



Astrodienst Ephemeris Tables for the year 1518

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 D5EPH

ASTRODIENST EPHEMERIS for the year 1518

geocentric

JANUARY 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 18 17	20° 3' 48"	2° 41'	28° 47'	26° 13'	25° 11'	21° 51'	4° 0'	4° 20'	23° 10'	4° 13'	27° 58'	26° 56'	1° 54'	26° 5'	F 1
S 2	7 22 13	21° 5' 44"	15° 8'	0° 8'	27° 26'	25° 55'	21° 50'	4° 7'	4° 20'	23° 12'	4° 15'	27° 54'	26° 53'	2° 0'	26° 10'	S 2
S 3	7 26 10	22° 6' 49"	27° 49'	1° 30'	28° 39'	26° 40'	21° 49'	4° 14'	4° 20'	23° 14'	4° 17'	27° 51'	26° 50'	2° 7'	26° 16'	S 3
M 4	7 30 6	23° 7' 53"	10° 47'	2° 52'	29° 51'	27° 24'	21° 48'	4° 21'	4° 20'	23° 16'	4° 19'	27° 50'	26° 47'	2° 14'	26° 21'	M 4
T 5	7 34 3	24° 8' 57"	24° 4'	4° 16'	1° 4'	28° 9'	21° 47'	4° 28'	4° 20'	23° 18'	4° 21'	27° 49'	26° 43'	2° 20'	26° 26'	T 5
W 6	7 37 59	25° 10' 01"	7° 42'	5° 41'	2° 17'	28° 54'	21° 45'	4° 34'	4° 20'	23° 20'	4° 23'	27° 50'	26° 40'	2° 27'	26° 31'	W 6
T 7	7 41 56	26° 11' 04"	21° 42'	7° 7'	3° 29'	29° 38'	21° 43'	4° 41'	4° 20'	23° 22'	4° 25'	27° 51'	26° 37'	2° 33'	26° 36'	T 7
F 8	7 45 53	27° 12' 07"	6° 5'	8° 33'	4° 42'	0° 23'	21° 41'	4° 48'	4° 20'	23° 24'	4° 27'	27° 52'	26° 34'	2° 40'	26° 41'	F 8
S 9	7 49 49	28° 13' 10"	20° 47'	10° 1'	5° 54'	1° 8'	21° 39'	4° 54'	4° 21'	23° 26'	4° 29'	27° 54'	26° 31'	2° 47'	26° 47'	S 9
S 10	7 53 46	29° 14' 12"	5° 45'	11° 29'	7° 7'	1° 52'	21° 37'	5° 1'	4° 21'	23° 28'	4° 31'	27° 53'	26° 28'	2° 53'	26° 52'	S 10
M 11	7 57 42	0° 15' 13"	20° 50'	12° 57'	8° 19'	2° 37'	21° 34'	5° 8'	4° 21'	23° 30'	4° 33'	27° 52'	26° 24'	3° 0'	26° 57'	M 11
T 12	8 1 39	1° 16' 13"	5° 55'	14° 27'	9° 32'	3° 22'	21° 31'	5° 14'	4° 22'	23° 33'	4° 35'	27° 48'	26° 21'	3° 7'	27° 2'	T 12
W 13	8 5 35	2° 17' 12"	20° 49'	15° 57'	10° 44'	4° 7'	21° 28'	5° 21'	4° 22'	23° 35'	4° 37'	27° 44'	26° 18'	3° 13'	27° 7'	W 13
T 14	8 9 32	3° 18' 10"	5° 25'	17° 28'	11° 56'	4° 52'	21° 25'	5° 27'	4° 23'	23° 37'	4° 39'	27° 38'	26° 15'	3° 20'	27° 12'	T 14
F 15	8 13 28	4° 19' 06"	19° 35'	19° 0'	13° 8'	5° 37'	21° 22'	5° 34'	4° 23'	23° 39'	4° 41'	27° 32'	26° 12'	3° 27'	27° 17'	F 15
S 16	8 17 25	5° 20' 02"	3° 18'	20° 33'	14° 20'	6° 22'	21° 18'	5° 40'	4° 24'	23° 41'	4° 42'	27° 27'	26° 9'	3° 33'	27° 22'	S 16
S 17	8 21 22	6° 20' 56"	16° 32'	22° 6'	15° 32'	7° 7'	21° 15'	5° 47'	4° 25'	23° 43'	4° 44'	27° 24'	26° 5'	3° 40'	27° 28'	S 17
M 18	8 25 18	7° 21' 48"	29° 20'	23° 40'	16° 43'	7° 52'	21° 11'	5° 53'	4° 26'	23° 46'	4° 46'	27° 22'	26° 2'	3° 47'	27° 33'	M 18
T 19	8 29 15	8° 22' 39"	11° 46'	25° 14'	17° 55'	8° 37'	21° 7'	6° 0'	4° 26'	23° 48'	4° 48'	27° 21'	25° 59'	3° 53'	27° 38'	T 19
W 20	8 33 11	9° 23' 29"	23° 54'	26° 50'	19° 6'	9° 22'	21° 3'	6° 6'	4° 27'	23° 50'	4° 50'	27° 22'	25° 56'	4° 0'	27° 43'	W 20
T 21	8 37 8	10° 24' 17"	5° 11'	28° 26'	20° 18'	10° 7'	20° 58'	6° 12'	4° 28'	23° 52'	4° 52'	27° 24'	25° 53'	4° 7'	27° 48'	T 21
F 22	8 41 4	11° 25' 04"	17° 39'	0° 3'	21° 29'	10° 52'	20° 54'	6° 18'	4° 29'	23° 55'	4° 53'	27° 25'	25° 49'	4° 13'	27° 53'	F 22
S 23	8 45 1	12° 25' 49"	29° 25'	1° 40'	22° 40'	11° 38'	20° 49'	6° 24'	4° 30'	23° 57'	4° 55'	27° 26'	25° 46'	4° 20'	27° 58'	S 23
S 24	8 48 57	13° 26' 33"	11° 12'	3° 19'	23° 52'	12° 23'	20° 44'	6° 31'	4° 31'	23° 59'	4° 57'	27° 25'	25° 43'	4° 26'	28° 3'	S 24
M 25	8 52 54	14° 27' 15"	23° 5'	4° 58'	25° 2'	13° 8'	20° 39'	6° 37'	4° 32'	24° 1'	4° 59'	27° 21'	25° 40'	4° 33'	28° 8'	M 25
T 26	8 56 51	15° 27' 56"	5° 11'	6° 38'	26° 13'	13° 54'	20° 34'	6° 43'	4° 34'	24° 4'	5° 0'	27° 16'	25° 37'	4° 40'	28° 13'	T 26
W 27	9 0 47	16° 28' 36"	17° 15'	8° 19'	27° 24'	14° 39'	20° 29'	6° 49'	4° 35'	24° 6'	5° 2'	27° 8'	25° 34'	4° 46'	28° 18'	W 27
T 28	9 4 44	17° 29' 13"	29° 36'	10° 0'	28° 35'	15° 24'	20° 24'	6° 55'	4° 36'	24° 8'	5° 4'	26° 59'	25° 30'	4° 53'	28° 23'	T 28
F 29	9 8 40	18° 29' 50"	12° 8'	11° 43'	29° 45'	16° 10'	20° 18'	7° 1'	4° 37'	24° 10'	5° 5'	26° 49'	25° 27'	5° 0'	28° 28'	F 29
S 30	9 12 37	19° 30' 25"	24° 51'	13° 26'	0° 55'	16° 55'	20° 12'	7° 6'	4° 39'	24° 13'	5° 7'	26° 39'	25° 24'	5° 6'	28° 33'	S 30
S 31	9 16 33	20° 30' 59"	7° 47'	15° 11'	2° 6'	17° 40'	20° 6'	7° 12'	4° 40'	24° 15'	5° 9'	26° 31'	25° 21'	5° 13'	28° 37'	S 31

Delta T = 251.69 sec

Julian Calendar 1 Jan. 1518 == Greg. Calendar 11 Jan. 1518

FEBRUARY 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 20 30	21° 31' 31"	20° 55'	16° 56'	3° 16'	18° 26'	20° 0'	7° 18'	4° 42'	24° 17'	5° 10'	26° 24'	25° 18'	5° 20'	28° 42'	M 1
T 2	9 24 26	22° 32' 02"	4° 11'	18° 42'	4° 26'	19° 11'	19° 54'	7° 24'	4° 43'	24° 19'	5° 12'	26° 20'	25° 15'	5° 26'	28° 47'	T 2
W 3	9 28 23	23° 32' 32"	17° 52'	20° 29'	5° 36'	19° 57'	19° 48'	7° 29'	4° 45'	24° 22'	5° 13'	26° 19'	25° 11'	5° 33'	28° 52'	W 3
T 4	9 32 20	24° 33' 00"	1° 42'	22° 17'	6° 45'	20° 43'	19° 42'	7° 35'	4° 46'	24° 24'	5° 15'	26° 19'	25° 8'	5° 40'	28° 57'	T 4
F 5	9 36 16	25° 33' 28"	15° 48'	24° 6'	7° 55'	21° 28'	19° 35'	7° 40'	4° 48'	24° 26'	5° 16'	26° 20'	25° 5'	5° 46'	29° 1'	F 5
S 6	9 40 13	26° 33' 54"	0° 3'	25° 56'	9° 4'	22° 14'	19° 29'	7° 46'	4° 50'	24° 29'	5° 18'	26° 20'	25° 2'	5° 53'	29° 6'	S 6
S 7	9 44 9	27° 34' 18"	14° 43'	27° 46'	10° 13'	23° 0'	19° 22'	7° 51'	4° 51'	24° 31'	5° 19'	26° 18'	24° 59'	6° 0'	29° 11'	S 7
M 8	9 48 6	28° 34' 41"	29° 26'	29° 38'	11° 22'	23° 45'	19° 15'	7° 56'	4° 53'	24° 33'	5° 21'	26° 15'	24° 55'	6° 6'	29° 15'	M 8
T 9	9 52 2	29° 35' 03"	14° 11'	1° 30'	12° 31'	24° 31'	19° 8'	8° 2'	4° 55'	24° 35'	5° 22'	26° 8'	24° 52'	6° 13'	29° 20'	T 9
W 10	9 55 59	0° 35' 23"	28° 52'	3° 23'	13° 40'	25° 17'	19° 1'	8° 7'	4° 57'	24° 38'	5° 24'	25° 59'	24° 49'	6° 19'	29° 25'	W 10
T 11	9 59 55	1° 35' 41"	13° 11'	5° 17'	14° 49'	26° 2'	18° 54'	8° 12'	4° 59'	24° 40'	5° 25'	25° 48'	24° 46'	6° 26'	29° 29'	T 11
F 12	10 3 52	2° 35' 57"	27° 28'	7° 11'	15° 57'	26° 48'	18° 47'	8° 17'	5° 1'	24° 42'	5° 26'	25° 37'	24° 43'	6° 33'	29° 34'	F 12
S 13	10 7 49	3° 36' 11"	11° 12'	9° 6'	17° 5'	27° 34'	18° 40'	8° 22'	5° 3'	24° 44'	5° 28'	25° 27'	24° 40'	6° 39'	29° 38'	S 13
S 14	10 11 45	4° 36' 23"	24° 29'	11° 1'	18° 13'	28° 20'	18° 32'	8° 27'	5° 5'	24° 47'	5° 29'	25° 19'	24° 36'	6° 46'	29° 43'	S 14
M 15	10 15 42	5° 36' 33"	7° 22'	12° 57'	19° 21'	29° 6'	18° 25'	8° 32'	5° 7'	24° 49'	5° 30'	25° 13'	24° 33'	6° 53'	29° 47'	M 15
T 16	10 19 38	6° 36' 41"	19° 51'	14° 52'	20° 29'	29° 52'	18° 17'	8° 37'	5° 9'	24° 51'	5° 31'	25° 9'	24° 30'	6° 59'	29° 51'	T 16
W 17	10 23 35	7° 36' 47"	2° 11'	16° 47'	21° 36'	0° 37'	18° 10'	8° 41'	5° 11'	24° 53'	5° 33'	25° 8'	24° 27'	7° 6'	29° 56'	W 17
T 18	10 27 31	8° 36' 51"	13° 59'	18° 42'	22° 43'	1° 23'	18° 2'	8° 46'	5° 13'	24° 56'	5° 34'	25° 8'	24° 24'	7° 13'	0° 0'	T 18
F 19	10 31 28	9° 36' 53"	25° 49'	20° 36'	23° 51'	2° 9'	17° 55'	8° 51'	5° 16'	24° 58'	5° 35'	25° 8'	24° 21'	7° 19'	0° 4'	F 19
S 20	10 35 24	10° 36' 52"	7° 36'	22° 29'	24° 57'	2° 55'	17° 47'	8° 55'	5° 18'	25° 0'	5° 36'	25° 8'	24° 17'	7° 26'	0° 9'	S 20
S 21	10 39 21	11° 36' 50"	19° 25'	24° 21'	26° 4'	3° 41'	17° 39'	9° 0'	5° 20'	25° 2'	5° 37'	25° 5'	24° 14'	7° 33'	0° 13'	S 21
M 22	10 43 18	12° 36' 45"	1° 22'	26° 10'	27° 10'	4° 27'	17° 31'	9° 4'	5° 23'	25° 4'	5° 38'	25° 0'	24° 11'	7° 39'	0° 17'	M 22
T 23	10 47 14	13° 36' 38"	13° 30'	27° 57'	28° 16'	5° 13'	17° 24'	9° 8'	5° 25'	25° 7'	5° 39'	24° 52'	24° 8'	7° 46'	0° 21'	T 23
W 24	10 51 11	14° 36' 29"	25° 51'	29° 42'	29° 22'	5° 59'	17° 16'	9° 12'	5° 28'	25° 9'	5° 40'	24° 42'	24° 5'	7° 53'	0° 25'	W 24
T 25	10 55 7	15° 36' 17"	8° 27'	1° 23'	0° 28'	6° 45'	17° 8'	9° 17'	5° 30'	25° 11'	5° 41'	24° 29'	24° 1'	7° 59'	0° 29'	T 25
F 26	10 59 4	16° 36' 04"	21° 18'	3° 1'	1° 33'	7° 31'	17° 0'	9° 21'	5° 33'	25° 13'	5° 42'	24° 16'	23° 58'	8° 6'	0° 33'	F 26
S 27	11 3 0	17° 35' 49"	4° 23'	4° 34'	2° 38'	8° 17'	16° 53'	9° 25'	5° 35'	25° 15'	5° 43'	24° 3'	23° 55'	8° 12'	0° 37'	S 27
S 28	11 6 57	18° 35' 32"	17° 41'	6° 2'	3° 43'	9° 3'	16° 45'	9° 28'	5° 38'	25° 17'	5° 44'	23° 51'	23° 52'	8° 19'	0° 41'	S 28

