

# Custom Ephemeris

Compiled by: APS

Calculated by: JPL Horizons

Date: 2023-08-26

## 322P (SOHO)

Discovered: 1999-09-04.85423

Orbital Period: 3.99 yrs.

Diameter: 150 m

Perihelion: 2023-08-21, 2:11:24.511 UT

Links:

[SBDB](#)

[MPC](#)

Date	UT	JD	AU	RA	Declination	Latitude	Longitude	Rx
2023-Jan-01	12:00	2459946.0	3.3555	242°30'43.94"	-29°38'49.34"	-8°27'48.57"	6° Sag 04'27.18"	
2023-Jan-02	12:00	2459947.0	3.3481	242°46'46.97"	-29°42'34.04"	-8°28'54.83"	6° Sag 19'00.52"	
2023-Jan-03	12:00	2459948.0	3.3406	243°02'49.03"	-29°46'18.86"	-8°30'02.90"	6° Sag 33'32.45"	
2023-Jan-04	12:00	2459949.0	3.3330	243°18'50.02"	-29°50'03.81"	-8°31'12.83"	6° Sag 48'02.90"	
2023-Jan-05	12:00	2459950.0	3.3255	243°34'49.82"	-29°53'48.92"	-8°32'24.61"	7° Sag 02'31.75"	
2023-Jan-06	12:00	2459951.0	3.3179	243°50'48.31"	-29°57'34.17"	-8°33'38.29"	7° Sag 16'58.90"	
2023-Jan-07	12:00	2459952.0	3.3103	244°06'45.38"	-30°01'19.60"	-8°34'53.87"	7° Sag 31'24.26"	
2023-Jan-08	12:00	2459953.0	3.3026	244°22'40.90"	-30°05'05.19"	-8°36'11.38"	7° Sag 45'47.72"	
2023-Jan-09	12:00	2459954.0	3.2950	244°38'34.76"	-30°08'50.97"	-8°37'30.84"	8° Sag 00'09.17"	
2023-Jan-10	12:00	2459955.0	3.2873	244°54'26.85"	-30°12'36.93"	-8°38'52.28"	8° Sag 14'28.51"	
2023-Jan-11	12:00	2459956.0	3.2796	245°10'17.05"	-30°16'23.08"	-8°40'15.73"	8° Sag 28'45.65"	
2023-Jan-12	12:00	2459957.0	3.2718	245°26'05.25"	-30°20'09.45"	-8°41'41.20"	8° Sag 43'00.49"	
2023-Jan-13	12:00	2459958.0	3.2641	245°41'51.34"	-30°23'56.03"	-8°43'08.73"	8° Sag 57'12.93"	
2023-Jan-14	12:00	2459959.0	3.2563	245°57'35.21"	-30°27'42.85"	-8°44'38.34"	9° Sag 11'22.88"	
2023-Jan-15	12:00	2459960.0	3.2484	246°13'16.75"	-30°31'29.92"	-8°46'10.05"	9° Sag 25'30.24"	
2023-Jan-16	12:00	2459961.0	3.2406	246°28'55.83"	-30°35'17.28"	-8°47'43.90"	9° Sag 39'34.91"	
2023-Jan-17	12:00	2459962.0	3.2327	246°44'32.33"	-30°39'04.94"	-8°49'19.91"	9° Sag 53'36.77"	
2023-Jan-18	12:00	2459963.0	3.2248	247°00'06.07"	-30°42'52.94"	-8°50'58.10"	10° Sag 07'35.70"	
2023-Jan-19	12:00	2459964.0	3.2169	247°15'36.89"	-30°46'41.31"	-8°52'38.51"	10° Sag 21'31.54"	
2023-Jan-20	12:00	2459965.0	3.2089	247°31'04.57"	-30°50'30.06"	-8°54'21.15"	10° Sag 35'24.11"	
2023-Jan-21	12:00	2459966.0	3.2009	247°46'28.90"	-30°54'19.22"	-8°56'06.07"	10° Sag 49'13.23"	
2023-Jan-22	12:00	2459967.0	3.1929	248°01'49.66"	-30°58'08.78"	-8°57'53.28"	11° Sag 02'58.70"	
2023-Jan-23	12:00	2459968.0	3.1849	248°17'06.64"	-31°01'58.75"	-8°59'42.80"	11° Sag 16'40.36"	
2023-Jan-24	12:00	2459969.0	3.1768	248°32'19.71"	-31°05'49.14"	-9°01'34.68"	11° Sag 30'18.08"	
2023-Jan-25	12:00	2459970.0	3.1687	248°47'28.72"	-31°09'39.96"	-9°03'28.94"	11° Sag 43'51.73"	
2023-Jan-26	12:00	2459971.0	3.1606	249°02'33.56"	-31°13'31.24"	-9°05'25.61"	11° Sag 57'21.23"	
2023-Jan-27	12:00	2459972.0	3.1524	249°17'34.11"	-31°17'23.03"	-9°07'24.72"	12° Sag 10'46.48"	
2023-Jan-28	12:00	2459973.0	3.1442	249°32'30.24"	-31°21'15.36"	-9°09'26.30"	12° Sag 24'07.37"	
2023-Jan-29	12:00	2459974.0	3.1360	249°47'21.82"	-31°25'08.29"	-9°11'30.40"	12° Sag 37'23.78"	
2023-Jan-30	12:00	2459975.0	3.1278	250°02'08.68"	-31°29'01.87"	-9°13'37.04"	12° Sag 50'35.60"	
2023-Jan-31	12:00	2459976.0	3.1195	250°16'50.65"	-31°32'56.13"	-9°15'46.27"	13° Sag 03'42.67"	
2023-Feb-01	12:00	2459977.0	3.1112	250°31'27.56"	-31°36'51.13"	-9°17'58.12"	13° Sag 16'44.86"	
2023-Feb-02	12:00	2459978.0	3.1029	250°45'59.23"	-31°40'46.91"	-9°20'12.64"	13° Sag 29'42.01"	
2023-Feb-03	12:00	2459979.0	3.0945	251°00'25.46"	-31°44'43.52"	-9°22'29.87"	13° Sag 42'33.96"	
2023-Feb-04	12:00	2459980.0	3.0861	251°14'46.07"	-31°48'40.99"	-9°24'49.85"	13° Sag 55'20.57"	
2023-Feb-05	12:00	2459981.0	3.0777	251°29'00.87"	-31°52'39.37"	-9°27'12.62"	14° Sag 08'01.66"	
2023-Feb-06	12:00	2459982.0	3.0692	251°43'09.67"	-31°56'38.70"	-9°29'38.24"	14° Sag 20'37.09"	
2023-Feb-07	12:00	2459983.0	3.0607	251°57'12.26"	-32°00'39.04"	-9°32'06.74"	14° Sag 33'06.68"	

