

Custom Ephemeris

Compiled by: APS

Calculated by: JPL Horizons

Date: 2023-04-15

2020PP1

Discovered: 2020-08-12.382861

Orbital Period: 1.00 yrs.

Diameter: 0.02 km

Perihelion: 2023-04-03, 19:36:13.7 UT

Links:

[SBDB](#)

[MPC](#)

Date	UT	JD	AU	RA	Declination	Latitude	Longitude	Rx
2023-Jan-01	12:00	2459946.0	1.0085	13°00'53.38"	-12°46'31.31"	-16°52'20.97"	6° Ari 48'52.91"	
2023-Jan-02	12:00	2459947.0	1.0073	13°36'17.16"	-12°15'54.67"	-16°38'19.17"	7° Ari 34'48.68"	
2023-Jan-03	12:00	2459948.0	1.0061	14°11'42.88"	-11°45'11.07"	-16°24'09.04"	8° Ari 20'48.21"	
2023-Jan-04	12:00	2459949.0	1.0049	14°47'10.51"	-11°14'20.59"	-16°09'50.49"	9° Ari 06'51.25"	
2023-Jan-05	12:00	2459950.0	1.0037	15°22'40.08"	-10°43'23.28"	-15°55'23.36"	9° Ari 52'57.60"	
2023-Jan-06	12:00	2459951.0	1.0024	15°58'11.61"	-10°12'19.21"	-15°40'47.54"	10° Ari 39'07.07"	
2023-Jan-07	12:00	2459952.0	1.0012	16°33'45.17"	-9°41'08.39"	-15°26'02.90"	11° Ari 25'19.51"	
2023-Jan-08	12:00	2459953.0	1.0000	17°09'20.85"	-9°09'50.85"	-15°11'09.29"	12° Ari 11'34.83"	
2023-Jan-09	12:00	2459954.0	0.9987	17°44'58.79"	-8°38'26.60"	-14°56'06.58"	12° Ari 57'52.92"	
2023-Jan-10	12:00	2459955.0	0.9975	18°20'39.14"	-8°06'55.64"	-14°40'54.64"	13° Ari 44'13.74"	
2023-Jan-11	12:00	2459956.0	0.9963	18°56'22.08"	-7°35'17.95"	-14°25'33.34"	14° Ari 30'37.28"	
2023-Jan-12	12:00	2459957.0	0.9951	19°32'07.82"	-7°03'33.52"	-14°10'02.55"	15° Ari 17'03.53"	
2023-Jan-13	12:00	2459958.0	0.9938	20°07'56.61"	-6°31'42.32"	-13°54'22.14"	16° Ari 03'32.53"	
2023-Jan-14	12:00	2459959.0	0.9926	20°43'48.70"	-5°59'44.32"	-13°38'31.99"	16° Ari 50'04.33"	
2023-Jan-15	12:00	2459960.0	0.9914	21°19'44.39"	-5°27'39.47"	-13°22'31.97"	17° Ari 36'39.03"	
2023-Jan-16	12:00	2459961.0	0.9901	21°55'43.99"	-4°55'27.74"	-13°06'21.97"	18° Ari 23'16.70"	
2023-Jan-17	12:00	2459962.0	0.9889	22°31'47.81"	-4°23'09.09"	-12°50'01.88"	19° Ari 09'57.46"	
2023-Jan-18	12:00	2459963.0	0.9877	23°07'56.16"	-3°50'43.49"	-12°33'31.60"	19° Ari 56'41.40"	
2023-Jan-19	12:00	2459964.0	0.9865	23°44'09.35"	-3°18'10.94"	-12°16'51.04"	20° Ari 43'28.57"	
2023-Jan-20	12:00	2459965.0	0.9853	24°20'27.61"	-2°45'31.47"	-12°00'00.11"	21° Ari 30'18.98"	
2023-Jan-21	12:00	2459966.0	0.9841	24°56'51.14"	-2°12'45.15"	-11°42'58.75"	22° Ari 17'12.56"	
2023-Jan-22	12:00	2459967.0	0.9828	25°33'20.03"	-1°39'52.08"	-11°25'46.90"	23° Ari 04'09.15"	
2023-Jan-23	12:00	2459968.0	0.9816	26°09'54.36"	-1°06'52.41"	-11°08'24.48"	23° Ari 51'08.53"	
2023-Jan-24	12:00	2459969.0	0.9805	26°46'34.10"	-0°33'46.30"	-10°50'51.45"	24° Ari 38'10.42"	
2023-Jan-25	12:00	2459970.0	0.9793	27°23'19.23"	-0°00'33.90"	-10°33'07.72"	25° Ari 25'14.49"	
2023-Jan-26	12:00	2459971.0	0.9781	28°00'09.67"	+0°32'44.62"	-10°15'13.22"	26° Ari 12'20.40"	
2023-Jan-27	12:00	2459972.0	0.9769	28°37'05.33"	+1°06'09.12"	-9°57'07.84"	26° Ari 59'27.78"	
2023-Jan-28	12:00	2459973.0	0.9757	29°14'06.11"	+1°39'39.47"	-9°38'51.47"	27° Ari 46'36.26"	
2023-Jan-29	12:00	2459974.0	0.9746	29°51'11.94"	+2°13'15.55"	-9°20'24.01"	28° Ari 33'45.49"	
2023-Jan-30	12:00	2459975.0	0.9734	30°28'22.71"	+2°46'57.26"	-9°01'45.32"	29° Ari 20'55.11"	
2023-Jan-31	12:00	2459976.0	0.9722	31°05'38.38"	+3°20'44.52"	-8°42'55.27"	0° Tau 08'04.80"	
2023-Feb-01	12:00	2459977.0	0.9711	31°42'58.88"	+3°54'37.25"	-8°23'53.73"	0° Tau 55'14.26"	
2023-Feb-02	12:00	2459978.0	0.9700	32°20'24.20"	+4°28'35.38"	-8°04'40.57"	1° Tau 42'23.21"	
2023-Feb-03	12:00	2459979.0	0.9688	32°57'54.33"	+5°02'38.87"	-7°45'15.64"	2° Tau 29'31.40"	
2023-Feb-04	12:00	2459980.0	0.9677	33°35'29.29"	+5°36'47.67"	-7°25'38.81"	3° Tau 16'38.58"	
2023-Feb-05	12:00	2459981.0	0.9666	34°13'09.14"	+6°11'01.75"	-7°05'49.93"	4° Tau 03'44.58"	
2023-Feb-06	12:00	2459982.0	0.9655	34°50'53.96"	+6°45'21.09"	-6°45'48.87"	4° Tau 50'49.23"	
2023-Feb-07	12:00	2459983.0	0.9644	35°28'43.88"	+7°19'45.68"	-6°25'35.49"	5° Tau 37'52.40"	

