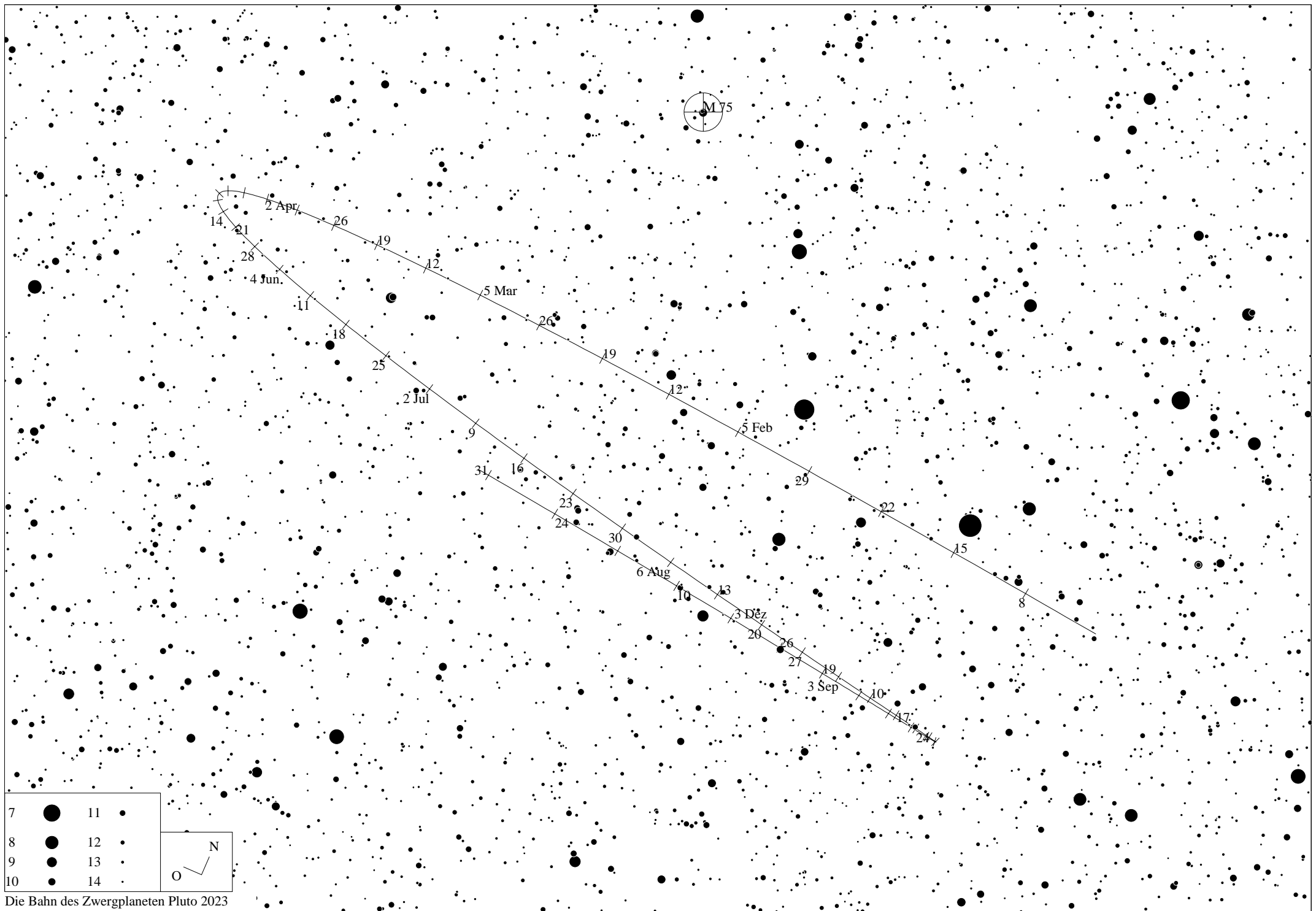


Die Bahn des Zwergplaneten Pluto 2023



Die Bahn des Zwergplaneten Pluto 2023

# EPHEMERIDE 2023 – Pluto

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
-----	--	-----	-	-----	---	-----	-----	-----	-----	-----	-----	-----
1 Jan 2023	19h59m32.22s	-22 53' 47.5"	34.677	35.614	14.6	17.5	0.5	-60.54	348.81	4.77	80.6	Sgr
2 Jan 2023	19h59m40.35s	-22 53' 28.8"	34.678	35.620	14.6	16.5	0.5	-60.64	350.58	4.79	80.6	Sgr
3 Jan 2023	19h59m48.50s	-22 53' 10.1"	34.679	35.625	14.6	15.6	0.4	-60.72	352.37	4.81	80.7	Sgr
4 Jan 2023	19h59m56.69s	-22 52' 51.3"	34.679	35.630	14.6	14.6	0.4	-60.79	354.16	4.83	80.7	Sgr
5 Jan 2023	20h00m04.91s	-22 52' 32.5"	34.680	35.635	14.6	13.6	0.4	-60.83	355.95	4.84	80.7	Sgr
6 Jan 2023	20h00m13.15s	-22 52' 13.7"	34.681	35.640	14.7	12.6	0.4	-60.86	357.75	4.86	80.7	Sgr
7 Jan 2023	20h00m21.42s	-22 51' 54.8"	34.681	35.644	14.7	11.7	0.3	-60.87	359.55	4.87	80.7	Sgr
8 Jan 2023	20h00m29.71s	-22 51' 35.9"	34.682	35.648	14.7	10.7	0.3	-60.86	1.35	4.88	80.7	Sgr
9 Jan 2023	20h00m38.02s	-22 51' 17.0"	34.683	35.651	14.7	9.7	0.3	-60.83	3.15	4.90	80.8	Sgr
10 Jan 2023	20h00m46.35s	-22 50' 58.0"	34.683	35.655	14.7	8.8	0.2	-60.78	4.95	4.91	80.8	Sgr
11 Jan 2023	20h00m54.70s	-22 50' 39.1"	34.684	35.658	14.7	7.8	0.2	-60.72	6.74	4.92	80.8	Sgr
12 Jan 2023	20h01m03.07s	-22 50' 20.1"	34.685	35.661	14.7	6.9	0.2	-60.63	8.52	4.92	80.8	Sgr
13 Jan 2023	20h01m11.45s	-22 50' 01.2"	34.685	35.663	14.7	6.0	0.2	-60.53	10.29	4.93	80.8	Sgr
14 Jan 2023	20h01m19.84s	-22 49' 42.2"	34.686	35.666	14.7	5.1	0.1	-60.41	12.05	4.94	80.9	Sgr
15 Jan 2023	20h01m28.24s	-22 49' 23.3"	34.687	35.668	14.7	4.2	0.1	-60.28	13.80	4.94	80.9	Sgr
16 Jan 2023	20h01m36.65s	-22 49' 04.4"	34.687	35.669	14.7	3.4	0.1	-60.12	15.54	4.95	80.9	Sgr
17 Jan 2023	20h01m45.06s	-22 48' 45.5"	34.688	35.671	14.7	2.8	0.1	-59.95	17.26	4.95	80.9	Sgr
18 Jan 2023	20h01m53.48s	-22 48' 26.6"	34.689	35.672	14.7	2.4	0.1	-59.76	18.97	4.95	80.9	Sgr
19 Jan 2023	20h02m01.90s	-22 48' 07.8"	34.689	35.673	14.7	2.3	0.1	-59.56	20.66	4.95	81.0	Sgr
20 Jan 2023	20h02m10.32s	-22 47' 49.1"	34.690	35.673	14.7	2.7	0.1	-59.34	22.33	4.95	81.0	Sgr
21 Jan 2023	20h02m18.74s	-22 47' 30.3"	34.691	35.673	14.7	3.3	0.1	-59.11	23.98	4.95	81.0	Sgr
22 Jan 2023	20h02m27.15s	-22 47' 11.7"	34.691	35.673	14.7	4.0	0.1	-58.85	25.61	4.94	81.0	Sgr
23 Jan 2023	20h02m35.56s	-22 46' 53.1"	34.692	35.673	14.7	4.9	0.1	-58.59	27.22	4.94	81.1	Sgr
24 Jan 2023	20h02m43.96s	-22 46' 34.5"	34.693	35.672	14.7	5.8	0.2	-58.31	28.80	4.93	81.1	Sgr
25 Jan 2023	20h02m52.34s	-22 46' 16.0"	34.693	35.671	14.7	6.7	0.2	-58.01	30.37	4.92	81.1	Sgr
26 Jan 2023	20h03m00.72s	-22 45' 57.7"	34.694	35.670	14.7	7.6	0.2	-57.71	31.91	4.92	81.1	Sgr
27 Jan 2023	20h03m09.07s	-22 45' 39.4"	34.695	35.668	14.7	8.6	0.2	-57.39	33.43	4.91	81.2	Sgr
28 Jan 2023	20h03m17.41s	-22 45' 21.1"	34.695	35.666	14.7	9.5	0.3	-57.05	34.93	4.89	81.2	Sgr
29 Jan 2023	20h03m25.73s	-22 45' 03.0"	34.696	35.664	14.7	10.5	0.3	-56.70	36.41	4.88	81.2	Sgr
30 Jan 2023	20h03m34.03s	-22 44' 45.0"	34.697	35.662	14.7	11.4	0.3	-56.35	37.86	4.87	81.3	Sgr
31 Jan 2023	20h03m42.31s	-22 44' 27.1"	34.697	35.659	14.7	12.4	0.3	-55.98	39.29	4.85	81.3	Sgr
1 Feb 2023	20h03m50.56s	-22 44' 09.4"	34.698	35.656	14.7	13.4	0.4	-55.59	40.70	4.84	81.3	Sgr
2 Feb 2023	20h03m58.78s	-22 43' 51.7"	34.699	35.653	14.7	14.3	0.4	-55.20	42.08	4.82	81.4	Sgr
3 Feb 2023	20h04m06.98s	-22 43' 34.2"	34.699	35.649	14.7	15.3	0.4	-54.80	43.44	4.80	81.4	Sgr
4 Feb 2023	20h04m15.14s	-22 43' 16.8"	34.700	35.645	14.7	16.3	0.5	-54.39	44.78	4.78	81.4	Sgr
5 Feb 2023	20h04m23.28s	-22 42' 59.5"	34.701	35.641	14.7	17.3	0.5	-53.96	46.09	4.76	81.5	Sgr
6 Feb 2023	20h04m31.37s	-22 42' 42.4"	34.701	35.637	14.7	18.2	0.5	-53.53	47.39	4.74	81.5	Sgr
7 Feb 2023	20h04m39.44s	-22 42' 25.4"	34.702	35.632	14.7	19.2	0.5	-53.09	48.66	4.72	81.5	Sgr
8 Feb 2023	20h04m47.46s	-22 42' 08.6"	34.703	35.627	14.7	20.2	0.6	-52.64	49.91	4.70	81.6	Sgr
9 Feb 2023	20h04m55.45s	-22 41' 52.0"	34.703	35.622	14.7	21.2	0.6	-52.19	51.14	4.67	81.6	Sgr
10 Feb 2023	20h05m03.39s	-22 41' 35.5"	34.704	35.616	14.7	22.1	0.6	-51.72	52.35	4.65	81.7	Sgr
11 Feb 2023	20h05m11.29s	-22 41' 19.2"	34.705	35.610	14.6	23.1	0.6	-51.25	53.54	4.62	81.7	Sgr
12 Feb 2023	20h05m19.15s	-22 41' 03.0"	34.705	35.604	14.6	24.1	0.7	-50.77	54.71	4.59	81.8	Sgr
13 Feb 2023	20h05m26.95s	-22 40' 47.0"	34.706	35.598	14.6	25.1	0.7	-50.28	55.87	4.56	81.8	Sgr
14 Feb 2023	20h05m34.72s	-22 40' 31.3"	34.707	35.591	14.6	26.0	0.7	-49.79	57.00	4.54	81.9	Sgr
