

Custom Ephemeris

Compiled by: APS

Calculated by: JPL Horizons

Date: 2023-02-23

29P/Schwassmann-Wachmann 1

Discovered: 1927-11-15

Orbital Period: 14.87 yrs.

Diameter: 60.4 km

Perihelion: 2019-03-07, 19:50:13 UT

Links:

[SBDB](#)

[MPC](#)

[Mission 29P](#)

Date	UT	JD	AU	RA	Declination	Latitude	Longitude	Rx
2022-Jan-01	12:00	2459581.0	5.9447	65°46'22.95"	+31°03'01.61"	+9°21'05.41"	9° Gem 07'39.06"	Rx
2022-Jan-02	12:00	2459582.0	5.9450	65°40'41.93"	+31°00'49.14"	+9°19'43.19"	9° Gem 02'24.77"	Rx
2022-Jan-03	12:00	2459583.0	5.9453	65°35'10.42"	+30°58'36.39"	+9°18'19.50"	8° Gem 57'18.44"	Rx
2022-Jan-04	12:00	2459584.0	5.9456	65°29'48.58"	+30°56'23.43"	+9°16'54.41"	8° Gem 52'20.22"	Rx
2022-Jan-05	12:00	2459585.0	5.9459	65°24'36.61"	+30°54'10.36"	+9°15'27.95"	8° Gem 47'30.30"	Rx
2022-Jan-06	12:00	2459586.0	5.9462	65°19'34.68"	+30°51'57.24"	+9°14'00.18"	8° Gem 42'48.86"	Rx
2022-Jan-07	12:00	2459587.0	5.9465	65°14'42.99"	+30°49'44.16"	+9°12'31.15"	8° Gem 38'16.07"	Rx
2022-Jan-08	12:00	2459588.0	5.9468	65°10'01.73"	+30°47'31.21"	+9°11'00.90"	8° Gem 33'52.12"	Rx
2022-Jan-09	12:00	2459589.0	5.9471	65°05'31.06"	+30°45'18.48"	+9°09'29.48"	8° Gem 29'37.18"	Rx
2022-Jan-10	12:00	2459590.0	5.9474	65°01'11.15"	+30°43'06.05"	+9°07'56.94"	8° Gem 25'31.40"	Rx
2022-Jan-11	12:00	2459591.0	5.9477	64°57'02.12"	+30°40'54.01"	+9°06'23.32"	8° Gem 21'34.92"	Rx
2022-Jan-12	12:00	2459592.0	5.9480	64°53'04.10"	+30°38'42.45"	+9°04'48.68"	8° Gem 17'47.87"	Rx
2022-Jan-13	12:00	2459593.0	5.9483	64°49'17.19"	+30°36'31.46"	+9°03'13.06"	8° Gem 14'10.35"	Rx
2022-Jan-14	12:00	2459594.0	5.9486	64°45'41.48"	+30°34'21.11"	+9°01'36.50"	8° Gem 10'42.47"	Rx
2022-Jan-15	12:00	2459595.0	5.9489	64°42'17.04"	+30°32'11.47"	+8°59'59.06"	8° Gem 07'24.31"	Rx
2022-Jan-16	12:00	2459596.0	5.9492	64°39'03.94"	+30°30'02.62"	+8°58'20.76"	8° Gem 04'15.94"	Rx
2022-Jan-17	12:00	2459597.0	5.9495	64°36'02.24"	+30°27'54.62"	+8°56'41.67"	8° Gem 01'17.44"	Rx
2022-Jan-18	12:00	2459598.0	5.9498	64°33'11.98"	+30°25'47.54"	+8°55'01.82"	7° Gem 58'28.87"	Rx
2022-Jan-19	12:00	2459599.0	5.9501	64°30'33.23"	+30°23'41.42"	+8°53'21.25"	7° Gem 55'50.29"	Rx
2022-Jan-20	12:00	2459600.0	5.9504	64°28'06.03"	+30°21'36.33"	+8°51'40.01"	7° Gem 53'21.75"	Rx
2022-Jan-21	12:00	2459601.0	5.9506	64°25'50.43"	+30°19'32.32"	+8°49'58.14"	7° Gem 51'03.33"	Rx
2022-Jan-22	12:00	2459602.0	5.9509	64°23'46.50"	+30°17'29.43"	+8°48'15.68"	7° Gem 48'55.10"	Rx
2022-Jan-23	12:00	2459603.0	5.9512	64°21'54.31"	+30°15'27.74"	+8°46'32.67"	7° Gem 46'57.12"	Rx
2022-Jan-24	12:00	2459604.0	5.9515	64°20'13.92"	+30°13'27.28"	+8°44'49.16"	7° Gem 45'09.48"	Rx
2022-Jan-25	12:00	2459605.0	5.9518	64°18'45.40"	+30°11'28.12"	+8°43'05.18"	7° Gem 43'32.25"	Rx
2022-Jan-26	12:00	2459606.0	5.9521	64°17'28.81"	+30°09'30.34"	+8°41'20.77"	7° Gem 42'05.50"	Rx
2022-Jan-27	12:00	2459607.0	5.9524	64°16'24.20"	+30°07'33.98"	+8°39'35.98"	7° Gem 40'49.29"	Rx
2022-Jan-28	12:00	2459608.0	5.9527	64°15'31.58"	+30°05'39.12"	+8°37'50.86"	7° Gem 39'43.67"	Rx
2022-Jan-29	12:00	2459609.0	5.9530	64°14'50.96"	+30°03'45.81"	+8°36'05.43"	7° Gem 38'48.64"	Rx
2022-Jan-30	12:00	2459610.0	5.9534	64°14'22.32"	+30°01'54.10"	+8°34'19.73"	7° Gem 38'04.20"	Rx
2022-Jan-31	12:00	2459611.0	5.9537	64°14'05.62"	+30°00'04.02"	+8°32'33.82"	7° Gem 37'30.34"	Rx
2022-Feb-01	12:00	2459612.0	5.9540	64°14'00.83"	+29°58'15.62"	+8°30'47.74"	7° Gem 37'07.05"	Rx
2022-Feb-02	12:00	2459613.0	5.9543	64°14'07.93"	+29°56'28.90"	+8°29'01.51"	7° Gem 36'54.32"	Rx
2022-Feb-03	12:00	2459614.0	5.9546	64°14'26.93"	+29°54'43.89"	+8°27'15.18"	7° Gem 36'52.17"	Rx
2022-Feb-04	12:00	2459615.0	5.9549	64°14'57.83"	+29°53'00.64"	+8°25'28.78"	7° Gem 37'00.59"	
2022-Feb-05	12:00	2459616.0	5.9552	64°15'40.61"	+29°51'19.15"	+8°23'42.36"	7° Gem 37'19.60"	
2022-Feb-06	12:00	2459617.0	5.9555	64°16'35.26"	+29°49'39.48"	+8°21'55.94"	7° Gem 37'49.19"	
2022-Feb-07	12:00	2459618.0	5.9558	64°17'41.74"	+29°48'01.65"	+8°20'09.55"	7° Gem 38'29.35"	

2022-Feb-08	12:00	2459619.0	5.9561	64°19'00.00"	+29°46'25.69"	+8°18'23.24"	7° Gem 39'20.04"	
2022-Feb-09	12:00	2459620.0	5.9564	64°20'29.99"	+29°44'51.62"	+8°16'37.02"	7° Gem 40'21.23"	
2022-Feb-10	12:00	2459621.0	5.9567	64°22'11.63"	+29°43'19.47"	+8°14'50.94"	7° Gem 41'32.85"	
2022-Feb-11	12:00	2459622.0	5.9570	64°24'04.84"	+29°41'49.25"	+8°13'05.01"	7° Gem 42'54.85"	
2022-Feb-12	12:00	2459623.0	5.9573	64°26'09.53"	+29°40'20.98"	+8°11'19.26"	7° Gem 44'27.17"	
2022-Feb-13	12:00	2459624.0	5.9576	64°28'25.62"	+29°38'54.66"	+8°09'33.72"	7° Gem 46'09.72"	
2022-Feb-14	12:00	2459625.0	5.9579	64°30'53.01"	+29°37'30.30"	+8°07'48.42"	7° Gem 48'02.44"	
2022-Feb-15	12:00	2459626.0	5.9582	64°33'31.60"	+29°36'07.89"	+8°06'03.37"	7° Gem 50'05.24"	
2022-Feb-16	12:00	2459627.0	5.9585	64°36'21.32"	+29°34'47.44"	+8°04'18.61"	7° Gem 52'18.07"	
2022-Feb-17	12:00	2459628.0	5.9588	64°39'22.08"	+29°33'28.92"	+8°02'34.15"	7° Gem 54'40.83"	
2022-Feb-18	12:00	2459629.0	5.9591	64°42'33.80"	+29°32'12.35"	+8°00'50.01"	7° Gem 57'13.49"	
2022-Feb-19	12:00	2459630.0	5.9594	64°45'56.44"	+29°30'57.72"	+7°59'06.23"	7° Gem 59'56.00"	
2022-Feb-20	12:00	2459631.0	5.9597	64°49'29.95"	+29°29'45.02"	+7°57'22.81"	8° Gem 02'48.30"	
2022-Feb-21	12:00	2459632.0	5.9600	64°53'14.26"	+29°28'34.26"	+7°55'39.78"	8° Gem 05'50.37"	
2022-Feb-22	12:00	2459633.0	5.9603	64°57'09.34"	+29°27'25.45"	+7°53'57.16"	8° Gem 09'02.16"	
2022-Feb-23	12:00	2459634.0	5.9606	65°01'15.12"	+29°26'18.59"	+7°52'14.96"	8° Gem 12'23.63"	
2022-Feb-24	12:00	2459635.0	5.9609	65°05'31.51"	+29°25'13.70"	+7°50'33.22"	8° Gem 15'54.71"	
2022-Feb-25	12:00	2459636.0	5.9612	65°09'58.43"	+29°24'10.78"	+7°48'51.94"	8° Gem 19'35.32"	
2022-Feb-26	12:00	2459637.0	5.9615	65°14'35.77"	+29°23'09.82"	+7°47'11.16"	8° Gem 23'25.37"	
2022-Feb-27	12:00	2459638.0	5.9618	65°19'23.39"	+29°22'10.82"	+7°45'30.87"	8° Gem 27'24.75"	
2022-Feb-28	12:00	2459639.0	5.9621	65°24'21.20"	+29°21'13.75"	+7°43'51.12"	8° Gem 31'33.36"	
2022-Mar-01	12:00	2459640.0	5.9624	65°29'29.07"	+29°20'18.60"	+7°42'11.90"	8° Gem 35'51.11"	
2022-Mar-02	12:00	2459641.0	5.9627	65°34'46.94"	+29°19'25.33"	+7°40'33.25"	8° Gem 40'17.92"	
2022-Mar-03	12:00	2459642.0	5.9630	65°40'14.70"	+29°18'33.92"	+7°38'55.17"	8° Gem 44'53.71"	
2022-Mar-04	12:00	2459643.0	5.9633	65°45'52.30"	+29°17'44.37"	+7°37'17.69"	8° Gem 49'38.42"	
2022-Mar-05	12:00	2459644.0	5.9636	65°51'39.65"	+29°16'56.64"	+7°35'40.80"	8° Gem 54'31.98"	
2022-Mar-06	12:00	2459645.0	5.9639	65°57'36.65"	+29°16'10.74"	+7°34'04.54"	8° Gem 59'34.30"	
2022-Mar-07	12:00	2459646.0	5.9642	66°03'43.22"	+29°15'26.66"	+7°32'28.90"	9° Gem 04'45.31"	
2022-Mar-08	12:00	2459647.0	5.9645	66°09'59.22"	+29°14'44.36"	+7°30'53.91"	9° Gem 10'04.89"	
2022-Mar-09	12:00	2459648.0	5.9648	66°16'24.54"	+29°14'03.85"	+7°29'19.56"	9° Gem 15'32.94"	
2022-Mar-10	12:00	2459649.0	5.9651	66°22'59.05"	+29°13'25.10"	+7°27'45.88"	9° Gem 21'09.34"	
2022-Mar-11	12:00	2459650.0	5.9655	66°29'42.62"	+29°12'48.07"	+7°26'12.86"	9° Gem 26'53.97"	
2022-Mar-12	12:00	2459651.0	5.9658	66°36'35.11"	+29°12'12.76"	+7°24'40.52"	9° Gem 32'46.72"	
2022-Mar-13	12:00	2459652.0	5.9661	66°43'36.38"	+29°11'39.12"	+7°23'08.86"	9° Gem 38'47.46"	
2022-Mar-14	12:00	2459653.0	5.9664	66°50'46.32"	+29°11'07.13"	+7°21'37.88"	9° Gem 44'56.07"	
2022-Mar-15	12:00	2459654.0	5.9667	66°58'04.79"	+29°10'36.75"	+7°20'07.61"	9° Gem 51'12.43"	
2022-Mar-16	12:00	2459655.0	5.9670	67°05'31.67"	+29°10'07.93"	+7°18'38.04"	9° Gem 57'36.44"	
2022-Mar-17	12:00	2459656.0	5.9673	67°13'06.85"	+29°09'40.66"	+7°17'09.17"	10° Gem 04'08.00"	
2022-Mar-18	12:00	2459657.0	5.9676	67°20'50.25"	+29°09'14.88"	+7°15'41.02"	10° Gem 10'47.02"	
2022-Mar-19	12:00	2459658.0	5.9679	67°28'41.78"	+29°08'50.58"	+7°14'13.58"	10° Gem 17'33.42"	
2022-Mar-20	12:00	2459659.0	5.9682	67°36'41.37"	+29°08'27.72"	+7°12'46.87"	10° Gem 24'27.14"	
2022-Mar-21	12:00	2459660.0	5.9685	67°44'48.96"	+29°08'06.29"	+7°11'20.88"	10° Gem 31'28.10"	
2022-Mar-22	12:00	2459661.0	5.9688	67°53'04.45"	+29°07'46.27"	+7°09'55.62"	10° Gem 38'36.25"	
2022-Mar-23	12:00	2459662.0	5.9691	68°01'27.76"	+29°07'27.65"	+7°08'31.10"	10° Gem 45'51.49"	
2022-Mar-24	12:00	2459663.0	5.9694	68°09'58.76"	+29°07'10.41"	+7°07'07.32"	10° Gem 53'13.72"	
2022-Mar-25	12:00	2459664.0	5.9697	68°18'37.35"	+29°06'54.52"	+7°05'44.29"	11° Gem 00'42.82"	