2023-Feb-08	12:00	2459984.0	0.9634	36°06'39.05"	+7°54'15.52"	-6°05'09.65"	6° Tau 24'54.01"	
2023-Feb-09	12:00	2459985.0	0.9623	36°44'39.66"	+8°28'50.64"	-5°44'31.21"	7° Tau 11'53.98"	
2023-Feb-10	12:00	2459986.0	0.9613	37°22'45.94"	+9°03'31.04"	-5°23'40.04"	7° Tau 58'52.31"	
2023-Feb-11	12:00	2459987.0	0.9602	38°00'58.15"	+9°38'16.77"	-5°02'36.01"	8° Tau 45'48.99"	
2023-Feb-12	12:00	2459988.0	0.9592	38°39'16.58"	+10°13'07.85"	-4°41'19.01"	9° Tau 32'44.07"	
2023-Feb-13	12:00	2459989.0	0.9582	39°17'41.55"	+10°48'04.33"	-4°19'48.89"	10° Tau 19'37.60"	
2023-Feb-14	12:00	2459990.0	0.9572	39°56'13.39"	+11°23'06.26"	-3°58'05.56"	11° Tau 06'29.64"	
2023-Feb-15	12:00	2459991.0	0.9562	40°34'52.44"	+11°58'13.66"	-3°36'08.89"	11° Tau 53'20.27"	
2023-Feb-16	12:00	2459992.0	0.9552	41°13'39.02"	+12°33'26.57"	-3°13'58.77"	12° Tau 40'09.52"	
2023-Feb-17	12:00	2459993.0	0.9542	41°52'33.44"	+13°08'45.00"	-2°51'35.12"	13° Tau 26'57.44"	
2023-Feb-18	12:00	2459994.0	0.9533	42°31'35.97"	+13°44'08.91"	-2°28'57.82"	14° Tau 13'43.98"	
2023-Feb-19	12:00	2459995.0	0.9524	43°10'46.82"	+14°19'38.27"	-2°06'06.80"	15° Tau 00'29.05"	
2023-Feb-20	12:00	2459996.0	0.9515	43°50'06.14"	+14°55'12.98"	-1°43'01.97"	15° Tau 47'12.51"	
2023-Feb-21	12:00	2459997.0	0.9506	44°29'34.04"	+15°30'52.95"	-1°19'43.25"	16° Tau 33'54.14"	
2023-Feb-22	12:00	2459998.0	0.9497	45°09'10.53"	+16°06'38.07"	-0°56'10.57"	17° Tau 20'33.63"	
2023-Feb-23	12:00	2459999.0	0.9488	45°48'55.59"	+16°42'28.20"	-0°32'23.84"	18° Tau 07'10.65"	
2023-Feb-24	12:00	2460000.0	0.9480	46°28'49.13"	+17°18'23.23"	-0°08'23.00"	18° Tau 53'44.80"	
2023-Feb-25	12:00	2460001.0	0.9471	47°08'51.03"	+17°54'23.02"	+0°15'52.04"	19° Tau 40'15.66"	
2023-Feb-26	12:00	2460002.0	0.9463	47°49'01.18"	+18°30'27.45"	+0°40'21.36"	20° Tau 26'42.80"	
2023-Feb-27	12:00	2460003.0	0.9455	48°29'19.46"	+19°06'36.42"	+1°05'05.04"	21° Tau 13'05.81"	
2023-Feb-28	12:00	2460004.0	0.9447	49°09'45.76"	+19°42'49.80"	+1°30'03.14"	21° Tau 59'24.27"	
2023-Mar-01	12:00	2460005.0	0.9440	49°50'20.01"	+20°19'07.49"	+1°55'15.74"	22° Tau 45'37.80"	
2023-Mar-02	12:00	2460006.0	0.9432	50°31'02.14"	+20°55'29.39"	+2°20'42.92"	23° Tau 31'46.04"	
