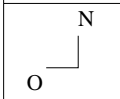
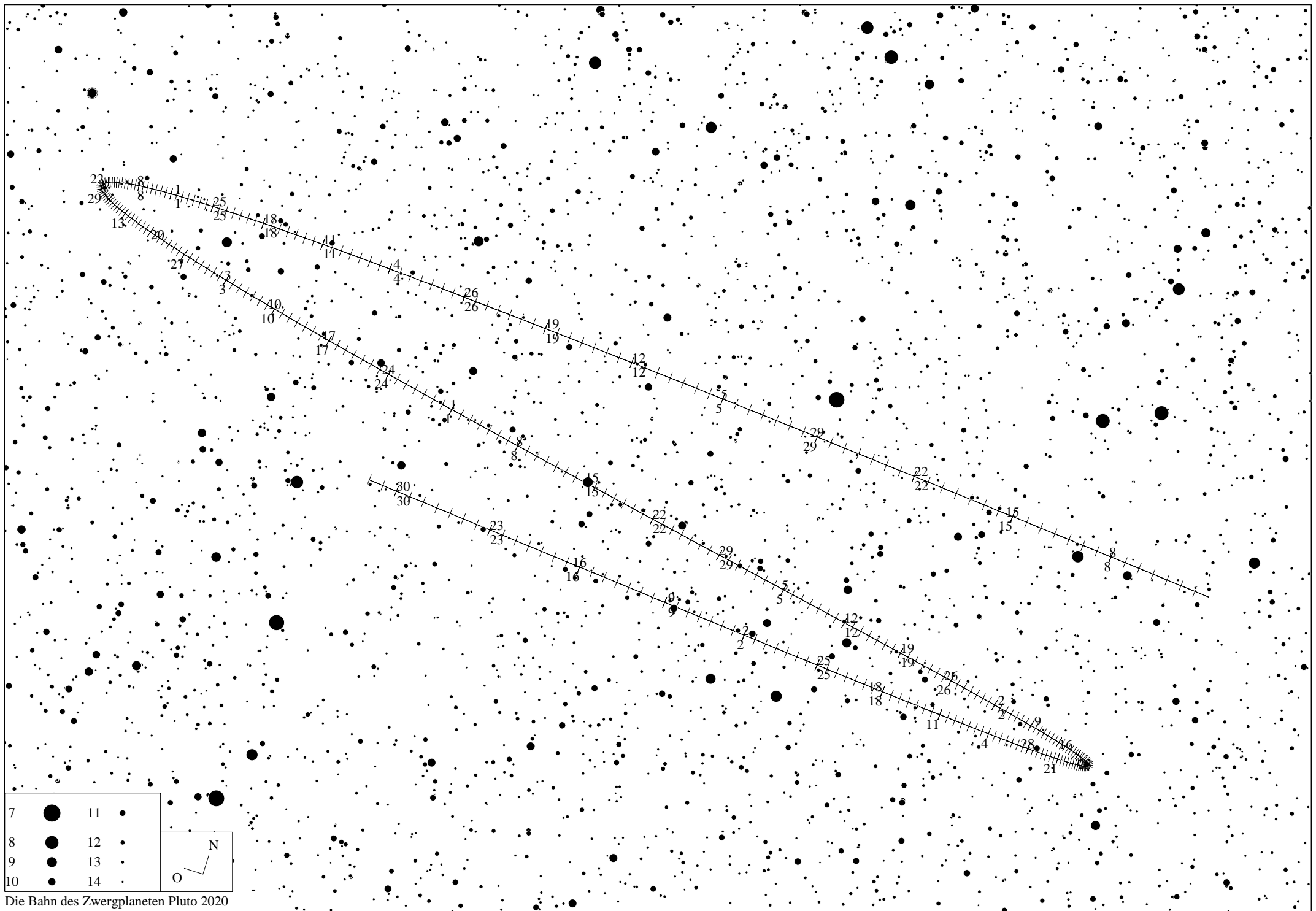




4	●	8	●
5	●	9	●
6	●	10	●
7	●	11	●



Die Bahn des Zwergplaneten Pluto 2020



Die Bahn des Zwergplaneten Pluto 2020

EPHEMERIDE 2020 – PLUTO

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
1 Jan 2020	19h36m00.92s	-22 15' 56.4"	33.950	34.910	14.6	12.4	0.4	-60.28	359.45	4.98	83.2	Sgr
2 Jan 2020	19h36m09.42s	-22 15' 42.3"	33.951	34.914	14.6	11.4	0.3	-60.28	1.22	5.00	83.2	Sgr
3 Jan 2020	19h36m17.94s	-22 15' 28.1"	33.952	34.918	14.6	10.4	0.3	-60.25	3.00	5.01	83.2	Sgr
4 Jan 2020	19h36m26.47s	-22 15' 13.8"	33.952	34.922	14.6	9.4	0.3	-60.21	4.77	5.02	83.2	Sgr
5 Jan 2020	19h36m35.03s	-22 14' 59.5"	33.953	34.925	14.6	8.5	0.2	-60.15	6.53	5.03	83.2	Sgr
6 Jan 2020	19h36m43.61s	-22 14' 45.1"	33.954	34.928	14.6	7.5	0.2	-60.07	8.29	5.04	83.2	Sgr
7 Jan 2020	19h36m52.19s	-22 14' 30.7"	33.954	34.931	14.6	6.5	0.2	-59.97	10.04	5.05	83.2	Sgr
8 Jan 2020	19h37m00.79s	-22 14' 16.2"	33.955	34.934	14.6	5.5	0.2	-59.85	11.77	5.05	83.2	Sgr
9 Jan 2020	19h37m09.40s	-22 14' 01.8"	33.956	34.936	14.6	4.5	0.1	-59.72	13.50	5.06	83.2	Sgr
10 Jan 2020	19h37m18.02s	-22 13' 47.3"	33.956	34.938	14.6	3.6	0.1	-59.57	15.22	5.06	83.2	Sgr
11 Jan 2020	19h37m26.65s	-22 13' 32.7"	33.957	34.939	14.6	2.6	0.1	-59.41	16.92	5.07	83.2	Sgr
12 Jan 2020	19h37m35.28s	-22 13' 18.2"	33.958	34.941	14.6	1.7	0.0	-59.22	18.60	5.07	83.2	Sgr
13 Jan 2020	19h37m43.91s	-22 13' 03.6"	33.958	34.942	14.6	0.9	0.0	-59.02	20.27	5.07	83.2	Sgr
14 Jan 2020	19h37m52.55s	-22 12' 49.0"	33.959	34.942	14.6	0.8	0.0	-58.81	21.93	5.07	83.2	Sgr
15 Jan 2020	19h38m01.18s	-22 12' 34.4"	33.960	34.943	14.6	1.6	0.0	-58.58	23.56	5.07	83.2	Sgr
16 Jan 2020	19h38m09.81s	-22 12' 19.8"	33.960	34.943	14.6	2.5	0.1	-58.33	25.17	5.07	83.2	Sgr
17 Jan 2020	19h38m18.43s	-22 12' 05.3"	33.961	34.943	14.6	3.5	0.1	-58.07	26.77	5.06	83.2	Sgr
18 Jan 2020	19h38m27.05s	-22 11' 50.7"	33.962	34.942	14.6	4.4	0.1	-57.80	28.34	5.06	83.2	Sgr
19 Jan 2020	19h38m35.66s	-22 11' 36.1"	33.962	34.942	14.6	5.4	0.2	-57.51	29.90	5.05	83.2	Sgr
20 Jan 2020	19h38m44.26s	-22 11' 21.6"	33.963	34.941	14.6	6.4	0.2	-57.21	31.43	5.04	83.2	Sgr
21 Jan 2020	19h38m52.85s	-22 11' 07.1"	33.964	34.939	14.6	7.4	0.2	-56.89	32.94	5.04	83.2	Sgr
22 Jan 2020	19h39m01.41s	-22 10' 52.6"	33.964	34.938	14.6	8.3	0.2	-56.56	34.42	5.03	83.2	Sgr
23 Jan 2020	19h39m09.97s	-22 10' 38.2"	33.965	34.936	14.6	9.3	0.3	-56.22	35.89	5.01	83.2	Sgr
24 Jan 2020	19h39m18.50s	-22 10' 23.8"	33.966	34.933	14.6	10.3	0.3	-55.87	37.33	5.00	83.2	Sgr
25 Jan 2020	19h39m27.01s	-22 10' 09.4"	33.966	34.931	14.6	11.3	0.3	-55.50	38.75	4.99	83.2	Sgr
26 Jan 2020	19h39m35.50s	-22 09' 55.1"	33.967	34.928	14.6	12.3	0.4	-55.13	40.15	4.97	83.2	Sgr
27 Jan 2020	19h39m43.96s	-22 09' 40.8"	33.967	34.925	14.6	13.3	0.4	-54.74	41.53	4.96	83.2	Sgr
28 Jan 2020	19h39m52.39s	-22 09' 26.6"	33.968	34.922	14.6	14.2	0.4	-54.34	42.89	4.94	83.2	Sgr
29 Jan 2020	19h40m00.79s	-22 09' 12.5"	33.969	34.918	14.6	15.2	0.4	-53.94	44.22	4.92	83.2	Sgr
30 Jan 2020	19h40m09.16s	-22 08' 58.4"	33.969	34.914	14.6	16.2	0.5	-53.52	45.53	4.90	83.3	Sgr
31 Jan 2020	19h40m17.49s	-22 08' 44.4"	33.970	34.910	14.6	17.2	0.5	-53.09	46.82	4.88	83.3	Sgr
1 Feb 2020	19h40m25.79s	-22 08' 30.5"	33.971	34.905	14.6	18.2	0.5	-52.66	48.09	4.86	83.3	Sgr
2 Feb 2020	19h40m34.05s	-22 08' 16.7"	33.971	34.901	14.6	19.2	0.5	-52.21	49.34	4.83	83.3	Sgr
3 Feb 2020	19h40m42.27s	-22 08' 03.0"	33.972	34.896	14.6	20.1	0.6	-51.76	50.57	4.81	83.3	Sgr
4 Feb 2020	19h40m50.44s	-22 07' 49.4"	33.973	34.890	14.6	21.1	0.6	-51.30	51.78	4.78	83.3	Sgr
5 Feb 2020	19h40m58.58s	-22 07' 35.8"	33.973	34.885	14.6	22.1	0.6	-50.83	52.97	4.76	83.3	Sgr
6 Feb 2020	19h41m06.66s	-22 07' 22.4"	33.974	34.879	14.6	23.1	0.7	-50.36	54.14	4.73	83.4	Sgr
7 Feb 2020	19h41m14.70s	-22 07' 09.1"	33.975	34.873	14.6	24.1	0.7	-49.88	55.29	4.70	83.4	Sgr
8 Feb 2020	19h41m22.69s	-22 06' 55.9"	33.975	34.866	14.6	25.0	0.7	-49.39	56.42	4.67	83.4	Sgr
9 Feb 2020	19h41m30.63s	-22 06' 42.8"	33.976	34.860	14.6	26.0	0.7	-48.89	57.54	4.64	83.4	Sgr
10 Feb 2020	19h41m38.51s	-22 06' 29.9"	33.977	34.853	14.6	27.0	0.8	-48.39	58.64	4.61	83.4	Sgr
11 Feb 2020	19h41m46.35s	-22 06' 17.1"	33.977	34.846	14.6	28.0	0.8	-47.88	59.72	4.58	83.5	Sgr
12 Feb 2020	19h41m54.12s	-22 06' 04.4"	33.978	34.838	14.6	29.0	0.8	-47.37	60.79	4.54	83.5	Sgr
13 Feb 2020	19h42m01.84s	-22 05' 51.8"	33.979	34.830	14.6	30.0	0.8	-46.85	61.84	4.51	83.5	Sgr
