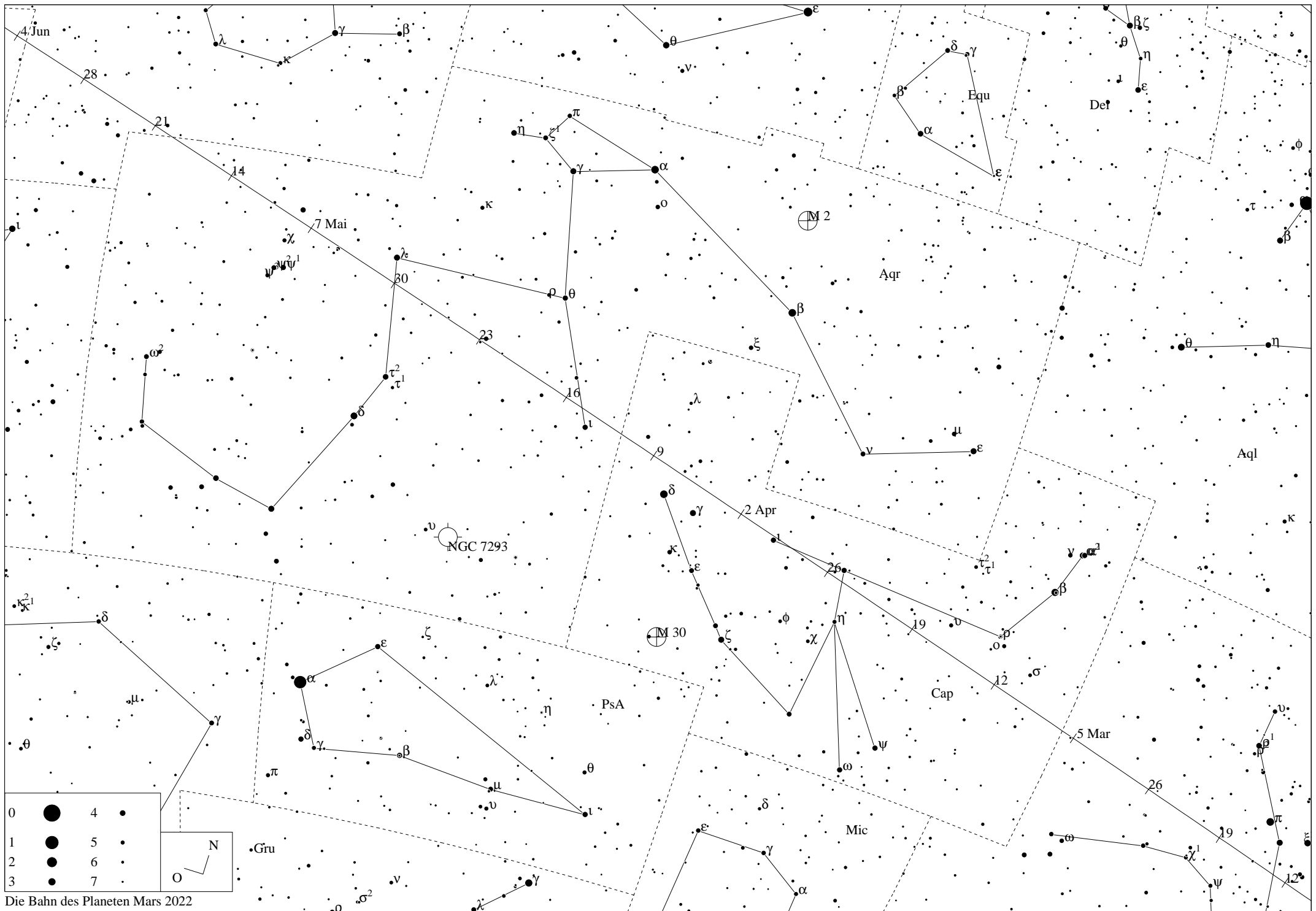
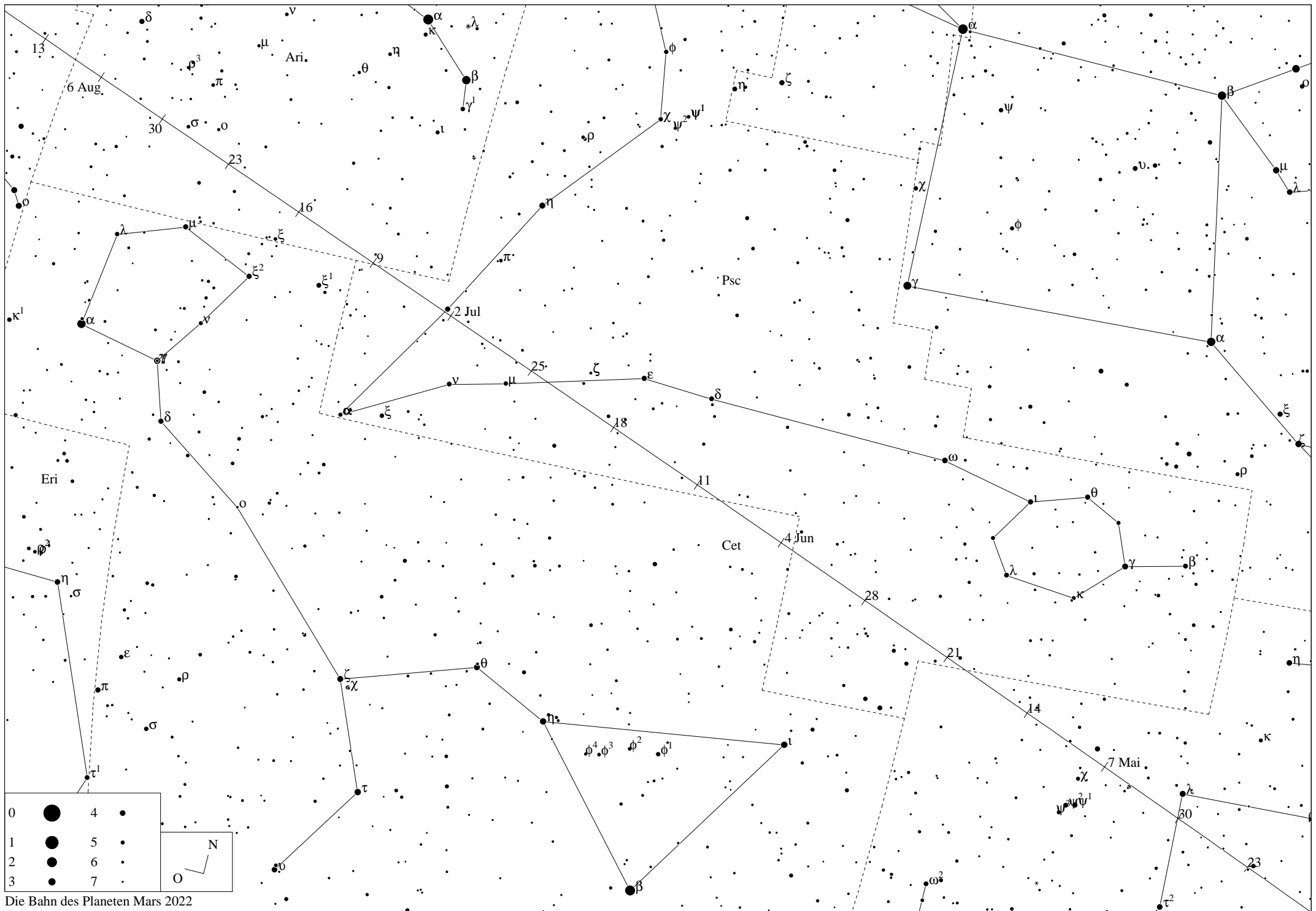


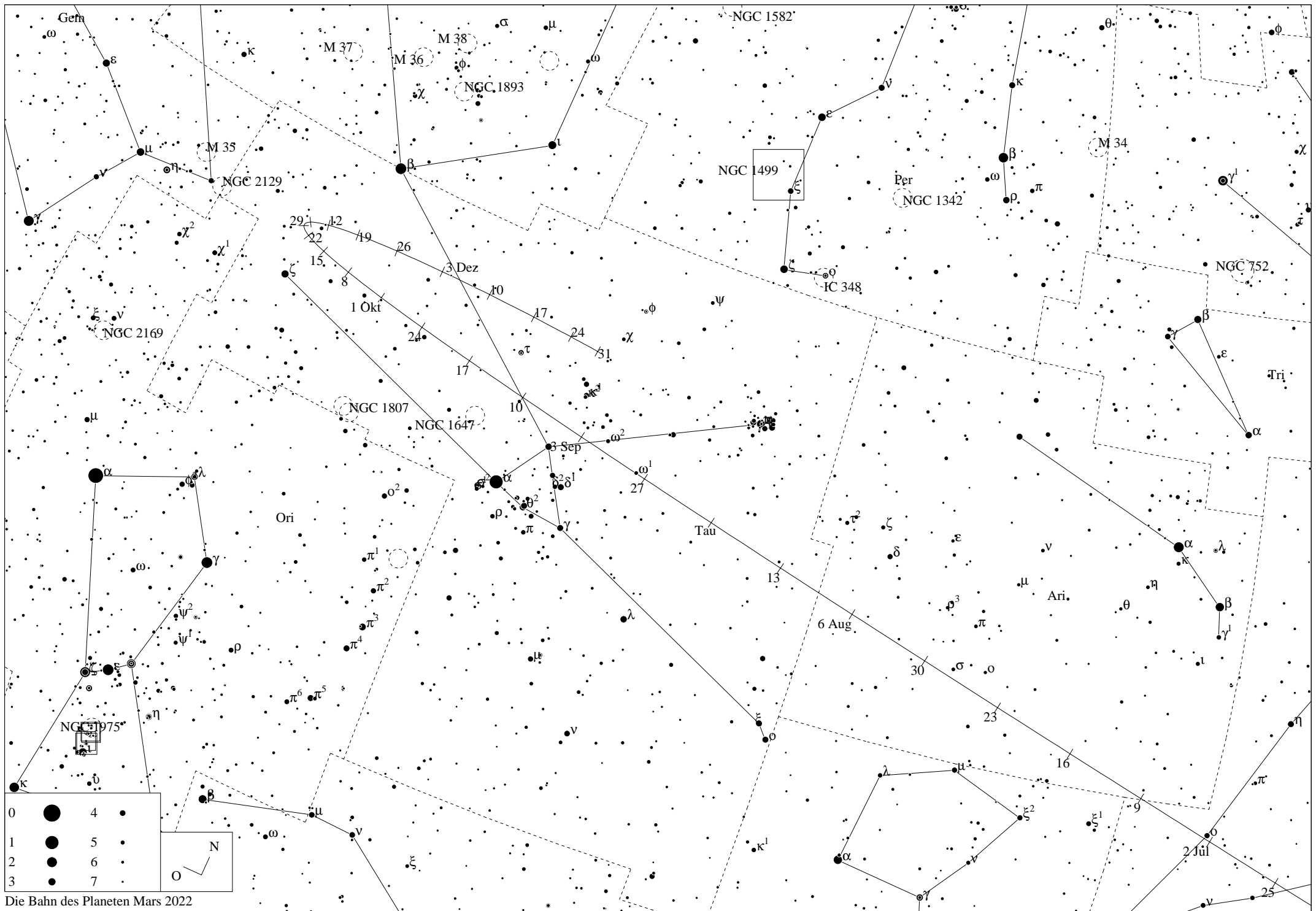
Die Bahn des Planeten Mars 2022



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# EPHEMERIDE 2022 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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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
2 Jan 2022	16h48m24.47s	-22 33' 41.1"	1.5354	2.3359	1.5	27.7	17.3	-45.92	64.99	107.14	98.0	Oph
3 Jan 2022	16h51m27.84s	-22 39' 27.3"	1.5341	2.3306	1.5	28.0	17.5	-45.87	65.31	107.23	97.7	Oph
4 Jan 2022	16h54m31.62s	-22 45' 01.0"	1.5328	2.3253	1.5	28.4	17.7	-45.82	65.62	107.32	97.4	Oph
5 Jan 2022	16h57m35.79s	-22 50' 22.0"	1.5315	2.3199	1.5	28.7	17.9	-45.77	65.92	107.41	97.1	Oph
6 Jan 2022	17h00m40.36s	-22 55' 30.2"	1.5302	2.3146	1.5	29.0	18.1	-45.71	66.22	107.50	96.8	Oph
7 Jan 2022	17h03m45.31s	-23 00' 25.5"	1.5289	2.3091	1.5	29.3	18.3	-45.65	66.52	107.59	96.5	Oph
8 Jan 2022	17h06m50.64s	-23 05' 07.8"	1.5276	2.3037	1.5	29.6	18.5	-45.59	66.81	107.67	96.2	Oph
9 Jan 2022	17h09m56.32s	-23 09' 36.9"	1.5263	2.2982	1.5	29.9	18.7	-45.53	67.09	107.76	95.9	Oph
10 Jan 2022	17h13m02.36s	-23 13' 52.9"	1.5250	2.2927	1.5	30.2	18.9	-45.47	67.37	107.85	95.6	Oph
11 Jan 2022	17h16m08.75s	-23 17' 55.6"	1.5237	2.2872	1.5	30.5	19.1	-45.40	67.64	107.94	95.3	Oph
12 Jan 2022	17h19m15.48s	-23 21' 44.9"	1.5224	2.2817	1.5	30.8	19.3	-45.33	67.91	108.03	95.0	Oph
13 Jan 2022	17h22m22.54s	-23 25' 20.8"	1.5211	2.2761	1.5	31.1	19.5	-45.26	68.17	108.12	94.7	Oph
14 Jan 2022	17h25m29.92s	-23 28' 43.2"	1.5198	2.2705	1.5	31.4	19.7	-45.18	68.43	108.21	94.4	Oph
15 Jan 2022	17h28m37.61s	-23 31' 52.0"	1.5185	2.2649	1.5	31.7	19.9	-45.11	68.68	108.30	94.1	Oph
16 Jan 2022	17h31m45.60s	-23 34' 47.1"	1.5172	2.2592	1.5	32.0	20.1	-45.03	68.92	108.39	93.8	Oph
17 Jan 2022	17h34m53.89s	-23 37' 28.4"	1.5159	2.2536	1.5	32.3	20.3	-44.95	69.16	108.48	93.5	Oph
18 Jan 2022	17h38m02.47s	-23 39' 56.0"	1.5146	2.2479	1.5	32.6	20.5	-44.86	69.40	108.57	93.2	Oph
19 Jan 2022	17h41m11.32s	-23 42' 09.6"	1.5133	2.2422	1.5	32.9	20.7	-44.77	69.63	108.66	92.9	Oph
20 Jan 2022	17h44m20.44s	-23 44' 09.4"	1.5120	2.2365	1.5	33.2	20.9	-44.68	69.85	108.76	92.6	Sgr
21 Jan 2022	17h47m29.82s	-23 45' 55.1"	1.5107	2.2307	1.5	33.5	21.1	-44.59	70.07	108.85	92.3	Sgr
22 Jan 2022	17h50m39.44s	-23 47' 26.8"	1.5093	2.2249	1.5	33.8	21.2	-44.50	70.29	108.95	92.0	Sgr
23 Jan 2022	17h53m49.30s	-23 48' 44.3"	1.5080	2.2192	1.4	34.1	21.4	-44.40	70.50	109.04	91.7	Sgr
24 Jan 2022	17h56m59.39s	-23 49' 47.7"	1.5067	2.2133	1.4	34.3	21.6	-44.30	70.71	109.13	91.3	Sgr
25 Jan 2022	18h00m09.68s	-23 50' 36.9"	1.5054	2.2075	1.4	34.6	21.8	-44.20	70.91	109.23	91.0	Sgr
26 Jan 2022	18h03m20.18s	-23 51' 11.8"	1.5041	2.2017	1.4	34.9	22.0	-44.09	71.10	109.32	90.7	Sgr
27 Jan 2022	18h06m30.86s	-23 51' 32.4"	1.5028	2.1958	1.4	35.2	22.2	-43.98	71.29	109.41	90.4	Sgr
28 Jan 2022	18h09m41.71s	-23 51' 38.6"	1.5015	2.1899	1.4	35.5	22.4	-43.87	71.48	109.50	90.1	Sgr
29 Jan 2022	18h12m52.72s	-23 51' 30.4"	1.5002	2.1840	1.4	35.8	22.6	-43.76	71.66	109.59	89.8	Sgr
30 Jan 2022	18h16m03.88s	-23 51' 07.9"	1.4989	2.1781	1.4	36.1	22.8	-43.64	71.84	109.67	89.5	Sgr
31 Jan 2022	18h19m15.16s	-23 50' 30.9"	1.4976	2.1722	1.4	36.4	23.0	-43.52	72.01	109.76	89.2	Sgr
1 Feb 2022	18h22m26.56s	-23 49' 39.4"	1.4963	2.1662	1.4	36.7	23.2	-43.40	72.18	109.84	88.8	Sgr
2 Feb 2022	18h25m38.05s	-23 48' 33.4"	1.4950	2.1603	1.4	36.9	23.3	-43.27	72.34	109.92	88.5	Sgr
3 Feb 2022	18h28m49.62s	-23 47' 13.0"	1.4937	2.1543	1.4	37.2	23.5	-43.14	72.50	110.00	88.2	Sgr
4 Feb 2022	18h32m01.27s	-23 45' 38.0"	1.4924	2.1483	1.4	37.5	23.7	-43.01	72.65	110.07	87.9	Sgr
5 Feb 2022	18h35m12.97s	-23 43' 48.5"	1.4911	2.1423	1.4	37.8	23.9	-42.88	72.81	110.15	87.6	Sgr
6 Feb 2022	18h38m24.71s	-23 41' 44.6"	1.4898	2.1362	1.4	38.1	24.1	-42.74	72.95	110.23	87.3	Sgr
7 Feb 2022	18h41m36.48s	-23 39' 26.2"	1.4885	2.1302	1.4	38.4	24.3	-42.60	73.09	110.30	87.0	Sgr
8 Feb 2022	18h44m48.27s	-23 36' 53.2"	1.4872	2.1242	1.4	38.6	24.5	-42.45	73.23	110.38	86.7	Sgr
9 Feb 2022	18h48m00.07s	-23 34' 05.9"	1.4859	2.1181	1.4	38.9	24.7	-42.31	73.37	110.45	86.3	Sgr
10 Feb 2022	18h51m11.86s	-23 31' 04.0"	1.4847	2.1120	1.4	39.2	24.8	-42.16	73.50	110.53	86.0	Sgr
11 Feb 2022	18h54m23.64s	-23 27' 47.8"	1.4834	2.1060	1.4	39.5	25.0	-42.00	73.63	110.61	85.7	Sgr
12 Feb 2022	18h57m35.39s	-23 24' 17.1"	1.4821	2.0999	1.3	39.8	25.2	-41.85	73.75	110.68	85.4	Sgr
13 Feb 2022	19h00m47.11s	-23 20' 32.1"	1.4808	2.0938	1.3	40.0	25.4	-41.69	73.87	110.76	85.1	Sgr