Delta T = 251.49 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1518

geocentric

MARCH 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 10 53	19°35'13	1°11' 9	7°26' 26	4°48' 48	9°49' 49	16°37' 37	9°32' 32	5°40' 40	25°20' 20	5°45' 45	23°42' 42	23°49' 49	8°26' 26	0°45' 45	M 1
T 2	11 14 50	20°34'52	14°48' 8	8°43' 43	5°52' 52	10°35' 35	16°29' 29	9°36' 36	5°43' 43	25°22' 22	5°46' 46	23°36' 36	23°46' 46	8°32' 32	0°48' 48	T 2
W 3	11 18 46	21°34'29	28°34' 9	9°55' 55	6°56' 56	11°22' 22	16°21' 21	9°40' 40	5°46' 46	25°24' 24	5°47' 47	23°32' 32	23°42' 42	8°39' 39	0°52' 52	W 3
T 4	11 22 43	22°34'05	12°28' 8	11° 0' 0	8° 0' 0	12° 8' 8	16°14' 14	9°43' 43	5°48' 48	25°26' 26	5°47' 47	23°31' 31	23°39' 39	8°46' 46	0°56' 56	T 4
F 5	11 26 40	23°33'39	26°29' 8	11°58' 58	9° 3' 3	12°54' 54	16° 6' 6	9°47' 47	5°51' 51	25°28' 28	5°48' 48	23°31' 31	23°36' 36	8°52' 52	0°59' 59	F 5
S 6	11 30 36	24°33'12	10°37' 3	12°49' 49	10° 6' 6	13°40' 40	15°58' 58	9°50' 50	5°54' 54	25°30' 30	5°49' 49	23°31' 31	23°33' 33	8°59' 59	1° 3' 3	S 6
S 7	11 34 33	25°32'42	24°52' 8	13°33' 33	11° 9' 9	14°26' 26	15°51' 51	9°53' 53	5°57' 57	25°32' 32	5°50' 50	23°29' 29	23°30' 30	9° 6' 6	1° 7' 7	S 7
M 8	11 38 29	26°32'11	9°10' 10	14° 9' 9	12°11' 11	15°12' 12	15°43' 43	9°57' 57	5°59' 59	25°34' 34	5°50' 50	23°24' 24	23°26' 26	9°12' 12	1°10' 10	M 8
T 9	11 42 26	27°31'38	23°28' 8	14°38' 38	13°13' 13	15°59' 59	15°36' 36	10° 0' 0	6° 2' 2	25°36' 36	5°51' 51	23°17' 17	23°23' 23	9°19' 19	1°13' 13	T 9
W10	11 46 22	28°31'03	7°43' 43	14°58' 58	14°15' 15	16°45' 45	15°28' 28	10° 3' 3	6° 5' 5	25°38' 38	5°52' 52	23° 7' 7	23°20' 20	9°26' 26	1°17' 17	W10
T 11	11 50 19	29°30'26	21°48' 8	15°12' 12	15°16' 16	17°31' 31	15°21' 21	10° 6' 6	6° 8' 8	25°40' 40	5°52' 52	22°55' 55	23°17' 17	9°32' 32	1°20' 20	T 11
F 12	11 54 15	0°29'47	5°39' 39	15°17' 17	16°17' 17	18°17' 17	15°13' 13	10° 9' 9	6°11' 11	25°42' 42	5°53' 53	22°42' 42	23°14' 14	9°39' 39	1°23' 23	F 12
S 13	11 58 12	1°29'05	19°11' 11	15°15' 15	17°18' 18	19° 3' 3	15° 6' 6	10°11' 11	6°14' 14	25°44' 44	5°53' 53	22°30' 30	23°11' 11	9°46' 46	1°27' 27	S 13
S 14	12 2 9	2°28'22	2°22' 22	15° 6' 6	18°18' 18	19°50' 50	14°59' 59	10°14' 14	6°17' 17	25°46' 46	5°54' 54	22°20' 20	23° 7' 7	9°52' 52	1°30' 30	S 14
M15	12 6 5	3°27'37	15°11' 11	14°50' 50	19°18' 18	20°36' 36	14°52' 52	10°17' 17	6°20' 20	25°48' 48	5°54' 54	22°13' 13	23° 4' 4	9°59' 59	1°33' 33	M15
T 16	12 10 2	4°26'49	27°40' 0	14°28' 28	20°17' 17	21°22' 22	14°45' 45	10°19' 19	6°23' 23	25°50' 50	5°55' 55	22° 8' 8	23° 1' 1	10° 6' 6	1°36' 36	T 16
W17	12 13 58	5°25'59	9°11' 11	13°59' 59	21°16' 16	22° 8' 8	14°38' 38	10°22' 22	6°26' 26	25°52' 52	5°55' 55	22° 6' 6	22°58' 58	10°12' 12	1°39' 39	W17
T 18	12 17 55	6°25'07	21°50' 0	13°26' 26	22°15' 15	22°54' 54	14°31' 31	10°24' 24	6°29' 29	25°53' 53	5°55' 55	22°D 5	22°55' 55	10°19' 19	1°42' 42	T 18
F 19	12 21 51	7°24'12	3°41' 41	12°48' 48	23°13' 13	23°41' 41	14°24' 24	10°26' 26	6°32' 32	25°55' 55	5°56' 56	22°R 5	22°52' 52	10°25' 25	1°45' 45	F 19
S 20	12 25 48	8°23'15	15°29' 9	12° 7' 7	24°10' 10	24°27' 27	14°18' 18	10°28' 28	6°36' 36	25°57' 57	5°56' 56	22° 5' 5	22°48' 48	10°32' 32	1°47' 47	S 20
S 21	12 29 44	9°22'16	27°20' 0	11°22' 22	25° 7' 7	25°13' 13	14°11' 11	10°31' 31	6°39' 39	25°59' 59	5°56' 56	22° 4' 4	22°45' 45	10°39' 39	1°50' 50	S 21
M22	12 33 41	10°21'14	9°20' 20	10°36' 36	26° 4' 4	25°59' 59	14° 5' 5	10°32' 32	6°42' 42	26° 1' 1	5°56' 56	22° 0' 0	22°42' 42	10°45' 45	1°53' 53	M22
T 23	12 37 38	11°20'10	21°32' 2	9°49' 49	27° 0' 0	26°45' 45	13°59' 59	10°34' 34	6°45' 45	26° 2' 2	5°57' 57	21°54' 54	22°39' 39	10°52' 52	1°55' 55	T 23
W24	12 41 34	12°19'04	4°11' 11	9° 2' 2	27°55' 55	27°32' 32	13°52' 52	10°36' 36	6°48' 48	26° 4' 4	5°57' 57	21°45' 45	22°36' 36	10°59' 59	1°58' 58	W24
T 25	12 45 31	13°17'56	16°48' 8	8°16' 16	28°50' 50	28°18' 18	13°46' 46	10°38' 38	6°52' 52	26° 6' 6	5°57' 57	21°35' 35	22°32' 32	11° 5' 5	2° 0' 0	T 25
F 26	12 49 27	14°16'45	29°55' 5	7°32' 32	29°44' 44	29° 4' 4	13°40' 40	10°39' 39	6°55' 55	26° 7' 7	5°57' 57	21°24' 24	22°29' 29	11°12' 12	2° 3' 3	F 26
S 27	12 53 24	15°15'32	13°20' 20	6°50' 50	0°11' 11	29°50' 50	13°35' 35	10°41' 41	6°58' 58	26° 9' 9	5°57' 57	21°12' 12	22°26' 26	11°19' 19	2° 5' 5	S 27
S 28	12 57 20	16°14'18	27° 2' 2	6°11' 11	1°31' 31	0°11' 11	13°29' 29	10°42' 42	7° 1' 1	26°11' 11	5°57' 57	21° 2' 2	22°23' 23	11°25' 25	2° 7' 7	S 28
M29	13 1 17	17°13'01	10°11' 11	5°36' 36	2°23' 23	1°23' 23	13°24' 24	10°44' 44	7° 5' 5	26°12' 12	5°57' 57	20°55' 55	22°20' 20	11°32' 32	2°10' 10	M29
T 30	13 5 13	18°11'43	24°59' 9	5° 5' 5	3°15' 15	2° 9' 9	13°18' 18	10°45' 45	7° 8' 8	26°14' 14	5°57' 57	20°50' 50	22°17' 17	11°39' 39	2°12' 12	T 30
W31	13 9 10	19°10'22	9°11' 11	4°39' 39	4°11' 11	2°11' 11	13°13' 13	10°46' 46	7°11' 11	26°15' 15	5°57' 57	20°47' 47	22°13' 13	11°45' 45	2°14' 14	W31

