	1.6434	2.0610	1.6	51.9	28.9	-5.64	323.69	91.92	93.5	Gem
7 Mai 2021	06h34m51.38s	+24 37' 46.2"	1.6440	2.0689	1.6	51.6	28.7	-5.79	323.94	91.95	93.7	Gem
8 Mai 2021	06h37m31.85s	+24 35' 20.4"	1.6446	2.0768	1.6	51.2	28.6	-5.94	324.19	91.99	94.0	Gem
9 Mai 2021	06h40m13.28s	+24 32' 44.4"	1.6453	2.0846	1.6	50.8	28.4	-6.10	324.44	92.03	94.3	Gem
10 Mai 2021	06h42m52.66s	+24 29' 58.1"	1.6459	2.0924	1.6	50.5	28.2	-6.25	324.69	92.06	94.5	Gem
11 Mai 2021	06h45m32.98s	+24 27' 01.6"	1.6465	2.1001	1.6	50.1	28.1	-6.41	324.94	92.10	94.8	Gem
12 Mai 2021	06h48m13.23s	+24 23' 54.9"	1.6471	2.1078	1.6	49.8	27.9	-6.58	325.19	92.13	95.1	Gem
13 Mai 2021	06h50m53.41s	+24 20' 38.1"	1.6477	2.1154	1.6	49.4	27.8	-6.74	325.43	92.16	95.3	Gem
14 Mai 2021	06h53m33.51s	+24 17' 11.0"	1.6483	2.1230	1.6	49.1	27.6	-6.90	325.68	92.20	95.6	Gem
15 Mai 2021	06h56m13.51s	+24 13' 33.9"	1.6489	2.1306	1.6	48.7	27.4	-7.07	325.93	92.23	95.8	Gem
16 Mai 2021	06h58m53.42s	+24 09' 46.6"	1.6494	2.1381	1.7	48.4	27.3	-7.24	326.18	92.25	96.1	Gem
17 Mai 2021	07h01m33.21s	+24 05' 49.3"	1.6500	2.1455	1.7	48.0	27.1	-7.41	326.42	92.28	96.4	Gem
18 Mai 2021	07h04m12.89s	+24 01' 42.0"	1.6505	2.1529	1.7	47.7	26.9	-7.59	326.67	92.31	96.6	Gem
19 Mai 2021	07h06m52.44s	+23 57' 24.7"	1.6511	2.1603	1.7	47.3	26.8	-7.76	326.92	92.33	96.9	Gem
20 Mai 2021	07h09m31.86s	+23 52' 57.4"	1.6516	2.1676	1.7	46.9	26.6	-7.94	327.17	92.36	97.1	Gem
21 Mai 2021	07h12m11.13s	+23 48' 20.2"	1.6521	2.1749	1.7	46.6	26.4	-8.12	327.42	92.38	97.4	Gem
22 Mai 2021	07h14m50.26s	+23 43' 33.1"	1.6526	2.1821	1.7	46.2	26.3	-8.30	327.67	92.40	97.6	Gem
23 Mai 2021	07h17m29.23s	+23 38' 36.2"	1.6531	2.1892	1.7	45.9	26.1	-8.49	327.92	92.42	97.9	Gem
24 Mai 2021	07h20m08.03s	+23 33' 29.6"	1.6536	2.1963	1.7	45.6	25.9	-8.68	328.17	92.44	98.1	Gem
25 Mai 2021	07h22m46.67s	+23 28' 13.2"	1.6541	2.2034	1.7	45.2	25.8	-8.86	328.42	92.46	98.4	Gem
26 Mai 2021	07h25m25.13s	+23 22' 47.1"	1.6546	2.2104	1.7	44.9	25.6	-9.05	328.67	92.48	98.6	Gem
27 Mai 2021	07h28m03.41s	+23 17' 11.5"	1.6550	2.2174	1.7	44.5	25.4	-9.25	328.92	92.50	98.9	Gem
28 Mai 2021	07h30m41.51s	+23 11' 26.2"	1.6555	2.2243	1.7	44.2	25.2	-9.44	329.17	92.53	99.1	Gem

# EPHEMERIDE 2021 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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29 Mai 2021	07h33m19.43s	+23 05' 31.4"	1.6559	2.2312	1.7	43.8	25.1	-9.64	329.42	92.55	99.4	Gem
30 Mai 2021	07h35m57.17s	+22 59' 27.2"	1.6564	2.2380	1.7	43.5	24.9	-9.84	329.68	92.58	99.6	Gem
31 Mai 2021	07h38m34.72s	+22 53' 13.5"	1.6568	2.2448	1.7	43.1	24.7	-10.04	329.93	92.61	99.9	Gem
1 Jun 2021	07h41m12.08s	+22 46' 50.4"	1.6572	2.2515	1.7	42.8	24.6	-10.24	330.19	92.63	100.1	Gem
2 Jun 2021	07h43m49.25s	+22 40' 18.0"	1.6576	2.2582	1.7	42.4	24.4	-10.45	330.44	92.66	100.3	Gem
3 Jun 2021	07h46m26.22s	+22 33' 36.4"	1.6580	2.2648	1.7	42.1	24.2	-10.66	330.70	92.70	100.6	Gem
4 Jun 2021	07h49m03.00s	+22 26' 45.5"	1.6584	2.2714	1.7	41.8	24.0	-10.86	330.96	92.73	100.8	Gem