2022-Mar-26	12:00	2459665.0	5.9700	68°27'23.37"	+29°06'39.97"	+7°04'22.02"	11° Gem 08'18.69"	
2022-Mar-27	12:00	2459666.0	5.9703	68°36'16.72"	+29°06'26.70"	+7°03'00.49"	11° Gem 16'01.19"	
2022-Mar-28	12:00	2459667.0	5.9706	68°45'17.27"	+29°06'14.69"	+7°01'39.74"	11° Gem 23'50.23"	
2022-Mar-29	12:00	2459668.0	5.9709	68°54'24.92"	+29°06'03.88"	+7°00'19.74"	11° Gem 31'45.70"	
2022-Mar-30	12:00	2459669.0	5.9712	69°03'39.58"	+29°05'54.25"	+6°59'00.52"	11° Gem 39'47.52"	
2022-Mar-31	12:00	2459670.0	5.9716	69°13'01.18"	+29°05'45.75"	+6°57'42.07"	11° Gem 47'55.62"	
2022-Apr-01	12:00	2459671.0	5.9719	69°22'29.62"	+29°05'38.36"	+6°56'24.40"	11° Gem 56'09.91"	
2022-Apr-02	12:00	2459672.0	5.9722	69°32'04.82"	+29°05'32.05"	+6°55'07.50"	12° Gem 04'30.31"	
2022-Apr-03	12:00	2459673.0	5.9725	69°41'46.69"	+29°05'26.80"	+6°53'51.38"	12° Gem 12'56.74"	
2022-Apr-04	12:00	2459674.0	5.9728	69°51'35.11"	+29°05'22.58"	+6°52'36.04"	12° Gem 21'29.09"	
2022-Apr-05	12:00	2459675.0	5.9731	70°01'29.97"	+29°05'19.36"	+6°51'21.48"	12° Gem 30'07.25"	
2022-Apr-06	12:00	2459676.0	5.9734	70°11'31.14"	+29°05'17.13"	+6°50'07.70"	12° Gem 38'51.12"	
2022-Apr-07	12:00	2459677.0	5.9737	70°21'38.49"	+29°05'15.85"	+6°48'54.69"	12° Gem 47'40.58"	
2022-Apr-08	12:00	2459678.0	5.9740	70°31'51.89"	+29°05'15.48"	+6°47'42.47"	12° Gem 56'35.49"	
2022-Apr-09	12:00	2459679.0	5.9743	70°42'11.21"	+29°05'15.99"	+6°46'31.02"	13° Gem 05'35.75"	
2022-Apr-10	12:00	2459680.0	5.9746	70°52'36.33"	+29°05'17.34"	+6°45'20.34"	13° Gem 14'41.24"	
2022-Apr-11	12:00	2459681.0	5.9749	71°03'07.13"	+29°05'19.50"	+6°44'10.44"	13° Gem 23'51.85"	
2022-Apr-12	12:00	2459682.0	5.9752	71°13'43.48"	+29°05'22.43"	+6°43'01.31"	13° Gem 33'07.46"	
2022-Apr-13	12:00	2459683.0	5.9755	71°24'25.29"	+29°05'26.08"	+6°41'52.95"	13° Gem 42'27.98"	
2022-Apr-14	12:00	2459684.0	5.9758	71°35'12.46"	+29°05'30.41"	+6°40'45.35"	13° Gem 51'53.32"	
2022-Apr-15	12:00	2459685.0	5.9762	71°46'04.92"	+29°05'35.40"	+6°39'38.53"	14° Gem 01'23.41"	
2022-Apr-16	12:00	2459686.0	5.9765	71°57'02.59"	+29°05'41.00"	+6°38'32.46"	14° Gem 10'58.18"	
2022-Apr-17	12:00	2459687.0	5.9768	72°08'05.42"	+29°05'47.20"	+6°37'27.16"	14° Gem 20'37.59"	
2022-Apr-18	12:00	2459688.0	5.9771	72°19'13.35"	+29°05'53.98"	+6°36'22.62"	14° Gem 30'21.56"	
2022-Apr-19	12:00	2459689.0	5.9774	72°30'26.29"	+29°06'01.32"	+6°35'18.84"	14° Gem 40'10.02"	
2022-Apr-20	12:00	2459690.0	5.9777	72°41'44.15"	+29°06'09.22"	+6°34'15.82"	14° Gem 50'02.90"	
2022-Apr-21	12:00	2459691.0	5.9780	72°53'06.81"	+29°06'17.65"	+6°33'13.55"	15° Gem 00'00.08"	
2022-Apr-22	12:00	2459692.0	5.9783	73°04'34.15"	+29°06'26.59"	+6°32'12.05"	15° Gem 10'01.45"	
2022-Apr-23	12:00	2459693.0	5.9786	73°16'06.05"	+29°06'36.00"	+6°31'11.30"	15° Gem 20'06.90"	
2022-Apr-24	12:00	2459694.0	5.9789	73°27'42.40"	+29°06'45.84"	+6°30'11.31"	15° Gem 30'16.34"	
2022-Apr-25	12:00	2459695.0	5.9792	73°39'23.12"	+29°06'56.07"	+6°29'12.08"	15° Gem 40'29.68"	
2022-Apr-26	12:00	2459696.0	5.9795	73°51'08.13"	+29°07'06.67"	+6°28'13.61"	15° Gem 50'46.85"	
2022-Apr-27	12:00	2459697.0	5.9798	74°02'57.35"	+29°07'17.59"	+6°27'15.89"	16° Gem 01'07.77"	
2022-Apr-28	12:00	2459698.0	5.9802	74°14'50.72"	+29°07'28.82"	+6°26'18.92"	16° Gem 11'32.40"	
2022-Apr-29	12:00	2459699.0	5.9805	74°26'48.17"	+29°07'40.32"	+6°25'22.71"	16° Gem 22'00.65"	
2022-Apr-30	12:00	2459700.0	5.9808	74°38'49.62"	+29°07'52.08"	+6°24'27.24"	16° Gem 32'32.47"	
2022-May-01	12:00	2459701.0	5.9811	74°50'54.97"	+29°08'04.08"	+6°23'32.52"	16° Gem 43'07.76"	
2022-May-02	12:00	2459702.0	5.9814	75°03'04.13"	+29°08'16.31"	+6°22'38.54"	16° Gem 53'46.44"	
2022-May-03	12:00	2459703.0	5.9817	75°15'16.99"	+29°08'28.73"	+6°21'45.31"	17° Gem 04'28.40"	
2022-May-04	12:00	2459704.0	5.9820	75°27'33.43"	+29°08'41.34"	+6°20'52.81"	17° Gem 15'13.55"	
2022-May-05	12:00	2459705.0	5.9823	75°39'53.34"	+29°08'54.10"	+6°20'01.04"	17° Gem 26'01.78"	
2022-May-06	12:00	2459706.0	5.9826	75°52'16.59"	+29°09'06.99"	+6°19'10.01"	17° Gem 36'52.98"	
2022-May-07	12:00	2459707.0	5.9829	76°04'43.08"	+29°09'19.98"	+6°18'19.70"	17° Gem 47'47.06"	
2022-May-08	12:00	2459708.0	5.9832	76°17'12.70"	+29°09'33.04"	+6°17'30.12"	17° Gem 58'43.91"	
2022-May-09	12:00	2459709.0	5.9836	76°29'45.34"	+29°09'46.15"	+6°16'41.25"	18° Gem 09'43.43"	
2022-May-10	12:00	2459710.0	5.9839	76°42'20.91"	+29°09'59.26"	+6°15'53.10"	18° Gem 20'45.55"	

2022-May-11	12:00	2459711.0	5.9842	76°54'59.31"	+29°10'12.36"	+6°15'05.66"	18° Gem 31'50.17"	
2022-May-12	12:00	2459712.0	5.9845	77°07'40.49"	+29°10'25.41"	+6°14'18.93"	18° Gem 42'57.24"	
2022-May-13	12:00	2459713.0	5.9848	77°20'24.37"	+29°10'38.38"	+6°13'32.91"	18° Gem 54'06.70"	
2022-May-14	12:00	2459714.0	5.9851	77°33'10.91"	+29°10'51.26"	+6°12'47.59"	19° Gem 05'18.50"	
2022-May-15	12:00	2459715.0	5.9854	77°46'00.05"	+29°11'04.03"	+6°12'02.96"	19° Gem 16'32.60"	
2022-May-16	12:00	2459716.0	5.9857	77°58'51.75"	+29°11'16.70"	+6°11'19.03"	19° Gem 27'48.96"	
2022-May-17	12:00	2459717.0	5.9860	78°11'45.92"	+29°11'29.26"	+6°10'35.80"	19° Gem 39'07.49"	
2022-May-18	12:00	2459718.0	5.9863	78°24'42.47"	+29°11'41.70"	+6°09'53.25"	19° Gem 50'28.12"	
2022-May-19	12:00	2459719.0	5.9866	78°37'41.28"	+29°11'54.02"	+6°09'11.40"	20° Gem 01'50.74"	
2022-May-20	12:00	2459720.0	5.9870	78°50'42.23"	+29°12'06.19"	+6°08'30.24"	20° Gem 13'15.26"	
2022-May-21	12:00	2459721.0	5.9873	79°03'45.23"	+29°12'18.18"	+6°07'49.76"	20° Gem 24'41.57"	
2022-May-22	12:00	2459722.0	5.9876	79°16'50.20"	+29°12'29.96"	+6°07'09.97"	20° Gem 36'09.62"	
2022-May-23	12:00	2459723.0	5.9879	79°29'57.06"	+29°12'41.51"	+6°06'30.87"	20° Gem 47'39.33"	
2022-May-24	12:00	2459724.0	5.9882	79°43'05.77"	+29°12'52.80"	+6°05'52.44"	20° Gem 59'10.66"	
2022-May-25	12:00	2459725.0	5.9885	79°56'16.26"	+29°13'03.82"	+6°05'14.70"	21° Gem 10'43.56"	
2022-May-26	12:00	2459726.0	5.9888	80°09'28.48"	+29°13'14.56"	+6°04'37.64"	21° Gem 22'17.97"	
2022-May-27	12:00	2459727.0	5.9891	80°22'42.35"	+29°13'25.00"	+6°04'01.25"	21° Gem 33'53.84"	
2022-May-28	12:00	2459728.0	5.9894	80°35'57.81"	+29°13'35.14"	+6°03'25.54"	21° Gem 45'31.09"	
2022-May-29	12:00	2459729.0	5.9897	80°49'14.77"	+29°13'44.97"	+6°02'50.49"	21° Gem 57'09.66"	
2022-May-30	12:00	2459730.0	5.9901	81°02'33.12"	+29°13'54.48"	+6°02'16.11"	22° Gem 08'49.45"	
2022-May-31	12:00	2459731.0	5.9904	81°15'52.78"	+29°14'03.67"	+6°01'42.40"	22° Gem 20'30.39"	
2022-Jun-01	12:00	2459732.0	5.9907	81°29'13.62"	+29°14'12.53"	+6°01'09.35"	22° Gem 32'12.37"	
2022-Jun-02	12:00	2459733.0	5.9910	81°42'35.55"	+29°14'21.04"	+6°00'36.95"	22° Gem 43'55.30"	
2022-Jun-03	12:00	2459734.0	5.9913	81°55'58.45"	+29°14'29.19"	+6°00'05.20"	22° Gem 55'39.09"	
2022-Jun-04	12:00	2459735.0	5.9916	82°09'22.23"	+29°14'36.96"	+5°59'34.11"	23° Gem 07'23.65"	
2022-Jun-05	12:00	2459736.0	5.9919	82°22'46.79"	+29°14'44.33"	+5°59'03.66"	23° Gem 19'08.88"	
2022-Jun-06	12:00	2459737.0	5.9922	82°36'12.02"	+29°14'51.29"	+5°58'33.86"	23° Gem 30'54.72"	
2022-Jun-07	12:00	2459738.0	5.9925	82°49'37.86"	+29°14'57.82"	+5°58'04.70"	23° Gem 42'41.08"	
2022-Jun-08	12:00	2459739.0	5.9928	83°03'04.24"	+29°15'03.91"	+5°57'36.17"	23° Gem 54'27.91"	
2022-Jun-09	12:00	2459740.0	5.9932	83°16'31.08"	+29°15'09.53"	+5°57'08.27"	24° Gem 06'15.15"	
2022-Jun-10	12:00	2459741.0	5.9935	83°29'58.34"	+29°15'14.68"	+5°56'41.01"	24° Gem 18'02.76"	
2022-Jun-11	12:00	2459742.0	5.9938	83°43'25.97"	+29°15'19.36"	+5°56'14.38"	24° Gem 29'50.69"	
2022-Jun-12	12:00	2459743.0	5.9941	83°56'53.93"	+29°15'23.56"	+5°55'48.37"	24° Gem 41'38.92"	
2022-Jun-13	12:00	2459744.0	5.9944	84°10'22.16"	+29°15'27.30"	+5°55'22.98"	24° Gem 53'27.38"	
2022-Jun-14	12:00	2459745.0	5.9947	84°23'50.57"	+29°15'30.58"	+5°54'58.22"	25° Gem 05'16.01"	
2022-Jun-15	12:00	2459746.0	5.9950	84°37'19.07"	+29°15'33.42"	+5°54'34.07"	25° Gem 17'04.72"	
2022-Jun-16	12:00	2459747.0	5.9953	84°50'47.53"	+29°15'35.81"	+5°54'10.54"	25° Gem 28'53.41"	
2022-Jun-17	12:00	2459748.0	5.9956	85°04'15.86"	+29°15'37.73"	+5°53'47.62"	25° Gem 40'41.99"	
2022-Jun-18	12:00	2459749.0	5.9960	85°17'43.96"	+29°15'39.16"	+5°53'25.32"	25° Gem 52'30.38"	
2022-Jun-19	12:00	2459750.0	5.9963	85°31'11.78"	+29°15'40.10"	+5°53'03.64"	26° Gem 04'18.53"	
2022-Jun-20	12:00	2459751.0	5.9966	85°44'39.26"	+29°15'40.52"	+5°52'42.56"	26° Gem 16'06.38"	
2022-Jun-21	12:00	2459752.0	5.9969	85°58'06.35"	+29°15'40.42"	+5°52'22.10"	26° Gem 27'53.91"	
2022-Jun-22	12:00	2459753.0	5.9972	86°11'33.00"	+29°15'39.79"	+5°52'02.25"	26° Gem 39'41.06"	
2022-Jun-23	12:00	2459754.0	5.9975	86°24'59.16"	+29°15'38.65"	+5°51'43.01"	26° Gem 51'27.79"	
2022-Jun-24	12:00	2459755.0	5.9978	86°38'24.74"	+29°15'37.00"	+5°51'24.38"	27° Gem 03'14.03"	
2022-Jun-25	12:00	2459756.0	5.9981	86°51'49.68"	+29°15'34.85"	+5°51'06.35"	27° Gem 14'59.72"	