Delta T = 251.32 sec

Julian Calendar 1 March 1518 == Greg. Calendar 11 March 1518

APRIL 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 13 7	20°30'00	23°18' 8	4°17' 17	4°11' 11	3°41' 41	13°R 8	10°34' 34	7°15' 15	26°17' 17	5°57' 57	20°D46	22°11' 11	11°52' 52	2°16' 16	T 1
F 2	13 17 3	21° 7'37	7°28' 28	4°11' 11	5°45' 45	4°27' 27	13°13' 13	10°48' 48	7°18' 18	26°19' 19	5°57' 57	20°14' 14	22° 7' 7	11°59' 59	2°18' 18	F 2
S 3	13 21 0	22° 6'12	21°37' 7	3°49' 49	6°34' 34	5°14' 14	12°58' 58	10°49' 49	7°21' 21	26°20' 20	5°57' 57	20°R48	22° 4' 4	12° 5' 5	2°20' 20	S 3
S 4	13 24 56	23° 4'45	5°43' 43	3°42' 42	7°21' 21	6° 0' 0	12°54' 54	10°49' 49	7°25' 25	26°21' 21	5°57' 57	20°47' 47	22° 1' 1	12°12' 12	2°22' 22	S 4
M 5	13 28 53	24° 3'16	19°44' 4	3°D41	8° 8' 8	6°46' 46	12°49' 49	10°50' 50	7°28' 28	26°23' 23	5°57' 57	20°44' 44	21°58' 58	12°19' 19	2°23' 23	M 5
T 6	13 32 49	25° 1'46	3°40' 40	3°45' 45	8°54' 54	7°32' 32	12°45' 45	10°50' 50	7°32' 32	26°24' 24	5°56' 56	20°39' 39	21°54' 54	12°25' 25	2°25' 25	T 6
W 7	13 36 46	26° 0'14	17°29' 9	3°53' 53	9°40' 40	8°18' 18	12°41' 41	10°51' 51	7°35' 35	26°26' 26	5°56' 56	20°32' 32	21°51' 51	12°32' 32	2°27' 27	W 7
T 8	13 40 42	26°58'40	1°17' 17	4° 7' 7	10°24' 24	9° 4' 4	12°37' 37	10°51' 51	7°38' 38	26°27' 27	5°56' 56	20°23' 23	21°48' 48	12°39' 39	2°28' 28	T 8
F 9	13 44 39	27°57'05	14°33' 3	4°25' 25	11° 7' 7	9°50' 50	12°33' 33	10°51' 51	7°42' 42	26°28' 28	5°56' 56	20°14' 14	21°45' 45	12°45' 45	2°30' 30	F 9
S 10	13 48 36	28°55'28	27°43' 3	4°48' 48	11°49' 49	10°36' 36	12°30' 30	10°51' 51	7°45' 45	26°30' 30	5°55' 55	20° 6' 6	21°42' 42	12°52' 52	2°31' 31	S 10
S 11	13 52 32	29°53'49	10°38' 8	5°15' 15	12°31' 31	11°22' 22	12°26' 26	10°R52	7°49' 49	26°31' 31	5°55' 55	19°58' 58	21°38' 38	12°59' 59	2°32' 32	S 11
M12	13 56 29	0°52'08	23°15' 5	5°46' 46	13°11' 11	12° 8' 8	12°23' 23	10°51' 51	7°52' 52	26°32' 32	5°54' 54	19°53' 53	21°35' 35	13° 5' 5	2°34' 34	M12
T 13	14 0 25	1°50'25	5°11' 11	6°22' 22	13°50' 50	12°54' 54	12°20' 20	10°51' 51	7°56' 56	26°33' 33	5°54' 54	19°50' 50	21°32' 32	13°12' 12	2°35' 35	T 13
W14	14 4 22	2°48'40	17°45' 5	7° 1' 1	14°28' 28	13°40' 40	12°17' 17	10°51' 51	7°59' 59	26°35' 35	5°54' 54	19°D49	21°29' 29	13°18' 18	2°36' 36	W14
T 15	14 8 18	3°46'54	29°42' 2	7°44' 44	15° 4' 4	14°26' 26	12°14' 14	10°51' 51	8° 3' 3	26°36' 36	5°53' 53	19°49' 49	21°26' 26	13°25' 25	2°37' 37	T 15
F 16	14 12 15	4°45'05	11°33' 3	8°31' 31	15°39' 39	15°12' 12	12°12' 12	10°50' 50	8° 6' 6	26°37' 37	5°53' 53	19°50' 50	21°23' 23	13°32' 32	2°38' 38	F 16
S 17	14 16 11	5°43'14	23°21' 1	9°21' 21	16°13' 13	15°58' 58	12° 9' 9	10°50' 50	8° 9' 9	26°38' 38	5°52' 52	19°52' 52	21°19' 19	13°38' 38	2°39' 39	S 17
S 18	14 20 8	6°41'22	5°11' 11	10°14' 14	16°46' 46	16°44' 44	12° 7' 7	10°49' 49	8°13' 13	26°39' 39	5°51' 51	19°R52	21°16' 16	13°45' 45	2°40' 40	S 18
M19	14 24 5	7°39'27	17°13' 3	11°10' 10	17°17' 17	17°30' 30	12° 5' 5	10°48' 48	8°16' 16	26°40' 40	5°51' 51	19°52' 52	21°13' 13	13°52' 52	2°40' 40	M19
T 20	14 28 1	8°37'31	29°27' 7	12°10' 10	17°47' 47	18°16' 16	12° 3' 3	10°47' 47	8°20' 20	26°41' 41	5°50' 50	19°50' 50	21°10' 10	13°58' 58	2°41' 41	T 20
W21	14 31 58	9°35'32	11°11' 11	13°12' 12	18°15' 15	19° 2' 2	12° 1' 1	10°46' 46	8°23' 23	26°42' 42	5°50' 50	19°46' 46	21° 7' 7	14° 5' 5	2°42' 42	W21
T 22	14 35 54	10°33'32	24°50' 0	14°18' 18	18°41' 41	19°47' 47	12° 0' 0	10°45' 45	8°27' 27	26°43' 43	5°49' 49	19°41' 41	21° 3' 3	14°12' 12	2°42' 42	T 22
F 23	14 39 51	11°31'29	8°41' 41	15°26' 26	19° 6' 6	20°33' 33	11°59' 59	10°44' 44	8°30' 30	26°44' 44	5°48' 48	19°35' 35	21° 0' 0	14°18' 18	2°43' 43	F 23
S 24	14 43 47	12°29'25	21° 42' 42	16°36' 36	19°29' 29	21° 5' 5	11°58' 58	10°43' 43	8°34' 34	26°45' 45	5°47' 47	19°29' 29	20°57' 57	14°25' 25	2°43' 43	S 24
S 25	14 47 44	13°27'19	5°11' 11	17°49' 49	19°50' 50	22° 1' 1	11°57' 57	10°42' 42	8°37' 37	26°46' 46	5°47' 47	19°23' 23	20°54' 54	14°32' 32	2°44' 44	S 25
M26	14 51 40	14°25'12	19°57' 7	19° 5' 5	20°10' 10	22°50' 50	11°56' 56	10°40' 40	8°41' 41	26°46' 46	5°46' 46	19°19' 19	20°51' 51	14°38' 38	2°44' 44	M26
T 27	14 55 37	15°23'03	4°26' 26	20°23' 23	20°27' 27	23°36' 36	11°55' 55	10°39' 39	8°44' 44	26°47' 47	5°45' 45	19°17' 17	20°48' 48	14°45' 45	2°44' 44	T 27
W28	14 59 33	16°20'53	19° 0' 0	21°44' 44	20°43' 43	24°21' 21	11°55' 55	10°37' 37	8°48' 48	26°48' 48	5°44' 44	19°D16	20°44' 44	14°52' 52	2°44' 44	W28
T 29	15 3 30	17°18'42	3°35' 35	23° 7' 7	20°56' 56	25° 7' 7	11°55' 55	10°36' 36	8°51' 51	26°49' 49	5°43' 43	19°17' 17	20°41' 41	14°58' 58	2°R44	T 29
F 30	15 7 27	18°16'29	18°35' 5	24°37' 37	21°11' 11	25°11' 11	11°D55' 55	10°33' 33	8°54' 54	26°49' 49	5°43' 43	19°11' 11	20°11' 11	15°58' 58	2°44' 44	F 30

ASTRODIENST EPHEMERIS for the year 1518

geocentric

MAY 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 11 23	19°14'15	2°26	26°0	21°17	26°38	11°55	10°R32	8°58	26°50	5°R42	19°19	20°35	15°12	2°R44	S 1
S 2	15 15 20	20°12'00	16°36	27°30	21°24	27°24	11°55	10°30	9° 1	26°51	5°41	19°R20	20°32	15°18	2°44	S 2
M 3	15 19 16	21° 9'44	0°33	29° 2	21°29	28° 9	11°56	10°28	9° 5	26°51	5°40	19°20	20°29	15°25	2°44	M 3
T 4	15 23 13	22° 7'27	14°17	0°36	21°32	28°55	11°56	10°26	9° 8	26°52	5°39	19°18	20°25	15°32	2°43	T 4
W 5	15 27 9	23° 5'09	27°46	2°13	21°R32	29°40	11°57	10°24	9°12	26°52	5°38	19°16	20°22	15°38	2°43	W 5
T 6	15 31 6	24° 2'49	11°Y 2	3°52	21°30	0°Y25	11°58	10°21	9°15	26°53	5°37	19°12	20°19	15°45	2°42	T 6
F 7	15 35 3	25° 0'29	24° 4	5°33	21°25	1°11	12° 0	10°19	9°18	26°53	5°36	19° 8	20°16	15°52	2°42	F 7
S 8	15 38 59	25°58'07	6°52	7°17	21°19	1°56	12° 1	10°17	9°22	26°54	5°35	19° 5	20°13	15°58	2°41	S 8
S 9	15 42 56	26°55'44	19°26	9° 2	21° 9	2°41	12° 3	10°14	9°25	26°54	5°34	19° 2	20° 9	16° 5	2°41	S 9
M10	15 46 52	27°53'20	1°14	10°50	20°58	3°26	12° 4	10°11	9°28	26°55	5°33	19° 0	20° 6	16°12	2°40	M10
T 11	15 50 49	28°50'55	13°58	12°40	20°44	4°11	12° 6	10° 9	9°32	26°55	5°31	18°D59	20° 3	16°18	2°39	T 11
W12	15 54 45	29°48'29	25°59	14°32	20°27	4°56	12° 8	10° 6	9°35	26°55	5°30	18°59	20° 0	16°25	2°38	W12
T 13	15 58 42	0°14'02	7°52	16°26	20° 9	5°41	12°11	10° 3	9°38	26°55	5°29	19° 0	19°57	16°32	2°37	T 13
F 14	16 2 38	1°43'33	19°42	18°23	19°48	6°26	12°13	10° 0	9°42	26°56	5°28	19° 1	19°54	16°38	2°36	F 14
S 15	16 6 35	2°41'03	1°30	20°21	19°24	7°11	12°16	9°57	9°45	26°56	5°27	19° 3	19°50	16°45	2°35	S 15
S 16	16 10 32	3°38'31	13°22	22°22	18°59	7°56	12°19	9°54	9°48	26°56	5°26	19° 4	19°47	16°52	2°34	S 16
M17	16 14 28	4°35'59	25°22	24°24	18°31	8°41	12°22	9°51	9°51	26°56	5°24	19° 5	19°44	16°58	2°33	M17
T 18	16 18 25	5°33'25	7°34	26°29	18° 2	9°26	12°25	9°48	9°55	26°56	5°23	19°R 5	19°41	17° 5	2°32	T 18
W19	16 22 21	6°30'50	20° 3	28°35	17°31	10°11	12°28	9°45	9°58	26°56	5°22	19° 5	19°38	17°12	2°30	W19
T 20	16 26 18	7°28'13	2°54	0°14	16°59	10°55	12°32	9°41	10° 1	26°56	5°21	19° 4	19°35	17°18	2°29	T 20
F 21	16 30 14	8°25'35	16° 8	2°51	16°25	11°40	12°35	9°38	10° 4	26°R56	5°19	19° 3	19°31	17°25	2°27	F 21
S 22	16 34 11	9°22'57	29°48	5° 1	15°49	12°24	12°39	9°34	10° 7	26°56	5°18	19° 1	19°28	17°32	2°26	S 22
S 23	16 38 7	10°20'17	13°53	7°12	15°13	13° 9	12°43	9°31	10°10	26°56	5°17	19° 0	19°25	17°38	2°24	S 23
M24	16 42 4	11°17'36	28°21	9°23	14°36	13°53	12°47	9°27	10°14	26°56	5°15	19° 0	19°22	17°45	2°23	M24
T 25	16 46 1	12°14'55	13°7	11°35	13°59	14°38	12°51	9°24	10°17	26°56	5°14	18°D59	19°19	17°52	2°21	T 25
W26	16 49 57	13°12'13	28° 3	13°47	13°21	15°22	12°56	9°20	10°20	26°56	5°13	18°59	19°15	17°58	2°19	W26
T 27	16 53 54	14° 9'30	13°3	15°59	12°43	16° 6	13° 1	9°16	10°23	26°56	5°11	19° 0	19°12	18° 5	2°17	T 27
F 28	16 57 50	15° 6'47	27°54	18°10	12° 6	16°51	13° 5	9°13	10°26	26°56	5°10	19° 0	19° 9	18°12	2°15	F 28
S 29	17 1 47	16° 4'03	12°35	20°21	11°29	17°35	13°10	9° 9	10°29	26°55	5° 8	19° 0	19° 6	18°18	2°13	S 29
S 30	17 5 43	17° 1'19	26°58	22°31	10°53	18°19	13°15	9° 5	10°32	26°55	5° 7	19° 0	19° 3	18°25	2°11	S 30
M31	17 9 40	17°58'35	11°1	24°13	10°17	19°Y 3	13°20	9°3	10°35	26°55	5°6	19°1	19°1	18°32	2°9	M31