5 Jun 2021	07h51m39.58s	+22 19' 45.5"	1.6588	2.2779	1.7	41.4	23.9	-11.08	331.22	92.76	101.1	Gem
6 Jun 2021	07h54m15.95s	+22 12' 36.3"	1.6592	2.2844	1.8	41.1	23.7	-11.29	331.48	92.79	101.3	Gem
7 Jun 2021	07h56m52.12s	+22 05' 18.2"	1.6595	2.2908	1.8	40.7	23.5	-11.50	331.74	92.82	101.5	Gem
8 Jun 2021	07h59m28.08s	+21 57' 51.0"	1.6599	2.2972	1.8	40.4	23.3	-11.72	332.00	92.85	101.7	Gem
9 Jun 2021	08h02m03.82s	+21 50' 14.9"	1.6602	2.3035	1.8	40.0	23.2	-11.94	332.26	92.88	102.0	Cnc
10 Jun 2021	08h04m39.34s	+21 42' 30.0"	1.6606	2.3098	1.8	39.7	23.0	-12.16	332.53	92.92	102.2	Cnc
11 Jun 2021	08h07m14.64s	+21 34' 36.3"	1.6609	2.3160	1.8	39.4	22.8	-12.38	332.79	92.95	102.4	Cnc
12 Jun 2021	08h09m49.72s	+21 26' 33.8"	1.6612	2.3222	1.8	39.0	22.6	-12.61	333.06	92.97	102.6	Cnc
13 Jun 2021	08h12m24.56s	+21 18' 22.7"	1.6615	2.3283	1.8	38.7	22.5	-12.83	333.33	93.00	102.9	Cnc
14 Jun 2021	08h14m59.17s	+21 10' 03.0"	1.6618	2.3343	1.8	38.3	22.3	-13.06	333.60	93.03	103.1	Cnc
15 Jun 2021	08h17m34.55s	+21 01' 34.8"	1.6621	2.3403	1.8	38.0	22.1	-13.29	333.87	93.06	103.3	Cnc
16 Jun 2021	08h20m07.68s	+20 52' 58.2"	1.6623	2.3462	1.8	37.7	21.9	-13.52	334.14	93.08	103.5	Cnc
17 Jun 2021	08h22m41.56s	+20 44' 13.2"	1.6626	2.3521	1.8	37.3	21.7	-13.75	334.42	93.11	103.7	Cnc
18 Jun 2021	08h25m15.20s	+20 35' 19.9"	1.6628	2.3579	1.8	37.0	21.6	-13.99	334.70	93.13	104.0	Cnc
19 Jun 2021	08h27m48.58s	+20 26' 18.4"	1.6631	2.3637	1.8	36.7	21.4	-14.23	334.97	93.16	104.2	Cnc
20 Jun 2021	08h30m21.71s	+20 17' 08.7"	1.6633	2.3694	1.8	36.3	21.2	-14.46	335.25	93.18	104.4	Cnc
21 Jun 2021	08h32m54.59s	+20 07' 51.1"	1.6635	2.3751	1.8	36.0	21.0	-14.70	335.54	93.21	104.6	Cnc
22 Jun 2021	08h35m27.21s	+19 58' 25.4"	1.6638	2.3807	1.8	35.6	20.9	-14.94	335.82	93.23	104.8	Cnc
23 Jun 2021	08h37m59.57s	+19 48' 51.9"	1.6640	2.3862	1.8	35.3	20.7	-15.19	336.11	93.25	105.0	Cnc
24 Jun 2021	08h40m31.67s	+19 39' 10.5"	1.6642	2.3917	1.8	35.0	20.5	-15.43	336.39	93.28	105.2	Cnc
25 Jun 2021	08h43m03.52s	+19 29' 21.4"	1.6643	2.3971	1.8	34.6	20.3	-15.68	336.68	93.31	105.4	Cnc
26 Jun 2021	08h45m35.11s	+19 19' 24.6"	1.6645	2.4025	1.8	34.3	20.1	-15.92	336.97	93.33	105.6	Cnc
27 Jun 2021	08h48m06.45s	+19 09' 20.2"	1.6647	2.4078	1.8	34.0	19.9	-16.17	337.27	93.36	105.8	Cnc
28 Jun 2021	08h50m37.54s	+18 59' 08.3"	1.6648	2.4131	1.8	33.6	19.8	-16.42	337.56	93.40	106.0	Cnc
29 Jun 2021	08h53m08.39s	+18 48' 49.0"	1.6650	2.4183	1.8	33.3	19.6	-16.67	337.86	93.43	106.2	Cnc
30 Jun 2021	08h55m38.99s	+18 38' 22.2"	1.6651	2.4235	1.8	33.0	19.4	-16.93	338.16	93.46	106.4	Cnc
1 Jul 2021	08h58m09.35s	+18 27' 48.1"	1.6652	2.4286	1.8	32.6	19.2	-17.18	338.46	93.50	106.5	Cnc
2 Jul 2021	09h00m39.47s	+18 17' 06.8"	1.6654	2.4336	1.8	32.3	19.0	-17.44	338.77	93.54	106.7	Cnc
3 Jul 2021	09h03m09.35s	+18 06' 18.3"	1.6655	2.4386	1.8	32.0	18.9	-17.69	339.07	93.58	106.9	Cnc
4 Jul 2021	09h05m38.99s	+17 55' 22.7"	1.6655	2.4435	1.8	31.6	18.7	-17.95	339.38	93.61	107.1	Cnc