2022-Jun-26	12:00	2459757.0	5.9984	87°05'13.87"	+29°15'32.19"	+5°50'48.93"	27° Gem 26'44.77"	
2022-Jun-27	12:00	2459758.0	5.9988	87°18'37.22"	+29°15'29.04"	+5°50'32.11"	27° Gem 38'29.10"	
2022-Jun-28	12:00	2459759.0	5.9991	87°31'59.63"	+29°15'25.39"	+5°50'15.88"	27° Gem 50'12.62"	
2022-Jun-29	12:00	2459760.0	5.9994	87°45'21.00"	+29°15'21.26"	+5°50'00.25"	28° Gem 01'55.24"	
2022-Jun-30	12:00	2459761.0	5.9997	87°58'41.20"	+29°15'16.64"	+5°49'45.21"	28° Gem 13'36.86"	
2022-Jul-01	12:00	2459762.0	6.0000	88°12'00.14"	+29°15'11.53"	+5°49'30.76"	28° Gem 25'17.40"	
2022-Jul-02	12:00	2459763.0	6.0003	88°25'17.73"	+29°15'05.92"	+5°49'16.90"	28° Gem 36'56.77"	
2022-Jul-03	12:00	2459764.0	6.0006	88°38'33.86"	+29°14'59.81"	+5°49'03.62"	28° Gem 48'34.88"	
2022-Jul-04	12:00	2459765.0	6.0009	88°51'48.45"	+29°14'53.19"	+5°48'50.92"	29° Gem 00'11.67"	
2022-Jul-05	12:00	2459766.0	6.0013	89°05'01.43"	+29°14'46.07"	+5°48'38.80"	29° Gem 11'47.06"	
2022-Jul-06	12:00	2459767.0	6.0016	89°18'12.73"	+29°14'38.43"	+5°48'27.25"	29° Gem 23'21.01"	
2022-Jul-07	12:00	2459768.0	6.0019	89°31'22.29"	+29°14'30.27"	+5°48'16.28"	29° Gem 34'53.46"	
2022-Jul-08	12:00	2459769.0	6.0022	89°44'30.06"	+29°14'21.62"	+5°48'05.89"	29° Gem 46'24.37"	
2022-Jul-09	12:00	2459770.0	6.0025	89°57'35.99"	+29°14'12.46"	+5°47'56.06"	29° Gem 57'53.69"	
2022-Jul-10	12:00	2459771.0	6.0028	90°10'40.03"	+29°14'02.83"	+5°47'46.80"	0° Can 09'21.38"	
2022-Jul-11	12:00	2459772.0	6.0031	90°23'42.10"	+29°13'52.74"	+5°47'38.10"	0° Can 20'47.37"	
2022-Jul-12	12:00	2459773.0	6.0034	90°36'42.11"	+29°13'42.22"	+5°47'29.97"	0° Can 32'11.59"	
2022-Jul-13	12:00	2459774.0	6.0038	90°49'39.94"	+29°13'31.28"	+5°47'22.41"	0° Can 43'33.93"	
2022-Jul-14	12:00	2459775.0	6.0041	91°02'35.49"	+29°13'19.92"	+5°47'15.40"	0° Can 54'54.29"	
2022-Jul-15	12:00	2459776.0	6.0044	91°15'28.65"	+29°13'08.14"	+5°47'08.96"	1° Can 06'12.60"	
2022-Jul-16	12:00	2459777.0	6.0047	91°28'19.35"	+29°12'55.94"	+5°47'03.08"	1° Can 17'28.77"	
2022-Jul-17	12:00	2459778.0	6.0050	91°41'07.51"	+29°12'43.30"	+5°46'57.77"	1° Can 28'42.75"	
2022-Jul-18	12:00	2459779.0	6.0053	91°53'53.09"	+29°12'30.23"	+5°46'53.01"	1° Can 39'54.51"	
2022-Jul-19	12:00	2459780.0	6.0056	92°06'36.06"	+29°12'16.73"	+5°46'48.81"	1° Can 51'04.00"	
2022-Jul-20	12:00	2459781.0	6.0059	92°19'16.34"	+29°12'02.83"	+5°46'45.17"	2° Can 02'11.18"	
2022-Jul-21	12:00	2459782.0	6.0062	92°31'53.86"	+29°11'48.53"	+5°46'42.09"	2° Can 13'15.97"	
2022-Jul-22	12:00	2459783.0	6.0066	92°44'28.55"	+29°11'33.85"	+5°46'39.56"	2° Can 24'18.31"	
2022-Jul-23	12:00	2459784.0	6.0069	92°57'00.31"	+29°11'18.82"	+5°46'37.58"	2° Can 35'18.12"	
2022-Jul-24	12:00	2459785.0	6.0072	93°09'29.03"	+29°11'03.45"	+5°46'36.15"	2° Can 46'15.30"	
2022-Jul-25	12:00	2459786.0	6.0075	93°21'54.62"	+29°10'47.76"	+5°46'35.26"	2° Can 57'09.76"	
2022-Jul-26	12:00	2459787.0	6.0078	93°34'16.95"	+29°10'31.76"	+5°46'34.93"	3° Can 08'01.41"	
2022-Jul-27	12:00	2459788.0	6.0081	93°46'35.91"	+29°10'15.47"	+5°46'35.13"	3° Can 18'50.14"	
2022-Jul-28	12:00	2459789.0	6.0084	93°58'51.40"	+29°09'58.89"	+5°46'35.87"	3° Can 29'35.85"	
2022-Jul-29	12:00	2459790.0	6.0088	94°11'03.31"	+29°09'42.04"	+5°46'37.15"	3° Can 40'18.45"	
2022-Jul-30	12:00	2459791.0	6.0091	94°23'11.52"	+29°09'24.91"	+5°46'38.97"	3° Can 50'57.85"	
2022-Jul-31	12:00	2459792.0	6.0094	94°35'15.95"	+29°09'07.52"	+5°46'41.31"	4° Can 01'33.96"	
2022-Aug-01	12:00	2459793.0	6.0097	94°47'16.50"	+29°08'49.88"	+5°46'44.19"	4° Can 12'06.72"	
2022-Aug-02	12:00	2459794.0	6.0100	94°59'13.11"	+29°08'31.99"	+5°46'47.59"	4° Can 22'36.04"	
2022-Aug-03	12:00	2459795.0	6.0103	95°11'05.70"	+29°08'13.86"	+5°46'51.52"	4° Can 33'01.87"	
2022-Aug-04	12:00	2459796.0	6.0106	95°22'54.21"	+29°07'55.50"	+5°46'55.97"	4° Can 43'24.16"	
2022-Aug-05	12:00	2459797.0	6.0109	95°34'38.57"	+29°07'36.94"	+5°47'00.94"	4° Can 53'42.85"	
2022-Aug-06	12:00	2459798.0	6.0113	95°46'18.73"	+29°07'18.20"	+5°47'06.42"	5° Can 03'57.88"	
2022-Aug-07	12:00	2459799.0	6.0116	95°57'54.60"	+29°06'59.31"	+5°47'12.42"	5° Can 14'09.18"	
2022-Aug-08	12:00	2459800.0	6.0119	96°09'26.09"	+29°06'40.30"	+5°47'18.93"	5° Can 24'16.66"	
2022-Aug-09	12:00	2459801.0	6.0122	96°20'53.10"	+29°06'21.19"	+5°47'25.96"	5° Can 34'20.24"	
2022-Aug-10	12:00	2459802.0	6.0125	96°32'15.49"	+29°06'02.01"	+5°47'33.49"	5° Can 44'19.80"	

2022-Aug-11	12:00	2459803.0	6.0128	96°43'33.17"	+29°05'42.77"	+5°47'41.54"	5° Can 54'15.24"	
2022-Aug-12	12:00	2459804.0	6.0131	96°54'46.01"	+29°05'23.47"	+5°47'50.08"	6° Can 04'06.47"	
2022-Aug-13	12:00	2459805.0	6.0134	97°05'53.95"	+29°05'04.12"	+5°47'59.14"	6° Can 13'53.42"	
2022-Aug-14	12:00	2459806.0	6.0138	97°16'56.92"	+29°04'44.71"	+5°48'08.70"	6° Can 23'36.03"	
2022-Aug-15	12:00	2459807.0	6.0141	97°27'54.86"	+29°04'25.27"	+5°48'18.75"	6° Can 33'14.27"	
2022-Aug-16	12:00	2459808.0	6.0144	97°38'47.73"	+29°04'05.80"	+5°48'29.31"	6° Can 42'48.06"	
2022-Aug-17	12:00	2459809.0	6.0147	97°49'35.44"	+29°03'46.34"	+5°48'40.37"	6° Can 52'17.35"	
2022-Aug-18	12:00	2459810.0	6.0150	98°00'17.90"	+29°03'26.91"	+5°48'51.91"	7° Can 01'42.06"	
2022-Aug-19	12:00	2459811.0	6.0153	98°10'55.02"	+29°03'07.55"	+5°49'03.95"	7° Can 11'02.09"	
2022-Aug-20	12:00	2459812.0	6.0156	98°21'26.68"	+29°02'48.27"	+5°49'16.48"	7° Can 20'17.34"	
2022-Aug-21	12:00	2459813.0	6.0160	98°31'52.76"	+29°02'29.10"	+5°49'29.48"	7° Can 29'27.71"	
2022-Aug-22	12:00	2459814.0	6.0163	98°42'13.14"	+29°02'10.08"	+5°49'42.97"	7° Can 38'33.09"	
2022-Aug-23	12:00	2459815.0	6.0166	98°52'27.69"	+29°01'51.21"	+5°49'56.93"	7° Can 47'33.36"	
2022-Aug-24	12:00	2459816.0	6.0169	99°02'36.30"	+29°01'32.52"	+5°50'11.36"	7° Can 56'28.42"	
2022-Aug-25	12:00	2459817.0	6.0172	99°12'38.84"	+29°01'14.02"	+5°50'26.26"	8° Can 05'18.15"	
2022-Aug-26	12:00	2459818.0	6.0175	99°22'35.19"	+29°00'55.74"	+5°50'41.63"	8° Can 14'02.45"	
2022-Aug-27	12:00	2459819.0	6.0178	99°32'25.23"	+29°00'37.68"	+5°50'57.45"	8° Can 22'41.22"	
2022-Aug-28	12:00	2459820.0	6.0181	99°42'08.88"	+29°00'19.85"	+5°51'13.72"	8° Can 31'14.37"	
2022-Aug-29	12:00	2459821.0	6.0185	99°51'46.03"	+29°00'02.28"	+5°51'30.45"	8° Can 39'41.82"	
2022-Aug-30	12:00	2459822.0	6.0188	100°01'16.61"	+28°59'44.96"	+5°51'47.61"	8° Can 48'03.50"	
2022-Aug-31	12:00	2459823.0	6.0191	100°10'40.53"	+28°59'27.93"	+5°52'05.22"	8° Can 56'19.32"	
2022-Sep-01	12:00	2459824.0	6.0194	100°19'57.73"	+28°59'11.20"	+5°52'23.26"	9° Can 04'29.24"	
2022-Sep-02	12:00	2459825.0	6.0197	100°29'08.13"	+28°58'54.81"	+5°52'41.73"	9° Can 12'33.16"	
2022-Sep-03	12:00	2459826.0	6.0200	100°38'11.63"	+28°58'38.78"	+5°53'00.62"	9° Can 20'31.03"	
2022-Sep-04	12:00	2459827.0	6.0203	100°47'08.14"	+28°58'23.15"	+5°53'19.94"	9° Can 28'22.73"	
2022-Sep-05	12:00	2459828.0	6.0207	100°55'57.54"	+28°58'07.95"	+5°53'39.67"	9° Can 36'08.18"	
2022-Sep-06	12:00	2459829.0	6.0210	101°04'39.72"	+28°57'53.21"	+5°53'59.81"	9° Can 43'47.25"	
2022-Sep-07	12:00	2459830.0	6.0213	101°13'14.54"	+28°57'38.94"	+5°54'20.35"	9° Can 51'19.84"	
2022-Sep-08	12:00	2459831.0	6.0216	101°21'41.89"	+28°57'25.16"	+5°54'41.29"	9° Can 58'45.84"	
2022-Sep-09	12:00	2459832.0	6.0219	101°30'01.68"	+28°57'11.87"	+5°55'02.63"	10° Can 06'05.17"	
2022-Sep-10	12:00	2459833.0	6.0222	101°38'13.81"	+28°56'59.07"	+5°55'24.36"	10° Can 13'17.74"	
2022-Sep-11	12:00	2459834.0	6.0225	101°46'18.23"	+28°56'46.78"	+5°55'46.47"	10° Can 20'23.52"	
2022-Sep-12	12:00	2459835.0	6.0228	101°54'14.88"	+28°56'35.01"	+5°56'08.96"	10° Can 27'22.43"	
2022-Sep-13	12:00	2459836.0	6.0232	102°02'03.67"	+28°56'23.79"	+5°56'31.81"	10° Can 34'14.41"	
2022-Sep-14	12:00	2459837.0	6.0235	102°09'44.53"	+28°56'13.13"	+5°56'55.04"	10° Can 40'59.37"	
2022-Sep-15	12:00	2459838.0	6.0238	102°17'17.34"	+28°56'03.08"	+5°57'18.61"	10° Can 47'37.23"	
2022-Sep-16	12:00	2459839.0	6.0241	102°24'41.99"	+28°55'53.65"	+5°57'42.54"	10° Can 54'07.88"	
2022-Sep-17	12:00	2459840.0	6.0244	102°31'58.36"	+28°55'44.88"	+5°58'06.81"	11° Can 00'31.19"	
2022-Sep-18	12:00	2459841.0	6.0247	102°39'06.32"	+28°55'36.78"	+5°58'31.41"	11° Can 06'47.07"	
2022-Sep-19	12:00	2459842.0	6.0250	102°46'05.72"	+28°55'29.39"	+5°58'56.33"	11° Can 12'55.39"	
2022-Sep-20	12:00	2459843.0	6.0254	102°52'56.46"	+28°55'22.71"	+5°59'21.57"	11° Can 18'56.03"	
2022-Sep-21	12:00	2459844.0	6.0257	102°59'38.39"	+28°55'16.77"	+5°59'47.11"	11° Can 24'48.87"	
2022-Sep-22	12:00	2459845.0	6.0260	103°06'11.39"	+28°55'11.57"	+6°00'12.94"	11° Can 30'33.82"	
2022-Sep-23	12:00	2459846.0	6.0263	103°12'35.36"	+28°55'07.12"	+6°00'39.06"	11° Can 36'10.76"	
2022-Sep-24	12:00	2459847.0	6.0266	103°18'50.17"	+28°55'03.44"	+6°01'05.46"	11° Can 41'39.60"	
2022-Sep-25	12:00	2459848.0	6.0269	103°24'55.73"	+28°55'00.52"	+6°01'32.11"	11° Can 47'00.25"	

