



Astrodienst Ephemeris Tables for the year 1452

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 1452

geocentric

JANUARY 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 14 19	19°55'55"	27°21'21"	26°11'11"	13°59'59"	2°31'31"	8°12'12"	18°34'34"	24°R 9	2°R25	6°R41	13°43'43"	13°31'31"	16°31'31"	18°R 4	S 1
S 2	7 18 16	20° 7'01"	10°55'55"	27°26'26"	15°14'14"	3°12'12"	8°26'26"	18°36'36"	24°6 6	2°25	6°40	13°43'43"	13°28'28"	16°21'21"	18°II 1	S 2
M 3	7 22 12	21° 8'06"	24°56'56"	28°41'41"	16°29'29"	3°53'53"	8°40'40"	18°38'38"	24° 3	2°24	6°39	13°44'44"	13°25'25"	16°28'28"	17°57'57"	M 3
T 4	7 26 9	22° 9'10"	9°11'11"	29°59'59"	17°45'45"	4°34'34"	8°54'54"	18°40'40"	24° 1	2°24	6°37	13°45'45"	13°21'21"	16°34'34"	17°54'54"	T 4
W 5	7 30 6	23°10'13"	24°12'12"	1°17'17"	19° 0	5°15'15"	9° 9	18°41'41"	23°58'58"	2°24	6°36	13°45'45"	13°18'18"	16°41'41"	17°52'52"	W 5
T 6	7 34 2	24°11'16"	9°18'18"	2°37'37"	20°16'16"	5°56'56"	9°23'23"	18°43'43"	23°56'56"	2°24	6°35	13°R46	13°15'15"	16°48'48"	17°49'49"	T 6
F 7	7 37 59	25°12'17"	24°32'32"	3°58'58"	21°31'31"	6°37'37"	9°37'37"	18°44'44"	23°53'53"	2°23	6°33	13°46'46"	13°12'12"	16°54'54"	17°46'46"	F 7
S 8	7 41 55	26°13'18"	9°45'45"	5°20'20"	22°46'46"	7°19'19"	9°51'51"	18°45'45"	23°50'50"	2°23	6°32	13°45'45"	13° 9	17° 1	17°43'43"	S 8
S 9	7 45 52	27°14'18"	24°46'46"	6°44'44"	24° 2	8° 0	10° 5	18°46'46"	23°48'48"	2°22	6°30	13°44'44"	13° 6	17° 7	17°40'40"	S 9
M10	7 49 48	28°15'17"	9°17'17"	8° 8	25°17'17"	8°41'41"	10°19'19"	18°47'47"	23°45'45"	2°22	6°29	13°42'42"	13° 2	17°14'14"	17°38'38"	M10
T 11	7 53 45	29°16'16"	23°44'44"	9°33'33"	26°32'32"	9°22'22"	10°33'33"	18°48'48"	23°42'42"	2°21	6°28	13°40'40"	12°59'59"	17°21'21"	17°35'35"	T 11
W12	7 57 41	0°17'13"	7°43'43"	10°59'59"	27°48'48"	10° 4	10°48'48"	18°49'49"	23°40'40"	2°21	6°26	13°38'38"	12°56'56"	17°27'27"	17°32'32"	W12
T 13	8 1 38	1°18'10"	20°52'52"	12°26'26"	29° 3	10°45'45"	11° 2	18°50'50"	23°37'37"	2°20	6°25	13°37'37"	12°53'53"	17°34'34"	17°30'30"	T 13
F 14	8 5 35	2°19'07"	3°14'14"	13°53'53"	0°18'18"	11°26'26"	11°16'16"	18°50'50"	23°35'35"	2°20	6°23	13°D37	12°50'50"	17°41'41"	17°28'28"	F 14
S 15	8 9 31	3°20'02"	16°19'19"	15°22'22"	1°34'34"	12° 8	11°31'31"	18°51'51"	23°32'32"	2°19	6°22	13°37'37"	12°46'46"	17°47'47"	17°25'25"	S 15
S 16	8 13 28	4°20'57"	28°34'34"	16°51'51"	2°49'49"	12°49'49"	11°45'45"	18°51'51"	23°30'30"	2°18	6°21	13°38'38"	12°43'43"	17°54'54"	17°23'23"	S 16
M17	8 17 24	5°21'51"	10°13'51"	18°21'21"	4° 4	13°30'30"	11°59'59"	18°52'52"	23°27'27"	2°18	6°19	13°40'40"	12°40'40"	18° 1	17°21'21"	M17
T 18	8 21 21	6°22'45"	22°27'27"	19°52'52"	5°20'20"	14°12'12"	12°14'14"	18°52'52"	23°24'24"	2°17	6°18	13°42'42"	12°37'37"	18° 7	17°19'19"	T 18
W19	8 25 17	7°23'37"	4°15'15"	21°24'24"	6°35'35"	14°53'53"	12°28'28"	18°R52	23°22'22"	2°16	6°16	13°43'43"	12°34'34"	18°14'14"	17°17'17"	W19
T 20	8 29 14	8°24'28"	16° 1	22°56'56"	7°50'50"	15°35'35"	12°42'42"	18°52'52"	23°19'19"	2°15	6°15	13°R43	12°31'31"	18°21'21"	17°15'15"	T 20
F 21	8 33 11	9°25'18"	27°49'49"	24°30'30"	9° 6	16°16'16"	12°57'57"	18°52'52"	23°17'17"	2°14	6°13	13°42'42"	12°27'27"	18°27'27"	17°13'13"	F 21
S 22	8 37 7	10°26'07"	9°40'40"	26° 4	10°21'21"	16°58'58"	13°11'11"	18°51'51"	23°14'14"	2°14	6°12	13°40'40"	12°24'24"	18°34'34"	17°11'11"	S 22
S 23	8 41 4	11°26'54"	21°38'38"	27°38'38"	11°36'36"	17°39'39"	13°25'25"	18°51'51"	23°12'12"	2°13	6°11	13°36'36"	12°21'21"	18°40'40"	17° 9	S 23
M24	8 45 0	12°27'40"	3°43'43"	29°14'14"	12°51'51"	18°21'21"	13°40'40"	18°51'51"	23°10'10"	2°12	6° 9	13°32'32"	12°18'18"	18°47'47"	17° 8	M24
T 25	8 48 57	13°28'24"	15°57'57"	0°50'50"	14° 7	19° 2	13°54'54"	18°50'50"	23° 7	2°11	6° 8	13°26'26"	12°15'15"	18°54'54"	17° 6	T 25
W26	8 52 53	14°29'07"	28°22'22"	2°27'27"	15°22'22"	19°44'44"	14° 9	18°49'49"	23° 5	2°10	6° 6	13°21'21"	12°12'12"	19° 0	17° 4	W26
T 27	8 56 50	15°29'49"	11°17'17"	4° 5	16°37'37"	20°26'26"	14°23'23"	18°49'49"	23° 2	2° 9	6° 5	13°16'16"	12° 8	19° 7	17° 3	T 27
F 28	9 0 46	16°30'28"	23°52'52"	5°44'44"	17°52'52"	21° 7	14°37'37"	18°48'48"	23° 0	2° 8	6° 4	13°12'12"	12° 5	19°14'14"	17° 2	F 28
S 29	9 4 43	17°31'06"	7°8 0	7°24'24"	19° 7	21°49'49"	14°52'52"	18°47'47"	22°58'58"	2° 7	6° 2	13°10'10"	12° 2	19°20'20"	17° 0	S 29
S 30	9 8 39	18°31'43"	20°28'28"	9° 4	20°23'23"	22°30'30"	15° 6	18°46'46"	22°55'55"	2° 6	6° 1	13°D10	11°59'59"	19°27'27"	16°59'59"	S 30
M31	9 12 36	19°32'17"	4°11'11"	10°46'46"	21°38'38"	23°12'12"	15°20'20"	18°44'44"	22°53'53"	2° 5	5°59	13°31'31"	11°56'56"	19°34'34"	16°II58	M31