Delta T = 250.94 sec

Julian Calendar 1 May 1518 == Greg. Calendar 11 May 1518

JUNE 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 13 36	18°15'50	24°42	26°14	9°R43	19°Y47	13°26	8°R57	10°37	26°R54	5°R 4	19°11	18°15	18°38	2°R 7	T 1
W 2	17 17 33	19°53'05	8°Y 3	28°52	9°10	20°31	13°31	8°35	10°40	26°54	5°3	19° 0	18°53	18°45	2°5	W 2
T 3	17 21 30	20°50'20	21° 5	0°56	8°39	21°15	13°37	8°49	10°43	26°54	5° 1	19° 1	18°50	18°51	2° 3	T 3
F 4	17 25 26	21°47'34	3°49	2°59	8° 9	21°59	13°43	8°45	10°46	26°53	5° 0	19° 1	18°47	18°58	2° 1	F 4
S 5	17 29 23	22°44'49	16°19	4°59	7°41	22°42	13°49	8°41	10°49	26°53	4°58	19° 1	18°44	19° 5	1°58	S 5
S 6	17 33 19	23°42'03	28°36	6°57	7°16	23°26	13°55	8°37	10°52	26°52	4°57	19° 2	18°41	19°11	1°56	S 6
M 7	17 37 16	24°39'17	10°14	8°54	6°52	24°10	14° 1	8°32	10°54	26°52	4°56	19° 2	18°37	19°18	1°53	M 7
T 8	17 41 12	25°36'30	22°43	10°48	6°30	24°53	14° 7	8°28	10°57	26°51	4°54	19°R 2	18°34	19°25	1°51	T 8
W 9	17 45 9	26°33'44	4°37	12°40	6°11	25°36	14°14	8°24	11° 0	26°51	4°53	19° 2	18°31	19°31	1°48	W 9
T 10	17 49 5	27°30'57	16°26	14°30	5°54	26°20	14°21	8°20	11° 2	26°50	4°51	19° 1	18°28	19°38	1°46	T 10
F 11	17 53 2	28°28'10	28°15	16°18	5°39	27° 3	14°27	8°15	11° 5	26°49	4°50	19° 0	18°25	19°45	1°43	F 11
S 12	17 56 59	29°25'22	10°4	18° 4	5°27	27°46	14°34	8°11	11° 8	26°49	4°48	18°58	18°21	19°51	1°40	S 12
S 13	18 0 55	0°22'34	21°57	19°47	5°17	28°29	14°41	8° 7	11°10	26°48	4°47	18°57	18°18	19°58	1°38	S 13
M14	18 4 52	1°19'46	3°58	21°28	5° 9	29°12	14°49	8° 2	11°13	26°47	4°45	18°55	18°15	20° 5	1°35	M14
T 15	18 8 48	2°16'57	16°11	23° 7	5° 4	29°55	14°56	7°58	11°15	26°47	4°44	18°54	18°12	20°11	1°32	T 15
W16	18 12 45	3°14'08	28°38	24°44	5° 1	0°38	15° 3	7°53	11°17	26°46	4°42	18°D54	18° 9	20°18	1°29	W16
T 17	18 16 41	4°11'18	11°24	26°19	5°D 1	1°21	15°11	7°49	11°20	26°45	4°41	18°54	18° 6	20°25	1°26	T 17
F 18	18 20 38	5° 8'28	24°33	27°51	5° 3	2° 4	15°18	7°45	11°22	26°44	4°39	18°55	18° 2	20°31	1°23	F 18
S 19	18 24 34	6° 5'39	8°7	29°21	5° 7	2°46	15°26	7°40	11°25	26°43	4°38	18°56	17°59	20°38	1°21	S 19
S 20	18 28 31	7° 2'48	22° 8	0°49	5°13	3°29	15°34	7°36	11°27	26°42	4°36	18°57	17°56	20°45	1°18	S 20
M21	18 32 28	7°59'58	6°35	2°15	5°22	4°11	15°42	7°31	11°29	26°41	4°35	18°58	17°53	20°51	1°14	M21
T 22	18 36 24	8°57'08	21°24	3°38	5°32	4°54	15°50	7°27	11°31	26°40	4°33	18°R58	17°50	20°58	1°11	T 22
W23	18 40 21	9°54'18	6°39	4°59	5°45	5°36	15°59	7°23	11°34	26°39	4°32	18°57	17°47	21° 5	1° 8	W23
T 24	18 44 17	10°51'28	21°42	6°17	5°59	6°18	16° 7	7°18	11°36	26°38	4°30	18°56	17°43	21°12	1° 5	T 24
F 25	18 48 14	11°48'38	6°52	7°34	6°16	7° 0	16°15	7°14	11°38	26°37	4°29	18°53	17°40	21°18	1° 2	F 25
S 26	18 52 10	12°45'49	21°50	8°47	6°34	7°42	16°24	7° 9	11°40	26°36	4°27	18°50	17°37	21°25	0°59	S 26
S 27	18 56 7	13°43'00	6°29	9°58	6°55	8°24	16°33	7° 5	11°42	26°35	4°26	18°47	17°34	21°32	0°56	S 27
M28	19 0 4	14°40'12	20°43	11° 7	7°17	9° 6	16°42	7° 1	11°44	26°34	4°24	18°45	17°31	21°38	0°52	M28
T 29	19 4 0	15°37'24	4°Y31	12°12	7°40	9°48	16°50	6°56	11°46	26°33	4°23	18°43	17°27	21°45	0°49	T 29
W30	19 7 57	16°34'37	17°Y52	13°15	8°11	10°8	17°10	6°52	11°48	26°32	4°21	18°D43	17°12	21°52	0°46	W30

Delta T = 250.75 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1518

geocentric

JULY 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 11 53	17°31'50	08°48	14°15	8°33	11°11	17°09	6°R48	11°50	26°R31	4°R20	18°44	17°21	21°58	0°R43	T 1
F 2	19 15 50	18°29'05	13°24	15°13	9° 2	11°52	17°18	6°343	11°51	26°30	4°18	18°45	17°18	22° 5	0°39	F 2
S 3	19 19 46	19°26'20	25°44	16° 7	9°32	12°34	17°27	6°39	11°53	26°28	4°17	18°46	17°15	22°12	0°36	S 3
S 4	19 23 43	20°23'35	7°150	16°57	10° 3	13°15	17°37	6°35	11°55	26°27	4°15	18°48	17°12	22°18	0°33	S 4
M 5	19 27 39	21°20'52	19°47	17°45	10°36	13°56	17°46	6°31	11°57	26°26	4°14	18°R48	17° 8	22°25	0°29	M 5
T 6	19 31 36	22°18'09	1°39	18°29	11°10	14°37	17°56	6°27	11°58	26°25	4°13	18°47	17° 5	22°32	0°26	T 6
W 7	19 35 33	23°15'27	13°28	19° 9	11°45	15°18	18° 5	6°22	12° 0	26°23	4°11	18°45	17° 2	22°38	0°23	W 7
T 8	19 39 29	24°12'46	25°16	19°45	12°22	15°59	18°15	6°18	12° 2	26°22	4°10	18°41	16°59	22°45	0°19	T 8
F 9	19 43 26	25°10'05	7°6	20°18	13° 0	16°40	18°25	6°14	12° 3	26°21	4° 8	18°35	16°56	22°52	0°16	F 9
S 10	19 47 22	26° 7'25	18°59	20°46	13°39	17°20	18°35	6°10	12° 5	26°19	4° 7	18°29	16°53	22°58	0°12	S 10
S 11	19 51 19	27° 4'46	0°58	21°10	14°19	18° 1	18°45	6° 6	12° 6	26°18	4° 6	18°22	16°49	23° 5	0° 9	S 11
M12	19 55 15	28° 2'07	13° 5	21°30	15° 0	18°41	18°55	6° 2	12° 7	26°17	4° 4	18°15	16°46	23°12	0° 5	M12
T 13	19 59 12	28°59'28	25°21	21°45	15°42	19°21	19° 6	5°58	12° 9	26°15	4° 3	18° 9	16°43	23°18	0° 2	T 13
W14	20 3 8	29°56'51	7°50	21°55	16°25	20° 1	19°16	5°55	12°10	26°14	4° 2	18° 5	16°40	23°25	29°59	W14
T 15	20 7 5	0°54'13	20°35	22° 0	17° 9	20°41	19°26	5°51	12°11	26°12	4° 0	18° 3	16°37	23°32	29°55	T 15
F 16	20 11 2	1°51'37	3°39	22°R 0	17°53	21°21	19°37	5°47	12°12	26°11	3°59	18°D 3	16°33	23°38	29°52	F 16
S 17	20 14 58	2°49'01	17° 5	21°55	18°39	22° 1	19°47	5°43	12°14	26° 9	3°58	18° 3	16°30	23°45	29°48	S 17
S 18	20 18 55	3°46'26	0°56	21°44	19°25	22°41	19°58	5°40	12°15	26° 8	3°56	18° 5	16°27	23°52	29°45	S 18
M19	20 22 51	4°43'51	15°12	21°29	20°13	23°20	20° 9	5°36	12°16	26° 6	3°55	18°R 5	16°24	23°58	29°42	M19
T 20	20 26 48	5°41'18	29°51	21° 8	21° 1	23°59	20°20	5°33	12°17	26° 5	3°54	18° 5	16°21	24° 5	29°38	T 20
W21	20 30 44	6°38'45	14°51	20°42	21°50	24°39	20°30	5°29	12°18	26° 3	3°53	18° 2	16°18	24°12	29°35	W21
T 22	20 34 41	7°36'13	0°2	20°11	22°39	25°18	20°41	5°26	12°19	26° 2	3°52	17°58	16°14	24°18	29°31	T 22
F 23	20 38 37	8°33'42	15°17	19°36	23°30	25°57	20°52	5°22	12°20	26° 0	3°50	17°52	16°11	24°25	29°28	F 23
S 24	20 42 34	9°31'12	0°23	18°57	24°20	26°36	21° 4	5°19	12°20	25°59	3°49	17°44	16° 8	24°32	29°25	S 24
S 25	20 46 31	10°28'44	15°12	18°14	25°12	27°14	21°15	5°16	12°21	25°57	3°48	17°36	16° 5	24°38	29°21	S 25
M26	20 50 27	11°26'16	29°36	17°28	26° 4	27°53	21°26	5°13	12°22	25°56	3°47	17°29	16° 2	24°45	29°18	M26
T 27	20 54 24	12°23'50	13°31	16°40	26°57	28°31	21°37	5°10	12°23	25°54	3°46	17°24	15°59	24°52	29°15	T 27
W28	20 58 20	13°21'26	26°57	15°51	27°51	29°10	21°49	5° 7	12°23	25°52	3°45	17°21	15°55	24°58	29°12	W28
T 29	21 2 17	14°19'03	9°55	15° 1	28°45	29°48	22° 0	5° 4	12°24	25°51	3°44	17°D19	15°52	25° 5	29° 8	T 29
F 30	21 6 13	15°16'42	22°30	14°12	29°39	0°26	22°11	5° 1	12°24	25°49	3°43	17°19	15°49	25°12	29° 5	F 30
S 31	21 10 10	16°14'22	4°46	13°24	0°34	1°11	22°23	4°58	12°25	25°48	3°42	17°20	15°46	25°18	29°2	S 31

Delta T = 250.56 sec

Julian Calendar 1 July 1518 == Greg. Calendar 11 July 1518

AUGUST 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 14 6	17°12'04	16°48	12°R38	1°30	1°11	22°35	4°R56	12°25	25°R44	3°R41	17°R21	15°43	25°25	28°R59	S 1
M 2	21 18 3	18° 9'47	28°41	11°56	2°26	2°19	22°46	4°353	12°26	25°44	3°40	17°20	15°39	25°32	28°56	M 2
T 3	21 22 0	19° 7'33	10°29	11°18	3°23	2°56	22°58	4°50	12°26	25°43	3°39	17°17	15°36	25°38	28°52	T 3
W 4	21 25 56	20° 5'19	22°17	10°45	4°20	3°34	23°10	4°48	12°26	25°41	3°38	17°12	15°33	25°45	28°49	W 4
T 5	21 29 53	21° 3'07	4°6	10°18	5°18	4°11	23°22	4°46	12°26	25°40	3°37	17° 4	15°30	25°52	28°46	T 5
F 6	21 33 49	22° 0'57	16° 1	9°57	6°15	4°48	23°33	4°43	12°26	25°38	3°36	16°54	15°27	25°58	28°43	F 6
S 7	21 37 46	22°58'48	28° 2	9°43	7°14	5°25	23°45	4°41	12°27	25°36	3°35	16°43	15°24	26° 5	28°40	S 7
S 8	21 41 42	23°56'41	10°11	9°D37	8°13	6° 1	23°57	4°39	12°27	25°35	3°34	16°30	15°20	26°12	28°37	S 8
M 9	21 45 39	24°54'35	22°28	9°39	9°12	6°38	24° 9	4°37	12°R27	25°33	3°34	16°18	15°17	26°19	28°34	M 9
T 10	21 49 35	25°52'30	4°55	9°48	10°12	7°14	24°21	4°35	12°27	25°31	3°33	16° 8	15°14	26°25	28°31	T 10
W11	21 53 32	26°50'27	17°33	10° 6	11°12	7°50	24°34	4°33	12°27	25°30	3°32	16° 0	15°11	26°32	28°29	W11
T 12	21 57 29	27°48'25	0°24	10°31	12°12	8°26	24°46	4°31	12°26	25°28	3°31	15°54	15° 8	26°39	28°26	T 12
F 13	22 1 25	28°46'25	13°29	11° 5	13°13	9° 1	24°58	4°30	12°26	25°26	3°31	15°52	15° 4	26°45	28°23	F 13
S 14	22 5 22	29°44'26	26°52	11°46	14°14	9°37	25°10	4°28	12°26	25°25	3°30	15°D51	15° 1	26°52	28°20	S 14
S 15	22 9 18	0°42'28	10°34	12°35	15°15	10°12	25°23	4°26	12°26	25°23	3°29	15°R51	14°58	26°59	28°18	S 15
M16	22 13 15	1°40'32	24°37	13°32	16°17	10°47	25°35	4°25	12°25	25°21	3°29	15°51	14°55	27° 5	28°15	M16
T 17	22 17 11	2°38'37	9°3	14°35	17°19	11°22	25°47	4°24	12°25	25°20	3°28	15°49	14°52	27°12	28°12	T 17
W18	22 21 8	3°36'44	23°44	15°45	18°21	11°57	26° 0	4°23	12°25	25°18	3°27	15°45	14°49	27°19	28°10	W18
T 19	22 25 4	4°34'52	8°40	17° 2	19°24	12°32	26°12	4°21	12°24	25°17	3°27	15°38	14°45	27°25	28° 7	T 19
F 20	22 29 1	5°33'01	23°43	18°24	20°27	13° 6	26°25	4°20	12°24	25°15	3°26	15°29	14°42	27°32	28° 5	F 20
S 21	22 32 58	6°31'13	8°41	19°51	21°30	13°40	26°37	4°19	12°23	25°13	3°26	15°19	14°39	27°39	28° 3	S 21
S 22	22 36 54	7°29'26	23°27	21°23	22°33	14°14	26°50	4°19	12°22	25°12	3°25	15° 7	14°36	27°45	28° 0	S 22
M23	22 40 51	8°27'41	7°51	22°59	23°37	14°48	27° 2	4°18	12°22	25°10	3°25	14°57	14°33	27°52	27°58	M23
T 24	22 44 47	9°25'57	21°49	24°39	24°41	15°21	27°15	4°17	12°21	25° 9	3°25	14°49	14°30	27°59	27°56	T 24
W25	22 48 44	10°24'16	5°19	26°22	25°46	15°54	27°28	4°17	12°20	25° 7	3°24	14°43	14°26	28° 5	27°54	W25
T 26	22 52 40	11°22'37	18°21	28° 8	26°50	16°28	27°40	4°16	12°19	25° 5	3°24	14°39	14°23	28°12	27°51	T 26
F 27	22 56 37	12°21'01	0°58	29°56	27°55	17° 0	27°53	4°16	12°19	25° 4	3°24	14°38	14°20	28°19	27°49	F 27
S 28	23 0 33	13°19'26	13°15	1°45	29° 0	17°33	28° 6	4°15	12°18	25° 2	3°23	14°37	14°17	28°25	27°47	S 28
S 29	23 4 30	14°17'54	25°17	3°36	0°6	18° 5	28°18	4°15	12°17	25° 1	3°23	14°37	14°14	28°32	27°45	S 29
M30	23 8 27	15°16'23	7°10	5°27	1°11	18°37	28°31	4°D15	12°16	24°59	3°23	14°36	14°10	28°39	27°44	M30
T 31	23 12 23	16°14'55	18°59	7°20	2°17	19°11	28°44	4°35	12°15	24°58	3°23	14°33	14°11	28°46	27°42	T 31