14 Feb 2022	19h03m58.78s	-23 16' 32.8"	1.4795	2.0877	1.3	40.3	25.6	-41.52	73.99	110.84	84.8	Sgr
15 Feb 2022	19h07m10.39s	-23 12' 19.1"	1.4783	2.0816	1.3	40.6	25.8	-41.36	74.10	110.91	84.5	Sgr
16 Feb 2022	19h10m21.94s	-23 07' 51.2"	1.4770	2.0755	1.3	40.8	25.9	-41.19	74.21	110.99	84.2	Sgr
17 Feb 2022	19h13m33.41s	-23 03' 09.1"	1.4757	2.0693	1.3	41.1	26.1	-41.02	74.32	111.07	83.9	Sgr
18 Feb 2022	19h16m44.80s	-22 58' 12.8"	1.4745	2.0632	1.3	41.4	26.3	-40.84	74.43	111.15	83.6	Sgr
19 Feb 2022	19h19m56.09s	-22 53' 02.3"	1.4732	2.0571	1.3	41.7	26.5	-40.66	74.53	111.23	83.3	Sgr
20 Feb 2022	19h23m07.27s	-22 47' 37.8"	1.4719	2.0510	1.3	41.9	26.7	-40.48	74.62	111.30	83.0	Sgr
21 Feb 2022	19h26m18.34s	-22 41' 59.2"	1.4707	2.0448	1.3	42.2	26.8	-40.29	74.72	111.38	82.7	Sgr
22 Feb 2022	19h29m29.29s	-22 36' 06.7"	1.4694	2.0387	1.3	42.5	27.0	-40.10	74.81	111.46	82.4	Sgr
23 Feb 2022	19h32m40.09s	-22 30' 00.2"	1.4682	2.0325	1.3	42.7	27.2	-39.91	74.90	111.54	82.1	Sgr
24 Feb 2022	19h35m50.75s	-22 23' 40.0"	1.4670	2.0264	1.3	43.0	27.4	-39.71	74.99	111.61	81.8	Sgr
25 Feb 2022	19h39m01.25s	-22 17' 05.9"	1.4657	2.0202	1.3	43.3	27.6	-39.51	75.07	111.68	81.5	Sgr
26 Feb 2022	19h42m11.58s	-22 10' 18.1"	1.4645	2.0140	1.3	43.5	27.7	-39.31	75.15	111.75	81.2	Sgr
27 Feb 2022	19h45m21.73s	-22 03' 16.7"	1.4633	2.0079	1.3	43.8	27.9	-39.10	75.23	111.82	80.9	Sgr
28 Feb 2022	19h48m31.68s	-21 56' 01.8"	1.4620	2.0017	1.3	44.0	28.1	-38.89	75.31	111.89	80.7	Sgr
1 Mar 2022	19h51m41.42s	-21 48' 33.5"	1.4608	1.9955	1.3	44.3	28.3	-38.68	75.38	111.95	80.4	Sgr
2 Mar 2022	19h54m50.94s	-21 40' 51.8"	1.4596	1.9894	1.2	44.6	28.5	-38.46	75.46	112.01	80.1	Sgr
3 Mar 2022	19h58m00.24s	-21 32' 56.9"	1.4584	1.9832	1.2	44.8	28.6	-38.24	75.53	112.07	79.8	Sgr
4 Mar 2022	20h01m09.29s	-21 24' 48.8"	1.4572	1.9770	1.2	45.1	28.8	-38.02	75.60	112.13	79.5	Sgr
5 Mar 2022	20h04m18.09s	-21 16' 27.7"	1.4560	1.9708	1.2	45.3	29.0	-37.79	75.66	112.18	79.3	Sgr
6 Mar 2022	20h07m26.63s	-21 07' 53.7"	1.4548	1.9646	1.2	45.6	29.2	-37.56	75.73	112.24	79.0	Cap
7 Mar 2022	20h10m34.91s	-20 59' 07.0"	1.4536	1.9585	1.2	45.8	29.3	-37.33	75.79	112.29	78.7	Cap
8 Mar 2022	20h13m42.91s	-20 50' 07.5"	1.4524	1.9523	1.2	46.1	29.5	-37.09	75.85	112.34	78.4	Cap
9 Mar 2022	20h16m50.63s	-20 40' 55.4"	1.4512	1.9461	1.2	46.4	29.7	-36.85	75.91	112.39	78.2	Cap
10 Mar 2022	20h19m58.06s	-20 31' 30.9"	1.4500	1.9399	1.2	46.6	29.8	-36.61	75.97	112.44	77.9	Cap
11 Mar 2022	20h23m05.21s	-20 21' 54.1"	1.4489	1.9338	1.2	46.9	30.0	-36.36	76.03	112.49	77.6	Cap
12 Mar 2022	20h26m12.06s	-20 12' 05.0"	1.4477	1.9276	1.2	47.1	30.2	-36.11	76.08	112.54	77.4	Cap
13 Mar 2022	20h29m18.61s	-20 02' 03.9"	1.4466	1.9214	1.2	47.4	30.4	-35.85	76.14	112.59	77.1	Cap
14 Mar 2022	20h32m24.85s	-19 51' 50.8"	1.4454	1.9153	1.2	47.6	30.5	-35.59	76.19	112.65	76.9	Cap
15 Mar 2022	20h35m30.79s	-19 41' 25.8"	1.4443	1.9091	1.2	47.9	30.7	-35.33	76.24	112.70	76.6	Cap

# EPHEMERIDE 2022 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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16 Mar 2022	20h38m36.41s	-19 30' 49.1"	1.4431	1.9030	1.2	48.1	30.9	-35.07	76.29	112.75	76.4	Cap
17 Mar 2022	20h41m41.72s	-19 20' 00.8"	1.4420	1.8968	1.2	48.3	31.0	-34.80	76.34	112.80	76.1	Cap
18 Mar 2022	20h44m46.72s	-19 09' 01.1"	1.4409	1.8907	1.2	48.6	31.2	-34.53	76.39	112.85	75.9	Cap
19 Mar 2022	20h47m51.40s	-18 57' 50.0"	1.4398	1.8846	1.1	48.8	31.4	-34.25	76.44	112.90	75.7	Cap
20 Mar 2022	20h50m55.76s	-18 46' 27.7"	1.4387	1.8784	1.1	49.1	31.5	-33.97	76.49	112.95	75.4	Cap
21 Mar 2022	20h53m59.79s	-18 34' 54.4"	1.4375	1.8723	1.1	49.3	31.7	-33.69	76.53	113.00	75.2	Cap
22 Mar 2022	20h57m03.50s	-18 23' 10.1"	1.4365	1.8662	1.1	49.6	31.9	-33.41	76.58	113.04	75.0	Cap
23 Mar 2022	21h00m06.89s	-18 11' 15.0"	1.4354	1.8601	1.1	49.8	32.0	-33.12	76.63	113.09	74.7	Cap
24 Mar 2022	21h03m09.94s	-17 59' 09.2"	1.4343	1.8540	1.1	50.0	32.2	-32.83	76.67	113.14	74.5	Cap
25 Mar 2022	21h06m12.65s	-17 46' 53.0"	1.4332	1.8479	1.1	50.3	32.4	-32.53	76.71	113.18	74.3	Cap
26 Mar 2022	21h09m15.03s	-17 34' 26.4"	1.4321	1.8418	1.1	50.5	32.5	-32.23	76.76	113.22	74.1	Cap
27 Mar 2022	21h12m17.07s	-17 21' 49.7"	1.4311	1.8357	1.1	50.8	32.7	-31.93	76.80	113.26	73.8	Cap
28 Mar 2022	21h15m18.75s	-17 09' 02.9"	1.4300	1.8297	1.1	51.0	32.8	-31.63	76.84	113.29	73.6	Cap
29 Mar 2022	21h18m02.09s	-16 56' 06.2"	1.4290	1.8236	1.1	51.2	33.0	-31.32	76.88	113.32	73.4	Cap
30 Mar 2022	21h21m21.07s	-16 42' 59.9"	1.4280	1.8175	1.1	51.5	33.2	-31.01	76.92	113.35	73.2	Cap