2023-Feb-08	12:00	2459984.0	3.0522	252°11'08.47"	-32°04'40.41"	-9°34'38.18"	14° Sag 45'30.29"	
2023-Feb-09	12:00	2459985.0	3.0437	252°24'58.09"	-32°08'42.88"	-9°37'12.60"	14° Sag 57'47.75"	
2023-Feb-10	12:00	2459986.0	3.0351	252°38'40.93"	-32°12'46.50"	-9°39'50.06"	15° Sag 09'58.90"	
2023-Feb-11	12:00	2459987.0	3.0265	252°52'16.78"	-32°16'51.32"	-9°42'30.60"	15° Sag 22'03.57"	
2023-Feb-12	12:00	2459988.0	3.0179	253°05'45.41"	-32°20'57.42"	-9°45'14.29"	15° Sag 34'01.58"	
2023-Feb-13	12:00	2459989.0	3.0092	253°19'06.61"	-32°25'04.85"	-9°48'01.16"	15° Sag 45'52.74"	
2023-Feb-14	12:00	2459990.0	3.0005	253°32'20.11"	-32°29'13.68"	-9°50'51.27"	15° Sag 57'36.84"	
2023-Feb-15	12:00	2459991.0	2.9918	253°45'25.64"	-32°33'23.99"	-9°53'44.69"	16° Sag 09'13.66"	
2023-Feb-16	12:00	2459992.0	2.9830	253°58'22.88"	-32°37'35.84"	-9°56'41.45"	16° Sag 20'42.94"	
2023-Feb-17	12:00	2459993.0	2.9742	254°11'11.50"	-32°41'49.30"	-9°59'41.63"	16° Sag 32'04.40"	
2023-Feb-18	12:00	2459994.0	2.9654	254°23'51.15"	-32°46'04.41"	-10°02'45.26"	16° Sag 43'17.77"	
2023-Feb-19	12:00	2459995.0	2.9565	254°36'21.50"	-32°50'21.24"	-10°05'52.42"	16° Sag 54'22.76"	
2023-Feb-20	12:00	2459996.0	2.9476	254°48'42.23"	-32°54'39.81"	-10°09'03.15"	17° Sag 05'19.10"	
2023-Feb-21	12:00	2459997.0	2.9387	255°00'53.06"	-32°59'00.20"	-10°12'17.52"	17° Sag 16'06.56"	
2023-Feb-22	12:00	2459998.0	2.9297	255°12'53.71"	-33°03'22.45"	-10°15'35.58"	17° Sag 26'44.93"	
2023-Feb-23	12:00	2459999.0	2.9207	255°24'43.93"	-33°07'46.65"	-10°18'57.40"	17° Sag 37'14.01"	
2023-Feb-24	12:00	2460000.0	2.9117	255°36'23.46"	-33°12'12.88"	-10°22'23.04"	17° Sag 47'33.57"	
2023-Feb-25	12:00	2460001.0	2.9026	255°47'52.00"	-33°16'41.24"	-10°25'52.57"	17° Sag 57'43.39"	
2023-Feb-26	12:00	2460002.0	2.8935	255°59'09.25"	-33°21'11.82"	-10°29'26.07"	18° Sag 07'43.23"	
2023-Feb-27	12:00	2460003.0	2.8844	256°10'14.88"	-33°25'44.71"	-10°33'03.59"	18° Sag 17'32.82"	
2023-Feb-28	12:00	2460004.0	2.8753	256°21'08.55"	-33°30'20.00"	-10°36'45.22"	18° Sag 27'11.89"	
2023-Mar-01	12:00	2460005.0	2.8661	256°31'49.90"	-33°34'57.80"	-10°40'31.03"	18° Sag 36'40.16"	
2023-Mar-02	12:00	2460006.0	2.8568	256°42'18.57"	-33°39'38.18"	-10°44'21.10"	18° Sag 45'57.32"	
2023-Mar-03	12:00	2460007.0	2.8476	256°52'34.18"	-33°44'21.24"	-10°48'15.52"	18° Sag 55'03.09"	
2023-Mar-04	12:00	2460008.0	2.8383	257°02'36.35"	-33°49'07.06"	-10°52'14.36"	19° Sag 03'57.16"	
2023-Mar-05	12:00	2460009.0	2.8289	257°12'24.68"	-33°53'55.75"	-10°56'17.72"	19° Sag 12'39.21"	
2023-Mar-06	12:00	2460010.0	2.8195	257°21'58.77"	-33°58'47.39"	-11°00'25.67"	19° Sag 21'08.92"	
2023-Mar-07	12:00	2460011.0	2.8101	257°31'18.20"	-34°03'42.07"	-11°04'38.31"	19° Sag 29'25.96"	
2023-Mar-08	12:00	2460012.0	2.8007	257°40'22.57"	-34°08'39.90"	-11°08'55.74"	19° Sag 37'30.01"	
2023-Mar-09	12:00	2460013.0	2.7912	257°49'11.43"	-34°13'40.98"	-11°13'18.04"	19° Sag 45'20.72"	
2023-Mar-10	12:00	2460014.0	2.7817	257°57'44.33"	-34°18'45.40"	-11°17'45.31"	19° Sag 52'57.73"	
2023-Mar-11	12:00	2460015.0	2.7721	258°06'00.80"	-34°23'53.28"	-11°22'17.66"	20° Sag 00'20.68"	
2023-Mar-12	12:00	2460016.0	2.7625	258°14'00.32"	-34°29'04.74"	-11°26'55.17"	20° Sag 07'29.16"	
2023-Mar-13	12:00	2460017.0	2.7529	258°21'42.37"	-34°34'19.89"	-11°31'37.95"	20° Sag 14'22.75"	
2023-Mar-14	12:00	2460018.0	2.7432	258°29'06.36"	-34°39'38.85"	-11°36'26.11"	20° Sag 21'01.00"	
2023-Mar-15	12:00	2460019.0	2.7335	258°36'11.68"	-34°45'01.72"	-11°41'19.74"	20° Sag 27'23.43"	
2023-Mar-16	12:00	2460020.0	2.7238	258°42'57.68"	-34°50'28.63"	-11°46'18.95"	20° Sag 33'29.53"	
2023-Mar-17	12:00	2460021.0	2.7140	258°49'23.68"	-34°55'59.67"	-11°51'23.85"	20° Sag 39'18.77"	
2023-Mar-18	12:00	2460022.0	2.7042	258°55'28.99"	-35°01'34.94"	-11°56'34.55"	20° Sag 44'50.59"	
2023-Mar-19	12:00	2460023.0	2.6943	259°01'12.89"	-35°07'14.52"	-12°01'51.14"	20° Sag 50'04.45"	
2023-Mar-20	12:00	2460024.0	2.6844	259°06'34.71"	-35°12'58.49"	-12°07'13.74"	20° Sag 54'59.82"	
2023-Mar-21	12:00	2460025.0	2.6745	259°11'33.77"	-35°18'46.96"	-12°12'42.45"	20° Sag 59'36.18"	
2023-Mar-22	12:00	2460026.0	2.6645	259°16'09.38"	-35°24'40.02"	-12°18'17.39"	21° Sag 03'53.00"	
2023-Mar-23	12:00	2460027.0	2.6545	259°20'20.87"	-35°30'37.78"	-12°23'58.67"	21° Sag 07'49.77"	
2023-Mar-24	12:00	2460028.0	2.6444	259°24'07.52"	-35°36'40.35"	-12°29'46.42"	21° Sag 11'25.95"	
2023-Mar-25	12:00	2460029.0	2.6343	259°27'28.56"	-35°42'47.85"	-12°35'40.73"	21° Sag 14'40.96"	