15 Feb 2023	20h05m42.43s	-22 40' 15.7"	34.707	35.584	14.6	27.0	0.7	-49.29	58.12	4.50	81.9	Sgr
16 Feb 2023	20h05m50.08s	-22 40' 00.3"	34.708	35.577	14.6	28.0	0.8	-48.78	59.22	4.47	82.0	Sgr
17 Feb 2023	20h05m57.69s	-22 39' 45.1"	34.709	35.570	14.6	29.0	0.8	-48.27	60.30	4.44	82.0	Sgr
18 Feb 2023	20h06m05.23s	-22 39' 30.1"	34.709	35.562	14.6	29.9	0.8	-47.75	61.37	4.41	82.1	Sgr
19 Feb 2023	20h06m12.72s	-22 39' 15.3"	34.710	35.554	14.6	30.9	0.8	-47.23	62.42	4.37	82.1	Sgr
20 Feb 2023	20h06m20.15s	-22 39' 00.8"	34.711	35.546	14.6	31.9	0.9	-46.70	63.45	4.33	82.2	Sgr
21 Feb 2023	20h06m27.52s	-22 38' 46.5"	34.711	35.538	14.6	32.9	0.9	-46.17	64.47	4.30	82.2	Sgr
22 Feb 2023	20h06m34.82s	-22 38' 32.4"	34.712	35.529	14.6	33.9	0.9	-45.63	65.48	4.26	82.3	Sgr
23 Feb 2023	20h06m42.06s	-22 38' 18.5"	34.713	35.520	14.6	34.8	0.9	-45.09	66.47	4.22	82.4	Sgr
24 Feb 2023	20h06m49.23s	-22 38' 04.9"	34.714	35.511	14.6	35.8	1.0	-44.55	67.45	4.18	82.4	Sgr
25 Feb 2023	20h06m56.33s	-22 37' 51.5"	34.714	35.502	14.6	36.8	1.0	-44.00	68.41	4.13	82.5	Sgr
26 Feb 2023	20h07m03.37s	-22 37' 38.4"	34.715	35.492	14.6	37.8	1.0	-43.45	69.37	4.09	82.6	Sgr
27 Feb 2023	20h07m10.33s	-22 37' 25.6"	34.716	35.482	14.6	38.7	1.0	-42.89	70.31	4.05	82.7	Sgr
28 Feb 2023	20h07m17.21s	-22 37' 13.0"	34.716	35.472	14.6	39.7	1.0	-42.33	71.24	4.00	82.7	Sgr
1 Mar 2023	20h07m24.02s	-22 37' 00.6"	34.717	35.462	14.6	40.7	1.1	-41.77	72.15	3.96	82.8	Sgr
2 Mar 2023	20h07m30.76s	-22 36' 48.6"	34.718	35.452	14.6	41.7	1.1	-41.20	73.06	3.91	82.9	Cap
3 Mar 2023	20h07m37.41s	-22 36' 36.8"	34.718	35.441	14.6	42.6	1.1	-40.63	73.96	3.87	83.0	Cap
4 Mar 2023	20h07m43.99s	-22 36' 25.3"	34.719	35.430	14.6	43.6	1.1	-40.06	74.84	3.82	83.1	Cap
5 Mar 2023	20h07m50.49s	-22 36' 14.0"	34.720	35.419	14.6	44.6	1.1	-39.49	75.72	3.77	83.2	Cap
6 Mar 2023	20h07m56.90s	-22 36' 03.1"	34.720	35.407	14.6	45.6	1.2	-38.91	76.59	3.72	83.3	Cap
7 Mar 2023	20h08m03.23s	-22 35' 52.4"	34.721	35.396	14.6	46.5	1.2	-38.33	77.45	3.67	83.4	Cap
8 Mar 2023	20h08m09.48s	-22 35' 42.1"	34.722	35.384	14.6	47.5	1.2	-37.75	78.30	3.62	83.5	Cap
9 Mar 2023	20h08m15.64s	-22 35' 32.0"	34.722	35.372	14.6	48.5	1.2	-37.17	79.14	3.57	83.6	Cap
10 Mar 2023	20h08m21.71s	-22 35' 22.2"	34.723	35.360	14.6	49.5	1.2	-36.58	79.97	3.52	83.7	Cap
11 Mar 2023	20h08m27.70s	-22 35' 12.8"	34.724	35.348	14.6	50.4	1.3	-36.00	80.80	3.46	83.8	Cap
12 Mar 2023	20h08m33.59s	-22 35' 03.6"	34.724	35.335	14.6	51.4	1.3	-35.41	81.62	3.41	83.9	Cap
13 Mar 2023	20h08m39.39s	-22 34' 54.8"	34.725	35.322	14.6	52.4	1.3	-34.82	82.43	3.35	84.1	Cap
14 Mar 2023	20h08m45.10s	-22 34' 46.3"	34.726	35.310	14.6	53.4	1.3	-34.23	83.24	3.30	84.2	Cap
15 Mar 2023	20h08m50.72s	-22 34' 38.1"	34.726	35.296	14.6	54.3	1.3	-33.64	84.04	3.24	84.3	Cap

# EPHEMERIDE 2023 – Pluto

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
-----	--	-----	-	-----	---	-----	-----	-----	-----	-----	-----	-----
16 Mar 2023	20h08m56.24s	-22 34' 30.2"	34.727	35.283	14.6	55.3	1.3	-33.05	84.83	3.18	84.5	Cap
17 Mar 2023	20h09m01.67s	-22 34' 22.6"	34.728	35.270	14.6	56.3	1.4	-32.45	85.62	3.13	84.6	Cap
18 Mar 2023	20h09m07.00s	-22 34' 15.4"	34.728	35.256	14.6	57.3	1.4	-31.86	86.40	3.07	84.8	Cap
19 Mar 2023	20h09m12.22s	-22 34' 08.5"	34.729	35.243	14.6	58.2	1.4	-31.27	87.18	3.01	85.0	Cap
20 Mar 2023	20h09m17.35s	-22 34' 02.0"	34.730	35.229	14.6	59.2	1.4	-30.67	87.96	2.95	85.1	Cap
21 Mar 2023	20h09m22.38s	-22 33' 55.8"	34.730	35.215	14.6	60.2	1.4	-30.07	88.72	2.89	85.3	Cap
22 Mar 2023	20h09m27.30s	-22 33' 49.9"	34.731	35.201	14.6	61.2	1.4	-29.48	89.49	2.83	85.5	Cap
23 Mar 2023	20h09m32.12s	-22 33' 44.4"	34.732	35.186	14.6	62.1	1.5	-28.88	90.25	2.76	85.7	Cap
24 Mar 2023	20h09m36.83s	-22 33' 39.2"	34.732	35.172	14.6	63.1	1.5	-28.29	91.00	2.70	85.9	Cap
25 Mar 2023	20h09m41.44s	-22 33' 34.4"	34.733	35.157	14.6	64.1	1.5	-27.69	91.76	2.64	86.1	Cap
26 Mar 2023	20h09m45.94s	-22 33' 30.0"	34.734	35.143	14.6	65.1	1.5	-27.09	92.50	2.58	86.4	Cap
27 Mar 2023	20h09m50.33s	-22 33' 25.9"	34.734	35.128	14.6	66.0	1.5	-26.50	93.25	2.51	86.6	Cap
28 Mar 2023	20h09m54.61s	-22 33' 22.1"	34.735	35.113	14.6	67.0	1.5	-25.90	93.99	2.45	86.9	Cap
29 Mar 2023	20h09m58.78s	-22 33' 18.8"	34.736	35.098	14.6	68.0	1.5	-25.30	94.73	2.38	87.2	Cap
30 Mar 2023	20h10m02.85s	-22 33' 15.8"	34.736	35.083	14.6	68.9	1.5	-24.71	95.47	2.32	87.5	Cap
31 Mar 2023	20h10m06.80s	-22 33' 13.1"	34.737	35.067	14.6	69.9	1.5	-24.11	96.20	2.25	87.8	Cap
1 Apr 2023	20h10m10.64s	-22 33' 10.9"	34.738	35.052	14.6	70.9	1.6	-23.52	96.94	2.19	88.1	Cap