31 Mar 2022	21h24m21.69s	-16 29' 44.1"	1.4269	1.8115	1.1	51.7	33.3	-30.70	76.97	113.38	73.0	Cap
1 Apr 2022	21h27m21.95s	-16 16' 19.0"	1.4259	1.8054	1.1	51.9	33.5	-30.38	77.01	113.40	72.8	Cap
2 Apr 2022	21h30m21.84s	-16 02' 44.7"	1.4249	1.7994	1.1	52.2	33.6	-30.06	77.05	113.42	72.6	Cap
3 Apr 2022	21h33m21.37s	-15 49' 01.4"	1.4239	1.7934	1.1	52.4	33.8	-29.74	77.09	113.44	72.4	Cap
4 Apr 2022	21h36m20.54s	-15 35' 09.3"	1.4229	1.7873	1.1	52.6	34.0	-29.41	77.13	113.45	72.2	Cap
5 Apr 2022	21h39m19.34s	-15 21' 08.6"	1.4220	1.7813	1.0	52.9	34.1	-29.08	77.17	113.47	72.0	Cap
6 Apr 2022	21h42m17.77s	-15 06' 59.4"	1.4210	1.7753	1.0	53.1	34.3	-28.75	77.21	113.48	71.8	Cap
7 Apr 2022	21h45m15.84s	-14 52' 42.0"	1.4200	1.7693	1.0	53.3	34.4	-28.42	77.25	113.49	71.7	Cap
8 Apr 2022	21h48m13.55s	-14 38' 16.4"	1.4191	1.7633	1.0	53.5	34.6	-28.08	77.29	113.50	71.5	Cap
9 Apr 2022	21h51m10.90s	-14 23' 42.9"	1.4181	1.7574	1.0	53.8	34.7	-27.74	77.34	113.51	71.3	Cap
10 Apr 2022	21h54m07.89s	-14 09' 01.6"	1.4172	1.7514	1.0	54.0	34.9	-27.40	77.38	113.52	71.1	Cap
11 Apr 2022	21h57m04.53s	-13 54' 12.7"	1.4163	1.7455	1.0	54.2	35.0	-27.06	77.42	113.52	71.0	Cap
12 Apr 2022	22h00m00.81s	-13 39' 16.3"	1.4153	1.7395	1.0	54.5	35.2	-26.71	77.46	113.53	70.8	Aqr
13 Apr 2022	22h02m56.75s	-13 24' 12.7"	1.4144	1.7336	1.0	54.7	35.3	-26.36	77.50	113.54	70.6	Aqr
14 Apr 2022	22h05m52.35s	-13 09' 01.9"	1.4135	1.7277	1.0	54.9	35.5	-26.00	77.54	113.54	70.5	Aqr
15 Apr 2022	22h08m47.62s	-12 53' 44.2"	1.4127	1.7218	1.0	55.1	35.6	-25.65	77.59	113.55	70.3	Aqr
16 Apr 2022	22h11m42.54s	-12 38' 19.7"	1.4118	1.7159	1.0	55.3	35.8	-25.29	77.63	113.55	70.2	Aqr
17 Apr 2022	22h14m37.15s	-12 22' 48.6"	1.4109	1.7100	1.0	55.6	35.9	-24.93	77.67	113.56	70.0	Aqr
18 Apr 2022	22h17m31.43s	-12 07' 11.0"	1.4101	1.7042	1.0	55.8	36.1	-24.57	77.72	113.56	69.9	Aqr
19 Apr 2022	22h20m25.39s	-11 51' 27.1"	1.4092	1.6983	1.0	56.0	36.2	-24.21	77.76	113.57	69.8	Aqr
20 Apr 2022	22h23m19.03s	-11 35' 37.1"	1.4084	1.6925	0.9	56.2	36.4	-23.84	77.80	113.57	69.6	Aqr
21 Apr 2022	22h26m12.37s	-11 19' 41.1"	1.4076	1.6866	0.9	56.5	36.5	-23.47	77.85	113.57	69.5	Aqr
22 Apr 2022	22h29m05.39s	-11 03' 39.4"	1.4068	1.6808	0.9	56.7	36.7	-23.10	77.89	113.56	69.4	Aqr
23 Apr 2022	22h31m58.11s	-10 47' 32.0"	1.4060	1.6750	0.9	56.9	36.8	-22.72	77.94	113.56	69.2	Aqr
24 Apr 2022	22h34m50.52s	-10 31' 19.3"	1.4052	1.6692	0.9	57.1	36.9	-22.35	77.98	113.55	69.1	Aqr
25 Apr 2022	22h37m42.62s	-10 15' 01.4"	1.4044	1.6634	0.9	57.3	37.1	-21.97	78.03	113.53	69.0	Aqr
26 Apr 2022	22h40m34.43s	-09 58' 38.4"	1.4036	1.6577	0.9	57.5	37.2	-21.59	78.07	113.51	68.9	Aqr
27 Apr 2022	22h43m25.93s	-09 42' 10.7"	1.4029	1.6519	0.9	57.8	37.4	-21.21	78.12	113.49	68.8	Aqr
28 Apr 2022	22h46m17.13s	-09 25' 38.3"	1.4021	1.6461	0.9	58.0	37.5	-20.83	78.17	113.46	68.7	Aqr
29 Apr 2022	22h49m08.03s	-09 09' 01.5"	1.4014	1.6404	0.9	58.2	37.6	-20.44	78.22	113.43	68.5	Aqr
30 Apr 2022	22h51m58.63s	-08 52' 20.6"	1.4007	1.6347	0.9	58.4	37.8	-20.06	78.26	113.40	68.4	Aqr
1 Mai 2022	22h54m48.94s	-08 35' 35.6"	1.4000	1.6289	0.9	58.6	37.9	-19.67	78.31	113.36	68.3	Aqr
2 Mai 2022	22h57m38.96s	-08 18' 46.7"	1.3993	1.6232	0.9	58.8	38.0	-19.28	78.36	113.32	68.3	Aqr
3 Mai 2022	23h00m28.69s	-08 01' 54.3"	1.3986	1.6175	0.9	59.1	38.2	-18.89	78.41	113.28	68.2	Aqr
4 Mai 2022	23h03m18.14s	-07 44' 58.4"	1.3979	1.6118	0.9	59.3	38.3	-18.49	78.46	113.24	68.1	Aqr
5 Mai 2022	23h06m07.32s	-07 27' 59.2"	1.3973	1.6061	0.9	59.5	38.5	-18.10	78.51	113.19	68.0	Aqr
6 Mai 2022	23h08m56.21s	-07 10' 57.0"	1.3966	1.6005	0.8	59.7	38.6	-17.70	78.56	113.14	67.9	Aqr
7 Mai 2022	23h11m44.84s	-06 53' 51.9"	1.3960	1.5948	0.8	59.9	38.7	-17.31	78.62	113.09	67.8	Aqr
8 Mai 2022	23h14m33.21s	-06 36' 44.1"	1.3954	1.5892	0.8	60.1	38.8	-16.91	78.67	113.04	67.8	Aqr
9 Mai 2022	23h17m21.32s	-06 19' 33.7"	1.3948	1.5835	0.8	60.4	39.0	-16.51	78.72	112.98	67.7	Aqr
10 Mai 2022	23h20m09.18s	-06 02' 20.9"	1.3942	1.5779	0.8	60.6	39.1	-16.11	78.77	112.93	67.6	Aqr
11 Mai 2022	23h22m56.80s	-05 45' 06.0"	1.3936	1.5723	0.8	60.8	39.2	-15.70	78.83	112.87	67.6	Aqr
12 Mai 2022	23h25m44.17s	-05 27' 49.0"	1.3930	1.5667	0.8	61.0	39.4	-15.30	78.88	112.81	67.5	Aqr
13 Mai 2022	23h28m31.32s	-05 10' 30.2"	1.3924	1.5612	0.8	61.2	39.5	-14.90	78.94	112.75	67.4	Aqr
14 Mai 2022	23h31m18.25s	-04 53' 09.7"	1.3919	1.5556	0.8	61.4	39.6	-14.49	78.99	112.69	67.4	Aqr
15 Mai 2022	23h34m04.96s	-04 35' 47.6"	1.3914	1.5500	0.8	61.6	39.7	-14.08	79.05	112.63	67.3	Aqr
16 Mai 2022	23h36m51.46s	-04 18' 24.2"	1.3908	1.5445	0.8	61.9	39.9	-13.68	79.11	112.57	67.3	Aqr
