



# Astrodienst Ephemeris Tables for the year 1520

tropical geocentric zodiac

contains Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, True Node, Moon's Node, Lilith, Chiron

Programming  
Dieter Koch and Alois Treindl  
based on Swiss Ephemeris  
Code D5EPX

## ASTRODIENST EPHEMERIS for the year 1520

geocentric

JANUARY 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 16 22	19°35'20	1°11'59	19°35'50	19°R45	10°36	17°19	23°35'56	12°R39	27°27	8°30	19°R44	18°17	23°11'21	7°33'33	S 1
M 2	7 20 19	20°36'25	15°17	21°31	19°38	10°52	17°28	24°3	12°38	27°29	8°4	19°R41	18°14	23°28	7°37	M 2
T 3	7 24 15	21°37'30	28°25	23°11	18°31	11°38	17°37	24°10	12°38	27°31	8°6	19°35	18°11	23°34	7°42	T 3
W 4	7 28 12	22°38'34	11°22	24°52	17°55	12°24	17°46	24°18	12°38	27°33	8°8	19°26	18°7	23°41	7°46	W 4
T 5	7 32 9	23°39'37	24°8	26°34	17°20	13°10	17°55	24°25	12°37	27°35	8°10	19°16	18°4	23°48	7°51	T 5
F 6	7 36 5	24°40'40	6°41	28°16	16°45	13°56	18°3	24°32	12°37	27°37	8°12	19°3	18°1	23°55	7°56	F 6
S 7	7 40 2	25°41'42	19°2	29°59	16°12	14°42	18°12	24°39	12°37	27°39	8°14	18°50	17°58	24°1	8°0	S 7
S 8	7 43 58	26°42'43	1°12	1°42	15°40	15°29	18°20	24°46	12°36	27°41	8°16	18°38	17°55	24°8	8°5	S 8
M 9	7 47 55	27°43'43	13°13	3°26	15°10	16°15	18°29	24°53	12°36	27°43	8°18	18°28	17°51	24°15	8°10	M 9
T 10	7 51 51	28°44'43	25°6	5°10	14°42	17°1	18°37	25°0	12°36	27°45	8°20	18°20	17°48	24°21	8°14	T 10
W 11	7 55 48	29°45'42	6°55	6°55	14°16	17°48	18°45	25°7	12°36	27°47	8°22	18°15	17°45	24°28	8°19	W 11
T 12	7 59 44	0°46'40	18°45	8°40	13°52	18°34	18°52	25°14	12°D36	27°49	8°24	18°13	17°42	24°35	8°24	T 12
F 13	8 3 41	1°47'38	0°41	10°25	13°30	19°20	19°0	25°22	12°36	27°51	8°26	18°D12	17°39	24°41	8°28	F 13
S 14	8 7 38	2°48'35	12°48	12°10	13°10	20°7	19°8	25°29	12°36	27°53	8°28	18°R12	17°36	24°48	8°33	S 14
S 15	8 11 34	3°49'31	25°12	13°55	12°53	20°53	19°15	25°36	12°36	27°55	8°30	18°12	17°32	24°55	8°38	S 15
M 16	8 15 31	4°50'27	7°57	15°40	12°38	21°40	19°22	25°43	12°37	27°57	8°32	18°11	17°29	25°1	8°42	M 16
T 17	8 19 27	5°51'21	21°9	17°25	12°26	22°26	19°30	25°50	12°37	27°59	8°34	18°7	17°26	25°8	8°47	T 17
W 18	8 23 24	6°52'15	4°38	19°10	12°16	23°13	19°37	25°57	12°37	28°1	8°36	18°0	17°23	25°15	8°52	W 18
T 19	8 27 20	7°53'08	18°54	20°53	12°9	24°0	19°43	26°4	12°37	28°4	8°37	17°51	17°20	25°22	8°56	T 19
F 20	8 31 17	8°54'00	3°24	22°36	12°4	24°46	19°50	26°11	12°38	28°6	8°39	17°40	17°17	25°28	9°1	F 20
S 21	8 35 13	9°54'51	18°12	24°17	12°D 2	25°33	19°57	26°18	12°38	28°8	8°41	17°27	17°13	25°35	9°6	S 21
S 22	8 39 10	10°55'40	3°9	25°57	12°2	26°20	20°3	26°25	12°39	28°10	8°43	17°16	17°10	25°42	9°10	S 22
M 23	8 43 7	11°56'28	18°4	27°34	12°5	27°6	20°9	26°32	12°39	28°12	8°45	17°6	17°7	25°48	9°15	M 23
T 24	8 47 3	12°57'14	2°9	29°9	12°9	27°53	20°16	26°39	12°40	28°15	8°47	16°59	17°4	25°55	9°20	T 24
W 25	8 51 0	13°57'59	17°22	0°40	12°17	28°40	20°22	26°46	12°41	28°17	8°48	16°55	17°1	26°2	9°24	W 25
T 26	8 54 56	14°58'42	1°33	2°8	12°26	29°26	20°27	26°53	12°41	28°19	8°50	16°53	16°57	26°8	9°29	T 26
F 27	8 58 53	15°59'23	15°25	3°31	12°38	0°13	20°33	26°59	12°42	28°21	8°52	16°53	16°54	26°15	9°34	F 27
S 28	9 2 49	17°0'03	28°58	4°50	12°51	1°0	20°38	27°6	12°43	28°23	8°54	16°53	16°51	26°22	9°38	S 28
S 29	9 6 46	18°0'41	12°14	6°2	13°7	1°47	20°44	27°13	12°44	28°26	8°55	16°51	16°48	26°28	9°43	S 29
M 30	9 10 42	19°1'17	25°15	7°8	13°25	2°34	20°49	27°20	12°45	28°28	8°57	16°48	16°45	26°35	9°48	M 30
T 31	9 14 39	20°1'52	8°4	8°7	13°45	3°20	20°54	27°27	12°46	28°30	8°59	16°41	16°42	26°42	9°52	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	22s 4	21n40	1n 5	24s 1	2s 0	16s35	5n32	23s56	0s49	16s 3	1n 3	21s34	0s12	15n21	0s21	13s 1
M 2	21 55	24 52	2 12	23 47	2 2	16 28	5 43	23 53	0 50	16 5	1 3	21 33	0 12	15 21	0 21	13 0
T 3	21 46	26 40	3 11	23 32	2 3	16 22	5 54	23 50	0 50	16 8	1 3	21 32	0 12	15 20	0 21	13 0
W 4	21 36	26 59	3 59	23 15	2 4	16 16	6 5	23 46	0 51	16 10	1 3	21 31	0 12	15 20	0 21	12 59
T 5	21 25	25 44	3 54	22 56	2 5	16 11	6 14	23 42	0 51	16 12	1 3	21 30	0 12	15 20	0 21	12 58
F 6	21 15	23 24	4 55	22 36	2 5	16 7	6 23	23 38	0 52	16 15	1 3	21 28	0 12	15 20	0 21	12 58
S 7	21 4	19 56	5 2	22 14	2 5	16 3	6 31	23 33	0 52	16 17	1 3	21 27	0 12	15 20	0 21	12 57
S 8	20 52	15 40	4 55	21 51	2 4	15 59	6 38	23 28	0 52	16 19	1 3	21 26	0 12	15 20	0 21	12 56
M 9	20 40	10 50	4 35	21 26	2 3	15 56	6 45	23 23	0 53	16 21	1 4	21 25	0 12	15 20	0 21	12 56
T 10	20 28	5 40	4 3	20 59	2 1	15 54	6 50	23 18	0 53	16 23	1 4	21 24	0 12	15 20	0 21	12 55
W 11	20 15	0 19	3 21	20 31	1 59	15 52	6 55	23 12	0 54	16 25	1 4	21 22	0 13	15 20	0 21	12 54
T 12	20 2	5s 4	2 30	20 1	1 56	15 50	6 59	23 6	0 54	16 27	1 4	21 21	0 13	15 20	0 21	12 53
F 13	19 49	10 19	1 32	19 29	1 53	15 49	7 2	23 0	0 55	16 29	1 4	21 20	0 13	15 20	0 21	12 53
S 14	19 35	15 16	0 29	18 56	1 49	15 48	7 4	22 54	0 55	16 31	1 4	21 19	0 13	15 20	0 21	12 52
S 15	19 21	19 43	0s37	18 21	1 44	15 48	7 6	22 47	0 55	16 33	1 4	21 17	0 13	15 20	0 20	12 51
M 16	19 6	23 23	1 43	17 45	1 39	15 49	7 7	22 40	0 56	16 35	1 4	21 16	0 13	15 20	0 20	12 50
T 17	18 51	25 57	2 45	17 8	1 33	15 49	7 7	22 33	0 56	16 37	1 5	21 15	0 13	15 20	0 20	12 50
W 18	18 36	27 5	3 40	16 29	1 26	15 51	7 7	22 26	0 57	16 39	1 5	21 14	0 13	15 21	0 20	12 49
T 19	18 21	26 31	4 23	15 49	1 19	15 52	7 6	22 18	0 57	16 40	1 5	21 12	0 13	15 21	0 20	12 48
F 20	18 5	24 10	4 51	15 8	1 11	15 54	7 5	22 10	0 57	16 42	1 5	21 11	0 13	15 21	0 20	12 48
S 21	17 49	20 10	5 0	14 26	1 2	15 56	7 3	22 2	0 58	16 44	1 5	21 10	0 13	15 21	0 20	12 47
S 22	17 32	14 52	4 49	13 44	0 52	15 58	7 1	21 54	0 58	16 45	1 5	21 9	0 13	15 21	0 20	12 46
M 23	17 15	8 41	4 18	13 0	0 42	16 1	6 58	21 45	0 59	16 47	1 5	21 7	0 13	15 21	0 20	12 45
T 24	16 58	2 5	3 30	12 17	0 31	16 4	6 55	21 36	0 59	16 48	1 5	21 6	0 14	15 22	0 20	12 44
W 25	16 41	4n32	2 29	11 34	0 19	16 7	6 51	21 27	0 59	16 50	1 6	21 5	0 14	15 22	0 20	12 44
T 26	16 23	10 48	1 20	10 51	0 6	16 10	6 47	21 18	1 0	16 51	1 6	21 4	0 14	15 22	0 20	12 43
F 27	16 5	16 23	0 8	10 8	0n 7	16 13	6 42	21 8	1 0	16 53	1 6	21 2	0 14	15 22	0 20	12 42
S 28	15 47	21 1	1n 3	9 26	0 21	16 17	6 38	20 58	1 0	16 54	1 6	21 1	0 14	15 23	0 20	12 41
S 29	15 28	24 28	2 10	8 46	0 36	16 20	6 33	20 48	1 1	16 55	1 6	21 0	0 14	15 23	0 20	12 41
M 30	15 10	26 33	3 8	8 8	0 51	16 24	6 28	20 38	1 1	16 56	1 6	20 59	0 14	15 23	0 20	12 40
T 31	14s51	27n10	3n55	7s32	1n 6	16s27	6n22	20s27	1s 1	16s58	1n 6	20s57	0s14	15n24	0s20	12s39

Julian Day Number = 2276237.5, Delta T = 247.16 sec

Ecliptic obliquity = 23°30'12, Nutation = - 0°00'12, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°02'34, Lahiri = 17°09'34 Julian Calendar 1 Jan. 1520 == Greg. Calendar 11 Jan. 1520

ASTRODIENST EPHEMERIS for the year 1520  
geocentric

FEBRUARY 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	9 18 36	21° 2' 24"	20° 41'	8° 58'	14° 30'	4° 54'	21° 4'	27° 40'	12° 48'	28° 35'	9° 2'	16° R31	16° 38'	26° 49'	9° 55'	W 1
T 2	9 22 32	22° 2' 56"	3° 8'	9° 40'	14° 30'	4° 54'	21° 4'	27° 40'	12° 48'	28° 35'	9° 2'	16° 19'	16° 35'	26° 55'	10° 2'	T 2
F 3	9 26 29	23° 3' 25"	15° 27'	10° 14'	14° 55'	5° 41'	21° 8'	27° 47'	12° 49'	28° 37'	9° 4'	16° 5'	16° 32'	27° 2'	10° 6'	F 3
S 4	9 30 25	24° 3' 53"	27° 37'	10° 37'	15° 22'	6° 28'	21° 12'	27° 53'	12° 50'	28° 39'	9° 5'	15° 50'	16° 29'	27° 9'	10° 11'	S 4
S 5	9 34 22	25° 4' 19"	9° 39'	10° 51'	15° 50'	7° 15'	21° 17'	28° 0'	12° 52'	28° 42'	9° 7'	15° 37'	16° 26'	27° 15'	10° 15'	S 5
M 6	9 38 18	26° 4' 43"	21° 34'	10° R55	16° 21'	8° 2'	21° 21'	28° 7'	12° 53'	28° 44'	9° 8'	15° 25'	16° 22'	27° 22'	10° 20'	M 6
T 7	9 42 15	27° 5' 06"	3° 25'	10° 49'	16° 52'	8° 49'	21° 24'	28° 13'	12° 54'	28° 46'	9° 10'	15° 15'	16° 19'	27° 29'	10° 25'	T 7
W 8	9 46 11	28° 5' 28"	15° 14'	10° 32'	17° 25'	9° 36'	21° 28'	28° 20'	12° 56'	28° 48'	9° 11'	15° 9'	16° 16'	27° 35'	10° 29'	W 8
T 9	9 50 8	29° 5' 48"	27° 3'	10° 7'	18° 0'	10° 23'	21° 32'	28° 26'	12° 57'	28° 51'	9° 13'	15° 5'	16° 13'	27° 42'	10° 34'	T 9
F 10	9 54 5	0° 5' 6"	8° 58'	9° 32'	18° 36'	11° 10'	21° 35'	28° 33'	12° 59'	28° 53'	9° 14'	15° 3'	16° 10'	27° 49'	10° 38'	F 10
S 11	9 58 1	1° 6' 23"	21° 3'	8° 50'	19° 13'	11° 57'	21° 38'	28° 39'	13° 0'	28° 55'	9° 16'	15° D 3'	16° 7'	27° 55'	10° 42'	S 11
S 12	10 1 58	2° 6' 39"	3° 23'	8° 1'	19° 51'	12° 44'	21° 41'	28° 45'	13° 2'	28° 57'	9° 17'	15° R 4'	16° 3'	28° 2'	10° 47'	S 12
M13	10 5 54	3° 6' 53"	16° 4'	7° 6'	20° 31'	13° 31'	21° 44'	28° 52'	13° 3'	29° 0'	9° 19'	15° 3'	16° 0'	28° 9'	10° 51'	M13
T 14	10 9 51	4° 7' 05"	29° 10'	6° 8'	21° 12'	14° 18'	21° 46'	28° 58'	13° 5'	29° 2'	9° 20'	15° 0'	15° 57'	28° 16'	10° 56'	T 14
W15	10 13 47	5° 7' 16"	12° 46'	5° 6'	21° 54'	15° 5'	21° 49'	29° 4'	13° 7'	29° 4'	9° 21'	14° 55'	15° 54'	28° 22'	11° 0'	W15
T 16	10 17 44	6° 7' 26"	26° 51'	4° 4'	22° 37'	15° 52'	21° 51'	29° 10'	13° 8'	29° 7'	9° 23'	14° 48'	15° 51'	28° 29'	11° 5'	T 16
F 17	10 21 40	7° 7' 34"	11° 25'	3° 2'	23° 21'	16° 39'	21° 53'	29° 16'	13° 10'	29° 9'	9° 24'	14° 38'	15° 48'	28° 36'	11° 9'	F 17
S 18	10 25 37	8° 7' 40"	26° 21'	2° 1'	24° 5'	17° 26'	21° 55'	29° 22'	13° 12'	29° 11'	9° 25'	14° 28'	15° 44'	28° 42'	11° 13'	S 18
S 19	10 29 34	9° 7' 44"	11° 32'	1° 4'	24° 51'	18° 13'	21° 57'	29° 29'	13° 14'	29° 13'	9° 27'	14° 18'	15° 41'	28° 49'	11° 17'	S 19
M20	10 33 30	10° 7' 46"	26° 46'	0° 11'	25° 38'	19° 0'	21° 58'	29° 34'	13° 16'	29° 16'	9° 28'	14° 9'	15° 38'	28° 56'	11° 22'	M20
T 21	10 37 27	11° 7' 46"	11° 53'	29° 22'	26° 25'	19° 47'	21° 59'	29° 40'	13° 18'	29° 18'	9° 29'	14° 3'	15° 35'	29° 2'	11° 26'	T 21
W22	10 41 23	12° 7' 44"	26° 44'	28° 40'	27° 14'	20° 34'	22° 1'	29° 46'	13° 20'	29° 20'	9° 30'	14° 0'	15° 32'	29° 9'	11° 30'	W22
T 23	10 45 20	13° 7' 40"	11° 13'	28° 3'	28° 3'	21° 21'	22° 1'	29° 52'	13° 22'	29° 22'	9° 31'	13° D58'	15° 28'	29° 16'	11° 34'	T 23
F 24	10 49 16	14° 7' 34"	25° 17'	27° 32'	28° 53'	22° 8'	22° 2'	29° 58'	13° 24'	29° 25'	9° 32'	13° 59'	15° 25'	29° 22'	11° 38'	F 24
S 25	10 53 13	15° 7' 25"	8° 56'	27° 8'	29° 43'	22° 55'	22° 3'	0° 4'	13° 26'	29° 27'	9° 34'	13° R59'	15° 22'	29° 29'	11° 42'	S 25
S 26	10 57 9	16° 7' 15"	22° 12'	26° 51'	0° 35'	23° 42'	22° 3'	0° 9'	13° 28'	29° 29'	9° 35'	13° 59'	15° 19'	29° 36'	11° 47'	S 26
M27	11 1 6	17° 7' 02"	5° 7'	26° 40'	1° 27'	24° 29'	22° R 3'	0° 15'	13° 31'	29° 31'	9° 36'	13° 58'	15° 16'	29° 42'	11° 51'	M27
T 28	11 5 3	18° 6' 46"	17° 46'	26° D35'	2° 19'	25° 16'	22° 3'	0° 20'	13° 33'	29° 33'	9° 37'	13° 54'	15° 13'	29° 49'	11° 55'	T 28
W29	11 8 59	19° 6' 29"	0° 11'	26° 37'	3° 13'	26° 33'	22° 3'	0° 26'	13° 35'	29° 36'	9° 38'	13° 47'	15° 9'	29° 56'	11° 59'	W29