2 Apr 2023	20h10m14.37s	-22 33' 09.0"	34.738	35.036	14.6	71.9	1.6	-22.92	97.67	2.12	88.5	Cap
3 Apr 2023	20h10m17.98s	-22 33' 07.4"	34.739	35.021	14.6	72.8	1.6	-22.33	98.40	2.05	88.9	Cap
4 Apr 2023	20h10m21.48s	-22 33' 06.3"	34.740	35.005	14.6	73.8	1.6	-21.74	99.12	1.99	89.3	Cap
5 Apr 2023	20h10m24.87s	-22 33' 05.5"	34.740	34.990	14.6	74.8	1.6	-21.15	99.85	1.92	89.7	Cap
6 Apr 2023	20h10m28.14s	-22 33' 05.1"	34.741	34.974	14.6	75.7	1.6	-20.56	100.57	1.85	90.2	Cap
7 Apr 2023	20h10m31.29s	-22 33' 05.0"	34.742	34.958	14.6	76.7	1.6	-19.97	101.30	1.78	90.7	Cap
8 Apr 2023	20h10m34.33s	-22 33' 05.4"	34.742	34.942	14.6	77.7	1.6	-19.38	102.02	1.72	91.3	Cap
9 Apr 2023	20h10m37.26s	-22 33' 06.1"	34.743	34.926	14.6	78.7	1.6	-18.80	102.74	1.65	91.9	Cap
10 Apr 2023	20h10m40.06s	-22 33' 07.2"	34.744	34.910	14.6	79.6	1.6	-18.21	103.46	1.58	92.5	Cap
11 Apr 2023	20h10m42.75s	-22 33' 08.7"	34.744	34.894	14.6	80.6	1.6	-17.63	104.19	1.51	93.2	Cap
12 Apr 2023	20h10m45.32s	-22 33' 10.5"	34.745	34.878	14.6	81.6	1.6	-17.05	104.91	1.45	94.0	Cap
13 Apr 2023	20h10m47.78s	-22 33' 12.7"	34.746	34.862	14.6	82.5	1.6	-16.47	105.63	1.38	94.8	Cap
14 Apr 2023	20h10m50.11s	-22 33' 15.3"	34.746	34.845	14.6	83.5	1.6	-15.89	106.35	1.31	95.8	Cap
15 Apr 2023	20h10m52.32s	-22 33' 18.3"	34.747	34.829	14.6	84.5	1.6	-15.31	107.07	1.24	96.8	Cap
16 Apr 2023	20h10m54.42s	-22 33' 21.7"	34.748	34.813	14.6	85.5	1.6	-14.74	107.79	1.17	98.0	Cap
17 Apr 2023	20h10m56.39s	-22 33' 25.5"	34.748	34.796	14.6	86.4	1.7	-14.17	108.51	1.11	99.3	Cap
18 Apr 2023	20h10m58.24s	-22 33' 29.6"	34.749	34.780	14.6	87.4	1.7	-13.60	109.23	1.04	100.8	Cap
19 Apr 2023	20h10m59.97s	-22 33' 34.1"	34.750	34.764	14.6	88.4	1.7	-13.03	109.96	0.97	102.5	Cap
20 Apr 2023	20h11m01.58s	-22 33' 39.0"	34.750	34.747	14.6	89.3	1.7	-12.47	110.68	0.91	104.5	Cap
21 Apr 2023	20h11m03.06s	-22 33' 44.3"	34.751	34.731	14.6	90.3	1.7	-11.90	111.41	0.84	106.7	Cap
22 Apr 2023	20h11m04.43s	-22 33' 49.9"	34.752	34.715	14.6	91.3	1.7	-11.34	112.13	0.78	109.3	Cap
23 Apr 2023	20h11m05.67s	-22 33' 56.0"	34.752	34.698	14.6	92.3	1.7	-10.79	112.86	0.72	112.4	Cap
24 Apr 2023	20h11m06.79s	-22 34' 02.4"	34.753	34.682	14.6	93.2	1.7	-10.23	113.59	0.66	116.0	Cap
25 Apr 2023	20h11m07.79s	-22 34' 09.2"	34.754	34.666	14.6	94.2	1.7	-9.68	114.32	0.61	120.3	Cap
26 Apr 2023	20h11m08.66s	-22 34' 16.4"	34.754	34.649	14.6	95.2	1.7	-9.13	115.05	0.56	125.3	Cap
27 Apr 2023	20h11m09.42s	-22 34' 23.9"	34.755	34.633	14.6	96.1	1.6	-8.59	115.79	0.51	131.4	Cap
28 Apr 2023	20h11m10.05s	-22 34' 31.9"	34.756	34.617	14.6	97.1	1.6	-8.04	116.52	0.47	138.5	Cap
29 Apr 2023	20h11m10.56s	-22 34' 40.1"	34.756	34.601	14.6	98.1	1.6	-7.51	117.26	0.44	146.7	Cap
30 Apr 2023	20h11m10.95s	-22 34' 48.8"	34.757	34.585	14.6	99.0	1.6	-6.97	118.00	0.42	155.9	Cap
1 Mai 2023	20h11m11.22s	-22 34' 57.8"	34.758	34.568	14.6	100.0	1.6	-6.44	118.75	0.41	165.8	Cap
2 Mai 2023	20h11m11.37s	-22 35' 07.2"	34.758	34.552	14.6	101.0	1.6	-5.91	119.49	0.41	175.7	Cap
3 Mai 2023	20h11m11.40s	-22 35' 17.0"	34.759	34.536	14.6	102.0	1.6	-5.39	120.24	0.43	185.2	Cap
4 Mai 2023	20h11m11.31s	-22 35' 27.1"	34.760	34.520	14.6	102.9	1.6	-4.86	120.99	0.46	193.8	Cap
5 Mai 2023	20h11m11.10s	-22 35' 37.6"	34.760	34.505	14.6	103.9	1.6	-4.35	121.74	0.49	201.3	Cap
6 Mai 2023	20h11m10.77s	-22 35' 48.4"	34.761	34.489	14.6	104.9	1.6	-3.83	122.50	0.53	207.6	Cap
7 Mai 2023	20h11m10.32s	-22 35' 59.6"	34.762	34.473	14.6	105.8	1.6	-3.33	123.25	0.58	213.0	Cap
8 Mai 2023	20h11m09.76s	-22 36' 11.1"	34.762	34.457	14.6	106.8	1.6	-2.82	124.02	0.63	217.5	Cap
9 Mai 2023	20h11m09.07s	-22 36' 23.0"	34.763	34.442	14.6	107.8	1.6	-2.32	124.78	0.69	221.3	Cap
10 Mai 2023	20h11m08.27s	-22 36' 35.2"	34.764	34.426	14.6	108.7	1.6	-1.83	125.55	0.74	224.6	Cap
11 Mai 2023	20h11m07.36s	-22 36' 47.7"	34.765	34.411	14.6	109.7	1.6	-1.33	126.32	0.80	227.3	Cap
12 Mai 2023	20h11m06.32s	-22 37' 00.6"	34.765	34.396	14.6	110.7	1.6	-0.85	127.09	0.86	229.7	Cap
13 Mai 2023	20h11m05.17s	-22 37' 13.8"	34.766	34.380	14.6	111.6	1.5	-0.37	127.87	0.92	231.8	Cap
14 Mai 2023	20h11m03.90s	-22 37' 27.4"	34.767	34.365	14.6	112.6	1.5	0.11	128.65	0.98	233.6	Cap
15 Mai 2023	20h11m02.52s	-22 37' 41.3"	34.767	34.350	14.6	113.6	1.5	0.58	129.44	1.05	235.2	Cap
16 Mai 2023	20h11m01.02s	-22 37' 55.5"	34.768	34.336	14.6	114.6	1.5	1.05	130.23	1.11	236.6	Cap
17 Mai 2023	20h10m59.41s	-22 38' 10.0"	34.769	34.321	14.6	115.5	1.5	1.51	131.02	1.17	237.8	Cap