17 Mai 2022	23h39m37.76s	-04 00' 59.5"	1.3903	1.5390	0.8	62.1	40.0	-13.27	79.17	112.51	67.3	Aqr
18 Mai 2022	23h42m23.86s	-03 43' 33.7"	1.3898	1.5334	0.8	62.3	40.1	-12.86	79.22	112.45	67.2	Aqr
19 Mai 2022	23h45m09.78s	-03 26' 07.1"	1.3894	1.5279	0.8	62.5	40.2	-12.45	79.28	112.38	67.2	Aqr
20 Mai 2022	23h47m55.51s	-03 08' 39.7"	1.3889	1.5224	0.8	62.7	40.3	-12.04	79.34	112.31	67.2	Psc
21 Mai 2022	23h50m41.06s	-02 51' 11.9"	1.3884	1.5169	0.7	62.9	40.5	-11.63	79.40	112.24	67.1	Psc
22 Mai 2022	23h53m26.42s	-02 33' 43.7"	1.3880	1.5114	0.7	63.1	40.6	-11.22	79.46	112.16	67.1	Psc
23 Mai 2022	23h56m11.61s	-02 16' 15.3"	1.3876	1.5060	0.7	63.4	40.7	-10.81	79.52	112.07	67.1	Psc
24 Mai 2022	23h58m56.62s	-01 58' 47.0"	1.3872	1.5005	0.7	63.6	40.8	-10.39	79.58	111.99	67.1	Psc
25 Mai 2022	00h01m41.46s	-01 41' 18.9"	1.3868	1.4950	0.7	63.8	40.9	-9.98	79.64	111.89	67.0	Psc
26 Mai 2022	00h04m26.13s	-01 23' 51.3"	1.3864	1.4896	0.7	64.0	41.0	-9.57	79.71	111.80	67.0	Psc
27 Mai 2022	00h07m10.62s	-01 06' 24.3"	1.3860	1.4841	0.7	64.2	41.2	-9.16	79.77	111.69	67.0	Psc
28 Mai 2022	00h09m54.95s	-00 48' 58.2"	1.3856	1.4787	0.7	64.4	41.3	-8.74	79.83	111.59	67.0	Psc

# EPHEMERIDE 2022 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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29 Mai 2022	00h12m39.10s	-00 31' 33.1"	1.3853	1.4733	0.7	64.6	41.4	-8.33	79.90	111.48	67.0	Psc
30 Mai 2022	00h15m23.10s	-00 14' 09.1"	1.3850	1.4679	0.7	64.9	41.5	-7.91	79.96	111.36	67.0	Psc
31 Mai 2022	00h18m06.93s	+00 03' 13.3"	1.3847	1.4624	0.7	65.1	41.6	-7.50	80.03	111.24	67.0	Psc
1 Jun 2022	00h20m50.60s	+00 20' 34.2"	1.3844	1.4570	0.7	65.3	41.7	-7.09	80.09	111.12	67.0	Psc
2 Jun 2022	00h23m34.12s	+00 37' 53.5"	1.3841	1.4516	0.7	65.5	41.8	-6.67	80.16	111.00	67.1	Psc
3 Jun 2022	00h26m17.48s	+00 55' 10.7"	1.3838	1.4462	0.7	65.7	41.9	-6.26	80.23	110.87	67.1	Psc
4 Jun 2022	00h29m00.69s	+01 12' 25.9"	1.3835	1.4409	0.7	66.0	42.0	-5.84	80.30	110.74	67.1	Cet
5 Jun 2022	00h31m43.76s	+01 29' 38.9"	1.3833	1.4355	0.6	66.2	42.1	-5.43	80.37	110.60	67.1	Cet
6 Jun 2022	00h34m26.69s	+01 46' 49.4"	1.3831	1.4301	0.6	66.4	42.2	-5.02	80.43	110.47	67.1	Cet
7 Jun 2022	00h37m09.47s	+02 03' 57.3"	1.3828	1.4248	0.6	66.6	42.3	-4.60	80.51	110.33	67.2	Cet
8 Jun 2022	00h39m52.13s	+02 21' 02.5"	1.3826	1.4194	0.6	66.8	42.4	-4.19	80.58	110.18	67.2	Cet
9 Jun 2022	00h42m34.66s	+02 38' 04.9"	1.3824	1.4141	0.6	67.1	42.5	-3.78	80.65	110.04	67.2	Cet
10 Jun 2022	00h45m17.06s	+02 55' 04.2"	1.3823	1.4087	0.6	67.3	42.6	-3.37	80.72	109.90	67.3	Psc
11 Jun 2022	00h47m59.35s	+03 12' 00.3"	1.3821	1.4034	0.6	67.5	42.7	-2.95	80.79	109.75	67.3	Psc
12 Jun 2022	00h50m41.52s	+03 28' 53.1"	1.3820	1.3981	0.6	67.7	42.8	-2.54	80.87	109.60	67.4	Psc
13 Jun 2022	00h53m23.58s	+03 45' 42.5"	1.3818	1.3927	0.6	68.0	42.9	-2.13	80.94	109.45	67.4	Psc
14 Jun 2022	00h56m05.55s	+04 02' 28.3"	1.3817	1.3874	0.6	68.2	43.0	-1.72	81.02	109.30	67.5	Psc
15 Jun 2022	00h58m47.41s	+04 19' 10.5"	1.3816	1.3821	0.6	68.4	43.1	-1.31	81.09	109.15	67.5	Psc
16 Jun 2022	01h01m29.18s	+04 35' 48.7"	1.3815	1.3768	0.6	68.6	43.2	-0.90	81.17	109.00	67.6	Psc
17 Jun 2022	01h04m10.85s	+04 52' 23.0"	1.3815	1.3715	0.6	68.9	43.3	-0.50	81.25	108.84	67.6	Psc
18 Jun 2022	01h06m52.44s	+05 08' 53.1"	1.3814	1.3662	0.6	69.1	43.4	-0.09	81.32	108.68	67.7	Psc
19 Jun 2022	01h09m33.93s	+05 25' 18.8"	1.3814	1.3609	0.5	69.3	43.5	0.32	81.40	108.51	67.8	Psc
20 Jun 2022	01h12m15.32s	+05 41' 40.1"	1.3813	1.3556	0.5	69.6	43.6	0.72	81.48	108.33	67.8	Psc
21 Jun 2022	01h14m56.62s	+05 57' 56.7"	1.3813	1.3503	0.5	69.8	43.7	1.13	81.56	108.15	67.9	Psc
22 Jun 2022	01h17m37.82s	+06 14' 08.5"	1.3813	1.3451	0.5	70.0	43.7	1.53	81.64	107.97	68.0	Psc
23 Jun 2022	01h20m18.91s	+06 30' 15.2"	1.3813	1.3398	0.5	70.3	43.8	1.94	81.72	107.78	68.0	Psc
24 Jun 2022	01h22m59.90s	+06 46' 16.8"	1.3813	1.3345	0.5	70.5	43.9	2.34	81.81	107.58	68.1	Psc
25 Jun 2022	01h25m40.78s	+07 02' 13.1"	1.3814	1.3292	0.5	70.7	44.0	2.74	81.89	107.38	68.2	Psc
26 Jun 2022	01h28m21.56s	+07 18' 03.8"	1.3814	1.3239	0.5	71.0	44.1	3.14	81.97	107.17	68.3	Psc
27 Jun 2022	01h31m02.21s	+07 33' 48.9"	1.3815	1.3186	0.5	71.2	44.2	3.54	82.06	106.96	68.4	Psc
28 Jun 2022	01h33m42.75s	+07 49' 28.2"	1.3816	1.3133	0.5	71.5	44.2	3.94	82.15	106.74	68.5	Psc
29 Jun 2022	01h36m23.18s	+08 05' 01.5"	1.3817	1.3080	0.5	71.7	44.3	4.33	82.23	106.51	68.6	Psc
30 Jun 2022	01h39m03.48s	+08 20' 28.8"	1.3818	1.3028	0.5	71.9	44.4	4.73	82.32	106.28	68.7	Psc
1 Jul 2022	01h41m43.65s	+08 35' 49.8"	1.3820	1.2975	0.5	72.2	44.5	5.13	82.41	106.05	68.8	Psc