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	14s31	26n21	4n30	6s58	1n22	16s31	6n17	20s17	1 s 2	16s59	1n 7	20s56	0s14	15n24	0s20	12s38	0s40	21s24	1n48	16n49	16n51	4n53	11s41	6n21	
T 2	14 12	24 14	4 52	6 27	1 38	16 34	6 11	20 6	1 2	17 0	1 7	20 55	0 14	15 24	0 20	12 37	0 40	21 24	1 48	16 46	16 50	4 50	11 40	6 21	
F 3	13 52	21 1	4 59	6 0	1 53	16 38	6 5	19 54	1 2	17 1	1 7	20 54	0 14	15 25	0 20	12 37	0 40	21 24	1 48	16 42	16 49	4 47	11 39	6 21	
S 4	13 32	16 55	4 53	5 37	2 9	16 41	5 58	19 43	1 3	17 2	1 7	20 52	0 14	15 25	0 20	12 36	0 40	21 24	1 48	16 37	16 49	4 43	11 37	6 21	
S 5	13 12	12 12	4 34	5 18	2 24	16 44	5 52	19 31	1 3	17 3	1 7	20 51	0 14	15 25	0 20	12 35	0 40	21 24	1 48	16 33	16 48	4 40	11 36	6 21	
M 6	12 52	7 4	4 3	5 3	2 39	16 47	5 45	19 20	1 3	17 4	1 7	20 50	0 15	15 26	0 20	12 34	0 40	21 24	1 48	16 30	16 47	4 37	11 35	6 21	
T 7	12 31	1 43	3 21	4 53	2 52	16 50	5 39	19 8	1 4	17 5	1 7	20 49	0 15	15 26	0 20	12 34	0 40	21 24	1 48	16 27	16 46	4 34	11 34	6 21	
W 8	12 10	3s41	2 31	4 47	3 5	16 52	5 32	18 55	1 4	17 5	1 8	20 48	0 15	15 27	0 20	12 33	0 40	21 24	1 48	16 25	16 45	4 31	11 32	6 21	
T 9	11 49	8 59	1 34	4 46	3 16	16 55	5 25	18 43	1 4	17 6	1 8	20 46	0 15	15 27	0 20	12 32	0 40	21 24	1 48	16 24	16 44	4 27	11 31	6 21	
F 10	11 28	14 1	0 32	4 50	3 25	16 57	5 18	18 30	1 4	17 7	1 8	20 45	0 15	15 28	0 20	12 31	0 40	21 24	1 47	16 24	16 43	4 24	11 30	6 21	
S 11	11 7	18 35	0s32	4 59	3 33	16 59	5 11	18 17	1 5	17 8	1 8	20 44	0 15	15 28	0 20	12 30	0 40	21 24	1 47	16 24	16 42	4 21	11 28	6 21	
S 12	10 45	22 27	1 36	5 12	3 39	17 1	5 4	18 4	1 5	17 8	1 8	20 43	0 15	15 29	0 20	12 30	0 40	21 24	1 47	16 24	16 41	4 18	11 27	6 22	
M13	10 23	25 22	2 37	5 29	3 43	17 2	4 57	17 51	1 5	17 9	1 8	20 41	0 15	15 29	0 20	12 29	0 40	21 23	1 47	16 24	16 40	4 14	11 26	6 22	
T 14	10 2	27 2	3 32	5 49	3 44	17 3	4 50	17 38	1 5	17 9	1 8	20 40	0 15	15 30	0 20	12 28	0 40	21 23	1 47	16 23	16 39	4 11	11 25	6 22	
W15	9 40	27 9	4 17	6 12	3 44	17 4	4 43	17 24	1 6	17 10	1 9	20 39	0 15	15 30	0 20	12 27	0 40	21 23	1 47	16 21	16 38	4 8	11 23	6 22	
T 16	9 17	25 33	4 48	6 37	3 41	17 4	4 36	17 10	1 6	17 10	1 9	20 38	0 15	15 31	0 20	12 26	0 40	21 23	1 47	16 19	16 38	4 5	11 22	6 22	
F 17	8 55	22 14	5 2	7 4	3 36	17 4	4 29	16 56	1 6	17 11	1 9	20 37	0 16	15 31	0 20	12 26	0 40	21 23	1 47	16 16	16 37	4 2	11 21	6 22	
S 18	8 33	17 24	4 56	7 31	3 29	17 4	4 21	16 42	1 6	17 11	1 9	20 35	0 16	15 32	0 20	12 25	0 40	21 23	1 47	16 13	16 36	3 58	11 19	6 22	
S 19	8 10	11 24	4 30	7 59	3 21	17 3	4 14	16 28	1 7	17 11	1 9	20 34	0 16	15 32	0 20	12 24	0 40	21 23	1 47	16 10	16 35	3 55	11 18	6 23	
M20	7 47	4 42	3 44	8 27	3 11	17 2	4 7	16 13	1 7	17 12	1 9	20 33	0 16	15 33	0 20	12 23	0 40	21 23	1 47	16 8	16 34	3 52	11 17	6 23	
T 21	7 25	2n14	2 42	8 55	3 0	17 0	4 0	15 59	1 7	17 12	1 9	20 32	0 16	15 34	0 20	12 23	0 40	21 23	1 47	16 6	16 33	3 49	11 15	6 23	
W22	7 2	8 56	1 31	9 21	2 48	16 58	3 52	15 44	1 7	17 12	1 10	20 31	0 16	15 34	0 20	12 22	0 40	21 23	1 47	16 5	16 32	3 46	11 14	6 23	
T 23	6 39	15 0	0 15	9 46	2 34	16 56	3 45	15 29	1 7	17 12	1 10	20 30	0 16	15 35	0 20	12 21	0 40	21 23	1 47	16 5	16 31	3 42	11 13	6 23	
F 24	6 16	20 6	1n 0	10 9	2 21	16 53	3 38	15 14	1 7	17 12	1 10	20 28	0 16	15 36	0 19	12 20	0 40	21 23	1 47	16 5	16 30	3 39	11 12	6 23	
S 25	5 53	23 59	2 9	10 31	2 7	16 50	3 31	14 59	1 8	17 12	1 10	20 27	0 16	15 36	0 19	12 20	0 40	21 23	1 47	16 5	16 29	3 36	11 10	6 24	
S 26	5 29	26 26	3 10	10 50	1 52	16 46	3 24	14 43	1 8	17 12	1 10	20 26	0 16	15 37	0 19	12 19	0 40	21 23	1 47	16 5	16 28	3 33	11 9	6 24	
M27	5 6	27 23	3 59	11 8	1 38	16 42	3 16	14 28	1 8	17 12	1 10	20 25	0 16	15 38	0 19	12 18	0 40	21 23	1 47	16 4	16 27	3 29	11 8	6 24	
T 28	4 43	26 51	4 35	11 23	1 23	16 37	3 9	14 12	1 8	17 12	1 10	20 24	0 16	15 38	0 19	12 17	0 40	21 23	1 47	16 3	16 26	3 26	11 6	6 24	
W29	4s19	25n 0	4n57	11s36	1n 9	16s32	3n 2	13s56	1s 8	17s12	1n10	20s23	0s17	15n39	0s19	12s16	0s40	21s23	1n47	16n 1	16n26	3n23	11s 5	6n24	

# ASTRODIENST EPHEMERIS for the year 1520

## geocentric

MARCH 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	11 12 56	20 <sup>h</sup> 09'	12 <sup>h</sup> 26'	26 <sup>h</sup> 44'	4 <sup>h</sup> 06'	26 <sup>h</sup> 50'	22°R 3	0 <sup>h</sup> 31'	13 <sup>h</sup> 38'	29 <sup>h</sup> 38'	9 <sup>h</sup> 39'	13°R39	15 <sup>h</sup> 06'	0 <sup>h</sup> 02'	12 <sup>h</sup> 22'	T 1
F 2	11 16 52	21° 5'47"	24°32'	26°57'	5° 1'	27°37'	22 <sup>h</sup> 12'	0°37'	13°40'	29°40'	9°40'	13 <sup>h</sup> 29'	15° 3'	0° 9'	12° 6'	F 2
S 3	11 20 49	22° 5'23"	6 <sup>h</sup> 32'	27°15'	5°56'	28°24'	22° 1'	0°42'	13°42'	29°42'	9°40'	13°19'	15° 0'	0°16'	12°10'	S 3
S 4	11 24 45	23° 4'56"	18°27'	27°39'	6°51'	29°11'	22° 0'	0°47'	13°45'	29°44'	9°41'	13° 9'	14°57'	0°23'	12°14'	S 4
M 5	11 28 42	24° 4'28"	0 <sup>h</sup> 18'	28° 7'	7°47'	29°58'	21°59'	0°53'	13°47'	29°46'	9°42'	13° 1'	14°54'	0°29'	12°18'	M 5
T 6	11 32 38	25° 3'57"	12° 7'	28°39'	8°44'	0 <sup>h</sup> 45'	21°58'	0°58'	13°50'	29°48'	9°43'	12°54'	14°50'	0°36'	12°22'	T 6
W 7	11 36 35	26° 3'25"	23°57'	29°16'	9°41'	1°32'	21°56'	1° 3'	13°52'	29°50'	9°44'	12°50'	14°47'	0°43'	12°25'	W 7
T 8	11 40 32	27° 2'51"	5 <sup>h</sup> 15'	29°57'	10°39'	2°19'	21°55'	1° 8'	13°55'	29°53'	9°44'	12°48'	14°44'	0°49'	12°29'	T 8
F 9	11 44 48	28° 2'14"	17°48'	0 <sup>h</sup> 41'	11°36'	3° 6'	21°53'	1°13'	13°58'	29°55'	9°45'	12°D48	14°41'	0°56'	12°33'	F 9
S 10	11 48 25	29° 1'36"	29°56'	1°29'	12°35'	3°53'	21°51'	1°18'	14° 0'	29°57'	9°46'	12°49'	14°38'	1° 3'	12°36'	S 10
S 11	11 52 21	0 <sup>h</sup> 05'	12 <sup>h</sup> 17'	2°21'	13°34'	4°40'	21°49'	1°22'	14° 3'	29°59'	9°47'	12°50'	14°34'	1° 9'	12°40'	S 11
M12	11 56 18	1° 0'15"	24°56'	3°15'	14°33'	5°27'	21°46'	1°27'	14° 6'	0 <sup>h</sup> 1'	9°47'	12°51'	14°31'	1°16'	12°43'	M12
T 13	12 0 14	1°59'32"	7 <sup>h</sup> 35'	4°12'	15°32'	6°14'	21°44'	1°32'	14° 9'	0° 3'	9°48'	12°R51	14°28'	1°23'	12°47'	T 13
W14	12 4 11	2°58'47"	21°26'	5°13'	16°32'	7° 1'	21°41'	1°36'	14°11'	0° 5'	9°48'	12°50'	14°25'	1°29'	12°50'	W14
T 15	12 8 7	3°58'00"	5 <sup>h</sup> 22'	6°15'	17°33'	7°48'	21°38'	1°41'	14°14'	0° 7'	9°49'	12°47'	14°22'	1°36'	12°53'	T 15
F 16	12 12 4	4°57'11"	19°46'	7°21'	18°33'	8°35'	21°35'	1°45'	14°17'	0° 9'	9°49'	12°42'	14°19'	1°43'	12°57'	F 16
S 17	12 16 1	5°56'21"	4 <sup>h</sup> 34'	8°29'	19°34'	9°22'	21°31'	1°50'	14°20'	0°11'	9°50'	12°36'	14°15'	1°49'	13° 0'	S 17
S 18	12 19 57	6°55'28"	19°40'	9°39'	20°36'	10° 9'	21°28'	1°54'	14°23'	0°13'	9°50'	12°31'	14°12'	1°56'	13° 3'	S 18
M19	12 23 54	7°54'34"	4 <sup>h</sup> 05'	10°51'	21°37'	10°56'	21°24'	1°58'	14°26'	0°14'	9°51'	12°27'	14° 9'	2° 3'	13° 6'	M19
T 20	12 27 50	8°53'37"	20° 9'	12° 6'	22°39'	11°42'	21°20'	2° 2'	14°29'	0°16'	9°51'	12°23'	14° 6'	2° 9'	13° 9'	T 20
W21	12 31 47	9°52'38"	5 <sup>h</sup> 11'	13°22'	23°42'	12°29'	21°16'	2° 6'	14°32'	0°18'	9°52'	12°D22	14° 3'	2°16'	13°13'	W21
T 22	12 35 43	10°51'38"	19°53'	14°41'	24°44'	13°16'	21°12'	2°10'	14°35'	0°20'	9°52'	12°22'	13°59'	2°23'	13°16'	T 22
F 23	12 39 40	11°50'35"	4 <sup>h</sup> 11'	16° 1'	25°47'	14° 3'	21° 8'	2°14'	14°38'	0°22'	9°52'	12°23'	13°56'	2°29'	13°19'	F 23
S 24	12 43 36	12°49'30"	18° 1'	17°23'	26°50'	14°50'	21° 3'	2°18'	14°41'	0°24'	9°53'	12°24'	13°53'	2°36'	13°21'	S 24
S 25	12 47 33	13°48'22"	1 <sup>h</sup> 24'	18°47'	27°53'	15°36'	20°59'	2°22'	14°44'	0°26'	9°53'	12°26'	13°50'	2°43'	13°24'	S 25
M26	12 51 30	14°47'12"	14°24'	20°13'	28°56'	16°23'	20°54'	2°25'	14°47'	0°27'	9°53'	12°R26	13°47'	2°50'	13°27'	M26
T 27	12 55 26	15°46'00"	27° 3'	21°41'	0 <sup>h</sup> 0'	17°10'	20°49'	2°29'	14°50'	0°29'	9°53'	12°26'	13°44'	2°56'	13°30'	T 27
W28	12 59 23	16°44'46"	9 <sup>h</sup> 25'	23°10'	1° 4'	17°56'	20°44'	2°32'	14°53'	0°31'	9°53'	12°24'	13°40'	3° 3'	13°33'	W28
T 29	13 3 19	17°43'29"	21°34'	24°41'	2° 8'	18°43'	20°39'	2°36'	14°57'	0°32'	9°53'	12°21'	13°37'	3°10'	13°35'	T 29
F 30	13 7 16	18°42'10"	3 <sup>h</sup> 33'	26°14'	3°13'	19°30'	20°33'	2°39'	15° 0'	0°34'	9°54'	12°18'	13°34'	3°16'	13°38'	F 30
S 31	13 11 12	19°40'49"	15 <sup>h</sup> 27'	27°48'	4 <sup>h</sup> 17'	20°41'	20°16'	2°42'	15° 3'	0 <sup>h</sup> 36'	9°54'	12°14'	13°31'	3°23'	13°40'	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	3s56	22n 0	5n 5	11s47	0n55	16s27	2ns55	13s40	1s 8	17s11	1n11	20s22	0s17	15n40	0s19	12s16
F 2	3 32	18 5	5 0	11 55	0 41	16 21	2 48	13 24	1 9	17 11	1 11	20 21	0 17	15 41	0 19	12 15
S 3	3 9	13 29	4 41	12 2	0 27	16 14	2 41	13 8	1 9	17 11	1 11	20 20	0 17	15 41	0 19	12 14
S 4	2 45	8 25	4 10	12 6	0 14	16 7	2 34	12 52	1 9	17 10	1 11	20 19	0 17	15 42	0 19	12 14
M 5	2 22	3 4	3 28	12 9	0 1	16 0	2 27	12 35	1 9	17 10	1 11	20 18	0 17	15 43	0 19	12 13
T 6	1 58	2s23	2 38	12 9	0s11	15 52	2 21	12 19	1 9	17 10	1 11	20 17	0 17	15 44	0 19	12 12
W 7	1 34	7 46	1 40	12 7	0 23	15 43	2 14	12 2	1 9	17 9	1 11	20 16	0 17	15 44	0 19	12 11
T 8	1 11	12 55	0 38	12 3	0 34	15 35	2 7	11 45	1 9	17 9	1 12	20 15	0 17	15 45	0 19	12 11
F 9	0 47	17 37	0s27	11 58	0 45	15 25	2 0	11 28	1 9	17 8	1 12	20 14	0 17	15 46	0 19	12 10
S 10	0 23	21 41	1 32	11 50	0 55	15 15	1 54	11 11	1 9	17 7	1 12	20 13	0 18	15 47	0 19	12 9
S 11	0n 0	24 51	2 33	11 41	1 5	15 5	1 47	10 54	1 9	17 7	1 12	20 12	0 18	15 48	0 19	12 9
M12	0 24	26 53	3 29	11 30	1 15	14 54	1 41	10 37	1 9	17 6	1 12	20 11	0 18	15 48	0 19	12 8
T 13	0 48	27 31	4 15	11 17	1 23	14 43	1 34	10 19	1 9	17 5	1 12	20 10	0 18	15 49	0 19	12 7
W14	1 11	26 33	4 49	11 3	1 32	14 31	1 28	10 2	1 9	17 4	1 12	20 9	0 18	15 50	0 19	12 6
T 15	1 35	23 57	5 8	10 47	1 39	14 19	1 22	9 44	1 10	17 3	1 12	20 8	0 18	15 51	0 19	12 6
F 16	1 58	19 48	5 8	10 29	1 47	14 6	1 16	9 27	1 10	17 2	1 12	20 7	0 18	15 52	0 19	12 5
S 17	2 22	14 20	4 48	10 10	1 53	13 53	1 10	9 9	1 10	17 1	1 13	20 6	0 18	15 53	0 19	12 4
S 18	2 45	7 54	4 8	9 49	1 59	13 40	1 4	8 51	1 10	17 0	1 13	20 5	0 18	15 54	0 19	12 4
M19	3 9	0 57	3 10	9 27	2 5	13 26	0 58	8 34	1 10	16 59	1 13	20 4	0 18	15 55	0 19	12 3
T 20	3 32	6n 4	1 58	9 3	2 10	13 11	0 52	8 16	1 10	16 58	1 13	20 4	0 19	15 55	0 19	12 2
W21	3 55	12 40	0 39	8 38	2 15	12 56	0 46	7 58	1 10	16 57	1 13	20 3	0 19	15 56	0 19	12 2
T 22	4 19	18 25	0n41	8 11	2 19	12 41	0 40	7 40	1 10	16 56	1 13	20 2	0 19	15 57	0 19	12 1
F 23	4 42	22 57	1 57	7 43	2 22	12 25	0 35	7 22	1 10	16 55	1 13	20 1	0 19	15 58	0 19	12 1
S 24	5 5	26 0	3 3	7 14	2 26	12 9	0 29	7 4	1 9	16 54	1 13	20 1	0 19	15 59	0 19	12 0
S 25	5 28	27 27	3 57	6 43	2 28	11 52	0 24	6 45	1 9	16 52	1 13	20 0	0 19	16 0	0 19	11 59
M26	5 51	27 19	4 37	6 11	2 30	11 35	0 18	6 27	1 9	16 51	1 13	19 59	0 19	16 1	0 19	11 59
T 27	6 13	25 45	5 3	5 38	2 32	11 18	0 13	6 9	1 9	16 50	1 13	19 58	0 19	16 2	0 19	11 58
W28	6 36	22 58	5 13	5 3	2 33	11 0	0 8	5 50	1 9	16 48	1 14	19 58	0 19	16 3	0 19	11 58
T 29	6 58	19 14	5 10	4 27	2 33	10 42	0 3	5 32	1 9	16 47	1 14	19 57	0 20	16 4	0 19	11 57
F 30	7 21	14 46	4 53	3 51	2 33	10 23	0s 2	5 14	1 9	16 45	1 14	19 56	0 20	16 5	0 19	11 56
S 31	7n43	9n47	4n23	3s12	2s32	10s 4	0s 7	4s55	1s 9	16s44	1n14	19s56	0s20	16n 6	0s19	11s56

Julian Day Number = 2276297.5, Delta T = 246.79 sec

Ecliptic obliquity = 23°30'13", Nutation = - 0°00'11", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°02'42", Lahiri = 17°09'43" Julian Calendar 1 March 1520 == Greg. Calendar 11 March 1520