2023-Mar-03	12:00	2460007.0	0.9425	51°11'52.12"	+21°31'55.39"	+2°46'24.73"	24° Tau 17'48.64"	
2023-Mar-04	12:00	2460008.0	0.9418	51°52'49.95"	+22°08'25.41"	+3°12'21.22"	25° Tau 03'45.30"	
2023-Mar-05	12:00	2460009.0	0.9411	52°33'55.66"	+22°44'59.35"	+3°38'32.46"	25° Tau 49'35.72"	
2023-Mar-06	12:00	2460010.0	0.9405	53°15'09.31"	+23°21'37.12"	+4°04'58.48"	26° Tau 35'19.68"	
2023-Mar-07	12:00	2460011.0	0.9398	53°56'31.04"	+23°58'18.64"	+4°31'39.31"	27° Tau 20'56.95"	
2023-Mar-08	12:00	2460012.0	0.9392	54°38'00.99"	+24°35'03.82"	+4°58'34.98"	28° Tau 06'27.38"	
2023-Mar-09	12:00	2460013.0	0.9386	55°19'39.40"	+25°11'52.60"	+5°25'45.50"	28° Tau 51'50.85"	
2023-Mar-10	12:00	2460014.0	0.9380	56°01'26.54"	+25°48'44.91"	+5°53'10.89"	29° Tau 37'07.28"	
2023-Mar-11	12:00	2460015.0	0.9375	56°43'22.73"	+26°25'40.67"	+6°20'51.13"	0° Gem 22'16.65"	
2023-Mar-12	12:00	2460016.0	0.9369	57°25'28.37"	+27°02'39.85"	+6°48'46.23"	1° Gem 07'18.96"	
2023-Mar-13	12:00	2460017.0	0.9364	58°07'43.88"	+27°39'42.37"	+7°16'56.17"	1° Gem 52'14.28"	
2023-Mar-14	12:00	2460018.0	0.9359	58°50'09.71"	+28°16'48.19"	+7°45'20.92"	2° Gem 37'02.66"	
2023-Mar-15	12:00	2460019.0	0.9355	59°32'46.37"	+28°53'57.25"	+8°14'00.47"	3° Gem 21'44.19"	
2023-Mar-16	12:00	2460020.0	0.9350	60°15'34.37"	+29°31'09.48"	+8°42'54.79"	4° Gem 06'18.95"	
2023-Mar-17	12:00	2460021.0	0.9346	60°58'34.20"	+30°08'24.80"	+9°12'03.86"	4° Gem 50'47.02"	
2023-Mar-18	12:00	2460022.0	0.9342	61°41'46.38"	+30°45'43.12"	+9°41'27.64"	5° Gem 35'08.45"	
2023-Mar-19	12:00	2460023.0	0.9338	62°25'11.35"	+31°23'04.35"	+10°11'06.13"	6° Gem 19'23.24"	
2023-Mar-20	12:00	2460024.0	0.9335	63°08'49.55"	+32°00'28.36"	+10°40'59.28"	7° Gem 03'31.35"	
2023-Mar-21	12:00	2460025.0	0.9331	63°52'41.31"	+32°37'55.02"	+11°11'07.09"	7° Gem 47'32.66"	
2023-Mar-22	12:00	2460026.0	0.9328	64°36'46.89"	+33°15'24.18"	+11°41'29.50"	8° Gem 31'26.95"	
2023-Mar-23	12:00	2460027.0	0.9325	65°21'06.44"	+33°52'55.67"	+12°12'06.49"	9° Gem 15'13.93"	
2023-Mar-24	12:00	2460028.0	0.9323	66°05'40.04"	+34°30'29.32"	+12°42'57.97"	9° Gem 58'53.22"	
2023-Mar-25	12:00	2460029.0	0.9320	66°50'27.72"	+35°08'04.93"	+13°14'03.88"	10° Gem 42'24.39"	