2 Jul 2022	01h44m23.70s	+08 51' 04.4"	1.3821	1.2922	0.5	72.4	44.5	5.52	82.50	105.81	68.9	Psc
3 Jul 2022	01h47m03.61s	+09 06' 12.6"	1.3823	1.2869	0.4	72.7	44.6	5.91	82.59	105.57	69.0	Psc
4 Jul 2022	01h49m43.39s	+09 21' 14.1"	1.3824	1.2816	0.4	72.9	44.7	6.30	82.69	105.32	69.1	Psc
5 Jul 2022	01h52m23.04s	+09 36' 08.8"	1.3826	1.2763	0.4	73.2	44.7	6.69	82.78	105.07	69.2	Psc
6 Jul 2022	01h55m02.56s	+09 50' 56.7"	1.3828	1.2710	0.4	73.4	44.8	7.08	82.88	104.82	69.3	Psc
7 Jul 2022	01h57m41.93s	+10 05' 37.7"	1.3830	1.2657	0.4	73.7	44.9	7.47	82.97	104.56	69.4	Psc
8 Jul 2022	02h00m21.17s	+10 20' 11.6"	1.3833	1.2604	0.4	73.9	44.9	7.86	83.07	104.30	69.5	Psc
9 Jul 2022	02h03m00.26s	+10 34' 38.3"	1.3835	1.2551	0.4	74.2	45.0	8.24	83.17	104.04	69.7	Ari
10 Jul 2022	02h05m39.21s	+10 48' 57.8"	1.3838	1.2498	0.4	74.5	45.1	8.62	83.27	103.78	69.8	Ari
11 Jul 2022	02h08m18.02s	+11 03' 10.0"	1.3840	1.2445	0.4	74.7	45.1	9.01	83.37	103.51	69.9	Ari
12 Jul 2022	02h10m56.69s	+11 17' 14.8"	1.3843	1.2392	0.4	75.0	45.2	9.39	83.48	103.24	70.0	Ari
13 Jul 2022	02h13m35.21s	+11 31' 12.0"	1.3846	1.2339	0.4	75.2	45.2	9.77	83.58	102.97	70.2	Ari
14 Jul 2022	02h16m13.58s	+11 45' 01.7"	1.3849	1.2286	0.4	75.5	45.3	10.15	83.69	102.70	70.3	Ari
15 Jul 2022	02h18m51.79s	+11 58' 43.7"	1.3853	1.2233	0.4	75.8	45.3	10.52	83.80	102.42	70.4	Ari
16 Jul 2022	02h21m29.85s	+12 12' 17.9"	1.3856	1.2180	0.3	76.1	45.4	10.90	83.90	102.13	70.6	Ari
17 Jul 2022	02h24m07.74s	+12 25' 44.2"	1.3860	1.2127	0.3	76.3	45.4	11.27	84.02	101.84	70.7	Ari
18 Jul 2022	02h26m45.45s	+12 39' 02.6"	1.3863	1.2074	0.3	76.6	45.5	11.65	84.13	101.54	70.8	Ari
19 Jul 2022	02h29m22.98s	+12 52' 12.8"	1.3867	1.2020	0.3	76.9	45.5	12.02	84.24	101.23	71.0	Ari
20 Jul 2022	02h32m00.31s	+13 05' 14.8"	1.3871	1.1967	0.3	77.2	45.6	12.39	84.36	100.92	71.1	Ari
21 Jul 2022	02h34m37.43s	+13 18' 08.5"	1.3875	1.1913	0.3	77.4	45.6	12.76	84.47	100.60	71.3	Ari
22 Jul 2022	02h37m14.33s	+13 30' 53.8"	1.3880	1.1860	0.3	77.7	45.7	13.12	84.59	100.27	71.4	Ari
23 Jul 2022	02h39m51.00s	+13 43' 30.5"	1.3884	1.1806	0.3	78.0	45.7	13.49	84.72	99.93	71.5	Ari
24 Jul 2022	02h42m27.42s	+13 55' 58.6"	1.3888	1.1753	0.3	78.3	45.7	13.86	84.84	99.59	71.7	Ari
25 Jul 2022	02h45m03.58s	+14 08' 18.0"	1.3893	1.1699	0.3	78.6	45.8	14.22	84.96	99.23	71.8	Ari
26 Jul 2022	02h47m39.48s	+14 20' 28.6"	1.3898	1.1645	0.3	78.9	45.8	14.58	85.09	98.87	72.0	Ari
27 Jul 2022	02h50m15.09s	+14 32' 30.3"	1.3903	1.1591	0.2	79.2	45.9	14.94	85.22	98.50	72.2	Ari
28 Jul 2022	02h52m50.40s	+14 44' 23.1"	1.3908	1.1537	0.2	79.5	45.9	15.30	85.35	98.13	72.3	Ari
29 Jul 2022	02h55m25.40s	+14 56' 06.9"	1.3913	1.1483	0.2	79.8	45.9	15.66	85.49	97.74	72.5	Ari
30 Jul 2022	02h58m00.09s	+15 07' 41.6"	1.3918	1.1429	0.2	80.1	45.9	16.02	85.62	97.35	72.6	Ari
31 Jul 2022	03h00m34.43s	+15 19' 07.2"	1.3924	1.1374	0.2	80.4	46.0	16.37	85.76	96.96	72.8	Ari
1 Aug 2022	03h03m08.43s	+15 30' 23.6"	1.3929	1.1320	0.2	80.7	46.0	16.73	85.90	96.55	72.9	Ari
2 Aug 2022	03h05m42.06s	+15 41' 30.7"	1.3935	1.1265	0.2	81.0	46.0	17.08	86.05	96.14	73.1	Ari
3 Aug 2022	03h08m15.33s	+15 52' 28.7"	1.3941	1.1211	0.2	81.3	46.0	17.44	86.19	95.72	73.3	Ari
4 Aug 2022	03h10m48.21s	+16 03' 17.4"	1.3947	1.1156	0.2	81.6	46.0	17.79	86.34	95.30	73.4	Ari
5 Aug 2022	03h13m20.69s	+16 13' 56.8"	1.3953	1.1102	0.2	82.0	46.1	18.14	86.49	94.87	73.6	Ari
6 Aug 2022	03h15m52.76s	+16 24' 26.9"	1.3959	1.1047	0.2	82.3	46.1	18.49	86.65	94.44	73.8	Ari
7 Aug 2022	03h18m24.41s	+16 34' 47.8"	1.3966	1.0992	0.1	82.6	46.1	18.84	86.81	94.00	73.9	Ari
8 Aug 2022	03h20m55.64s	+16 44' 59.3"	1.3972	1.0937	0.1	82.9	46.1	19.19	86.97	93.56	74.1	Ari
9 Aug 2022	03h23m26.42s	+16 55' 01.6"	1.3979	1.0882	0.1	83.3	46.1	19.53	87.13	93.11	74.3	Ari
10 Aug 2022	03h25m56.74s	+17 04' 54.6"	1.3985	1.0827	0.1	83.6	46.1	19.88	87.30	92.66	74.4	Tau

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Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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11 Aug 2022	03h28m26.60s	+17 14' 38.3"	1.3992	1.0772	0.1	84.0	46.1	20.22	87.47	92.20	74.6	Tau
12 Aug 2022	03h30m55.97s	+17 24' 12.8"	1.3999	1.0716	0.1	84.3	46.1	20.57	87.64	91.73	74.8	Tau
13 Aug 2022	03h33m24.85s	+17 33' 38.0"	1.4006	1.0661	0.1	84.6	46.1	20.91	87.82	91.25	74.9	Tau
14 Aug 2022	03h35m53.21s	+17 42' 53.9"	1.4013	1.0605	0.1	85.0	46.1	21.25	87.99	90.77	75.1	Tau
15 Aug 2022	03h38m21.04s	+17 52' 00.5"	1.4021	1.0550	0.1	85.4	46.1	21.60	88.18	90.27	75.3	Tau
16 Aug 2022	03h40m48.30s	+18 00' 57.9"	1.4028	1.0494	0.1	85.7	46.0	21.94	88.36	89.77	75.4	Tau