2022-Sep-26	12:00	2459849.0	6.0272	103°30'51.95"	+28°54'58.38"	+6°01'59.02"	11° Can 52'12.64"	
2022-Sep-27	12:00	2459850.0	6.0276	103°36'38.77"	+28°54'57.03"	+6°02'26.17"	11° Can 57'16.69"	
2022-Sep-28	12:00	2459851.0	6.0279	103°42'16.10"	+28°54'56.48"	+6°02'53.55"	12° Can 02'12.34"	
2022-Sep-29	12:00	2459852.0	6.0282	103°47'43.88"	+28°54'56.75"	+6°03'21.15"	12° Can 06'59.53"	
2022-Sep-30	12:00	2459853.0	6.0285	103°53'02.02"	+28°54'57.86"	+6°03'48.95"	12° Can 11'38.19"	
2022-Oct-01	12:00	2459854.0	6.0288	103°58'10.43"	+28°54'59.83"	+6°04'16.94"	12° Can 16'08.22"	
2022-Oct-02	12:00	2459855.0	6.0291	104°03'09.02"	+28°55'02.70"	+6°04'45.12"	12° Can 20'29.54"	
2022-Oct-03	12:00	2459856.0	6.0294	104°07'57.65"	+28°55'06.46"	+6°05'13.47"	12° Can 24'42.04"	
2022-Oct-04	12:00	2459857.0	6.0297	104°12'36.23"	+28°55'11.14"	+6°05'41.97"	12° Can 28'45.62"	
2022-Oct-05	12:00	2459858.0	6.0301	104°17'04.66"	+28°55'16.74"	+6°06'10.62"	12° Can 32'40.21"	
2022-Oct-06	12:00	2459859.0	6.0304	104°21'22.83"	+28°55'23.24"	+6°06'39.39"	12° Can 36'25.70"	
2022-Oct-07	12:00	2459860.0	6.0307	104°25'30.68"	+28°55'30.64"	+6°07'08.29"	12° Can 40'02.06"	
2022-Oct-08	12:00	2459861.0	6.0310	104°29'28.16"	+28°55'38.94"	+6°07'37.28"	12° Can 43'29.23"	
2022-Oct-09	12:00	2459862.0	6.0313	104°33'15.22"	+28°55'48.13"	+6°08'06.37"	12° Can 46'47.16"	
2022-Oct-10	12:00	2459863.0	6.0316	104°36'51.82"	+28°55'58.21"	+6°08'35.52"	12° Can 49'55.83"	
2022-Oct-11	12:00	2459864.0	6.0319	104°40'17.88"	+28°56'09.19"	+6°09'04.74"	12° Can 52'55.17"	
2022-Oct-12	12:00	2459865.0	6.0323	104°43'33.35"	+28°56'21.09"	+6°09'33.99"	12° Can 55'45.12"	
2022-Oct-13	12:00	2459866.0	6.0326	104°46'38.13"	+28°56'33.90"	+6°10'03.27"	12° Can 58'25.61"	
2022-Oct-14	12:00	2459867.0	6.0329	104°49'32.13"	+28°56'47.66"	+6°10'32.55"	13° Can 00'56.55"	
2022-Oct-15	12:00	2459868.0	6.0332	104°52'15.25"	+28°57'02.35"	+6°11'01.83"	13° Can 03'17.85"	
2022-Oct-16	12:00	2459869.0	6.0335	104°54'47.39"	+28°57'17.98"	+6°11'31.07"	13° Can 05'29.43"	
2022-Oct-17	12:00	2459870.0	6.0338	104°57'08.46"	+28°57'34.54"	+6°12'00.27"	13° Can 07'31.21"	
2022-Oct-18	12:00	2459871.0	6.0341	104°59'18.35"	+28°57'52.04"	+6°12'29.40"	13° Can 09'23.10"	
2022-Oct-19	12:00	2459872.0	6.0345	105°01'17.00"	+28°58'10.45"	+6°12'58.43"	13° Can 11'05.03"	
2022-Oct-20	12:00	2459873.0	6.0348	105°03'04.31"	+28°58'29.78"	+6°13'27.37"	13° Can 12'36.93"	
2022-Oct-21	12:00	2459874.0	6.0351	105°04'40.22"	+28°58'49.99"	+6°13'56.17"	13° Can 13'58.77"	
2022-Oct-22	12:00	2459875.0	6.0354	105°06'04.68"	+28°59'11.08"	+6°14'24.82"	13° Can 15'10.47"	
2022-Oct-23	12:00	2459876.0	6.0357	105°07'17.65"	+28°59'33.01"	+6°14'53.30"	13° Can 16'12.03"	
2022-Oct-24	12:00	2459877.0	6.0360	105°08'19.10"	+28°59'55.78"	+6°15'21.59"	13° Can 17'03.41"	
2022-Oct-25	12:00	2459878.0	6.0363	105°09'09.02"	+29°00'19.37"	+6°15'49.66"	13° Can 17'44.62"	
2022-Oct-26	12:00	2459879.0	6.0367	105°09'47.41"	+29°00'43.75"	+6°16'17.49"	13° Can 18'15.64"	
2022-Oct-27	12:00	2459880.0	6.0370	105°10'14.24"	+29°01'08.94"	+6°16'45.06"	13° Can 18'36.46"	
2022-Oct-28	12:00	2459881.0	6.0373	105°10'29.50"	+29°01'34.91"	+6°17'12.34"	13° Can 18'47.08"	
2022-Oct-29	12:00	2459882.0	6.0376	105°10'33.16"	+29°02'01.66"	+6°17'39.32"	13° Can 18'47.46"	
2022-Oct-30	12:00	2459883.0	6.0379	105°10'25.18"	+29°02'29.19"	+6°18'05.97"	13° Can 18'37.58"	Rx
2022-Oct-31	12:00	2459884.0	6.0382	105°10'05.53"	+29°02'57.45"	+6°18'32.26"	13° Can 18'17.41"	Rx
2022-Nov-01	12:00	2459885.0	6.0385	105°09'34.17"	+29°03'26.43"	+6°18'58.18"	13° Can 17'46.93"	Rx
2022-Nov-02	12:00	2459886.0	6.0388	105°08'51.12"	+29°03'56.09"	+6°19'23.69"	13° Can 17'06.16"	Rx
2022-Nov-03	12:00	2459887.0	6.0392	105°07'56.39"	+29°04'26.38"	+6°19'48.78"	13° Can 16'15.10"	Rx
2022-Nov-04	12:00	2459888.0	6.0395	105°06'50.01"	+29°04'57.26"	+6°20'13.41"	13° Can 15'13.81"	Rx
2022-Nov-05	12:00	2459889.0	6.0398	105°05'32.03"	+29°05'28.69"	+6°20'37.58"	13° Can 14'02.32"	Rx
2022-Nov-06	12:00	2459890.0	6.0401	105°04'02.50"	+29°06'00.63"	+6°21'01.24"	13° Can 12'40.69"	Rx
2022-Nov-07	12:00	2459891.0	6.0404	105°02'21.48"	+29°06'33.07"	+6°21'24.37"	13° Can 11'08.97"	Rx
2022-Nov-08	12:00	2459892.0	6.0407	105°00'29.00"	+29°07'05.96"	+6°21'46.95"	13° Can 09'27.20"	Rx
2022-Nov-09	12:00	2459893.0	6.0410	104°58'25.11"	+29°07'39.28"	+6°22'08.96"	13° Can 07'35.41"	Rx
2022-Nov-10	12:00	2459894.0	6.0414	104°56'09.81"	+29°08'13.01"	+6°22'30.35"	13° Can 05'33.62"	Rx

2022-Nov-11	12:00	2459895.0	6.0417	104°53'43.14"	+29°08'47.12"	+6°22'51.12"	13° Can 03'21.87"	Rx
2022-Nov-12	12:00	2459896.0	6.0420	104°51'05.11"	+29°09'21.56"	+6°23'11.22"	13° Can 01'00.18"	Rx
2022-Nov-13	12:00	2459897.0	6.0423	104°48'15.77"	+29°09'56.30"	+6°23'30.64"	12° Can 58'28.57"	Rx
2022-Nov-14	12:00	2459898.0	6.0426	104°45'15.14"	+29°10'31.30"	+6°23'49.34"	12° Can 55'47.10"	Rx
2022-Nov-15	12:00	2459899.0	6.0429	104°42'03.29"	+29°11'06.50"	+6°24'07.29"	12° Can 52'55.81"	Rx
2022-Nov-16	12:00	2459900.0	6.0432	104°38'40.26"	+29°11'41.87"	+6°24'24.48"	12° Can 49'54.76"	Rx
2022-Nov-17	12:00	2459901.0	6.0435	104°35'06.14"	+29°12'17.34"	+6°24'40.86"	12° Can 46'44.03"	Rx
2022-Nov-18	12:00	2459902.0	6.0439	104°31'21.01"	+29°12'52.85"	+6°24'56.41"	12° Can 43'23.71"	Rx
2022-Nov-19	12:00	2459903.0	6.0442	104°27'25.00"	+29°13'28.36"	+6°25'11.11"	12° Can 39'53.89"	Rx
2022-Nov-20	12:00	2459904.0	6.0445	104°23'18.21"	+29°14'03.80"	+6°25'24.93"	12° Can 36'14.69"	Rx
2022-Nov-21	12:00	2459905.0	6.0448	104°19'00.81"	+29°14'39.13"	+6°25'37.83"	12° Can 32'26.26"	Rx
2022-Nov-22	12:00	2459906.0	6.0451	104°14'32.95"	+29°15'14.28"	+6°25'49.79"	12° Can 28'28.72"	Rx
2022-Nov-23	12:00	2459907.0	6.0454	104°09'54.78"	+29°15'49.21"	+6°26'00.79"	12° Can 24'22.24"	Rx
2022-Nov-24	12:00	2459908.0	6.0457	104°05'06.48"	+29°16'23.88"	+6°26'10.80"	12° Can 20'06.95"	Rx
2022-Nov-25	12:00	2459909.0	6.0461	104°00'08.20"	+29°16'58.26"	+6°26'19.78"	12° Can 15'43.00"	Rx
2022-Nov-26	12:00	2459910.0	6.0464	103°55'00.08"	+29°17'32.29"	+6°26'27.72"	12° Can 11'10.52"	Rx
2022-Nov-27	12:00	2459911.0	6.0467	103°49'42.26"	+29°18'05.94"	+6°26'34.60"	12° Can 06'29.63"	Rx
2022-Nov-28	12:00	2459912.0	6.0470	103°44'14.91"	+29°18'39.13"	+6°26'40.38"	12° Can 01'40.48"	Rx
2022-Nov-29	12:00	2459913.0	6.0473	103°38'38.20"	+29°19'11.81"	+6°26'45.04"	11° Can 56'43.23"	Rx
2022-Nov-30	12:00	2459914.0	6.0476	103°32'52.35"	+29°19'43.89"	+6°26'48.56"	11° Can 51'38.09"	Rx
2022-Dec-01	12:00	2459915.0	6.0479	103°26'57.59"	+29°20'15.31"	+6°26'50.92"	11° Can 46'25.25"	Rx
2022-Dec-02	12:00	2459916.0	6.0482	103°20'54.15"	+29°20'46.01"	+6°26'52.10"	11° Can 41'04.93"	Rx
2022-Dec-03	12:00	2459917.0	6.0486	103°14'42.30"	+29°21'15.92"	+6°26'52.07"	11° Can 35'37.36"	Rx
2022-Dec-04	12:00	2459918.0	6.0489	103°08'22.28"	+29°21'45.00"	+6°26'50.81"	11° Can 30'02.76"	Rx
2022-Dec-05	12:00	2459919.0	6.0492	103°01'54.34"	+29°22'13.20"	+6°26'48.30"	11° Can 24'21.35"	Rx
2022-Dec-06	12:00	2459920.0	6.0495	102°55'18.72"	+29°22'40.47"	+6°26'44.52"	11° Can 18'33.33"	Rx
2022-Dec-07	12:00	2459921.0	6.0498	102°48'35.65"	+29°23'06.77"	+6°26'39.46"	11° Can 12'38.92"	Rx
2022-Dec-08	12:00	2459922.0	6.0501	102°41'45.35"	+29°23'32.05"	+6°26'33.09"	11° Can 06'38.32"	Rx
2022-Dec-09	12:00	2459923.0	6.0504	102°34'48.07"	+29°23'56.27"	+6°26'25.39"	11° Can 00'31.72"	Rx
2022-Dec-10	12:00	2459924.0	6.0508	102°27'44.02"	+29°24'19.38"	+6°26'16.35"	10° Can 54'19.33"	Rx
2022-Dec-11	12:00	2459925.0	6.0511	102°20'33.47"	+29°24'41.32"	+6°26'05.95"	10° Can 48'01.38"	Rx
2022-Dec-12	12:00	2459926.0	6.0514	102°13'16.65"	+29°25'02.05"	+6°25'54.17"	10° Can 41'38.07"	Rx
2022-Dec-13	12:00	2459927.0	6.0517	102°05'53.83"	+29°25'21.51"	+6°25'41.00"	10° Can 35'09.65"	Rx
2022-Dec-14	12:00	2459928.0	6.0520	101°58'25.30"	+29°25'39.65"	+6°25'26.43"	10° Can 28'36.35"	Rx
2022-Dec-15	12:00	2459929.0	6.0523	101°50'51.33"	+29°25'56.41"	+6°25'10.44"	10° Can 21'58.44"	Rx
2022-Dec-16	12:00	2459930.0	6.0526	101°43'12.25"	+29°26'11.75"	+6°24'53.01"	10° Can 15'16.18"	Rx
2022-Dec-17	12:00	2459931.0	6.0529	101°35'28.37"	+29°26'25.60"	+6°24'34.15"	10° Can 08'29.85"	Rx
2022-Dec-18	12:00	2459932.0	6.0533	101°27'40.02"	+29°26'37.93"	+6°24'13.84"	10° Can 01'39.75"	Rx
2022-Dec-19	12:00	2459933.0	6.0536	101°19'47.55"	+29°26'48.70"	+6°23'52.07"	9° Can 54'46.17"	Rx
2022-Dec-20	12:00	2459934.0	6.0539	101°11'51.32"	+29°26'57.86"	+6°23'28.84"	9° Can 47'49.43"	Rx
2022-Dec-21	12:00	2459935.0	6.0542	101°03'51.67"	+29°27'05.39"	+6°23'04.13"	9° Can 40'49.83"	Rx
2022-Dec-22	12:00	2459936.0	6.0545	100°55'48.97"	+29°27'11.28"	+6°22'37.95"	9° Can 33'47.67"	Rx
2022-Dec-23	12:00	2459937.0	6.0548	100°47'43.53"	+29°27'15.51"	+6°22'10.29"	9° Can 26'43.23"	Rx
2022-Dec-24	12:00	2459938.0	6.0551	100°39'35.68"	+29°27'18.05"	+6°21'41.15"	9° Can 19'36.80"	Rx
2022-Dec-25	12:00	2459939.0	6.0554	100°31'25.72"	+29°27'18.87"	+6°21'10.54"	9° Can 12'28.63"	Rx
2022-Dec-26	12:00	2459940.0	6.0558	100°23'13.99"	+29°27'17.94"	+6°20'38.45"	9° Can 05'19.03"	Rx