5 Jul 2021	09h08m08.39s	+17 44' 20.1"	1.6656	2.4484	1.8	31.3	18.5	-18.21	339.69	93.65	107.3	Cnc
6 Jul 2021	09h10m37.56s	+17 33' 10.5"	1.6657	2.4532	1.8	31.0	18.3	-18.47	340.01	93.69	107.4	Cnc
7 Jul 2021	09h13m06.49s	+17 21' 54.1"	1.6658	2.4580	1.8	30.6	18.1	-18.73	340.32	93.73	107.6	Cnc
8 Jul 2021	09h15m35.19s	+17 10' 30.9"	1.6658	2.4627	1.8	30.3	17.9	-18.99	340.64	93.77	107.8	Cnc
9 Jul 2021	09h18m03.66s	+16 59' 01.0"	1.6659	2.4673	1.8	30.0	17.8	-19.25	340.96	93.81	108.0	Cnc
10 Jul 2021	09h20m31.90s	+16 47' 24.4"	1.6659	2.4719	1.8	29.6	17.6	-19.52	341.28	93.85	108.1	Cnc
11 Jul 2021	09h22m59.90s	+16 35' 41.4"	1.6659	2.4764	1.8	29.3	17.4	-19.78	341.61	93.89	108.3	Leo
12 Jul 2021	09h25m27.67s	+16 23' 51.8"	1.6659	2.4808	1.8	29.0	17.2	-20.05	341.94	93.92	108.4	Leo
13 Jul 2021	09h27m55.22s	+16 11' 56.0"	1.6660	2.4852	1.8	28.6	17.0	-20.31	342.27	93.96	108.6	Leo
14 Jul 2021	09h30m22.53s	+15 59' 53.8"	1.6660	2.4896	1.8	28.3	16.8	-20.58	342.60	94.00	108.8	Leo
15 Jul 2021	09h32m49.61s	+15 47' 45.5"	1.6659	2.4938	1.8	28.0	16.6	-20.85	342.93	94.03	108.9	Leo
16 Jul 2021	09h35m16.47s	+15 35' 31.0"	1.6659	2.4980	1.8	27.7	16.5	-21.11	343.27	94.07	109.1	Leo
17 Jul 2021	09h37m43.10s	+15 23' 10.6"	1.6659	2.5022	1.8	27.3	16.3	-21.38	343.61	94.10	109.2	Leo
18 Jul 2021	09h40m09.50s	+15 10' 44.3"	1.6658	2.5063	1.8	27.0	16.1	-21.65	343.96	94.14	109.4	Leo
19 Jul 2021	09h42m35.68s	+14 58' 12.1"	1.6658	2.5103	1.8	26.7	15.9	-21.92	344.31	94.17	109.5	Leo
20 Jul 2021	09h45m01.64s	+14 45' 34.2"	1.6657	2.5143	1.8	26.3	15.7	-22.19	344.66	94.21	109.7	Leo
21 Jul 2021	09h47m27.38s	+14 32' 50.7"	1.6656	2.5182	1.8	26.0	15.5	-22.46	345.01	94.24	109.8	Leo
22 Jul 2021	09h49m52.91s	+14 20' 01.6"	1.6656	2.5220	1.8	25.7	15.3	-22.74	345.36	94.28	110.0	Leo
23 Jul 2021	09h52m18.23s	+14 07' 07.0"	1.6655	2.5258	1.8	25.3	15.1	-23.01	345.72	94.32	110.1	Leo
24 Jul 2021	09h54m43.34s	+13 54' 07.0"	1.6654	2.5295	1.8	25.0	15.0	-23.28	346.08	94.36	110.2	Leo
25 Jul 2021	09h57m08.25s	+13 41' 01.7"	1.6652	2.5332	1.8	24.7	14.8	-23.55	346.45	94.40	110.4	Leo
26 Jul 2021	09h59m32.98s	+13 27' 51.1"	1.6651	2.5368	1.8	24.4	14.6	-23.82	346.81	94.44	110.5	Leo
27 Jul 2021	10h01m57.51s	+13 14' 35.3"	1.6650	2.5403	1.8	24.0	14.4	-24.10	347.18	94.49	110.6	Leo
28 Jul 2021	10h04m21.86s	+13 01' 14.5"	1.6648	2.5438	1.8	23.7	14.2	-24.37	347.56	94.53	110.7	Leo
29 Jul 2021	10h06m46.04s	+12 47' 48.6"	1.6647	2.5472	1.8	23.4	14.0	-24.64	347.93	94.58	110.9	Leo
30 Jul 2021	10h09m10.04s	+12 34' 17.8"	1.6645	2.5506	1.8	23.0	13.8	-24.92	348.31	94.63	111.0	Leo
31 Jul 2021	10h11m33.88s	+12 20' 42.0"	1.6644	2.5539	1.8	22.7	13.6	-25.19	348.70	94.68	111.1	Leo
1 Aug 2021	10h13m57.56s	+12 07' 01.5"	1.6642	2.5571	1.8	22.4	13.4	-25.46	349.08	94.73	111.2	Leo
2 Aug 2021	10h16m21.08s	+11 53' 16.3"	1.6640	2.5603	1.8	22.1	13.2	-25.73	349.47	94.78	111.3	Leo
3 Aug 2021	10h18m44.45s	+11 39' 26.4"	1.6638	2.5634	1.8	21.7	13.1	-26.01	349.86	94.83	111.4	Leo