2023-Mar-26	12:00	2460030.0	0.9318	67°35'29.46"	+35°45'42.28"	+13°45'24.12"	11° Gem 25'46.98"	
2023-Mar-27	12:00	2460031.0	0.9316	68°20'45.27"	+36°23'21.15"	+14°16'58.58"	12° Gem 09'00.52"	
2023-Mar-28	12:00	2460032.0	0.9315	69°06'15.13"	+37°01'01.28"	+14°48'47.11"	12° Gem 52'04.54"	
2023-Mar-29	12:00	2460033.0	0.9313	69°51'59.11"	+37°38'42.42"	+15°20'49.57"	13° Gem 34'58.60"	
2023-Mar-30	12:00	2460034.0	0.9312	70°37'57.28"	+38°16'24.32"	+15°53'05.79"	14° Gem 17'42.29"	
2023-Mar-31	12:00	2460035.0	0.9311	71°24'09.77"	+38°54'06.67"	+16°25'35.58"	15° Gem 00'15.22"	
2023-Apr-01	12:00	2460036.0	0.9310	72°10'36.73"	+39°31'49.21"	+16°58'18.72"	15° Gem 42'37.01"	
2023-Apr-02	12:00	2460037.0	0.9310	72°57'18.40"	+40°09'31.62"	+17°31'14.98"	16° Gem 24'47.34"	
2023-Apr-03	12:00	2460038.0	0.9310	73°44'15.07"	+40°47'13.58"	+18°04'24.11"	17° Gem 06'45.92"	
2023-Apr-04	12:00	2460039.0	0.9310	74°31'27.08"	+41°24'54.76"	+18°37'45.82"	17° Gem 48'32.49"	
2023-Apr-05	12:00	2460040.0	0.9310	75°18'54.88"	+42°02'34.81"	+19°11'19.82"	18° Gem 30'06.88"	
2023-Apr-06	12:00	2460041.0	0.9311	76°06'39.04"	+42°40'13.36"	+19°45'05.76"	19° Gem 11'28.95"	
2023-Apr-07	12:00	2460042.0	0.9311	76°54'40.20"	+43°17'50.06"	+20°19'03.31"	19° Gem 52'38.64"	
2023-Apr-08	12:00	2460043.0	0.9312	77°42'59.16"	+43°55'24.52"	+20°53'12.10"	20° Gem 33'35.99"	
2023-Apr-09	12:00	2460044.0	0.9314	78°31'36.83"	+44°32'56.36"	+21°27'31.76"	21° Gem 14'21.08"	
2023-Apr-10	12:00	2460045.0	0.9315	79°20'34.24"	+45°10'25.18"	+22°02'01.89"	21° Gem 54'54.07"	
2023-Apr-11	12:00	2460046.0	0.9317	80°09'52.55"	+45°47'50.61"	+22°36'42.14"	22° Gem 35'15.19"	
2023-Apr-12	12:00	2460047.0	0.9319	80°59'32.99"	+46°25'12.25"	+23°11'32.11"	23° Gem 15'24.70"	
2023-Apr-13	12:00	2460048.0	0.9321	81°49'36.92"	+47°02'29.71"	+23°46'31.48"	23° Gem 55'22.90"	
2023-Apr-14	12:00	2460049.0	0.9324	82°40'05.74"	+47°39'42.62"	+24°21'39.89"	24° Gem 35'10.10"	
2023-Apr-15	12:00	2460050.0	0.9326	83°31'00.92"	+48°16'50.59"	+24°56'57.04"	25° Gem 14'46.61"	
2023-Apr-16	12:00	2460051.0	0.9329	84°22'23.93"	+48°53'53.24"	+25°32'22.66"	25° Gem 54'12.73"	
2023-Apr-17	12:00	2460052.0	0.9332	85°14'16.25"	+49°30'50.23"	+26°07'56.48"	26° Gem 33'28.67"	