## ASTRODIENST EPHEMERIS for the year 1520

geocentric

MAY 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	15 13 25	19°34'21"	29°23'38"	28°34'49"	8°57'56"	14°49'4	16°R51	3°37'37"	16°34'49"	1°11'14"	9°R41	12°R 7	11°R52	6°25'50"	14°28'29"	T 1
W 2	15 17 22	20°42'05"	11°14'40"	0°11'54"	10° 5'	14°49'	16°14'44"	3°37'37"	16°52'	1°15'	9°R40	12°R 8	11°49'	6°56'	14°30'	W 2
T 3	15 21 19	21°39'47"	23°51'	2°58'	11°14'	15°34'	16°36'	3°37'37"	16°56'	1°15'	9°40'	12° 7'	11°46'	7° 3'	14°30'	T 3
F 4	15 25 15	22°37'28"	6°13'	4°59'	12°23'	16°20'	16°28'	3°R37	16°59'	1°16'	9°39'	12° 7'	11°43'	7°10'	14°30'	F 4
S 5	15 29 12	23°35'08"	18°47'	6°59'	13°32'	17° 5'	16°21'	3°37'37"	17° 3'	1°17'	9°38'	12° 6'	11°40'	7°16'	14°31'	S 5
S 6	15 33 8	24°32'46"	1°35'	8°56'	14°41'	17°50'	16°13'	3°37'37"	17° 6'	1°17'	9°37'	12° 4'	11°37'	7°23'	14°31'	S 6
M 7	15 37 5	25°30'23"	14°36'	10°50'	15°50'	18°35'	16° 6'	3°37'37"	17°10'	1°18'	9°36'	12° 2'	11°33'	7°30'	14°31'	M 7
T 8	15 41 1	26°28'00"	27°52'	12°42'	17° 0'	19°20'	15°58'	3°37'37"	17°13'	1°19'	9°35'	12° 1'	11°30'	7°37'	14°31'	T 8
W 9	15 44 58	27°25'35"	11°24'	14°31'	18° 9'	20° 5'	15°51'	3°36'	17°16'	1°19'	9°34'	11°59'	11°27'	7°43'	14°32'	W 9
T 10	15 48 54	28°23'09"	25°10'	16°18'	19°18'	20°50'	15°44'	3°36'	17°20'	1°20'	9°33'	11°D59'	11°24'	7°50'	14°R32'	T 10
F 11	15 52 51	29°20'43"	9°13'	18° 1'	20°28'	21°35'	15°36'	3°35'	17°23'	1°20'	9°32'	11°59'	11°21'	7°57'	14°31'	F 11
S 12	15 56 48	0°11'18"	23°29'	19°42'	21°38'	22°20'	15°29'	3°34'	17°27'	1°20'	9°31'	12° 0'	11°17'	8° 3'	14°31'	S 12
S 13	16 0 44	1°15'47"	7°56'	21°20'	22°47'	23° 5'	15°22'	3°33'	17°30'	1°21'	9°30'	12° 1'	11°14'	8°10'	14°31'	S 13
M14	16 4 41	2°13'18"	22°32'	22°55'	23°57'	23°50'	15°15'	3°33'	17°34'	1°21'	9°29'	12° 2'	11°11'	8°17'	14°31'	M14
T 15	16 8 37	3°10'48"	7°12'	24°27'	25° 7'	24°35'	15° 8'	3°31'	17°37'	1°22'	9°28'	12°R 3	11° 8'	8°23'	14°31'	T 15
W16	16 12 34	4° 8'17"	21°49'	25°55'	26°17'	25°19'	15° 1'	3°30'	17°40'	1°22'	9°26'	12° 3'	11° 5'	8°30'	14°30'	W16
T 17	16 16 30	5° 5'46"	6°11'17"	27°21'	27°27'	26° 4'	14°54'	3°29'	17°44'	1°22'	9°25'	12° 1'	11° 2'	8°37'	14°30'	T 17
F 18	16 20 27	6° 3'13"	20°30'	28°44'	28°37'	26°49'	14°48'	3°28'	17°47'	1°22'	9°24'	11°59'	10°58'	8°43'	14°29'	F 18
S 19	16 24 23	7° 0'39"	4°25'	0°3'	29°47'	27°33'	14°41'	3°26'	17°50'	1°23'	9°23'	11°56'	10°55'	8°50'	14°29'	S 19
S 20	16 28 20	7°58'05"	17°57'	1°20'	0°57'	28°18'	14°34'	3°25'	17°54'	1°23'	9°22'	11°52'	10°52'	8°57'	14°28'	S 20
M21	16 32 17	8°55'29"	1°5'	2°33'	2° 7'	29° 2'	14°28'	3°23'	17°57'	1°23'	9°20'	11°48'	10°49'	9° 3'	14°27'	M21
T 22	16 36 13	9°52'52"	13°51'	3°43'	3°17'	29°46'	14°22'	3°22'	18° 0'	1°23'	9°19'	11°45'	10°46'	9°10'	14°27'	T 22
W23	16 40 10	10°50'14"	26°18'	4°49'	4°27'	0°31'	14°15'	3°20'	18° 4'	1°23'	9°18'	11°43'	10°43'	9°17'	14°26'	W23
T 24	16 44 6	11°47'35"	8°12'28"	5°52'	5°38'	1°15'	14° 9'	3°18'	18° 7'	1°23'	9°17'	11°D42'	10°39'	9°23'	14°25'	T 24
F 25	16 48 3	12°44'55"	20°26'	6°52'	6°48'	1°59'	14° 3'	3°16'	18°10'	1°R23	9°15'	11°42'	10°36'	9°30'	14°24'	F 25
S 26	16 51 59	13°42'14"	2°18'	7°48'	7°59'	2°43'	13°58'	3°14'	18°13'	1°23'	9°14'	11°43'	10°33'	9°37'	14°23'	S 26
S 27	16 55 56	14°39'31"	14° 7'	8°40'	9° 9'	3°27'	13°52'	3°12'	18°17'	1°23'	9°13'	11°45'	10°30'	9°43'	14°22'	S 27
M28	16 59 53	15°36'48"	25°59'	9°29'	10°20'	4°11'	13°46'	3°10'	18°20'	1°23'	9°12'	11°47'	10°27'	9°50'	14°21'	M28
T 29	17 3 49	16°34'04"	7°11'58"	10°13'	11°30'	4°55'	13°41'	3° 8'	18°23'	1°23'	9°10'	11°R47'	10°23'	9°57'	14°20'	T 29
W30	17 7 46	17°31'20"	20° 8'	10°54'	12°41'	5°39'	13°36'	3° 5'	18°26'	1°23'	9° 9'	11°47'	10°20'	10° 3'	14°18'	W30
T 31	17 11 42	18°28'35"	2°31'	11°31'	13°51'	6°23'	13°13'30"	3° 3'	18°29'	1°R23	9° 7'	11°R45'	10°17'	10°10'	14°17'	T 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17n43	10s18	1n 9	21n11	1n16	1n54	1s48	4n36	1s 2	15s45	1n13	19s46	0s23	16n37	0s18	11s43	0s42	21s26	1n44	15n31	15n26	0s 0	10s 3	6n46			
W 2	17 59	15 20	0 3	21 46	1 24	2 19	1 50	4 54	1 2	15 43	1 13	19 47	0 23	16 38	0 18	11 43	0 42	21 26	1 44	15 31	15 25	0 3	10 2	6 47			
T 3	18 14	19 50	1s 5	22 19	1 32	2 45	1 51	5 12	1 2	15 41	1 13	19 47	0 24	16 39	0 18	11 43	0 42	21 26	1 44	15 31	15 24	0 7	10 1	6 47			
F 4	18 29	23 32	2 10	22 49	1 40	3 11	1 52	5 30	1 1	15 39	1 13	19 47	0 24	16 40	0 18	11 42	0 42	21 26	1 43	15 31	15 23	0 10	10 1	6 48			
S 5	18 43	26 10	3 9	23 17	1 46	3 36	1 54	5 47	1 1	15 37	1 13	19 47	0 24	16 41	0 18	11 42	0 42	21 26	1 43	15 30	15 22	0 13	10 0	6 48			
S 6	18 57	27 30	4 1	23 42	1 53	4 2	1 55	6 5	1 0	15 35	1 13	19 47	0 24	16 41	0 18	11 42	0 42	21 26	1 43	15 30	15 21	0 17	10 0	6 49			
M 7	19 11	27 21	4 41	24 4	1 58	4 28	1 56	6 23	1 0	15 33	1 12	19 47	0 24	16 42	0 18	11 42	0 42	21 26	1 43	15 29	15 20	0 20	9 59	6 49			
T 8	19 25	25 39	5 6	24 24	2 2	4 53	1 57	6 40	1 0	15 31	1 12	19 47	0 24	16 43	0 18	11 42	0 42	21 26	1 43	15 29	15 19	0 23	9 59	6 49			
W 9	19 38	22 28	5 16	24 42	2 6	5 19	1 58	6 58	0 59	15 29	1 12	19 48	0 24	16 44	0 18	11 42	0 42	21 27	1 43	15 28	15 18	0 26	9 59	6 50			
T 10	19 51	17 59	5 8	24 56	2 9	5 45	1 59	7 15	0 59	15 27	1 12	19 48	0 24	16 45	0 18	11 41	0 42	21 27	1 43	15 28	15 17	0 30	9 58	6 50			
F 11	20 4	12 28	4 41	25 9	2 12	6 10	1 59	7 32	0 59	15 25	1 12	19 48	0 25	16 46	0 18	11 41	0 42	21 27	1 43	15 28	15 16	0 33	9 58	6 51			
S 12	20 16	6 13	3 57	25 19	2 13	6 36	2 0	7 49	0 58	15 23	1 12	19 48	0 25	16 47	0 18	11 41	0 42	21 27	1 43	15 29	15 15	0 36	9 57	6 51			
S 13	20 28	0n27	2 57	25 27	2 14	7 1	2 1	8 6	0 58	15 21	1 12	19 49	0 25	16 48	0 18	11 41	0 42	21 27	1 43	15 29	15 14	0 40	9 57	6 51			
M14	20 40	7 10	1 46	25 32	2 14	7 27	2 1	8 23	0 57	15 19	1 11	19 49	0 25	16 49	0 18	11 41	0 42	21 27	1 43	15 29	15 13	0 43	9 57	6 52			
T 15	20 51	13 32	0 27	25 36	2 13	7 52	2 1	8 40	0 57	15 17	1 11	19 49	0 25	16 50	0 18	11 41	0 42	21 27	1 43	15 30	15 13	0 46	9 56	6 52			
W16	21 2	19 8	0n54	25 38	2 11	8 17	2 1	8 57	0 56	15 15	1 11	19 50	0 25	16 51	0 18	11 41	0 43	21 28	1 43	15 29	15 12	0 50	9 56	6 53			
T 17	21 12	23 32	2 10	25 37	2 9	8 42	2 2	9 13	0 56	15 13	1 11	19 50	0 25	16 52	0 18	11 41	0 43	21 28	1 43	15 29	15 11	0 53	9 56	6 53			
F 18	21 23	26 25	3 16	25 35	2 5	9 7	2 2	9 30	0 55	15 11	1 11	19 51	0 25	16 53	0 18	11 41	0 43	21 28	1 43	15 28	15 10	0 56	9 56	6 54			
S 19	21 32	27 35	4 9	25 32	2 1	9 32	2 2	9 47	0 55	15 10	1 11	19 51	0 25	16 54	0 18	11 41	0 43	21 28	1 43	15 27	15 9	1 0	9 55	6 54			
S 20	21 42	27 2	4 47	25 26	1 56	9 56	2 1	10 3	0 55	15 8	1 10	19 52	0 26	16 55	0 18	11 41	0 43	21 28	1 42	15 26	15 8	1 3	9 55	6 54			
M21	21 51	24 59	5 8	25 20	1 51	10 21	2 1	10 19	0 54	15 6	1 10	19 52	0 26	16 56	0 18	11 41	0 43	21 28	1 42	15 25	15 7	1 6	9 55	6 55			
T 22	21 59	21 42	5 13	25 11	1 44	10 45	2 1	10 35	0 54	15 5	1 10	19 52	0 26	16 57	0 18	11 41	0 43	21 28	1 42	15 24	15 6	1 10	9 55	6 55			
W23	22 8	17 32	5 4	25 2	1 37	11 9	2 1	10 51	0 53	15 3	1 10	19 53	0 26	16 58	0 18	11 41	0 43	21 29	1 42	15 23	15 5	1 13	9 55	6 56			
T 24	22 16	12 45	4 40	24 52	1 29	11 33	2 0	11 7	0 53	15 1	1 10	19 54	0 26	16 59	0 18	11 41	0 43	21 29	1 42	15 23	15 4	1 16	9 55	6 56			
F 25	22 23	7 33	4 5	24 40	1 21	11 56	1 59	11 23	0 52	15 0	1 9	19 54	0 26	17 0	0 18	11 41	0 43	21 29	1 42	15 23	15 3	1 19	9 54	6 56			
S 26	22 30	2 8	3 19	24 28	1 11	12 20	1 59	11 38	0 52	14 58	1 9	19 55	0 26	17 0	0 18	11 41	0 43	21 29	1 42	15 23	15 2	1 23	9 54	6 57			
S 27	22 37	3s21	2 26	24 14	1 1	12 43	1 58	11 54	0 51	14 57	1 9	19 55	0 26	17 1	0 18	11 41	0 43	21 29	1 42	15 24	15 1	1 26	9 54	6 57			
M28	22 43	8 44	1 25	24 0	0 50	13 6	1 57	12 9	0 51	14 55	1 9	19 56	0 27	17 2	0 18	11 41	0 43	21 29	1 42	15 24	15 0	1 29	9 54	6 58			
T 29	22 49	13 53	0 21	23 45	0 39	13 29	1 56	12 25	0 50	14 54	1 9	19 57	0 27	17 3	0 18	11 41	0 43	21 30	1 42	15 25	14 59	1 33	9 54	6 58			
W30	22 55	18 33	0s45	23 30	0 27	13 51	1 55	12 40	0 49	14 52	1 8	19 57	0 27	17 4	0 18	11 41	0 43	21 30	1 42	15 25	14 58	1 36	9 54	6 58			
T 31	23n 0	22s32	1s51	23n14	0n14	14n13	1s54	12n55	0s49	14s51	1n 8	19s58	0s27	17n 5	0s18	11s41	0s43	21s30	1n42	15n24	14n57	1s39	9s54	6n59			



# ASTRODIENST EPHEMERIS for the year 1520

## geocentric

JUNE 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	17 15 39	19°25'49	15°10'10	12°56'4	15°8'2	7°8'7	13°R25	3°R 0	18°8'32	1°R22	9°R 6	11°R42	10°8'14	10°17'17	14°R16	F 1
S 2	17 19 35	20°23'02	28° 4	12°32	16°13	7°50	13°M20	2°58'8	18°36	1°K22	9°5	11°8'37	10°11	10°23	14°14'14	S 2
S 3	17 23 32	21°20'15	11°3'14	12°56	17°24	8°34	13°16	2°55	18°39	1°22	9° 3	11°31	10° 8	10°30	14°13	S 3
M 4	17 27 28	22°17'28	24°38	13°16	18°35	9°17	13°11	2°52	18°42	1°22	9° 2	11°24	10° 4	10°37	14°11	M 4
T 5	17 31 25	23°14'41	8°15'18	13°31	19°46	10° 1	13° 7	2°49	18°45	1°21	9° 1	11°18	10° 1	10°43	14° 9	T 5
W 6	17 35 22	24°11'53	22° 3	13°42	20°57	10°44	13° 2	2°47	18°48	1°21	8°59	11°13	9°58	10°50	14° 8	W 6
T 7	17 39 18	25° 9'05	6°1'0	13°48	22° 8	11°28	12°58	2°44	18°51	1°21	8°58	11° 9	9°55	10°57	14° 6	T 7
F 8	17 43 15	26° 6'17	20° 3	13°R49	23°19	12°11	12°54	2°41	18°54	1°20	8°56	11°D 8	9°52	11° 3	14° 4	F 8
S 9	17 47 11	27° 3'29	4°12'12	13°46	24°30	12°54	12°51	2°37	18°57	1°20	8°55	11° 8	9°49	11°10	14° 2	S 9
S 10	17 51 8	28° 0'41	18°25	13°39	25°41	13°37	12°47	2°34	18°59	1°19	8°53	11° 9	9°45	11°17	14° 1	S 10
M 11	17 55 4	28°57'54	2°39'39	13°27	26°52	14°21	12°44	2°31	19° 2	1°19	8°52	11°10	9°42	11°23	13°59	M 11
T 12	17 59 1	29°55'06	16°54	13°11	28° 3	15° 4	12°40	2°28	19° 5	1°18	8°50	11°R10	9°39	11°30	13°57	T 12
W 13	18 2 57	0°55'21'8	1°11'5	12°50	29°15	15°47	12°37	2°24	19° 8	1°17	8°49	11° 8	9°36	11°36	13°55	W 13
T 14	18 6 54	1°49'31	15°10	12°26	0°11'26	16°30	12°34	2°21	19°11	1°17	8°47	11° 5	9°33	11°43	13°52	T 14
F 15	18 10 51	2°46'43	29° 4	11°59	1°37	17°12	12°31	2°17	19°14	1°16	8°46	10°58	9°29	11°50	13°50	F 15
S 16	18 14 47	3°43'56	12°54'3	11°29	2°49	17°55	12°29	2°14	19°16	1°16	8°45	10°51	9°26	11°56	13°48	S 16
S 17	18 18 44	4°41'08	26° 5	10°56	4° 0	18°38	12°26	2°10	19°19	1°15	8°43	10°42	9°23	12° 3	13°46	S 17
M 18	18 22 40	5°38'20	9°8'8	10°21	5°12	19°20	12°24	2° 6	19°22	1°14	8°42	10°32	9°20	12°10	13°44	M 18
T 19	18 26 37	6°35'32	21°51	9°45	6°24	20° 3	12°22	2° 3	19°24	1°13	8°40	10°24	9°17	12°16	13°41	T 19
W 20	18 30 33	7°32'44	4°11'16	9° 7	7°35	20°45	12°20	1°59	19°27	1°13	8°39	10°17	9°14	12°23	13°39	W 20
T 21	18 34 30	8°29'56	16°26	8°30	8°47	21°28	12°18	1°55	19°29	1°12	8°37	10°13	9°10	12°30	13°36	T 21
F 22	18 38 26	9°27'07	28°24	7°52	9°59	22°10	12°17	1°51	19°32	1°11	8°36	10°10	9° 7	12°36	13°34	F 22
S 23	18 42 23	10°24'19	10°15'15	7°16	11°10	22°52	12°16	1°47	19°34	1°10	8°34	10°D10	9° 4	12°43	13°31	S 23
S 24	18 46 20	11°21'30	22° 4	6°42	12°22	23°35	12°14	1°43	19°37	1° 9	8°33	10°10	9° 1	12°50	13°29	S 24
M 25	18 50 16	12°18'41	3°11'57	6°10	13°34	24°17	12°13	1°39	19°39	1° 8	8°31	10°R11	8°58	12°56	13°26	M 25
T 26	18 54 13	13°15'53	15°59	5°40	14°46	24°59	12°13	1°35	19°42	1° 7	8°30	10°11	8°55	13° 3	13°24	T 26
W 27	18 58 9	14°13'04	28°15	5°14	15°58	25°41	12°12	1°31	19°44	1° 6	8°28	10° 9	8°51	13°10	13°21	W 27
T 28	19 2 6	15°10'16	10°14'47	4°52	17°10	26°23	12°12	1°27	19°46	1° 5	8°27	10° 5	8°48	13°16	13°18	T 28
F 29	19 6 2	16° 7'28	23°39	4°34	18°22	27° 4	12°11	1°23	19°49	1° 4	8°25	9°59	8°45	13°23	13°16	F 29
S 30	19 9 59	17°54'40	6°52'52	4°52'1	19°11'34	27°8'46	12°D11	1°18'18	19°51	1°K 3	8°24	9°51	8°42	13°13'30	13°13	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	23n 5	25s31	2s52	22n58	0n 1	14n35	1s53	13n10	0s48	14s50	1n 8	19s59	0s27	17n 6	0s18	11s41	0s43	21s30	1n42	15n23	14n56	1s43	9s54	6n59					
S 2	23 9	27 14	3 45	22 42	0s13	14 57	1 52	13 24	0 48	14 49	1 8	19 59	0 27	17 7	0 18	11 41	0 43	21 30	1 41	15 21	14 55	1 46	9 54	6 59					
S 3	23 13	27 28	4 28	22 25	0 28	15 18	1 51	13 39	0 47	14 47	1 7	20 0	0 27	17 7	0 18	11 41	0 43	21 30	1 41	15 20	14 54	1 49	9 54	7 0					
M 4	23 17	26 7	4 56	22 8	0 42	15 39	1 50	13 53	0 47	14 46	1 7	20 1	0 27	17 8	0 18	11 42	0 43	21 31	1 41	15 17	14 53	1 53	9 54	7 0					
T 5	23 20	23 13	5 9	21 51	0 58	15 59	1 48	14 8	0 46	14 45	1 7	20 2	0 28	17 9	0 18	11 42	0 43	21 31	1 41	15 16	14 52	1 56	9 55	7 0					
W 6	23 23	18 59	5 4	21 35	1 13	16 19	1 47	14 22	0 46	14 44	1 7	20 2	0 28	17 10	0 18	11 42	0 43	21 31	1 41	15 14	14 51	1 59	9 55	7 1					
T 7	23 25	13 41	4 41	21 18	1 29	16 39	1 45	14 36	0 45	14 43	1 7	20 3	0 28	17 11	0 18	11 42	0 43	21 31	1 41	15 13	14 50	2 3	9 55	7 1					
F 8	23 27	7 38	4 1	21 2	1 45	16 59	1 44	14 50	0 44	14 42	1 6	20 4	0 28	17 12	0 18	11 42	0 43	21 31	1 41	15 12	14 49	2 6	9 55	7 1					
S 9	23 28	1 10	3 6	20 46	2 2	17 18	1 42	15 4	0 44	14 41	1 6	20 5	0 28	17 12	0 18	11 42	0 43	21 32	1 41	15 12	14 48	2 9	9 55	7 2					
S 10	23 29	5n23	2 0	20 31	2 18	17 37	1 40	15 17	0 43	14 40	1 6	20 6	0 28	17 13	0 18	11 43	0 43	21 32	1 41	15 13	14 47	2 13	9 55	7 2					
M11	23 30	11 43	0 46	20 16	2 34	17 55	1 38	15 30	0 43	14 39	1 6	20 7	0 28	17 14	0 18	11 43	0 43	21 32	1 41	15 13	14 46	2 16	9 56	7 2					
T 12	23 30	17 25	0n31	20 2	2 50	18 13	1 37	15 44	0 42	14 39	1 5	20 7	0 28	17 15	0 18	11 43	0 43	21 32	1 41	15 13	14 45	2 19	9 56	7 3					
W13	23 30	22 9	1 45	19 49	3 5	18 30	1 35	15 57	0 41	14 38	1 5	20 8	0 28	17 16	0 18	11 43	0 43	21 32	1 40	15 13	14 44	2 23	9 56	7 3					
T 14	23 29	25 32	2 52	19 36	3 20	18 47	1 33	16 10	0 41	14 37	1 5	20 9	0 29	17 16	0 18	11 44	0 43	21 32	1 40	15 11	14 43	2 26	9 57	7 3					
F 15	23 28	27 18	3 48	19 25	3 34	19 4	1 31	16 23	0 40	14 37	1 5	20 10	0 29	17 17	0 18	11 44	0 44	21 33	1 40	15 10	14 42	2 29	9 57	7 4					
S 16	23 27	27 22	4 30	19 14	3 47	19 20	1 29	16 35	0 39	14 36	1 4	20 11	0 29	17 18	0 18	11 44	0 44	21 33	1 40	15 7	14 41	2 33	9 57	7 4					
S 17	23 25	25 50	4 56	19 4	4 0	19 35	1 27	16 48	0 39	14 36	1 4	20 12	0 29	17 18	0 18	11 44	0 44	21 33	1 40	15 4	14 39	2 36	9 58	7 4					
M18	23 23	22 55	5 6	18 56	4 11	19 50	1 24	17 0	0 38	14 35	1 4	20 13	0 29	17 19	0 18	11 45	0 44	21 33	1 40	15 1	14 38	2 39	9 58	7 5					
T 19	23 20	18 59	5 0	18 49	4 21	20 5	1 22	17 12	0 37	14 35	1 4	20 14	0 29	17 20	0 18	11 45	0 44	21 33	1 40	14 59	14 37	2 42	9 58	7 5					
W20	23 17	14 18	4 40	18 43	4 29	20 19	1 20	17 24	0 37	14 35	1 3	20 15	0 29	17 21	0 18	11 45	0 44	21 34	1 40	14 57	14 36	2 46	9 59	7 5					
T 21	23 14	9 10	4 7	18 38	4 37	20 33	1 18	17 36	0 36	14 34	1 3	20 16	0 29	17 21	0 18	11 46	0 44	21 34	1 40	14 55	14 35	2 49	9 59	7 5					
F 22	23 10	3 46	3 24	18 34	4 42	20 46	1 15	17 47	0 35	14 34	1 3	20 17	0 29	17 22	0 18	11 46	0 44	21 34	1 40	14 54	14 34	2 52	10 0	7 6					
S 23	23 6	1s43	2 33	18 32	4 46	20 58	1 13	17 59	0 35	14 34	1 2	20 18	0 30	17 23	0 18	11 46	0 44	21 34	1 40	14 54	14 33	2 56	10 0	7 6					
S 24	23 1	7 9	1 35	18 32	4 49	21 10	1 11	18 10	0 34	14 34	1 2	20 19	0 30	17 23	0 18	11 47	0 44	21 34	1 39	14 54	14 32	2 59	10 1	7 6					
M25	22 56	12 21	0 33	18 33	4 49	21 22	1 8	18 21	0 33	14 34	1 2	20 20	0 30	17 24	0 18	11 47	0 44	21 35	1 39	14 55	14 31	3 2	10 1	7 6					
T 26	22 50	17 10	0s31	18 35	4 48	21 32	1 6	18 32	0 33	14 34	1 2	20 21	0 30	17 25	0 18	11 47	0 44	21 35	1 39	14 55	14 30	3 6	10 2	7 6					
W27	22 45	21 22	1 35	18 38	4 46	21 43	1 3	18 43	0 32	14 34	1 1	20 22	0 30	17 25	0 18	11 48	0 44	21 35	1 39	14 54	14 29	3 9	10 2	7 7					
T 28	22 38	24 41	2 36	18 43	4 42	21 52	1 1	18 53	0 31	14 34	1 1	20 23	0 30	17 26	0 18	11 48	0 44	21 35	1 39	14 53	14 28	3 12	10 3	7 7					
F 29	22 32	26 51	3 30	18 49	4 37	22 1	0 58	19 4	0 31	14 34	1 1	20 24	0 30	17 27	0 18	11 48	0 44	21 35	1 39	14 51	14 27	3 16	10 3	7 7					
S 30	22n25	27s33	4s14	18n56	4s30	22n10	0s56	19n14	0s30	14s34	1n 1	20s25	0s30	17n27	0s18	11s49	0s44	21s36	1n39	14n48	14n26	3s19	10s 4	7n 7					