2023-Mar-26	12:00	2460030.0	2.6242	259°30'23.22"	-35°49'00.40"	-12°41'41.75"	21° Sag 17'34.21"	
2023-Mar-27	12:00	2460031.0	2.6140	259°32'50.66"	-35°55'18.11"	-12°47'49.59"	21° Sag 20'05.07"	
2023-Mar-28	12:00	2460032.0	2.6038	259°34'50.00"	-36°01'41.07"	-12°54'04.39"	21° Sag 22'12.90"	
2023-Mar-29	12:00	2460033.0	2.5935	259°36'20.37"	-36°08'09.39"	-13°00'26.26"	21° Sag 23'57.01"	
2023-Mar-30	12:00	2460034.0	2.5832	259°37'20.82"	-36°14'43.16"	-13°06'55.35"	21° Sag 25'16.71"	
2023-Mar-31	12:00	2460035.0	2.5728	259°37'50.40"	-36°21'22.47"	-13°13'31.79"	21° Sag 26'11.29"	
2023-Apr-01	12:00	2460036.0	2.5625	259°37'48.10"	-36°28'07.38"	-13°20'15.70"	21° Sag 26'40.01"	
2023-Apr-02	12:00	2460037.0	2.5520	259°37'12.91"	-36°34'57.98"	-13°27'07.23"	21° Sag 26'42.10"	
2023-Apr-03	12:00	2460038.0	2.5415	259°36'03.76"	-36°41'54.33"	-13°34'06.51"	21° Sag 26'16.78"	Rx
2023-Apr-04	12:00	2460039.0	2.5310	259°34'19.54"	-36°48'56.50"	-13°41'13.68"	21° Sag 25'23.23"	Rx
2023-Apr-05	12:00	2460040.0	2.5204	259°31'59.10"	-36°56'04.52"	-13°48'28.87"	21° Sag 24'00.61"	Rx
2023-Apr-06	12:00	2460041.0	2.5098	259°29'01.24"	-37°03'18.46"	-13°55'52.22"	21° Sag 22'08.05"	Rx
2023-Apr-07	12:00	2460042.0	2.4992	259°25'24.73"	-37°10'38.35"	-14°03'23.87"	21° Sag 19'44.64"	Rx
2023-Apr-08	12:00	2460043.0	2.4885	259°21'08.24"	-37°18'04.22"	-14°11'03.95"	21° Sag 16'49.41"	Rx
2023-Apr-09	12:00	2460044.0	2.4777	259°16'10.40"	-37°25'36.08"	-14°18'52.58"	21° Sag 13'21.36"	Rx
2023-Apr-10	12:00	2460045.0	2.4669	259°10'29.73"	-37°33'13.94"	-14°26'49.90"	21° Sag 09'19.42"	Rx
2023-Apr-11	12:00	2460046.0	2.4561	259°04'04.69"	-37°40'57.77"	-14°34'56.01"	21° Sag 04'42.49"	Rx
2023-Apr-12	12:00	2460047.0	2.4452	258°56'53.68"	-37°48'47.52"	-14°43'11.04"	20° Sag 59'29.37"	Rx
2023-Apr-13	12:00	2460048.0	2.4342	258°48'55.02"	-37°56'43.12"	-14°51'35.09"	20° Sag 53'38.87"	Rx
2023-Apr-14	12:00	2460049.0	2.4232	258°40'06.96"	-38°04'44.45"	-15°00'08.26"	20° Sag 47'09.71"	Rx
2023-Apr-15	12:00	2460050.0	2.4122	258°30'27.74"	-38°12'51.36"	-15°08'50.63"	20° Sag 40'00.63"	Rx
2023-Apr-16	12:00	2460051.0	2.4011	258°19'55.54"	-38°21'03.67"	-15°17'42.28"	20° Sag 32'10.33"	Rx
2023-Apr-17	12:00	2460052.0	2.3900	258°08'28.54"	-38°29'21.18"	-15°26'43.27"	20° Sag 23'37.48"	Rx
2023-Apr-18	12:00	2460053.0	2.3788	257°56'04.88"	-38°37'43.65"	-15°35'53.66"	20° Sag 14'20.79"	Rx
2023-Apr-19	12:00	2460054.0	2.3676	257°42'42.66"	-38°46'10.81"	-15°45'13.48"	20° Sag 04'18.89"	Rx
2023-Apr-20	12:00	2460055.0	2.3563	257°28'19.93"	-38°54'42.37"	-15°54'42.76"	19° Sag 53'30.42"	Rx
2023-Apr-21	12:00	2460056.0	2.3450	257°12'54.68"	-39°03'17.98"	-16°04'21.52"	19° Sag 41'53.94"	Rx
2023-Apr-22	12:00	2460057.0	2.3336	256°56'24.83"	-39°11'57.27"	-16°14'09.75"	19° Sag 29'28.00"	Rx
2023-Apr-23	12:00	2460058.0	2.3221	256°38'48.23"	-39°20'39.79"	-16°24'07.43"	19° Sag 16'11.08"	Rx
2023-Apr-24	12:00	2460059.0	2.3107	256°20'02.67"	-39°29'25.05"	-16°34'14.52"	19° Sag 02'01.60"	Rx
2023-Apr-25	12:00	2460060.0	2.2991	256°00'05.88"	-39°38'12.50"	-16°44'30.96"	18° Sag 46'57.97"	Rx
2023-Apr-26	12:00	2460061.0	2.2875	255°38'55.54"	-39°47'01.49"	-16°54'56.65"	18° Sag 30'58.53"	Rx
2023-Apr-27	12:00	2460062.0	2.2759	255°16'29.26"	-39°55'51.34"	-17°05'31.49"	18° Sag 14'01.59"	Rx
2023-Apr-28	12:00	2460063.0	2.2642	254°52'44.63"	-40°04'41.25"	-17°16'15.32"	17° Sag 56'05.42"	Rx
2023-Apr-29	12:00	2460064.0	2.2524	254°27'39.19"	-40°13'30.36"	-17°27'07.96"	17° Sag 37'08.24"	Rx
2023-Apr-30	12:00	2460065.0	2.2406	254°01'10.44"	-40°22'17.73"	-17°38'09.20"	17° Sag 17'08.26"	Rx
2023-May-01	12:00	2460066.0	2.2287	253°33'15.84"	-40°31'02.30"	-17°49'18.77"	16° Sag 56'03.64"	Rx
2023-May-02	12:00	2460067.0	2.2168	253°03'52.86"	-40°39'42.93"	-18°00'36.38"	16° Sag 33'52.48"	Rx
2023-May-03	12:00	2460068.0	2.2048	252°32'58.91"	-40°48'18.36"	-18°12'01.65"	16° Sag 10'32.90"	Rx
2023-May-04	12:00	2460069.0	2.1927	252°00'31.42"	-40°56'47.24"	-18°23'34.20"	15° Sag 46'02.94"	Rx
2023-May-05	12:00	2460070.0	2.1806	251°26'27.80"	-41°05'08.07"	-18°35'13.54"	15° Sag 20'20.62"	Rx
2023-May-06	12:00	2460071.0	2.1685	250°50'45.47"	-41°13'19.24"	-18°46'59.14"	14° Sag 53'23.93"	Rx
2023-May-07	12:00	2460072.0	2.1563	250°13'21.88"	-41°21'19.01"	-18°58'50.40"	14° Sag 25'10.82"	Rx
2023-May-08	12:00	2460073.0	2.1440	249°34'14.48"	-41°29'05.46"	-19°10'46.64"	13° Sag 55'39.22"	Rx
2023-May-09	12:00	2460074.0	2.1316	248°53'20.82"	-41°36'36.54"	-19°22'47.08"	13° Sag 24'47.04"	Rx
2023-May-10	12:00	2460075.0	2.1192	248°10'38.55"	-41°43'50.01"	-19°34'50.87"	12° Sag 52'32.20"	Rx