17 Aug 2022	03h43m14.98s	+18 09' 46.0"	1.4036	1.0438	0.0	86.1	46.0	22.28	88.55	89.25	75.6	Tau
18 Aug 2022	03h45m41.06s	+18 18' 24.8"	1.4043	1.0382	0.0	86.4	46.0	22.62	88.75	88.72	75.8	Tau
19 Aug 2022	03h48m06.50s	+18 26' 54.3"	1.4051	1.0326	0.0	86.8	46.0	22.96	88.94	88.17	75.9	Tau
20 Aug 2022	03h50m31.29s	+18 35' 14.6"	1.4059	1.0270	0.0	87.2	46.0	23.30	89.15	87.62	76.1	Tau
21 Aug 2022	03h52m55.39s	+18 43' 25.6"	1.4067	1.0213	0.0	87.6	45.9	23.64	89.35	87.05	76.3	Tau
22 Aug 2022	03h55m18.79s	+18 51' 27.3"	1.4075	1.0157	-0.0	87.9	45.9	23.98	89.56	86.46	76.4	Tau
23 Aug 2022	03h57m41.45s	+18 59' 19.9"	1.4083	1.0100	-0.0	88.3	45.9	24.32	89.78	85.87	76.6	Tau
24 Aug 2022	04h00m03.34s	+19 07' 03.3"	1.4092	1.0044	-0.0	88.7	45.8	24.66	89.99	85.26	76.8	Tau
25 Aug 2022	04h02m24.45s	+19 14' 37.5"	1.4100	0.9987	-0.0	89.1	45.8	25.00	90.22	84.64	76.9	Tau
26 Aug 2022	04h04m44.74s	+19 22' 02.7"	1.4109	0.9930	-0.1	89.5	45.8	25.34	90.44	84.01	77.1	Tau
27 Aug 2022	04h07m04.19s	+19 29' 18.9"	1.4117	0.9873	-0.1	89.9	45.7	25.68	90.68	83.36	77.2	Tau
28 Aug 2022	04h09m22.77s	+19 36' 26.2"	1.4126	0.9816	-0.1	90.3	45.7	26.02	90.91	82.70	77.4	Tau
29 Aug 2022	04h11m40.45s	+19 43' 24.6"	1.4135	0.9759	-0.1	90.7	45.6	26.36	91.16	82.03	77.5	Tau
30 Aug 2022	04h13m57.20s	+19 50' 14.2"	1.4144	0.9701	-0.1	91.2	45.5	26.70	91.40	81.34	77.7	Tau
31 Aug 2022	04h16m13.01s	+19 56' 55.1"	1.4153	0.9644	-0.1	91.6	45.5	27.04	91.66	80.64	77.8	Tau
1 Sep 2022	04h18m27.83s	+20 03' 27.4"	1.4162	0.9586	-0.1	92.0	45.4	27.39	91.91	79.93	78.0	Tau
2 Sep 2022	04h20m41.65s	+20 09' 51.2"	1.4171	0.9529	-0.1	92.4	45.4	27.73	92.18	79.21	78.1	Tau
3 Sep 2022	04h22m54.44s	+20 16' 06.7"	1.4180	0.9471	-0.2	92.9	45.3	28.07	92.45	78.48	78.3	Tau
4 Sep 2022	04h25m06.18s	+20 22' 13.9"	1.4190	0.9414	-0.2	93.3	45.2	28.42	92.72	77.73	78.4	Tau
5 Sep 2022	04h27m16.84s	+20 28' 13.0"	1.4199	0.9356	-0.2	93.8	45.1	28.76	93.00	76.98	78.6	Tau
6 Sep 2022	04h29m26.40s	+20 34' 04.2"	1.4209	0.9298	-0.2	94.2	45.0	29.11	93.29	76.21	78.7	Tau
7 Sep 2022	04h31m34.82s	+20 39' 47.4"	1.4219	0.9240	-0.2	94.7	44.9	29.46	93.58	75.43	78.8	Tau
8 Sep 2022	04h33m42.09s	+20 45' 23.0"	1.4229	0.9182	-0.2	95.1	44.9	29.81	93.88	74.63	79.0	Tau
9 Sep 2022	04h35m48.17s	+20 50' 50.9"	1.4238	0.9124	-0.2	95.6	44.8	30.16	94.18	73.83	79.1	Tau
10 Sep 2022	04h37m53.03s	+20 56' 11.4"	1.4248	0.9066	-0.2	96.1	44.7	30.51	94.50	73.00	79.2	Tau
11 Sep 2022	04h39m56.64s	+21 01' 24.6"	1.4259	0.9008	-0.3	96.6	44.5	30.86	94.81	72.16	79.3	Tau
12 Sep 2022	04h41m58.96s	+21 06' 30.6"	1.4269	0.8950	-0.3	97.1	44.4	31.22	95.14	71.30	79.4	Tau
13 Sep 2022	04h43m59.96s	+21 11' 29.4"	1.4279	0.8891	-0.3	97.6	44.3	31.58	95.47	70.42	79.5	Tau
14 Sep 2022	04h45m59.59s	+21 16' 21.4"	1.4289	0.8833	-0.3	98.1	44.2	31.93	95.81	69.52	79.6	Tau
15 Sep 2022	04h47m57.82s	+21 21' 06.5"	1.4300	0.8775	-0.3	98.6	44.1	32.30	96.16	68.60	79.7	Tau
16 Sep 2022	04h49m54.60s	+21 25' 44.9"	1.4310	0.8716	-0.3	99.1	43.9	32.66	96.51	67.65	79.8	Tau
17 Sep 2022	04h51m49.88s	+21 30' 16.8"	1.4321	0.8658	-0.4	99.6	43.8	33.02	96.88	66.69	79.9	Tau
18 Sep 2022	04h53m43.62s	+21 34' 42.3"	1.4331	0.8599	-0.4	100.1	43.7	33.39	97.25	65.70	80.0	Tau
19 Sep 2022	04h55m35.78s	+21 39' 01.5"	1.4342	0.8541	-0.4	100.7	43.5	33.76	97.63	64.68	80.1	Tau
20 Sep 2022	04h57m26.32s	+21 43' 14.7"	1.4353	0.8482	-0.4	101.2	43.4	34.13	98.01	63.64	80.1	Tau
21 Sep 2022	04h59m15.17s	+21 47' 22.0"	1.4364	0.8424	-0.4	101.8	43.2	34.51	98.41	62.58	80.2	Tau
22 Sep 2022	05h01m02.31s	+21 51' 23.6"	1.4375	0.8365	-0.4	102.3	43.0	34.89	98.82	61.50	80.2	Tau
23 Sep 2022	05h02m47.67s	+21 55' 19.7"	1.4386	0.8307	-0.4	102.9	42.9	35.27	99.23	60.38	80.2	Tau
24 Sep 2022	05h04m31.22s	+21 59' 10.3"	1.4397	0.8248	-0.5	103.5	42.7	35.65	99.66	59.25	80.3	Tau
25 Sep 2022	05h06m12.90s	+22 02' 55.8"	1.4408	0.8190	-0.5	104.1	42.5	36.04	100.09	58.09	80.3	Tau
26 Sep 2022	05h07m52.66s	+22 06' 36.4"	1.4419	0.8131	-0.5	104.6	42.3	36.43	100.54	56.90	80.3	Tau
27 Sep 2022	05h09m30.47s	+22 10' 12.1"	1.4431	0.8073	-0.5	105.2	42.1	36.83	100.99	55.69	80.3	Tau
28 Sep 2022	05h11m06.27s	+22 13' 43.3"	1.4442	0.8015	-0.5	105.9	41.9	37.23	101.46	54.46	80.3	Tau
29 Sep 2022	05h12m40.01s	+22 17' 10.2"	1.4453	0.7956	-0.5	106.5	41.7	37.63	101.94	53.20	80.2	Tau
30 Sep 2022	05h14m11.66s	+22 20' 33.0"	1.4465	0.7898	-0.6	107.1	41.4	38.03	102.43	51.92	80.2	Tau
1 Okt 2022	05h15m41.17s	+22 23' 51.8"	1.4477	0.7840	-0.6	107.7	41.2	38.44	102.93	50.61	80.1	Tau
2 Okt 2022	05h17m08.48s	+22 27' 06.9"	1.4488	0.7783	-0.6	108.4	41.0	38.86	103.45	49.29	80.0	Tau