ASTRODIENST EPHEMERIS for the year 1520  
geocentric

JULY 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	19 13 56	18°52'15"	20°25'25"	4°R13	20°II46	28°828	12°11	1°R14	19°853	1°R 2	8°R22	9°R41	8°839	13°36	13°R10	S 1
M 2	19 17 52	18°59'05"	4°15'15"	4°D10	21°58	29° 9	12°12	1°10	19°55	1°1 1	8°21	9°30	8°35	13°43	13°7	M 2
T 3	19 21 49	19°56'19"	18°18	4°13	23°10	29°51	12°12	1° 6	19°57	1° 0	8°19	9°20	8°32	13°50	13° 4	T 3
W 4	19 25 45	20°53'33"	2°30	4°21	24°22	0°II32	12°13	1° 1	20° 0	0°59	8°18	9°11	8°29	13°56	13° 1	W 4
T 5	19 29 42	21°50'48"	16°46	4°35	25°34	1°14	12°14	0°57	20° 2	0°58	8°17	9° 5	8°26	14° 3	12°58	T 5
F 6	19 33 38	22°48'03"	1°Y 1	4°55	26°47	1°55	12°15	0°53	20° 4	0°56	8°15	9° 1	8°23	14°10	12°56	F 6
S 7	19 37 35	23°45'20"	15°14	5°20	27°59	2°36	12°16	0°48	20° 6	0°55	8°14	8°59	8°20	14°16	12°53	S 7
S 8	19 41 31	24°42'37"	29°21	5°51	29°11	3°17	12°17	0°44	20° 7	0°54	8°12	8°D59	8°16	14°23	12°50	S 8
M 9	19 45 28	25°39'56"	13°823	6°29	0°24	3°58	12°19	0°39	20° 9	0°53	8°11	8°R59	8°13	14°30	12°47	M 9
T 10	19 49 25	26°37'15"	27°19	7°12	1°36	4°39	12°20	0°35	20°11	0°52	8° 9	8°58	8°10	14°36	12°43	T 10
W11	19 53 21	27°34'36"	11°II 7	8° 0	2°49	5°20	12°22	0°30	20°13	0°50	8° 8	8°55	8° 7	14°43	12°40	W11
T 12	19 57 18	28°31'58"	24°47	8°55	4° 1	6° 1	12°24	0°26	20°15	0°49	8° 7	8°49	8° 4	14°50	12°37	T 12
F 13	20 1 14	29°29'20"	8°216	9°55	5°14	6°42	12°27	0°22	20°16	0°48	8° 5	8°41	8° 1	14°56	12°34	F 13
S 14	20 5 11	0°26'44"	21°34	11° 0	6°27	7°22	12°29	0°17	20°18	0°46	8° 4	8°30	7°57	15° 3	12°31	S 14
S 15	20 9 7	1°24'08"	4°39	12°11	7°39	8° 3	12°32	0°13	20°20	0°45	8° 3	8°17	7°54	15°10	12°28	S 15
M16	20 13 4	2°21'33"	17°28	13°27	8°52	8°43	12°34	0° 8	20°21	0°43	8° 1	8° 4	7°51	15°16	12°25	M16
T 17	20 17 0	3°18'59"	0°II 2	14°48	10° 5	9°24	12°37	0° 4	20°23	0°42	8° 0	7°52	7°48	15°23	12°22	T 17
W18	20 20 57	4°16'26"	12°20	16°14	11°18	10° 4	12°41	29°359	20°24	0°41	7°59	7°42	7°45	15°30	12°18	W18
T 19	20 24 54	5°13'54"	24°26	17°45	12°31	10°44	12°44	29°55	20°26	0°39	7°57	7°35	7°41	15°36	12°15	T 19
F 20	20 28 50	6°11'22"	6°21	19°20	13°44	11°24	12°47	29°50	20°27	0°38	7°56	7°30	7°38	15°43	12°12	F 20
S 21	20 32 47	7° 8'51"	18°11	20°59	14°57	12° 4	12°51	29°46	20°29	0°36	7°55	7°27	7°35	15°50	12° 9	S 21
S 22	20 36 43	8° 6'21"	29°59	22°42	16°10	12°44	12°55	29°42	20°30	0°35	7°54	7°26	7°32	15°56	12° 6	S 22
M23	20 40 40	9° 3'52"	11°II 51	24°29	17°23	13°24	12°59	29°37	20°31	0°33	7°52	7°26	7°29	16° 3	12° 2	M23
T 24	20 44 36	10° 1'23"	23°53	26°18	18°36	14° 4	13° 3	29°33	20°32	0°32	7°51	7°26	7°26	16°10	11°59	T 24
W25	20 48 33	10°58'56"	6°110	28°11	19°49	14°43	13° 7	29°29	20°34	0°30	7°50	7°24	7°22	16°16	11°56	W25
T 26	20 52 29	11°56'30"	18°46	0°II 6	21° 2	15°23	13°12	29°24	20°35	0°29	7°49	7°20	7°19	16°23	11°53	T 26
F 27	20 56 26	12°54'04"	1°345	2° 3	22°15	16° 2	13°16	29°20	20°36	0°27	7°48	7°14	7°16	16°29	11°49	F 27
S 28	21 0 23	13°51'40"	15°10	4° 1	23°28	16°42	13°21	29°16	20°37	0°26	7°47	7° 5	7°13	16°36	11°46	S 28
S 29	21 4 19	14°49'17"	28°59	6° 1	24°42	17°21	13°26	29°12	20°38	0°24	7°45	6°54	7°10	16°43	11°43	S 29
M30	21 8 16	15°46'54"	13°II 10	8° 2	25°55	18° 0	13°31	29° 7	20°39	0°23	7°44	6°43	7° 7	16°49	11°40	M30
T 31	21 12 12	16°44'34"	27°38	10°II 4	27°28	18°II 39	13°II 36	29°3 3	20°40	0°21	7°43	6°32	7° 3	16°56	11°37	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	22n17	26s39	4s45	19n 4	4s22	22n18	0s53	19n24	0s29	14s35	1n 0	20s26	0s30	17n28	0s18	11s49
M 2	22 9	24 7	5 1	19 14	4 13	22 25	0 51	19 34	0 28	14 35	1 0	20 27	0 30	17 28	0 18	11 50
T 3	22 1	20 7	4 58	19 24	4 3	22 32	0 48	19 43	0 28	14 35	1 0	20 28	0 31	17 29	0 18	11 50
W 4	21 52	14 56	4 38	19 35	3 51	22 38	0 45	19 53	0 27	14 36	1 0	20 29	0 31	17 29	0 18	11 51
T 5	21 44	8 55	4 0	19 46	3 39	22 43	0 43	20 2	0 26	14 36	0 59	20 30	0 31	17 30	0 18	11 51
F 6	21 34	2 27	3 7	19 58	3 27	22 48	0 40	20 11	0 25	14 37	0 59	20 31	0 31	17 30	0 18	11 51
S 7	21 25	4n 8	2 2	20 10	3 13	22 52	0 37	20 20	0 25	14 37	0 59	20 32	0 31	17 31	0 18	11 52
S 8	21 14	10 29	0 51	20 23	3 0	22 56	0 35	20 29	0 24	14 38	0 59	20 33	0 31	17 32	0 18	11 52
M 9	21 4	16 16	0n23	20 35	2 45	22 58	0 32	20 37	0 23	14 39	0 58	20 34	0 31	17 32	0 18	11 53
T 10	20 53	21 10	1 35	20 48	2 31	23 1	0 29	20 46	0 22	14 40	0 58	20 35	0 31	17 33	0 18	11 53
W11	20 42	24 50	2 41	21 0	2 16	23 2	0 26	20 54	0 21	14 40	0 58	20 36	0 31	17 33	0 18	11 54
T 12	20 31	27 1	3 37	21 11	2 1	23 3	0 24	21 2	0 21	14 41	0 58	20 37	0 31	17 33	0 18	11 54
F 13	20 19	27 34	4 20	21 22	1 46	23 3	0 21	21 10	0 20	14 42	0 57	20 38	0 31	17 34	0 19	11 55
S 14	20 7	26 30	4 48	21 32	1 31	23 3	0 18	21 17	0 19	14 43	0 57	20 39	0 32	17 34	0 19	11 55
S 15	19 54	24 0	5 0	21 41	1 16	23 1	0 15	21 25	0 18	14 44	0 57	20 41	0 32	17 35	0 19	11 56
M16	19 41	20 20	4 56	21 48	1 1	23 0	0 13	21 32	0 17	14 45	0 57	20 42	0 32	17 35	0 19	11 56
T 17	19 28	15 50	4 39	21 54	0 47	22 57	0 10	21 39	0 17	14 46	0 56	20 43	0 32	17 36	0 19	11 57
W18	19 15	10 46	4 8	21 59	0 32	22 54	0 7	21 45	0 16	14 48	0 56	20 44	0 32	17 36	0 19	11 57
T 19	19 1	5 23	3 27	22 1	0 19	22 50	0 5	21 52	0 15	14 49	0 56	20 45	0 32	17 36	0 19	11 58
F 20	18 47	0s 8	2 37	22 1	0 5	22 46	0 2	21 59	0 14	14 50	0 55	20 46	0 32	17 37	0 19	11 58
S 21	18 32	5 36	1 40	21 59	0n 7	22 41	0n 1	22 5	0 13	14 52	0 55	20 47	0 32	17 37	0 19	11 59
S 22	18 17	10 53	0 39	21 54	0 19	22 35	0 3	22 11	0 12	14 53	0 55	20 48	0 32	17 37	0 19	11 59
M23	18 2	15 48	0s23	21 47	0 31	22 28	0 6	22 17	0 12	14 54	0 55	20 49	0 32	17 38	0 19	12 0
T 24	17 47	20 11	1 26	21 38	0 42	22 21	0 9	22 22	0 11	14 56	0 54	20 50	0 32	17 38	0 19	12 1
W25	17 31	23 47	2 26	21 25	0 52	22 13	0 11	22 28	0 10	14 57	0 54	20 51	0 32	17 38	0 19	12 1
T 26	17 15	26 21	3 20	21 10	1 1	22 5	0 14	22 33	0 9	14 59	0 54	20 52	0 33	17 39	0 19	12 2
F 27	16 59	27 35	4 6	20 53	1 9	21 56	0 16	22 38	0 8	15 1	0 54	20 53	0 33	17 39	0 19	12 2
S 28	16 43	27 16	4 39	20 32	1 17	21 46	0 19	22 43	0 7	15 2	0 54	20 54	0 33	17 39	0 19	12 3
S 29	16 26	25 16	4 58	20 10	1 23	21 36	0 21	22 48	0 6	15 4	0 53	20 54	0 33	17 39	0 19	12 3
M30	16 9	21 41	4 59	19 44	1 29	21 25	0 24	22 52	0 6	15 6	0 53	20 55	0 33	17 40	0 19	12 4
T 31	15n52	16s43	4s41	19n17	1n34	21n13	0n26	22n56	0s 5	15s 8	0n53	20s56	0s33	17n40	0s19	12s 5

Julian Day Number = 2276419.5, Delta T = 246.03 sec

Ecliptic obliquity = 23°30'12", Nutation = - 0°00'10", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 18°02'59", Lahiri = 17°09'59" Julian Calendar 1 July 1520 == Greg. Calendar 11 July 1520