2022-Dec-27	12:00	2459941.0	6.0561	100°15'00.85"	+29°27'15.22"	+6°20'04.88"	8° Can 58'08.29"	Rx
2022-Dec-28	12:00	2459942.0	6.0564	100°06'46.68"	+29°27'10.67"	+6°19'29.85"	8° Can 50'56.76"	Rx
2022-Dec-29	12:00	2459943.0	6.0567	99°58'31.86"	+29°27'04.26"	+6°18'53.35"	8° Can 43'44.75"	Rx
2022-Dec-30	12:00	2459944.0	6.0570	99°50'16.78"	+29°26'55.97"	+6°18'15.40"	8° Can 36'32.62"	Rx
2022-Dec-31	12:00	2459945.0	6.0573	99°42'01.82"	+29°26'45.80"	+6°17'36.00"	8° Can 29'20.69"	Rx
2023-Jan-01	12:00	2459946.0	6.0576	99°33'47.34"	+29°26'33.73"	+6°16'55.16"	8° Can 22'09.26"	Rx
2023-Jan-02	12:00	2459947.0	6.0579	99°25'33.70"	+29°26'19.77"	+6°16'12.89"	8° Can 14'58.64"	Rx
2023-Jan-03	12:00	2459948.0	6.0583	99°17'21.23"	+29°26'03.92"	+6°15'29.21"	8° Can 07'49.13"	Rx
2023-Jan-04	12:00	2459949.0	6.0586	99°09'10.25"	+29°25'46.19"	+6°14'44.11"	8° Can 00'40.99"	Rx
2023-Jan-05	12:00	2459950.0	6.0589	99°01'01.09"	+29°25'26.57"	+6°13'57.61"	7° Can 53'34.50"	Rx
2023-Jan-06	12:00	2459951.0	6.0592	98°52'54.05"	+29°25'05.07"	+6°13'09.74"	7° Can 46'29.93"	Rx
2023-Jan-07	12:00	2459952.0	6.0595	98°44'49.44"	+29°24'41.70"	+6°12'20.50"	7° Can 39'27.53"	Rx
2023-Jan-08	12:00	2459953.0	6.0598	98°36'47.57"	+29°24'16.46"	+6°11'29.90"	7° Can 32'27.59"	Rx
2023-Jan-09	12:00	2459954.0	6.0601	98°28'48.75"	+29°23'49.34"	+6°10'37.97"	7° Can 25'30.36"	Rx
2023-Jan-10	12:00	2459955.0	6.0604	98°20'53.30"	+29°23'20.35"	+6°09'44.73"	7° Can 18'36.12"	Rx
2023-Jan-11	12:00	2459956.0	6.0608	98°13'01.54"	+29°22'49.50"	+6°08'50.18"	7° Can 11'45.15"	Rx
2023-Jan-12	12:00	2459957.0	6.0611	98°05'13.80"	+29°22'16.79"	+6°07'54.36"	7° Can 04'57.72"	Rx
2023-Jan-13	12:00	2459958.0	6.0614	97°57'30.40"	+29°21'42.23"	+6°06'57.27"	6° Can 58'14.12"	Rx
2023-Jan-14	12:00	2459959.0	6.0617	97°49'51.67"	+29°21'05.83"	+6°05'58.96"	6° Can 51'34.64"	Rx
2023-Jan-15	12:00	2459960.0	6.0620	97°42'17.96"	+29°20'27.61"	+6°04'59.42"	6° Can 44'59.57"	Rx
2023-Jan-16	12:00	2459961.0	6.0623	97°34'49.59"	+29°19'47.60"	+6°03'58.70"	6° Can 38'29.19"	Rx
2023-Jan-17	12:00	2459962.0	6.0626	97°27'26.89"	+29°19'05.82"	+6°02'56.81"	6° Can 32'03.78"	Rx
2023-Jan-18	12:00	2459963.0	6.0629	97°20'10.18"	+29°18'22.31"	+6°01'53.78"	6° Can 25'43.61"	Rx
2023-Jan-19	12:00	2459964.0	6.0632	97°12'59.74"	+29°17'37.11"	+6°00'49.64"	6° Can 19'28.94"	Rx
2023-Jan-20	12:00	2459965.0	6.0636	97°05'55.84"	+29°16'50.27"	+5°59'44.41"	6° Can 13'20.00"	Rx
2023-Jan-21	12:00	2459966.0	6.0639	96°58'58.74"	+29°16'01.82"	+5°58'38.12"	6° Can 07'17.00"	Rx
2023-Jan-22	12:00	2459967.0	6.0642	96°52'08.67"	+29°15'11.77"	+5°57'30.80"	6° Can 01'20.15"	Rx
2023-Jan-23	12:00	2459968.0	6.0645	96°45'25.90"	+29°14'20.16"	+5°56'22.48"	5° Can 55'29.67"	Rx
2023-Jan-24	12:00	2459969.0	6.0648	96°38'50.70"	+29°13'26.99"	+5°55'13.19"	5° Can 49'45.81"	Rx
2023-Jan-25	12:00	2459970.0	6.0651	96°32'23.34"	+29°12'32.28"	+5°54'02.97"	5° Can 44'08.81"	Rx
2023-Jan-26	12:00	2459971.0	6.0654	96°26'04.11"	+29°11'36.07"	+5°52'51.83"	5° Can 38'38.92"	Rx
2023-Jan-27	12:00	2459972.0	6.0657	96°19'53.29"	+29°10'38.39"	+5°51'39.82"	5° Can 33'16.36"	Rx
2023-Jan-28	12:00	2459973.0	6.0660	96°13'51.10"	+29°09'39.28"	+5°50'26.95"	5° Can 28'01.35"	Rx
2023-Jan-29	12:00	2459974.0	6.0664	96°07'57.76"	+29°08'38.81"	+5°49'13.27"	5° Can 22'54.07"	Rx
2023-Jan-30	12:00	2459975.0	6.0667	96°02'13.47"	+29°07'37.00"	+5°47'58.80"	5° Can 17'54.69"	Rx
2023-Jan-31	12:00	2459976.0	6.0670	95°56'38.41"	+29°06'33.92"	+5°46'43.58"	5° Can 13'03.38"	Rx
2023-Feb-01	12:00	2459977.0	6.0673	95°51'12.73"	+29°05'29.61"	+5°45'27.62"	5° Can 08'20.26"	Rx
2023-Feb-02	12:00	2459978.0	6.0676	95°45'56.59"	+29°04'24.11"	+5°44'10.97"	5° Can 03'45.47"	Rx
2023-Feb-03	12:00	2459979.0	6.0679	95°40'50.13"	+29°03'17.46"	+5°42'53.66"	4° Can 59'19.15"	Rx
2023-Feb-04	12:00	2459980.0	6.0682	95°35'53.49"	+29°02'09.69"	+5°41'35.71"	4° Can 55'01.40"	Rx
2023-Feb-05	12:00	2459981.0	6.0685	95°31'06.79"	+29°01'00.85"	+5°40'17.15"	4° Can 50'52.34"	Rx
2023-Feb-06	12:00	2459982.0	6.0688	95°26'30.19"	+28°59'50.97"	+5°38'58.01"	4° Can 46'52.10"	Rx
2023-Feb-07	12:00	2459983.0	6.0692	95°22'03.79"	+28°58'40.07"	+5°37'38.33"	4° Can 43'00.80"	Rx
2023-Feb-08	12:00	2459984.0	6.0695	95°17'47.75"	+28°57'28.20"	+5°36'18.13"	4° Can 39'18.55"	Rx
2023-Feb-09	12:00	2459985.0	6.0698	95°13'42.20"	+28°56'15.38"	+5°34'57.45"	4° Can 35'45.47"	Rx
2023-Feb-10	12:00	2459986.0	6.0701	95°09'47.26"	+28°55'01.64"	+5°33'36.31"	4° Can 32'21.69"	Rx

2023-Feb-11	12:00	2459987.0	6.0704	95°06'03.09"	+28°53'47.04"	+5°32'14.74"	4° Can 29'07.32"	Rx
2023-Feb-12	12:00	2459988.0	6.0707	95°02'29.79"	+28°52'31.60"	+5°30'52.77"	4° Can 26'02.49"	Rx
2023-Feb-13	12:00	2459989.0	6.0710	94°59'07.50"	+28°51'15.37"	+5°29'30.43"	4° Can 23'07.30"	Rx
2023-Feb-14	12:00	2459990.0	6.0713	94°55'56.32"	+28°49'58.41"	+5°28'07.76"	4° Can 20'21.83"	Rx
2023-Feb-15	12:00	2459991.0	6.0716	94°52'56.34"	+28°48'40.75"	+5°26'44.77"	4° Can 17'46.19"	Rx
2023-Feb-16	12:00	2459992.0	6.0720	94°50'07.63"	+28°47'22.45"	+5°25'21.50"	4° Can 15'20.43"	Rx
2023-Feb-17	12:00	2459993.0	6.0723	94°47'30.23"	+28°46'03.54"	+5°23'57.97"	4° Can 13'04.59"	Rx
2023-Feb-18	12:00	2459994.0	6.0726	94°45'04.18"	+28°44'44.07"	+5°22'34.22"	4° Can 10'58.70"	Rx
2023-Feb-19	12:00	2459995.0	6.0729	94°42'49.52"	+28°43'24.06"	+5°21'10.27"	4° Can 09'02.82"	Rx
2023-Feb-20	12:00	2459996.0	6.0732	94°40'46.28"	+28°42'03.51"	+5°19'46.15"	4° Can 07'16.97"	Rx
2023-Feb-21	12:00	2459997.0	6.0735	94°38'54.55"	+28°40'42.46"	+5°18'21.89"	4° Can 05'41.22"	Rx
2023-Feb-22	12:00	2459998.0	6.0738	94°37'14.39"	+28°39'20.90"	+5°16'57.51"	4° Can 04'15.65"	Rx
2023-Feb-23	12:00	2459999.0	6.0741	94°35'45.86"	+28°37'58.88"	+5°15'33.03"	4° Can 03'00.31"	Rx
2023-Feb-24	12:00	2460000.0	6.0744	94°34'29.02"	+28°36'36.43"	+5°14'08.49"	4° Can 01'55.26"	Rx
2023-Feb-25	12:00	2460001.0	6.0747	94°33'23.88"	+28°35'13.59"	+5°12'43.90"	4° Can 01'00.50"	Rx
2023-Feb-26	12:00	2460002.0	6.0751	94°32'30.45"	+28°33'50.39"	+5°11'19.29"	4° Can 00'16.06"	Rx
2023-Feb-27	12:00	2460003.0	6.0754	94°31'48.70"	+28°32'26.87"	+5°09'54.68"	3° Can 59'41.90"	Rx
2023-Feb-28	12:00	2460004.0	6.0757	94°31'18.59"	+28°31'03.07"	+5°08'30.10"	3° Can 59'18.01"	Rx
2023-Mar-01	12:00	2460005.0	6.0760	94°31'00.09"	+28°29'39.00"	+5°07'05.55"	3° Can 59'04.35"	Rx
2023-Mar-02	12:00	2460006.0	6.0763	94°30'53.15"	+28°28'14.70"	+5°05'41.07"	3° Can 59'00.89"	Rx
2023-Mar-03	12:00	2460007.0	6.0766	94°30'57.72"	+28°26'50.17"	+5°04'16.67"	3° Can 59'07.59"	
2023-Mar-04	12:00	2460008.0	6.0769	94°31'13.75"	+28°25'25.44"	+5°02'52.37"	3° Can 59'24.40"	
2023-Mar-05	12:00	2460009.0	6.0772	94°31'41.19"	+28°24'00.53"	+5°01'28.20"	3° Can 59'51.30"	
2023-Mar-06	12:00	2460010.0	6.0775	94°32'19.99"	+28°22'35.42"	+5°00'04.16"	4° Can 00'28.25"	
2023-Mar-07	12:00	2460011.0	6.0778	94°33'10.12"	+28°21'10.15"	+4°58'40.29"	4° Can 01'15.22"	
2023-Mar-08	12:00	2460012.0	6.0781	94°34'11.55"	+28°19'44.72"	+4°57'16.58"	4° Can 02'12.18"	
2023-Mar-09	12:00	2460013.0	6.0785	94°35'24.23"	+28°18'19.13"	+4°55'53.07"	4° Can 03'19.11"	
2023-Mar-10	12:00	2460014.0	6.0788	94°36'48.14"	+28°16'53.40"	+4°54'29.77"	4° Can 04'35.99"	
2023-Mar-11	12:00	2460015.0	6.0791	94°38'23.26"	+28°15'27.55"	+4°53'06.69"	4° Can 06'02.80"	
2023-Mar-12	12:00	2460016.0	6.0794	94°40'09.54"	+28°14'01.59"	+4°51'43.85"	4° Can 07'39.51"	
2023-Mar-13	12:00	2460017.0	6.0797	94°42'06.94"	+28°12'35.54"	+4°50'21.26"	4° Can 09'26.09"	
2023-Mar-14	12:00	2460018.0	6.0800	94°44'15.41"	+28°11'09.43"	+4°48'58.94"	4° Can 11'22.49"	
2023-Mar-15	12:00	2460019.0	6.0803	94°46'34.88"	+28°09'43.27"	+4°47'36.91"	4° Can 13'28.66"	
2023-Mar-16	12:00	2460020.0	6.0806	94°49'05.25"	+28°08'17.08"	+4°46'15.18"	4° Can 15'44.52"	
2023-Mar-17	12:00	2460021.0	6.0809	94°51'46.44"	+28°06'50.86"	+4°44'53.76"	4° Can 18'10.00"	
2023-Mar-18	12:00	2460022.0	6.0812	94°54'38.35"	+28°05'24.62"	+4°43'32.67"	4° Can 20'45.02"	
2023-Mar-19	12:00	2460023.0	6.0815	94°57'40.90"	+28°03'58.35"	+4°42'11.91"	4° Can 23'29.51"	
2023-Mar-20	12:00	2460024.0	6.0819	95°00'54.01"	+28°02'32.04"	+4°40'51.50"	4° Can 26'23.40"	
2023-Mar-21	12:00	2460025.0	6.0822	95°04'17.63"	+28°01'05.66"	+4°39'31.45"	4° Can 29'26.67"	
2023-Mar-22	12:00	2460026.0	6.0825	95°07'51.73"	+27°59'39.22"	+4°38'11.78"	4° Can 32'39.28"	
2023-Mar-23	12:00	2460027.0	6.0828	95°11'36.24"	+27°58'12.72"	+4°36'52.48"	4° Can 36'01.18"	
2023-Mar-24	12:00	2460028.0	6.0831	95°15'31.10"	+27°56'46.18"	+4°35'33.58"	4° Can 39'32.32"	
2023-Mar-25	12:00	2460029.0	6.0834	95°19'36.22"	+27°55'19.59"	+4°34'15.07"	4° Can 43'12.62"	
2023-Mar-26	12:00	2460030.0	6.0837	95°23'51.47"	+27°53'52.97"	+4°32'56.98"	4° Can 47'01.98"	
2023-Mar-27	12:00	2460031.0	6.0840	95°28'16.74"	+27°52'26.33"	+4°31'39.30"	4° Can 51'00.30"	
2023-Mar-28	12:00	2460032.0	6.0843	95°32'51.90"	+27°50'59.68"	+4°30'22.03"	4° Can 55'07.47"	