Delta T = 250.37 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1518

geocentric

SEPTEMBER 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	23 16 20	17 ¹⁷ 13'29	0 ⁰ 48	9 ¹⁷ 12	3 ⁰ 23	19 ¹¹ 41	28 ¹⁷ 57	4 ³ 15	12 ¹² R14	24 ²⁴ R56	3 ³ R22	14 ¹⁴ R27	14 ¹⁴ II 4	28 ²⁸ 552	27 ²⁷ R40	W 1
T 2	23 20 16	18 ¹⁸ 12'06	12 ¹² 41	11 ¹¹ 5	4 ⁴ 29	20 ²⁰ 12	29 ²⁹ 10	4 ⁴ 16	12 ¹² 812	24 ²⁴ 555	3 ³ 22	14 ¹⁴ II 18	14 ¹⁴ 1	28 ²⁸ 59	27 ²⁷ 38	T 2
F 3	23 24 13	19 ¹⁹ 10'44	24 ²⁴ 42	12 ¹² 58	5 ⁵ 36	20 ²⁰ 43	29 ²⁹ 23	4 ⁴ 16	12 ¹² 11	24 ²⁴ 53	3 ³ 22	14 ¹⁴ 7	13 ¹³ 58	29 ²⁹ 6	27 ²⁷ 37	F 3
S 4	23 28 9	20 ²⁰ 9'24	6 ⁶ 53	14 ¹⁴ 50	6 ⁶ 43	21 ²¹ 14	29 ²⁹ 35	4 ⁴ 16	12 ¹² 10	24 ²⁴ 52	3 ³ 22	13 ¹³ 54	13 ¹³ 55	29 ²⁹ 12	27 ²⁷ 35	S 4
S 5	23 32 6	21 ²¹ 8'06	19 ¹⁹ 14	16 ¹⁶ 42	7 ⁷ 50	21 ²¹ 45	29 ²⁹ 48	4 ⁴ 17	12 ¹² 9	24 ²⁴ 50	3 ³ 22	13 ¹³ 40	13 ¹³ 51	29 ²⁹ 19	27 ²⁷ 34	S 5
M 6	23 36 2	22 ²² 6'51	1 ¹ 47	18 ¹⁸ 33	8 ⁸ 57	22 ²² 15	0 ⁰ 1	4 ⁴ 17	12 ¹² 7	24 ²⁴ 49	3 ³ D22	13 ¹³ 27	13 ¹³ 48	29 ²⁹ 26	27 ²⁷ 32	M 6
T 7	23 39 59	23 ²³ 5'37	14 ¹⁴ 31	20 ²⁰ 24	10 ¹⁰ 4	22 ²² 45	0 ⁰ 14	4 ⁴ 18	12 ¹² 6	24 ²⁴ 48	3 ³ 22	13 ¹³ 15	13 ¹³ 45	29 ²⁹ 32	27 ²⁷ 31	T 7
W 8	23 43 55	24 ²⁴ 4'25	27 ²⁷ 25	22 ²² 14	11 ¹¹ 11	23 ²³ 15	0 ⁰ 27	4 ⁴ 19	12 ¹² 5	24 ²⁴ 46	3 ³ 22	13 ¹³ 6	13 ¹³ 42	29 ²⁹ 39	27 ²⁷ 29	W 8
T 9	23 47 52	25 ²⁵ 3'15	10 ¹⁰ 31	24 ²⁴ 3	12 ¹² 19	23 ²³ 44	0 ⁰ 40	4 ⁴ 20	12 ¹² 3	24 ²⁴ 45	3 ³ 22	13 ¹³ 0	13 ¹³ 39	29 ²⁹ 46	27 ²⁷ 28	T 9
F 10	23 51 49	26 ²⁶ 2'07	23 ²³ 49	25 ²⁵ 52	13 ¹³ 27	24 ²⁴ 13	0 ⁰ 53	4 ⁴ 21	12 ¹² 2	24 ²⁴ 44	3 ³ 22	12 ¹² 56	13 ¹³ 36	29 ²⁹ 52	27 ²⁷ 27	F 10
S 11	23 55 45	27 ²⁷ 1'00	7 ⁷ 18	27 ²⁷ 39	14 ¹⁴ 35	24 ²⁴ 42	1 ¹ 6	4 ⁴ 22	12 ¹² 0	24 ²⁴ 42	3 ³ 22	12 ¹² D55	13 ¹³ 32	29 ²⁹ 59	27 ²⁷ 26	S 11
S 12	23 59 42	27 ²⁷ 59'56	21 ²¹ 1	29 ²⁹ 26	15 ¹⁵ 43	25 ²⁵ 11	1 ¹ 19	4 ⁴ 23	11 ¹¹ 59	24 ²⁴ 41	3 ³ 23	12 ¹² R55	13 ¹³ 29	0 ⁰ 1	27 ²⁷ 25	S 12
M13	0 3 38	28 ²⁸ 58'53	4 ⁴ 57	1 ¹ 12	16 ¹⁶ 52	25 ²⁵ 39	1 ¹ 32	4 ⁴ 24	11 ¹¹ 57	24 ²⁴ 40	3 ³ 23	12 ¹² 55	13 ¹³ 26	0 ⁰ 12	27 ²⁷ 24	M13
T 14	0 7 35	29 ²⁹ 57'52	19 ¹⁹ 8	2 ² 57	18 ¹⁸ 0	26 ²⁶ 7	1 ¹ 45	4 ⁴ 26	11 ¹¹ 55	24 ²⁴ 38	3 ³ 23	12 ¹² 54	13 ¹³ 23	0 ⁰ 19	27 ²⁷ 23	T 14
W15	0 11 31	0 ⁰ 56'53	3 ³ 31	4 ⁴ 41	19 ¹⁹ 9	26 ²⁶ 34	1 ¹ 58	4 ⁴ 27	11 ¹¹ 54	24 ²⁴ 37	3 ³ 23	12 ¹² 50	13 ¹³ 20	0 ⁰ 26	27 ²⁷ 22	W15
T 16	0 15 28	1 ¹ 55'55	18 ¹⁸ 5	6 ⁶ 24	20 ²⁰ 18	27 ²⁷ 1	2 ² 11	4 ⁴ 29	11 ¹¹ 52	24 ²⁴ 36	3 ³ 24	12 ¹² 44	13 ¹³ 16	0 ⁰ 32	27 ²⁷ 21	T 16
F 17	0 19 24	2 ² 55'00	2 ² 43	8 ⁸ 6	21 ²¹ 27	27 ²⁷ 28	2 ² 24	4 ⁴ 31	11 ¹¹ 50	24 ²⁴ 35	3 ³ 24	12 ¹² 36	13 ¹³ 13	0 ⁰ 39	27 ²⁷ 21	F 17
S 18	0 23 21	3 ³ 54'06	17 ¹⁷ 20	9 ⁹ 48	22 ²² 36	27 ²⁷ 55	2 ² 37	4 ⁴ 32	11 ¹¹ 49	24 ²⁴ 33	3 ³ 24	12 ¹² 25	13 ¹³ 10	0 ⁰ 46	27 ²⁷ 20	S 18
S 19	0 27 18	4 ⁴ 53'14	1 ¹ 48	11 ¹¹ 29	23 ²³ 45	28 ²⁸ 21	2 ² 50	4 ⁴ 34	11 ¹¹ 47	24 ²⁴ 32	3 ³ 25	12 ¹² 15	13 ¹³ 7	0 ⁰ 53	27 ²⁷ 19	S 19
M20	0 31 14	5 ⁵ 52'24	15 ¹⁵ 59	13 ¹³ 8	24 ²⁴ 55	28 ²⁸ 47	3 ³ 3	4 ⁴ 36	11 ¹¹ 45	24 ²⁴ 31	3 ³ 25	12 ¹² 5	13 ¹³ 4	0 ⁰ 59	27 ²⁷ 19	M20
T 21	0 35 11	6 ⁶ 51'36	29 ²⁹ 50	14 ¹⁴ 47	26 ²⁶ 4	29 ²⁹ 12	3 ³ 16	4 ⁴ 38	11 ¹¹ 43	24 ²⁴ 30	3 ³ 26	11 ¹¹ 56	13 ¹³ 1	1 ¹ 6	27 ²⁷ 19	T 21
W22	0 39 7	7 ⁷ 50'50	13 ¹³ 16	16 ¹⁶ 26	27 ²⁷ 14	29 ²⁹ 37	3 ³ 29	4 ⁴ 40	11 ¹¹ 41	24 ²⁴ 29	3 ³ 26	11 ¹¹ 50	12 ¹² 57	1 ¹ 13	27 ²⁷ 18	W22
T 23	0 43 4	8 ⁸ 50'07	26 ²⁶ 17	18 ¹⁸ 3	28 ²⁸ 24	0 ⁰ 26	3 ³ 42	4 ⁴ 43	11 ¹¹ 39	24 ²⁴ 28	3 ³ 27	11 ¹¹ 47	12 ¹² 54	1 ¹ 19	27 ²⁷ 18	T 23
F 24	0 47 0	9 ⁹ 49'26	8 ⁸ 15	19 ¹⁹ 40	29 ²⁹ 34	0 ⁰ 26	3 ³ 55	4 ⁴ 45	11 ¹¹ 37	24 ²⁴ 27	3 ³ 27	11 ¹¹ D46	12 ¹² 51	1 ¹ 26	27 ²⁷ 18	F 24
S 25	0 50 57	10 ¹⁰ 48'48	21 ²¹ 15	21 ²¹ 16	0 ⁰ 44	0 ⁰ 50	4 ⁴ 8	4 ⁴ 47	11 ¹¹ 35	24 ²⁴ 26	3 ³ 28	11 ¹¹ 46	12 ¹² 48	1 ¹ 33	27 ²⁷ 18	S 25
S 26	0 54 53	11 ¹¹ 48'11	3 ³ 59	22 ²² 51	1 ¹ 55	1 ¹ 14	4 ⁴ 21	4 ⁴ 50	11 ¹¹ 33	24 ²⁴ 25	3 ³ 28	11 ¹¹ 47	12 ¹² 45	1 ¹ 39	27 ²⁷ D18	S 26
M27	0 58 50	12 ¹² 47'37	15 ¹⁵ 13	24 ²⁴ 26	3 ³ 5	1 ¹ 37	4 ⁴ 34	4 ⁴ 53	11 ¹¹ 31	24 ²⁴ 24	3 ³ 29	11 ¹¹ R47	12 ¹² 41	1 ¹ 46	27 ²⁷ 18	M27
T 28	1 2 47	13 ¹³ 47'06	27 ²⁷ 4	26 ²⁶ 0	4 ⁴ 16	1 ¹ 59	4 ⁴ 46	4 ⁴ 55	11 ¹¹ 29	24 ²⁴ 23	3 ³ 29	11 ¹¹ 46	12 ¹² 38	1 ¹ 53	27 ²⁷ 18	T 28
W29	1 6 43	14 ¹⁴ 46'36	8 ⁸ 15	27 ²⁷ 33	5 ⁵ 27	2 ² 21	4 ⁴ 59	4 ⁴ 58	11 ¹¹ 27	24 ²⁴ 22	3 ³ 30	11 ¹¹ 43	12 ¹² 35	1 ¹ 59	27 ²⁷ 18	W29
T 30	1 10 40	15 ¹⁵ 46'09	20 ²⁰ 15	29 ²⁹ 15	6 ⁶ 38	2 ² 54	5 ⁵ 12	5 ⁵ 1	11 ¹¹ 25	24 ²⁴ 21	3 ³ 31	11 ¹¹ 43	12 ¹² 32	2 ² 1	27 ²⁷ 18	T 30