3 Okt 2022	05h18m33.56s	+22 30' 18.6"	1.4500	0.7725	-0.6	109.0	40.7	39.28	103.98	47.94	79.9	Tau
4 Okt 2022	05h19m56.37s	+22 33' 27.1"	1.4512	0.7667	-0.6	109.7	40.5	39.70	104.52	46.56	79.7	Tau
5 Okt 2022	05h21m16.85s	+22 36' 32.5"	1.4523	0.7610	-0.7	110.4	40.2	40.12	105.07	45.17	79.6	Tau
6 Okt 2022	05h22m34.96s	+22 39' 35.1"	1.4535	0.7553	-0.7	111.0	39.9	40.55	105.64	43.75	79.4	Tau
7 Okt 2022	05h23m50.65s	+22 42' 35.2"	1.4547	0.7496	-0.7	111.7	39.7	40.99	106.22	42.30	79.2	Tau
8 Okt 2022	05h25m03.87s	+22 45' 32.8"	1.4559	0.7439	-0.7	112.4	39.4	41.43	106.82	40.82	78.9	Tau
9 Okt 2022	05h26m14.56s	+22 48' 28.2"	1.4571	0.7383	-0.7	113.2	39.1	41.87	107.44	39.32	78.6	Tau
10 Okt 2022	05h27m22.66s	+22 51' 21.5"	1.4583	0.7327	-0.8	113.9	38.8	42.32	108.07	37.79	78.3	Tau
11 Okt 2022	05h28m28.12s	+22 54' 13.1"	1.4595	0.7271	-0.8	114.6	38.5	42.78	108.72	36.23	77.9	Tau
12 Okt 2022	05h29m30.88s	+22 57' 03.0"	1.4607	0.7215	-0.8	115.4	38.1	43.23	109.38	34.63	77.4	Tau
13 Okt 2022	05h30m30.86s	+22 59' 51.3"	1.4620	0.7160	-0.8	116.1	37.8	43.70	110.07	33.01	76.9	Tau
14 Okt 2022	05h31m28.01s	+23 02' 38.4"	1.4632	0.7105	-0.8	116.9	37.5	44.16	110.77	31.35	76.3	Tau
15 Okt 2022	05h32m22.27s	+23 05' 24.3"	1.4644	0.7050	-0.9	117.7	37.1	44.64	111.49	29.67	75.6	Tau
16 Okt 2022	05h33m13.55s	+23 08' 09.2"	1.4657	0.6995	-0.9	118.5	36.7	45.11	112.24	27.95	74.8	Tau
17 Okt 2022	05h34m01.81s	+23 10' 53.3"	1.4669	0.6941	-0.9	119.3	36.4	45.60	113.00	26.21	73.8	Tau
18 Okt 2022	05h34m46.98s	+23 13' 36.7"	1.4681	0.6888	-0.9	120.1	36.0	46.08	113.79	24.44	72.7	Tau
19 Okt 2022	05h35m28.98s	+23 16' 19.5"	1.4694	0.6835	-0.9	120.9	35.6	46.57	114.60	22.66	71.3	Tau
20 Okt 2022	05h36m07.77s	+23 19' 02.0"	1.4706	0.6782	-1.0	121.7	35.2	47.07	115.44	20.85	69.7	Tau
21 Okt 2022	05h36m43.26s	+23 21' 44.1"	1.4719	0.6730	-1.0	122.6	34.7	47.57	116.31	19.03	67.7	Tau
22 Okt 2022	05h37m15.41s	+23 24' 26.0"	1.4732	0.6678	-1.0	123.5	34.3	48.07	117.20	17.22	65.3	Tau
23 Okt 2022	05h37m44.15s	+23 27' 07.9"	1.4744	0.6627	-1.0	124.4	33.9	48.58	118.12	15.41	62.2	Tau



# EPHEMERIDE 2022 – MARS

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
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24 Okt 2022	05h38m09.43s	+23 29' 49.8"	1.4757	0.6576	-1.1	125.3	33.4	49.09	119.07	13.64	58.2	Tau
25 Okt 2022	05h38m31.19s	+23 32' 31.8"	1.4769	0.6526	-1.1	126.2	32.9	49.61	120.05	11.93	53.0	Tau
26 Okt 2022	05h38m49.38s	+23 35' 13.9"	1.4782	0.6477	-1.1	127.1	32.5	50.13	121.06	10.34	46.0	Tau
27 Okt 2022	05h39m03.96s	+23 37' 56.3"	1.4795	0.6429	-1.1	128.0	32.0	50.65	122.11	8.94	36.5	Tau
28 Okt 2022	05h39m14.88s	+23 40' 38.9"	1.4808	0.6381	-1.1	129.0	31.4	51.18	123.20	7.86	23.9	Tau
29 Okt 2022	05h39m22.11s	+23 43' 21.8"	1.4820	0.6334	-1.2	130.0	30.9	51.71	124.32	7.26	8.1	Tau
30 Okt 2022	05h39m25.61s	+23 46' 04.9"	1.4833	0.6287	-1.2	130.9	30.4	52.23	125.48	7.28	350.9	Tau
31 Okt 2022	05h39m25.36s	+23 48' 48.3"	1.4846	0.6242	-1.2	131.9	29.8	52.76	126.68	7.92	335.1	Tau
1 Nov 2022	05h39m21.34s	+23 51' 31.8"	1.4859	0.6197	-1.2	133.0	29.3	53.29	127.93	9.07	322.4	Tau
2 Nov 2022	05h39m13.51s	+23 54' 15.5"	1.4872	0.6153	-1.3	134.0	28.7	53.82	129.22	10.55	312.8	Tau
3 Nov 2022	05h39m01.86s	+23 56' 59.3"	1.4885	0.6110	-1.3	135.0	28.1	54.35	130.56	12.26	305.7	Tau
4 Nov 2022	05h38m46.38s	+23 59' 42.9"	1.4898	0.6069	-1.3	136.1	27.5	54.88	131.95	14.12	300.4	Tau
5 Nov 2022	05h38m27.05s	+24 02' 26.2"	1.4911	0.6028	-1.3	137.2	26.9	55.40	133.38	16.06	296.3	Tau
6 Nov 2022	05h38m03.85s	+24 05' 09.1"	1.4924	0.5988	-1.3	138.2	26.3	55.92	134.88	18.08	293.0	Tau
7 Nov 2022	05h37m36.79s	+24 07' 51.4"	1.4937	0.5949	-1.4	139.3	25.6	56.43	136.43	20.13	290.4	Tau
8 Nov 2022	05h37m05.86s	+24 10' 32.8"	1.4950	0.5912	-1.4	140.5	25.0	56.94	138.03	22.21	288.3	Tau
9 Nov 2022	05h36m31.06s	+24 13' 13.1"	1.4963	0.5875	-1.4	141.6	24.3	57.44	139.70	24.32	286.5	Tau
10 Nov 2022	05h35m52.40s	+24 15' 52.0"	1.4976	0.5840	-1.4	142.7	23.6	57.93	141.43	26.42	285.0	Tau
11 Nov 2022	05h35m09.90s	+24 18' 29.1"	1.4989	0.5806	-1.5	143.9	22.9	58.40	143.23	28.53	283.6	Tau
12 Nov 2022	05h34m23.58s	+24 21' 04.2"	1.5002	0.5773	-1.5	145.1	22.2	58.87	145.09	30.63	282.5	Tau
13 Nov 2022	05h33m33.47s	+24 23' 37.0"	1.5015	0.5741	-1.5	146.3	21.5	59.32	147.02	32.72	281.4	Tau
14 Nov 2022	05h32m39.62s	+24 26' 07.0"	1.5028	0.5711	-1.5	147.5	20.7	59.76	149.01	34.78	280.5	Tau
15 Nov 2022	05h31m42.07s	+24 28' 34.0"	1.5041	0.5682	-1.5	148.7	20.0	60.17	151.08	36.81	279.7	Tau
16 Nov 2022	05h30m40.90s	+24 30' 57.5"	1.5054	0.5655	-1.6	149.9	19.2	60.57	153.22	38.81	278.9	Tau