18 Mai 2023	20h10m57.69s	-22 38' 24.9"	34.769	34.306	14.6	116.5	1.5	1.96	131.81	1.23	238.9	Cap
19 Mai 2023	20h10m55.85s	-22 38' 40.1"	34.770	34.292	14.6	117.5	1.5	2.41	132.61	1.30	239.9	Cap
20 Mai 2023	20h10m53.90s	-22 38' 55.6"	34.771	34.277	14.6	118.4	1.5	2.86	133.42	1.36	240.8	Cap
21 Mai 2023	20h10m51.84s	-22 39' 11.3"	34.771	34.263	14.6	119.4	1.5	3.30	134.23	1.42	241.6	Cap
22 Mai 2023	20h10m49.67s	-22 39' 27.4"	34.772	34.249	14.6	120.4	1.4	3.73	135.04	1.48	242.4	Cap
23 Mai 2023	20h10m47.39s	-22 39' 43.8"	34.773	34.235	14.6	121.4	1.4	4.15	135.85	1.55	243.1	Cap
24 Mai 2023	20h10m45.00s	-22 40' 00.5"	34.773	34.221	14.6	122.3	1.4	4.58	136.67	1.61	243.7	Cap
25 Mai 2023	20h10m42.51s	-22 40' 17.5"	34.774	34.208	14.6	123.3	1.4	4.99	137.50	1.67	244.3	Cap
26 Mai 2023	20h10m39.91s	-22 40' 34.7"	34.775	34.194	14.6	124.3	1.4	5.40	138.32	1.73	244.8	Cap
27 Mai 2023	20h10m37.21s	-22 40' 52.2"	34.775	34.181	14.6	125.2	1.4	5.80	139.16	1.79	245.3	Cap
28 Mai 2023	20h10m34.41s	-22 41' 10.0"	34.776	34.168	14.6	126.2	1.3	6.19	139.99	1.84	245.8	Cap

# EPHEMERIDE 2023 – Pluto

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
-----	--	-----	-	-----	---	-----	-----	-----	-----	-----	-----	-----
29 Mai 2023	20h10m31.50s	-22 41' 28.1"	34.777	34.155	14.6	127.2	1.3	6.58	140.83	1.90	246.2	Cap
30 Mai 2023	20h10m28.49s	-22 41' 46.4"	34.777	34.142	14.6	128.1	1.3	6.96	141.68	1.96	246.6	Cap
31 Mai 2023	20h10m25.38s	-22 42' 05.0"	34.778	34.130	14.6	129.1	1.3	7.33	142.53	2.02	247.0	Cap
1 Jun 2023	20h10m22.18s	-22 42' 23.8"	34.779	34.117	14.6	130.1	1.3	7.70	143.38	2.07	247.3	Cap
2 Jun 2023	20h10m18.88s	-22 42' 42.9"	34.779	34.105	14.6	131.1	1.3	8.06	144.24	2.13	247.7	Cap
3 Jun 2023	20h10m15.48s	-22 43' 02.2"	34.780	34.093	14.6	132.0	1.2	8.41	145.10	2.18	248.0	Cap
4 Jun 2023	20h10m11.99s	-22 43' 21.8"	34.781	34.081	14.6	133.0	1.2	8.75	145.97	2.24	248.3	Cap
5 Jun 2023	20h10m08.41s	-22 43' 41.5"	34.781	34.069	14.6	134.0	1.2	9.09	146.84	2.29	248.6	Cap
6 Jun 2023	20h10m04.73s	-22 44' 01.5"	34.782	34.058	14.6	134.9	1.2	9.42	147.71	2.34	248.8	Cap
7 Jun 2023	20h10m00.97s	-22 44' 21.7"	34.783	34.047	14.6	135.9	1.2	9.74	148.59	2.39	249.1	Cap
8 Jun 2023	20h09m57.11s	-22 44' 42.1"	34.783	34.036	14.6	136.9	1.1	10.05	149.47	2.44	249.3	Cap
9 Jun 2023	20h09m53.17s	-22 45' 02.8"	34.784	34.025	14.6	137.8	1.1	10.36	150.36	2.49	249.6	Cap
10 Jun 2023	20h09m49.14s	-22 45' 23.6"	34.785	34.014	14.6	138.8	1.1	10.65	151.25	2.54	249.8	Cap
11 Jun 2023	20h09m45.03s	-22 45' 44.6"	34.785	34.004	14.6	139.8	1.1	10.94	152.15	2.59	250.0	Cap
12 Jun 2023	20h09m40.83s	-22 46' 05.8"	34.786	33.994	14.6	140.8	1.1	11.22	153.05	2.64	250.2	Cap
13 Jun 2023	20h09m36.55s	-22 46' 27.2"	34.787	33.984	14.6	141.7	1.0	11.49	153.95	2.69	250.4	Cap
14 Jun 2023	20h09m32.19s	-22 46' 48.7"	34.787	33.974	14.6	142.7	1.0	11.75	154.86	2.73	250.6	Cap
15 Jun 2023	20h09m27.75s	-22 47' 10.5"	34.788	33.965	14.6	143.7	1.0	12.00	155.77	2.78	250.8	Cap
16 Jun 2023	20h09m23.23s	-22 47' 32.4"	34.789	33.955	14.6	144.6	1.0	12.25	156.68	2.82	250.9	Cap
17 Jun 2023	20h09m18.64s	-22 47' 54.4"	34.789	33.946	14.6	145.6	0.9	12.48	157.60	2.86	251.1	Cap
18 Jun 2023	20h09m13.97s	-22 48' 16.6"	34.790	33.938	14.6	146.6	0.9	12.71	158.52	2.90	251.3	Cap
19 Jun 2023	20h09m09.24s	-22 48' 39.0"	34.791	33.929	14.6	147.5	0.9	12.92	159.45	2.94	251.4	Cap
20 Jun 2023	20h09m04.43s	-22 49' 01.4"	34.791	33.921	14.5	148.5	0.9	13.13	160.37	2.98	251.6	Cap
21 Jun 2023	20h08m59.55s	-22 49' 24.0"	34.792	33.913	14.5	149.5	0.8	13.33	161.30	3.02	251.7	Cap
22 Jun 2023	20h08m54.61s	-22 49' 46.8"	34.793	33.905	14.5	150.5	0.8	13.51	162.24	3.06	251.9	Cap
23 Jun 2023	20h08m49.60s	-22 50' 09.6"	34.793	33.897	14.5	151.4	0.8	13.69	163.18	3.10	252.0	Cap
24 Jun 2023	20h08m44.54s	-22 50' 32.6"	34.794	33.890	14.5	152.4	0.8	13.86	164.12	3.13	252.1	Cap
25 Jun 2023	20h08m39.41s	-22 50' 55.6"	34.795	33.883	14.5	153.4	0.8	14.02	165.06	3.16	252.2	Cap
26 Jun 2023	20h08m34.22s	-22 51' 18.8"	34.795	33.876	14.5	154.3	0.7	14.17	166.00	3.20	252.4	Cap
27 Jun 2023	20h08m28.98s	-22 51' 42.0"	34.796	33.870	14.5	155.3	0.7	14.31	166.95	3.23	252.5	Cap
28 Jun 2023	20h08m23.68s	-22 52' 05.3"	34.797	33.864	14.5	156.3	0.7	14.44	167.90	3.26	252.6	Cap
29 Jun 2023	20h08m18.33s	-22 52' 28.7"	34.797	33.858	14.5	157.2	0.6	14.56	168.85	3.29	252.7	Cap
30 Jun 2023	20h08m12.93s	-22 52' 52.1"	34.798	33.852	14.5	158.2	0.6	14.66	169.81	3.31	252.8	Cap
1 Jul 2023	20h08m07.48s	-22 53' 15.6"	34.799	33.847	14.5	159.2	0.6	14.76	170.76	3.34	252.9	Cap
2 Jul 2023	20h08m01.99s	-22 53' 39.2"	34.799	33.842	14.5	160.1	0.6	14.85	171.72	3.37	253.0	Cap