4 Aug 2021	10h21m07.67s	+11 25' 31.9"	1.6636	2.5665	1.8	21.4	12.9	-26.28	350.25	94.89	111.6	Leo
5 Aug 2021	10h23m30.74s	+11 11' 33.0"	1.6633	2.5694	1.8	21.1	12.7	-26.55	350.65	94.94	111.7	Leo
6 Aug 2021	10h25m53.68s	+10 57' 29.7"	1.6631	2.5724	1.8	20.8	12.5	-26.82	351.05	94.99	111.8	Leo
7 Aug 2021	10h28m16.48s	+10 43' 22.1"	1.6629	2.5752	1.8	20.4	12.3	-27.09	351.46	95.04	111.9	Leo
8 Aug 2021	10h30m39.15s	+10 29' 10.3"	1.6626	2.5780	1.8	20.1	12.1	-27.37	351.86	95.10	112.0	Leo
9 Aug 2021	10h33m01.69s	+10 14' 54.3"	1.6623	2.5808	1.8	19.8	11.9	-27.64	352.27	95.15	112.1	Leo
10 Aug 2021	10h35m24.11s	+10 00' 34.3"	1.6621	2.5834	1.8	19.4	11.7	-27.91	352.69	95.20	112.2	Leo

# EPHEMERIDE 2021 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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11 Aug 2021	10h37m46.40s	+09 46' 10.4"	1.6618	2.5860	1.8	19.1	11.5	-28.18	353.10	95.25	112.3	Leo
12 Aug 2021	10h40m08.58s	+09 31' 42.6"	1.6615	2.5886	1.8	18.8	11.3	-28.45	353.52	95.30	112.3	Leo
13 Aug 2021	10h42m30.64s	+09 17' 11.0"	1.6612	2.5911	1.8	18.5	11.1	-28.71	353.95	95.35	112.4	Leo
14 Aug 2021	10h44m52.59s	+09 02' 35.8"	1.6609	2.5935	1.8	18.1	10.9	-28.98	354.37	95.40	112.5	Leo
15 Aug 2021	10h47m14.43s	+08 47' 57.1"	1.6606	2.5958	1.8	17.8	10.7	-29.25	354.80	95.45	112.6	Leo
16 Aug 2021	10h49m36.17s	+08 33' 14.8"	1.6602	2.5981	1.8	17.5	10.6	-29.52	355.23	95.50	112.7	Leo
17 Aug 2021	10h51m57.81s	+08 18' 29.2"	1.6599	2.6003	1.8	17.1	10.4	-29.78	355.67	95.55	112.8	Leo
18 Aug 2021	10h54m19.36s	+08 03' 40.3"	1.6596	2.6025	1.8	16.8	10.2	-30.05	356.11	95.60	112.8	Leo
19 Aug 2021	10h56m40.82s	+07 48' 48.2"	1.6592	2.6046	1.8	16.5	10.0	-30.31	356.55	95.65	112.9	Leo
20 Aug 2021	10h59m02.20s	+07 33' 53.0"	1.6588	2.6066	1.8	16.2	9.8	-30.57	357.00	95.71	113.0	Leo
21 Aug 2021	11h01m23.51s	+07 18' 54.8"	1.6584	2.6086	1.8	15.8	9.6	-30.83	357.45	95.76	113.0	Leo
22 Aug 2021	11h03m44.75s	+07 03' 53.6"	1.6581	2.6105	1.8	15.5	9.4	-31.09	357.90	95.82	113.1	Leo
23 Aug 2021	11h06m05.93s	+06 48' 49.5"	1.6577	2.6123	1.8	15.2	9.2	-31.35	358.36	95.87	113.2	Leo
24 Aug 2021	11h08m27.06s	+06 33' 42.6"	1.6573	2.6141	1.8	14.9	9.0	-31.61	358.81	95.93	113.2	Leo
25 Aug 2021	11h10m48.14s	+06 18' 32.9"	1.6568	2.6158	1.8	14.5	8.8	-31.87	359.28	95.99	113.3	Leo
26 Aug 2021	11h13m09.19s	+06 03' 20.6"	1.6564	2.6175	1.8	14.2	8.6	-32.12	359.74	96.05	113.3	Leo
27 Aug 2021	11h15m30.21s	+05 48' 05.7"	1.6560	2.6191	1.8	13.9	8.4	-32.38	0.21	96.12	113.4	Leo
28 Aug 2021	11h17m51.20s	+05 32' 48.4"	1.6555	2.6206	1.8	13.5	8.2	-32.63	0.68	96.18	113.4	Leo
29 Aug 2021	11h20m12.18s	+05 17' 28.6"	1.6551	2.6221	1.8	13.2	8.0	-32.88	1.16	96.25	113.5	Leo
30 Aug 2021	11h22m33.15s	+05 02' 06.4"	1.6546	2.6235	1.8	12.9	7.8	-33.13	1.63	96.31	113.5	Leo
31 Aug 2021	11h24m54.12s	+04 46' 42.0"	1.6541	2.6248	1.8	12.6	7.6	-33.38	2.11	96.38	113.6	Leo
1 Sep 2021	11h27m15.09s	+04 31' 15.5"	1.6537	2.6261	1.8	12.2	7.4	-33.63	2.60	96.45	113.6	Leo