2023-May-11	12:00	2460076.0	2.1067	247°26'05.49"	-41°50'43.49"	-19°46'57.06"	12° Sag 18'52.67"	Rx
2023-May-12	12:00	2460077.0	2.0942	246°39'39.66"	-41°57'14.41"	-19°59'04.59"	11° Sag 43'46.47"	Rx
2023-May-13	12:00	2460078.0	2.0816	245°51'19.37"	-42°03'20.04"	-20°11'12.32"	11° Sag 07'11.73"	Rx
2023-May-14	12:00	2460079.0	2.0689	245°01'03.21"	-42°08'57.51"	-20°23'18.97"	10° Sag 29'06.69"	Rx
2023-May-15	12:00	2460080.0	2.0562	244°08'50.12"	-42°14'03.79"	-20°35'23.18"	9° Sag 49'29.72"	Rx
2023-May-16	12:00	2460081.0	2.0434	243°14'39.43"	-42°18'35.73"	-20°47'23.48"	9° Sag 08'19.34"	Rx
2023-May-17	12:00	2460082.0	2.0306	242°18'30.84"	-42°22'30.05"	-20°59'18.28"	8° Sag 25'34.23"	Rx
2023-May-18	12:00	2460083.0	2.0176	241°20'24.53"	-42°25'43.34"	-21°11'05.88"	7° Sag 41'13.24"	Rx
2023-May-19	12:00	2460084.0	2.0046	240°20'21.12"	-42°28'12.10"	-21°22'44.47"	6° Sag 55'15.40"	Rx
2023-May-20	12:00	2460085.0	1.9916	239°18'21.74"	-42°29'52.74"	-21°34'12.15"	6° Sag 07'39.94"	Rx
2023-May-21	12:00	2460086.0	1.9784	238°14'28.07"	-42°30'41.59"	-21°45'26.90"	5° Sag 18'26.35"	Rx
2023-May-22	12:00	2460087.0	1.9652	237°08'42.36"	-42°30'34.94"	-21°56'26.62"	4° Sag 27'34.33"	Rx
2023-May-23	12:00	2460088.0	1.9519	236°01'07.49"	-42°29'29.07"	-22°07'09.08"	3° Sag 35'03.90"	Rx
2023-May-24	12:00	2460089.0	1.9386	234°51'46.96"	-42°27'20.25"	-22°17'32.00"	2° Sag 40'55.35"	Rx
2023-May-25	12:00	2460090.0	1.9251	233°40'44.94"	-42°24'04.83"	-22°27'33.00"	1° Sag 45'09.34"	Rx
2023-May-26	12:00	2460091.0	1.9116	232°28'06.28"	-42°19'39.22"	-22°37'09.64"	0° Sag 47'46.85"	Rx
2023-May-27	12:00	2460092.0	1.8980	231°13'56.46"	-42°13'59.98"	-22°46'19.43"	29° Sco 48'49.26"	Rx
2023-May-28	12:00	2460093.0	1.8844	229°58'21.65"	-42°07'03.83"	-22°54'59.81"	28° Sco 48'18.35"	Rx
2023-May-29	12:00	2460094.0	1.8706	228°41'28.65"	-41°58'47.72"	-23°03'08.25"	27° Sco 46'16.29"	Rx
2023-May-30	12:00	2460095.0	1.8568	227°23'24.85"	-41°49'08.86"	-23°10'42.18"	26° Sco 42'45.69"	Rx
2023-May-31	12:00	2460096.0	1.8429	226°04'18.20"	-41°38'04.75"	-23°17'39.07"	25° Sco 37'49.62"	Rx
2023-Jun-01	12:00	2460097.0	1.8289	224°44'17.13"	-41°25'33.25"	-23°23'56.41"	24° Sco 31'31.53"	Rx
2023-Jun-02	12:00	2460098.0	1.8148	223°23'30.50"	-41°11'32.60"	-23°29'31.78"	23° Sco 23'55.36"	Rx
2023-Jun-03	12:00	2460099.0	1.8007	222°02'07.51"	-40°56'01.44"	-23°34'22.83"	22° Sco 15'05.43"	Rx
2023-Jun-04	12:00	2460100.0	1.7864	220°40'17.61"	-40°38'58.87"	-23°38'27.33"	21° Sco 05'06.50"	Rx
2023-Jun-05	12:00	2460101.0	1.7721	219°18'10.43"	-40°20'24.44"	-23°41'43.18"	19° Sco 54'03.73"	Rx
2023-Jun-06	12:00	2460102.0	1.7577	217°55'55.73"	-40°00'18.22"	-23°44'08.46"	18° Sco 42'02.68"	Rx
2023-Jun-07	12:00	2460103.0	1.7432	216°33'43.29"	-39°38'40.74"	-23°45'41.43"	17° Sco 29'09.30"	Rx
2023-Jun-08	12:00	2460104.0	1.7286	215°11'42.85"	-39°15'33.10"	-23°46'20.57"	16° Sco 15'29.91"	Rx
2023-Jun-09	12:00	2460105.0	1.7139	213°50'04.01"	-38°50'56.93"	-23°46'04.62"	15° Sco 01'11.21"	Rx
2023-Jun-10	12:00	2460106.0	1.6991	212°28'56.16"	-38°24'54.40"	-23°44'52.58"	13° Sco 46'20.16"	Rx
2023-Jun-11	12:00	2460107.0	1.6842	211°08'28.34"	-37°57'28.18"	-23°42'43.74"	12° Sco 31'04.01"	Rx
2023-Jun-12	12:00	2460108.0	1.6692	209°48'49.15"	-37°28'41.46"	-23°39'37.71"	11° Sco 15'30.11"	Rx
2023-Jun-13	12:00	2460109.0	1.6541	208°30'06.67"	-36°58'37.87"	-23°35'34.40"	9° Sco 59'45.95"	Rx
2023-Jun-14	12:00	2460110.0	1.6390	207°12'28.36"	-36°27'21.45"	-23°30'34.05"	8° Sco 43'58.98"	Rx
2023-Jun-15	12:00	2460111.0	1.6237	205°56'01.03"	-35°54'56.57"	-23°24'37.21"	7° Sco 28'16.58"	Rx
2023-Jun-16	12:00	2460112.0	1.6083	204°40'50.77"	-35°21'27.89"	-23°17'44.72"	6° Sco 12'45.97"	Rx
2023-Jun-17	12:00	2460113.0	1.5928	203°27'02.96"	-34°47'00.31"	-23°09'57.74"	4° Sco 57'34.16"	Rx
2023-Jun-18	12:00	2460114.0	1.5772	202°14'42.22"	-34°11'38.88"	-23°01'17.67"	3° Sco 42'47.86"	Rx
2023-Jun-19	12:00	2460115.0	1.5615	201°03'52.48"	-33°35'28.74"	-22°51'46.18"	2° Sco 28'33.45"	Rx
2023-Jun-20	12:00	2460116.0	1.5456	199°54'36.89"	-32°58'35.09"	-22°41'25.14"	1° Sco 14'56.93"	Rx
2023-Jun-21	12:00	2460117.0	1.5297	198°46'57.98"	-32°21'03.11"	-22°30'16.62"	0° Sco 02'03.85"	Rx
2023-Jun-22	12:00	2460118.0	1.5136	197°40'57.55"	-31°42'57.93"	-22°18'22.84"	28° Lib 49'59.34"	Rx
2023-Jun-23	12:00	2460119.0	1.4974	196°36'36.81"	-31°04'24.53"	-22°05'46.18"	27° Lib 38'48.01"	Rx
2023-Jun-24	12:00	2460120.0	1.4811	195°33'56.38"	-30°25'27.78"	-21°52'29.07"	26° Lib 28'33.98"	Rx
2023-Jun-25	12:00	2460121.0	1.4647	194°32'56.32"	-29°46'12.31"	-21°38'34.05"	25° Lib 19'20.88"	Rx