14 Feb 2020	19h42m09.50s	-22 05' 39.4"	33.979	34.822	14.6	30.9	0.9	-46.33	62.88	4.47	83.6	Sgr
15 Feb 2020	19h42m17.09s	-22 05' 27.2"	33.980	34.814	14.6	31.9	0.9	-45.80	63.90	4.43	83.6	Sgr
16 Feb 2020	19h42m24.63s	-22 05' 15.1"	33.981	34.806	14.6	32.9	0.9	-45.26	64.91	4.40	83.6	Sgr
17 Feb 2020	19h42m32.09s	-22 05' 03.2"	33.981	34.797	14.6	33.9	0.9	-44.73	65.90	4.36	83.7	Sgr
18 Feb 2020	19h42m39.50s	-22 04' 51.4"	33.982	34.788	14.6	34.9	1.0	-44.18	66.88	4.32	83.7	Sgr
19 Feb 2020	19h42m46.83s	-22 04' 39.8"	33.983	34.779	14.6	35.8	1.0	-43.64	67.85	4.28	83.7	Sgr
20 Feb 2020	19h42m54.09s	-22 04' 28.3"	33.983	34.770	14.6	36.8	1.0	-43.09	68.80	4.23	83.8	Sgr
21 Feb 2020	19h43m01.28s	-22 04' 17.1"	33.984	34.760	14.6	37.8	1.0	-42.53	69.74	4.19	83.8	Sgr
22 Feb 2020	19h43m08.40s	-22 04' 06.0"	33.985	34.750	14.6	38.8	1.0	-41.98	70.68	4.15	83.8	Sgr
23 Feb 2020	19h43m15.44s	-22 03' 55.1"	33.985	34.740	14.6	39.8	1.1	-41.42	71.60	4.10	83.9	Sgr
24 Feb 2020	19h43m22.40s	-22 03' 44.4"	33.986	34.730	14.5	40.7	1.1	-40.85	72.51	4.05	83.9	Sgr
25 Feb 2020	19h43m29.28s	-22 03' 33.9"	33.987	34.719	14.5	41.7	1.1	-40.29	73.40	4.01	84.0	Sgr
26 Feb 2020	19h43m36.08s	-22 03' 23.6"	33.987	34.708	14.5	42.7	1.1	-39.72	74.29	3.96	84.0	Sgr
27 Feb 2020	19h43m42.80s	-22 03' 13.5"	33.988	34.697	14.5	43.7	1.2	-39.15	75.17	3.91	84.1	Sgr
28 Feb 2020	19h43m49.44s	-22 03' 03.6"	33.989	34.686	14.5	44.7	1.2	-38.57	76.04	3.86	84.1	Sgr
29 Feb 2020	19h43m55.99s	-22 02' 54.0"	33.989	34.674	14.5	45.6	1.2	-38.00	76.90	3.81	84.2	Sgr
1 Mar 2020	19h44m02.45s	-22 02' 44.5"	33.990	34.663	14.5	46.6	1.2	-37.42	77.76	3.75	84.3	Sgr
2 Mar 2020	19h44m08.82s	-22 02' 35.3"	33.990	34.651	14.5	47.6	1.2	-36.84	78.60	3.70	84.3	Sgr
3 Mar 2020	19h44m15.11s	-22 02' 26.3"	33.991	34.639	14.5	48.6	1.3	-36.25	79.44	3.65	84.4	Sgr
4 Mar 2020	19h44m21.30s	-22 02' 17.5"	33.992	34.627	14.5	49.5	1.3	-35.67	80.27	3.59	84.5	Sgr
5 Mar 2020	19h44m27.40s	-22 02' 09.0"	33.992	34.614	14.5	50.5	1.3	-35.08	81.09	3.54	84.5	Sgr
6 Mar 2020	19h44m33.41s	-22 02' 00.6"	33.993	34.602	14.5	51.5	1.3	-34.50	81.91	3.48	84.6	Sgr
7 Mar 2020	19h44m39.32s	-22 01' 52.6"	33.994	34.589	14.5	52.5	1.3	-33.91	82.71	3.42	84.7	Sgr
8 Mar 2020	19h44m45.13s	-22 01' 44.8"	33.994	34.576	14.5	53.5	1.3	-33.32	83.52	3.37	84.8	Sgr
9 Mar 2020	19h44m50.85s	-22 01' 37.2"	33.995	34.563	14.5	54.4	1.4	-32.73	84.31	3.31	84.9	Sgr
10 Mar 2020	19h44m56.47s	-22 01' 29.9"	33.996	34.550	14.5	55.4	1.4	-32.13	85.10	3.25	85.0	Sgr
11 Mar 2020	19h45m01.99s	-22 01' 22.8"	33.996	34.536	14.5	56.4	1.4	-31.54	85.89	3.19	85.1	Sgr
12 Mar 2020	19h45m07.41s	-22 01' 16.0"	33.997	34.523	14.5	57.4	1.4	-30.95	86.67	3.13	85.2	Sgr
13 Mar 2020	19h45m12.73s	-22 01' 09.5"	33.998	34.509	14.5	58.3	1.4	-30.35	87.44	3.07	85.3	Sgr
14 Mar 2020	19h45m17.94s	-22 01' 03.2"	33.998	34.495	14.5	59.3	1.4	-29.76	88.21	3.01	85.4	Sgr

EPHEMERIDE 2020 – PLUTO

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
15 Mar 2020	19h45m23.05s	-22 00' 57.2"	33.999	34.481	14.5	60.3	1.5	-29.16	88.98	2.95	85.5	Sgr
16 Mar 2020	19h45m28.06s	-22 00' 51.4"	34.000	34.467	14.5	61.3	1.5	-28.57	89.74	2.88	85.7	Sgr
17 Mar 2020	19h45m32.96s	-22 00' 45.9"	34.000	34.452	14.5	62.3	1.5	-27.97	90.50	2.82	85.8	Sgr
18 Mar 2020	19h45m37.75s	-22 00' 40.8"	34.001	34.438	14.5	63.2	1.5	-27.37	91.26	2.76	85.9	Sgr
19 Mar 2020	19h45m42.43s	-22 00' 35.8"	34.002	34.423	14.5	64.2	1.5	-26.78	92.01	2.69	86.1	Sgr
20 Mar 2020	19h45m47.01s	-22 00' 31.2"	34.002	34.408	14.5	65.2	1.5	-26.18	92.75	2.63	86.3	Sgr
21 Mar 2020	19h45m51.47s	-22 00' 26.9"	34.003	34.393	14.5	66.2	1.5	-25.58	93.50	2.56	86.4	Sgr
22 Mar 2020	19h45m55.82s	-22 00' 22.8"	34.004	34.378	14.5	67.1	1.5	-24.99	94.24	2.49	86.6	Sgr
23 Mar 2020	19h46m00.05s	-22 00' 19.1"	34.004	34.363	14.5	68.1	1.6	-24.39	94.98	2.43	86.8	Sgr
24 Mar 2020	19h46m04.18s	-22 00' 15.6"	34.005	34.348	14.5	69.1	1.6	-23.80	95.72	2.36	87.0	Sgr
25 Mar 2020	19h46m08.18s	-22 00' 12.4"	34.006	34.333	14.5	70.1	1.6	-23.20	96.45	2.29	87.2	Sgr
26 Mar 2020	19h46m12.07s	-22 00' 09.5"	34.006	34.317	14.5	71.0	1.6	-22.61	97.18	2.22	87.5	Sgr
27 Mar 2020	19h46m15.85s	-22 00' 07.0"	34.007	34.302	14.5	72.0	1.6	-22.01	97.92	2.15	87.7	Sgr
28 Mar 2020	19h46m19.51s	-22 00' 04.7"	34.008	34.286	14.5	73.0	1.6	-21.42	98.64	2.08	88.0	Sgr
29 Mar 2020	19h46m23.05s	-22 00' 02.8"	34.008	34.270	14.5	74.0	1.6	-20.83	99.37	2.01	88.3	Sgr
30 Mar 2020	19h46m26.47s	-22 00' 01.1"	34.009	34.255	14.5	74.9	1.6	-20.24	100.10	1.94	88.6	Sgr
31 Mar 2020	19h46m29.77s	-21 59' 59.7"	34.010	34.239	14.5	75.9	1.6	-19.65	100.82	1.87	89.0	Sgr