Delta T = 06m26s

Julian Calendar 1 Jan. 1452 == Greg. Calendar 10 Jan. 1452

FEBRUARY 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	9 16 33	20°32'50"	18°II24	12°28'28"	22°53'53"	23°15'54"	15°35'35"	18°R43	22°R51	2°R 3	5°R58	13°31'31"	11°35'35"	19°34'34"	16°R57	T 1
W 2	9 20 29	21°33'21"	2°53'53"	14°11'11"	24° 8	24°35'35"	15°49'49"	18°42'42"	22°49'49"	2° 2	5°57	13°13'13"	11°49'49"	19°47'47"	16°II56	W 2
T 3	9 24 26	22°33'50"	17°39'39"	15°55'55"	25°23'23"	25°17'17"	16° 3	18°40'40"	22°46'46"	2° 1	5°55	13°R13	11°46'46"	19°54'54"	16°55'55"	T 3
F 4	9 28 22	23°34'17"	2°43'43"	17°40'40"	26°38'38"	25°59'59"	16°18'18"	18°39'39"	22°44'44"	2° 0	5°54	13°12'12"	11°43'43"	20° 0	16°55'55"	F 4
S 5	9 32 19	24°34'42"	17°40'40"	19°26'26"	27°53'53"	26°41'41"	16°32'32"	18°37'37"	22°42'42"	1°59	5°53	13° 9	11°40'40"	20° 7	16°54'54"	S 5
S 6	9 36 15	25°35'06"	2°17'17"	21°13'13"	29° 8	27°22'22"	16°46'46"	18°35'35"	22°40'40"	1°58	5°51	13° 3	11°37'37"	20°14'14"	16°53'53"	S 6
M 7	9 40 12	26°35'28"	17°22'22"	23° 1	0°13'13"	28° 4	17° 1	18°33'33"	22°38'38"	1°56	5°50	12°57'57"	11°33'33"	20°20'20"	16°53'53"	M 7
T 8	9 44 9	27°35'48"	1°46'46"	24°50'50"	1°38'38"	28°46'46"	17°15'15"	18°31'31"	22°36'36"	1°55	5°49	12°49'49"	11°30'30"	20°27'27"	16°52'52"	T 8
W 9	9 48 5	28°36'07"	1°54'54"	26°40'40"	2°53'53"	29°28'28"	17°29'29"	18°29'29"	22°34'34"	1°54	5°47	12°42'42"	11°27'27"	20°33'33"	16°52'52"	W 9
T 10	9 52 2	29°36'24"	2°12'12"	28°30'30"	4° 8	0°10'10"	17°44'44"	18°27'27"	22°32'32"	1°52	5°46	12°37'37"	11°24'24"	20°40'40"	16°52'52"	T 10
F 11	9 55 58	0°36'40"	12°13'13"	0°12'12"	5°23'23"	0°52'52"	17°58'58"	18°25'25"	22°30'30"	1°51	5°45	12°33'33"	11°21'21"	20°47'47"	16°52'52"	F 11
S 12	9 59 55	1°36'54"	24°50'50"	2°14'14"	6°38'38"	1°34'34"	18°12'12"	18°22'22"	22°28'28"	1°50	5°44	12°31'31"	11°18'18"	20°53'53"	16°D52	S 12
S 13	10 3 51	2°37'07"	7°17'17"	4° 8	7°53'53"	2°15'15"	18°26'26"	18°20'20"	22°27'27"	1°48	5°42	12°D31	11°14'14"	21° 0	16°52'52"	S 13
M14	10 7 48	3°37'18"	19° 7	6° 2	9° 8	2°57'57"	18°40'40"	18°17'17"	22°25'25"	1°47	5°41	12°32'32"	11°11'11"	21° 7	16°52'52"	M14
T 15	10 11 44	4°37'28"	0°35'58"	7°57'57"	10°23'23"	3°39'39"	18°54'54"	18°15'15"	22°23'23"	1°45	5°40	12°33'33"	11° 8	21°13'13"	16°52'52"	T 15
W16	10 15 41	5°37'36"	12°45'45"	9°52'52"	11°38'38"	4°21'21"	19° 9	18°12'12"	22°21'21"	1°44	5°39	12°R34	11° 5	21°20'20"	16°52'52"	W16
T 17	10 19 37	6°37'43"	24°31'31"	11°48'48"	12°53'53"	5° 3	19°23'23"	18° 9	22°20'20"	1°43	5°38	12°33'33"	11° 2	21°27'27"	16°52'52"	T 17
F 18	10 23 34	7°37'47"	6°21'21"	13°45'45"	14° 8	5°45'45"	19°37'37"	18° 6	22°18'18"	1°41	5°36	12°30'30"	10°58'58"	21°33'33"	16°53'53"	F 18
S 19	10 27 31	8°37'50"	18°19'19"	15°41'41"	15°22'22"	6°27'27"	19°51'51"	18° 4	22°16'16"	1°40	5°35	12°24'24"	10°55'55"	21°40'40"	16°53'53"	S 19
S 20	10 31 27	9°37'51"	0°13'27"	17°38'38"	16°37'37"	7° 9	20° 5	18° 1	22°15'15"	1°38	5°34	12°16'16"	10°52'52"	21°47'47"	16°54'54"	S 20
M21	10 35 24	10°37'50"	12°45'45"	19°35'35"	17°52'52"	7°51'51"	20°19'19"	17°57'57"	22°13'13"	1°37	5°33	12° 6	10°49'49"	21°53'53"	16°55'55"	M21
T 22	10 39 20	11°37'47"	25°16'16"	21°31'31"	19° 7	8°33'33"	20°33'33"	17°54'54"	22°12'12"	1°35	5°32	11°55'55"	10°46'46"	22° 0	16°55'55"	T 22
W23	10 43 17	12°37'42"	7°15'59"	23°26'26"	20°22'22"	9°15'15"	20°46'46"	17°51'51"	22°10'10"	1°34	5°31	11°44'44"	10°43'43"	22° 7	16°56'56"	W23
T 24	10 47 13	13°37'35"	20°54'54"	25°20'20"	21°36'36"	9°57'57"	21° 0	17°48'48"	22° 9	1°32	5°30	11°33'33"	10°39'39"	22°13'13"	16°57'57"	T 24
F 25	10 51 10	14°37'26"	4°8 0	27°12'12"	22°51'51"	10°39'39"	21°14'14"	17°44'44"	22° 8	1°30	5°29	11°25'25"	10°36'36"	22°20'20"	16°58'58"	F 25
S 26	10 55 6	15°37'15"	17°19'19"	29° 3	24° 6	11°22'22"	21°28'28"	17°41'41"	22° 7	1°29	5°28	11°19'19"	10°33'33"	22°26'26"	16°59'59"	S 26
S 27	10 59 3	16°37'01"	0°II50	0°15'52"	25°20'20"	12° 4	21°42'42"	17°37'37"	22° 5	1°27	5°27	11°16'16"	10°30'30"	22°33'33"	17° 1	S 27
M28	11 3 0	17°36'46"	14°35'35"	2°37'37"	26°35'35"	12°46'46"	21°55'55"	17°33'33"	22° 4	1°26	5°26	11°D14	10°27'27"	22°40'40"	17° 2	M28