2023-Apr-18	12:00	2460053.0	0.9336	86°06'39.29"	+50°07'41.20"	+26°43'38.26"	27° Gem 12'34.58"	
2023-Apr-19	12:00	2460054.0	0.9340	86°59'34.39"	+50°44'25.79"	+27°19'27.76"	27° Gem 51'30.53"	
2023-Apr-20	12:00	2460055.0	0.9343	87°53'02.80"	+51°21'03.64"	+27°55'24.75"	28° Gem 30'16.45"	
2023-Apr-21	12:00	2460056.0	0.9348	88°47'05.69"	+51°57'34.38"	+28°31'28.95"	29° Gem 08'52.18"	
2023-Apr-22	12:00	2460057.0	0.9352	89°41'44.15"	+52°33'57.59"	+29°07'40.10"	29° Gem 47'17.46"	
2023-Apr-23	12:00	2460058.0	0.9356	90°36'59.29"	+53°10'12.85"	+29°43'57.88"	0° Can 25'32.01"	
2023-Apr-24	12:00	2460059.0	0.9361	91°32'52.21"	+53°46'19.66"	+30°20'21.95"	1° Can 03'35.49"	
2023-Apr-25	12:00	2460060.0	0.9366	92°29'24.11"	+54°22'17.53"	+30°56'51.95"	1° Can 41'27.60"	
2023-Apr-26	12:00	2460061.0	0.9371	93°26'36.26"	+54°58'05.89"	+31°33'27.46"	2° Can 19'08.03"	
2023-Apr-27	12:00	2460062.0	0.9377	94°24'30.05"	+55°33'44.17"	+32°10'08.07"	2° Can 56'36.52"	
2023-Apr-28	12:00	2460063.0	0.9383	95°23'07.00"	+56°09'11.76"	+32°46'53.33"	3° Can 33'52.84"	
2023-Apr-29	12:00	2460064.0	0.9388	96°22'28.76"	+56°44'27.99"	+33°23'42.75"	4° Can 10'56.81"	
2023-Apr-30	12:00	2460065.0	0.9395	97°22'37.13"	+57°19'32.19"	+34°00'35.85"	4° Can 47'48.29"	
2023-May-01	12:00	2460066.0	0.9401	98°23'34.09"	+57°54'23.62"	+34°37'32.07"	5° Can 24'27.19"	
2023-May-02	12:00	2460067.0	0.9407	99°25'21.79"	+58°29'01.50"	+35°14'30.88"	6° Can 00'53.52"	
2023-May-03	12:00	2460068.0	0.9414	100°28'02.64"	+59°03'25.02"	+35°51'31.66"	6° Can 37'07.36"	
2023-May-04	12:00	2460069.0	0.9421	101°31'39.28"	+59°37'33.29"	+36°28'33.81"	7° Can 13'08.90"	
2023-May-05	12:00	2460070.0	0.9428	102°36'14.69"	+60°11'25.38"	+37°05'36.68"	7° Can 48'58.47"	
2023-May-06	12:00	2460071.0	0.9435	103°41'52.20"	+60°45'00.31"	+37°42'39.63"	8° Can 24'36.56"	
2023-May-07	12:00	2460072.0	0.9443	104°48'35.53"	+61°18'17.06"	+38°19'41.99"	9° Can 00'03.82"	
2023-May-08	12:00	2460073.0	0.9450	105°56'28.81"	+61°51'14.57"	+38°56'43.15"	9° Can 35'21.09"	
2023-May-09	12:00	2460074.0	0.9458	107°05'36.59"	+62°23'51.76"	+39°33'42.55"	10° Can 10'29.35"	
2023-May-10	12:00	2460075.0	0.9466	108°16'03.85"	+62°56'07.53"	+40°10'39.66"	10° Can 45'29.77"	