2023-Jun-26	12:00	2460122.0	1.4481	193°33'36.20"	-29°06'42.55"	-21°24'03.66"	24° Lib 11'11.79"	Rx
2023-Jun-27	12:00	2460123.0	1.4314	192°35'55.12"	-28°27'02.65"	-21°09'00.48"	23° Lib 04'09.28"	Rx
2023-Jun-28	12:00	2460124.0	1.4146	191°39'51.77"	-27°47'16.52"	-20°53'27.05"	21° Lib 58'15.41"	Rx
2023-Jun-29	12:00	2460125.0	1.3976	190°45'24.45"	-27°07'27.72"	-20°37'25.88"	20° Lib 53'31.74"	Rx
2023-Jun-30	12:00	2460126.0	1.3805	189°52'31.15"	-26°27'39.53"	-20°20'59.39"	19° Lib 49'59.33"	Rx
2023-Jul-01	12:00	2460127.0	1.3632	189°01'09.54"	-25°47'54.90"	-20°04'09.95"	18° Lib 47'38.78"	Rx
2023-Jul-02	12:00	2460128.0	1.3458	188°11'17.04"	-25°08'16.45"	-19°46'59.80"	17° Lib 46'30.26"	Rx
2023-Jul-03	12:00	2460129.0	1.3283	187°22'50.88"	-24°28'46.49"	-19°29'31.08"	16° Lib 46'33.48"	Rx
2023-Jul-04	12:00	2460130.0	1.3105	186°35'48.08"	-23°49'27.02"	-19°11'45.80"	15° Lib 47'47.83"	Rx
2023-Jul-05	12:00	2460131.0	1.2927	185°50'05.57"	-23°10'19.74"	-18°53'45.85"	14° Lib 50'12.34"	Rx
2023-Jul-06	12:00	2460132.0	1.2746	185°05'40.17"	-22°31'26.11"	-18°35'33.01"	13° Lib 53'45.76"	Rx
2023-Jul-07	12:00	2460133.0	1.2564	184°22'28.62"	-21°52'47.28"	-18°17'08.91"	12° Lib 58'26.55"	Rx
2023-Jul-08	12:00	2460134.0	1.2381	183°40'27.57"	-21°14'24.18"	-17°58'35.05"	12° Lib 04'12.92"	Rx
2023-Jul-09	12:00	2460135.0	1.2195	182°59'33.56"	-20°36'17.47"	-17°39'52.81"	11° Lib 11'02.80"	Rx
2023-Jul-10	12:00	2460136.0	1.2008	182°19'43.05"	-19°58'27.54"	-17°21'03.44"	10° Lib 18'53.81"	Rx
2023-Jul-11	12:00	2460137.0	1.1819	181°40'52.35"	-19°20'54.52"	-17°02'08.03"	9° Lib 27'43.32"	Rx
2023-Jul-12	12:00	2460138.0	1.1628	181°02'57.68"	-18°43'38.28"	-16°43'07.52"	8° Lib 37'28.39"	Rx
2023-Jul-13	12:00	2460139.0	1.1434	180°25'55.15"	-18°06'38.41"	-16°24'02.74"	7° Lib 48'05.83"	Rx
2023-Jul-14	12:00	2460140.0	1.1239	179°49'40.75"	-17°29'54.26"	-16°04'54.35"	6° Lib 59'32.15"	Rx
2023-Jul-15	12:00	2460141.0	1.1042	179°14'10.35"	-16°53'24.94"	-15°45'42.85"	6° Lib 11'43.64"	Rx
2023-Jul-16	12:00	2460142.0	1.0842	178°39'19.75"	-16°17'09.29"	-15°26'28.62"	5° Lib 24'36.31"	Rx
2023-Jul-17	12:00	2460143.0	1.0640	178°05'04.60"	-15°41'05.92"	-15°07'11.87"	4° Lib 38'05.95"	Rx
2023-Jul-18	12:00	2460144.0	1.0436	177°31'20.46"	-15°05'13.21"	-14°47'52.68"	3° Lib 52'08.07"	Rx
2023-Jul-19	12:00	2460145.0	1.0229	176°58'02.76"	-14°29'29.28"	-14°28'30.96"	3° Lib 06'37.98"	Rx
2023-Jul-20	12:00	2460146.0	1.0020	176°25'06.80"	-13°53'52.05"	-14°09'06.51"	2° Lib 21'30.70"	Rx
2023-Jul-21	12:00	2460147.0	0.9808	175°52'27.73"	-13°18'19.16"	-13°49'38.94"	1° Lib 36'41.01"	Rx
2023-Jul-22	12:00	2460148.0	0.9594	175°20'00.52"	-12°42'48.03"	-13°30'07.73"	0° Lib 52'03.41"	Rx
2023-Jul-23	12:00	2460149.0	0.9376	174°47'39.95"	-12°07'15.82"	-13°10'32.22"	0° Lib 07'32.09"	Rx
2023-Jul-24	12:00	2460150.0	0.9156	174°15'20.60"	-11°31'39.41"	-12°50'51.57"	29° Vir 23'00.93"	Rx
2023-Jul-25	12:00	2460151.0	0.8932	173°42'56.77"	-10°55'55.42"	-12°31'04.78"	28° Vir 38'23.43"	Rx
2023-Jul-26	12:00	2460152.0	0.8705	173°10'22.48"	-10°20'00.14"	-12°11'10.71"	27° Vir 53'32.71"	Rx
2023-Jul-27	12:00	2460153.0	0.8474	172°37'31.41"	-9°43'49.56"	-11°51'08.00"	27° Vir 08'21.45"	Rx
2023-Jul-28	12:00	2460154.0	0.8240	172°04'16.86"	-9°07'19.31"	-11°30'55.15"	26° Vir 22'41.83"	Rx
2023-Jul-29	12:00	2460155.0	0.8002	171°30'31.66"	-8°30'24.62"	-11°10'30.40"	25° Vir 36'25.45"	Rx
2023-Jul-30	12:00	2460156.0	0.7760	170°56'08.15"	-7°53'00.31"	-10°49'51.83"	24° Vir 49'23.29"	Rx
2023-Jul-31	12:00	2460157.0	0.7514	170°20'58.07"	-7°15'00.71"	-10°28'57.24"	24° Vir 01'25.63"	Rx
2023-Aug-01	12:00	2460158.0	0.7263	169°44'52.48"	-6°36'19.65"	-10°07'44.18"	23° Vir 12'21.93"	Rx
2023-Aug-02	12:00	2460159.0	0.7008	169°07'41.66"	-5°56'50.37"	-9°46'09.93"	22° Vir 22'00.70"	Rx
2023-Aug-03	12:00	2460160.0	0.6747	168°29'14.96"	-5°16'25.45"	-9°24'11.40"	21° Vir 30'09.42"	Rx
2023-Aug-04	12:00	2460161.0	0.6481	167°49'20.65"	-4°34'56.69"	-9°01'45.16"	20° Vir 36'34.30"	Rx
2023-Aug-05	12:00	2460162.0	0.6208	167°07'45.62"	-3°52'15.01"	-8°38'47.34"	19° Vir 41'00.00"	Rx
2023-Aug-06	12:00	2460163.0	0.5929	166°24'15.19"	-3°08'10.21"	-8°15'13.53"	18° Vir 43'09.40"	Rx
2023-Aug-07	12:00	2460164.0	0.5644	165°38'32.68"	-2°22'30.85"	-7°50'58.75"	17° Vir 42'43.16"	Rx
2023-Aug-08	12:00	2460165.0	0.5350	164°50'19.04"	-1°35'03.94"	-7°25'57.26"	16° Vir 39'19.30"	Rx
2023-Aug-09	12:00	2460166.0	0.5048	163°59'12.30"	-0°45'34.65"	-7°00'02.42"	15° Vir 32'32.62"	Rx
2023-Aug-10	12:00	2460167.0	0.4737	163°04'46.86"	+0°06'14.07"	-6°33'06.52"	14° Vir 21'54.01"	Rx