ASTRODIENST EPHEMERIS for the year 1452

geocentric

MARCH 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	11 10 53	19°36'07	12°44	5°58	29°4	14°10	22°23	17°R26	22°R 2	1°R23	5°R24	11°R15	10°R20	22°R53	17°II 5	W 1
T 2	11 14 49	20°35'44	27° 8	7°33	0°Y19	14°52	22°36	17°A22	22°A 1	1°A21	5°A23	11°A14	10°17	23° 0	17° 6	T 2
F 3	11 18 46	21°35'19	11°42	9° 2	1°33	15°34	22°50	17°18	22° 0	1°19	5°22	11°11	10°14	23° 6	17° 8	F 3
S 4	11 22 42	22°34'52	26°21	10°27	2°48	16°16	23° 3	17°14	21°59	1°18	5°21	11° 5	10°11	23°13	17°10	S 4
S 5	11 26 39	23°34'22	10°59	11°46	4° 2	16°59	23°17	17°10	21°58	1°16	5°20	10°56	10° 8	23°20	17°11	S 5
M 6	11 30 35	24°33'50	25°29	12°59	5°17	17°41	23°30	17° 6	21°57	1°14	5°19	10°46	10° 4	23°26	17°13	M 6
T 7	11 34 32	25°33'16	9°43	14° 6	6°31	18°23	23°43	17° 2	21°57	1°13	5°18	10°34	10° 1	23°33	17°15	T 7
W 8	11 38 29	26°32'40	23°36	15° 7	7°46	19° 5	23°56	16°58	21°56	1°11	5°18	10°23	9°58	23°40	17°17	W 8
T 9	11 42 25	27°32'03	7°5	16° 0	9° 0	19°47	24°10	16°54	21°55	1° 9	5°17	10°13	9°55	23°46	17°19	T 9
F 10	11 46 22	28°31'23	20° 8	16°47	10°14	20°30	24°23	16°50	21°55	1° 8	5°16	10° 5	9°52	23°53	17°21	F 10
S 11	11 50 18	29°30'42	2°48	17°26	11°29	21°12	24°36	16°46	21°54	1° 6	5°15	10° 0	9°49	24° 0	17°24	S 11
S 12	11 54 15	0°Y29'59	15° 7	17°58	12°43	21°54	24°49	16°41	21°54	1° 4	5°15	9°58	9°45	24° 6	17°26	S 12
M13	11 58 11	1°29'14	27°11	18°22	13°57	22°36	25° 2	16°37	21°53	1° 3	5°14	9°57	9°42	24°13	17°28	M13
T 14	12 2 8	2°28'27	9°3	18°39	15°12	23°18	25°15	16°33	21°53	1° 1	5°13	9°57	9°39	24°19	17°31	T 14
W15	12 6 4	3°27'38	20°51	18°49	16°26	24° 1	25°28	16°28	21°52	1° 0	5°13	9°57	9°36	24°26	17°33	W15
T 16	12 10 1	4°26'48	2°39	18°R52	17°40	24°43	25°40	16°24	21°52	0°58	5°12	9°55	9°33	24°33	17°36	T 16
F 17	12 13 58	5°25'55	14°33	18°47	18°54	25°25	25°53	16°19	21°52	0°56	5°11	9°51	9°29	24°39	17°39	F 17
S 18	12 17 54	6°25'01	26°36	18°36	20° 9	26° 8	26° 6	16°15	21°52	0°55	5°11	9°44	9°26	24°46	17°41	S 18
S 19	12 21 51	7°24'05	8°53	18°18	21°23	26°50	26°18	16°10	21°52	0°53	5°10	9°35	9°23	24°53	17°44	S 19
M20	12 25 47	8°23'07	21°24	17°55	22°37	27°32	26°31	16° 6	21°51	0°51	5°10	9°23	9°20	24°59	17°47	M20
T 21	12 29 44	9°22'07	4°Y12	17°26	23°51	28°14	26°43	16° 1	21°D51	0°50	5° 9	9°10	9°17	25° 6	17°50	T 21
W22	12 33 40	10°21'05	17°15	16°53	25° 5	28°57	26°56	15°57	21°51	0°48	5° 9	8°57	9°14	25°13	17°53	W22
T 23	12 37 37	11°20'00	0°B33	16°15	26°19	29°39	27° 8	15°52	21°52	0°46	5° 8	8°44	9°10	25°19	17°56	T 23
F 24	12 41 33	12°18'54	14° 2	15°35	27°33	0°A21	27°20	15°47	21°52	0°45	5° 8	8°34	9° 7	25°26	18° 0	F 24
S 25	12 45 30	13°17'46	27°42	14°52	28°47	1° 3	27°32	15°43	21°52	0°43	5° 7	8°27	9° 4	25°33	18° 3	S 25
S 26	12 49 26	14°16'35	11°II29	14° 7	0°B 1	1°45	27°44	15°38	21°52	0°42	5° 7	8°22	9° 1	25°39	18° 6	S 26
M27	12 53 23	15°15'22	25°23	13°22	1°15	2°28	27°56	15°34	21°52	0°40	5° 7	8°21	8°58	25°46	18°10	M27
T 28	12 57 20	16°14'07	9°B23	12°37	2°29	3°10	28° 8	15°29	21°53	0°38	5° 6	8°20	8°55	25°53	18°13	T 28
W29	13 1 16	17°12'50	23°29	11°53	3°43	3°52	28°20	15°24	21°53	0°37	5° 6	8°20	8°51	25°59	18°17	W29
T 30	13 5 13	18°11'30	7°II39	11°11	4°57	4°34	28°32	15°20	21°54	0°35	5° 6	8°19	8°48	26° 6	18°20	T 30
F 31	13 9 9	19°Y10'08	21°II52	10°Y32	6°B10	5°A17	28°A43	15°A15	21°B54	0°A34	5°A 6	8°B16	8°B45	26°B13	18°II24	F 31