Delta T = 250.18 sec

Julian Calendar 1 Sept. 1518 == Greg. Calendar 11 Sept. 1518

OCTOBER 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 14 36	16 ¹⁶ 45'44	2 ² 57	0 ⁰ 37	7 ⁷ 49	3 ³ 54	5 ⁵ 25	5 ⁵ 3	11 ¹¹ R22	24 ²⁴ R20	3 ³ 32	11 ¹¹ R30	12 ¹² II29	2 ² 13	27 ²⁷ 18	F 1
S 2	1 18 33	17 ¹⁷ 45'21	15 ¹⁵ 15	2 ² 9	9 ⁹ 0	3 ³ 25	5 ⁵ 38	5 ⁵ 7	11 ¹¹ 820	24 ²⁴ 19	3 ³ 32	11 ¹¹ II21	12 ¹² 26	2 ² 19	27 ²⁷ 19	S 2
S 3	1 22 29	18 ¹⁸ 45'01	27 ²⁷ 48	3 ³ 39	10 ¹⁰ 11	3 ³ 45	5 ⁵ 51	5 ⁵ 10	11 ¹¹ 18	24 ²⁴ 19	3 ³ 33	11 ¹¹ 11	12 ¹² 22	2 ² 26	27 ²⁷ 19	S 3
M 4	1 26 26	19 ¹⁹ 44'42	10 ¹⁰ 37	5 ⁵ 9	11 ¹¹ 22	4 ⁴ 5	6 ⁶ 4	5 ⁵ 13	11 ¹¹ 16	24 ²⁴ 18	3 ³ 34	11 ¹¹ 1	12 ¹² 19	2 ² 33	27 ²⁷ 20	M 4
T 5	1 30 22	20 ²⁰ 44'26	23 ²³ 40	6 ⁶ 39	12 ¹² 34	4 ⁴ 25	6 ⁶ 17	5 ⁵ 17	11 ¹¹ 13	24 ²⁴ 17	3 ³ 35	10 ¹⁰ 53	12 ¹² 16	2 ² 40	27 ²⁷ 20	T 5
W 6	1 34 19	21 ²¹ 44'12	6 ⁶ 15	8 ⁸ 7	13 ¹³ 45	4 ⁴ 43	6 ⁶ 29	5 ⁵ 20	11 ¹¹ 11	24 ²⁴ 16	3 ³ 36	10 ¹⁰ 46	12 ¹² 13	2 ² 46	27 ²⁷ 21	W 6
T 7	1 38 15	22 ²² 43'59	20 ²⁰ 26	9 ⁹ 35	14 ¹⁴ 57	5 ⁵ 2	6 ⁶ 42	5 ⁵ 24	11 ¹¹ 9	24 ²⁴ 16	3 ³ 37	10 ¹⁰ 42	12 ¹² 10	2 ² 53	27 ²⁷ 22	T 7
F 8	1 42 12	23 ²³ 43'49	4 ⁴ 6	11 ¹¹ 3	16 ¹⁶ 9	5 ⁵ 19	6 ⁶ 55	5 ⁵ 27	11 ¹¹ 6	24 ²⁴ 15	3 ³ 38	10 ¹⁰ D40	12 ¹² 7	3 ³ 0	27 ²⁷ 22	F 8
S 9	1 46 9	24 ²⁴ 43'40	17 ¹⁷ 54	12 ¹² 30	17 ¹⁷ 21	5 ⁵ 37	7 ⁷ 8	5 ⁵ 31	11 ¹¹ 4	24 ²⁴ 14	3 ³ 39	10 ¹⁰ 40	12 ¹² 3	3 ³ 6	27 ²⁷ 23	S 9
S 10	1 50 5	25 ²⁵ 43'34	1 ¹ 50	13 ¹³ 56	18 ¹⁸ 33	5 ⁵ 53	7 ⁷ 20	5 ⁵ 35	11 ¹¹ 2	24 ²⁴ 14	3 ³ 40	10 ¹⁰ 41	12 ¹² 0	3 ³ 13	27 ²⁷ 24	S 10
M11	1 54 2	26 ²⁶ 43'29	15 ¹⁵ 52	15 ¹⁵ 21	19 ¹⁹ 45	6 ⁶ 9	7 ⁷ 33	5 ⁵ 38	10 ¹⁰ 59	24 ²⁴ 13	3 ³ 41	10 ¹⁰ 42	11 ¹¹ 57	3 ³ 20	27 ²⁷ 25	M11
T 12	1 57 58	27 ²⁷ 43'25	29 ²⁹ 59	16 ¹⁶ 46	20 ²⁰ 57	6 ⁶ 25	7 ⁷ 45	5 ⁵ 42	10 ¹⁰ 57	24 ²⁴ 13	3 ³ 42	10 ¹⁰ R43	11 ¹¹ 54	3 ³ 26	27 ²⁷ 26	T 12
W13	2 1 55	28 ²⁸ 43'23	14 ¹⁴ 10	18 ¹⁸ 9	22 ²² 9	6 ⁶ 40	7 ⁷ 58	5 ⁵ 46	10 ¹⁰ 55	24 ²⁴ 12	3 ³ 43	10 ¹⁰ 42	11 ¹¹ 51	3 ³ 33	27 ²⁷ 28	W13
T 14	2 5 51	29 ²⁹ 43'23	28 ²⁸ 24	19 ¹⁹ 32	23 ²³ 22	6 ⁶ 54	8 ⁸ 11	5 ⁵ 50	10 ¹⁰ 52	24 ²⁴ 12	3 ³ 44	10 ¹⁰ 39	11 ¹¹ 47	3 ³ 40	27 ²⁷ 29	T 14
F 15	2 9 48	0 ⁰ 43'24	12 ¹² 36	20 ²⁰ 54	24 ²⁴ 34	7 ⁷ 8	8 ⁸ 23	5 ⁵ 55	10 ¹⁰ 50	24 ²⁴ 11	3 ³ 45	10 ¹⁰ 34	11 ¹¹ 44	3 ³ 46	27 ²⁷ 30	F 15
S 16	2 13 45	1 ¹ 43'27	26 ²⁶ 45	22 ²² 15	25 ²⁵ 47	7 ⁷ 21	8 ⁸ 36	5 ⁵ 59	10 ¹⁰ 47	24 ²⁴ 11	3 ³ 46	10 ¹⁰ 28	11 ¹¹ 41	3 ³ 53	27 ²⁷ 31	S 16
S 17	2 17 41	2 ² 43'31	10 ¹⁰ Y44	23 ²³ 35	26 ²⁶ 59	7 ⁷ 33	8 ⁸ 48	6 ⁶ 3	10 ¹⁰ 45	24 ²⁴ 11	3 ³ 48	10 ¹⁰ 22	11 ¹¹ 38	4 ⁴ 0	27 ²⁷ 33	S 17
M18	2 21 38	3 ³ 43'37	24 ²⁴ 32	24 ²⁴ 54	28 ²⁸ 12	7 ⁷ 45	9 ⁹ 0	6 ⁶ 7	10 ¹⁰ 42	24 ²⁴ 10	3 ³ 49	10 ¹⁰ 16	11 ¹¹ 35	4 ⁴ 7	27 ²⁷ 34	M18
T 19	2 25 34	4 ⁴ 43'45	8 ⁸ 3	26 ²⁶ 12	29 ²⁹ 25	7 ⁷ 56	9 ⁹ 13	6 ⁶ 12	10 ¹⁰ 40	24 ²⁴ 10	3 ³ 50	10 ¹⁰ 11	11 ¹¹ 32	4 ⁴ 13	27 ²⁷ 36	T 19
W20	2 29 31	5 ⁵ 43'55	21 ²¹ 15	27 ²⁷ 28	0 ⁰ 38	8 ⁸ 7	9 ⁹ 25	6 ⁶ 16	10 ¹⁰ 37	24 ²⁴ 10	3 ³ 51	10 ¹⁰ 8	11 ¹¹ 28	4 ⁴ 20	27 ²⁷ 38	W20
T 21	2 33 27	6 ⁶ 44'07	4 ⁴ II 8	28 ²⁸ 43	1 ¹ 51	8 ⁸ 17	9 ⁹ 37	6 ⁶ 21	10 ¹⁰ 35	24 ²⁴ 10	3 ³ 53	10 ¹⁰ D 6	11 ¹¹ 25	4 ⁴ 27	27 ²⁷ 39	T 21
F 22	2 37 24	7 ⁷ 44'21	16 ¹⁶ 43	29 ²⁹ 56	3 ³ 4	8 ⁸ 26	9 ⁹ 50	6 ⁶ 26	10 ¹⁰ 32	24 ²⁴ 9	3 ³ 54	10 ¹⁰ 6	11 ¹¹ 22	4 ⁴ 33	27 ²⁷ 41	F 22
S 23	2 41 20	8 ⁸ 44'37	29 ²⁹ 1	1 ¹ 7 7	4 ⁴ 17	8 ⁸ 34	10 ¹⁰ 2	6 ⁶ 30	10 ¹⁰ 30	24 ²⁴ 9	3 ³ 55	10 ¹⁰ 8	11 ¹¹ 19	4 ⁴ 40	27 ²⁷ 43	S 23
S 24	2 45 17	9 ⁹ 44'55	11 ¹¹ 56	2 ² 16	5 ⁵ 30	8 ⁸ 42	10 ¹⁰ 14	6 ⁶ 35	10 ¹⁰ 27	24 ²⁴ 9	3 ³ 57	10 ¹⁰ 9	11 ¹¹ 16	4 ⁴ 47	27 ²⁷ 45	S 24
M25	2 49 14	10 ¹⁰ 45'15	23 ²³ 2	3 ³ 23	6 ⁶ 43	8 ⁸ 49	10 ¹⁰ 26	6 ⁶ 40	10 ¹⁰ 25	24 ²⁴ 9	3 ³ 58	10 ¹⁰ 11	11 ¹¹ 13	4 ⁴ 53	27 ²⁷ 47	M25
T 26	2 53 10	11 ¹¹ 45'36	4 ⁴ 20	4 ⁴ 53	4 ⁴ 27	7 ⁷ 56	10 ¹⁰ 38	6 ⁶ 45	10 ¹⁰ 22	24 ²⁴ 9	3 ³ 59	10 ¹⁰ 12	11 ¹¹ 9	5 ⁵ 0	27 ²⁷ 49	T 26
W27	2 57 7	12 ¹² 46'00	16 ¹⁶ 45	5 ⁵ 28	9 ⁹ 10	9 ⁹ 0	10 ¹⁰ 50	6 ⁶ 50	10 ¹⁰ 20	24 ²⁴ D 9	4 ⁴ 1	10 ¹⁰ R12	11 ¹¹ 6	5 ⁵ 7	27 ²⁷ 51	W27
T 28	3 1 3	13 ¹³ 46'26	28 ²⁸ 42	6 ⁶ 26	10 ¹⁰ 23	9 ⁹ 5	11 ¹¹ 2	6 ⁶ 55	10 ¹⁰ 17	24 ²⁴ 9	4 ⁴ 2	10 ¹⁰ 11	11 ¹¹ 3	5 ⁵ 14	27 ²⁷ 53	T 28
F 29	3 5 0	14 ¹⁴ 46'53	10 ¹⁰ 49	7 ⁷ 20	11 ¹¹ 37	9 ⁹ 9	11 ¹¹ 14	7 ⁷ 0	10 ¹⁰ 15	24 ²⁴ 9	4 ⁴ 4	10 ¹⁰ 9	11 ¹¹ 0	5 ⁵ 20	27 ²⁷ 55	F 29
S 30	3 8 56	15 ¹⁵ 47'22	23 ²³ 10	8 ⁸ 11	12 ¹² 50	9 ⁹ 12	11 ¹¹ 26	7 ⁷ 6	10 ¹⁰ 12	24 ²⁴ 9	4 ⁴ 5	10 ¹⁰ 6	10 ¹⁰ 57	5 ⁵ 27	27 ²⁷ 58	S 30
S 31	3 12 53	16 ¹⁶ 47'53	5 ⁵ 49	8 ⁸ 756	14 ¹⁴ 4	9 ⁹ 514	11 ¹¹ 37	7 ⁷ 311	10 ¹⁰ 810	24 ²⁴ 9	4 ⁴ 3 7	10 ¹⁰ II 2	10 ¹⁰ II53	5 ⁵ 34	28 ²⁸ 0	S 31