2023-Aug-11	12:00	2460168.0	0.4415	162°06'32.63"	+1°00'42.06"	-6°05'00.44"	13° Vir 06'49.46"	Rx
2023-Aug-12	12:00	2460169.0	0.4082	161°03'53.70"	+1°58'12.66"	-5°35'33.29"	11° Vir 46'38.75"	Rx
2023-Aug-13	12:00	2460170.0	0.3735	159°56'06.66"	+2°59'13.74"	-5°04'31.81"	10° Vir 20'33.61"	Rx
2023-Aug-14	12:00	2460171.0	0.3372	158°42'18.03"	+4°04'19.28"	-4°31'39.52"	8° Vir 47'35.14"	Rx
2023-Aug-15	12:00	2460172.0	0.2991	157°21'20.65"	+5°14'11.63"	-3°56'35.23"	7° Vir 06'29.95"	Rx
2023-Aug-16	12:00	2460173.0	0.2588	155°51'48.38"	+6°29'45.30"	-3°18'50.67"	5° Vir 15'44.53"	Rx
2023-Aug-17	12:00	2460174.0	0.2158	154°11'48.96"	+7°52'12.87"	-2°37'46.00"	3° Vir 13'17.56"	Rx
2023-Aug-18	12:00	2460175.0	0.1693	152°18'59.72"	+9°23'13.42"	-1°52'21.17"	0° Vir 56'34.76"	Rx
2023-Aug-19	12:00	2460176.0	0.1186	150°11'14.79"	+11°04'47.80"	-1°01'00.81"	28° Leo 23'16.93"	Rx
2023-Aug-20	12:00	2460177.0	0.0665	147°58'51.79"	+12°54'12.24"	-0°02'21.77"	25° Leo 44'13.36"	Rx
2023-Aug-21	12:00	2460178.0	0.0588	148°06'49.32"	+13°33'51.14"	+0°37'34.43"	25° Leo 38'08.03"	Rx
2023-Aug-22	12:00	2460179.0	0.1089	151°01'09.30"	+12°25'06.73"	+0°31'15.49"	28° Leo 41'16.94"	
2023-Aug-23	12:00	2460180.0	0.1603	153°48'50.16"	+11°07'50.28"	+0°16'48.79"	1° Vir 42'08.30"	
2023-Aug-24	12:00	2460181.0	0.2075	156°17'51.54"	+9°55'24.32"	+0°02'05.57"	4° Vir 24'54.79"	
2023-Aug-25	12:00	2460182.0	0.2512	158°31'57.77"	+8°48'09.78"	-0°11'51.56"	6° Vir 52'40.61"	
2023-Aug-26	12:00	2460183.0	0.2919	160°34'20.26"	+7°45'28.64"	-0°24'53.83"	9° Vir 08'24.84"	
2023-Aug-27	12:00	2460184.0	0.3304	162°27'13.90"	+6°46'44.23"	-0°37'03.14"	11° Vir 14'17.38"	
2023-Aug-28	12:00	2460185.0	0.3670	164°12'15.29"	+5°51'26.78"	-0°48'23.69"	13° Vir 11'52.57"	
2023-Aug-29	12:00	2460186.0	0.4019	165°50'36.04"	+4°59'12.47"	-0°58'59.92"	15° Vir 02'21.08"	
2023-Aug-30	12:00	2460187.0	0.4355	167°23'11.04"	+4°09'41.96"	-1°08'55.96"	16° Vir 46'37.56"	
2023-Aug-31	12:00	2460188.0	0.4679	168°50'43.62"	+3°22'39.23"	-1°18'15.50"	18° Vir 25'25.53"	
2023-Sep-01	12:00	2460189.0	0.4992	170°13'48.76"	+2°37'50.82"	-1°27'01.82"	19° Vir 59'20.41"	
2023-Sep-02	12:00	2460190.0	0.5295	171°32'55.26"	+1°55'05.21"	-1°35'17.83"	21° Vir 28'51.65"	
2023-Sep-03	12:00	2460191.0	0.5590	172°48'27.22"	+1°14'12.40"	-1°43'06.08"	22° Vir 54'24.07"	
2023-Sep-04	12:00	2460192.0	0.5877	174°00'45.04"	+0°35'03.67"	-1°50'28.87"	24° Vir 16'18.89"	
2023-Sep-05	12:00	2460193.0	0.6157	175°10'06.20"	-0°02'28.69"	-1°57'28.26"	25° Vir 34'54.43"	
2023-Sep-06	12:00	2460194.0	0.6431	176°16'45.82"	-0°38'31.55"	-2°04'06.06"	26° Vir 50'26.69"	
2023-Sep-07	12:00	2460195.0	0.6698	177°20'57.09"	-1°13'11.07"	-2°10'23.95"	28° Vir 03'09.71"	
2023-Sep-08	12:00	2460196.0	0.6960	178°22'51.63"	-1°46'32.77"	-2°16'23.39"	29° Vir 13'15.95"	
2023-Sep-09	12:00	2460197.0	0.7216	179°22'39.69"	-2°18'41.68"	-2°22'05.76"	0° Lib 20'56.52"	
2023-Sep-10	12:00	2460198.0	0.7468	180°20'30.43"	-2°49'42.36"	-2°27'32.28"	1° Lib 26'21.39"	
2023-Sep-11	12:00	2460199.0	0.7715	181°16'32.04"	-3°19'38.97"	-2°32'44.06"	2° Lib 29'39.53"	
2023-Sep-12	12:00	2460200.0	0.7958	182°10'51.89"	-3°48'35.34"	-2°37'42.13"	3° Lib 30'59.09"	
2023-Sep-13	12:00	2460201.0	0.8196	183°03'36.64"	-4°16'34.97"	-2°42'27.42"	4° Lib 30'27.44"	
2023-Sep-14	12:00	2460202.0	0.8431	183°54'52.33"	-4°43'41.08"	-2°47'00.79"	5° Lib 28'11.34"	
2023-Sep-15	12:00	2460203.0	0.8662	184°44'44.46"	-5°09'56.65"	-2°51'23.03"	6° Lib 24'16.94"	
2023-Sep-16	12:00	2460204.0	0.8890	185°33'18.04"	-5°35'24.43"	-2°55'34.86"	7° Lib 18'49.91"	
2023-Sep-17	12:00	2460205.0	0.9114	186°20'37.68"	-6°00'06.99"	-2°59'36.95"	8° Lib 11'55.46"	
2023-Sep-18	12:00	2460206.0	0.9335	187°06'47.59"	-6°24'06.67"	-3°03'29.92"	9° Lib 03'38.37"	
2023-Sep-19	12:00	2460207.0	0.9553	187°51'51.64"	-6°47'25.70"	-3°07'14.33"	9° Lib 54'03.08"	
2023-Sep-20	12:00	2460208.0	0.9769	188°35'53.40"	-7°10'06.10"	-3°10'50.73"	10° Lib 43'13.66"	
2023-Sep-21	12:00	2460209.0	0.9981	189°18'56.15"	-7°32'09.79"	-3°14'19.58"	11° Lib 31'13.92"	
2023-Sep-22	12:00	2460210.0	1.0191	190°01'02.93"	-7°53'38.55"	-3°17'41.36"	12° Lib 18'07.36"	
2023-Sep-23	12:00	2460211.0	1.0398	190°42'16.55"	-8°14'34.02"	-3°20'56.49"	13° Lib 03'57.22"	
2023-Sep-24	12:00	2460212.0	1.0602	191°22'39.60"	-8°34'57.76"	-3°24'05.35"	13° Lib 48'46.54"	
2023-Sep-25	12:00	2460213.0	1.0805	192°02'14.51"	-8°54'51.22"	-3°27'08.32"	14° Lib 32'38.14"	