2023-Mar-29	12:00	2460033.0	6.0846	95°37'36.81"	+27°49'33.00"	+4°29'05.20"	4° Can 59'23.38"	
2023-Mar-30	12:00	2460034.0	6.0849	95°42'31.35"	+27°48'06.29"	+4°27'48.81"	5° Can 03'47.91"	
2023-Mar-31	12:00	2460035.0	6.0852	95°47'35.39"	+27°46'39.54"	+4°26'32.85"	5° Can 08'20.95"	
2023-Apr-01	12:00	2460036.0	6.0855	95°52'48.80"	+27°45'12.75"	+4°25'17.34"	5° Can 13'02.41"	
2023-Apr-02	12:00	2460037.0	6.0859	95°58'11.47"	+27°43'45.90"	+4°24'02.29"	5° Can 17'52.19"	
2023-Apr-03	12:00	2460038.0	6.0862	96°03'43.30"	+27°42'18.97"	+4°22'47.69"	5° Can 22'50.20"	
2023-Apr-04	12:00	2460039.0	6.0865	96°09'24.18"	+27°40'51.96"	+4°21'33.55"	5° Can 27'56.34"	
2023-Apr-05	12:00	2460040.0	6.0868	96°15'14.02"	+27°39'24.84"	+4°20'19.88"	5° Can 33'10.55"	
2023-Apr-06	12:00	2460041.0	6.0871	96°21'12.73"	+27°37'57.62"	+4°19'06.68"	5° Can 38'32.74"	
2023-Apr-07	12:00	2460042.0	6.0874	96°27'20.24"	+27°36'30.27"	+4°17'53.96"	5° Can 44'02.86"	
2023-Apr-08	12:00	2460043.0	6.0877	96°33'36.45"	+27°35'02.81"	+4°16'41.72"	5° Can 49'40.84"	
2023-Apr-09	12:00	2460044.0	6.0880	96°40'01.28"	+27°33'35.23"	+4°15'29.96"	5° Can 55'26.59"	
2023-Apr-10	12:00	2460045.0	6.0883	96°46'34.63"	+27°32'07.52"	+4°14'18.68"	6° Can 01'20.03"	
2023-Apr-11	12:00	2460046.0	6.0886	96°53'16.39"	+27°30'39.70"	+4°13'07.90"	6° Can 07'21.06"	
2023-Apr-12	12:00	2460047.0	6.0889	97°00'06.42"	+27°29'11.77"	+4°11'57.61"	6° Can 13'29.58"	
2023-Apr-13	12:00	2460048.0	6.0892	97°07'04.61"	+27°27'43.70"	+4°10'47.82"	6° Can 19'45.48"	
2023-Apr-14	12:00	2460049.0	6.0895	97°14'10.82"	+27°26'15.49"	+4°09'38.53"	6° Can 26'08.64"	
2023-Apr-15	12:00	2460050.0	6.0898	97°21'24.93"	+27°24'47.13"	+4°08'29.75"	6° Can 32'38.97"	
2023-Apr-16	12:00	2460051.0	6.0901	97°28'46.85"	+27°23'18.57"	+4°07'21.46"	6° Can 39'16.38"	
2023-Apr-17	12:00	2460052.0	6.0905	97°36'16.48"	+27°21'49.79"	+4°06'13.69"	6° Can 46'00.79"	
2023-Apr-18	12:00	2460053.0	6.0908	97°43'53.75"	+27°20'20.78"	+4°05'06.42"	6° Can 52'52.16"	
2023-Apr-19	12:00	2460054.0	6.0911	97°51'38.59"	+27°18'51.51"	+4°03'59.65"	6° Can 59'50.40"	
2023-Apr-20	12:00	2460055.0	6.0914	97°59'30.91"	+27°17'21.99"	+4°02'53.40"	7° Can 06'55.46"	
2023-Apr-21	12:00	2460056.0	6.0917	98°07'30.62"	+27°15'52.21"	+4°01'47.66"	7° Can 14'07.25"	
2023-Apr-22	12:00	2460057.0	6.0920	98°15'37.60"	+27°14'22.16"	+4°00'42.42"	7° Can 21'25.67"	
2023-Apr-23	12:00	2460058.0	6.0923	98°23'51.71"	+27°12'51.85"	+3°59'37.69"	7° Can 28'50.61"	
2023-Apr-24	12:00	2460059.0	6.0926	98°32'12.81"	+27°11'21.27"	+3°58'33.47"	7° Can 36'21.93"	
2023-Apr-25	12:00	2460060.0	6.0929	98°40'40.76"	+27°09'50.42"	+3°57'29.76"	7° Can 43'59.51"	
2023-Apr-26	12:00	2460061.0	6.0932	98°49'15.41"	+27°08'19.28"	+3°56'26.56"	7° Can 51'43.24"	
2023-Apr-27	12:00	2460062.0	6.0935	98°57'56.64"	+27°06'47.83"	+3°55'23.86"	7° Can 59'33.00"	
2023-Apr-28	12:00	2460063.0	6.0938	99°06'44.31"	+27°05'16.06"	+3°54'21.66"	8° Can 07'28.67"	
2023-Apr-29	12:00	2460064.0	6.0941	99°15'38.31"	+27°03'43.94"	+3°53'19.97"	8° Can 15'30.16"	
2023-Apr-30	12:00	2460065.0	6.0944	99°24'38.51"	+27°02'11.47"	+3°52'18.78"	8° Can 23'37.36"	
2023-May-01	12:00	2460066.0	6.0947	99°33'44.81"	+27°00'38.62"	+3°51'18.10"	8° Can 31'50.18"	
2023-May-02	12:00	2460067.0	6.0950	99°42'57.11"	+26°59'05.37"	+3°50'17.91"	8° Can 40'08.55"	
2023-May-03	12:00	2460068.0	6.0953	99°52'15.33"	+26°57'31.70"	+3°49'18.22"	8° Can 48'32.38"	
2023-May-04	12:00	2460069.0	6.0957	100°01'39.38"	+26°55'57.61"	+3°48'19.03"	8° Can 57'01.61"	
2023-May-05	12:00	2460070.0	6.0960	100°11'09.18"	+26°54'23.08"	+3°47'20.34"	9° Can 05'36.17"	
2023-May-06	12:00	2460071.0	6.0963	100°20'44.65"	+26°52'48.12"	+3°46'22.15"	9° Can 14'15.99"	
2023-May-07	12:00	2460072.0	6.0966	100°30'25.70"	+26°51'12.71"	+3°45'24.45"	9° Can 23'00.98"	
2023-May-08	12:00	2460073.0	6.0969	100°40'12.22"	+26°49'36.87"	+3°44'27.24"	9° Can 31'51.06"	
2023-May-09	12:00	2460074.0	6.0972	100°50'04.09"	+26°48'00.58"	+3°43'30.52"	9° Can 40'46.13"	
2023-May-10	12:00	2460075.0	6.0975	101°00'01.18"	+26°46'23.85"	+3°42'34.30"	9° Can 49'46.06"	
2023-May-11	12:00	2460076.0	6.0978	101°10'03.37"	+26°44'46.66"	+3°41'38.56"	9° Can 58'50.76"	
2023-May-12	12:00	2460077.0	6.0981	101°20'10.55"	+26°43'08.98"	+3°40'43.31"	10° Can 08'00.14"	
2023-May-13	12:00	2460078.0	6.0984	101°30'22.63"	+26°41'30.80"	+3°39'48.55"	10° Can 17'14.10"	

2023-May-14	12:00	2460079.0	6.0987	101°40'39.51"	+26°39'52.08"	+3°38'54.28"	10° Can 26'32.58"	
2023-May-15	12:00	2460080.0	6.0990	101°51'01.14"	+26°38'12.81"	+3°38'00.48"	10° Can 35'55.54"	
2023-May-16	12:00	2460081.0	6.0993	102°01'27.46"	+26°36'32.97"	+3°37'07.16"	10° Can 45'22.90"	
2023-May-17	12:00	2460082.0	6.0996	102°11'58.38"	+26°34'52.55"	+3°36'14.32"	10° Can 54'54.63"	
2023-May-18	12:00	2460083.0	6.0999	102°22'33.83"	+26°33'11.55"	+3°35'21.95"	11° Can 04'30.63"	
2023-May-19	12:00	2460084.0	6.1002	102°33'13.71"	+26°31'29.97"	+3°34'30.06"	11° Can 14'10.84"	
2023-May-20	12:00	2460085.0	6.1005	102°43'57.91"	+26°29'47.81"	+3°33'38.63"	11° Can 23'55.16"	
2023-May-21	12:00	2460086.0	6.1008	102°54'46.31"	+26°28'05.07"	+3°32'47.66"	11° Can 33'43.46"	
2023-May-22	12:00	2460087.0	6.1011	103°05'38.78"	+26°26'21.74"	+3°31'57.16"	11° Can 43'35.65"	
2023-May-23	12:00	2460088.0	6.1014	103°16'35.18"	+26°24'37.84"	+3°31'07.11"	11° Can 53'31.61"	
2023-May-24	12:00	2460089.0	6.1017	103°27'35.40"	+26°22'53.33"	+3°30'17.52"	12° Can 03'31.24"	
2023-May-25	12:00	2460090.0	6.1020	103°38'39.31"	+26°21'08.21"	+3°29'28.39"	12° Can 13'34.42"	
2023-May-26	12:00	2460091.0	6.1023	103°49'46.81"	+26°19'22.47"	+3°28'39.70"	12° Can 23'41.07"	
2023-May-27	12:00	2460092.0	6.1026	104°00'57.79"	+26°17'36.10"	+3°27'51.45"	12° Can 33'51.10"	
2023-May-28	12:00	2460093.0	6.1029	104°12'12.16"	+26°15'49.07"	+3°27'03.65"	12° Can 44'04.43"	
2023-May-29	12:00	2460094.0	6.1032	104°23'29.83"	+26°14'01.39"	+3°26'16.30"	12° Can 54'20.99"	
2023-May-30	12:00	2460095.0	6.1036	104°34'50.74"	+26°12'13.02"	+3°25'29.38"	13° Can 04'40.71"	
2023-May-31	12:00	2460096.0	6.1039	104°46'14.79"	+26°10'23.98"	+3°24'42.89"	13° Can 15'03.52"	
2023-Jun-01	12:00	2460097.0	6.1042	104°57'41.94"	+26°08'34.25"	+3°23'56.84"	13° Can 25'29.38"	
2023-Jun-02	12:00	2460098.0	6.1045	105°09'12.10"	+26°06'43.83"	+3°23'11.21"	13° Can 35'58.23"	
2023-Jun-03	12:00	2460099.0	6.1048	105°20'45.22"	+26°04'52.73"	+3°22'26.02"	13° Can 46'30.00"	
2023-Jun-04	12:00	2460100.0	6.1051	105°32'21.19"	+26°03'00.95"	+3°21'41.25"	13° Can 57'04.61"	
2023-Jun-05	12:00	2460101.0	6.1054	105°43'59.93"	+26°01'08.51"	+3°20'56.90"	14° Can 07'41.99"	
2023-Jun-06	12:00	2460102.0	6.1057	105°55'41.32"	+25°59'15.40"	+3°20'12.98"	14° Can 18'22.02"	
2023-Jun-07	12:00	2460103.0	6.1060	106°07'25.24"	+25°57'21.63"	+3°19'29.47"	14° Can 29'04.61"	
2023-Jun-08	12:00	2460104.0	6.1063	106°19'11.60"	+25°55'27.18"	+3°18'46.38"	14° Can 39'49.68"	
2023-Jun-09	12:00	2460105.0	6.1066	106°31'00.30"	+25°53'32.04"	+3°18'03.70"	14° Can 50'37.14"	
2023-Jun-10	12:00	2460106.0	6.1069	106°42'51.27"	+25°51'36.17"	+3°17'21.42"	15° Can 01'26.94"	
2023-Jun-11	12:00	2460107.0	6.1072	106°54'44.48"	+25°49'39.58"	+3°16'39.56"	15° Can 12'19.04"	
2023-Jun-12	12:00	2460108.0	6.1075	107°06'39.86"	+25°47'42.24"	+3°15'58.10"	15° Can 23'13.40"	
2023-Jun-13	12:00	2460109.0	6.1078	107°18'37.36"	+25°45'44.16"	+3°15'17.04"	15° Can 34'09.98"	
2023-Jun-14	12:00	2460110.0	6.1081	107°30'36.92"	+25°43'45.35"	+3°14'36.38"	15° Can 45'08.72"	
2023-Jun-15	12:00	2460111.0	6.1084	107°42'38.47"	+25°41'45.79"	+3°13'56.11"	15° Can 56'09.54"	
2023-Jun-16	12:00	2460112.0	6.1087	107°54'41.91"	+25°39'45.52"	+3°13'16.23"	16° Can 07'12.38"	
2023-Jun-17	12:00	2460113.0	6.1090	108°06'47.14"	+25°37'44.54"	+3°12'36.73"	16° Can 18'17.13"	
2023-Jun-18	12:00	2460114.0	6.1093	108°18'54.04"	+25°35'42.85"	+3°11'57.62"	16° Can 29'23.70"	
2023-Jun-19	12:00	2460115.0	6.1096	108°31'02.50"	+25°33'40.45"	+3°11'18.89"	16° Can 40'31.99"	
2023-Jun-20	12:00	2460116.0	6.1099	108°43'12.42"	+25°31'37.36"	+3°10'40.54"	16° Can 51'41.90"	
2023-Jun-21	12:00	2460117.0	6.1102	108°55'23.68"	+25°29'33.57"	+3°10'02.56"	17° Can 02'53.34"	
2023-Jun-22	12:00	2460118.0	6.1105	109°07'36.18"	+25°27'29.08"	+3°09'24.95"	17° Can 14'06.21"	
2023-Jun-23	12:00	2460119.0	6.1108	109°19'49.84"	+25°25'23.88"	+3°08'47.71"	17° Can 25'20.45"	
2023-Jun-24	12:00	2460120.0	6.1111	109°32'04.57"	+25°23'17.97"	+3°08'10.83"	17° Can 36'35.97"	
2023-Jun-25	12:00	2460121.0	6.1114	109°44'20.30"	+25°21'11.35"	+3°07'34.31"	17° Can 47'52.71"	
2023-Jun-26	12:00	2460122.0	6.1117	109°56'36.95"	+25°19'04.01"	+3°06'58.16"	17° Can 59'10.62"	
2023-Jun-27	12:00	2460123.0	6.1120	110°08'54.46"	+25°16'55.96"	+3°06'22.36"	18° Can 10'29.63"	
2023-Jun-28	12:00	2460124.0	6.1123	110°21'12.77"	+25°14'47.19"	+3°05'46.91"	18° Can 21'49.70"	