ASTRODIENST EPHEMERIS for the year 1518

geocentric

NOVEMBER 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 16 49	17 ¹¹ 48'26	18 ¹¹ 47	9 ¹¹ 36	15 ¹¹ 18	9 ¹¹ 16	11 ¹¹ 49	7 ¹¹ 16	10 ¹¹ R 8	24 ¹¹ ≈ 9	4 ¹¹ 8	9 ¹¹ R58	10 ¹¹ II50	5 ¹¹ Ω40	28 ¹¹ 3	M 1
T 2	3 20 46	18 ¹¹ 49'01	2 ¹¹ 5	10 ¹¹ 10	16 ¹¹ 32	9 ¹¹ R16	12 ¹¹ 1	7 ¹¹ 22	10 ¹¹ 8 5	24 ¹¹ 9	4 ¹¹ 10	9 ¹¹ II55	10 ¹¹ 47	5 ¹¹ 47	28 ¹¹ 5	T 2
W 3	3 24 42	19 ¹¹ 49'37	15 ¹¹ 42	10 ¹¹ 37	17 ¹¹ 45	9 ¹¹ 16	12 ¹¹ 12	7 ¹¹ 27	10 ¹¹ 3	24 ¹¹ 10	4 ¹¹ 12	9 ¹¹ 53	10 ¹¹ 44	5 ¹¹ 54	28 ¹¹ 8	W 3
T 4	3 28 39	20 ¹¹ 50'15	29 ¹¹ 36	10 ¹¹ 57	18 ¹¹ 59	9 ¹¹ 15	12 ¹¹ 24	7 ¹¹ 33	10 ¹¹ 0	24 ¹¹ 10	4 ¹¹ 13	9 ¹¹ 52	10 ¹¹ 41	6 ¹¹ 0	28 ¹¹ 10	T 4
F 5	3 32 36	21 ¹¹ 50'54	13 ¹¹ 44	11 ¹¹ 9	20 ¹¹ 13	9 ¹¹ 13	12 ¹¹ 35	7 ¹¹ 38	9 ¹¹ 58	24 ¹¹ 10	4 ¹¹ 15	9 ¹¹ D51	10 ¹¹ 38	6 ¹¹ 7	28 ¹¹ 13	F 5
S 6	3 36 32	22 ¹¹ 51'35	28 ¹¹ 0	11 ¹¹ R11	21 ¹¹ 27	9 ¹¹ 11	12 ¹¹ 47	7 ¹¹ 44	9 ¹¹ 55	24 ¹¹ 10	4 ¹¹ 17	9 ¹¹ 52	10 ¹¹ 34	6 ¹¹ 14	28 ¹¹ 16	S 6
S 7	3 40 29	23 ¹¹ 52'17	12 ¹¹ 321	11 ¹¹ 4	22 ¹¹ 41	9 ¹¹ 7	12 ¹¹ 58	7 ¹¹ 49	9 ¹¹ 53	24 ¹¹ 11	4 ¹¹ 18	9 ¹¹ 53	10 ¹¹ 31	6 ¹¹ 21	28 ¹¹ 19	S 7
M 8	3 44 25	24 ¹¹ 53'00	26 ¹¹ 42	10 ¹¹ 47	23 ¹¹ 55	9 ¹¹ 2	13 ¹¹ 9	7 ¹¹ 55	9 ¹¹ 51	24 ¹¹ 11	4 ¹¹ 20	9 ¹¹ 54	10 ¹¹ 28	6 ¹¹ 27	28 ¹¹ 21	M 8
T 9	3 48 22	25 ¹¹ 53'44	11 ¹¹ ≈ 0	10 ¹¹ 19	25 ¹¹ 9	8 ¹¹ 57	13 ¹¹ 20	8 ¹¹ 1	9 ¹¹ 48	24 ¹¹ 12	4 ¹¹ 22	9 ¹¹ 55	10 ¹¹ 25	6 ¹¹ 34	28 ¹¹ 24	T 9
W10	3 52 18	26 ¹¹ 54'29	25 ¹¹ 12	9 ¹¹ 41	26 ¹¹ 24	8 ¹¹ 51	13 ¹¹ 31	8 ¹¹ 7	9 ¹¹ 46	24 ¹¹ 12	4 ¹¹ 23	9 ¹¹ R56	10 ¹¹ 22	6 ¹¹ 41	28 ¹¹ 27	W10
T 11	3 56 15	27 ¹¹ 55'15	9 ¹¹ 16	8 ¹¹ 51	27 ¹¹ 38	8 ¹¹ 44	13 ¹¹ 43	8 ¹¹ 13	9 ¹¹ 43	24 ¹¹ 13	4 ¹¹ 25	9 ¹¹ 55	10 ¹¹ 19	6 ¹¹ 47	28 ¹¹ 30	T 11
F 12	4 0 12	28 ¹¹ 56'02	23 ¹¹ 10	7 ¹¹ 52	28 ¹¹ 52	8 ¹¹ 36	13 ¹¹ 53	8 ¹¹ 19	9 ¹¹ 41	24 ¹¹ 13	4 ¹¹ 27	9 ¹¹ 55	10 ¹¹ 15	6 ¹¹ 54	28 ¹¹ 33	F 12
S 13	4 4 8	29 ¹¹ 56'50	6 ¹¹ 54	6 ¹¹ 44	0 ¹¹ 6	8 ¹¹ 27	14 ¹¹ 4	8 ¹¹ 25	9 ¹¹ 39	24 ¹¹ 14	4 ¹¹ 29	9 ¹¹ 54	10 ¹¹ 12	7 ¹¹ 1	28 ¹¹ 37	S 13
S 14	4 8 5	0 ¹¹ 57'39	20 ¹¹ 26	5 ¹¹ 28	1 ¹¹ 21	8 ¹¹ 18	14 ¹¹ 15	8 ¹¹ 31	9 ¹¹ 37	24 ¹¹ 14	4 ¹¹ 31	9 ¹¹ 52	10 ¹¹ 9	7 ¹¹ 7	28 ¹¹ 40	S 14
M15	4 12 1	1 ¹¹ 58'29	3 ¹¹ 45	4 ¹¹ 8	2 ¹¹ 35	8 ¹¹ 7	14 ¹¹ 26	8 ¹¹ 37	9 ¹¹ 34	24 ¹¹ 15	4 ¹¹ 32	9 ¹¹ 51	10 ¹¹ 6	7 ¹¹ 14	28 ¹¹ 43	M15
T 16	4 15 58	2 ¹¹ 59'20	16 ¹¹ 51	2 ¹¹ 45	3 ¹¹ 49	7 ¹¹ 56	14 ¹¹ 36	8 ¹¹ 43	9 ¹¹ 32	24 ¹¹ 15	4 ¹¹ 34	9 ¹¹ 50	10 ¹¹ 3	7 ¹¹ 21	28 ¹¹ 46	T 16
W17	4 19 54	4 ¹¹ 0'12	29 ¹¹ 43	1 ¹¹ 23	5 ¹¹ 4	7 ¹¹ 44	14 ¹¹ 47	8 ¹¹ 49	9 ¹¹ 30	24 ¹¹ 16	4 ¹¹ 36	9 ¹¹ 50	9 ¹¹ 59	7 ¹¹ 28	28 ¹¹ 50	W17
T 18	4 23 51	5 ¹¹ 1'05	12 ¹¹ II21	0 ¹¹ 4	6 ¹¹ 18	7 ¹¹ 31	14 ¹¹ 57	8 ¹¹ 55	9 ¹¹ 28	24 ¹¹ 17	4 ¹¹ 38	9 ¹¹ D50	9 ¹¹ 56	7 ¹¹ 34	28 ¹¹ 53	T 18
F 19	4 27 47	6 ¹¹ 2'00	24 ¹¹ 45	28 ¹¹ 51	7 ¹¹ 33	7 ¹¹ 17	15 ¹¹ 8	9 ¹¹ 2	9 ¹¹ 25	24 ¹¹ 18	4 ¹¹ 40	9 ¹¹ 50	9 ¹¹ 53	7 ¹¹ 41	28 ¹¹ 57	F 19
S 20	4 31 44	7 ¹¹ 2'55	6 ¹¹ 58	27 ¹¹ 46	8 ¹¹ 47	7 ¹¹ 3	15 ¹¹ 18	9 ¹¹ 8	9 ¹¹ 23	24 ¹¹ 18	4 ¹¹ 42	9 ¹¹ 50	9 ¹¹ 50	7 ¹¹ 48	29 ¹¹ 0	S 20
S 21	4 35 41	8 ¹¹ 3'52	19 ¹¹ 0	26 ¹¹ 50	10 ¹¹ 2	6 ¹¹ 47	15 ¹¹ 28	9 ¹¹ 14	9 ¹¹ 21	24 ¹¹ 19	4 ¹¹ 44	9 ¹¹ 51	9 ¹¹ 47	7 ¹¹ 54	29 ¹¹ 4	S 21
M22	4 39 37	9 ¹¹ 4'49	0 ¹¹ Ω55	26 ¹¹ 5	11 ¹¹ 17	6 ¹¹ 31	15 ¹¹ 38	9 ¹¹ 21	9 ¹¹ 19	24 ¹¹ 20	4 ¹¹ 46	9 ¹¹ 51	9 ¹¹ 44	8 ¹¹ 1	29 ¹¹ 7	M22
T 23	4 43 34	10 ¹¹ 5'48	12 ¹¹ 46	25 ¹¹ 32	12 ¹¹ 31	6 ¹¹ 14	15 ¹¹ 48	9 ¹¹ 27	9 ¹¹ 17	24 ¹¹ 21	4 ¹¹ 48	9 ¹¹ R51	9 ¹¹ 40	8 ¹¹ 8	29 ¹¹ 11	T 23
W24	4 47 30	11 ¹¹ 6'48	24 ¹¹ 38	25 ¹¹ 9	13 ¹¹ 46	5 ¹¹ 57	15 ¹¹ 58	9 ¹¹ 34	9 ¹¹ 15	24 ¹¹ 22	4 ¹¹ 50	9 ¹¹ 51	9 ¹¹ 37	8 ¹¹ 14	29 ¹¹ 15	W24
T 25	4 51 27	12 ¹¹ 7'49	6 ¹¹ 33	24 ¹¹ 58	15 ¹¹ 1	5 ¹¹ 39	16 ¹¹ 8	9 ¹¹ 40	9 ¹¹ 13	24 ¹¹ 23	4 ¹¹ 51	9 ¹¹ D51	9 ¹¹ 34	8 ¹¹ 21	29 ¹¹ 18	T 25
F 26	4 55 23	13 ¹¹ 8'51	18 ¹¹ 38	24 ¹¹ D57	16 ¹¹ 15	5 ¹¹ 20	16 ¹¹ 17	9 ¹¹ 47	9 ¹¹ 11	24 ¹¹ 24	4 ¹¹ 53	9 ¹¹ 51	9 ¹¹ 31	8 ¹¹ 28	29 ¹¹ 22	F 26
S 27	4 59 20	14 ¹¹ 9'54	0 ¹¹ Δ56	25 ¹¹ 7	17 ¹¹ 30	5 ¹¹ 0	16 ¹¹ 27	9 ¹¹ 53	9 ¹¹ 9	24 ¹¹ 25	4 ¹¹ 55	9 ¹¹ 51	9 ¹¹ 28	8 ¹¹ 35	29 ¹¹ 26	S 27
S 28	5 3 16	15 ¹¹ 10'58	13 ¹¹ 33	25 ¹¹ 25	18 ¹¹ 45	4 ¹¹ 40	16 ¹¹ 36	10 ¹¹ 0	9 ¹¹ 7	24 ¹¹ 26	4 ¹¹ 57	9 ¹¹ 51	9 ¹¹ 25	8 ¹¹ 41	29 ¹¹ 30	S 28
M29	5 7 13	16 ¹¹ 12'03	26 ¹¹ 31	25 ¹¹ 51	20 ¹¹ 0	4 ¹¹ 20	16 ¹¹ 46	10 ¹¹ 7	9 ¹¹ 5	24 ¹¹ 27	4 ¹¹ 59	9 ¹¹ 52	9 ¹¹ 21	8 ¹¹ 48	29 ¹¹ 34	M29
T 30	5 11 10	17 ¹¹ 13'10	9 ¹¹ 53	26 ¹¹ 25	21 ¹¹ 14	3 ¹¹ 59	16 ¹¹ Δ55	10 ¹¹ 313	9 ¹¹ 8 4	24 ¹¹ ≈28	5 ¹¹ 3 1	9 ¹¹ II53	9 ¹¹ II18	8 ¹¹ Δ55	29 ¹¹ 38	T 30