3 Jul 2023	20h07m56.45s	-22 54' 02.7"	34.800	33.837	14.5	161.1	0.5	14.93	172.68	3.39	253.1	Cap
4 Jul 2023	20h07m50.87s	-22 54' 26.4"	34.801	33.832	14.5	162.1	0.5	15.00	173.64	3.41	253.2	Cap
5 Jul 2023	20h07m45.24s	-22 54' 50.0"	34.801	33.828	14.5	163.0	0.5	15.05	174.60	3.43	253.3	Cap
6 Jul 2023	20h07m39.58s	-22 55' 13.7"	34.802	33.824	14.5	164.0	0.5	15.10	175.56	3.46	253.4	Cap
7 Jul 2023	20h07m33.89s	-22 55' 37.4"	34.803	33.820	14.5	165.0	0.4	15.14	176.52	3.48	253.5	Cap
8 Jul 2023	20h07m28.15s	-22 56' 01.1"	34.803	33.816	14.5	165.9	0.4	15.16	177.49	3.49	253.6	Cap
9 Jul 2023	20h07m22.39s	-22 56' 24.8"	34.804	33.813	14.5	166.9	0.4	15.18	178.45	3.51	253.7	Sgr
10 Jul 2023	20h07m16.59s	-22 56' 48.5"	34.805	33.810	14.5	167.8	0.4	15.18	179.41	3.53	253.8	Sgr
11 Jul 2023	20h07m10.76s	-22 57' 12.2"	34.806	33.808	14.5	168.8	0.3	15.18	180.38	3.54	253.9	Sgr
12 Jul 2023	20h07m04.91s	-22 57' 35.9"	34.806	33.805	14.5	169.7	0.3	15.16	181.34	3.56	253.9	Sgr
13 Jul 2023	20h06m59.03s	-22 57' 59.6"	34.807	33.803	14.5	170.7	0.3	15.13	182.30	3.57	254.0	Sgr
14 Jul 2023	20h06m53.14s	-22 58' 23.2"	34.808	33.802	14.5	171.6	0.2	15.10	183.27	3.58	254.1	Sgr
15 Jul 2023	20h06m47.22s	-22 58' 46.8"	34.808	33.800	14.5	172.5	0.2	15.05	184.23	3.59	254.2	Sgr
16 Jul 2023	20h06m41.28s	-22 59' 10.3"	34.809	33.799	14.5	173.4	0.2	14.99	185.19	3.60	254.3	Sgr
17 Jul 2023	20h06m35.33s	-22 59' 33.8"	34.810	33.798	14.5	174.3	0.2	14.92	186.15	3.60	254.3	Sgr
18 Jul 2023	20h06m29.36s	-22 59' 57.3"	34.810	33.797	14.5	175.1	0.1	14.85	187.11	3.61	254.4	Sgr
19 Jul 2023	20h06m23.38s	-23 00' 20.6"	34.811	33.797	14.5	175.9	0.1	14.76	188.07	3.61	254.5	Sgr
20 Jul 2023	20h06m17.40s	-23 00' 43.9"	34.812	33.797	14.5	176.6	0.1	14.66	189.03	3.62	254.5	Sgr
21 Jul 2023	20h06m11.41s	-23 01' 07.1"	34.812	33.797	14.5	177.1	0.1	14.55	189.98	3.62	254.6	Sgr
22 Jul 2023	20h06m05.41s	-23 01' 30.3"	34.813	33.798	14.5	177.3	0.1	14.43	190.93	3.62	254.7	Sgr
23 Jul 2023	20h05m59.42s	-23 01' 53.3"	34.814	33.799	14.5	177.2	0.1	14.30	191.89	3.62	254.7	Sgr
24 Jul 2023	20h05m53.42s	-23 02' 16.2"	34.814	33.800	14.5	176.8	0.1	14.16	192.84	3.61	254.8	Sgr
25 Jul 2023	20h05m47.43s	-23 02' 39.0"	34.815	33.801	14.5	176.1	0.1	14.01	193.78	3.61	254.9	Sgr
26 Jul 2023	20h05m41.44s	-23 03' 01.7"	34.816	33.803	14.5	175.4	0.1	13.85	194.73	3.60	254.9	Sgr
27 Jul 2023	20h05m35.46s	-23 03' 24.3"	34.816	33.805	14.5	174.5	0.2	13.68	195.67	3.60	255.0	Sgr
28 Jul 2023	20h05m29.50s	-23 03' 46.8"	34.817	33.807	14.5	173.7	0.2	13.50	196.61	3.59	255.1	Sgr
29 Jul 2023	20h05m23.54s	-23 04' 09.1"	34.818	33.810	14.5	172.8	0.2	13.31	197.54	3.58	255.1	Sgr
30 Jul 2023	20h05m17.60s	-23 04' 31.2"	34.818	33.813	14.5	171.9	0.2	13.11	198.48	3.57	255.2	Sgr
31 Jul 2023	20h05m11.67s	-23 04' 53.3"	34.819	33.816	14.5	170.9	0.3	12.91	199.41	3.56	255.2	Sgr
1 Aug 2023	20h05m05.76s	-23 05' 15.1"	34.820	33.820	14.5	170.0	0.3	12.69	200.33	3.54	255.3	Sgr
2 Aug 2023	20h04m59.87s	-23 05' 36.9"	34.820	33.823	14.5	169.0	0.3	12.46	201.26	3.53	255.3	Sgr
3 Aug 2023	20h04m54.01s	-23 05' 58.4"	34.821	33.827	14.5	168.1	0.3	12.22	202.18	3.51	255.4	Sgr
4 Aug 2023	20h04m48.17s	-23 06' 19.8"	34.822	33.832	14.5	167.1	0.4	11.98	203.09	3.50	255.5	Sgr
5 Aug 2023	20h04m42.35s	-23 06' 41.0"	34.822	33.836	14.5	166.2	0.4	11.72	204.01	3.48	255.5	Sgr
6 Aug 2023	20h04m36.57s	-23 07' 02.0"	34.823	33.841	14.5	165.2	0.4	11.46	204.92	3.46	255.6	Sgr
7 Aug 2023	20h04m30.81s	-23 07' 22.8"	34.824	33.846	14.5	164.2	0.5	11.19	205.82	3.44	255.6	Sgr
8 Aug 2023	20h04m25.09s	-23 07' 43.5"	34.824	33.852	14.5	163.3	0.5	10.91	206.72	3.42	255.7	Sgr
9 Aug 2023	20h04m19.40s	-23 08' 03.9"	34.825	33.858	14.5	162.3	0.5	10.62	207.62	3.40	255.7	Sgr
10 Aug 2023	20h04m13.75s	-23 08' 24.2"	34.826	33.864	14.5	161.3	0.5	10.32	208.52	3.37	255.8	Sgr

# EPHEMERIDE 2023 – Pluto

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
-----	--	-----	-	-----	---	-----	-----	-----	-----	-----	-----	-----
11 Aug 2023	20h04m08.14s	-23 08' 44.2"	34.826	33.870	14.5	160.4	0.6	10.01	209.41	3.35	255.8	Sgr
12 Aug 2023	20h04m02.56s	-23 09' 04.0"	34.827	33.876	14.5	159.4	0.6	9.70	210.29	3.32	255.9	Sgr
13 Aug 2023	20h03m57.04s	-23 09' 23.6"	34.828	33.883	14.5	158.4	0.6	9.38	211.18	3.29	255.9	Sgr
14 Aug 2023	20h03m51.56s	-23 09' 43.0"	34.828	33.890	14.6	157.5	0.6	9.05	212.05	3.26	256.0	Sgr
15 Aug 2023	20h03m46.12s	-23 10' 02.1"	34.829	33.898	14.6	156.5	0.7	8.71	212.93	3.23	256.0	Sgr