2023-Sep-26	12:00	2460214.0	1.1005	192°41'03.56"	-9°14'15.76"	-3°30'05.74"	15° Lib 15'34.68"	
2023-Sep-27	12:00	2460215.0	1.1202	193°19'08.88"	-9°33'12.67"	-3°32'57.94"	15° Lib 57'38.67"	
2023-Sep-28	12:00	2460216.0	1.1398	193°56'32.50"	-9°51'43.19"	-3°35'45.22"	16° Lib 38'52.48"	
2023-Sep-29	12:00	2460217.0	1.1591	194°33'16.36"	-10°09'48.46"	-3°38'27.86"	17° Lib 19'18.37"	
2023-Sep-30	12:00	2460218.0	1.1783	195°09'22.25"	-10°27'29.60"	-3°41'06.14"	17° Lib 58'58.47"	
2023-Oct-01	12:00	2460219.0	1.1973	195°44'51.89"	-10°44'47.64"	-3°43'40.32"	18° Lib 37'54.79"	
2023-Oct-02	12:00	2460220.0	1.2160	196°19'46.84"	-11°01'43.57"	-3°46'10.63"	19° Lib 16'09.17"	
2023-Oct-03	12:00	2460221.0	1.2346	196°54'08.54"	-11°18'18.29"	-3°48'37.29"	19° Lib 53'43.36"	
2023-Oct-04	12:00	2460222.0	1.2530	197°27'58.36"	-11°34'32.67"	-3°51'00.53"	20° Lib 30'38.95"	
2023-Oct-05	12:00	2460223.0	1.2712	198°01'17.55"	-11°50'27.49"	-3°53'20.54"	21° Lib 06'57.45"	
2023-Oct-06	12:00	2460224.0	1.2893	198°34'07.28"	-12°06'03.52"	-3°55'37.51"	21° Lib 42'40.26"	
2023-Oct-07	12:00	2460225.0	1.3072	199°06'28.67"	-12°21'21.47"	-3°57'51.62"	22° Lib 17'48.72"	
2023-Oct-08	12:00	2460226.0	1.3249	199°38'22.77"	-12°36'22.00"	-4°00'03.04"	22° Lib 52'24.07"	
2023-Oct-09	12:00	2460227.0	1.3425	200°09'50.55"	-12°51'05.75"	-4°02'11.92"	23° Lib 26'27.51"	
2023-Oct-10	12:00	2460228.0	1.3599	200°40'52.95"	-13°05'33.33"	-4°04'18.41"	24° Lib 00'00.14"	
2023-Oct-11	12:00	2460229.0	1.3772	201°11'30.86"	-13°19'45.30"	-4°06'22.65"	24° Lib 33'03.05"	
2023-Oct-12	12:00	2460230.0	1.3944	201°41'45.12"	-13°33'42.21"	-4°08'24.79"	25° Lib 05'37.22"	
2023-Oct-13	12:00	2460231.0	1.4114	202°11'36.51"	-13°47'24.57"	-4°10'24.93"	25° Lib 37'43.62"	
2023-Oct-14	12:00	2460232.0	1.4282	202°41'05.79"	-14°00'52.87"	-4°12'23.21"	26° Lib 09'23.16"	
2023-Oct-15	12:00	2460233.0	1.4449	203°10'13.66"	-14°14'07.57"	-4°14'19.73"	26° Lib 40'36.69"	
2023-Oct-16	12:00	2460234.0	1.4615	203°39'00.79"	-14°27'09.13"	-4°16'14.60"	27° Lib 11'25.02"	
2023-Oct-17	12:00	2460235.0	1.4780	204°07'27.79"	-14°39'57.96"	-4°18'07.93"	27° Lib 41'48.90"	
2023-Oct-18	12:00	2460236.0	1.4943	204°35'35.25"	-14°52'34.46"	-4°19'59.80"	28° Lib 11'49.06"	
2023-Oct-19	12:00	2460237.0	1.5105	205°03'23.71"	-15°04'59.01"	-4°21'50.32"	28° Lib 41'26.15"	
2023-Oct-20	12:00	2460238.0	1.5266	205°30'53.67"	-15°17'11.96"	-4°23'39.56"	29° Lib 10'40.80"	
2023-Oct-21	12:00	2460239.0	1.5426	205°58'05.59"	-15°29'13.64"	-4°25'27.62"	29° Lib 39'33.60"	
2023-Oct-22	12:00	2460240.0	1.5585	206°24'59.93"	-15°41'04.38"	-4°27'14.56"	0° Sco 08'05.09"	
2023-Oct-23	12:00	2460241.0	1.5742	206°51'37.13"	-15°52'44.48"	-4°29'00.47"	0° Sco 36'15.84"	
2023-Oct-24	12:00	2460242.0	1.5898	207°17'57.62"	-16°04'14.24"	-4°30'45.42"	1° Sco 04'06.36"	
2023-Oct-25	12:00	2460243.0	1.6054	207°44'01.82"	-16°15'33.95"	-4°32'29.49"	1° Sco 31'37.20"	
2023-Oct-26	12:00	2460244.0	1.6208	208°09'50.19"	-16°26'43.90"	-4°34'12.73"	1° Sco 58'48.87"	
2023-Oct-27	12:00	2460245.0	1.6361	208°35'23.15"	-16°37'44.37"	-4°35'55.23"	2° Sco 25'41.91"	
2023-Oct-28	12:00	2460246.0	1.6513	209°00'41.10"	-16°48'35.65"	-4°37'37.05"	2° Sco 52'16.82"	
2023-Oct-29	12:00	2460247.0	1.6664	209°25'44.44"	-16°59'18.02"	-4°39'18.25"	3° Sco 18'34.07"	
2023-Oct-30	12:00	2460248.0	1.6814	209°50'33.50"	-17°09'51.73"	-4°40'58.89"	3° Sco 44'34.10"	
2023-Oct-31	12:00	2460249.0	1.6963	210°15'08.58"	-17°20'17.02"	-4°42'39.05"	4° Sco 10'17.29"	
2023-Nov-01	12:00	2460250.0	1.7111	210°39'29.97"	-17°30'34.12"	-4°44'18.77"	4° Sco 35'43.99"	
2023-Nov-02	12:00	2460251.0	1.7258	211°03'37.91"	-17°40'43.22"	-4°45'58.11"	5° Sco 00'54.55"	
2023-Nov-03	12:00	2460252.0	1.7404	211°27'32.65"	-17°50'44.53"	-4°47'37.14"	5° Sco 25'49.26"	
2023-Nov-04	12:00	2460253.0	1.7549	211°51'14.40"	-18°00'38.24"	-4°49'15.89"	5° Sco 50'28.43"	
2023-Nov-05	12:00	2460254.0	1.7694	212°14'43.38"	-18°10'24.51"	-4°50'54.42"	6° Sco 14'52.33"	
2023-Nov-06	12:00	2460255.0	1.7837	212°37'59.79"	-18°20'03.53"	-4°52'32.78"	6° Sco 39'01.23"	
2023-Nov-07	12:00	2460256.0	1.7980	213°01'03.83"	-18°29'35.45"	-4°54'11.01"	7° Sco 02'55.40"	
2023-Nov-08	12:00	2460257.0	1.8121	213°23'55.69"	-18°39'00.44"	-4°55'49.16"	7° Sco 26'35.07"	
2023-Nov-09	12:00	2460258.0	1.8262	213°46'35.53"	-18°48'18.65"	-4°57'27.27"	7° Sco 50'00.48"	
2023-Nov-10	12:00	2460259.0	1.8402	214°09'03.51"	-18°57'30.23"	-4°59'05.38"	8° Sco 13'11.85"	