ASTRODIENST EPHEMERIS for the year 1520  
geocentric

AUGUST 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	21 16 9	17 <sup>02</sup> 42'14	12 <sup>18</sup> 16	12 <sup>05</sup> 5	28 <sup>22</sup> 22	19 <sup>11</sup> 18	13 <sup>18</sup> 42	28 <sup>05</sup> 59	20 <sup>08</sup> 40	0 <sup>00</sup> 19	7 <sup>00</sup> 42	6 <sup>00</sup> 22	7 <sup>00</sup> 0	17 <sup>02</sup> 3	11 <sup>00</sup> 33	W 1
T 2	21 20 5	18 <sup>03</sup> 39'56	26 <sup>00</sup> 56	14 <sup>00</sup> 7	29 <sup>00</sup> 35	19 <sup>00</sup> 57	13 <sup>00</sup> 47	28 <sup>00</sup> 55	20 <sup>00</sup> 41	0 <sup>00</sup> 18	7 <sup>00</sup> 41	6 <sup>00</sup> 15	6 <sup>00</sup> 57	17 <sup>00</sup> 9	11 <sup>00</sup> 30	T 2
F 3	21 24 2	19 <sup>03</sup> 37'39	11 <sup>00</sup> 32	16 <sup>00</sup> 8	0 <sup>00</sup> 48	20 <sup>00</sup> 36	13 <sup>00</sup> 53	28 <sup>00</sup> 51	20 <sup>00</sup> 42	0 <sup>00</sup> 16	7 <sup>00</sup> 40	6 <sup>00</sup> 11	6 <sup>00</sup> 54	17 <sup>00</sup> 16	11 <sup>00</sup> 27	F 3
S 4	21 27 58	20 <sup>03</sup> 35'24	25 <sup>00</sup> 58	18 <sup>00</sup> 10	2 <sup>00</sup> 2	21 <sup>00</sup> 15	13 <sup>00</sup> 59	28 <sup>00</sup> 47	20 <sup>00</sup> 43	0 <sup>00</sup> 15	7 <sup>00</sup> 39	6 <sup>00</sup> 9	6 <sup>00</sup> 51	17 <sup>00</sup> 23	11 <sup>00</sup> 24	S 4
S 5	21 31 55	21 <sup>03</sup> 33'11	10 <sup>00</sup> 12	20 <sup>00</sup> 10	3 <sup>00</sup> 16	21 <sup>00</sup> 53	14 <sup>00</sup> 5	28 <sup>00</sup> 43	20 <sup>00</sup> 43	0 <sup>00</sup> 13	7 <sup>00</sup> 38	6 <sup>00</sup> D 9	6 <sup>00</sup> 47	17 <sup>00</sup> 29	11 <sup>00</sup> 21	S 5
M 6	21 35 52	22 <sup>03</sup> 31'00	24 <sup>00</sup> 13	22 <sup>00</sup> 10	4 <sup>00</sup> 29	22 <sup>00</sup> 32	14 <sup>00</sup> 11	28 <sup>00</sup> 39	20 <sup>00</sup> 44	0 <sup>00</sup> 11	7 <sup>00</sup> 37	6 <sup>00</sup> R 9	6 <sup>00</sup> 44	17 <sup>00</sup> 36	11 <sup>00</sup> 17	M 6
T 7	21 39 48	23 <sup>02</sup> 28'51	7 <sup>00</sup> 11	24 <sup>00</sup> 8	5 <sup>00</sup> 43	23 <sup>00</sup> 10	14 <sup>00</sup> 17	28 <sup>00</sup> 36	20 <sup>00</sup> 44	0 <sup>00</sup> 10	7 <sup>00</sup> 36	6 <sup>00</sup> 9	6 <sup>00</sup> 41	17 <sup>00</sup> 43	11 <sup>00</sup> 14	T 7
W 8	21 43 45	24 <sup>02</sup> 26'43	21 <sup>00</sup> 32	26 <sup>00</sup> 6	6 <sup>00</sup> 56	23 <sup>00</sup> 48	14 <sup>00</sup> 24	28 <sup>00</sup> 32	20 <sup>00</sup> 45	0 <sup>00</sup> 8	7 <sup>00</sup> 35	6 <sup>00</sup> 6	6 <sup>00</sup> 38	17 <sup>00</sup> 49	11 <sup>00</sup> 11	W 8
T 9	21 47 41	25 <sup>02</sup> 24'37	4 <sup>00</sup> 53	28 <sup>00</sup> 3	8 <sup>00</sup> 10	24 <sup>00</sup> 27	14 <sup>00</sup> 30	28 <sup>00</sup> 28	20 <sup>00</sup> 45	0 <sup>00</sup> 6	7 <sup>00</sup> 35	6 <sup>00</sup> 1	6 <sup>00</sup> 35	17 <sup>00</sup> 56	11 <sup>00</sup> 8	T 9
F 10	21 51 38	26 <sup>02</sup> 22'33	18 <sup>00</sup> 1	29 <sup>00</sup> 58	9 <sup>00</sup> 24	25 <sup>00</sup> 5	14 <sup>00</sup> 37	28 <sup>00</sup> 24	20 <sup>00</sup> 46	0 <sup>00</sup> 5	7 <sup>00</sup> 34	5 <sup>00</sup> 53	6 <sup>00</sup> 32	18 <sup>00</sup> 3	11 <sup>00</sup> 5	F 10
S 11	21 55 34	27 <sup>02</sup> 20'31	0 <sup>00</sup> 58	1 <sup>00</sup> 53	10 <sup>00</sup> 38	25 <sup>00</sup> 43	14 <sup>00</sup> 44	28 <sup>00</sup> 21	20 <sup>00</sup> 46	0 <sup>00</sup> 3	7 <sup>00</sup> 33	5 <sup>00</sup> 43	6 <sup>00</sup> 28	18 <sup>00</sup> 9	11 <sup>00</sup> 2	S 11
S 12	21 59 31	28 <sup>01</sup> 18'30	13 <sup>00</sup> 42	3 <sup>00</sup> 46	11 <sup>00</sup> 52	26 <sup>00</sup> 21	14 <sup>00</sup> 51	28 <sup>00</sup> 17	20 <sup>00</sup> 46	0 <sup>00</sup> 2	7 <sup>00</sup> 32	5 <sup>00</sup> 31	6 <sup>00</sup> 25	18 <sup>00</sup> 16	10 <sup>00</sup> 59	S 12
M13	22 3 27	29 <sup>01</sup> 16'31	26 <sup>00</sup> 14	5 <sup>00</sup> 38	13 <sup>00</sup> 6	26 <sup>00</sup> 58	14 <sup>00</sup> 58	28 <sup>00</sup> 14	20 <sup>00</sup> 46	29 <sup>00</sup> 59	7 <sup>00</sup> 31	5 <sup>00</sup> 19	6 <sup>00</sup> 22	18 <sup>00</sup> 23	10 <sup>00</sup> 56	M13
T 14	22 7 24	0 <sup>00</sup> 14'34	8 <sup>00</sup> 14	7 <sup>00</sup> 28	14 <sup>00</sup> 19	27 <sup>00</sup> 36	15 <sup>00</sup> 5	28 <sup>00</sup> 10	20 <sup>00</sup> 47	29 <sup>00</sup> 58	7 <sup>00</sup> 30	5 <sup>00</sup> 8	6 <sup>00</sup> 19	18 <sup>00</sup> 29	10 <sup>00</sup> 53	T 14
W15	22 11 21	1 <sup>00</sup> 12'38	20 <sup>00</sup> 43	9 <sup>00</sup> 18	15 <sup>00</sup> 33	28 <sup>00</sup> 14	15 <sup>00</sup> 13	28 <sup>00</sup> 7	20 <sup>00</sup> 47	29 <sup>00</sup> 57	7 <sup>00</sup> 30	4 <sup>00</sup> 59	6 <sup>00</sup> 16	18 <sup>00</sup> 36	10 <sup>00</sup> 50	W15
T 16	22 15 17	2 <sup>00</sup> 10'43	2 <sup>00</sup> 42	11 <sup>00</sup> 6	16 <sup>00</sup> 47	28 <sup>00</sup> 51	15 <sup>00</sup> 20	28 <sup>00</sup> 4	20 <sup>00</sup> 47	29 <sup>00</sup> 55	7 <sup>00</sup> 29	4 <sup>00</sup> 51	6 <sup>00</sup> 12	18 <sup>00</sup> 43	10 <sup>00</sup> 47	T 16
F 17	22 19 14	3 <sup>00</sup> 8'51	14 <sup>00</sup> 34	12 <sup>00</sup> 53	18 <sup>00</sup> 1	29 <sup>00</sup> 28	15 <sup>00</sup> 28	28 <sup>00</sup> 0	20 <sup>00</sup> R47	29 <sup>00</sup> 53	7 <sup>00</sup> 28	4 <sup>00</sup> 47	6 <sup>00</sup> 9	18 <sup>00</sup> 49	10 <sup>00</sup> 44	F 17
S 18	22 23 10	4 <sup>00</sup> 7'00	26 <sup>00</sup> 21	14 <sup>00</sup> 39	19 <sup>00</sup> 15	0 <sup>00</sup> 56	15 <sup>00</sup> 36	27 <sup>00</sup> 57	20 <sup>00</sup> 47	29 <sup>00</sup> 52	7 <sup>00</sup> 28	4 <sup>00</sup> 45	6 <sup>00</sup> 6	18 <sup>00</sup> 56	10 <sup>00</sup> 41	S 18
S 19	22 27 7	5 <sup>00</sup> 5'10	8 <sup>00</sup> 18	16 <sup>00</sup> 23	20 <sup>00</sup> 30	0 <sup>00</sup> 43	15 <sup>00</sup> 44	27 <sup>00</sup> 54	20 <sup>00</sup> 47	29 <sup>00</sup> 50	7 <sup>00</sup> 27	4 <sup>00</sup> D44	6 <sup>00</sup> 3	19 <sup>00</sup> 3	10 <sup>00</sup> 38	S 19
M20	22 31 3	6 <sup>00</sup> 3'22	19 <sup>00</sup> 58	18 <sup>00</sup> 6	21 <sup>00</sup> 44	1 <sup>00</sup> 20	15 <sup>00</sup> 52	27 <sup>00</sup> 51	20 <sup>00</sup> 47	29 <sup>00</sup> 48	7 <sup>00</sup> 26	4 <sup>00</sup> 45	6 <sup>00</sup> 0	19 <sup>00</sup> 9	10 <sup>00</sup> 36	M20
T 21	22 35 0	7 <sup>00</sup> 1'35	1 <sup>00</sup> 59	19 <sup>00</sup> 48	22 <sup>00</sup> 58	1 <sup>00</sup> 57	16 <sup>00</sup> 0	27 <sup>00</sup> 48	20 <sup>00</sup> 46	29 <sup>00</sup> 47	7 <sup>00</sup> 26	4 <sup>00</sup> R46	5 <sup>00</sup> 57	19 <sup>00</sup> 16	10 <sup>00</sup> 33	T 21
W22	22 38 56	7 <sup>00</sup> 59'50	14 <sup>00</sup> 13	21 <sup>00</sup> 29	24 <sup>00</sup> 12	2 <sup>00</sup> 33	16 <sup>00</sup> 8	27 <sup>00</sup> 45	20 <sup>00</sup> 46	29 <sup>00</sup> 45	7 <sup>00</sup> 25	4 <sup>00</sup> 46	5 <sup>00</sup> 53	19 <sup>00</sup> 22	10 <sup>00</sup> 30	W22
T 23	22 42 53	8 <sup>00</sup> 58'07	26 <sup>00</sup> 48	23 <sup>00</sup> 9	25 <sup>00</sup> 26	3 <sup>00</sup> 10	16 <sup>00</sup> 17	27 <sup>00</sup> 42	20 <sup>00</sup> 46	29 <sup>00</sup> 43	7 <sup>00</sup> 25	4 <sup>00</sup> 44	5 <sup>00</sup> 50	19 <sup>00</sup> 29	10 <sup>00</sup> 27	T 23
F 24	22 46 50	9 <sup>00</sup> 56'25	9 <sup>00</sup> 37	24 <sup>00</sup> 47	26 <sup>00</sup> 40	3 <sup>00</sup> 46	16 <sup>00</sup> 25	27 <sup>00</sup> 40	20 <sup>00</sup> 46	29 <sup>00</sup> 42	7 <sup>00</sup> 24	4 <sup>00</sup> 40	5 <sup>00</sup> 47	19 <sup>00</sup> 36	10 <sup>00</sup> 25	F 24
S 25	22 50 46	10 <sup>00</sup> 54'45	23 <sup>00</sup> 13	26 <sup>00</sup> 25	27 <sup>00</sup> 55	4 <sup>00</sup> 23	16 <sup>00</sup> 34	27 <sup>00</sup> 37	20 <sup>00</sup> 45	29 <sup>00</sup> 40	7 <sup>00</sup> 24	4 <sup>00</sup> 35	5 <sup>00</sup> 44	19 <sup>00</sup> 42	10 <sup>00</sup> 22	S 25
S 26	22 54 43	11 <sup>00</sup> 53'06	7 <sup>00</sup> 38	28 <sup>00</sup> 1	29 <sup>00</sup> 9	4 <sup>00</sup> 59	16 <sup>00</sup> 43	27 <sup>00</sup> 35	20 <sup>00</sup> 45	29 <sup>00</sup> 39	7 <sup>00</sup> 23	4 <sup>00</sup> 27	5 <sup>00</sup> 41	19 <sup>00</sup> 49	10 <sup>00</sup> 20	S 26
M27	22 58 39	12 <sup>00</sup> 51'29	21 <sup>00</sup> 28	29 <sup>00</sup> 36	0 <sup>00</sup> 23	5 <sup>00</sup> 35	16 <sup>00</sup> 52	27 <sup>00</sup> 32	20 <sup>00</sup> 44	29 <sup>00</sup> 37	7 <sup>00</sup> 23	4 <sup>00</sup> 19	5 <sup>00</sup> 38	19 <sup>00</sup> 56	10 <sup>00</sup> 17	M27
T 28	23 2 36	13 <sup>00</sup> 49'54	6 <sup>00</sup> 11	1 <sup>00</sup> 10	1 <sup>00</sup> 38	6 <sup>00</sup> 11	17 <sup>00</sup> 1	27 <sup>00</sup> 30	20 <sup>00</sup> 44	29 <sup>00</sup> 35	7 <sup>00</sup> 22	4 <sup>00</sup> 11	5 <sup>00</sup> 34	20 <sup>00</sup> 2	10 <sup>00</sup> 15	T 28
W29	23 6 32	14 <sup>00</sup> 48'21	21 <sup>00</sup> 8	2 <sup>00</sup> 43	2 <sup>00</sup> 52	6 <sup>00</sup> 47	17 <sup>00</sup> 10	27 <sup>00</sup> 27	20 <sup>00</sup> 43	29 <sup>00</sup> 34	7 <sup>00</sup> 22	4 <sup>00</sup> 4	5 <sup>00</sup> 31	20 <sup>00</sup> 9	10 <sup>00</sup> 12	W29
T 30	23 10 29	15 <sup>00</sup> 46'49	6 <sup>00</sup> 9	4 <sup>00</sup> 15	4 <sup>00</sup> 7	7 <sup>00</sup> 23	17 <sup>00</sup> 19	27 <sup>00</sup> 25	20 <sup>00</sup> 43	29 <sup>00</sup> 32	7 <sup>00</sup> 22	4 <sup>00</sup> 0	5 <sup>00</sup> 28	20 <sup>00</sup> 16	10 <sup>00</sup> 10	T 30
F 31	23 14 25	16 <sup>00</sup> 45'19	21 <sup>00</sup> 8	5 <sup>00</sup> 46	5 <sup>00</sup> 21	7 <sup>00</sup> 58	17 <sup>00</sup> 18	27 <sup>00</sup> 23	20 <sup>00</sup> 42	29 <sup>00</sup> 31	7 <sup>00</sup> 21	3 <sup>00</sup> 57	5 <sup>00</sup> 25	20 <sup>00</sup> 22	10 <sup>00</sup> 38	F 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	15n34	10s44	4s 4	18n47	1n38	21n 1	0n29	23n 1	0s 4	15s 9	0n53	20s57	0s33	17n40	0s19	12s 5	0s45	21s42	1n35	13n41	13n53	5s 5	10s29	7n 9							
T 2	15 16	4 9	3 12	18 15	1 41	20 48	0 31	23 5	0 3	15 11	0 52	20 58	0 33	17 40	0 19	12 6	0 45	21 42	1 35	13 39	13 52	5 9	10 30	7 9							
F 3	14 58	2n38	2 7	17 41	1 43	20 35	0 33	23 8	0 2	15 13	0 52	20 59	0 33	17 41	0 19	12 6	0 45	21 42	1 35	13 37	13 51	5 12	10 31	7 9							
S 4	14 40	9 13	0 54	17 6	1 45	20 20	0 36	23 12	0 1	15 15	0 52	21 0	0 33	17 41	0 19	12 7	0 45	21 43	1 35	13 37	13 50	5 15	10 32	7 8							
S 5	14 21	15 16	0n22	16 28	1 46	20 6	0 38	23 15	0 0	15 17	0 52	21 1	0 33	17 41	0 19	12 7	0 45	21 43	1 34	13 36	13 49	5 19	10 33	7 8							
M 6	14 3	20 24	1 34	15 50	1 46	19 51	0 40	23 18	0n 1	15 19	0 51	21 2	0 33	17 41	0 19	12 8	0 45	21 43	1 34	13 36	13 48	5 22	10 34	7 8							
T 7	13 44	24 20	2 40	15 10	1 46	19 35	0 43	23 21	0 2	15 21	0 51	21 3	0 33	17 41	0 19	12 9	0 45	21 43	1 34	13 36	13 47	5 25	10 35	7 8							
W 8	13 25	26 50	3 36	14 29	1 45	19 18	0 45	23 24	0 3	15 23	0 51	21 3	0 33	17 41	0 19	12 9	0 45	21 43	1 34	13 35	13 46	5 28	10 36	7 8							
T 9	13 5	27 44	4 19	13 48	1 43	19 2	0 47	23 27	0 4	15 26	0 51	21 4	0 33	17 41	0 19	12 10	0 45	21 43	1 34	13 34	13 45	5 32	10 37	7 8							
F 10	12 45	27 3	4 48	13 5	1 41	18 44	0 49	23 29	0 5	15 28	0 51	21 5	0 34	17 41	0 19	12 10	0 45	21 44	1 34	13 31	13 44	5 35	10 38	7 8							
S 11	12 26	24 54	5 1	12 21	1 38	18 26	0 51	23 32	0 6	15 30	0 50	21 6	0 34	17 42	0 19	12 11	0 45	21 44	1 34	13 28	13 43	5 38	10 39	7 7							
S 12	12 6	21 32	4 59	11 37	1 35	18 7	0 53	23 34	0 7	15 32	0 50	21 7	0 34	17 42	0 19	12 12	0 45	21 44	1 33	13 24	13 42	5 42	10 40	7 7							
M13	11 45	17 14	4 43	10 53	1 31	17 48	0 55	23 36	0 8	15 35	0 50	21 7	0 34	17 42	0 19	12 12	0 45	21 44	1 33	13 20	13 41	5 45	10 41	7 7							
T 14	11 25	12 17	4 13	10 8	1 27	17 29	0 57	23 37	0 9	15 37	0 50	21 8	0 34	17 42	0 19	12 13	0 45	21 44	1 33	13 16	13 40	5 48	10 42	7 7							
W15	11 4	6 56	3 32	9 23	1 23	17 9	0 58	23 39	0 10	15 39	0 49	21 9	0 34	17 42	0 19	12 13	0 45	21 45	1 33	13 13	13 39	5 52	10 43	7 7							
T 16	10 44	1 24	2 42	8 37	1 18	16 48	1 0	23 40	0 11	15 42	0 49	21 9	0 34	17 42	0 19	12 14	0 45	21 45	1 33	13 11	13 38	5 55	10 44	7 6							
F 17	10 23	4s 8	1 46	7 51	1 13	16 27	1 2	23 42	0 12	15 44	0 49	21 10	0 34	17 42	0 19	12 15	0 45	21 45	1 33	13 9	13 37	5 58	10 45	7 6							
S 18	10 2	9 30	0 45	7 6	1 7	16 6	1 4	23 43	0 13	15 47	0 49	21 11	0 34	17 42	0 19	12 15	0 45	21 45	1 33	13 8	13 35	6 2	10 46	7 6							
S 19	9 40	14 32	0s18	6 20	1 1	15 44	1 5	23 44	0 14	15 49	0 49	21 12	0 34	17 42	0 19	12 16	0 45	21 45	1 32	13 8	13 34	6 5	10 47	7 6							
M20	9 19	19 5	1 21	5 34	0 55	15 21	1 7	23 44	0 15	15 52	0 48	21 12	0 34	17 42	0 19	12 16	0 45	21 45	1 32	13 8	13 33	6 8	10 48	7 5							
T 21	8 57	22 55	2 21	4 48	0 49	14 59	1 8	23 45	0 16	15 54	0 48	21 13	0 34	17 42	0 19	12 17	0 45	21 46	1 32	13 9	13 32	6 11	10 49	7 5							
W22	8 36	25 48	3 16	4 2	0 43	14 35	1 10	23 45	0 17	15 57	0 48	21 13	0 34	17 42	0 19	12 17	0 45	21 46	1 32	13 9	13 31	6 15	10 50	7 5							
T 23	8 14	27 30	4 3	3 17	0 36	14 12	1 11	23 46	0 18	15 59	0 48	21 14	0 34	17 41	0 19	12 18	0 45	21 46	1 32	13 8	13 30	6 18	10 51	7 5							
F 24	7 52	27 46	4 39	2 31	0 29	13 48	1 13	23 46	0 19	16 2	0 48	21 15	0 34	17 41	0 19	12 19	0 45	21 46	1 32	13 7	13 29	6 21	10 52	7 4							
S 25	7 30	26 26	5 1	1 46	0 22	13 23	1 14	23 46	0 20	16 5	0 47	21 15	0 34	17 41	0 19	12 19	0 45	21 46	1 32	13 5	13 28	6 25	10 53	7 4							
S 26	7 7	23 28	5 6	1 1	0 15	12 58	1 15	23 45	0 21	16 7	0 47	21 16	0 34	17 41	0 19	12 20	0 45	21 46	1 31	13 2	13 27	6 28	10 54	7 4							
M27	6 45	19 0	4 53	0 16	0 8	12 33	1 16	23 45	0 22	16 10	0 47	21 16	0 34	17 41	0 19	12 20	0 45	21 47	1 31	13 0	13 26	6 31	10 55	7 3							
T 28	6 23	13 48	4 21	0s28	0 0	12 8	1 17	23 44	0 23	16 13	0 47	21 17	0 34	17 41	0 19	12 21	0 45	21 47	1 31	12 57	13 25	6 35	10 56	7 3							
W29	6 0	6 44	3 30	1 12	0s 7	11 42	1 18	23 44	0 24	16 16	0 47	21 17	0 34	17 41	0 19	12 21	0 45	21 47	1 31	12 55	13 24	6 38	10 56	7 3							
T 30	5 37	0n15	2 24	1 55	0 15	11 16	1 19	23 43	0 25	16 18	0 46	21 18	0 34	17 41	0 19	12 22	0 45	21 47	1 31	12 53	13 23	6 41	10 57	7 2							
F 31	5n15	7n12	1s 9	2s38	0s22	10n49	1n20	23n42	0n26	16s21	0n46	21s18	0s35	17n40	0s19	12s23	0s45	21s47	1n31	12n52	13n22	6s44	10s58	7n 2							