2 Sep 2021	11h29m36.07s	+04 15' 46.8"	1.6532	2.6273	1.8	11.9	7.2	-33.88	3.09	96.52	113.7	Leo
3 Sep 2021	11h31m57.06s	+04 00' 16.1"	1.6527	2.6285	1.8	11.6	7.0	-34.12	3.58	96.59	113.7	Leo
4 Sep 2021	11h34m18.07s	+03 44' 43.6"	1.6522	2.6296	1.8	11.3	6.8	-34.36	4.07	96.65	113.7	Leo
5 Sep 2021	11h36m39.12s	+03 29' 09.2"	1.6516	2.6306	1.8	10.9	6.6	-34.60	4.57	96.72	113.8	Leo
6 Sep 2021	11h39m00.19s	+03 13' 33.0"	1.6511	2.6315	1.8	10.6	6.4	-34.84	5.06	96.79	113.8	Vir
7 Sep 2021	11h41m21.30s	+02 57' 55.3"	1.6506	2.6324	1.8	10.3	6.3	-35.08	5.57	96.86	113.8	Vir
8 Sep 2021	11h43m42.45s	+02 42' 16.0"	1.6500	2.6333	1.8	9.9	6.1	-35.32	6.07	96.93	113.8	Vir
9 Sep 2021	11h46m03.65s	+02 26' 35.3"	1.6495	2.6340	1.8	9.6	5.9	-35.55	6.58	96.99	113.9	Vir
10 Sep 2021	11h48m24.90s	+02 10' 53.3"	1.6489	2.6347	1.8	9.3	5.7	-35.78	7.09	97.06	113.9	Vir
11 Sep 2021	11h50m46.21s	+01 55' 10.0"	1.6483	2.6354	1.8	9.0	5.5	-36.01	7.60	97.13	113.9	Vir
12 Sep 2021	11h53m07.57s	+01 39' 25.7"	1.6477	2.6359	1.8	8.6	5.3	-36.24	8.12	97.19	113.9	Vir
13 Sep 2021	11h55m29.00s	+01 23' 40.3"	1.6471	2.6364	1.7	8.3	5.1	-36.47	8.64	97.26	113.9	Vir
14 Sep 2021	11h57m50.51s	+01 07' 54.0"	1.6465	2.6369	1.7	8.0	4.9	-36.69	9.16	97.32	113.9	Vir
15 Sep 2021	12h00m12.09s	+00 52' 06.8"	1.6459	2.6372	1.7	7.7	4.7	-36.91	9.69	97.39	113.9	Vir
16 Sep 2021	12h02m33.76s	+00 36' 19.0"	1.6453	2.6375	1.7	7.3	4.5	-37.13	10.21	97.45	113.9	Vir
17 Sep 2021	12h04m55.52s	+00 20' 30.5"	1.6447	2.6378	1.7	7.0	4.3	-37.35	10.74	97.52	113.9	Vir
18 Sep 2021	12h07m17.38s	+00 04' 41.4"	1.6440	2.6380	1.7	6.7	4.1	-37.56	11.28	97.59	113.9	Vir
19 Sep 2021	12h09m39.35s	-00 11' 08.0"	1.6434	2.6381	1.7	6.3	3.9	-37.78	11.81	97.66	113.9	Vir
20 Sep 2021	12h12m01.43s	-00 26' 57.8"	1.6427	2.6382	1.7	6.0	3.7	-37.99	12.35	97.73	113.9	Vir
21 Sep 2021	12h14m23.64s	-00 42' 48.0"	1.6421	2.6382	1.7	5.7	3.5	-38.20	12.89	97.80	113.9	Vir
22 Sep 2021	12h16m45.98s	-00 58' 38.4"	1.6414	2.6381	1.7	5.4	3.3	-38.40	13.43	97.88	113.9	Vir
23 Sep 2021	12h19m08.46s	-01 14' 28.9"	1.6407	2.6380	1.7	5.0	3.1	-38.61	13.98	97.95	113.9	Vir
24 Sep 2021	12h21m31.08s	-01 30' 19.4"	1.6400	2.6378	1.7	4.7	2.9	-38.81	14.52	98.03	113.8	Vir
25 Sep 2021	12h23m53.87s	-01 46' 09.9"	1.6393	2.6375	1.7	4.4	2.7	-39.01	15.07	98.11	113.8	Vir
26 Sep 2021	12h26m16.82s	-02 02' 00.3"	1.6386	2.6372	1.7	4.1	2.5	-39.20	15.62	98.19	113.8	Vir
27 Sep 2021	12h28m39.94s	-02 17' 50.4"	1.6379	2.6369	1.7	3.7	2.3	-39.40	16.18	98.27	113.8	Vir
28 Sep 2021	12h31m03.23s	-02 33' 40.2"	1.6372	2.6364	1.7	3.4	2.1	-39.59	16.73	98.35	113.7	Vir
29 Sep 2021	12h33m26.72s	-02 49' 29.6"	1.6364	2.6359	1.7	3.1	1.9	-39.78	17.29	98.43	113.7	Vir
30 Sep 2021	12h35m50.39s	-03 05' 18.4"	1.6357	2.6354	1.7	2.8	1.7	-39.97	17.85	98.51	113.7	Vir
1 Okt 2021	12h38m14.27s	-03 21' 06.7"	1.6349	2.6347	1.7	2.5	1.5	-40.15	18.41	98.60	113.6	Vir
2 Okt 2021	12h40m38.35s	-03 36' 54.3"	1.6342	2.6341	1.7	2.1	1.3	-40.33	18.97	98.68	113.6	Vir
3 Okt 2021	12h43m02.65s	-03 52' 41.0"	1.6334	2.6333	1.7	1.8	1.1	-40.51	19.53	98.76	113.5	Vir