Delta T = 249.80 sec

Julian Calendar 1 Nov. 1518 == Greg. Calendar 11 Nov. 1518

DECEMBER 1518 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	5 15 6	18 ¹¹ 14'16	23 ¹¹ 41	27 ¹¹ 6	22 ¹¹ 29	3 ¹¹ R37	17 ¹¹ Δ 4	10 ¹¹ 320	9 ¹¹ R 2	24 ¹¹ ≈29	5 ¹¹ 3 3	9 ¹¹ II53	9 ¹¹ II15	9 ¹¹ Ω 1	29 ¹¹ 342	W 1
T 2	5 19 3	19 ¹¹ 15'24	7 ¹¹ 51	27 ¹¹ 52	23 ¹¹ 44	3 ¹¹ 515	17 ¹¹ 13	10 ¹¹ 27	9 ¹¹ 8 0	24 ¹¹ 30	5 ¹¹ 6	9 ¹¹ R53	9 ¹¹ 12	9 ¹¹ 8	29 ¹¹ 46	T 2
F 3	5 22 59	20 ¹¹ 16'33	22 ¹¹ 21	28 ¹¹ 44	24 ¹¹ 59	2 ¹¹ 52	17 ¹¹ 22	10 ¹¹ 34	8 ¹¹ 58	24 ¹¹ 32	5 ¹¹ 8	9 ¹¹ 53	9 ¹¹ 9	9 ¹¹ 15	29 ¹¹ 50	F 3
S 4	5 26 56	21 ¹¹ 17'42	7 ¹¹ 3 5	29 ¹¹ 40	26 ¹¹ 14	2 ¹¹ 30	17 ¹¹ 31	10 ¹¹ 40	8 ¹¹ 57	24 ¹¹ 33	5 ¹¹ 10	9 ¹¹ 52	9 ¹¹ 5	9 ¹¹ 21	29 ¹¹ 54	S 4
S 5	5 30 52	22 ¹¹ 18'51	21 ¹¹ 55	0 ¹¹ 741	27 ¹¹ 29	2 ¹¹ 6	17 ¹¹ 40	10 ¹¹ 47	8 ¹¹ 55	24 ¹¹ 34	5 ¹¹ 12	9 ¹¹ 51	9 ¹¹ 2	9 ¹¹ 28	29 ¹¹ 58	S 5
M 6	5 34 49	23 ¹¹ 20'01	6 ¹¹ ≈44	1 ¹¹ 45	28 ¹¹ 44	1 ¹¹ 43	17 ¹¹ 48	10 ¹¹ 54	8 ¹¹ 54	24 ¹¹ 35	5 ¹¹ 14	9 ¹¹ 49	8 ¹¹ 59	9 ¹¹ 35	0 ¹¹ ≈ 3	M 6
T 7	5 38 45	24 ¹¹ 21'10	21 ¹¹ 24	2 ¹¹ 52	29 ¹¹ 59	1 ¹¹ 19	17 ¹¹ 57	11 ¹¹ 1	8 ¹¹ 52	24 ¹¹ 37	5 ¹¹ 16	9 ¹¹ 48	8 ¹¹ 56	9 ¹¹ 42	0 ¹¹ 7	T 7
W 8	5 42 42	25 ¹¹ 22'20	5 ¹¹ 51	4 ¹¹ 1	1 ¹¹ 14	0 ¹¹ 56	18 ¹¹ 5	11 ¹¹ 8	8 ¹¹ 50	24 ¹¹ 38	5 ¹¹ 18	9 ¹¹ 46	8 ¹¹ 53	9 ¹¹ 48	0 ¹¹ 11	W 8
T 9	5 46 39	26 ¹¹ 23'30	20 ¹¹ 0	5 ¹¹ 13	2 ¹¹ 29	0 ¹¹ 32	18 ¹¹ 13	11 ¹¹ 15	8 ¹¹ 49	24 ¹¹ 40	5 ¹¹ 20	9 ¹¹ D45	8 ¹¹ 50	9 ¹¹ 55	0 ¹¹ 15	T 9
F 10	5 50 35	27 ¹¹ 24'40	3 ¹¹ 50	6 ¹¹ 28	3 ¹¹ 44	0 ¹¹ 8	18 ¹¹ 21	11 ¹¹ 22	8 ¹¹ 48	24 ¹¹ 41	5 ¹¹ 22	9 ¹¹ 45	8 ¹¹ 46	10 ¹¹ 2	0 ¹¹ 20	F 10
S 11	5 54 32	28 ¹¹ 25'49	17 ¹¹ 21	7 ¹¹ 44	4 ¹¹ 59	29 ¹¹ II44	18 ¹¹ 29	11 ¹¹ 29	8 ¹¹ 46	24 ¹¹ 42	5 ¹¹ 24	9 ¹¹ 46	8 ¹¹ 43	10 ¹¹ 8	0 ¹¹ 24	S 11
S 12	5 58 28	29 ¹¹ 26'59	0 ¹¹ 834	9 ¹¹ 1	6 ¹¹ 14	29 ¹¹ 20	18 ¹¹ 37	11 ¹¹ 36	8 ¹¹ 45	24 ¹¹ 44	5 ¹¹ 26	9 ¹¹ 48	8 ¹¹ 40	10 ¹¹ 15	0 ¹¹ 28	S 12
M13	6 2 25	0 ¹¹ 328'09	13 ¹¹ 31	10 ¹¹ 21	7 ¹¹ 29	28 ¹¹ 57	18 ¹¹ 45	11 ¹¹ 43	8 ¹¹ 44	24 ¹¹ 45	5 ¹¹ 28	9 ¹¹ 49	8 ¹¹ 37	10 ¹¹ 22	0 ¹¹ 33	M13
T 14	6 6 21	1 ¹¹ 29'18	26 ¹¹ 14	11 ¹¹ 41	8 ¹¹ 44	28 ¹¹ 33	18 ¹¹ 52	11 ¹¹ 50	8 ¹¹ 42	24 ¹¹ 47	5 ¹¹ 30	9 ¹¹ 51	8 ¹¹ 34	10 ¹¹ 29	0 ¹¹ 37	T 14
W15	6 10 18	2 ¹¹ 30'28	8 ¹¹ II	13 ¹¹ 3	9 ¹¹ 59	28 ¹¹ 10	18 ¹¹ 59	11 ¹¹ 57	8 ¹¹ 41	24 ¹¹ 48	5 ¹¹ 33	9 ¹¹ R51	8 ¹¹ 31	10 ¹¹ 35	0 ¹¹ 42	W15
T 16	6 14 14	3 ¹¹ 31'38	21 ¹¹ 5	14 ¹¹ 25	11 ¹¹ 14	27 ¹¹ 47	19 ¹¹ 7	12 ¹¹ 4	8 ¹¹ 40	24 ¹¹ 50	5 ¹¹ 35	9 ¹¹ 51	8 ¹¹ 27	10 ¹¹ 42	0 ¹¹ 46	T 16
F 17	6 18 11	4 ¹¹ 32'47	3 ¹¹ 516	15 ¹¹ 49	12 ¹¹ 29	27 ¹¹ 24	19 ¹¹ 14	12 ¹¹ 11	8 ¹¹ 39	24 ¹¹ 52	5 ¹¹ 37	9 ¹¹ 49	8 ¹¹ 24	10 ¹¹ 49	0 ¹¹ 51	F 17
S 18	6 22 8	5 ¹¹ 33'57	15 ¹¹ 20	17 ¹¹ 14	13 ¹¹ 44	27 ¹¹ 1	19 ¹¹ 21	12 ¹¹ 18	8 ¹¹ 38	24 ¹¹ 53	5 ¹¹ 39	9 ¹¹ 46	8 ¹¹ 21	10 ¹¹ 55	0 ¹¹ 55	S 18
S 19	6 26 4	6 ¹¹ 35'07	27 ¹¹ 18	18 ¹¹ 39	14 ¹¹ 59	26 ¹¹ 39	19 ¹¹ 28	12 ¹¹ 25	8 ¹¹ 37	24 ¹¹ 55	5 ¹¹ 41	9 ¹¹ 41	8 ¹¹ 18	11 ¹¹ 2	1 ¹¹ 0	S 19
M20	6 30 1	7 ¹¹ 36'16	9 ¹¹ Ω11	20 ¹¹ 5	16 ¹¹ 14	26 ¹¹ 17	19 ¹¹ 34	12 ¹¹ 32	8 ¹¹ 36	24 ¹¹ 56	5 ¹¹ 43	9 ¹¹ 36	8 ¹¹ 15	11 ¹¹ 9	1 ¹¹ 5	M20
T 21	6 33 57	8 ¹¹ 37'26	21 ¹¹ 2	21 ¹¹ 32	17 ¹¹ 29	25 ¹¹ 56	19 ¹¹ 41	12 ¹¹ 39	8 ¹¹ 35	24 ¹¹ 58	5 ¹¹ 45	9 ¹¹ 31	8 ¹¹ 11	11 ¹¹ 16	1 ¹¹ 9	T 21
W22	6 37 54	9 ¹¹ 38'35	2 ¹¹ 54	23 ¹¹ 0	18 ¹¹ 44	25 ¹¹ 35	19 ¹¹ 47	12 ¹¹ 46	8 ¹¹ 34	25 ¹¹ 0	5 ¹¹ 47	9 ¹¹ 26	8 ¹¹ 8	11 ¹¹ 22	1 ¹¹ 14	W22
T 23	6 41 50	10 ¹¹ 39'45	14 ¹¹ 49	24 ¹¹ 28	19 ¹¹ 59	25 ¹¹ 15	19 ¹¹ 54	12 ¹¹ 53	8 ¹¹ 33	25 ¹¹ 2	5 ¹¹ 49	9 ¹¹ 22	8 ¹¹ 5	11 ¹¹ 29	1 ¹¹ 19	T 23
F 24	6 45 47	11 ¹¹ 40'54	26 ¹¹ 51	25 ¹¹ 56	21 ¹¹ 15	24 ¹¹ 55	20 ¹¹ 0	13 ¹¹ 0	8 ¹¹ 32	25 ¹¹ 3	5 ¹¹ 51	9 ¹¹ 19	8 ¹¹ 2	11 ¹¹ 36	1 ¹¹ 23	F 24
S 25	6 49 44	12 ¹¹ 42'04	9 ¹¹ Δ 6	27 ¹¹ 25	22 ¹¹ 30	24 ¹¹ 36	20 ¹¹ 6	13 ¹¹ 7	8 ¹¹ 32	25 ¹¹ 5	5 ¹¹ 54	9 ¹¹ D18	7 ¹¹ 59	11 ¹¹ 42	1 ¹¹ 28	S 25
S 26	6 53 40	13 ¹¹ 43'14	21 ¹¹ 36	28 ¹¹ 55	23 ¹¹ 45	24 ¹¹ 17	20 ¹¹ 11	13 ¹¹ 14	8 ¹¹ 31	25 ¹¹ 7	5 ¹¹ 56	9 ¹¹ 18	7 ¹¹ 56	11 ¹¹ 49	1 ¹¹ 33	S 26
M27	6 57 37	14 ¹¹ 44'23	4 ¹¹ Δ27	0 ¹¹ 325	25 ¹¹ 0	23 ¹¹ 59	20 ¹¹ 17	13 ¹¹ 21	8 ¹¹ 30	25 ¹¹ 9	5 ¹¹ 58	9 ¹¹ 19	7 ¹¹ 52	11 ¹¹ 56	1 ¹¹ 38	M27
T 28	7 1 33	15 ¹¹ 45'32	17 ¹¹ 43	1 ¹¹ 56	26 ¹¹ 15	23 ¹¹ 42	20 ¹¹ 23	13 ¹¹ 28	8 ¹¹ 30	25 ¹¹ 11	6 ¹¹ 0	9 ¹¹ 21	7 ¹¹ 49	12 ¹¹ 2	1 ¹¹ 42	T 28
W29	7 5 30	16 ¹¹ 46'42	1 ¹¹ Δ26	3 ¹¹ 28	27 ¹¹ 30	23 ¹¹ 26	20 ¹¹ 28	13 ¹¹ 35	8 ¹¹ 29	25 ¹¹ 12	6 ¹¹ 2	9 ¹¹ 22	7 ¹¹ 46	12 ¹¹ 9	1 ¹¹ 47	W29
T 30	7 9 26	17 ¹¹ 47'51	15 ¹¹ 37	4 ¹¹ 59	28 ¹¹ 45	23 ¹¹ 10	20 ¹¹ 33	13 ¹¹ 42	8 ¹¹ 29	25 ¹¹ 14	6 ¹¹ 4	9 ¹¹ R22	7 ¹¹ 43	12 ¹¹ 16	1 ¹¹ 52	T 30
F 31	7 13 23	18 ¹¹ 349'00	0 ¹¹ 315	6 ¹¹ 32	0 ¹¹ 3 1	22 ¹¹ II55	20 ¹¹ Δ38	13 ¹¹ 349	8 ¹¹ 29	25 ¹¹ ≈16	6 ¹¹ 3 6	9 ¹¹ II21	7 ¹¹ II40	12 ¹¹ Ω23	1 ¹¹ ≈57	F 31