ASTRODIENST EPHEMERIS for the year 1520  
geocentric

SEPTEMBER 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	23 18 22	17 <sup>h</sup> 43'52	5 <sup>h</sup> 54	7 <sup>h</sup> 16	6 <sup>h</sup> 36	8 <sup>h</sup> 34	17 <sup>h</sup> 38	27 <sup>h</sup> R21	20 <sup>h</sup> R41	29 <sup>h</sup> R29	7 <sup>h</sup> R21	3 <sup>h</sup> D56	5 <sup>h</sup> 22	20 <sup>h</sup> 29	10 <sup>h</sup> R 5	S 1
S 2	23 22 18	18°42'27	20°24	8°44	7°50	9° 9	17°47	27 <sup>h</sup> 19	20 <sup>h</sup> 40	29 <sup>h</sup> 28	7 <sup>h</sup> 21	3 <sup>h</sup> 57	5°18	20°36	10 <sup>h</sup> 3	S 2
M 3	23 26 15	19°41'04	4 <sup>h</sup> 34	10°12	9° 5	9°44	17°57	27°17	20°40	29°26	7°21	3°58	5°15	20°42	10° 1	M 3
T 4	23 30 12	20°39'44	18°23	11°38	10°19	10°19	18° 7	27°15	20°39	29°25	7°21	3°R59	5°12	20°49	9°58	T 4
W 5	23 34 8	21°38'25	1 <sup>h</sup> 52	13° 4	11°34	10°54	18°17	27°14	20°38	29°23	7°20	3°59	5° 9	20°56	9°56	W 5
T 6	23 38 5	22°37'09	15° 3	14°28	12°48	11°29	18°27	27°12	20°37	29°22	7°20	3°56	5° 6	21° 2	9°54	T 6
F 7	23 42 1	23°35'56	27°57	15°51	14° 3	12° 4	18°37	27°11	20°36	29°20	7°20	3°52	5° 3	21° 9	9°52	F 7
S 8	23 45 58	24°34'44	10 <sup>h</sup> 37	17°13	15°18	12°38	18°47	27° 9	20°35	29°19	7°20	3°47	4°59	21°16	9°50	S 8
S 9	23 49 54	25°33'35	23° 4	18°33	16°33	13°13	18°57	27° 8	20°34	29°17	7°20	3°40	4°56	21°22	9°48	S 9
M10	23 53 51	26°32'28	5 <sup>h</sup> 20	19°53	17°47	13°47	19° 7	27° 7	20°33	29°16	7°D20	3°33	4°53	21°29	9°46	M10
T 11	23 57 48	27°31'23	17°27	21°11	19° 2	14°21	19°18	27° 6	20°31	29°14	7°20	3°27	4°50	21°35	9°45	T 11
W12	0 1 44	28°30'20	29°26	22°28	20°17	14°55	19°28	27° 5	20°30	29°13	7°20	3°21	4°47	21°42	9°43	W12
T 13	0 5 41	29°29'19	11 <sup>h</sup> 19	23°43	21°32	15°29	19°39	27° 4	20°29	29°12	7°20	3°17	4°44	21°49	9°41	T 13
F 14	0 9 37	0 <sup>h</sup> 28'20	23° 7	24°56	22°47	16° 2	19°50	27° 3	20°28	29°10	7°20	3°15	4°40	21°55	9°39	F 14
S 15	0 13 34	1°27'23	4 <sup>h</sup> 53	26° 8	24° 1	16°35	20° 1	27° 2	20°26	29° 9	7°20	3°D15	4°37	22° 2	9°38	S 15
S 16	0 17 30	2°26'27	16°40	27°19	25°16	17° 9	20°11	27° 1	20°25	29° 8	7°21	3°15	4°34	22° 9	9°36	S 16
M17	0 21 27	3°25'34	28°32	28°27	26°31	17°42	20°22	27° 1	20°23	29° 6	7°21	3°17	4°31	22°15	9°35	M17
T 18	0 25 23	4°24'43	10 <sup>h</sup> 32	29°34	27°46	18°15	20°33	27° 0	20°22	29° 5	7°21	3°19	4°28	22°22	9°34	T 18
W19	0 29 20	5°23'54	22°46	0 <sup>h</sup> 38	29° 1	18°47	20°45	27° 0	20°20	29° 4	7°21	3°20	4°24	22°29	9°32	W19
T 20	0 33 16	6°23'06	5 <sup>h</sup> 18	1°40	0 <sup>h</sup> 16	19°20	20°56	27° 0	20°19	29° 3	7°22	3°R21	4°21	22°35	9°31	T 20
F 21	0 37 13	7°22'20	18°11	2°40	1°31	19°52	21° 7	27° 0	20°17	29° 1	7°22	3°20	4°18	22°42	9°30	F 21
S 22	0 41 10	8°21'36	1 <sup>h</sup> 31	3°36	2°46	20°24	21°19	27°D 0	20°15	29° 0	7°22	3°19	4°15	22°49	9°29	S 22
S 23	0 45 6	9°20'54	15°19	4°30	4° 1	20°56	21°30	27° 0	20°14	28°59	7°23	3°16	4°12	22°55	9°27	S 23
M24	0 49 3	10°20'13	29°35	5°21	5°16	21°28	21°42	27° 0	20°12	28°58	7°23	3°13	4° 9	23° 2	9°26	M24
T 25	0 52 59	11°19'35	14 <sup>h</sup> 17	6° 8	6°31	22° 0	21°53	27° 0	20°10	28°57	7°24	3°10	4° 5	23° 9	9°25	T 25
W26	0 56 56	12°18'58	29°17	6°51	7°46	22°31	22° 5	27° 1	20° 8	28°56	7°24	3° 7	4° 2	23°15	9°25	W26
T 27	1 0 52	13°18'23	14 <sup>h</sup> 29	7°29	9° 1	23° 2	22°17	27° 1	20° 7	28°55	7°25	3° 6	3°59	23°22	9°24	T 27
F 28	1 4 49	14°17'50	29°42	8° 3	10°16	23°33	22°28	27° 2	20° 5	28°54	7°25	3°D 5	3°56	23°28	9°23	F 28
S 29	1 8 45	15°17'20	14 <sup>h</sup> 47	8°32	11°31	24° 4	22°40	27° 2	20° 3	28°53	7°26	3° 5	3°53	23°35	9°22	S 29
S 30	1 12 42	16 <sup>h</sup> 16'51	29 <sup>h</sup> 35	8 <sup>h</sup> 55	12 <sup>h</sup> 46	24 <sup>h</sup> 35	22 <sup>h</sup> 52	27 <sup>h</sup> 3	20 <sup>h</sup> 8	28 <sup>h</sup> 52	7 <sup>h</sup> 26	3 <sup>h</sup> 6	3 <sup>h</sup> 49	23 <sup>h</sup> 42	9 <sup>h</sup> 22	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	4n52	13n42	0n11	3s21	0s30	10n22	1n21	23n41	0n27	16s24	0n46	21s19	0s35	17n40	0s19	12s23	0s45	21s47	1n31	12n52	13n21	6s48	10s59	7n 2			
S 2	4 29	19 19	1 28	4 3	0 38	9 55	1 22	23 40	0 28	16 27	0 46	21 19	0 35	17 40	0 19	12 24	0 45	21 48	1 31	12 52	13 20	6 51	11 0	7 1			
M 3	4 6	23 42	2 38	4 45	0 46	9 28	1 23	23 38	0 29	16 30	0 46	21 19	0 35	17 40	0 19	12 24	0 45	21 48	1 30	12 53	13 19	6 54	11 1	7 1			
T 4	3 43	26 36	3 37	5 26	0 53	9 0	1 23	23 37	0 31	16 33	0 45	21 20	0 35	17 39	0 19	12 25	0 45	21 48	1 30	12 53	13 17	6 58	11 2	7 1			
W 5	3 19	27 52	4 23	6 6	1 1	8 32	1 24	23 35	0 32	16 36	0 45	21 20	0 35	17 39	0 19	12 25	0 45	21 48	1 30	12 53	13 16	7 1	11 3	7 0			
T 6	2 56	27 31	4 54	6 46	1 9	8 4	1 24	23 33	0 33	16 38	0 45	21 21	0 35	17 39	0 19	12 26	0 45	21 48	1 30	12 52	13 15	7 4	11 4	7 0			
F 7	2 33	25 40	5 8	7 26	1 17	7 36	1 25	23 31	0 34	16 41	0 45	21 21	0 35	17 39	0 19	12 26	0 45	21 48	1 30	12 51	13 14	7 7	11 5	7 0			
S 8	2 10	22 33	5 8	8 4	1 24	7 7	1 25	23 29	0 35	16 44	0 45	21 21	0 35	17 38	0 19	12 27	0 45	21 48	1 30	12 49	13 13	7 11	11 6	6 59			
S 9	1 46	18 28	4 53	8 42	1 32	6 38	1 26	23 27	0 36	16 47	0 45	21 21	0 35	17 38	0 19	12 27	0 45	21 49	1 30	12 46	13 12	7 14	11 6	6 59			
M10	1 23	13 40	4 24	9 20	1 39	6 9	1 26	23 25	0 38	16 50	0 44	21 22	0 35	17 38	0 19	12 28	0 45	21 49	1 29	12 44	13 11	7 17	11 7	6 58			
T 11	0 59	8 24	3 44	9 56	1 47	5 40	1 26	23 22	0 39	16 53	0 44	21 22	0 35	17 37	0 19	12 28	0 45	21 49	1 29	12 42	13 10	7 21	11 8	6 58			
W12	0 36	2 53	2 54	10 32	1 54	5 11	1 26	23 20	0 40	16 56	0 44	21 22	0 35	17 37	0 19	12 29	0 45	21 49	1 29	12 40	13 9	7 24	11 9	6 58			
T 13	0 12	2s41	1 57	11 6	2 1	4 41	1 26	23 17	0 41	16 59	0 44	21 22	0 35	17 37	0 19	12 29	0 45	21 49	1 29	12 39	13 8	7 27	11 10	6 57			
F 14	0s11	8 9	0 55	11 40	2 8	4 12	1 26	23 14	0 42	17 2	0 44	21 23	0 35	17 36	0 19	12 30	0 45	21 49	1 29	12 38	13 7	7 30	11 11	6 57			
S 15	0 35	13 19	0s 9	12 13	2 15	3 42	1 26	23 11	0 44	17 6	0 44	21 23	0 35	17 36	0 19	12 30	0 45	21 49	1 29	12 38	13 6	7 34	11 12	6 56			
S 16	0 58	18 2	1 13	12 45	2 22	3 12	1 26	23 8	0 45	17 9	0 43	21 23	0 35	17 36	0 19	12 31	0 45	21 50	1 29	12 38	13 5	7 37	11 12	6 56			
M17	1 22	22 4	2 14	13 16	2 28	2 42	1 26	23 5	0 46	17 12	0 43	21 23	0 35	17 35	0 19	12 31	0 45	21 50	1 28	12 39	13 4	7 40	11 13	6 56			
T 18	1 45	25 14	3 11	13 45	2 35	2 12	1 25	23 2	0 47	17 15	0 43	21 23	0 35	17 35	0 19	12 32	0 45	21 50	1 28	12 39	13 3	7 44	11 14	6 55			
W19	2 9	27 17	3 59	14 14	2 41	1 42	1 25	22 59	0 48	17 18	0 43	21 23	0 35	17 34	0 19	12 32	0 45	21 50	1 28	12 40	13 1	7 47	11 15	6 55			
T 20	2 33	28 2	4 38	14 41	2 46	1 11	1 25	22 56	0 50	17 21	0 43	21 23	0 35	17 34	0 19	12 32	0 45	21 50	1 28	12 40	13 0	7 50	11 15	6 54			
F 21	2 56	27 17	5 4	15 7	2 52	0 41	1 24	22 52	0 51	17 24	0 43	21 23	0 35	17 34	0 19	12 33	0 45	21 50	1 28	12 40	12 59	7 53	11 16	6 54			
S 22	3 19	24 59	5 15	15 31	2 57	0 11	1 24	22 49	0 52	17 27	0 42	21 23	0 35	17 33	0 19	12 33	0 45	21 50	1 28	12 39	12 58	7 57	11 17	6 53			
S 23	3 43	21 11	5 8	15 54	3 1	0s20	1 23	22 45	0 54	17 30	0 42	21 23	0 35	17 33	0 19	12 34	0 45	21 50	1 28	12 38	12 57	8 0	11 18	6 53			
M24	4 6	16 3	4 42	16 15	3 5	0 50	1 22	22 41	0 55	17 33	0 42	21 23	0 35	17 32	0 19	12 34	0 45	21 51	1 27	12 37	12 56	8 3	11 18	6 52			
T 25	4 30	9 51	3 58	16 34	3 9	1 21	1 22	22 38	0 56	17 37	0 42	21 23	0 35	17 32	0 19	12 34	0 45	21 51	1 27	12 36	12 55	8 6	11 19	6 52			
W26	4 53	2 58	2 56	16 51	3 12	1 51	1 21	22 34	0 58	17 40	0 42	21 23	0 35	17 31	0 19	12 35	0 45	21 51	1 27	12 35	12 54	8 10	11 20	6 52			
T 27	5 16	4n10	1 41	17 6	3 14	2 21	1 20	22 30	0 59	17 43	0 42	21 23	0 35	17 31	0 19	12 35	0 45	21 51	1 27	12 35	12 53	8 13	11 20	6 51			
F 28	5 39	11 6	0 19	17 19	3 16	2 52	1 19	22 26	1 0	17 46	0 42	21 23	0 35	17 30	0 19	12 36	0 45	21 51	1 27	12 34	12 52	8 16	11 21	6 51			
S 29	6 2	17 20	1n 4	17 29	3 17	3 22	1 18	22 22	1 2	17 49	0 41	21 23	0 35	17 30	0 19	12 36	0 45	21 51	1 27	12 34	12 51	8 20	11 22	6 50			
S 30	6s25	22n25	2n22	17s37	3s17	3s52	1n17	22n18	1n 3	17s52	0n41	21s23	0s35	17n29	0s19	12s36	0s45	21s51	1n27	12n35	12n50	8s23	11s22	6n50			

## ASTRODIENST EPHEMERIS for the year 1520

geocentric

OCTOBER 1520 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	1 16 39	17♏16'25	14♏1	9♏12	14♏2	25♏5	23♏4	27♏4	19♏59	28♏51	7♏27	3♏7	3♏46	23♏48	9♏21	M 1
T 2	1 20 35	18°16'02	28°1	9°22	15°17	25°35	23°16	27°5	19♏57	28♏50	7°28	3°8	3°43	23°55	9♏20	T 2
W 3	1 24 32	19°15'40	11♏37	9♏25	16°32	26°5	23°28	27°6	19°55	28°49	7°28	3°9	3°40	24°2	9°20	W 3
T 4	1 28 28	20°15'22	24°48	9°21	17°47	26°35	23°40	27°7	19°53	28°48	7°29	3°R 9	3°37	24°8	9°20	T 4
F 5	1 32 25	21°15'05	7♏37	9°7	19°2	27°4	23°53	27°8	19°51	28°47	7°30	3°9	3°34	24°15	9°19	F 5
S 6	1 36 21	22°14'50	20°8	8°46	20°17	27°34	24°5	27°10	19°49	28°46	7°31	3°8	3°30	24°22	9°19	S 6
S 7	1 40 18	23°14'38	2♏25	8°15	21°33	28°3	24°17	27°11	19°46	28°45	7°31	3°6	3°27	24°28	9°19	S 7
M 8	1 44 14	24°14'28	14°30	7°35	22°48	28°32	24°30	27°13	19°44	28°45	7°32	3°5	3°24	24°35	9°19	M 8
T 9	1 48 11	25°14'20	26°27	6°47	24°3	29°0	24°42	27°14	19°42	28°44	7°33	3°4	3°21	24°42	9°D19	T 9
W10	1 52 8	26°14'14	8♏18	5°50	25°18	29°28	24°55	27°16	19°40	28°43	7°34	3°3	3°18	24°48	9°19	W10
T 11	1 56 4	27°14'10	20°6	4°46	26°34	29°56	25°7	27°18	19°38	28°42	7°35	3°2	3°15	24°55	9°19	T 11
F 12	2 0 1	28°14'08	1♏53	3°35	27°49	0♏24	25°20	27°20	19°35	28°42	7°36	3°D 2	3°11	25°2	9°19	F 12
S 13	2 3 57	29°14'08	13°41	2°21	29°4	0°52	25°33	27°22	19°33	28°41	7°37	3°2	3°8	25°8	9°19	S 13
S 14	2 7 54	0♏14'10	25°33	1°4	0♏19	1°19	25°45	27°24	19°31	28°41	7°38	3°2	3°5	25°15	9°20	S 14
M15	2 11 50	1°14'14	7♏31	29♏46	1°35	1°46	25°58	27°26	19°28	28°40	7°39	3°3	3°2	25°21	9°20	M15
T 16	2 15 47	2°14'20	19°38	28°31	2°50	2°13	26°11	27°29	19°26	28°40	7°40	3°3	2°59	25°28	9°20	T 16
W17	2 19 43	3°14'27	1♏56	27°21	4°5	2°39	26°24	27°31	19°24	28°39	7°41	3°R 3	2°55	25°35	9°21	W17
T 18	2 23 40	4°14'36	14°29	26°18	5°21	3°5	26°37	27°34	19°21	28°39	7°42	3°3	2°52	25°41	9°21	T 18
F 19	2 27 37	5°14'47	27°20	25°23	6°36	3°31	26°50	27°36	19°19	28°38	7°43	3°3	2°49	25°48	9°22	F 19
S 20	2 31 33	6°14'59	10♏33	24°39	7°51	3°56	27°3	27°39	19°16	28°38	7°44	3°D 3	2°46	25°55	9°23	S 20
S 21	2 35 30	7°15'12	24°10	24°5	9°7	4°21	27°16	27°42	19°14	28°37	7°46	3°3	2°43	26°1	9°24	S 21
M22	2 39 26	8°15'27	8♏12	23°44	10°22	4°46	27°29	27°45	19°12	28°37	7°47	3°3	2°40	26°8	9°24	M22
T 23	2 43 23	9°15'43	22°38	23°D33	11°37	5°11	27°42	27°48	19°9	28°37	7°48	3°4	2°36	26°15	9°25	T 23
W24	2 47 19	10°16'01	7♏26	23°35	12°53	5°35	27°55	27°51	19°7	28°37	7°49	3°4	2°33	26°21	9°26	W24
T 25	2 51 16	11°16'21	22°29	23°47	14°8	5°59	28°8	27°54	19°4	28°36	7°51	3°5	2°30	26°28	9°27	T 25
F 26	2 55 12	12°16'42	7♏40	24°9	15°23	6°22	28°21	27°57	19°2	28°36	7°52	3°R 5	2°27	26°35	9°28	F 26
S 27	2 59 9	13°17'05	22°50	24°41	16°38	6°45	28°34	28°1	18°59	28°36	7°53	3°4	2°24	26°41	9°30	S 27
S 28	3 3 6	14°17'29	7♏48	25°21	17°54	7°8	28°47	28°4	18°57	28°36	7°55	3°3	2°21	26°48	9°31	S 28
M29	3 7 2	15°17'56	22°26	26°8	19°9	7°30	29°1	28°8	18°54	28°36	7°56	3°2	2°17	26°54	9°32	M29
T 30	3 10 59	16°18'24	6♏40	27°3	20°25	7°53	29°14	28°11	18°52	28°36	7°57	3°0	2°14	27°1	9°33	T 30
W31	3 14 55	17♏18'54	20♏27	28♏3	21♏40	8♏14	29♏27	28♏15	18♏49	28°D36	7♏59	2♏59	2♏11	27♏8	9♏35	W31