4 Okt 2021	12h45m27.16s	-04 08' 26.8"	1.6326	2.6325	1.7	1.5	0.9	-40.69	20.10	98.85	113.5	Vir
5 Okt 2021	12h47m51.90s	-04 24' 11.6"	1.6318	2.6316	1.7	1.2	0.8	-40.86	20.66	98.93	113.4	Vir
6 Okt 2021	12h50m16.87s	-04 39' 55.2"	1.6311	2.6307	1.7	1.0	0.6	-41.03	21.23	99.01	113.4	Vir
7 Okt 2021	12h52m42.07s	-04 55' 37.6"	1.6303	2.6297	1.6	0.8	0.5	-41.20	21.80	99.09	113.3	Vir
8 Okt 2021	12h55m07.51s	-05 11' 18.6"	1.6294	2.6286	1.6	0.7	0.4	-41.37	22.37	99.17	113.3	Vir
9 Okt 2021	12h57m33.20s	-05 26' 58.1"	1.6286	2.6275	1.6	0.7	0.4	-41.53	22.94	99.25	113.2	Vir
10 Okt 2021	12h59m59.13s	-05 42' 36.0"	1.6278	2.6263	1.6	0.9	0.5	-41.69	23.51	99.33	113.2	Vir
11 Okt 2021	13h02m25.32s	-05 58' 12.1"	1.6270	2.6251	1.6	1.1	0.7	-41.85	24.08	99.41	113.1	Vir
12 Okt 2021	13h04m51.77s	-06 13' 46.4"	1.6261	2.6238	1.6	1.4	0.9	-42.01	24.66	99.49	113.0	Vir
13 Okt 2021	13h07m18.49s	-06 29' 18.8"	1.6253	2.6224	1.6	1.7	1.0	-42.16	25.23	99.57	113.0	Vir
14 Okt 2021	13h09m45.48s	-06 44' 49.0"	1.6244	2.6210	1.6	2.0	1.2	-42.31	25.81	99.65	112.9	Vir
15 Okt 2021	13h12m12.75s	-07 00' 17.1"	1.6236	2.6195	1.6	2.3	1.4	-42.45	26.38	99.73	112.8	Vir
16 Okt 2021	13h14m40.31s	-07 15' 42.9"	1.6227	2.6179	1.6	2.6	1.6	-42.60	26.96	99.81	112.7	Vir
17 Okt 2021	13h17m08.16s	-07 31' 06.3"	1.6218	2.6163	1.6	3.0	1.8	-42.74	27.54	99.89	112.6	Vir
18 Okt 2021	13h19m36.32s	-07 46' 27.1"	1.6209	2.6147	1.6	3.3	2.0	-42.88	28.11	99.97	112.6	Vir
19 Okt 2021	13h22m04.79s	-08 01' 45.4"	1.6200	2.6129	1.6	3.6	2.2	-43.01	28.69	100.06	112.5	Vir
20 Okt 2021	13h24m33.57s	-08 17' 01.0"	1.6191	2.6112	1.6	3.9	2.4	-43.15	29.27	100.14	112.4	Vir
21 Okt 2021	13h27m02.68s	-08 32' 13.8"	1.6182	2.6093	1.6	4.3	2.6	-43.28	29.84	100.23	112.3	Vir
22 Okt 2021	13h29m32.13s	-08 47' 23.7"	1.6173	2.6074	1.7	4.6	2.8	-43.40	30.42	100.32	112.2	Vir
23 Okt 2021	13h32m01.91s	-09 02' 30.5"	1.6163	2.6055	1.7	4.9	3.0	-43.53	30.99	100.41	112.1	Vir



# EPHEMERIDE 2021 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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24 Okt 2021	13h34m32.05s	-09 17' 34.2"	1.6154	2.6035	1.7	5.2	3.2	-43.65	31.57	100.50	112.0	Vir
25 Okt 2021	13h37m02.54s	-09 32' 34.7"	1.6145	2.6014	1.7	5.6	3.4	-43.77	32.15	100.59	111.9	Vir
26 Okt 2021	13h39m33.40s	-09 47' 31.8"	1.6135	2.5993	1.7	5.9	3.6	-43.89	32.72	100.68	111.8	Vir
27 Okt 2021	13h42m04.62s	-10 02' 25.5"	1.6126	2.5971	1.7	6.2	3.8	-44.00	33.29	100.77	111.7	Vir
28 Okt 2021	13h44m36.22s	-10 17' 15.6"	1.6116	2.5948	1.7	6.5	4.0	-44.11	33.87	100.87	111.6	Vir
29 Okt 2021	13h47m08.21s	-10 32' 01.9"	1.6106	2.5925	1.7	6.9	4.2	-44.22	34.44	100.96	111.4	Vir
30 Okt 2021	13h49m40.58s	-10 46' 44.5"	1.6097	2.5902	1.7	7.2	4.4	-44.32	35.01	101.06	111.3	Vir
31 Okt 2021	13h52m13.35s	-11 01' 23.1"	1.6087	2.5878	1.7	7.5	4.6	-44.43	35.58	101.15	111.2	Vir
1 Nov 2021	13h54m46.51s	-11 15' 57.7"	1.6077	2.5853	1.7	7.9	4.8	-44.53	36.15	101.25	111.1	Vir