16 Aug 2023	20h03m40.74s	-23 10' 21.0"	34.830	33.906	14.6	155.5	0.7	8.36	213.80	3.20	256.1	Sgr
17 Aug 2023	20h03m35.41s	-23 10' 39.7"	34.830	33.913	14.6	154.5	0.7	8.01	214.66	3.17	256.1	Sgr
18 Aug 2023	20h03m30.14s	-23 10' 58.1"	34.831	33.922	14.6	153.5	0.7	7.64	215.52	3.13	256.2	Sgr
19 Aug 2023	20h03m24.92s	-23 11' 16.3"	34.832	33.930	14.6	152.6	0.8	7.27	216.38	3.10	256.2	Sgr
20 Aug 2023	20h03m19.76s	-23 11' 34.2"	34.832	33.939	14.6	151.6	0.8	6.90	217.23	3.06	256.2	Sgr
21 Aug 2023	20h03m14.66s	-23 11' 51.8"	34.833	33.948	14.6	150.6	0.8	6.51	218.08	3.02	256.3	Sgr
22 Aug 2023	20h03m09.62s	-23 12' 09.2"	34.834	33.957	14.6	149.6	0.8	6.12	218.93	2.98	256.3	Sgr
23 Aug 2023	20h03m04.65s	-23 12' 26.3"	34.834	33.967	14.6	148.7	0.9	5.73	219.77	2.94	256.4	Sgr
24 Aug 2023	20h03m04.75s	-23 12' 43.1"	34.835	33.976	14.6	147.7	0.9	5.32	220.60	2.90	256.4	Sgr
25 Aug 2023	20h02m54.91s	-23 12' 59.6"	34.836	33.986	14.6	146.7	0.9	4.91	221.43	2.86	256.5	Sgr
26 Aug 2023	20h02m50.15s	-23 13' 15.9"	34.836	33.997	14.6	145.7	0.9	4.49	222.26	2.82	256.5	Sgr
27 Aug 2023	20h02m45.45s	-23 13' 31.9"	34.837	34.007	14.6	144.7	1.0	4.07	223.08	2.77	256.5	Sgr
28 Aug 2023	20h02m40.83s	-23 13' 47.5"	34.838	34.018	14.6	143.8	1.0	3.64	223.90	2.73	256.6	Sgr
29 Aug 2023	20h02m36.29s	-23 14' 02.9"	34.838	34.029	14.6	142.8	1.0	3.20	224.72	2.68	256.6	Sgr
30 Aug 2023	20h02m31.82s	-23 14' 18.0"	34.839	34.040	14.6	141.8	1.0	2.76	225.53	2.64	256.7	Sgr
31 Aug 2023	20h02m27.43s	-23 14' 32.8"	34.840	34.051	14.6	140.8	1.0	2.31	226.34	2.59	256.7	Sgr
1 Sep 2023	20h02m23.13s	-23 14' 47.2"	34.840	34.063	14.6	139.8	1.1	1.86	227.14	2.54	256.7	Sgr
2 Sep 2023	20h02m18.90s	-23 15' 01.4"	34.841	34.075	14.6	138.9	1.1	1.40	227.94	2.49	256.8	Sgr
3 Sep 2023	20h02m14.75s	-23 15' 15.3"	34.842	34.087	14.6	137.9	1.1	0.93	228.74	2.44	256.8	Sgr
4 Sep 2023	20h02m10.70s	-23 15' 28.8"	34.843	34.099	14.6	136.9	1.1	0.46	229.53	2.39	256.9	Sgr
5 Sep 2023	20h02m06.72s	-23 15' 42.0"	34.843	34.112	14.6	135.9	1.2	-0.02	230.32	2.33	256.9	Sgr
6 Sep 2023	20h02m02.84s	-23 15' 55.0"	34.844	34.124	14.6	134.9	1.2	-0.50	231.10	2.28	256.9	Sgr
7 Sep 2023	20h01m59.04s	-23 16' 07.5"	34.845	34.137	14.6	133.9	1.2	-0.98	231.88	2.23	257.0	Sgr
8 Sep 2023	20h01m55.34s	-23 16' 19.8"	34.845	34.151	14.6	133.0	1.2	-1.47	232.66	2.17	257.0	Sgr
9 Sep 2023	20h01m51.73s	-23 16' 31.7"	34.846	34.164	14.6	132.0	1.2	-1.97	233.44	2.11	257.0	Sgr
10 Sep 2023	20h01m48.21s	-23 16' 43.3"	34.847	34.177	14.6	131.0	1.3	-2.47	234.21	2.06	257.1	Sgr
11 Sep 2023	20h01m44.79s	-23 16' 54.6"	34.847	34.191	14.6	130.0	1.3	-2.97	234.98	2.00	257.1	Sgr
12 Sep 2023	20h01m41.47s	-23 17' 05.5"	34.848	34.205	14.6	129.0	1.3	-3.48	235.74	1.94	257.1	Sgr
13 Sep 2023	20h01m38.24s	-23 17' 16.1"	34.849	34.219	14.6	128.0	1.3	-4.00	236.51	1.88	257.2	Sgr
14 Sep 2023	20h01m35.12s	-23 17' 26.3"	34.849	34.234	14.6	127.1	1.3	-4.52	237.26	1.82	257.2	Sgr
15 Sep 2023	20h01m32.10s	-23 17' 36.2"	34.850	34.248	14.6	126.1	1.3	-5.04	238.02	1.76	257.2	Sgr
16 Sep 2023	20h01m29.18s	-23 17' 45.8"	34.851	34.263	14.6	125.1	1.4	-5.56	238.78	1.70	257.2	Sgr
17 Sep 2023	20h01m26.37s	-23 17' 55.0"	34.851	34.277	14.6	124.1	1.4	-6.09	239.53	1.63	257.3	Sgr
18 Sep 2023	20h01m23.66s	-23 18' 03.8"	34.852	34.292	14.6	123.1	1.4	-6.63	240.28	1.57	257.3	Sgr
19 Sep 2023	20h01m21.06s	-23 18' 12.3"	34.853	34.308	14.6	122.1	1.4	-7.17	241.02	1.51	257.3	Sgr
20 Sep 2023	20h01m18.57s	-23 18' 20.4"	34.853	34.323	14.6	121.2	1.4	-7.71	241.77	1.44	257.4	Sgr
21 Sep 2023	20h01m16.18s	-23 18' 28.2"	34.854	34.338	14.6	120.2	1.4	-8.25	242.51	1.37	257.4	Sgr
22 Sep 2023	20h01m13.91s	-23 18' 35.6"	34.855	34.354	14.6	119.2	1.4	-8.80	243.25	1.31	257.4	Sgr
23 Sep 2023	20h01m11.75s	-23 18' 42.7"	34.855	34.370	14.6	118.2	1.5	-9.35	243.99	1.24	257.4	Sgr
24 Sep 2023	20h01m09.70s	-23 18' 49.4"	34.856	34.386	14.6	117.2	1.5	-9.90	244.73	1.18	257.5	Sgr
25 Sep 2023	20h01m07.76s	-23 18' 55.7"	34.857	34.402	14.6	116.2	1.5	-10.46	245.46	1.11	257.5	Sgr
26 Sep 2023	20h01m05.94s	-23 19' 01.7"	34.857	34.418	14.6	115.2	1.5	-11.02	246.19	1.04	257.5	Sgr
27 Sep 2023	20h01m04.23s	-23 19' 07.3"	34.858	34.434	14.6	114.3	1.5	-11.58	246.93	0.97	257.5	Sgr
28 Sep 2023	20h01m02.64s	-23 19' 12.5"	34.859	34.450	14.6	113.3	1.5	-12.15	247.66	0.90	257.6	Sgr
29 Sep 2023	20h01m01.16s	-23 19' 17.4"	34.859	34.467	14.6	112.3	1.5	-12.72	248.39	0.83	257.6	Sgr
30 Sep 2023	20h00m59.80s	-23 19' 22.0"	34.860	34.484	14.6	111.3	1.5	-13.29	249.11	0.77	257.6	Sgr
1 Okt 2023	20h00m58.55s	-23 19' 26.1"	34.861	34.500	14.6	110.3	1.5	-13.86	249.84	0.70	257.6	Sgr