Day	☉	☾		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	6s48	25n59	3n28	17s41	3s16	4s23	1n16	22n14	1n 4	17s56	0n41	21s23	0s35	17n29	0s19	12s37	0s45	21s51	1n26	12n35	12n49	8s26	11s23	6n49			
T 2	7 11	27 49	4 20	17 43	3 14	4 53	1 15	22 10	1 6	17 59	0 41	21 23	0 35	17 28	0 19	12 37	0 45	21 51	1 26	12 36	12 47	8 29	11 23	6 49			
W 3	7 34	27 53	4 55	17 40	3 10	5 23	1 14	22 5	1 7	18 2	0 41	21 22	0 35	17 28	0 19	12 37	0 45	21 52	1 26	12 36	12 46	8 33	11 24	6 48			
T 4	7 56	26 22	5 14	17 34	3 5	5 53	1 13	22 1	1 9	18 5	0 41	21 22	0 35	17 27	0 19	12 37	0 45	21 52	1 26	12 36	12 45	8 36	11 25	6 48			
F 5	8 19	23 30	5 16	17 24	2 59	6 23	1 11	21 57	1 10	18 8	0 41	21 22	0 35	17 27	0 19	12 38	0 45	21 52	1 26	12 36	12 44	8 39	11 25	6 47			
S 6	8 41	19 36	5 3	17 10	2 51	6 52	1 10	21 52	1 12	18 11	0 40	21 22	0 35	17 26	0 19	12 38	0 45	21 52	1 26	12 35	12 43	8 42	11 26	6 47			
S 7	9 3	14 56	4 37	16 51	2 42	7 22	1 9	21 48	1 13	18 15	0 40	21 21	0 35	17 25	0 19	12 38	0 45	21 52	1 26	12 35	12 42	8 46	11 26	6 46			
M 8	9 25	9 47	3 58	16 27	2 31	7 51	1 7	21 44	1 14	18 18	0 40	21 21	0 35	17 25	0 19	12 39	0 45	21 52	1 25	12 34	12 41	8 49	11 27	6 46			
T 9	9 47	4 19	3 10	15 59	2 18	8 20	1 6	21 39	1 16	18 21	0 40	21 21	0 35	17 24	0 19	12 39	0 45	21 52	1 25	12 34	12 40	8 52	11 27	6 45			
W10	10 9	1s16	2 13	15 26	2 3	8 49	1 4	21 35	1 17	18 24	0 40	21 21	0 36	17 24	0 19	12 39	0 45	21 52	1 25	12 34	12 39	8 55	11 28	6 45			
T 11	10 31	6 47	1 11	14 49	1 47	9 18	1 2	21 30	1 19	18 27	0 40	21 20	0 36	17 23	0 19	12 39	0 45	21 52	1 25	12 33	12 38	8 59	11 28	6 44			
F 12	10 53	12 4	0 6	14 8	1 29	9 47	1 1	21 26	1 20	18 30	0 40	21 20	0 36	17 22	0 19	12 39	0 45	21 52	1 25	12 33	12 37	9 2	11 28	6 44			
S 13	11 14	16 56	0s59	13 24	1 9	10 15	0 59	21 21	1 22	18 33	0 40	21 19	0 36	17 22	0 19	12 40	0 45	21 52	1 25	12 33	12 36	9 5	11 29	6 43			
S 14	11 35	21 11	2 2	12 39	0 49	10 43	0 57	21 17	1 24	18 37	0 39	21 19	0 36	17 21	0 19	12 40	0 45	21 53	1 25	12 34	12 34	9 8	11 29	6 43			
M15	11 56	24 35	3 0	11 52	0 29	11 11	0 56	21 12	1 25	18 40	0 39	21 19	0 36	17 21	0 19	12 40	0 45	21 53	1 24	12 34	12 33	9 12	11 30	6 42			
T 16	12 17	26 56	3 51	11 6	0 8	11 39	0 54	21 8	1 27	18 43	0 39	21 18	0 36	17 20	0 19	12 40	0 45	21 53	1 24	12 34	12 32	9 15	11 30	6 42			
W17	12 38	28 2	4 32	10 22	0n12	12 6	0 52	21 3	1 28	18 46	0 39	21 18	0 36	17 19	0 19	12 40	0 45	21 53	1 24	12 34	12 31	9 18	11 30	6 41			
T 18	12 58	27 42	5 1	9 41	0 32	12 33	0 50	20 59	1 30	18 49	0 39	21 17	0 36	17 19	0 19	12 41	0 45	21 53	1 24	12 34	12 30	9 21	11 31	6 41			
F 19	13 18	25 55	5 16	9 4	0 50	13 0	0 48	20 54	1 32	18 52	0 39	21 17	0 36	17 18	0 19	12 41	0 45	21 53	1 24	12 34	12 29	9 25	11 31	6 40			
S 20	13 38	22 41	5 15	8 32	1 7	13 26	0 46	20 50	1 33	18 55	0 39	21 16	0 36	17 17	0 19	12 41	0 45	21 53	1 24	12 34	12 28	9 28	11 31	6 40			
S 21	13 58	18 10	4 57	8 6	1 22	13 53	0 44	20 46	1 35	18 58	0 39	21 16	0 36	17 17	0 19	12 41	0 45	21 53	1 24	12 34	12 27	9 31	11 31	6 40			
M22	14 18	12 32	4 20	7 45	1 36	14 18	0 42	20 41	1 37	19 1	0 39	21 15	0 36	17 16	0 19	12 41	0 45	21 53	1 24	12 34	12 26	9 34	11 32	6 39			
T 23	14 37	6 5	3 26	7 31	1 47	14 44	0 40	20 37	1 38	19 4	0 38	21 15	0 36	17 15	0 19	12 41	0 45	21 53	1 23	12 34	12 25	9 37	11 32	6 39			
W24	14 56	0n51	2 18	7 22	1 57	15 9	0 38	20 33	1 40	19 8	0 38	21 14	0 36	17 15	0 19	12 41	0 45	21 53	1 23	12 34	12 24	9 41	11 32	6 38			
T 25	15 15	7 52	0 59	7 19	2 5	15 33	0 36	20 28	1 42	19 11	0 38	21 13	0 36	17 14	0 19	12 41	0 45	21 53	1 23	12 34	12 22	9 44	11 32	6 38			
F 26	15 34	14 31	0n25	7 22	2 11	15 58	0 33	20 24	1 44	19 14	0 38	21 13	0 36	17 13	0 19	12 41	0 45	21 53	1 23	12 34	12 21	9 47	11 33	6 37			
S 27	15 52	20 16	1 48	7 29	2 15	16 22	0 31	20 20	1 45	19 17	0 38	21 12	0 36	17 13	0 19	12 41	0 45	21 53	1 23	12 34	12 20	9 50	11 33	6 37			
S 28	16 10	24 39	3 1	7 41	2 18	16 45	0 29	20 16	1 47	19 20	0 38	21 11	0 36	17 12	0 19	12 41	0 45	21 53	1 23	12 34	12 19	9 54	11 33	6 36			
M29	16 28	27 18	4 1	7 57	2 20	17 8	0 27	20 12	1 49	19 23	0 38	21 11	0 36	17 11	0 19	12 41	0 45	21 53	1 23	12 33	12 18	9 57	11 33	6 36			
T 30	16 46	28 4	4 4	8 16	2 20	17 30	0 24	20 8	1 51	19 26	0 38	21 10	0 36	17 11	0 19	12 41	0 45	21 54	1 22	12 33	12 17	10 0	11 33	6 35			
W31	17 s 3	27n 2	5n 9	8s38	2n20	17s52	0n22	20n 4	1n53	19s29	0n38	21s 9	0s36	17n10	0s19	12s41	0s45	21s54	1n22	12n32	12n16	10s 3	11s33	6n35			

ASTRODIENST EPHEMERIS for the year 1520  
geocentric

NOVEMBER 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	3 18 52	18 <sup>11</sup> 19'26	3 <sup>0</sup> 45	29 <sup>2</sup> 8	22 <sup>11</sup> 55	8 <sup>0</sup> 36	29 <sup>11</sup> 41	28 <sup>3</sup> 19	18 <sup>1</sup> 47	28 <sup>2</sup> 36	8 <sup>3</sup> 0	2 <sup>0</sup> R58	2 <sup>8</sup> 8	27 <sup>2</sup> 14	9 <sup>2</sup> 36	T 1
F 2	3 22 48	19 <sup>0</sup> 20'00	16 <sup>0</sup> 38	0 <sup>11</sup> 18	24 <sup>0</sup> 11	8 <sup>0</sup> 56	29 <sup>0</sup> 54	28 <sup>0</sup> 23	18 <sup>8</sup> 44	28 <sup>0</sup> 36	8 <sup>0</sup> 2	2 <sup>0</sup> D57	2 <sup>0</sup> 5	27 <sup>0</sup> 21	9 <sup>0</sup> 38	F 2
S 3	3 26 45	20 <sup>0</sup> 20'35	29 <sup>0</sup> 9	1 <sup>0</sup> 31	25 <sup>0</sup> 26	9 <sup>0</sup> 17	0 <sup>2</sup> 7	28 <sup>0</sup> 27	18 <sup>0</sup> 42	28 <sup>0</sup> 36	8 <sup>0</sup> 3	2 <sup>0</sup> S57	2 <sup>0</sup> 1	27 <sup>0</sup> 28	9 <sup>0</sup> 40	S 3
S 4	3 30 41	21 <sup>0</sup> 21'12	11 <sup>11</sup> 22	2 <sup>0</sup> 48	26 <sup>0</sup> 41	9 <sup>0</sup> 37	0 <sup>0</sup> 21	28 <sup>0</sup> 31	18 <sup>0</sup> 39	28 <sup>0</sup> 36	8 <sup>0</sup> 5	2 <sup>0</sup> S58	1 <sup>0</sup> 58	27 <sup>0</sup> 34	9 <sup>0</sup> 41	S 4
M 5	3 34 38	22 <sup>0</sup> 21'51	23 <sup>0</sup> 23	4 <sup>0</sup> 7	27 <sup>0</sup> 57	9 <sup>0</sup> 57	0 <sup>0</sup> 34	28 <sup>0</sup> 35	18 <sup>0</sup> 37	28 <sup>0</sup> 36	8 <sup>0</sup> 6	3 <sup>0</sup> 0	1 <sup>0</sup> 55	27 <sup>0</sup> 41	9 <sup>0</sup> 43	M 5
T 6	3 38 35	23 <sup>0</sup> 22'32	5 <sup>0</sup> 14	5 <sup>0</sup> 29	29 <sup>0</sup> 12	10 <sup>0</sup> 16	0 <sup>0</sup> 48	28 <sup>0</sup> 39	18 <sup>0</sup> 34	28 <sup>0</sup> 36	8 <sup>0</sup> 8	3 <sup>0</sup> 1	1 <sup>0</sup> 52	27 <sup>0</sup> 48	9 <sup>0</sup> 45	T 6
W 7	3 42 31	24 <sup>0</sup> 23'14	17 <sup>0</sup> 1	6 <sup>0</sup> 52	0 <sup>2</sup> 27	10 <sup>0</sup> 34	1 <sup>0</sup> 1	28 <sup>0</sup> 43	18 <sup>0</sup> 32	28 <sup>0</sup> 36	8 <sup>0</sup> 10	3 <sup>0</sup> 3	1 <sup>0</sup> 49	27 <sup>0</sup> 54	9 <sup>0</sup> 47	W 7
T 8	3 46 28	25 <sup>0</sup> 23'58	28 <sup>0</sup> 48	8 <sup>0</sup> 18	1 <sup>0</sup> 43	10 <sup>0</sup> 53	1 <sup>0</sup> 14	28 <sup>0</sup> 48	18 <sup>0</sup> 29	28 <sup>0</sup> 37	8 <sup>0</sup> 11	3 <sup>0</sup> R 4	1 <sup>0</sup> 46	28 <sup>0</sup> 1	9 <sup>0</sup> 49	T 8
F 9	3 50 24	26 <sup>0</sup> 24'43	10 <sup>11</sup> 37	9 <sup>0</sup> 44	2 <sup>0</sup> 58	11 <sup>0</sup> 11	1 <sup>0</sup> 28	28 <sup>0</sup> 52	18 <sup>0</sup> 27	28 <sup>0</sup> 37	8 <sup>0</sup> 13	3 <sup>0</sup> 4	1 <sup>0</sup> 42	28 <sup>0</sup> 8	9 <sup>0</sup> 51	F 9
S 10	3 54 21	27 <sup>0</sup> 25'29	22 <sup>0</sup> 31	11 <sup>0</sup> 12	4 <sup>0</sup> 14	11 <sup>0</sup> 28	1 <sup>0</sup> 41	28 <sup>0</sup> 57	18 <sup>0</sup> 24	28 <sup>0</sup> 37	8 <sup>0</sup> 14	3 <sup>0</sup> 2	1 <sup>0</sup> 39	28 <sup>0</sup> 14	9 <sup>0</sup> 53	S 10
S 11	3 58 17	28 <sup>0</sup> 26'18	4 <sup>0</sup> 32	12 <sup>0</sup> 41	5 <sup>0</sup> 29	11 <sup>0</sup> 45	1 <sup>0</sup> 55	29 <sup>0</sup> 1	18 <sup>0</sup> 22	28 <sup>0</sup> 38	8 <sup>0</sup> 16	2 <sup>0</sup> 59	1 <sup>0</sup> 36	28 <sup>0</sup> 21	9 <sup>0</sup> 55	S 11
M 12	4 2 14	29 <sup>0</sup> 27'07	16 <sup>0</sup> 41	14 <sup>0</sup> 11	6 <sup>0</sup> 44	12 <sup>0</sup> 1	2 <sup>0</sup> 8	29 <sup>0</sup> 6	18 <sup>0</sup> 19	28 <sup>0</sup> 38	8 <sup>0</sup> 18	2 <sup>0</sup> 55	1 <sup>0</sup> 33	28 <sup>0</sup> 28	9 <sup>0</sup> 57	M 12
T 13	4 6 10	0 <sup>2</sup> 27'57	29 <sup>0</sup> 1	15 <sup>0</sup> 41	8 <sup>0</sup> 0	12 <sup>0</sup> 17	2 <sup>0</sup> 22	29 <sup>0</sup> 11	18 <sup>0</sup> 17	28 <sup>0</sup> 38	8 <sup>0</sup> 20	2 <sup>0</sup> 51	1 <sup>0</sup> 30	28 <sup>0</sup> 34	9 <sup>0</sup> 59	T 13
W 14	4 10 7	1 <sup>0</sup> 28'49	11 <sup>1</sup> 32	17 <sup>0</sup> 12	9 <sup>0</sup> 15	12 <sup>0</sup> 32	2 <sup>0</sup> 35	29 <sup>0</sup> 15	18 <sup>0</sup> 14	28 <sup>0</sup> 39	8 <sup>0</sup> 21	2 <sup>0</sup> 46	1 <sup>0</sup> 27	28 <sup>0</sup> 41	10 <sup>0</sup> 1	W 14
T 15	4 14 4	2 <sup>0</sup> 29'42	24 <sup>0</sup> 16	18 <sup>0</sup> 43	10 <sup>0</sup> 30	12 <sup>0</sup> 47	2 <sup>0</sup> 49	29 <sup>0</sup> 20	18 <sup>0</sup> 12	28 <sup>0</sup> 39	8 <sup>0</sup> 23	2 <sup>0</sup> 41	1 <sup>0</sup> 23	28 <sup>0</sup> 47	10 <sup>0</sup> 4	T 15
F 16	4 18 0	3 <sup>0</sup> 30'35	7 <sup>0</sup> 14	20 <sup>0</sup> 15	11 <sup>0</sup> 46	13 <sup>0</sup> 1	3 <sup>0</sup> 2	29 <sup>0</sup> 25	18 <sup>0</sup> 10	28 <sup>0</sup> 40	8 <sup>0</sup> 25	2 <sup>0</sup> 37	1 <sup>0</sup> 20	28 <sup>0</sup> 54	10 <sup>0</sup> 6	F 16
S 17	4 21 57	4 <sup>0</sup> 31'30	20 <sup>0</sup> 27	21 <sup>0</sup> 47	13 <sup>0</sup> 1	13 <sup>0</sup> 15	3 <sup>0</sup> 16	29 <sup>0</sup> 30	18 <sup>0</sup> 7	28 <sup>0</sup> 40	8 <sup>0</sup> 27	2 <sup>0</sup> 35	1 <sup>0</sup> 17	29 <sup>0</sup> 1	10 <sup>0</sup> 9	S 17
S 18	4 25 53	5 <sup>0</sup> 32'25	3 <sup>0</sup> 58	23 <sup>0</sup> 19	14 <sup>0</sup> 17	13 <sup>0</sup> 28	3 <sup>0</sup> 29	29 <sup>0</sup> 35	18 <sup>0</sup> 5	28 <sup>0</sup> 41	8 <sup>0</sup> 28	2 <sup>0</sup> D34	1 <sup>0</sup> 14	29 <sup>0</sup> 7	10 <sup>0</sup> 11	S 18
M 19	4 29 50	6 <sup>0</sup> 33'20	17 <sup>0</sup> 47	24 <sup>0</sup> 51	15 <sup>0</sup> 32	13 <sup>0</sup> 41	3 <sup>0</sup> 43	29 <sup>0</sup> 40	18 <sup>0</sup> 2	28 <sup>0</sup> 42	8 <sup>0</sup> 30	2 <sup>0</sup> 34	1 <sup>0</sup> 11	29 <sup>0</sup> 14	10 <sup>0</sup> 14	M 19
T 20	4 33 46	7 <sup>0</sup> 34'17	1 <sup>0</sup> 55	26 <sup>0</sup> 24	16 <sup>0</sup> 47	13 <sup>0</sup> 52	3 <sup>0</sup> 56	29 <sup>0</sup> 46	18 <sup>0</sup> 0	28 <sup>0</sup> 42	8 <sup>0</sup> 32	2 <sup>0</sup> 36	1 <sup>0</sup> 7	29 <sup>0</sup> 21	10 <sup>0</sup> 16	T 20
W 21	4 37 43	8 <sup>0</sup> 35'14	16 <sup>0</sup> 22	27 <sup>0</sup> 57	18 <sup>0</sup> 3	14 <sup>0</sup> 4	4 <sup>0</sup> 10	29 <sup>0</sup> 51	17 <sup>0</sup> 58	28 <sup>0</sup> 43	8 <sup>0</sup> 34	2 <sup>0</sup> 37	1 <sup>0</sup> 4	29 <sup>0</sup> 27	10 <sup>0</sup> 19	W 21
T 22	4 41 39	9 <sup>0</sup> 36'12	1 <sup>0</sup> 3	29 <sup>0</sup> 29	19 <sup>0</sup> 18	14 <sup>0</sup> 15	4 <sup>0</sup> 23	29 <sup>0</sup> 56	17 <sup>0</sup> 55	28 <sup>0</sup> 44	8 <sup>0</sup> 36	2 <sup>0</sup> R38	1 <sup>0</sup> 1	29 <sup>0</sup> 34	10 <sup>0</sup> 22	T 22
F 23	4 45 36	10 <sup>0</sup> 37'11	15 <sup>0</sup> 54	1 <sup>0</sup> 2	20 <sup>0</sup> 33	14 <sup>0</sup> 25	4 <sup>0</sup> 37	0 <sup>2</sup> 2	17 <sup>0</sup> 53	28 <sup>0</sup> 45	8 <sup>0</sup> 38	2 <sup>0</sup> 37	0 <sup>0</sup> 58	29 <sup>0</sup> 41	10 <sup>0</sup> 25	F 23
S 24	4 49 33	11 <sup>0</sup> 38'10	0 <sup>11</sup> 50	2 <sup>0</sup> 35	21 <sup>0</sup> 49	14 <sup>0</sup> 34	4 <sup>0</sup> 50	0 <sup>0</sup> 7	17 <sup>0</sup> 51	28 <sup>0</sup> 45	8 <sup>0</sup> 39	2 <sup>0</sup> 35	0 <sup>0</sup> 55	29 <sup>0</sup> 47	10 <sup>0</sup> 28	S 24
S 25	4 53 29	12 <sup>0</sup> 39'10	15 <sup>0</sup> 40	4 <sup>0</sup> 9	23 <sup>0</sup> 4	14 <sup>0</sup> 43	5 <sup>0</sup> 4	0 <sup>0</sup> 13	17 <sup>0</sup> 49	28 <sup>0</sup> 46	8 <sup>0</sup> 41	2 <sup>0</sup> 30	0 <sup>0</sup> 52	29 <sup>0</sup> 54	10 <sup>0</sup> 30	S 25
M 26	4 57 26	13 <sup>0</sup> 40'12	0 <sup>11</sup> 8	5 <sup>0</sup> 42	24 <sup>0</sup> 19	14 <sup>0</sup> 52	5 <sup>0</sup> 17	0 <sup>0</sup> 18	17 <sup>0</sup> 47	28 <sup>0</sup> 47	8 <sup>0</sup> 43	2 <sup>0</sup> 24	0 <sup>0</sup> 48	0 <sup>11</sup> 1	10 <sup>0</sup> 33	M 26
T 27	5 1 22	14 <sup>0</sup> 41'14	14 <sup>0</sup> 36	7 <sup>0</sup> 15	25 <sup>0</sup> 35	14 <sup>0</sup> 59	5 <sup>0</sup> 31	0 <sup>0</sup> 24	17 <sup>0</sup> 44	28 <sup>0</sup> 48	8 <sup>0</sup> 45	2 <sup>0</sup> 17	0 <sup>0</sup> 45	0 <sup>0</sup> 7	10 <sup>0</sup> 36	T 27
W 28	5 5 19	15 <sup>0</sup> 42'17	28 <sup>0</sup> 29	8 <sup>0</sup> 49	26 <sup>0</sup> 50	15 <sup>0</sup> 6	5 <sup>0</sup> 44	0 <sup>0</sup> 30	17 <sup>0</sup> 42	28 <sup>0</sup> 49	8 <sup>0</sup> 47	2 <sup>0</sup> 10	0 <sup>0</sup> 42	0 <sup>0</sup> 14	10 <sup>0</sup> 39	W 28
T 29	5 9 15	16 <sup>0</sup> 43'20	11 <sup>0</sup> 54	10 <sup>0</sup> 22	28 <sup>0</sup> 5	15 <sup>0</sup> 12	5 <sup>0</sup> 57	0 <sup>0</sup> 35	17 <sup>0</sup> 40	28 <sup>0</sup> 50	8 <sup>0</sup> 49	2 <sup>0</sup> 4	0 <sup>0</sup> 39	0 <sup>0</sup> 21	10 <sup>0</sup> 43	T 29
F 30	5 13 12	17 <sup>0</sup> 44'25	24 <sup>0</sup> 54	11 <sup>0</sup> 56	29 <sup>0</sup> 21	15 <sup>0</sup> 18	6 <sup>0</sup> 11	0 <sup>0</sup> 41	17 <sup>0</sup> 38	28 <sup>0</sup> 51	8 <sup>0</sup> 51	1 <sup>0</sup> 59	0 <sup>0</sup> 36	0 <sup>11</sup> 27	10 <sup>0</sup> 46	F 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17s20	24n29	5n17	9s 2	2n18	18s14	0n20	20n 0	1n55	19s31	0n38	21s 8	0s36	17n 9	0s19	12s41	0s44	21s54	1n22	12n32	12n15	10s 6	11s33	6n34	
F 2	17 36	20 47	5 8	9 29	2 16	18 35	0 17	19 57	1 57	19 34	0 37	21 8	0 36	17 9	0 19	12 41	0 44	21 54	1 22	12 32	12 14	10 10	11 33	6 34	
S 3	17 53	16 14	4 44	9 57	2 13	18 56	0 15	19 53	1 58	19 37	0 37	21 7	0 36	17 8	0 19	12 41	0 44	21 54	1 22	12 32	12 13	10 13	11 33	6 33	
S 4	18 9	11 9	4 8	10 27	2 9	19 16	0 13	19 49	2 0	19 40	0 37	21 6	0 36	17 7	0 19	12 41	0 44	21 54	1 22	12 32	12 11	10 16	11 33	6 33	
M 5	18 25	5 44	3 22	10 58	2 5	19 35	0 10	19 46	2 2	19 43	0 37	21 5	0 36	17 6	0 19	12 41	0 44	21 54	1 22	12 33	12 10	10 19	11 33	6 32	
T 6	18 40	0 11	2 28	11 30	2 0	19 54	0 8	19 43	2 4	19 46	0 37	21 4	0 36	17 6	0 19	12 41	0 44	21 54	1 22	12 33	12 9	10 23	11 33	6 32	
W 7	18 55	5s21	1 27	12 2	1 55	20 13	0 6	19 39	2 6	19 49	0 37	21 4	0 36	17 5	0 19	12 41	0 44	21 54	1 21	12 34	12 8	10 26	11 33	6 32	
T 8	19 10	10 43	0 24	12 35	1 49	20 31	0 3	19 36	2 8	19 52	0 37	21 3	0 36	17 4	0 19	12 41	0 44	21 54	1 21	12 34	12 7	10 29	11 33	6 31	
F 9	19 24	15 42	0s42	13 8	1 43	20 48	0 1	19 33	2 10	19 54	0 37	21 2	0 36	17 4	0 19	12 41	0 44	21 54	1 21	12 34	12 6	10 32	11 33	6 31	
S 10	19 38	20 8	1 45	13 41	1 37	21 4	0s 2	19 30	2 12	19 57	0 37	21 1	0 36	17 3	0 19	12 41	0 44	21 54	1 21	12 33	12 5	10 35	11 33	6 30	
S 11	19 52	23 48	2 45	14 15	1 31	21 21	0 4	19 28	2 14	20 0	0 37	21 0	0 36	17 2	0 19	12 41	0 44	21 54	1 21	12 32	12 4	10 39	11 33	6 30	
M 12	20 5	26 26	3 37	14 48	1 24	21 36	0 7	19 25	2 17	20 3	0 37	20 59	0 36	17 2	0 19	12 40	0 44	21 54	1 21	12 31	12 3	10 42	11 33	6 29	
T 13	20 18	27 50	4 20	15 21	1 17	21 51	0 9	19 23	2 19	20 6	0 36	20 58	0 36	17 1	0 19	12 40	0 44	21 54	1 21	12 29	12 2	10 45	11 33	6 29	
W 14	20 31	27 51	4 52	15 53	1 11	22 5	0 11	19 20	2 21	20 8	0 36	20 57	0 36	17 0	0 19	12 40	0 44	21 54	1 21	12 28	12 0	10 48	11 32	6 28	
T 15	20 43	26 24	5 9	16 25	1 4	22 19	0 14	19 18	2 23	20 11	0 36	20 56	0 36	17 0	0 19	12 40	0 44	21 54	1 20	12 26	11 59	10 51	11 32	6 28	
F 16	20 55	23 32	5 12	16 57	0 57	22 31	0 16	19 16	2 25	20 14	0 36	20 55	0 36	16 59	0 19	12 40	0 44	21 54	1 20	12 25	11 58	10 54	11 32	6 28	
S 17	21 6	19 24	4 58	17 28	0 49	22 44	0 19	19 14	2 27	20 16	0 36	20 54	0 36	16 58	0 19	12 39	0 44	21 54	1 20	12 24	11 57	10 58	11 32	6 27	
S 18	21 17	14 13	4 27	17 58	0 42	22 55	0 21	19 13	2 30	20 19	0 36	20 53	0 36	16 58	0 19	12 39	0 44	21 54	1 20	12 24	11 56	11 1	11 31	6 27	
M 19	21 28	8 13	3 41	18 28	0 35	23 6	0 23	19 11	2 32	20 22	0 36	20 52	0 36	16 57	0 19	12 39	0 44	21 54	1 20	12 24	11 55	11 4	11 31	6 26	
T 20	21 38	1 41	2 40	18 57	0 28	23 16	0 26	19 10	2 34	20 24	0 36	20 51	0 36	16 57	0 19	12 39	0 44	21 54	1 20	12 24	11 54	11 7	11 31	6 26	
W 21	21 48	5n 6	1 28	19 25	0 21	23 26	0 28	19 9	2 36	20 27	0 36	20 50	0 36	16 56	0 19	12 38	0 44	21 54	1 20	12 25	11 53	11 10	11 31	6 26	
T 22	21 57	11 44	0 9	19 52	0 14	23 34	0 30	19 8	2 39	20 29	0 36	20 49	0 36	16 55	0 19	12 38	0 44	21 54	1 20	12 25	11 52	11 14	11 30	6 25	
F 23	22 6	17 47	1n12	20 19	0 7	23 43	0 33	19 7	2 41	20 32	0 36	20 48	0 36	16 55	0 19	12 38	0 44	21 54	1 20	12 25	11 50	11 17	11 30	6 25	
S 24	22 14	22 47	2 27	20 44	0 0	23 50	0 35	19 7	2 43	20 34	0 36	20 46	0 36	16 54	0 19	12 38	0 44	21 54	1 19	12 24	11 49	11 20	11 30	6 24	
S 25	22 22	26 15	3 33	21 9	0s 7	23 56	0 37	19 6	2 46	20 37	0 36	20 45	0 37	16 53	0 19	12 37	0 44	21 54	1 19	12 22	11 48	11 23	11 29	6 24	
M 26	22 30	27 53	4 23	21 32	0 14	24 2	0 39	19 6	2 48	20 39	0 36	20 44	0 37	16 53	0 19	12 37	0 44	21 54	1 19	12 20	11 47	11 26	11 29	6 24	
T 27	22 37	27 35	4 55	21 55	0 20	24 7	0 42	19 6	2 51	20 42	0 35	20 43	0 37	16 52	0 19	12 37	0 44	21 54	1 19	12 18	11 46	11 29	11 28	6 23	
W 28	22 44	25 33	5 9	22 16	0 27	24 12	0 44	19 6	2 53	20 44	0 35	20 42	0 37	16 52	0 18	12 36	0 44	21 54	1 19	12 15	11 45	11 33	11 28	6 23	
T 29	22 50	22 8	5 5	22 37	0 33	24 15	0 46	19 7	2 55	20 47	0 35	20 40	0 37	16 51	0 18	12 36	0 44	21 54	1 19	12 13	11 44	11 36	11 27	6 22	
F 30	22s56	17n44	4n45	22s56	0s40	24s18	0s48	19n 7	2n58	20s49	0n35	20s39	0s37	16n51	0s18	12s36	0s44	21s54	1n19	12n12	11n43	11s39	11s27	6n22	