2 Nov 2021	13h57m20.09s	-11 30' 28.1"	1.6067	2.5828	1.7	8.2	5.0	-44.62	36.71	101.34	111.0	Vir
3 Nov 2021	13h59m54.07s	-11 44' 54.1"	1.6057	2.5802	1.7	8.5	5.2	-44.72	37.28	101.43	110.8	Vir
4 Nov 2021	14h02m28.46s	-11 59' 15.7"	1.6047	2.5776	1.7	8.8	5.4	-44.81	37.84	101.53	110.7	Vir
5 Nov 2021	14h05m03.28s	-12 13' 32.7"	1.6036	2.5749	1.6	9.2	5.7	-44.90	38.41	101.62	110.6	Vir
6 Nov 2021	14h07m38.21s	-12 27' 44.9"	1.6026	2.5721	1.6	9.5	5.9	-44.99	38.97	101.71	110.4	Vir
7 Nov 2021	14h10m14.16s	-12 41' 52.2"	1.6016	2.5693	1.6	9.8	6.1	-45.07	39.53	101.80	110.3	Vir
8 Nov 2021	14h12m50.24s	-12 55' 54.6"	1.6005	2.5664	1.6	10.1	6.3	-45.15	40.08	101.88	110.1	Vir
9 Nov 2021	14h15m26.76s	-13 09' 51.7"	1.5995	2.5635	1.6	10.5	6.5	-45.23	40.64	101.97	110.0	Vir
10 Nov 2021	14h18m03.70s	-13 23' 43.6"	1.5984	2.5605	1.6	10.8	6.7	-45.31	41.19	102.06	109.8	Vir
11 Nov 2021	14h20m41.09s	-13 37' 30.0"	1.5974	2.5575	1.6	11.1	6.9	-45.38	41.74	102.15	109.7	Vir
12 Nov 2021	14h23m18.92s	-13 51' 10.8"	1.5963	2.5544	1.6	11.5	7.1	-45.45	42.29	102.23	109.5	Lib
13 Nov 2021	14h25m57.20s	-14 04' 46.0"	1.5953	2.5513	1.6	11.8	7.3	-45.52	42.83	102.32	109.4	Lib
14 Nov 2021	14h28m35.93s	-14 18' 15.3"	1.5942	2.5481	1.6	12.1	7.5	-45.58	43.37	102.41	109.2	Lib
15 Nov 2021	14h31m15.12s	-14 31' 38.7"	1.5931	2.5448	1.6	12.4	7.7	-45.65	43.91	102.50	109.0	Lib
16 Nov 2021	14h33m54.78s	-14 44' 56.0"	1.5920	2.5416	1.6	12.8	7.9	-45.71	44.45	102.60	108.9	Lib
17 Nov 2021	14h36m34.91s	-14 58' 07.1"	1.5909	2.5382	1.6	13.1	8.1	-45.76	44.98	102.69	108.7	Lib
18 Nov 2021	14h39m15.51s	-15 11' 11.9"	1.5898	2.5348	1.6	13.4	8.3	-45.82	45.51	102.78	108.5	Lib
19 Nov 2021	14h41m56.59s	-15 24' 10.3"	1.5887	2.5314	1.6	13.7	8.5	-45.87	46.04	102.88	108.4	Lib
20 Nov 2021	14h44m38.16s	-15 37' 02.0"	1.5876	2.5279	1.6	14.1	8.7	-45.92	46.57	102.97	108.2	Lib
21 Nov 2021	14h47m20.22s	-15 49' 47.1"	1.5865	2.5244	1.6	14.4	8.9	-45.97	47.09	103.07	108.0	Lib
22 Nov 2021	14h50m02.78s	-16 02' 25.3"	1.5853	2.5208	1.6	14.7	9.1	-46.01	47.61	103.17	107.8	Lib
23 Nov 2021	14h52m45.83s	-16 14' 56.5"	1.5842	2.5171	1.6	15.0	9.3	-46.06	48.12	103.27	107.6	Lib
24 Nov 2021	14h55m29.39s	-16 27' 20.7"	1.5831	2.5135	1.6	15.4	9.5	-46.10	48.63	103.37	107.4	Lib
25 Nov 2021	14h58m13.45s	-16 39' 37.6"	1.5819	2.5097	1.6	15.7	9.7	-46.14	49.14	103.46	107.2	Lib
26 Nov 2021	15h00m58.02s	-16 51' 47.1"	1.5808	2.5059	1.6	16.0	9.9	-46.17	49.64	103.57	107.0	Lib
27 Nov 2021	15h03m43.11s	-17 03' 49.1"	1.5796	2.5021	1.6	16.3	10.1	-46.21	50.14	103.67	106.8	Lib
28 Nov 2021	15h06m28.71s	-17 15' 43.5"	1.5785	2.4982	1.6	16.7	10.3	-46.24	50.63	103.77	106.6	Lib
29 Nov 2021	15h09m14.83s	-17 27' 30.0"	1.5773	2.4943	1.6	17.0	10.5	-46.27	51.13	103.87	106.4	Lib
30 Nov 2021	15h12m01.47s	-17 39' 08.7"	1.5762	2.4904	1.6	17.3	10.7	-46.29	51.61	103.97	106.2	Lib
1 Dez 2021	15h14m48.62s	-17 50' 39.2"	1.5750	2.4863	1.6	17.6	10.9	-46.32	52.10	104.07	106.0	Lib
2 Dez 2021	15h17m36.30s	-18 02' 01.6"	1.5738	2.4823	1.6	17.9	11.1	-46.34	52.57	104.16	105.8	Lib