1 Apr 2020	19h46m32.95s	-21 59' 58.7"	34.010	34.223	14.5	76.9	1.6	-19.06	101.55	1.80	89.3	Sgr
2 Apr 2020	19h46m36.01s	-21 59' 58.0"	34.011	34.207	14.5	77.9	1.6	-18.47	102.27	1.73	89.7	Sgr
3 Apr 2020	19h46m38.95s	-21 59' 57.6"	34.012	34.191	14.5	78.8	1.7	-17.89	103.00	1.66	90.2	Sgr
4 Apr 2020	19h46m41.77s	-21 59' 57.5"	34.012	34.175	14.5	79.8	1.7	-17.30	103.72	1.59	90.7	Sgr
5 Apr 2020	19h46m44.46s	-21 59' 57.7"	34.013	34.159	14.5	80.8	1.7	-16.72	104.44	1.52	91.2	Sgr
6 Apr 2020	19h46m47.04s	-21 59' 58.2"	34.014	34.142	14.5	81.8	1.7	-16.14	105.16	1.45	91.8	Sgr
7 Apr 2020	19h46m49.49s	-21 59' 59.1"	34.014	34.126	14.5	82.7	1.7	-15.56	105.89	1.38	92.4	Sgr
8 Apr 2020	19h46m51.82s	-22 00' 00.3"	34.015	34.110	14.5	83.7	1.7	-14.98	106.61	1.31	93.1	Sgr
9 Apr 2020	19h46m54.03s	-22 00' 01.7"	34.015	34.094	14.5	84.7	1.7	-14.41	107.33	1.24	93.9	Sgr
10 Apr 2020	19h46m56.12s	-22 00' 03.6"	34.016	34.077	14.5	85.7	1.7	-13.84	108.05	1.17	94.8	Sgr
11 Apr 2020	19h46m58.08s	-22 00' 05.7"	34.017	34.061	14.5	86.6	1.7	-13.26	108.78	1.10	95.8	Sgr
12 Apr 2020	19h46m59.92s	-22 00' 08.1"	34.017	34.045	14.5	87.6	1.7	-12.70	109.50	1.03	96.9	Sgr
13 Apr 2020	19h47m01.64s	-22 00' 10.9"	34.018	34.028	14.5	88.6	1.7	-12.13	110.23	0.96	98.3	Sgr
14 Apr 2020	19h47m03.23s	-22 00' 14.0"	34.019	34.012	14.5	89.6	1.7	-11.56	110.96	0.89	99.8	Sgr
15 Apr 2020	19h47m04.70s	-22 00' 17.4"	34.019	33.995	14.5	90.5	1.7	-11.00	111.68	0.82	101.6	Sgr
16 Apr 2020	19h47m06.04s	-22 00' 21.1"	34.020	33.979	14.5	91.5	1.7	-10.44	112.41	0.75	103.7	Sgr
17 Apr 2020	19h47m07.26s	-22 00' 25.2"	34.021	33.963	14.5	92.5	1.7	-9.89	113.14	0.68	106.3	Sgr
18 Apr 2020	19h47m08.35s	-22 00' 29.5"	34.021	33.946	14.5	93.4	1.7	-9.33	113.88	0.61	109.4	Sgr
19 Apr 2020	19h47m09.31s	-22 00' 34.2"	34.022	33.930	14.5	94.4	1.7	-8.78	114.61	0.55	113.2	Sgr
20 Apr 2020	19h47m10.16s	-22 00' 39.3"	34.023	33.914	14.5	95.4	1.7	-8.23	115.35	0.49	118.0	Sgr
21 Apr 2020	19h47m10.87s	-22 00' 44.6"	34.023	33.897	14.5	96.4	1.7	-7.69	116.08	0.43	124.1	Sgr
22 Apr 2020	19h47m11.46s	-22 00' 50.3"	34.024	33.881	14.5	97.3	1.7	-7.15	116.82	0.39	131.9	Sgr
23 Apr 2020	19h47m11.93s	-22 00' 56.2"	34.025	33.865	14.5	98.3	1.7	-6.61	117.57	0.34	141.7	Sgr
24 Apr 2020	19h47m12.27s	-22 01' 02.5"	34.025	33.848	14.5	99.3	1.7	-6.08	118.31	0.32	153.6	Sgr
25 Apr 2020	19h47m12.48s	-22 01' 09.2"	34.026	33.832	14.5	100.3	1.7	-5.54	119.06	0.30	167.2	Sgr
26 Apr 2020	19h47m12.57s	-22 01' 16.1"	34.027	33.816	14.5	101.2	1.7	-5.02	119.81	0.31	181.0	Sgr
27 Apr 2020	19h47m12.54s	-22 01' 23.3"	34.027	33.800	14.5	102.2	1.7	-4.49	120.56	0.33	193.5	Sgr
28 Apr 2020	19h47m12.38s	-22 01' 30.9"	34.028	33.784	14.5	103.2	1.7	-3.97	121.31	0.37	204.1	Sgr
29 Apr 2020	19h47m12.10s	-22 01' 38.8"	34.029	33.768	14.5	104.2	1.6	-3.46	122.07	0.41	212.5	Sgr
30 Apr 2020	19h47m11.70s	-22 01' 47.0"	34.029	33.752	14.5	105.1	1.6	-2.95	122.83	0.47	219.1	Sgr
1 Mai 2020	19h47m11.17s	-22 01' 55.5"	34.030	33.737	14.5	106.1	1.6	-2.44	123.59	0.52	224.3	Sgr
2 Mai 2020	19h47m10.53s	-22 02' 04.3"	34.031	33.721	14.5	107.1	1.6	-1.93	124.36	0.58	228.4	Sgr
3 Mai 2020	19h47m09.76s	-22 02' 13.4"	34.031	33.705	14.5	108.1	1.6	-1.44	125.13	0.64	231.7	Sgr
4 Mai 2020	19h47m08.87s	-22 02' 22.8"	34.032	33.690	14.5	109.0	1.6	-0.94	125.90	0.71	234.5	Sgr
5 Mai 2020	19h47m07.86s	-22 02' 32.5"	34.033	33.674	14.5	110.0	1.6	-0.45	126.68	0.77	236.7	Sgr
6 Mai 2020	19h47m06.74s	-22 02' 42.6"	34.033	33.659	14.5	111.0	1.6	0.03	127.46	0.84	238.6	Sgr
7 Mai 2020	19h47m05.49s	-22 02' 52.9"	34.034	33.644	14.5	111.9	1.6	0.51	128.24	0.90	240.2	Sgr
8 Mai 2020	19h47m04.13s	-22 03' 03.5"	34.035	33.629	14.5	112.9	1.6	0.99	129.03	0.97	241.6	Sgr
9 Mai 2020	19h47m02.65s	-22 03' 14.4"	34.035	33.614	14.5	113.9	1.6	1.46	129.82	1.03	242.8	Sgr
10 Mai 2020	19h47m01.05s	-22 03' 25.6"	34.036	33.599	14.5	114.9	1.5	1.92	130.61	1.10	243.9	Sgr
11 Mai 2020	19h46m59.34s	-22 03' 37.0"	34.037	33.584	14.5	115.8	1.5	2.38	131.41	1.17	244.8	Sgr
12 Mai 2020	19h46m57.52s	-22 03' 48.8"	34.037	33.570	14.5	116.8	1.5	2.83	132.21	1.23	245.7	Sgr
13 Mai 2020	19h46m55.58s	-22 04' 00.8"	34.038	33.555	14.5	117.8	1.5	3.28	133.02	1.30	246.4	Sgr
14 Mai 2020	19h46m53.52s	-22 04' 13.1"	34.039	33.541	14.5	118.8	1.5	3.72	133.83	1.36	247.1	Sgr
15 Mai 2020	19h46m51.36s	-22 04' 25.7"	34.039	33.527	14.5	119.7	1.5	4.16	134.64	1.43	247.7	Sgr
16 Mai 2020	19h46m49.08s	-22 04' 38.6"	34.040	33.513	14.5	120.7	1.5	4.59	135.46	1.49	248.3	Sgr