Delta T = 06m25s

Julian Calendar 1 March 1452 == Greg. Calendar 10 March 1452

APRIL 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	13 13 6	20°Y 8'44	6°II 6	9°R55	7°B24	5°A59	28°A55	15°R11	21°B55	0°R32	5°R 5	8°R10	8°B42	26°B19	18°II27	S 1
S 2	13 17 2	21° 7'17	20°17	9°Y22	8°38	6°41	29° 6	15°A 6	21°55	0°A31	5°A 5	8°B 2	8°39	26°26	18°31	S 2
M 3	13 20 59	22° 5'48	4°A21	8°54	9°52	7°23	29°18	15° 2	21°56	0°29	5° 5	7°51	8°35	26°32	18°35	M 3
T 4	13 24 55	23° 4'17	18°14	8°29	11° 5	8° 5	29°29	14°57	21°57	0°28	5° 5	7°39	8°32	26°39	18°39	T 4
W 5	13 28 52	24° 2'45	1°II49	8° 9	12°19	8°47	29°40	14°52	21°58	0°26	5° 5	7°28	8°29	26°46	18°43	W 5
T 6	13 32 49	25° 1'10	15° 6	7°55	13°32	9°30	29°51	14°48	21°58	0°25	5° 5	7°18	8°26	26°52	18°47	T 6
F 7	13 36 45	25°59'34	28° 2	7°45	14°46	10°12	0°H 2	14°43	21°59	0°23	5° 5	7°10	8°23	26°59	18°51	F 7
S 8	13 40 42	26°57'56	10°A38	7°D40	16° 0	10°54	0°13	14°39	22° 0	0°22	5°D 5	7° 4	8°20	27° 6	18°55	S 8
S 9	13 44 38	27°56'17	22°57	7°40	17°13	11°36	0°24	14°35	22° 1	0°20	5° 5	7° 1	8°16	27°12	18°59	S 9
M10	13 48 35	28°54'35	5°B 0	7°45	18°27	12°18	0°35	14°30	22° 2	0°19	5° 5	7°D 0	8°13	27°19	19° 4	M10
T 11	13 52 31	29°52'53	16°54	7°55	19°40	13° 0	0°45	14°26	22° 3	0°17	5° 5	7° 1	8°10	27°26	19° 8	T 11
W12	13 56 28	0°B51'08	28°44	8° 9	20°54	13°42	0°56	14°21	22° 4	0°16	5° 5	7°R 1	8° 7	27°32	19°12	W12
T 13	14 0 24	1°49'22	10°A33	8°29	22° 7	14°24	1° 6	14°17	22° 6	0°15	5° 5	7° 1	8° 4	27°39	19°17	T 13
F 14	14 4 21	2°47'35	22°29	8°52	23°20	15° 6	1°16	14°13	22° 7	0°13	5° 5	6°59	8° 1	27°46	19°21	F 14
S 15	14 8 18	3°45'46	4°H36	9°20	24°34	15°48	1°27	14° 9	22° 8	0°12	5° 5	6°54	7°57	27°52	19°26	S 15
S 16	14 12 14	4°43'55	16°58	9°52	25°47	16°30	1°37	14° 5	22°10	0°11	5° 6	6°48	7°54	27°59	19°30	S 16
M17	14 16 11	5°42'03	29°38	10°29	27° 0	17°12	1°47	14° 0	22°11	0° 9	5° 6	6°39	7°51	28° 6	19°35	M17
T 18	14 20 7	6°40'10	12°Y38	11° 9	28°14	17°54	1°56	13°56	22°12	0° 8	5° 6	6°30	7°48	28°12	19°39	T 18
W19	14 24 4	7°38'14	25°58	11°52	29°27	18°36	2° 6	13°52	22°14	0° 7	5° 6	6°19	7°45	28°19	19°44	W19
T 20	14 28 0	8°36'18	9°B37	12°40	0°II40	19°18	2°16	13°48	22°15	0° 6	5° 7	6°10	7°41	28°26	19°49	T 20
F 21	14 31 57	9°34'19	23°30	13°30	1°53	20° 0	2°25	13°44	22°17	0° 5	5° 7	6° 2	7°38	28°32	19°54	F 21
S 22	14 35 53	10°32'19	7°II35	14°24	3° 6	20°41	2°35	13°41	22°19	0° 3	5° 7	5°57	7°35	28°39	19°58	S 22
S 23	14 39 50	11°30'18	21°47	15°22	4°19	21°23	2°44	13°37	22°20	0° 2	5° 8	5°54	7°32	28°46	20° 3	S 23
M24	14 43 47	12°28'14	6°B 2	16°22	5°32	22° 5	2°53	13°33	22°22	0° 1	5° 8	5°D53	7°29	28°52	20° 8	M24
T 25	14 47 43	13°26'09	20°17	17°25	6°45	22°46	3° 2	13°29	22°24	29°II59	5° 9	5°53	7°26	28°59	20°13	T 25
W26	14 51 40	14°24'02	4°II29	18°31	7°58	23°28	3°11	13°26	22°26	29°59	5° 9	5°54	7°22	29° 6	20°18	W26
T 27	14 55 36	15°21'53	18°37	19°40	9°11	24°10	3°19	13°22	22°28	29°58	5°10	5°R55	7°19	29°12	20°23	T 27
F 28	14 59 33	16°19'42	2°II40	20°51	10°24	24°51	3°28	13°19	22°29	29°57	5°10	5°53	7°16	29°19	20°28	F 28
S 29	15 3 29	17°17'29	16°37	22° 5	11°37	25°33	3°36	13°15	22°31	29°56	5°11	5°50	7°13	29°25	20°34	S 29
S 30	15 7 26	18°B15'15	0°A25	23°Y22	12°II50	26°A14	3°H45	13°A12	22°B33	29°II55	5°A11	5°B45	7°B10	29°B32	20°II39	S 30