2023-Jun-29	12:00	2460125.0	6.1126	110°33'31.84"	+25°12'37.72"	+3°05'11.82"	18° Can 33'10.77"	
2023-Jun-30	12:00	2460126.0	6.1129	110°45'51.59"	+25°10'27.55"	+3°04'37.07"	18° Can 44'32.80"	
2023-Jul-01	12:00	2460127.0	6.1132	110°58'11.97"	+25°08'16.71"	+3°04'02.67"	18° Can 55'55.72"	
2023-Jul-02	12:00	2460128.0	6.1135	111°10'32.88"	+25°06'05.20"	+3°03'28.62"	19° Can 07'19.46"	
2023-Jul-03	12:00	2460129.0	6.1138	111°22'54.24"	+25°03'53.06"	+3°02'54.91"	19° Can 18'43.92"	
2023-Jul-04	12:00	2460130.0	6.1141	111°35'15.93"	+25°01'40.28"	+3°02'21.54"	19° Can 30'09.02"	
2023-Jul-05	12:00	2460131.0	6.1144	111°47'37.86"	+24°59'26.88"	+3°01'48.50"	19° Can 41'34.66"	
2023-Jul-06	12:00	2460132.0	6.1147	111°59'59.93"	+24°57'12.84"	+3°01'15.81"	19° Can 53'00.76"	
2023-Jul-07	12:00	2460133.0	6.1150	112°12'22.09"	+24°54'58.15"	+3°00'43.44"	20° Can 04'27.27"	
2023-Jul-08	12:00	2460134.0	6.1153	112°24'44.29"	+24°52'42.81"	+3°00'11.41"	20° Can 15'54.16"	
2023-Jul-09	12:00	2460135.0	6.1156	112°37'06.49"	+24°50'26.81"	+2°59'39.71"	20° Can 27'21.40"	
2023-Jul-10	12:00	2460136.0	6.1159	112°49'28.66"	+24°48'10.16"	+2°59'08.33"	20° Can 38'48.94"	
2023-Jul-11	12:00	2460137.0	6.1162	113°01'50.74"	+24°45'52.88"	+2°58'37.27"	20° Can 50'16.74"	
2023-Jul-12	12:00	2460138.0	6.1165	113°14'12.66"	+24°43'34.97"	+2°58'06.54"	21° Can 01'44.74"	
2023-Jul-13	12:00	2460139.0	6.1168	113°26'34.33"	+24°41'16.45"	+2°57'36.11"	21° Can 13'12.86"	
2023-Jul-14	12:00	2460140.0	6.1171	113°38'55.67"	+24°38'57.34"	+2°57'05.97"	21° Can 24'41.01"	
2023-Jul-15	12:00	2460141.0	6.1174	113°51'16.60"	+24°36'37.64"	+2°56'36.13"	21° Can 36'09.12"	
2023-Jul-16	12:00	2460142.0	6.1177	114°03'37.01"	+24°34'17.38"	+2°56'06.58"	21° Can 47'37.10"	
2023-Jul-17	12:00	2460143.0	6.1180	114°15'56.80"	+24°31'56.58"	+2°55'37.34"	21° Can 59'04.86"	
2023-Jul-18	12:00	2460144.0	6.1183	114°28'15.86"	+24°29'35.26"	+2°55'08.40"	22° Can 10'32.29"	
2023-Jul-19	12:00	2460145.0	6.1186	114°40'34.11"	+24°27'13.43"	+2°54'39.76"	22° Can 21'59.30"	
2023-Jul-20	12:00	2460146.0	6.1189	114°52'51.45"	+24°24'51.09"	+2°54'11.41"	22° Can 33'25.82"	
2023-Jul-21	12:00	2460147.0	6.1192	115°05'07.79"	+24°22'28.25"	+2°53'43.36"	22° Can 44'51.78"	
2023-Jul-22	12:00	2460148.0	6.1195	115°17'23.06"	+24°20'04.92"	+2°53'15.60"	22° Can 56'17.10"	
2023-Jul-23	12:00	2460149.0	6.1198	115°29'37.21"	+24°17'41.10"	+2°52'48.12"	23° Can 07'41.72"	
2023-Jul-24	12:00	2460150.0	6.1201	115°41'50.16"	+24°15'16.80"	+2°52'20.93"	23° Can 19'05.59"	
2023-Jul-25	12:00	2460151.0	6.1204	115°54'01.86"	+24°12'52.04"	+2°51'54.02"	23° Can 30'28.66"	
2023-Jul-26	12:00	2460152.0	6.1206	116°06'12.26"	+24°10'26.84"	+2°51'27.39"	23° Can 41'50.87"	
2023-Jul-27	12:00	2460153.0	6.1209	116°18'21.29"	+24°08'01.20"	+2°51'01.04"	23° Can 53'12.17"	
2023-Jul-28	12:00	2460154.0	6.1212	116°30'28.91"	+24°05'35.16"	+2°50'34.96"	24° Can 04'32.49"	
2023-Jul-29	12:00	2460155.0	6.1215	116°42'35.02"	+24°03'08.73"	+2°50'09.15"	24° Can 15'51.78"	
2023-Jul-30	12:00	2460156.0	6.1218	116°54'39.56"	+24°00'41.95"	+2°49'43.62"	24° Can 27'09.94"	
2023-Jul-31	12:00	2460157.0	6.1221	117°06'42.42"	+23°58'14.85"	+2°49'18.35"	24° Can 38'26.89"	
2023-Aug-01	12:00	2460158.0	6.1224	117°18'43.50"	+23°55'47.44"	+2°48'53.35"	24° Can 49'42.52"	
2023-Aug-02	12:00	2460159.0	6.1227	117°30'42.70"	+23°53'19.74"	+2°48'28.62"	25° Can 00'56.75"	
2023-Aug-03	12:00	2460160.0	6.1230	117°42'39.95"	+23°50'51.73"	+2°48'04.14"	25° Can 12'09.52"	
2023-Aug-04	12:00	2460161.0	6.1233	117°54'35.20"	+23°48'23.43"	+2°47'39.93"	25° Can 23'20.76"	
2023-Aug-05	12:00	2460162.0	6.1236	118°06'28.42"	+23°45'54.82"	+2°47'15.97"	25° Can 34'30.47"	
2023-Aug-06	12:00	2460163.0	6.1239	118°18'19.58"	+23°43'25.92"	+2°46'52.26"	25° Can 45'38.61"	
2023-Aug-07	12:00	2460164.0	6.1242	118°30'08.64"	+23°40'56.76"	+2°46'28.80"	25° Can 56'45.14"	
2023-Aug-08	12:00	2460165.0	6.1245	118°41'55.53"	+23°38'27.35"	+2°46'05.59"	26° Can 07'49.99"	
2023-Aug-09	12:00	2460166.0	6.1248	118°53'40.19"	+23°35'57.72"	+2°45'42.62"	26° Can 18'53.10"	
2023-Aug-10	12:00	2460167.0	6.1251	119°05'22.51"	+23°33'27.92"	+2°45'19.89"	26° Can 29'54.36"	
2023-Aug-11	12:00	2460168.0	6.1254	119°17'02.41"	+23°30'57.96"	+2°44'57.40"	26° Can 40'53.70"	
2023-Aug-12	12:00	2460169.0	6.1257	119°28'39.78"	+23°28'27.88"	+2°44'35.14"	26° Can 51'51.00"	
2023-Aug-13	12:00	2460170.0	6.1260	119°40'14.51"	+23°25'57.70"	+2°44'13.12"	27° Can 02'46.17"	

2023-Aug-14	12:00	2460171.0	6.1263	119°51'46.50"	+23°23'27.44"	+2°43'51.32"	27° Can 13'39.11"	
2023-Aug-15	12:00	2460172.0	6.1266	120°03'15.66"	+23°20'57.12"	+2°43'29.75"	27° Can 24'29.72"	
2023-Aug-16	12:00	2460173.0	6.1269	120°14'41.89"	+23°18'26.77"	+2°43'08.41"	27° Can 35'17.92"	
2023-Aug-17	12:00	2460174.0	6.1272	120°26'05.11"	+23°15'56.39"	+2°42'47.29"	27° Can 46'03.63"	
2023-Aug-18	12:00	2460175.0	6.1275	120°37'25.24"	+23°13'26.01"	+2°42'26.39"	27° Can 56'46.77"	
2023-Aug-19	12:00	2460176.0	6.1277	120°48'42.21"	+23°10'55.65"	+2°42'05.70"	28° Can 07'27.28"	
2023-Aug-20	12:00	2460177.0	6.1280	120°59'55.96"	+23°08'25.32"	+2°41'45.23"	28° Can 18'05.08"	
2023-Aug-21	12:00	2460178.0	6.1283	121°11'06.41"	+23°05'55.05"	+2°41'24.98"	28° Can 28'40.11"	
2023-Aug-22	12:00	2460179.0	6.1286	121°22'13.52"	+23°03'24.86"	+2°41'04.93"	28° Can 39'12.32"	
2023-Aug-23	12:00	2460180.0	6.1289	121°33'17.21"	+23°00'54.77"	+2°40'45.09"	28° Can 49'41.63"	
2023-Aug-24	12:00	2460181.0	6.1292	121°44'17.42"	+22°58'24.83"	+2°40'25.46"	29° Can 00'07.99"	
2023-Aug-25	12:00	2460182.0	6.1295	121°55'14.08"	+22°55'55.06"	+2°40'06.03"	29° Can 10'31.30"	
2023-Aug-26	12:00	2460183.0	6.1298	122°06'07.11"	+22°53'25.50"	+2°39'46.81"	29° Can 20'51.50"	
2023-Aug-27	12:00	2460184.0	6.1301	122°16'56.40"	+22°50'56.18"	+2°39'27.78"	29° Can 31'08.47"	
2023-Aug-28	12:00	2460185.0	6.1304	122°27'41.85"	+22°48'27.15"	+2°39'08.96"	29° Can 41'22.12"	
2023-Aug-29	12:00	2460186.0	6.1307	122°38'23.36"	+22°45'58.41"	+2°38'50.32"	29° Can 51'32.35"	
2023-Aug-30	12:00	2460187.0	6.1310	122°49'00.84"	+22°43'30.00"	+2°38'31.88"	0° Leo 01'39.06"	
2023-Aug-31	12:00	2460188.0	6.1313	122°59'34.22"	+22°41'01.91"	+2°38'13.63"	0° Leo 11'42.20"	
2023-Sep-01	12:00	2460189.0	6.1316	123°10'03.45"	+22°38'34.15"	+2°37'55.56"	0° Leo 21'41.71"	
2023-Sep-02	12:00	2460190.0	6.1319	123°20'28.51"	+22°36'06.73"	+2°37'37.67"	0° Leo 31'37.57"	
2023-Sep-03	12:00	2460191.0	6.1321	123°30'49.35"	+22°33'39.68"	+2°37'19.97"	0° Leo 41'29.73"	
2023-Sep-04	12:00	2460192.0	6.1324	123°41'05.92"	+22°31'13.03"	+2°37'02.44"	0° Leo 51'18.13"	
2023-Sep-05	12:00	2460193.0	6.1327	123°51'18.14"	+22°28'46.82"	+2°36'45.08"	1° Leo 01'02.69"	
2023-Sep-06	12:00	2460194.0	6.1330	124°01'25.92"	+22°26'21.09"	+2°36'27.89"	1° Leo 10'43.31"	
2023-Sep-07	12:00	2460195.0	6.1333	124°11'29.15"	+22°23'55.88"	+2°36'10.86"	1° Leo 20'19.89"	
2023-Sep-08	12:00	2460196.0	6.1336	124°21'27.72"	+22°21'31.22"	+2°35'53.99"	1° Leo 29'52.31"	
2023-Sep-09	12:00	2460197.0	6.1339	124°31'21.51"	+22°19'07.15"	+2°35'37.29"	1° Leo 39'20.47"	
2023-Sep-10	12:00	2460198.0	6.1342	124°41'10.43"	+22°16'43.71"	+2°35'20.74"	1° Leo 48'44.24"	
2023-Sep-11	12:00	2460199.0	6.1345	124°50'54.35"	+22°14'20.92"	+2°35'04.34"	1° Leo 58'03.52"	
2023-Sep-12	12:00	2460200.0	6.1348	125°00'33.18"	+22°11'58.82"	+2°34'48.09"	2° Leo 07'18.22"	
2023-Sep-13	12:00	2460201.0	6.1351	125°10'06.82"	+22°09'37.42"	+2°34'31.99"	2° Leo 16'28.23"	
2023-Sep-14	12:00	2460202.0	6.1354	125°19'35.19"	+22°07'16.76"	+2°34'16.03"	2° Leo 25'33.47"	
2023-Sep-15	12:00	2460203.0	6.1356	125°28'58.20"	+22°04'56.86"	+2°34'00.22"	2° Leo 34'33.85"	
2023-Sep-16	12:00	2460204.0	6.1359	125°38'15.78"	+22°02'37.75"	+2°33'44.54"	2° Leo 43'29.30"	
2023-Sep-17	12:00	2460205.0	6.1362	125°47'27.84"	+22°00'19.46"	+2°33'28.99"	2° Leo 52'19.74"	
2023-Sep-18	12:00	2460206.0	6.1365	125°56'34.33"	+21°58'02.01"	+2°33'13.58"	3° Leo 01'05.09"	
2023-Sep-19	12:00	2460207.0	6.1368	126°05'35.17"	+21°55'45.44"	+2°32'58.30"	3° Leo 09'45.27"	
2023-Sep-20	12:00	2460208.0	6.1371	126°14'30.27"	+21°53'29.80"	+2°32'43.14"	3° Leo 18'20.21"	
2023-Sep-21	12:00	2460209.0	6.1374	126°23'19.57"	+21°51'15.11"	+2°32'28.11"	3° Leo 26'49.82"	
2023-Sep-22	12:00	2460210.0	6.1377	126°32'02.96"	+21°49'01.42"	+2°32'13.19"	3° Leo 35'13.99"	
2023-Sep-23	12:00	2460211.0	6.1380	126°40'40.35"	+21°46'48.78"	+2°31'58.40"	3° Leo 43'32.63"	
2023-Sep-24	12:00	2460212.0	6.1383	126°49'11.63"	+21°44'37.21"	+2°31'43.71"	3° Leo 51'45.62"	
2023-Sep-25	12:00	2460213.0	6.1385	126°57'36.69"	+21°42'26.77"	+2°31'29.14"	3° Leo 59'52.85"	
2023-Sep-26	12:00	2460214.0	6.1388	127°05'55.42"	+21°40'17.46"	+2°31'14.67"	4° Leo 07'54.23"	
2023-Sep-27	12:00	2460215.0	6.1391	127°14'07.74"	+21°38'09.32"	+2°31'00.31"	4° Leo 15'49.65"	
2023-Sep-28	12:00	2460216.0	6.1394	127°22'13.58"	+21°36'02.34"	+2°30'46.04"	4° Leo 23'39.06"	