17 Mai 2020	19h46m46.69s	-22 04' 51.7"	34.041	33.499	14.5	121.7	1.4	5.01	136.29	1.56	248.8	Sgr
18 Mai 2020	19h46m44.19s	-22 05' 05.1"	34.041	33.485	14.5	122.6	1.4	5.43	137.11	1.62	249.2	Sgr
19 Mai 2020	19h46m41.58s	-22 05' 18.8"	34.042	33.471	14.5	123.6	1.4	5.84	137.94	1.68	249.7	Sgr
20 Mai 2020	19h46m38.86s	-22 05' 32.7"	34.042	33.458	14.5	124.6	1.4	6.25	138.78	1.74	250.1	Sgr
21 Mai 2020	19h46m36.03s	-22 05' 46.9"	34.043	33.444	14.5	125.6	1.4	6.65	139.62	1.81	250.4	Sgr
22 Mai 2020	19h46m33.10s	-22 06' 01.3"	34.044	33.431	14.5	126.5	1.4	7.04	140.46	1.87	250.8	Sgr
23 Mai 2020	19h46m30.07s	-22 06' 16.0"	34.044	33.418	14.5	127.5	1.4	7.42	141.31	1.93	251.1	Sgr
24 Mai 2020	19h46m26.93s	-22 06' 30.9"	34.045	33.406	14.5	128.5	1.3	7.80	142.16	1.99	251.4	Sgr
25 Mai 2020	19h46m23.69s	-22 06' 46.0"	34.046	33.393	14.5	129.5	1.3	8.17	143.02	2.05	251.6	Sgr
26 Mai 2020	19h46m20.35s	-22 07' 01.4"	34.046	33.381	14.5	130.4	1.3	8.53	143.88	2.11	251.9	Sgr
27 Mai 2020	19h46m16.91s	-22 07' 17.0"	34.047	33.368	14.5	131.4	1.3	8.89	144.75	2.16	252.1	Sgr

EPHEMERIDE 2020 – PLUTO

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
28 Mai 2020	19h46m13.37s	-22 07' 32.9"	34.048	33.356	14.5	132.4	1.3	9.24	145.62	2.22	252.3	Sgr
29 Mai 2020	19h46m09.74s	-22 07' 49.0"	34.048	33.345	14.5	133.4	1.2	9.58	146.49	2.27	252.6	Sgr
30 Mai 2020	19h46m06.01s	-22 08' 05.2"	34.049	33.333	14.5	134.3	1.2	9.91	147.37	2.33	252.8	Sgr
31 Mai 2020	19h46m02.19s	-22 08' 21.7"	34.050	33.321	14.5	135.3	1.2	10.24	148.25	2.38	252.9	Sgr
1 Jun 2020	19h45m58.27s	-22 08' 38.5"	34.050	33.310	14.5	136.3	1.2	10.55	149.14	2.44	253.1	Sgr
2 Jun 2020	19h45m54.27s	-22 08' 55.4"	34.051	33.299	14.5	137.3	1.2	10.86	150.03	2.49	253.3	Sgr
3 Jun 2020	19h45m50.18s	-22 09' 12.5"	34.052	33.289	14.5	138.2	1.1	11.16	150.93	2.54	253.4	Sgr
4 Jun 2020	19h45m46.01s	-22 09' 29.8"	34.052	33.278	14.5	139.2	1.1	11.45	151.83	2.59	253.6	Sgr
5 Jun 2020	19h45m41.74s	-22 09' 47.3"	34.053	33.268	14.5	140.2	1.1	11.74	152.73	2.64	253.7	Sgr
6 Jun 2020	19h45m37.40s	-22 10' 04.9"	34.054	33.257	14.5	141.1	1.1	12.01	153.64	2.69	253.9	Sgr
7 Jun 2020	19h45m32.97s	-22 10' 22.8"	34.054	33.248	14.5	142.1	1.0	12.28	154.55	2.73	254.0	Sgr
8 Jun 2020	19h45m28.47s	-22 10' 40.8"	34.055	33.238	14.5	143.1	1.0	12.53	155.47	2.78	254.1	Sgr
9 Jun 2020	19h45m23.88s	-22 10' 59.0"	34.056	33.228	14.5	144.1	1.0	12.78	156.39	2.82	254.3	Sgr
10 Jun 2020	19h45m19.22s	-22 11' 17.3"	34.056	33.219	14.5	145.0	1.0	13.02	157.31	2.87	254.4	Sgr
11 Jun 2020	19h45m14.48s	-22 11' 35.8"	34.057	33.210	14.5	146.0	1.0	13.25	158.24	2.91	254.5	Sgr
12 Jun 2020	19h45m09.66s	-22 11' 54.5"	34.058	33.202	14.5	147.0	0.9	13.47	159.17	2.96	254.6	Sgr
13 Jun 2020	19h45m04.78s	-22 12' 13.3"	34.058	33.193	14.5	148.0	0.9	13.68	160.10	3.00	254.7	Sgr
14 Jun 2020	19h44m59.82s	-22 12' 32.3"	34.059	33.185	14.5	148.9	0.9	13.88	161.04	3.04	254.8	Sgr
15 Jun 2020	19h44m54.79s	-22 12' 51.3"	34.060	33.177	14.5	149.9	0.9	14.07	161.98	3.08	254.9	Sgr
16 Jun 2020	19h44m49.70s	-22 13' 10.6"	34.060	33.169	14.5	150.9	0.8	14.25	162.92	3.11	255.0	Sgr
17 Jun 2020	19h44m44.54s	-22 13' 29.9"	34.061	33.162	14.5	151.9	0.8	14.43	163.87	3.15	255.1	Sgr
18 Jun 2020	19h44m39.32s	-22 13' 49.4"	34.062	33.154	14.5	152.8	0.8	14.59	164.81	3.19	255.2	Sgr
19 Jun 2020	19h44m34.04s	-22 14' 09.0"	34.062	33.147	14.5	153.8	0.8	14.74	165.77	3.22	255.3	Sgr
20 Jun 2020	19h44m28.70s	-22 14' 28.7"	34.063	33.141	14.5	154.8	0.7	14.88	166.72	3.26	255.3	Sgr
21 Jun 2020	19h44m23.30s	-22 14' 48.5"	34.064	33.134	14.5	155.8	0.7	15.02	167.68	3.29	255.4	Sgr
22 Jun 2020	19h44m17.84s	-22 15' 08.4"	34.064	33.128	14.5	156.7	0.7	15.14	168.64	3.32	255.5	Sgr
23 Jun 2020	19h44m12.34s	-22 15' 28.4"	34.065	33.122	14.5	157.7	0.6	15.25	169.60	3.35	255.6	Sgr
24 Jun 2020	19h44m06.78s	-22 15' 48.4"	34.066	33.117	14.5	158.7	0.6	15.35	170.56	3.38	255.6	Sgr
25 Jun 2020	19h44m01.17s	-22 16' 08.6"	34.066	33.111	14.5	159.7	0.6	15.44	171.52	3.41	255.7	Sgr
26 Jun 2020	19h43m55.52s	-22 16' 28.8"	34.067	33.106	14.5	160.6	0.6	15.52	172.49	3.43	255.8	Sgr
27 Jun 2020	19h43m49.82s	-22 16' 49.1"	34.068	33.101	14.5	161.6	0.5	15.59	173.46	3.46	255.8	Sgr
28 Jun 2020	19h43m44.09s	-22 17' 09.5"	34.068	33.097	14.5	162.6	0.5	15.65	174.42	3.48	255.9	Sgr
29 Jun 2020	19h43m38.31s	-22 17' 29.9"	34.069	33.093	14.5	163.6	0.5	15.70	175.39	3.50	255.9	Sgr
30 Jun 2020	19h43m32.49s	-22 17' 50.4"	34.070	33.089	14.5	164.5	0.5	15.74	176.36	3.52	256.0	Sgr
1 Jul 2020	19h43m26.65s	-22 18' 10.9"	34.070	33.085	14.5	165.5	0.4	15.77	177.33	3.54	256.0	Sgr