17 Nov 2022	05h29m36.18s	+24 33' 17.1"	1.5067	0.5629	-1.6	151.2	18.4	60.94	155.43	40.76	278.2	Tau
18 Nov 2022	05h28m27.98s	+24 35' 32.4"	1.5080	0.5605	-1.6	152.4	17.7	61.29	157.71	42.66	277.6	Tau
19 Nov 2022	05h27m16.42s	+24 37' 43.1"	1.5093	0.5582	-1.6	153.7	16.9	61.61	160.06	44.50	276.9	Tau
20 Nov 2022	05h26m01.59s	+24 39' 48.7"	1.5106	0.5561	-1.6	155.0	16.1	61.90	162.48	46.28	276.4	Tau
21 Nov 2022	05h24m43.63s	+24 41' 48.9"	1.5119	0.5541	-1.7	156.3	15.2	62.16	164.96	47.98	275.8	Tau
22 Nov 2022	05h23m22.66s	+24 43' 43.2"	1.5133	0.5523	-1.7	157.6	14.4	62.39	167.49	49.60	275.3	Tau
23 Nov 2022	05h21m58.85s	+24 45' 31.3"	1.5146	0.5507	-1.7	158.9	13.6	62.58	170.09	51.13	274.8	Tau
24 Nov 2022	05h20m32.35s	+24 47' 12.9"	1.5159	0.5493	-1.7	160.2	12.7	62.73	172.73	52.57	274.4	Tau
25 Nov 2022	05h19m03.34s	+24 48' 47.6"	1.5172	0.5480	-1.7	161.6	11.9	62.84	175.41	53.90	273.9	Tau
26 Nov 2022	05h17m32.01s	+24 50' 15.2"	1.5185	0.5469	-1.7	162.9	11.0	62.92	178.12	55.12	273.5	Tau
27 Nov 2022	05h15m58.56s	+24 51' 35.3"	1.5198	0.5461	-1.8	164.3	10.1	62.95	180.86	56.23	273.1	Tau
28 Nov 2022	05h14m23.19s	+24 52' 47.8"	1.5211	0.5454	-1.8	165.6	9.3	62.93	183.62	57.22	272.7	Tau
29 Nov 2022	05h12m46.12s	+24 53' 52.5"	1.5224	0.5449	-1.8	167.0	8.4	62.88	186.39	58.09	272.3	Tau
30 Nov 2022	05h11m07.57s	+24 54' 49.1"	1.5237	0.5445	-1.8	168.3	7.5	62.78	189.15	58.83	271.9	Tau
1 Dez 2022	05h09m27.76s	+24 55' 37.6"	1.5250	0.5444	-1.8	169.7	6.6	62.64	191.91	59.45	271.5	Tau
2 Dez 2022	05h07m46.90s	+24 56' 17.8"	1.5263	0.5445	-1.8	171.1	5.8	62.45	194.64	59.95	271.2	Tau
3 Dez 2022	05h06m05.23s	+24 56' 49.7"	1.5276	0.5448	-1.8	172.4	4.9	62.22	197.35	60.32	270.8	Tau
4 Dez 2022	05h04m22.96s	+24 57' 13.4"	1.5289	0.5453	-1.9	173.7	4.0	61.95	200.02	60.56	270.4	Tau
5 Dez 2022	05h02m40.32s	+24 57' 28.7"	1.5302	0.5459	-1.9	175.0	3.2	61.63	202.65	60.68	270.1	Tau
6 Dez 2022	05h00m57.53s	+24 57' 35.9"	1.5315	0.5468	-1.9	176.2	2.5	61.28	205.23	60.67	269.8	Tau
7 Dez 2022	04h59m14.82s	+24 57' 35.0"	1.5328	0.5479	-1.9	177.2	1.8	60.90	207.75	60.53	269.4	Tau
8 Dez 2022	04h57m32.40s	+24 57' 26.2"	1.5341	0.5492	-1.9	177.7	1.5	60.47	210.22	60.28	269.1	Tau
9 Dez 2022	04h55m50.50s	+24 57' 09.7"	1.5354	0.5507	-1.9	177.4	1.6	60.02	212.63	59.90	268.7	Tau
10 Dez 2022	04h54m09.33s	+24 56' 45.9"	1.5366	0.5524	-1.8	176.6	2.2	59.53	214.97	59.40	268.4	Tau
11 Dez 2022	04h52m29.10s	+24 56' 14.8"	1.5379	0.5543	-1.8	175.5	2.9	59.01	217.24	58.78	268.1	Tau
12 Dez 2022	04h50m50.02s	+24 55' 37.1"	1.5392	0.5564	-1.8	174.2	3.7	58.47	219.45	58.05	267.8	Tau
13 Dez 2022	04h49m12.30s	+24 54' 52.9"	1.5405	0.5586	-1.8	172.9	4.5	57.90	221.59	57.20	267.5	Tau
14 Dez 2022	04h47m36.12s	+24 54' 02.8"	1.5418	0.5611	-1.7	171.6	5.4	57.31	223.66	56.24	267.2	Tau
15 Dez 2022	04h46m01.69s	+24 53' 07.1"	1.5430	0.5638	-1.7	170.3	6.2	56.70	225.67	55.17	266.9	Tau
16 Dez 2022	04h44m29.19s	+24 52' 06.5"	1.5443	0.5667	-1.7	168.9	7.0	56.07	227.60	54.00	266.6	Tau
17 Dez 2022	04h42m58.80s	+24 51' 01.3"	1.5456	0.5698	-1.7	167.6	7.9	55.42	229.48	52.73	266.3	Tau
18 Dez 2022	04h41m30.68s	+24 49' 52.1"	1.5469	0.5731	-1.6	166.3	8.7	54.77	231.29	51.37	266.0	Tau
19 Dez 2022	04h40m05.00s	+24 48' 39.5"	1.5481	0.5766	-1.6	165.0	9.5	54.10	233.04	49.92	265.7	Tau
20 Dez 2022	04h38m41.91s	+24 47' 24.1"	1.5494	0.5803	-1.6	163.6	10.3	53.42	234.73	48.38	265.4	Tau
21 Dez 2022	04h37m21.56s	+24 46' 06.3"	1.5506	0.5841	-1.6	162.3	11.1	52.73	236.36	46.75	265.1	Tau
22 Dez 2022	04h36m04.08s	+24 44' 46.9"	1.5519	0.5882	-1.5	161.0	11.9	52.03	237.94	45.05	264.9	Tau
23 Dez 2022	04h34m49.60s	+24 43' 26.3"	1.5531	0.5924	-1.5	159.7	12.7	51.33	239.46	43.28	264.6	Tau
24 Dez 2022	04h33m38.25s	+24 42' 05.3"	1.5544	0.5968	-1.5	158.5	13.4	50.63	240.94	41.45	264.3	Tau
25 Dez 2022	04h32m30.12s	+24 40' 44.2"	1.5556	0.6014	-1.4	157.2	14.2	49.92	242.37	39.55	264.1	Tau
26 Dez 2022	04h31m25.32s	+24 39' 23.8"	1.5569	0.6062	-1.4	155.9	14.9	49.21	243.75	37.60	263.8	Tau
27 Dez 2022	04h30m23.91s	+24 38' 04.4"	1.5581	0.6112	-1.4	154.7	15.7	48.51	245.08	35.62	263.5	Tau
28 Dez 2022	04h29m25.97s	+24 36' 46.7"	1.5594	0.6163	-1.3	153.5	16.4	47.80	246.38	33.59	263.3	Tau
29 Dez 2022	04h28m31.55s	+24 35' 31.1"	1.5606	0.6216	-1.3	152.2	17.1	47.10	247.63	31.54	263.0	Tau
30 Dez 2022	04h27m40.68s	+24 34' 17.9"	1.5618	0.6270	-1.3	151.0	17.8	46.39	248.84	29.46	262.7	Tau
31 Dez 2022	04h26m53.41s	+24 33' 07.7"	1.5630	0.6326	-1.2	149.8	18.4	45.70	250.02	27.37	262.4	Tau
1 Jan 2023	04h26m09.75s	+24 32' 00.6"	1.5642	0.6384	-1.2	148.7	19.1	45.00	251.17	25.27	262.1	Tau