2023-May-11	12:00	2460076.0	0.9475	109°27'55.93"	+63°28'00.79"	+40°47'34.07"	11° Can 20'23.61"	
2023-May-12	12:00	2460077.0	0.9483	110°41'18.53"	+63°59'30.44"	+41°24'25.45"	11° Can 55'12.24"	
2023-May-13	12:00	2460078.0	0.9492	111°56'17.66"	+64°30'35.40"	+42°01'13.56"	12° Can 29'57.08"	
2023-May-14	12:00	2460079.0	0.9500	113°12'59.55"	+65°01'14.58"	+42°37'58.26"	13° Can 04'39.58"	
2023-May-15	12:00	2460080.0	0.9509	114°31'30.63"	+65°31'26.91"	+43°14'39.48"	13° Can 39'21.16"	
2023-May-16	12:00	2460081.0	0.9518	115°51'57.46"	+66°01'11.30"	+43°51'17.25"	14° Can 14'03.18"	
2023-May-17	12:00	2460082.0	0.9527	117°14'26.65"	+66°30'26.67"	+44°27'51.61"	14° Can 48'46.93"	
2023-May-18	12:00	2460083.0	0.9537	118°39'04.88"	+66°59'11.85"	+45°04'22.66"	15° Can 23'33.64"	
2023-May-19	12:00	2460084.0	0.9546	120°05'58.82"	+67°27'25.66"	+45°40'50.53"	15° Can 58'24.43"	
2023-May-20	12:00	2460085.0	0.9556	121°35'15.16"	+67°55'06.81"	+46°17'15.33"	16° Can 33'20.41"	
2023-May-21	12:00	2460086.0	0.9566	123°07'00.61"	+68°22'13.88"	+46°53'37.16"	17° Can 08'22.65"	
2023-May-22	12:00	2460087.0	0.9576	124°41'21.92"	+68°48'45.37"	+47°29'56.11"	17° Can 43'32.26"	
2023-May-23	12:00	2460088.0	0.9586	126°18'25.89"	+69°14'39.62"	+48°06'12.25"	18° Can 18'50.43"	
2023-May-24	12:00	2460089.0	0.9596	127°58'19.34"	+69°39'54.80"	+48°42'25.61"	18° Can 54'18.46"	
2023-May-25	12:00	2460090.0	0.9606	129°41'09.06"	+70°04'28.94"	+49°18'36.24"	19° Can 29'57.79"	
2023-May-26	12:00	2460091.0	0.9617	131°27'01.81"	+70°28'19.92"	+49°54'44.15"	20° Can 05'50.02"	
2023-May-27	12:00	2460092.0	0.9627	133°16'04.12"	+70°51'25.41"	+50°30'49.33"	20° Can 41'56.93"	
2023-May-28	12:00	2460093.0	0.9638	135°08'22.28"	+71°13'42.93"	+51°06'51.78"	21° Can 18'20.54"	
2023-May-29	12:00	2460094.0	0.9649	137°04'02.13"	+71°35'09.78"	+51°42'51.45"	21° Can 55'03.08"	
2023-May-30	12:00	2460095.0	0.9660	139°03'08.92"	+71°55'43.07"	+52°18'48.28"	22° Can 32'07.08"	
2023-May-31	12:00	2460096.0	0.9671	141°05'47.16"	+72°15'19.66"	+52°54'42.19"	23° Can 09'35.39"	