2023-Sep-29	12:00	2460217.0	6.1397	127°30'12.90"	+21°33'56.56"	+2°30'31.86"	4° Leo 31'22.41"	
2023-Sep-30	12:00	2460218.0	6.1400	127°38'05.65"	+21°31'51.98"	+2°30'17.78"	4° Leo 38'59.65"	
2023-Oct-01	12:00	2460219.0	6.1403	127°45'51.79"	+21°29'48.63"	+2°30'03.77"	4° Leo 46'30.72"	
2023-Oct-02	12:00	2460220.0	6.1406	127°53'31.24"	+21°27'46.57"	+2°29'49.85"	4° Leo 53'55.55"	
2023-Oct-03	12:00	2460221.0	6.1409	128°01'03.91"	+21°25'45.82"	+2°29'36.00"	5° Leo 01'14.03"	
2023-Oct-04	12:00	2460222.0	6.1412	128°08'29.68"	+21°23'46.44"	+2°29'22.21"	5° Leo 08'26.05"	
2023-Oct-05	12:00	2460223.0	6.1414	128°15'48.43"	+21°21'48.48"	+2°29'08.50"	5° Leo 15'31.48"	
2023-Oct-06	12:00	2460224.0	6.1417	128°23'00.04"	+21°19'51.97"	+2°28'54.84"	5° Leo 22'30.19"	
2023-Oct-07	12:00	2460225.0	6.1420	128°30'04.40"	+21°17'56.94"	+2°28'41.23"	5° Leo 29'22.08"	
2023-Oct-08	12:00	2460226.0	6.1423	128°37'01.39"	+21°16'03.44"	+2°28'27.68"	5° Leo 36'07.01"	
2023-Oct-09	12:00	2460227.0	6.1426	128°43'50.89"	+21°14'11.49"	+2°28'14.17"	5° Leo 42'44.89"	
2023-Oct-10	12:00	2460228.0	6.1429	128°50'32.81"	+21°12'21.12"	+2°28'00.71"	5° Leo 49'15.61"	
2023-Oct-11	12:00	2460229.0	6.1432	128°57'07.05"	+21°10'32.36"	+2°27'47.28"	5° Leo 55'39.06"	
2023-Oct-12	12:00	2460230.0	6.1435	129°03'33.53"	+21°08'45.24"	+2°27'33.88"	6° Leo 01'55.16"	
2023-Oct-13	12:00	2460231.0	6.1437	129°09'52.14"	+21°06'59.79"	+2°27'20.51"	6° Leo 08'03.83"	
2023-Oct-14	12:00	2460232.0	6.1440	129°16'02.83"	+21°05'16.03"	+2°27'07.17"	6° Leo 14'04.97"	
2023-Oct-15	12:00	2460233.0	6.1443	129°22'05.51"	+21°03'33.99"	+2°26'53.84"	6° Leo 19'58.52"	
2023-Oct-16	12:00	2460234.0	6.1446	129°28'00.12"	+21°01'53.71"	+2°26'40.52"	6° Leo 25'44.38"	
2023-Oct-17	12:00	2460235.0	6.1449	129°33'46.56"	+21°00'15.22"	+2°26'27.22"	6° Leo 31'22.49"	
2023-Oct-18	12:00	2460236.0	6.1452	129°39'24.77"	+20°58'38.56"	+2°26'13.92"	6° Leo 36'52.74"	
2023-Oct-19	12:00	2460237.0	6.1455	129°44'54.64"	+20°57'03.77"	+2°26'00.62"	6° Leo 42'15.05"	
2023-Oct-20	12:00	2460238.0	6.1457	129°50'16.08"	+20°55'30.88"	+2°25'47.31"	6° Leo 47'29.31"	
2023-Oct-21	12:00	2460239.0	6.1460	129°55'28.99"	+20°53'59.93"	+2°25'33.99"	6° Leo 52'35.42"	
2023-Oct-22	12:00	2460240.0	6.1463	130°00'33.26"	+20°52'30.97"	+2°25'20.65"	6° Leo 57'33.26"	
2023-Oct-23	12:00	2460241.0	6.1466	130°05'28.80"	+20°51'03.99"	+2°25'07.29"	7° Leo 02'22.74"	
2023-Oct-24	12:00	2460242.0	6.1469	130°10'15.52"	+20°49'39.04"	+2°24'53.90"	7° Leo 07'03.77"	
2023-Oct-25	12:00	2460243.0	6.1472	130°14'53.34"	+20°48'16.10"	+2°24'40.48"	7° Leo 11'36.30"	
2023-Oct-26	12:00	2460244.0	6.1475	130°19'22.24"	+20°46'55.20"	+2°24'27.01"	7° Leo 16'00.27"	
2023-Oct-27	12:00	2460245.0	6.1477	130°23'42.16"	+20°45'36.34"	+2°24'13.49"	7° Leo 20'15.64"	
2023-Oct-28	12:00	2460246.0	6.1480	130°27'53.07"	+20°44'19.53"	+2°23'59.92"	7° Leo 24'22.37"	
2023-Oct-29	12:00	2460247.0	6.1483	130°31'54.93"	+20°43'04.81"	+2°23'46.28"	7° Leo 28'20.41"	
2023-Oct-30	12:00	2460248.0	6.1486	130°35'47.66"	+20°41'52.21"	+2°23'32.57"	7° Leo 32'09.68"	
2023-Oct-31	12:00	2460249.0	6.1489	130°39'31.18"	+20°40'41.76"	+2°23'18.78"	7° Leo 35'50.09"	
2023-Nov-01	12:00	2460250.0	6.1492	130°43'05.37"	+20°39'33.50"	+2°23'04.90"	7° Leo 39'21.53"	
2023-Nov-02	12:00	2460251.0	6.1495	130°46'30.14"	+20°38'27.46"	+2°22'50.94"	7° Leo 42'43.90"	
2023-Nov-03	12:00	2460252.0	6.1497	130°49'45.37"	+20°37'23.66"	+2°22'36.87"	7° Leo 45'57.08"	
2023-Nov-04	12:00	2460253.0	6.1500	130°52'50.97"	+20°36'22.14"	+2°22'22.70"	7° Leo 49'00.98"	
2023-Nov-05	12:00	2460254.0	6.1503	130°55'46.85"	+20°35'22.91"	+2°22'08.41"	7° Leo 51'55.51"	
2023-Nov-06	12:00	2460255.0	6.1506	130°58'32.93"	+20°34'25.98"	+2°21'54.00"	7° Leo 54'40.60"	
2023-Nov-07	12:00	2460256.0	6.1509	131°01'09.13"	+20°33'31.37"	+2°21'39.46"	7° Leo 57'16.17"	
2023-Nov-08	12:00	2460257.0	6.1512	131°03'35.40"	+20°32'39.09"	+2°21'24.79"	7° Leo 59'42.15"	
2023-Nov-09	12:00	2460258.0	6.1514	131°05'51.67"	+20°31'49.15"	+2°21'09.98"	8° Leo 01'58.50"	
2023-Nov-10	12:00	2460259.0	6.1517	131°07'57.89"	+20°31'01.56"	+2°20'55.01"	8° Leo 04'05.15"	
2023-Nov-11	12:00	2460260.0	6.1520	131°09'54.03"	+20°30'16.33"	+2°20'39.90"	8° Leo 06'02.08"	
2023-Nov-12	12:00	2460261.0	6.1523	131°11'40.05"	+20°29'33.47"	+2°20'24.62"	8° Leo 07'49.24"	
2023-Nov-13	12:00	2460262.0	6.1526	131°13'15.91"	+20°28'53.00"	+2°20'09.17"	8° Leo 09'26.58"	

2023-Nov-14	12:00	2460263.0	6.1529	131°14'41.57"	+20°28'14.93"	+2°19'53.54"	8° Leo 10'54.08"	
2023-Nov-15	12:00	2460264.0	6.1531	131°15'56.98"	+20°27'39.28"	+2°19'37.73"	8° Leo 12'11.68"	
2023-Nov-16	12:00	2460265.0	6.1534	131°17'02.10"	+20°27'06.07"	+2°19'21.73"	8° Leo 13'19.33"	
2023-Nov-17	12:00	2460266.0	6.1537	131°17'56.86"	+20°26'35.30"	+2°19'05.52"	8° Leo 14'16.97"	
2023-Nov-18	12:00	2460267.0	6.1540	131°18'41.22"	+20°26'06.99"	+2°18'49.11"	8° Leo 15'04.55"	
2023-Nov-19	12:00	2460268.0	6.1543	131°19'15.13"	+20°25'41.14"	+2°18'32.49"	8° Leo 15'42.04"	
2023-Nov-20	12:00	2460269.0	6.1545	131°19'38.56"	+20°25'17.73"	+2°18'15.64"	8° Leo 16'09.40"	
2023-Nov-21	12:00	2460270.0	6.1548	131°19'51.51"	+20°24'56.74"	+2°17'58.56"	8° Leo 16'26.64"	
2023-Nov-22	12:00	2460271.0	6.1551	131°19'53.99"	+20°24'38.17"	+2°17'41.24"	8° Leo 16'33.77"	
2023-Nov-23	12:00	2460272.0	6.1554	131°19'46.02"	+20°24'21.98"	+2°17'23.67"	8° Leo 16'30.81"	Rx
2023-Nov-24	12:00	2460273.0	6.1557	131°19'27.63"	+20°24'08.15"	+2°17'05.84"	8° Leo 16'17.81"	Rx
2023-Nov-25	12:00	2460274.0	6.1560	131°18'58.85"	+20°23'56.69"	+2°16'47.74"	8° Leo 15'54.78"	Rx
2023-Nov-26	12:00	2460275.0	6.1562	131°18'19.70"	+20°23'47.59"	+2°16'29.37"	8° Leo 15'21.74"	Rx
2023-Nov-27	12:00	2460276.0	6.1565	131°17'30.17"	+20°23'40.84"	+2°16'10.71"	8° Leo 14'38.69"	Rx
2023-Nov-28	12:00	2460277.0	6.1568	131°16'30.24"	+20°23'36.44"	+2°15'51.75"	8° Leo 13'45.60"	Rx
2023-Nov-29	12:00	2460278.0	6.1571	131°15'19.90"	+20°23'34.41"	+2°15'32.49"	8° Leo 12'42.47"	Rx
2023-Nov-30	12:00	2460279.0	6.1574	131°13'59.13"	+20°23'34.72"	+2°15'12.92"	8° Leo 11'29.28"	Rx
2023-Dec-01	12:00	2460280.0	6.1576	131°12'27.91"	+20°23'37.36"	+2°14'53.04"	8° Leo 10'06.01"	Rx
2023-Dec-02	12:00	2460281.0	6.1579	131°10'46.25"	+20°23'42.33"	+2°14'32.82"	8° Leo 08'32.68"	Rx
2023-Dec-03	12:00	2460282.0	6.1582	131°08'54.15"	+20°23'49.59"	+2°14'12.27"	8° Leo 06'49.30"	Rx
2023-Dec-04	12:00	2460283.0	6.1585	131°06'51.65"	+20°23'59.12"	+2°13'51.38"	8° Leo 04'55.91"	Rx
2023-Dec-05	12:00	2460284.0	6.1588	131°04'38.79"	+20°24'10.89"	+2°13'30.14"	8° Leo 02'52.54"	Rx
2023-Dec-06	12:00	2460285.0	6.1590	131°02'15.60"	+20°24'24.87"	+2°13'08.54"	8° Leo 00'39.25"	Rx
2023-Dec-07	12:00	2460286.0	6.1593	130°59'42.17"	+20°24'41.03"	+2°12'46.58"	7° Leo 58'16.11"	Rx
2023-Dec-08	12:00	2460287.0	6.1596	130°56'58.54"	+20°24'59.33"	+2°12'24.24"	7° Leo 55'43.19"	Rx
2023-Dec-09	12:00	2460288.0	6.1599	130°54'04.82"	+20°25'19.74"	+2°12'01.53"	7° Leo 53'00.57"	Rx
2023-Dec-10	12:00	2460289.0	6.1601	130°51'01.08"	+20°25'42.23"	+2°11'38.44"	7° Leo 50'08.34"	Rx
2023-Dec-11	12:00	2460290.0	6.1604	130°47'47.41"	+20°26'06.77"	+2°11'14.95"	7° Leo 47'06.59"	Rx
2023-Dec-12	12:00	2460291.0	6.1607	130°44'23.90"	+20°26'33.33"	+2°10'51.07"	7° Leo 43'55.42"	Rx
2023-Dec-13	12:00	2460292.0	6.1610	130°40'50.65"	+20°27'01.88"	+2°10'26.79"	7° Leo 40'34.89"	Rx
2023-Dec-14	12:00	2460293.0	6.1613	130°37'07.73"	+20°27'32.39"	+2°10'02.09"	7° Leo 37'05.11"	Rx
2023-Dec-15	12:00	2460294.0	6.1615	130°33'15.22"	+20°28'04.83"	+2°09'36.98"	7° Leo 33'26.15"	Rx
2023-Dec-16	12:00	2460295.0	6.1618	130°29'13.22"	+20°28'39.14"	+2°09'11.45"	7° Leo 29'38.11"	Rx
2023-Dec-17	12:00	2460296.0	6.1621	130°25'01.85"	+20°29'15.26"	+2°08'45.49"	7° Leo 25'41.12"	Rx
2023-Dec-18	12:00	2460297.0	6.1624	130°20'41.24"	+20°29'53.15"	+2°08'19.10"	7° Leo 21'35.32"	Rx
2023-Dec-19	12:00	2460298.0	6.1626	130°16'11.56"	+20°30'32.71"	+2°07'52.27"	7° Leo 17'20.87"	Rx
2023-Dec-20	12:00	2460299.0	6.1629	130°11'32.99"	+20°31'13.89"	+2°07'24.99"	7° Leo 12'57.97"	Rx
2023-Dec-21	12:00	2460300.0	6.1632	130°06'45.71"	+20°31'56.63"	+2°06'57.26"	7° Leo 08'26.79"	Rx
2023-Dec-22	12:00	2460301.0	6.1635	130°01'49.92"	+20°32'40.85"	+2°06'29.07"	7° Leo 03'47.53"	Rx
2023-Dec-23	12:00	2460302.0	6.1638	129°56'45.80"	+20°33'26.52"	+2°06'00.42"	6° Leo 59'00.36"	Rx
2023-Dec-24	12:00	2460303.0	6.1640	129°51'33.50"	+20°34'13.58"	+2°05'31.30"	6° Leo 54'05.44"	Rx
2023-Dec-25	12:00	2460304.0	6.1643	129°46'13.19"	+20°35'01.99"	+2°05'01.71"	6° Leo 49'02.93"	Rx
2023-Dec-26	12:00	2460305.0	6.1646	129°40'45.02"	+20°35'51.69"	+2°04'31.64"	6° Leo 43'52.98"	Rx
2023-Dec-27	12:00	2460306.0	6.1649	129°35'09.14"	+20°36'42.64"	+2°04'01.09"	6° Leo 38'35.75"	Rx
2023-Dec-28	12:00	2460307.0	6.1651	129°29'25.71"	+20°37'34.78"	+2°03'30.07"	6° Leo 33'11.38"	Rx
2023-Dec-29	12:00	2460308.0	6.1654	129°23'34.89"	+20°38'28.06"	+2°02'58.55"	6° Leo 27'40.06"	Rx

2023-Dec-30	12:00	2460309.0	6.1657	129°17'36.88"	+20°39'22.39"	+2°02'26.56"	6° Leo 22'01.96"	Rx
2023-Dec-31	12:00	2460310.0	6.1660	129°11'31.87"	+20°40'17.73"	+2°01'54.07"	6° Leo 16'17.28"	Rx