2 Jul 2020	19h43m20.76s	-22 18' 31.4"	34.071	33.081	14.4	166.5	0.4	15.79	178.31	3.56	256.1	Sgr
3 Jul 2020	19h43m14.85s	-22 18' 52.0"	34.071	33.078	14.4	167.5	0.4	15.80	179.28	3.57	256.1	Sgr
4 Jul 2020	19h43m08.91s	-22 19' 12.6"	34.072	33.075	14.4	168.4	0.3	15.79	180.25	3.59	256.2	Sgr
5 Jul 2020	19h43m02.94s	-22 19' 33.2"	34.073	33.073	14.4	169.4	0.3	15.78	181.22	3.60	256.2	Sgr
6 Jul 2020	19h42m56.94s	-22 19' 53.9"	34.073	33.071	14.4	170.4	0.3	15.75	182.19	3.62	256.3	Sgr
7 Jul 2020	19h42m50.93s	-22 20' 14.5"	34.074	33.069	14.4	171.4	0.3	15.72	183.16	3.63	256.3	Sgr
8 Jul 2020	19h42m44.89s	-22 20' 35.2"	34.075	33.067	14.4	172.3	0.2	15.67	184.13	3.64	256.4	Sgr
9 Jul 2020	19h42m38.83s	-22 20' 55.9"	34.075	33.066	14.4	173.3	0.2	15.62	185.10	3.65	256.4	Sgr
10 Jul 2020	19h42m32.76s	-22 21' 16.5"	34.076	33.064	14.4	174.3	0.2	15.55	186.07	3.66	256.5	Sgr
11 Jul 2020	19h42m26.68s	-22 21' 37.1"	34.077	33.064	14.4	175.2	0.1	15.47	187.04	3.66	256.5	Sgr
12 Jul 2020	19h42m20.58s	-22 21' 57.8"	34.077	33.063	14.4	176.2	0.1	15.39	188.00	3.67	256.5	Sgr
13 Jul 2020	19h42m14.47s	-22 22' 18.4"	34.078	33.063	14.4	177.1	0.1	15.29	188.97	3.67	256.6	Sgr
14 Jul 2020	19h42m08.35s	-22 22' 38.9"	34.079	33.063	14.4	178.0	0.1	15.18	189.93	3.68	256.6	Sgr
15 Jul 2020	19h42m02.23s	-22 22' 59.5"	34.079	33.063	14.4	178.7	0.0	15.06	190.89	3.68	256.7	Sgr
16 Jul 2020	19h41m56.11s	-22 23' 20.0"	34.080	33.064	14.4	179.0	0.0	14.93	191.85	3.68	256.7	Sgr
17 Jul 2020	19h41m49.98s	-22 23' 40.4"	34.081	33.065	14.4	178.4	0.0	14.80	192.81	3.68	256.7	Sgr
18 Jul 2020	19h41m43.86s	-22 24' 00.8"	34.081	33.066	14.4	177.6	0.1	14.65	193.76	3.68	256.7	Sgr
19 Jul 2020	19h41m37.74s	-22 24' 21.1"	34.082	33.067	14.4	176.7	0.1	14.49	194.72	3.67	256.8	Sgr
20 Jul 2020	19h41m31.62s	-22 24' 41.4"	34.083	33.069	14.4	175.8	0.1	14.32	195.66	3.67	256.8	Sgr
21 Jul 2020	19h41m25.52s	-22 25' 01.6"	34.083	33.071	14.4	174.8	0.2	14.14	196.61	3.66	256.8	Sgr
22 Jul 2020	19h41m19.43s	-22 25' 21.7"	34.084	33.074	14.5	173.8	0.2	13.95	197.56	3.65	256.9	Sgr
23 Jul 2020	19h41m13.35s	-22 25' 41.8"	34.085	33.076	14.5	172.9	0.2	13.75	198.50	3.64	256.9	Sgr
24 Jul 2020	19h41m07.29s	-22 26' 01.7"	34.085	33.079	14.5	171.9	0.2	13.55	199.43	3.63	256.9	Sgr
25 Jul 2020	19h41m01.24s	-22 26' 21.6"	34.086	33.083	14.5	170.9	0.3	13.33	200.37	3.62	256.9	Sgr
26 Jul 2020	19h40m55.22s	-22 26' 41.4"	34.087	33.086	14.5	170.0	0.3	13.10	201.30	3.60	257.0	Sgr
27 Jul 2020	19h40m49.22s	-22 27' 01.0"	34.087	33.090	14.5	169.0	0.3	12.86	202.23	3.59	257.0	Sgr
28 Jul 2020	19h40m43.24s	-22 27' 20.6"	34.088	33.094	14.5	168.0	0.4	12.62	203.15	3.57	257.0	Sgr
29 Jul 2020	19h40m37.30s	-22 27' 40.1"	34.089	33.098	14.5	167.0	0.4	12.36	204.07	3.55	257.0	Sgr
30 Jul 2020	19h40m31.38s	-22 27' 59.4"	34.089	33.103	14.5	166.0	0.4	12.10	204.99	3.53	257.0	Sgr
31 Jul 2020	19h40m25.50s	-22 28' 18.6"	34.090	33.108	14.5	165.1	0.4	11.83	205.90	3.51	257.0	Sgr
1 Aug 2020	19h40m19.65s	-22 28' 37.7"	34.091	33.113	14.5	164.1	0.5	11.55	206.81	3.49	257.1	Sgr
2 Aug 2020	19h40m13.83s	-22 28' 56.6"	34.091	33.119	14.5	163.1	0.5	11.26	207.72	3.47	257.1	Sgr
3 Aug 2020	19h40m08.05s	-22 29' 15.4"	34.092	33.125	14.5	162.1	0.5	10.96	208.62	3.44	257.1	Sgr
4 Aug 2020	19h40m02.32s	-22 29' 34.1"	34.093	33.131	14.5	161.2	0.6	10.65	209.51	3.42	257.1	Sgr
5 Aug 2020	19h39m56.62s	-22 29' 52.6"	34.093	33.137	14.5	160.2	0.6	10.33	210.41	3.39	257.1	Sgr
6 Aug 2020	19h39m50.97s	-22 30' 11.0"	34.094	33.144	14.5	159.2	0.6	10.01	211.29	3.37	257.1	Sgr
7 Aug 2020	19h39m45.37s	-22 30' 29.2"	34.095	33.151	14.5	158.2	0.6	9.68	212.18	3.34	257.1	Sgr
8 Aug 2020	19h39m39.82s	-22 30' 47.2"	34.095	33.158	14.5	157.2	0.7	9.34	213.06	3.31	257.1	Sgr
9 Aug 2020	19h39m34.31s	-22 31' 05.1"	34.096	33.165	14.5	156.3	0.7	8.99	213.93	3.28	257.1	Sgr

EPHEMERIDE 2020 – PLUTO

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
10 Aug 2020	19h39m28.86s	-22 31' 22.9"	34.097	33.173	14.5	155.3	0.7	8.63	214.81	3.24	257.1	Sgr
11 Aug 2020	19h39m23.46s	-22 31' 40.4"	34.097	33.181	14.5	154.3	0.7	8.27	215.67	3.21	257.1	Sgr
12 Aug 2020	19h39m18.12s	-22 31' 57.8"	34.098	33.189	14.5	153.3	0.8	7.90	216.54	3.18	257.1	Sgr
13 Aug 2020	19h39m12.83s	-22 32' 15.0"	34.099	33.198	14.5	152.3	0.8	7.52	217.39	3.14	257.1	Sgr
14 Aug 2020	19h39m07.61s	-22 32' 32.0"	34.099	33.207	14.5	151.4	0.8	7.14	218.25	3.10	257.1	Sgr
15 Aug 2020	19h39m02.45s	-22 32' 48.8"	34.100	33.216	14.5	150.4	0.8	6.75	219.10	3.06	257.1	Sgr