2023-Nov-11	12:00	2460260.0	1.8542	214°31'19.79"	-19°06'35.31"	-5°00'43.54"	8° Sco 36'09.39"	
2023-Nov-12	12:00	2460261.0	1.8680	214°53'24.51"	-19°15'34.06"	-5°02'21.77"	8° Sco 58'53.29"	
2023-Nov-13	12:00	2460262.0	1.8817	215°15'17.77"	-19°24'26.58"	-5°04'00.11"	9° Sco 21'23.73"	
2023-Nov-14	12:00	2460263.0	1.8954	215°36'59.69"	-19°33'13.02"	-5°05'38.61"	9° Sco 43'40.87"	
2023-Nov-15	12:00	2460264.0	1.9090	215°58'30.32"	-19°41'53.50"	-5°07'17.28"	10° Sco 05'44.83"	
2023-Nov-16	12:00	2460265.0	1.9225	216°19'49.74"	-19°50'28.11"	-5°08'56.18"	10° Sco 27'35.72"	
2023-Nov-17	12:00	2460266.0	1.9360	216°40'57.98"	-19°58'56.98"	-5°10'35.32"	10° Sco 49'13.65"	
2023-Nov-18	12:00	2460267.0	1.9494	217°01'55.08"	-20°07'20.18"	-5°12'14.74"	11° Sco 10'38.70"	
2023-Nov-19	12:00	2460268.0	1.9627	217°22'41.08"	-20°15'37.82"	-5°13'54.47"	11° Sco 31'50.97"	
2023-Nov-20	12:00	2460269.0	1.9759	217°43'16.05"	-20°23'49.98"	-5°15'34.54"	11° Sco 52'50.55"	
2023-Nov-21	12:00	2460270.0	1.9890	218°03'40.05"	-20°31'56.77"	-5°17'14.98"	12° Sco 13'37.56"	
2023-Nov-22	12:00	2460271.0	2.0021	218°23'53.16"	-20°39'58.28"	-5°18'55.83"	12° Sco 34'12.13"	
2023-Nov-23	12:00	2460272.0	2.0151	218°43'55.49"	-20°47'54.62"	-5°20'37.10"	12° Sco 54'34.41"	
2023-Nov-24	12:00	2460273.0	2.0281	219°03'47.12"	-20°55'45.90"	-5°22'18.84"	13° Sco 14'44.53"	
2023-Nov-25	12:00	2460274.0	2.0410	219°23'28.13"	-21°03'32.23"	-5°24'01.07"	13° Sco 34'42.62"	
2023-Nov-26	12:00	2460275.0	2.0538	219°42'58.58"	-21°11'13.72"	-5°25'43.83"	13° Sco 54'28.78"	
2023-Nov-27	12:00	2460276.0	2.0665	220°02'18.51"	-21°18'50.49"	-5°27'27.14"	14° Sco 14'03.11"	
2023-Nov-28	12:00	2460277.0	2.0792	220°21'27.93"	-21°26'22.60"	-5°29'11.04"	14° Sco 33'25.66"	
2023-Nov-29	12:00	2460278.0	2.0918	220°40'26.83"	-21°33'50.16"	-5°30'55.56"	14° Sco 52'36.49"	
2023-Nov-30	12:00	2460279.0	2.1043	220°59'15.20"	-21°41'13.24"	-5°32'40.73"	15° Sco 11'35.61"	
2023-Dec-01	12:00	2460280.0	2.1168	221°17'53.04"	-21°48'31.91"	-5°34'26.57"	15° Sco 30'23.07"	
2023-Dec-02	12:00	2460281.0	2.1292	221°36'20.31"	-21°55'46.24"	-5°36'13.11"	15° Sco 48'58.88"	
2023-Dec-03	12:00	2460282.0	2.1416	221°54'37.00"	-22°02'56.29"	-5°38'00.39"	16° Sco 07'23.07"	
2023-Dec-04	12:00	2460283.0	2.1539	222°12'43.09"	-22°10'02.13"	-5°39'48.42"	16° Sco 25'35.65"	
2023-Dec-05	12:00	2460284.0	2.1661	222°30'38.54"	-22°17'03.82"	-5°41'37.24"	16° Sco 43'36.64"	
2023-Dec-06	12:00	2460285.0	2.1783	222°48'23.33"	-22°24'01.43"	-5°43'26.87"	17° Sco 01'26.05"	
2023-Dec-07	12:00	2460286.0	2.1904	223°05'57.43"	-22°30'55.02"	-5°45'17.33"	17° Sco 19'03.88"	
2023-Dec-08	12:00	2460287.0	2.2025	223°23'20.77"	-22°37'44.64"	-5°47'08.65"	17° Sco 36'30.14"	
2023-Dec-09	12:00	2460288.0	2.2145	223°40'33.33"	-22°44'30.37"	-5°49'00.86"	17° Sco 53'44.81"	
2023-Dec-10	12:00	2460289.0	2.2264	223°57'35.02"	-22°51'12.25"	-5°50'53.97"	18° Sco 10'47.88"	
2023-Dec-11	12:00	2460290.0	2.2383	224°14'25.77"	-22°57'50.36"	-5°52'48.01"	18° Sco 27'39.30"	
2023-Dec-12	12:00	2460291.0	2.2501	224°31'05.49"	-23°04'24.73"	-5°54'43.00"	18° Sco 44'19.03"	
2023-Dec-13	12:00	2460292.0	2.2619	224°47'34.05"	-23°10'55.42"	-5°56'38.96"	19° Sco 00'47.00"	
2023-Dec-14	12:00	2460293.0	2.2736	225°03'51.31"	-23°17'22.47"	-5°58'35.91"	19° Sco 17'03.12"	
2023-Dec-15	12:00	2460294.0	2.2853	225°19'57.14"	-23°23'45.92"	-6°00'33.87"	19° Sco 33'07.29"	
2023-Dec-16	12:00	2460295.0	2.2969	225°35'51.41"	-23°30'05.78"	-6°02'32.86"	19° Sco 48'59.42"	
2023-Dec-17	12:00	2460296.0	2.3084	225°51'33.99"	-23°36'22.10"	-6°04'32.90"	20° Sco 04'39.43"	
2023-Dec-18	12:00	2460297.0	2.3199	226°07'04.79"	-23°42'34.90"	-6°06'34.02"	20° Sco 20'07.27"	
2023-Dec-19	12:00	2460298.0	2.3314	226°22'23.73"	-23°48'44.24"	-6°08'36.23"	20° Sco 35'22.91"	
2023-Dec-20	12:00	2460299.0	2.3428	226°37'30.76"	-23°54'50.15"	-6°10'39.55"	20° Sco 50'26.31"	
2023-Dec-21	12:00	2460300.0	2.3541	226°52'25.80"	-24°00'52.70"	-6°12'44.01"	21° Sco 05'17.46"	
2023-Dec-22	12:00	2460301.0	2.3654	227°07'08.79"	-24°06'51.94"	-6°14'49.62"	21° Sco 19'56.33"	
2023-Dec-23	12:00	2460302.0	2.3767	227°21'39.65"	-24°12'47.94"	-6°16'56.42"	21° Sco 34'22.88"	
2023-Dec-24	12:00	2460303.0	2.3878	227°35'58.27"	-24°18'40.76"	-6°19'04.41"	21° Sco 48'37.06"	
2023-Dec-25	12:00	2460304.0	2.3990	227°50'04.52"	-24°24'30.44"	-6°21'13.64"	22° Sco 02'38.80"	
2023-Dec-26	12:00	2460305.0	2.4101	228°03'58.27"	-24°30'17.04"	-6°23'24.11"	22° Sco 16'27.99"	



2023-Dec-27	12:00	2460306.0	2.4211	228°17'39.37"	-24°36'00.58"	-6°25'35.85"	22° Sco 30'04.55"	
2023-Dec-28	12:00	2460307.0	2.4321	228°31'07.67"	-24°41'41.10"	-6°27'48.88"	22° Sco 43'28.37"	
2023-Dec-29	12:00	2460308.0	2.4431	228°44'23.02"	-24°47'18.63"	-6°30'03.23"	22° Sco 56'39.33"	
2023-Dec-30	12:00	2460309.0	2.4540	228°57'25.27"	-24°52'53.21"	-6°32'18.92"	23° Sco 09'37.34"	
2023-Dec-31	12:00	2460310.0	2.4648	229°10'14.26"	-24°58'24.85"	-6°34'35.96"	23° Sco 22'22.27"	