Delta T = 06m25s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1452

geocentric

MAY 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day				
M 1	15 11 22	19°8'12"59	14°5' 2	24°41' 14	14°11' 3	26°56' 56	3°53' 53	13°R 9	22°35' 35	29°R54	5°12' 12	5°R38	7°3' 6	29°33' 39	20°11' 44	M 1				
T 2	15 15 19	20°10'41	27°28	26° 3	15°16	27°37	4° 1	13°5 5	22°38	29°11'53	5°13	5°31	7° 3	29°45	20°49	T 2				
W 3	15 19 16	21° 8'22	10°11'40	27°27	16°28	28°18	4° 9	13° 2	22°40	29°52	5°13	5°23	7° 0	29°52	20°54	W 3				
T 4	15 23 12	22° 6'02	23°37	28°54	17°41	28°59	4°17	12°59	22°42	29°51	5°14	5°17	6°57	29°59	21° 0	T 4				
F 5	15 27 9	23° 3'40	6°18	0°23	18°54	29°41	4°24	12°56	22°44	29°50	5°15	5°12	6°54	0°5 5	21° 5	F 5				
S 6	15 31 5	24° 1'17	18°44	1°54	20° 6	0°22	4°32	12°53	22°46	29°49	5°15	5° 8	6°51	0°12	21°10	S 6				
S 7	15 35 2	24°58'53	0°356	3°27	21°19	1° 3	4°39	12°50	22°49	29°49	5°16	5°D 7	6°47	0°19	21°16	S 7				
M 8	15 38 58	25°56'28	12°57	5° 3	22°31	1°44	4°46	12°48	22°51	29°48	5°17	5° 7	6°44	0°25	21°21	M 8				
T 9	15 42 55	26°54'02	24°50	6°42	23°44	2°25	4°54	12°45	22°53	29°47	5°18	5° 8	6°41	0°32	21°27	T 9				
W10	15 46 51	27°51'35	6°39	8°22	24°56	3° 6	5° 0	12°42	22°56	29°46	5°19	5°10	6°38	0°39	21°32	W10				
T 11	15 50 48	28°49'07	18°30	10° 5	26° 9	3°47	5° 7	12°40	22°58	29°46	5°19	5°12	6°35	0°45	21°38	T 11				
F 12	15 54 45	29°46'38	0°26	11°50	27°21	4°28	5°14	12°38	23° 1	29°45	5°20	5°R12	6°32	0°52	21°43	F 12				
S 13	15 58 41	0°11'44"08	12°33	13°38	28°34	5° 8	5°20	12°35	23° 3	29°44	5°21	5°11	6°28	0°59	21°49	S 13				
S 14	16 2 38	1°41'37	24°56	15°28	29°46	5°49	5°27	12°33	23° 6	29°44	5°22	5° 9	6°25	1° 5	21°54	S 14				
M15	16 6 34	2°39'06	7°39	17°20	0°58	6°30	5°33	12°31	23° 9	29°43	5°23	5° 6	6°22	1°12	22° 0	M15				
T 16	16 10 31	3°36'34	20°44	19°14	2°10	7°10	5°39	12°29	23°11	29°43	5°24	5° 1	6°19	1°19	22° 5	T 16				
W17	16 14 27	4°34'01	4°13	21°11	3°23	7°50	5°44	12°27	23°14	29°42	5°25	4°57	6°16	1°25	22°11	W17				
T 18	16 18 24	5°31'27	18° 4	23° 9	4°35	8°31	5°50	12°25	23°17	29°42	5°26	4°52	6°12	1°32	22°17	T 18				
F 19	16 22 20	6°28'53	2°16	25°10	5°47	9°11	5°56	12°23	23°19	29°41	5°27	4°49	6° 9	1°39	22°22	F 19				
S 20	16 26 17	7°26'17	16°43	27°13	6°59	9°51	6° 1	12°21	23°22	29°41	5°28	4°46	6° 6	1°45	22°28	S 20				
S 21	16 30 14	8°23'41	1°20	29°17	8°11	10°31	6° 6	12°20	23°25	29°41	5°29	4°D45	6° 3	1°52	22°34	S 21				
M22	16 34 10	9°21'04	16° 0	1°11'24	9°23	11°11	6°11	12°18	23°28	29°40	5°30	4°46	6° 0	1°59	22°40	M22				
T 23	16 38 7	10°18'26	0°13	3°31	10°35	11°51	6°16	12°17	23°31	29°40	5°31	4°47	5°57	2° 5	22°45	T 23				
W24	16 42 3	11°15'46	15° 7	5°40	11°47	12°31	6°21	12°16	23°34	29°40	5°33	4°48	5°53	2°12	22°51	W24				
T 25	16 46 0	12°13'06	29°25	7°50	12°59	13°10	6°25	12°14	23°37	29°39	5°34	4°49	5°50	2°19	22°57	T 25				
F 26	16 49 56	13°10'24	13°29	10° 1	14°10	13°50	6°29	12°13	23°40	29°39	5°35	4°R50	5°47	2°25	23° 3	F 26				
S 27	16 53 53	14° 7'42	27°18	12°13	15°22	14°29	6°33	12°12	23°43	29°39	5°36	4°49	5°44	2°32	23° 9	S 27				
S 28	16 57 49	15° 4'58	10°52	14°25	16°34	15° 9	6°37	12°11	23°46	29°39	5°37	4°48	5°41	2°39	23°14	S 28				
M29	17 1 46	16° 2'14	24°10	16°36	17°46	15°48	6°41	12°11	23°49	29°39	5°39	4°46	5°38	2°45	23°20	M29				
T 30	17 5 43	16°59'29	7°14	18°48	18°57	16°27	6°45	12°10	23°52	29°39	5°40	4°43	5°34	2°52	23°26	T 30				
W31	17 9 39	17°11'56"43	20°11	3	20°11'59	20°26	9	17°11	6	6°48	12°11	9	23°55	29°11'38	5°41	4°31	5°31	2°59	23°11'32	W31