16 Aug 2020	19h38m57.35s	-22 33' 05.4"	34.101	33.225	14.5	149.4	0.9	6.35	219.94	3.02	257.1	Sgr
17 Aug 2020	19h38m52.33s	-22 33' 21.8"	34.101	33.234	14.5	148.4	0.9	5.94	220.79	2.98	257.1	Sgr
18 Aug 2020	19h38m47.37s	-22 33' 38.0"	34.102	33.244	14.5	147.4	0.9	5.53	221.62	2.94	257.1	Sgr
19 Aug 2020	19h38m42.48s	-22 33' 54.0"	34.102	33.254	14.5	146.5	0.9	5.11	222.46	2.90	257.1	Sgr
20 Aug 2020	19h38m37.66s	-22 34' 09.8"	34.103	33.265	14.5	145.5	1.0	4.68	223.28	2.85	257.0	Sgr
21 Aug 2020	19h38m32.92s	-22 34' 25.4"	34.104	33.275	14.5	144.5	1.0	4.25	224.11	2.81	257.0	Sgr
22 Aug 2020	19h38m28.26s	-22 34' 40.8"	34.104	33.286	14.5	143.5	1.0	3.81	224.93	2.76	257.0	Sgr
23 Aug 2020	19h38m23.68s	-22 34' 55.9"	34.105	33.297	14.5	142.5	1.0	3.37	225.75	2.71	257.0	Sgr
24 Aug 2020	19h38m19.17s	-22 35' 10.9"	34.106	33.308	14.5	141.6	1.1	2.92	226.56	2.66	256.9	Sgr
25 Aug 2020	19h38m14.75s	-22 35' 25.6"	34.106	33.320	14.5	140.6	1.1	2.46	227.37	2.61	256.9	Sgr
26 Aug 2020	19h38m10.42s	-22 35' 40.0"	34.107	33.331	14.5	139.6	1.1	2.00	228.17	2.56	256.9	Sgr
27 Aug 2020	19h38m06.17s	-22 35' 54.2"	34.108	33.343	14.5	138.6	1.1	1.53	228.97	2.51	256.8	Sgr
28 Aug 2020	19h38m02.00s	-22 36' 08.2"	34.108	33.355	14.5	137.6	1.1	1.06	229.77	2.46	256.8	Sgr
29 Aug 2020	19h37m57.93s	-22 36' 22.0"	34.109	33.368	14.5	136.7	1.2	0.58	230.56	2.41	256.7	Sgr
30 Aug 2020	19h37m53.95s	-22 36' 35.5"	34.110	33.380	14.5	135.7	1.2	0.10	231.35	2.35	256.7	Sgr
31 Aug 2020	19h37m50.05s	-22 36' 48.7"	34.110	33.393	14.5	134.7	1.2	-0.39	232.14	2.30	256.6	Sgr
1 Sep 2020	19h37m46.25s	-22 37' 01.7"	34.111	33.406	14.5	133.7	1.2	-0.88	232.92	2.24	256.5	Sgr
2 Sep 2020	19h37m42.55s	-22 37' 14.5"	34.112	33.419	14.5	132.7	1.2	-1.38	233.70	2.18	256.5	Sgr
3 Sep 2020	19h37m38.94s	-22 37' 27.0"	34.112	33.432	14.5	131.7	1.3	-1.88	234.47	2.13	256.4	Sgr
4 Sep 2020	19h37m35.43s	-22 37' 39.2"	34.113	33.446	14.5	130.8	1.3	-2.39	235.25	2.07	256.3	Sgr
5 Sep 2020	19h37m32.02s	-22 37' 51.2"	34.114	33.460	14.5	129.8	1.3	-2.90	236.02	2.01	256.2	Sgr
6 Sep 2020	19h37m28.70s	-22 38' 03.0"	34.114	33.474	14.5	128.8	1.3	-3.42	236.78	1.95	256.1	Sgr
7 Sep 2020	19h37m25.49s	-22 38' 14.4"	34.115	33.488	14.5	127.8	1.3	-3.94	237.54	1.89	256.0	Sgr
8 Sep 2020	19h37m22.38s	-22 38' 25.6"	34.116	33.502	14.5	126.8	1.4	-4.46	238.31	1.83	255.9	Sgr
9 Sep 2020	19h37m19.38s	-22 38' 36.5"	34.116	33.517	14.5	125.8	1.4	-4.99	239.06	1.77	255.8	Sgr
10 Sep 2020	19h37m16.48s	-22 38' 47.2"	34.117	33.531	14.5	124.9	1.4	-5.52	239.82	1.70	255.6	Sgr
11 Sep 2020	19h37m13.68s	-22 38' 57.6"	34.118	33.546	14.5	123.9	1.4	-6.06	240.57	1.64	255.5	Sgr
12 Sep 2020	19h37m11.00s	-22 39' 07.7"	34.118	33.561	14.5	122.9	1.4	-6.60	241.32	1.58	255.3	Sgr
13 Sep 2020	19h37m08.42s	-22 39' 17.5"	34.119	33.576	14.5	121.9	1.4	-7.14	242.07	1.51	255.1	Sgr
14 Sep 2020	19h37m05.96s	-22 39' 27.1"	34.120	33.592	14.5	120.9	1.4	-7.69	242.81	1.45	254.9	Sgr
15 Sep 2020	19h37m03.60s	-22 39' 36.4"	34.120	33.607	14.5	119.9	1.5	-8.24	243.56	1.38	254.7	Sgr
16 Sep 2020	19h37m01.36s	-22 39' 45.4"	34.121	33.623	14.5	119.0	1.5	-8.79	244.30	1.31	254.4	Sgr
17 Sep 2020	19h36m59.24s	-22 39' 54.1"	34.122	33.638	14.5	118.0	1.5	-9.35	245.04	1.24	254.1	Sgr
18 Sep 2020	19h36m57.23s	-22 40' 02.5"	34.122	33.654	14.5	117.0	1.5	-9.91	245.78	1.18	253.8	Sgr
19 Sep 2020	19h36m55.33s	-22 40' 10.7"	34.123	33.670	14.5	116.0	1.5	-10.47	246.51	1.11	253.4	Sgr
20 Sep 2020	19h36m53.56s	-22 40' 18.5"	34.124	33.687	14.5	115.0	1.5	-11.03	247.25	1.04	252.9	Sgr
21 Sep 2020	19h36m51.90s	-22 40' 26.1"	34.124	33.703	14.5	114.0	1.5	-11.60	247.98	0.97	252.4	Sgr
22 Sep 2020	19h36m50.36s	-22 40' 33.4"	34.125	33.719	14.5	113.1	1.6	-12.17	248.71	0.90	251.8	Sgr
23 Sep 2020	19h36m48.94s	-22 40' 40.3"	34.126	33.736	14.5	112.1	1.6	-12.74	249.44	0.83	251.1	Sgr
24 Sep 2020	19h36m47.64s	-22 40' 47.0"	34.126	33.752	14.5	111.1	1.6	-13.32	250.17	0.76	250.2	Sgr
25 Sep 2020	19h36m46.46s	-22 40' 53.4"	34.127	33.769	14.5	110.1	1.6	-13.89	250.90	0.69	249.2	Sgr
26 Sep 2020	19h36m45.40s	-22 40' 59.5"	34.128	33.786	14.5	109.1	1.6	-14.47	251.63	0.62	247.9	Sgr
27 Sep 2020	19h36m44.47s	-22 41' 05.3"	34.128	33.803	14.5	108.1	1.6	-15.05	252.36	0.55	246.3	Sgr
28 Sep 2020	19h36m43.65s	-22 41' 10.8"	34.129	33.820	14.5	107.2	1.6	-15.64	253.09	0.48	244.2	Sgr
29 Sep 2020	19h36m42.96s	-22 41' 16.1"	34.130	33.837	14.5	106.2	1.6	-16.22	253.82	0.41	241.4	Sgr
30 Sep 2020	19h36m42.40s	-22 41' 21.0"	34.130	33.854	14.5	105.2	1.6	-16.81	254.54	0.34	237.4	Sgr
1 Okt 2020	19h36m41.95s	-22 41' 25.6"	34.131	33.871	14.5	104.2	1.6	-17.40	255.27	0.27	231.4	Sgr