ASTRODIENST EPHEMERIS for the year 1520  
geocentric

DECEMBER 1520 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	5 17 9	18°45'30	7♐29	13♌29	0♋36	15♏23	6♊24	0♈47	17°R36	28♈52	8♋53	1°R56	0♋33	0♌34	10♈49	S 1
S 2	5 21 5	19°46'37	19°44	15° 3	1°51	15°27	6°37	0°53	17°B34	28°53	8°55	1°D55	0°29	0°40	10°52	S 2
M 3	5 25 2	20°47'44	1♌44	16°37	3° 7	15°30	6°51	0°59	17°32	28°54	8°57	1°B56	0°26	0°47	10°55	M 3
T 4	5 28 58	21°48'52	13°35	18°12	4°22	15°33	7° 4	1° 5	17°30	28°55	8°59	1°57	0°23	0°54	10°59	T 4
W 5	5 32 55	22°50'01	25°22	19°46	5°37	15°35	7°17	1°11	17°28	28°56	9° 1	1°59	0°20	1° 0	11° 2	W 5
T 6	5 36 51	23°51'10	7♌ 9	21°21	6°52	15°36	7°31	1°17	17°26	28°57	9° 3	1°R59	0°17	1° 7	11° 5	T 6
F 7	5 40 48	24°52'20	19° 1	22°55	8° 8	15°R36	7°44	1°23	17°24	28°59	9° 5	1°57	0°13	1°14	11° 9	F 7
S 8	5 44 44	25°53'30	1♌ 2	24°31	9°23	15°36	7°57	1°30	17°23	29° 0	9° 7	1°53	0°10	1°20	11°12	S 8
S 9	5 48 41	26°54'42	13°13	26° 6	10°38	15°34	8°10	1°36	17°21	29° 1	9° 9	1°46	0° 7	1°27	11°16	S 9
M10	5 52 38	27°55'53	25°38	27°41	11°54	15°32	8°24	1°42	17°19	29° 2	9°11	1°37	0° 4	1°34	11°20	M10
T 11	5 56 34	28°57'05	8♋16	29°17	13° 9	15°30	8°37	1°49	17°17	29° 4	9°13	1°26	0° 1	1°40	11°23	T 11
W12	6 0 31	29°58'17	21° 8	0♋53	14°24	15°26	8°50	1°55	17°16	29° 5	9°15	1°15	29°Y58	1°47	11°27	W12
T 13	6 4 27	0♋59'29	4♈12	2°30	15°39	15°21	9° 3	2° 2	17°14	29° 6	9°17	1° 4	29°54	1°54	11°31	T 13
F 14	6 8 24	2° 0'41	17°27	4° 6	16°55	15°16	9°16	2° 8	17°12	29° 8	9°19	0°55	29°51	2° 0	11°34	F 14
S 15	6 12 20	3° 1'52	0♈54	5°43	18°10	15°10	9°29	2°15	17°11	29° 9	9°21	0°48	29°48	2° 7	11°38	S 15
S 16	6 16 17	4° 3'04	14°31	7°20	19°25	15° 3	9°42	2°21	17° 9	29°11	9°23	0°44	29°45	2°13	11°42	S 16
M17	6 20 13	5° 4'15	28°19	8°58	20°40	14°55	9°55	2°28	17° 8	29°12	9°25	0°42	29°42	2°20	11°46	M17
T 18	6 24 10	6° 5'26	12°Y17	10°36	21°56	14°47	10° 7	2°34	17° 6	29°14	9°27	0°D42	29°39	2°27	11°50	T 18
W19	6 28 7	7° 6'36	26°25	12°14	23°11	14°37	10°20	2°41	17° 5	29°15	9°29	0°R43	29°35	2°33	11°54	W19
T 20	6 32 3	8° 7'47	10♋43	13°53	24°26	14°27	10°33	2°48	17° 4	29°17	9°32	0°42	29°32	2°40	11°58	T 20
F 21	6 36 0	9° 8'56	25° 8	15°32	25°41	14°16	10°46	2°54	17° 2	29°19	9°34	0°40	29°29	2°47	12° 1	F 21
S 22	6 39 56	10°10'06	9♏37	17°11	26°56	14° 4	10°58	3° 1	17° 1	29°20	9°36	0°35	29°26	2°53	12° 5	S 22
S 23	6 43 53	11°11'15	24° 5	18°50	28°11	13°52	11°11	3° 8	17° 0	29°22	9°38	0°27	29°23	3° 0	12°10	S 23
M24	6 47 49	12°12'24	8♋24	20°30	29°26	13°38	11°24	3°15	16°59	29°23	9°40	0°17	29°19	3° 7	12°14	M24
T 25	6 51 46	13°13'32	22°30	22°10	0♈42	13°24	11°36	3°22	16°58	29°25	9°42	0° 5	29°16	3°13	12°18	T 25
W26	6 55 43	14°14'41	6♏16	23°50	1°57	13° 9	11°49	3°29	16°57	29°27	9°44	29°Y53	29°13	3°20	12°22	W26
T 27	6 59 39	15°15'48	19°40	25°30	3°12	12°54	12° 1	3°36	16°56	29°29	9°46	29°42	29°10	3°27	12°26	T 27
F 28	7 3 36	16°16'56	2♐41	27°11	4°27	12°37	12°13	3°42	16°55	29°30	9°48	29°32	29° 7	3°33	12°30	F 28
S 29	7 7 32	17°18'03	15°18	28°51	5°42	12°20	12°26	3°49	16°54	29°32	9°50	29°26	29° 4	3°40	12°34	S 29
S 30	7 11 29	18°19'10	27°36	0♈31	6°57	12° 3	12°38	3°56	16°53	29°34	9°52	29°22	29° 0	3°47	12°39	S 30
M31	7 15 25	19°20'17	9♋38	2♈10	8♈12	11°Q44	12°X50	4♈ 3	16°B52	29°X36	9°B54	29°Y20	28°Y57	3♌53	12°X43	M31

Day	☉	☽		♂	♀		♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
S 1	23s 2	12n41	4n12	23s14	0s46	24s20	0s50	19n 8	3n 0	20s51	0n35	20s38	0s37	16n50	0s18	12s35	0s44	21s54	1n19	12n11	11n42	11s42	11s26	6n22
S 2	23 7	7 16	3 28	23 32	0 52	24 22	0 52	19 9	3 3	20 54	0 35	20 37	0 37	16 49	0 18	12 35	0 44	21 54	1 19	12 10	11 40	11 45	11 26	6 21
M 3	23 11	1 41	2 36	23 47	0 58	24 22	0 54	19 11	3 5	20 56	0 35	20 35	0 37	16 49	0 18	12 35	0 44	21 54	1 18	12 11	11 39	11 48	11 25	6 21
T 4	23 15	3s53	1 38	24 2	1 4	24 22	0 56	19 12	3 8	20 58	0 35	20 34	0 37	16 48	0 18	12 34	0 44	21 54	1 18	12 11	11 38	11 52	11 25	6 21
W 5	23 19	9 17	0 36	24 16	1 9	24 21	0 58	19 14	3 10	21 1	0 35	20 33	0 37	16 48	0 18	12 34	0 44	21 54	1 18	12 12	11 37	11 55	11 24	6 20
T 6	23 22	14 22	0s28	24 28	1 15	24 20	1 0	19 16	3 13	21 3	0 35	20 32	0 37	16 47	0 18	12 33	0 44	21 54	1 18	12 12	11 36	11 58	11 24	6 20
F 7	23 24	18 58	1 30	24 39	1 20	24 17	1 2	19 19	3 15	21 5	0 35	20 30	0 37	16 47	0 18	12 33	0 44	21 54	1 18	12 11	11 35	12 1	11 23	6 20
S 8	23 26	22 52	2 30	24 48	1 25	24 14	1 4	19 21	3 18	21 7	0 35	20 29	0 37	16 46	0 18	12 32	0 44	21 54	1 18	12 9	11 34	12 4	11 22	6 19
S 9	23 28	25 48	3 23	24 56	1 30	24 10	1 6	19 24	3 21	21 9	0 35	20 27	0 37	16 46	0 18	12 32	0 44	21 54	1 18	12 7	11 33	12 7	11 22	6 19
M10	23 29	27 33	4 7	25 3	1 34	24 6	1 8	19 27	3 23	21 12	0 35	20 26	0 37	16 45	0 18	12 31	0 44	21 54	1 18	12 4	11 32	12 10	11 21	6 19
T 11	23 30	27 54	4 40	25 9	1 39	24 0	1 9	19 30	3 26	21 14	0 35	20 25	0 37	16 45	0 18	12 31	0 44	21 53	1 18	12 0	11 30	12 14	11 21	6 18
W12	23 30	26 46	4 59	25 13	1 43	23 54	1 11	19 34	3 28	21 16	0 35	20 23	0 37	16 44	0 18	12 31	0 44	21 53	1 18	11 56	11 29	12 17	11 20	6 18
T 13	23 30	24 10	5 4	25 15	1 46	23 47	1 13	19 38	3 31	21 18	0 35	20 22	0 37	16 44	0 18	12 30	0 44	21 53	1 17	11 53	11 28	12 20	11 19	6 18
F 14	23 29	20 16	4 52	25 16	1 50	23 39	1 14	19 42	3 33	21 20	0 35	20 20	0 37	16 44	0 18	12 30	0 44	21 53	1 17	11 49	11 27	12 23	11 18	6 17
S 15	23 28	15 17	4 24	25 16	1 53	23 31	1 16	19 46	3 36	21 22	0 34	20 19	0 37	16 43	0 18	12 29	0 44	21 53	1 17	11 47	11 26	12 26	11 18	6 17
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T 18	23 22	3n23	1 37	25 5	2 1	23 2	1 20	20 0	3 43	21 28	0 34	20 15	0 37	16 42	0 18	12 27	0 44	21 53	1 17	11 45	11 23	12 35	11 15	6 16
W19	23 19	9 52	0 23	24 59	2 3	22 51	1 21	20 5	3 46	21 30	0 34	20 13	0 37	16 42	0 18	12 27	0 44	21 53	1 17	11 45	11 21	12 39	11 15	6 16
T 20	23 15	15 55	0n53	24 51	2 5	22 39	1 23	20 10	3 48	21 31	0 34	20 12	0 37	16 41	0 18	12 26	0 44	21 53	1 17	11 45	11 20	12 42	11 14	6 16
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T 27	22 38	19 26	4 44	23 8	2 4	20 57	1 30	20 53	4 4	21 44	0 34	20 1	0 38	16 39	0 18	12 22	0 44	21 53	1 16	11 24	11 12	13 3	11 8	6 14
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M31	22s 6	2s16	1n42	21s33	1s52	19s45	1s32	21n11	4n12	21s50	0n34	19s55	0s38	16n38	0s18	12s20	0s44	21s52	1n16	11n16	11n 8	13s16	11s 4	6n13