2 Okt 2023	20h00m57.43s	-23 19' 29.9"	34.861	34.517	14.6	109.3	1.6	-14.44	250.57	0.63	257.6	Sgr
3 Okt 2023	20h00m56.42s	-23 19' 33.4"	34.862	34.534	14.6	108.3	1.6	-15.01	251.29	0.56	257.6	Sgr
4 Okt 2023	20h00m55.53s	-23 19' 36.5"	34.863	34.551	14.6	107.4	1.6	-15.59	252.02	0.48	257.6	Sgr
5 Okt 2023	20h00m54.76s	-23 19' 39.2"	34.863	34.568	14.6	106.4	1.6	-16.17	252.75	0.41	257.6	Sgr
6 Okt 2023	20h00m54.11s	-23 19' 41.5"	34.864	34.585	14.6	105.4	1.6	-16.76	253.47	0.34	257.5	Sgr
7 Okt 2023	20h00m53.58s	-23 19' 43.5"	34.865	34.603	14.6	104.4	1.6	-17.34	254.20	0.27	257.4	Sgr
8 Okt 2023	20h00m53.17s	-23 19' 45.1"	34.865	34.620	14.6	103.4	1.6	-17.93	254.92	0.20	257.2	Sgr
9 Okt 2023	20h00m52.88s	-23 19' 46.4"	34.866	34.637	14.6	102.4	1.6	-18.52	255.65	0.12	256.8	Sgr
10 Okt 2023	20h00m52.72s	-23 19' 47.3"	34.867	34.655	14.6	101.4	1.6	-19.11	256.37	0.05	255.1	Sgr
11 Okt 2023	20h00m52.68s	-23 19' 47.8"	34.867	34.672	14.6	100.5	1.6	-19.70	257.10	0.02	85.2	Sgr
12 Okt 2023	20h00m52.77s	-23 19' 48.0"	34.868	34.690	14.6	99.5	1.6	-20.29	257.83	0.09	79.7	Sgr
13 Okt 2023	20h00m52.97s	-23 19' 47.8"	34.869	34.708	14.6	98.5	1.6	-20.89	258.56	0.17	79.0	Sgr
14 Okt 2023	20h00m53.31s	-23 19' 47.2"	34.869	34.725	14.6	97.5	1.6	-21.48	259.29	0.24	78.8	Sgr
15 Okt 2023	20h00m53.76s	-23 19' 46.3"	34.870	34.743	14.6	96.5	1.6	-22.08	260.02	0.32	78.7	Sgr
16 Okt 2023	20h00m54.35s	-23 19' 45.0"	34.871	34.761	14.6	95.5	1.6	-22.68	260.75	0.39	78.6	Sgr
17 Okt 2023	20h00m55.05s	-23 19' 43.3"	34.871	34.779	14.6	94.5	1.6	-23.28	261.49	0.46	78.6	Sgr
18 Okt 2023	20h00m55.88s	-23 19' 41.3"	34.872	34.796	14.6	93.5	1.6	-23.88	262.22	0.54	78.5	Sgr
19 Okt 2023	20h00m56.84s	-23 19' 39.0"	34.873	34.814	14.6	92.6	1.6	-24.47	262.96	0.61	78.5	Sgr
20 Okt 2023	20h00m57.92s	-23 19' 36.2"	34.873	34.832	14.6	91.6	1.6	-25.07	263.70	0.68	78.5	Sgr
21 Okt 2023	20h00m59.13s	-23 19' 33.1"	34.874	34.850	14.6	90.6	1.6	-25.68	264.44	0.76	78.5	Sgr
22 Okt 2023	20h01m00.46s	-23 19' 29.7"	34.875	34.868	14.6	89.6	1.6	-26.28	265.19	0.83	78.5	Sgr
23 Okt 2023	20h01m01.91s	-23 19' 25.9"	34.876	34.886	14.6	88.6	1.6	-26.88	265.94	0.91	78.5	Sgr

# EPHEMERIDE 2023 – Pluto

Datum	RA	Deklination	r	delta	mag	Elong	Phase	Höhe	Az.	Gesch.	PA	Stb
-----	--	-----	-	-----	-----	-----	-----	-----	-----	-----	-----	-----
24 Okt 2023	20h01m03.49s	-23 19' 21.8"	34.876	34.903	14.6	87.6	1.6	-27.48	266.69	0.98	78.5	Sgr
25 Okt 2023	20h01m05.19s	-23 19' 17.3"	34.877	34.921	14.6	86.6	1.6	-28.08	267.45	1.05	78.5	Sgr
26 Okt 2023	20h01m07.02s	-23 19' 12.5"	34.878	34.939	14.6	85.6	1.6	-28.68	268.20	1.12	78.6	Sgr
27 Okt 2023	20h01m08.97s	-23 19' 07.3"	34.878	34.957	14.6	84.6	1.6	-29.28	268.97	1.20	78.6	Sgr
28 Okt 2023	20h01m11.04s	-23 19' 01.8"	34.879	34.975	14.6	83.7	1.6	-29.89	269.73	1.27	78.6	Sgr
29 Okt 2023	20h01m13.23s	-23 18' 56.0"	34.880	34.992	14.6	82.7	1.6	-30.49	270.50	1.34	78.6	Sgr
30 Okt 2023	20h01m15.55s	-23 18' 49.8"	34.880	35.010	14.6	81.7	1.6	-31.09	271.28	1.41	78.6	Sgr
31 Okt 2023	20h01m17.98s	-23 18' 43.3"	34.881	35.028	14.6	80.7	1.6	-31.69	272.06	1.48	78.6	Sgr
1 Nov 2023	20h01m20.54s	-23 18' 36.4"	34.882	35.045	14.6	79.7	1.6	-32.29	272.84	1.55	78.7	Sgr
2 Nov 2023	20h01m23.22s	-23 18' 29.3"	34.882	35.063	14.6	78.7	1.6	-32.88	273.64	1.63	78.7	Sgr
3 Nov 2023	20h01m26.01s	-23 18' 21.8"	34.883	35.080	14.6	77.7	1.6	-33.48	274.43	1.70	78.7	Sgr
4 Nov 2023	20h01m28.93s	-23 18' 13.9"	34.884	35.098	14.6	76.7	1.6	-34.08	275.23	1.77	78.7	Sgr
5 Nov 2023	20h01m31.97s	-23 18' 05.8"	34.884	35.115	14.6	75.8	1.6	-34.67	276.04	1.84	78.7	Sgr
6 Nov 2023	20h01m35.13s	-23 17' 57.3"	34.885	35.132	14.6	74.8	1.6	-35.27	276.86	1.91	78.7	Sgr
7 Nov 2023	20h01m38.40s	-23 17' 48.6"	34.886	35.150	14.6	73.8	1.6	-35.86	277.68	1.98	78.8	Sgr
8 Nov 2023	20h01m41.79s	-23 17' 39.5"	34.886	35.167	14.6	72.8	1.6	-36.45	278.51	2.05	78.8	Sgr
9 Nov 2023	20h01m45.30s	-23 17' 30.0"	34.887	35.184	14.6	71.8	1.5	-37.04	279.34	2.12	78.8	Sgr
10 Nov 2023	20h01m48.93s	-23 17' 20.3"	34.888	35.201	14.6	70.8	1.5	-37.63	280.19	2.18	78.8	Sgr
11 Nov 2023	20h01m52.67s	-23 17' 10.3"	34.888	35.218	14.6	69.8	1.5	-38.21	281.04	2.25	78.8	Sgr
12 Nov 2023	20h01m56.53s	-23 17' 00.0"	34.889	35.234	14.6	68.8	1.5	-38.80	281.90	2.32	78.8	Sgr
13 Nov 2023	20h02m00.50s	-23 16' 49.3"	34.890	35.251	14.6	67.8	1.5	-39.38	282.77	2.39	78.9	Sgr
14 Nov 2023	20h02m04.59s	-23 16' 38.4"	34.890	35.267	14.6	66.9	1.5	-39.96	283.65	2.45	78.9	Sgr
15 Nov 2023	20h02m08.79s	-23 16' 27.2"	34.891	35.284	14.6	65.9	1.5	-40.53	284.53	2.52	78.9	Sgr