Delta T = 06m25s

Julian Calendar 1 May 1452 == Greg. Calendar 10 May 1452

JUNE 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day		
T 1	17 13 36	18°11'53.57	2°39	23°11'10	21°20	17°45	6°51	12°R 9	23°58	29°D38	5°42	4°R39	5°28	3°5 5	23°11.38	T 1		
F 2	17 17 32	19°51'10	15° 3	25°19	22°32	18°24	6°54	12°5 8	24° 1	29°11.38	5°44	4°37	5°25	3°12	23°44	F 2		
S 3	17 21 29	20°48'23	27°16	27°27	23°43	19° 2	6°57	12° 8	24° 4	29°38	5°45	4°36	5°22	3°19	23°50	S 3		
S 4	17 25 25	21°45'35	9°39	29°34	24°54	19°41	7° 0	12° 8	24° 8	29°39	5°47	4°D36	5°18	3°25	23°55	S 4		
M 5	17 29 22	22°42'47	21°14	19°39	26° 6	20°19	7° 2	12° 8	24°11	29°39	5°48	4°37	5°15	3°32	24° 1	M 5		
T 6	17 33 19	23°39'58	3°5 5	3°43	27°17	20°57	7° 5	12°D 7	24°14	29°39	5°49	4°38	5°12	3°39	24° 7	T 6		
W 7	17 37 15	24°37'10	14°54	5°45	28°28	21°35	7° 7	12° 8	24°17	29°39	5°51	4°39	5° 9	3°45	24°13	W 7		
T 8	17 41 12	25°34'21	26°44	7°45	29°39	22°13	7° 9	12° 8	24°21	29°39	5°52	4°40	5° 6	3°52	24°19	T 8		
F 9	17 45 8	26°31'32	8°41	9°43	0°150	22°51	7°10	12° 8	24°24	29°39	5°54	4°40	5° 3	3°59	24°25	F 9		
S 10	17 49 5	27°28'43	20°48	11°39	2° 1	23°29	7°12	12° 8	24°28	29°40	5°55	4°41	4°59	4° 5	24°31	S 10		
S 11	17 53 1	28°25'54	3°9	13°33	3°12	24° 6	7°13	12° 9	24°31	29°40	5°56	4°R41	4°56	4°12	24°37	S 11		
M12	17 56 58	29°23'06	15°50	15°25	4°23	24°43	7°14	12° 9	24°34	29°40	5°58	4°40	4°53	4°19	24°43	M12		
T 13	18 0 54	0°20'17	28°53	17°15	5°34	25°20	7°15	12°10	24°38	29°41	5°59	4°40	4°50	4°25	24°48	T 13		
W14	18 4 51	1°17'29	12°21	19° 2	6°44	25°57	7°16	12°11	24°41	29°41	6° 1	4°40	4°47	4°32	24°54	W14		
T 15	18 8 48	2°14'41	26°15	20°48	7°55	26°34	7°17	12°12	24°45	29°41	6° 3	4°39	4°44	4°39	25° 0	T 15		
F 16	18 12 44	3°11'53	10°11.33	22°31	9° 6	27°11	7°17	12°13	24°48	29°42	6° 4	4°39	4°40	4°45	25° 6	F 16		
S 17	18 16 41	4° 9'05	25°13	24°13	10°16	27°47	7°R17	12°14	24°52	29°42	6° 6	4°D39	4°37	4°52	25°12	S 17		
S 18	18 20 37	5° 6'17	10°26	7	25°52	11°27	28°23	7°17	12°15	24°55	29°43	6° 7	4°R39	4°34	4°59	S 18		
M19	18 24 34	6° 3'29	25° 8	27°29	12°37	28°59	7°17	12°16	24°59	29°43	6° 9	4°39	4°31	5° 5	25°24	M19		
T 20	18 28 30	7° 0'42	10°11	8	29° 4	13°48	29°35	7°17	12°17	25° 2	29°44	6°10	4°39	4°28	5°12	T 20		
W21	18 32 27	7°57'54	24°58	0°137	14°58	0°110	7°16	12°19	25° 6	29°45	6°12	4°39	4°24	5°19	25°35	W21		
T 22	18 36 23	8°55'06	9°11.33	2° 8	16° 8	0°45	7°15	12°20	25° 9	29°45	6°14	4°38	4°21	5°25	25°41	T 22		
F 23	18 40 20	9°52'18	23°46	3°36	17°18	1°21	7°14	12°22	25°13	29°46	6°15	4°38	4°18	5°32	25°47	F 23		
S 24	18 44 17	10°49'29	7°11.38	5° 3	18°28	1°55	7°13	12°24	25°16	29°47	6°17	4°D38	4°15	5°39	25°53	S 24		
S 25	18 48 13	11°46'41	21° 7	6°27	19°38	2°30	7°12	12°26	25°20	29°47	6°19	4°38	4°12	5°45	25°58	S 25		
M26	18 52 10	12°43'53	4°11.15	7°49	20°48	3° 4	7°10	12°27	25°24	29°48	6°20	4°38	4° 9	5°52	26° 4	M26		
T 27	18 56 6	13°41'05	17° 5	9° 8	21°58	3°38	7° 8	12°29	25°27	29°49	6°22	4°39	4° 5	5°59	26°10	T 27		
W28	19 0 3	14°38'17	29°38	10°25	23° 8	4°12	7° 6	12°32	25°31	29°50	6°24	4°40	4° 2	6° 5	26°16	W28		
T 29	19 3 59	15°35'29	11°11.58	11°40	24°17	4°46	7° 4	12°34	25°35	29°51	6°25	4°41	3°59	6°12	26°21	T 29		
F 30	19 7 56	16°32'41	24°11	7	12°11.52	25°11.27	5°11.19	7°11	2	12°11.36	25°11.38	29°11.38	6°11.27	4°11.31	3°11.56	6°11.19	26°11.27	F 30