3 Dez 2021	15h20m24.49s	-18 13' 15.5"	1.5726	2.4782	1.6	18.3	11.3	-46.36	53.05	104.26	105.6	Lib
4 Dez 2021	15h23m13.20s	-18 24' 20.9"	1.5714	2.4740	1.6	18.6	11.5	-46.38	53.52	104.36	105.4	Lib
5 Dez 2021	15h26m02.43s	-18 35' 17.6"	1.5703	2.4698	1.6	18.9	11.7	-46.39	53.98	104.45	105.2	Lib
6 Dez 2021	15h28m52.17s	-18 46' 05.5"	1.5691	2.4656	1.6	19.2	11.9	-46.40	54.44	104.54	104.9	Lib
7 Dez 2021	15h31m42.42s	-18 56' 44.4"	1.5679	2.4613	1.6	19.6	12.1	-46.41	54.90	104.64	104.7	Lib
8 Dez 2021	15h34m33.18s	-19 07' 14.2"	1.5667	2.4569	1.6	19.9	12.3	-46.42	55.35	104.73	104.5	Lib
9 Dez 2021	15h37m24.45s	-19 17' 34.6"	1.5654	2.4525	1.6	20.2	12.5	-46.43	55.80	104.82	104.2	Lib
10 Dez 2021	15h40m16.22s	-19 27' 45.7"	1.5642	2.4481	1.6	20.5	12.7	-46.43	56.24	104.91	104.0	Lib
11 Dez 2021	15h43m08.51s	-19 37' 47.2"	1.5630	2.4436	1.6	20.8	12.9	-46.44	56.68	105.00	103.8	Lib
12 Dez 2021	15h46m01.30s	-19 47' 39.0"	1.5618	2.4391	1.6	21.2	13.2	-46.43	57.11	105.09	103.5	Lib
13 Dez 2021	15h48m54.60s	-19 57' 21.0"	1.5606	2.4346	1.6	21.5	13.4	-46.43	57.54	105.18	103.3	Lib
14 Dez 2021	15h51m48.41s	-20 06' 53.1"	1.5593	2.4300	1.6	21.8	13.6	-46.43	57.96	105.28	103.1	Lib
15 Dez 2021	15h54m42.72s	-20 16' 15.0"	1.5581	2.4254	1.6	22.1	13.8	-46.42	58.38	105.37	102.8	Lib
16 Dez 2021	15h57m37.54s	-20 25' 26.8"	1.5569	2.4207	1.6	22.4	14.0	-46.41	58.79	105.47	102.6	Sco
17 Dez 2021	16h00m32.86s	-20 34' 28.2"	1.5556	2.4160	1.6	22.7	14.2	-46.40	59.20	105.56	102.3	Sco
18 Dez 2021	16h03m28.69s	-20 43' 19.1"	1.5544	2.4113	1.6	23.1	14.4	-46.39	59.60	105.66	102.0	Sco
19 Dez 2021	16h06m25.01s	-20 51' 59.5"	1.5531	2.4065	1.6	23.4	14.6	-46.37	60.00	105.76	101.8	Sco
20 Dez 2021	16h09m21.84s	-21 00' 29.1"	1.5519	2.4017	1.6	23.7	14.8	-46.35	60.39	105.85	101.5	Sco
21 Dez 2021	16h12m19.16s	-21 08' 47.9"	1.5506	2.3968	1.6	24.0	15.0	-46.33	60.77	105.95	101.3	Sco
22 Dez 2021	16h15m16.98s	-21 16' 55.7"	1.5494	2.3919	1.6	24.3	15.2	-46.31	61.15	106.05	101.0	Sco
23 Dez 2021	16h18m15.30s	-21 24' 52.4"	1.5481	2.3870	1.6	24.6	15.4	-46.29	61.53	106.15	100.7	Sco
24 Dez 2021	16h21m14.10s	-21 32' 37.9"	1.5469	2.3821	1.6	24.9	15.6	-46.26	61.90	106.25	100.5	Sco
25 Dez 2021	16h24m13.38s	-21 40' 12.0"	1.5456	2.3771	1.6	25.3	15.8	-46.23	62.27	106.35	100.2	Oph
26 Dez 2021	16h27m13.15s	-21 47' 34.6"	1.5443	2.3721	1.6	25.6	16.0	-46.20	62.63	106.45	99.9	Oph
27 Dez 2021	16h30m13.39s	-21 54' 45.6"	1.5430	2.3670	1.6	25.9	16.2	-46.17	62.98	106.56	99.7	Oph
28 Dez 2021	16h33m14.11s	-22 01' 44.9"	1.5418	2.3619	1.5	26.2	16.4	-46.13	63.33	106.66	99.4	Oph
29 Dez 2021	16h36m15.28s	-22 08' 32.4"	1.5405	2.3568	1.5	26.5	16.6	-46.09	63.67	106.75	99.1	Oph
30 Dez 2021	16h39m16.92s	-22 15' 07.8"	1.5392	2.3516	1.5	26.8	16.7	-46.05	64.01	106.85	98.8	Oph
31 Dez 2021	16h42m19.00s	-22 21' 31.2"	1.5379	2.3464	1.5	27.1	16.9	-46.01	64.34	106.95	98.5	Oph
1 Jan 2022	16h45m21.52s	-22 27' 42.3"	1.5366	2.3412	1.5	27.4	17.1	-45.97	64.67	107.05	98.3	Oph