2 Okt 2020	19h36m41.63s	-22 41' 29.9"	34.132	33.889	14.5	103.2	1.6	-17.99	256.00	0.21	221.8	Sgr
3 Okt 2020	19h36m41.44s	-22 41' 34.0"	34.132	33.906	14.5	102.2	1.6	-18.58	256.73	0.16	205.3	Sgr
4 Okt 2020	19h36m41.37s	-22 41' 37.7"	34.133	33.924	14.5	101.3	1.6	-19.17	257.46	0.13	178.3	Sgr
5 Okt 2020	19h36m41.42s	-22 41' 41.2"	34.133	33.941	14.5	100.3	1.7	-19.77	258.19	0.14	147.6	Sgr
6 Okt 2020	19h36m41.60s	-22 41' 44.3"	34.134	33.959	14.5	99.3	1.7	-20.37	258.92	0.19	126.0	Sgr
7 Okt 2020	19h36m41.90s	-22 41' 47.1"	34.135	33.976	14.5	98.3	1.7	-20.96	259.65	0.24	113.4	Sgr
8 Okt 2020	19h36m42.33s	-22 41' 49.7"	34.135	33.994	14.5	97.3	1.7	-21.56	260.38	0.31	105.9	Sgr
9 Okt 2020	19h36m42.89s	-22 41' 52.0"	34.136	34.012	14.5	96.3	1.7	-22.16	261.12	0.38	101.0	Sgr
10 Okt 2020	19h36m43.58s	-22 41' 53.9"	34.137	34.029	14.5	95.3	1.7	-22.76	261.85	0.45	97.7	Sgr
11 Okt 2020	19h36m44.39s	-22 41' 55.6"	34.137	34.047	14.5	94.4	1.7	-23.36	262.59	0.52	95.2	Sgr
12 Okt 2020	19h36m45.32s	-22 41' 56.9"	34.138	34.065	14.5	93.4	1.7	-23.96	263.33	0.59	93.4	Sgr
13 Okt 2020	19h36m46.39s	-22 41' 58.0"	34.139	34.083	14.5	92.4	1.7	-24.56	264.07	0.67	92.0	Sgr
14 Okt 2020	19h36m47.58s	-22 41' 58.8"	34.139	34.101	14.5	91.4	1.7	-25.16	264.82	0.74	90.8	Sgr
15 Okt 2020	19h36m48.90s	-22 41' 59.2"	34.140	34.118	14.5	90.4	1.7	-25.77	265.57	0.81	89.9	Sgr
16 Okt 2020	19h36m50.35s	-22 41' 59.4"	34.141	34.136	14.5	89.4	1.7	-26.37	266.32	0.89	89.1	Sgr
17 Okt 2020	19h36m51.92s	-22 41' 59.3"	34.141	34.154	14.5	88.4	1.7	-26.97	267.07	0.96	88.5	Sgr
18 Okt 2020	19h36m53.63s	-22 41' 58.9"	34.142	34.172	14.5	87.5	1.7	-27.57	267.83	1.04	87.9	Sgr
19 Okt 2020	19h36m55.46s	-22 41' 58.2"	34.143	34.190	14.5	86.5	1.7	-28.18	268.59	1.11	87.4	Sgr
20 Okt 2020	19h36m57.41s	-22 41' 57.2"	34.143	34.207	14.5	85.5	1.7	-28.78	269.35	1.19	87.0	Sgr
21 Okt 2020	19h36m59.49s	-22 41' 55.9"	34.144	34.225	14.5	84.5	1.7	-29.38	270.12	1.26	86.6	Sgr
22 Okt 2020	19h37m01.70s	-22 41' 54.3"	34.145	34.243	14.5	83.5	1.7	-29.98	270.89	1.33	86.3	Sgr

EPHEMERIDE 2020 – PLUTO

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
23 Okt 2020	19h37m04.04s	-22 41' 52.5"	34.145	34.261	14.5	82.5	1.7	-30.58	271.67	1.41	86.0	Sgr
24 Okt 2020	19h37m06.49s	-22 41' 50.3"	34.146	34.278	14.5	81.5	1.7	-31.18	272.45	1.48	85.7	Sgr
25 Okt 2020	19h37m09.08s	-22 41' 47.9"	34.147	34.296	14.5	80.6	1.6	-31.78	273.24	1.55	85.5	Sgr
26 Okt 2020	19h37m11.78s	-22 41' 45.1"	34.147	34.313	14.5	79.6	1.6	-32.38	274.03	1.62	85.3	Sgr
27 Okt 2020	19h37m14.61s	-22 41' 42.1"	34.148	34.331	14.5	78.6	1.6	-32.98	274.82	1.70	85.1	Sgr
28 Okt 2020	19h37m17.56s	-22 41' 38.8"	34.149	34.348	14.5	77.6	1.6	-33.58	275.63	1.77	84.9	Sgr
29 Okt 2020	19h37m20.64s	-22 41' 35.3"	34.149	34.366	14.5	76.6	1.6	-34.17	276.44	1.84	84.8	Sgr
30 Okt 2020	19h37m23.83s	-22 41' 31.4"	34.150	34.383	14.5	75.6	1.6	-34.77	277.25	1.91	84.6	Sgr
31 Okt 2020	19h37m27.15s	-22 41' 27.3"	34.151	34.400	14.5	74.6	1.6	-35.36	278.07	1.98	84.5	Sgr
1 Nov 2020	19h37m30.58s	-22 41' 22.9"	34.151	34.417	14.5	73.6	1.6	-35.95	278.90	2.05	84.4	Sgr
2 Nov 2020	19h37m34.13s	-22 41' 18.2"	34.152	34.435	14.5	72.7	1.6	-36.54	279.74	2.12	84.2	Sgr
3 Nov 2020	19h37m37.81s	-22 41' 13.3"	34.153	34.452	14.5	71.7	1.6	-37.13	280.58	2.19	84.1	Sgr
4 Nov 2020	19h37m41.60s	-22 41' 08.1"	34.153	34.468	14.5	70.7	1.6	-37.71	281.44	2.26	84.0	Sgr
5 Nov 2020	19h37m45.50s	-22 41' 02.6"	34.154	34.485	14.5	69.7	1.6	-38.30	282.30	2.33	83.9	Sgr
6 Nov 2020	19h37m49.53s	-22 40' 56.8"	34.155	34.502	14.5	68.7	1.5	-38.88	283.17	2.40	83.8	Sgr
7 Nov 2020	19h37m53.67s	-22 40' 50.8"	34.155	34.519	14.5	67.7	1.5	-39.46	284.04	2.46	83.8	Sgr
8 Nov 2020	19h37m57.92s	-22 40' 44.5"	34.156	34.535	14.5	66.7	1.5	-40.03	284.93	2.53	83.7	Sgr
9 Nov 2020	19h38m02.29s	-22 40' 38.0"	34.157	34.551	14.5	65.8	1.5	-40.61	285.83	2.60	83.6	Sgr
10 Nov 2020	19h38m06.77s	-22 40' 31.2"	34.157	34.568	14.6	64.8	1.5	-41.18	286.74	2.66	83.5	Sgr
11 Nov 2020	19h38m11.36s	-22 40' 24.2"	34.158	34.584	14.6	63.8	1.5	-41.75	287.66	2.73	83.5	Sgr
12 Nov 2020	19h38m16.07s	-22 40' 16.9"	34.159	34.600	14.6	62.8	1.5	-42.31	288.58	2.80	83.4	Sgr
13 Nov 2020	19h38m20.88s	-22 40' 09.3"	34.159	34.616	14.6	61.8	1.5	-42.87	289.53	2.86	83.4	Sgr
14 Nov 2020	19h38m25.80s	-22 40' 01.5"	34.160	34.631	14.6	60.8	1.4	-43.43	290.48	2.92	83.3	Sgr
15 Nov 2020	19h38m30.84s	-22 39' 53.5"	34.161	34.647	14.6	59.8	1.4	-43.98	291.44	2.99	83.3	Sgr