Delta T = 06m25s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1452
geocentric

JULY 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	19 11 52	17°29'54	6°37 7	14°02 2	26°03'36	5°05'52	6°05'59	12°03'38	25°03'42	29°05'52	6°02'29	4°04'42	3°03'53	6°02'25	26°02'33	S 1
S 2	19 15 49	18°27'07	18° 2	15°10	27°46	6°25	6°05'57	12°41	25°46	29°53	6°31	4°03'41	3°50	6°32	26°38	S 2
M 3	19 19 46	19°24'21	29°53	16°14	28°55	6°58	6°54	12°44	25°49	29°54	6°32	4°40	3°46	6°39	26°44	M 3
T 4	19 23 42	20°21'35	11°04'42	17°16	0°04 4	7°30	6°51	12°46	25°53	29°55	6°34	4°38	3°43	6°45	26°50	T 4
W 5	19 27 39	21°18'50	23°32	18°15	1°13	8° 2	6°48	12°49	25°57	29°56	6°36	4°36	3°40	6°52	26°55	W 5
T 6	19 31 35	22°16'06	5°05'25	19°11	2°22	8°34	6°44	12°52	26° 0	29°57	6°38	4°33	3°37	6°59	27° 1	T 6
F 7	19 35 32	23°13'22	17°24	20° 4	3°31	9° 5	6°40	12°55	26° 4	29°59	6°39	4°31	3°34	7° 5	27° 6	F 7
S 8	19 39 28	24°10'40	29°32	20°53	4°40	9°36	6°37	12°58	26° 8	29°59	6°41	4°28	3°30	7°12	27°12	S 8
S 9	19 43 25	25° 7'58	11°05'53	21°39	5°49	10° 7	6°33	13° 1	26°11	0°01 1	6°43	4°27	3°27	7°19	27°17	S 9
M10	19 47 21	26° 5'17	24°31	22°22	6°57	10°37	6°29	13° 4	26°15	0° 2	6°45	4°02'26	3°24	7°25	27°23	M10
T 11	19 51 18	27° 2'37	7°05'29	23° 1	8° 6	11° 7	6°24	13° 7	26°19	0° 3	6°46	4°27	3°21	7°32	27°28	T 11
W12	19 55 15	27°59'59	20°50	23°36	9°14	11°37	6°20	13°11	26°22	0° 4	6°48	4°28	3°18	7°39	27°33	W12
T 13	19 59 11	28°57'21	4°02'38	24° 8	10°22	12° 6	6°15	13°14	26°26	0° 6	6°50	4°29	3°15	7°45	27°39	T 13
F 14	20 3 8	29°54'45	18°51	24°34	11°31	12°35	6°10	13°18	26°30	0° 7	6°52	4°30	3°11	7°52	27°44	F 14
S 15	20 7 4	0°05'21'10	3°03'30	24°57	12°39	13° 4	6° 5	13°21	26°33	0° 8	6°54	4°03'31	3° 8	7°59	27°49	S 15
S 16	20 11 1	1°49'36	18°28	25°15	13°47	13°32	6° 0	13°25	26°37	0°10	6°55	4°30	3° 5	8° 5	27°55	S 16
M17	20 14 57	2°47'03	3°03'38	25°28	14°54	13°59	5°55	13°29	26°41	0°11	6°57	4°29	3° 2	8°12	28° 0	M17
T 18	20 18 54	3°44'31	18°51	25°36	16° 2	14°27	5°49	13°33	26°44	0°12	6°59	4°25	2°59	8°19	28° 5	T 18
W19	20 22 50	4°41'59	3°05'58	25°04'40	17°10	14°54	5°44	13°37	26°48	0°14	7° 1	4°21	2°56	8°25	28°10	W19
T 20	20 26 47	5°39'29	18°48	25°37	18°17	15°20	5°38	13°41	26°52	0°15	7° 3	4°17	2°52	8°32	28°15	T 20
F 21	20 30 44	6°36'59	3°04'14	25°30	19°24	15°46	5°32	13°45	26°55	0°17	7° 4	4°13	2°49	8°39	28°20	F 21
S 22	20 34 40	7°34'30	17°15	25°17	20°32	16°12	5°26	13°49	26°59	0°18	7° 6	4°10	2°46	8°45	28°26	S 22
S 23	20 38 37	8°32'02	0°04'47	24°59	21°39	16°37	5°20	13°53	27° 3	0°20	7° 8	4° 9	2°43	8°52	28°31	S 23
M24	20 42 33	9°29'35	13°54	24°36	22°46	17° 1	5°13	13°57	27° 6	0°21	7°10	4°02' 9	2°40	8°59	28°35	M24
T 25	20 46 30	10°27'08	26°37	24° 7	23°52	17°25	5° 7	14° 2	27°10	0°23	7°12	4°10	2°36	9° 5	28°40	T 25
W26	20 50 26	11°24'43	9°05' 2	23°34	24°59	17°49	5° 0	14° 6	27°13	0°24	7°13	4°11	2°33	9°12	28°45	W26
T 27	20 54 23	12°22'19	21°12	22°56	26° 5	18°12	4°54	14°11	27°17	0°26	7°15	4°13	2°30	9°19	28°50	T 27
F 28	20 58 19	13°19'56	3°03'12	22°14	27°12	18°35	4°47	14°15	27°21	0°28	7°17	4°03'13	2°27	9°25	28°55	F 28
S 29	21 2 16	14°17'33	15° 5	21°28	28°18	18°57	4°40	14°20	27°24	0°29	7°19	4°13	2°24	9°32	29° 0	S 29
S 30	21 6 13	15°15'12	26°54	20°40	29°24	19°18	4°33	14°25	27°28	0°31	7°21	4°10	2°21	9°39	29° 4	S 30
M31	21 10 9	16°02'53	8°04'43	19°05'50	0°02'29	19°03'39	4°05'26	14°03'30	27°03'31	0°03'33	7°02'22	4°03' 6	2°03'17	9°04'45	29°02' 9	M31