16 Nov 2023	20h02m13.10s	-23 16' 15.7"	34.892	35.300	14.6	64.9	1.5	-41.11	285.43	2.58	78.9	Sgr
17 Nov 2023	20h02m17.52s	-23 16' 03.8"	34.892	35.316	14.6	63.9	1.5	-41.68	286.34	2.65	78.9	Sgr
18 Nov 2023	20h02m22.05s	-23 15' 51.8"	34.893	35.332	14.6	62.9	1.4	-42.25	287.26	2.71	78.9	Sgr
19 Nov 2023	20h02m26.68s	-23 15' 39.4"	34.894	35.348	14.6	61.9	1.4	-42.81	288.19	2.78	79.0	Sgr
20 Nov 2023	20h02m31.43s	-23 15' 26.8"	34.894	35.364	14.6	60.9	1.4	-43.37	289.13	2.84	79.0	Sgr
21 Nov 2023	20h02m36.28s	-23 15' 13.8"	34.895	35.380	14.6	59.9	1.4	-43.93	290.08	2.90	79.0	Sgr
22 Nov 2023	20h02m41.23s	-23 15' 00.7"	34.896	35.395	14.6	58.9	1.4	-44.48	291.05	2.96	79.0	Sgr
23 Nov 2023	20h02m46.29s	-23 14' 47.2"	34.896	35.410	14.6	58.0	1.4	-45.03	292.03	3.02	79.0	Sgr
24 Nov 2023	20h02m51.45s	-23 14' 33.5"	34.897	35.426	14.7	57.0	1.4	-45.58	293.02	3.08	79.0	Sgr
25 Nov 2023	20h02m56.71s	-23 14' 19.6"	34.898	35.441	14.7	56.0	1.3	-46.12	294.03	3.14	79.1	Sgr
26 Nov 2023	20h03m02.06s	-23 14' 05.4"	34.898	35.455	14.7	55.0	1.3	-46.66	295.05	3.20	79.1	Sgr
27 Nov 2023	20h03m07.52s	-23 13' 51.0"	34.899	35.470	14.7	54.0	1.3	-47.19	296.09	3.25	79.1	Sgr
28 Nov 2023	20h03m13.07s	-23 13' 36.3"	34.900	35.485	14.7	53.0	1.3	-47.72	297.14	3.31	79.1	Sgr
29 Nov 2023	20h03m18.72s	-23 13' 21.4"	34.900	35.499	14.7	52.0	1.3	-48.24	298.20	3.37	79.1	Sgr
30 Nov 2023	20h03m24.46s	-23 13' 06.2"	34.901	35.513	14.7	51.0	1.3	-48.76	299.29	3.42	79.1	Sgr
1 Dez 2023	20h03m30.30s	-23 12' 50.8"	34.902	35.527	14.7	50.0	1.2	-49.27	300.39	3.48	79.2	Sgr
2 Dez 2023	20h03m36.23s	-23 12' 35.2"	34.902	35.541	14.7	49.1	1.2	-49.77	301.50	3.53	79.2	Sgr
3 Dez 2023	20h03m42.24s	-23 12' 19.4"	34.903	35.554	14.7	48.1	1.2	-50.27	302.64	3.58	79.2	Sgr
4 Dez 2023	20h03m48.35s	-23 12' 03.4"	34.904	35.568	14.7	47.1	1.2	-50.76	303.79	3.63	79.2	Sgr
5 Dez 2023	20h03m54.55s	-23 11' 47.1"	34.904	35.581	14.7	46.1	1.2	-51.25	304.97	3.69	79.2	Sgr
6 Dez 2023	20h04m00.83s	-23 11' 30.7"	34.905	35.594	14.7	45.1	1.1	-51.72	306.16	3.74	79.3	Sgr
7 Dez 2023	20h04m07.19s	-23 11' 14.0"	34.906	35.606	14.7	44.1	1.1	-52.19	307.37	3.79	79.3	Sgr
8 Dez 2023	20h04m13.64s	-23 10' 57.2"	34.907	35.619	14.7	43.1	1.1	-52.66	308.60	3.83	79.3	Sgr
9 Dez 2023	20h04m20.18s	-23 10' 40.1"	34.907	35.631	14.7	42.1	1.1	-53.11	309.85	3.88	79.3	Sgr
10 Dez 2023	20h04m26.79s	-23 10' 22.9"	34.908	35.643	14.7	41.2	1.1	-53.55	311.13	3.93	79.3	Sgr
11 Dez 2023	20h04m33.48s	-23 10' 05.5"	34.909	35.655	14.7	40.2	1.0	-53.99	312.42	3.97	79.3	Sgr
12 Dez 2023	20h04m40.25s	-23 09' 47.9"	34.909	35.667	14.7	39.2	1.0	-54.42	313.74	4.02	79.4	Sgr
13 Dez 2023	20h04m47.10s	-23 09' 30.1"	34.910	35.678	14.7	38.2	1.0	-54.83	315.08	4.06	79.4	Sgr
14 Dez 2023	20h04m54.01s	-23 09' 12.1"	34.911	35.690	14.7	37.2	1.0	-55.24	316.44	4.11	79.4	Sgr
15 Dez 2023	20h05m01.00s	-23 08' 54.0"	34.911	35.701	14.7	36.2	1.0	-55.64	317.83	4.15	79.4	Sgr
16 Dez 2023	20h05m08.07s	-23 08' 35.8"	34.912	35.711	14.7	35.2	0.9	-56.02	319.23	4.19	79.4	Sgr
17 Dez 2023	20h05m15.19s	-23 08' 17.4"	34.913	35.722	14.7	34.2	0.9	-56.40	320.66	4.23	79.4	Sgr
18 Dez 2023	20h05m22.39s	-23 07' 58.8"	34.913	35.732	14.7	33.3	0.9	-56.76	322.12	4.27	79.5	Sgr
19 Dez 2023	20h05m29.65s	-23 07' 40.1"	34.914	35.742	14.7	32.3	0.9	-57.11	323.59	4.30	79.5	Sgr
20 Dez 2023	20h05m36.97s	-23 07' 21.3"	34.915	35.752	14.7	31.3	0.8	-57.45	325.10	4.34	79.5	Sgr
21 Dez 2023	20h05m44.35s	-23 07' 02.3"	34.915	35.761	14.7	30.3	0.8	-57.78	326.62	4.37	79.5	Sgr
22 Dez 2023	20h05m51.80s	-23 06' 43.2"	34.916	35.770	14.7	29.3	0.8	-58.09	328.17	4.41	79.5	Sgr
23 Dez 2023	20h05m59.30s	-23 06' 24.0"	34.917	35.779	14.7	28.3	0.8	-58.39	329.74	4.44	79.6	Sgr
24 Dez 2023	20h06m06.85s	-23 06' 04.7"	34.917	35.788	14.7	27.4	0.7	-58.67	331.33	4.47	79.6	Sgr
25 Dez 2023	20h06m14.46s	-23 05' 45.3"	34.918	35.797	14.7	26.4	0.7	-58.94	332.94	4.50	79.6	Sgr
26 Dez 2023	20h06m22.12s	-23 05' 25.8"	34.919	35.805	14.7	25.4	0.7	-59.20	334.57	4.53	79.6	Sgr
27 Dez 2023	20h06m29.83s	-23 05' 06.2"	34.919	35.813	14.7	24.4	0.7	-59.43	336.23	4.56	79.6	Sgr
28 Dez 2023	20h06m37.58s	-23 04' 46.5"	34.920	35.820	14.7	23.4	0.6	-59.66	337.90	4.59	79.7	Sgr
29 Dez 2023	20h06m45.39s	-23 04' 26.7"	34.921	35.828	14.7	22.4	0.6	-59.87	339.59	4.61	79.7	Sgr
30 Dez 2023	20h06m53.23s	-23 04' 06.8"	34.921	35.835	14.7	21.5	0.6	-60.06	341.30	4.64	79.7	Sgr
31 Dez 2023	20h07m01.13s	-23 03' 46.9"	34.922	35.842	14.7	20.5	0.6	-60.23	343.03	4.66	79.7	Sgr
1 Jan 2024	20h07m09.06s	-23 03' 26.9"	34.923	35.848	14.7	19.5	0.5	-60.39	344.77	4.69	79.7	Sgr