16 Nov 2020	19h38m35.98s	-22 39' 45.2"	34.161	34.662	14.6	58.8	1.4	-44.53	292.42	3.05	83.2	Sgr
17 Nov 2020	19h38m41.22s	-22 39' 36.6"	34.162	34.678	14.6	57.9	1.4	-45.08	293.41	3.11	83.2	Sgr
18 Nov 2020	19h38m46.57s	-22 39' 27.9"	34.163	34.693	14.6	56.9	1.4	-45.62	294.42	3.17	83.1	Sgr
19 Nov 2020	19h38m52.03s	-22 39' 18.9"	34.163	34.708	14.6	55.9	1.4	-46.16	295.43	3.23	83.1	Sgr
20 Nov 2020	19h38m57.58s	-22 39' 09.6"	34.164	34.723	14.6	54.9	1.4	-46.69	296.47	3.29	83.0	Sgr
21 Nov 2020	19h39m03.24s	-22 39' 00.1"	34.165	34.737	14.6	53.9	1.3	-47.21	297.51	3.35	83.0	Sgr
22 Nov 2020	19h39m08.99s	-22 38' 50.5"	34.165	34.752	14.6	52.9	1.3	-47.73	298.58	3.41	83.0	Sgr
23 Nov 2020	19h39m14.84s	-22 38' 40.5"	34.166	34.766	14.6	51.9	1.3	-48.25	299.66	3.46	82.9	Sgr
24 Nov 2020	19h39m20.79s	-22 38' 30.4"	34.167	34.780	14.6	50.9	1.3	-48.76	300.75	3.52	82.9	Sgr
25 Nov 2020	19h39m26.83s	-22 38' 20.0"	34.167	34.794	14.6	50.0	1.3	-49.26	301.87	3.58	82.9	Sgr
26 Nov 2020	19h39m32.96s	-22 38' 09.5"	34.168	34.808	14.6	49.0	1.2	-49.76	303.00	3.63	82.8	Sgr
27 Nov 2020	19h39m39.19s	-22 37' 58.7"	34.169	34.821	14.6	48.0	1.2	-50.25	304.15	3.68	82.8	Sgr
28 Nov 2020	19h39m45.50s	-22 37' 47.7"	34.169	34.834	14.6	47.0	1.2	-50.73	305.31	3.74	82.8	Sgr
29 Nov 2020	19h39m51.90s	-22 37' 36.5"	34.170	34.848	14.6	46.0	1.2	-51.21	306.50	3.79	82.8	Sgr
30 Nov 2020	19h39m58.39s	-22 37' 25.1"	34.170	34.861	14.6	45.0	1.2	-51.68	307.70	3.84	82.7	Sgr
1 Dez 2020	19h40m04.97s	-22 37' 13.6"	34.171	34.873	14.6	44.0	1.1	-52.14	308.93	3.89	82.7	Sgr
2 Dez 2020	19h40m11.63s	-22 37' 01.8"	34.172	34.886	14.6	43.0	1.1	-52.59	310.17	3.94	82.7	Sgr
3 Dez 2020	19h40m18.37s	-22 36' 49.8"	34.172	34.898	14.6	42.1	1.1	-53.04	311.44	3.98	82.7	Sgr
4 Dez 2020	19h40m25.19s	-22 36' 37.7"	34.173	34.910	14.6	41.1	1.1	-53.47	312.72	4.03	82.7	Sgr
5 Dez 2020	19h40m32.09s	-22 36' 25.4"	34.174	34.922	14.6	40.1	1.1	-53.90	314.03	4.08	82.6	Sgr
6 Dez 2020	19h40m39.07s	-22 36' 12.8"	34.174	34.934	14.6	39.1	1.0	-54.31	315.36	4.12	82.6	Sgr
7 Dez 2020	19h40m46.13s	-22 36' 00.2"	34.175	34.945	14.6	38.1	1.0	-54.72	316.71	4.17	82.6	Sgr
8 Dez 2020	19h40m53.26s	-22 35' 47.3"	34.176	34.956	14.6	37.1	1.0	-55.11	318.08	4.21	82.6	Sgr
9 Dez 2020	19h41m00.46s	-22 35' 34.3"	34.176	34.967	14.6	36.1	1.0	-55.50	319.48	4.25	82.6	Sgr
10 Dez 2020	19h41m07.74s	-22 35' 21.1"	34.177	34.978	14.6	35.1	1.0	-55.87	320.90	4.30	82.6	Sgr
11 Dez 2020	19h41m15.08s	-22 35' 07.8"	34.178	34.988	14.6	34.2	0.9	-56.24	322.34	4.34	82.5	Sgr
12 Dez 2020	19h41m22.50s	-22 34' 54.3"	34.178	34.998	14.6	33.2	0.9	-56.59	323.80	4.38	82.5	Sgr
13 Dez 2020	19h41m29.98s	-22 34' 40.6"	34.179	35.008	14.6	32.2	0.9	-56.92	325.29	4.41	82.5	Sgr
14 Dez 2020	19h41m37.52s	-22 34' 26.8"	34.180	35.018	14.6	31.2	0.9	-57.25	326.79	4.45	82.5	Sgr
15 Dez 2020	19h41m45.13s	-22 34' 12.9"	34.180	35.027	14.6	30.2	0.8	-57.56	328.32	4.49	82.5	Sgr
16 Dez 2020	19h41m52.80s	-22 33' 58.8"	34.181	35.037	14.6	29.2	0.8	-57.86	329.87	4.52	82.5	Sgr
17 Dez 2020	19h42m00.52s	-22 33' 44.6"	34.182	35.046	14.6	28.2	0.8	-58.14	331.45	4.56	82.5	Sgr
18 Dez 2020	19h42m08.31s	-22 33' 30.2"	34.182	35.054	14.6	27.2	0.8	-58.41	333.04	4.59	82.5	Sgr
19 Dez 2020	19h42m16.14s	-22 33' 15.7"	34.183	35.063	14.6	26.3	0.7	-58.67	334.66	4.62	82.4	Sgr
20 Dez 2020	19h42m24.03s	-22 33' 01.2"	34.184	35.071	14.6	25.3	0.7	-58.91	336.29	4.65	82.4	Sgr
21 Dez 2020	19h42m31.98s	-22 32' 46.4"	34.184	35.079	14.6	24.3	0.7	-59.13	337.94	4.68	82.4	Sgr
22 Dez 2020	19h42m39.96s	-22 32' 31.6"	34.185	35.086	14.6	23.3	0.7	-59.34	339.62	4.71	82.4	Sgr
23 Dez 2020	19h42m48.00s	-22 32' 16.7"	34.186	35.094	14.6	22.3	0.6	-59.53	341.30	4.73	82.4	Sgr
24 Dez 2020	19h42m56.08s	-22 32' 01.7"	34.186	35.101	14.6	21.3	0.6	-59.71	343.01	4.76	82.4	Sgr
25 Dez 2020	19h43m04.20s	-22 31' 46.5"	34.187	35.107	14.6	20.3	0.6	-59.87	344.73	4.78	82.4	Sgr
26 Dez 2020	19h43m12.36s	-22 31' 31.3"	34.188	35.114	14.6	19.4	0.5	-60.01	346.46	4.81	82.4	Sgr
27 Dez 2020	19h43m20.57s	-22 31' 16.0"	34.188	35.120	14.6	18.4	0.5	-60.13	348.20	4.83	82.4	Sgr
28 Dez 2020	19h43m28.80s	-22 31' 00.6"	34.189	35.126	14.6	17.4	0.5	-60.24	349.96	4.85	82.4	Sgr
29 Dez 2020	19h43m37.08s	-22 30' 45.2"	34.190	35.132	14.6	16.4	0.5	-60.33	351.72	4.87	82.4	Sgr
30 Dez 2020	19h43m45.38s	-22 30' 29.6"	34.190	35.137	14.6	15.4	0.4	-60.40	353.50	4.89	82.4	Sgr
31 Dez 2020	19h43m53.72s	-22 30' 14.0"	34.191	35.142	14.6	14.4	0.4	-60.45	355.27	4.91	82.4	Sgr
1 Jan 2021	19h44m02.09s	-22 29' 58.3"	34.192	35.147	14.6	13.5	0.4	-60.49	357.05	4.92	82.4	Sgr