Delta T = 06m25s

Julian Calendar 1 July 1452 == Greg. Calendar 10 July 1452

AUGUST 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	21 14 6	17°02'10'34	20°03'34	18°05'58	1°03'35	20°05' 0	4°05'19	14°03'35	27°03'35	0°03'34	7°02'24	4°05' 0	2°03'14	9°05'52	29°02'14	T 1
W 2	21 18 2	18° 8'17	2°05'38	18°02 7	2°40	20°20	4°05'12	14°40	27°38	0°36	7°26	3°03'52	2°11	9°59	29°18	W 2
T 3	21 21 59	19° 6'01	14°26	17°16	3°46	20°39	4° 4	14°45	27°42	0°38	7°28	3°44	2° 8	10° 5	29°23	T 3
F 4	21 25 55	20° 3'47	26°32	16°27	4°51	20°58	3°57	14°50	27°45	0°40	7°30	3°35	2° 5	10°12	29°27	F 4
S 5	21 29 52	21° 1'34	8°05'46	15°41	5°55	21°16	3°49	14°55	27°49	0°41	7°31	3°28	2° 2	10°19	29°31	S 5
S 6	21 33 48	21°59'23	21°12	14°59	7° 0	21°33	3°42	15° 0	27°52	0°43	7°33	3°22	1°58	10°25	29°36	S 6
M 7	21 37 45	22°57'14	3°05'51	14°22	8° 5	21°50	3°34	15° 5	27°56	0°45	7°35	3°18	1°55	10°32	29°40	M 7
T 8	21 41 42	23°55'07	16°46	13°51	9° 9	22° 6	3°26	15°11	27°59	0°47	7°37	3°16	1°52	10°39	29°44	T 8
W 9	21 45 38	24°53'01	0°02' 2	13°26	10°13	22°21	3°19	15°16	28° 3	0°49	7°38	3°02'16	1°49	10°45	29°48	W 9
T 10	21 49 35	25°50'58	13°40	13° 8	11°17	22°36	3°11	15°22	28° 6	0°51	7°40	3°17	1°46	10°52	29°53	T 10
F 11	21 53 31	26°48'56	27°42	12°58	12°20	22°50	3° 3	15°27	28° 9	0°53	7°42	3°03'18	1°42	10°59	29°57	F 11
S 12	21 57 28	27°46'56	12°08 8	12°05'56	13°24	23° 3	2°55	15°33	28°13	0°55	7°44	3°17	1°39	11° 5	0°08 1	S 12
S 13	22 1 24	28°44'58	26°56	13° 2	14°27	23°16	2°47	15°38	28°16	0°56	7°45	3°15	1°36	11°12	0° 5	S 13
M14	22 5 21	29°43'02	12°02 5	13°16	15°29	23°28	2°39	15°44	28°19	0°58	7°47	3°11	1°33	11°19	0° 8	M14
T 15	22 9 17	0°04'10'08	27°12	13°39	16°32	23°39	2°31	15°50	28°23	1° 0	7°49	3° 4	1°30	11°25	0°12	T 15
W16	22 13 14	1°39'15	12°05'21	14°10	17°34	23°49	2°24	15°56	28°26	1° 2	7°50	2°56	1°27	11°32	0°16	W16
T 17	22 17 11	2°37'24	27°18	14°49	18°37	23°59	2°16	16° 2	28°29	1° 4	7°52	2°47	1°23	11°39	0°20	T 17
F 18	22 21 7	3°35'34	11°05'53	15°36	19°38	24° 7	2° 8	16° 8	28°32	1° 6	7°54	2°38	1°20	11°46	0°23	F 18
S 19	22 25 4	4°33'46	26° 1	16°31	20°40	24°15	2° 0	16°14	28°35	1° 8	7°55	2°31	1°17	11°52	0°27	S 19
S 20	22 29 0	5°32'00	9°04'40	17°33	21°41	24°22	1°52	16°20	28°38	1°11	7°57	2°26	1°14	11°59	0°30	S 20
M21	22 32 57	6°30'15	22°50	18°41	22°42	24°29	1°44	16°26	28°42	1°13	7°59	2°23	1°11	12° 6	0°34	M21
T 22	22 36 53	7°28'32	5°05'34	19°56	23°43	24°34	1°36	16°32	28°45	1°15	8° 0	2°02'22	1° 7	12°12	0°37	T 22
W23	22 40 50	8°26'50	17°57	21°17	24°43	24°39	1°28	16°38	28°48	1°17	8° 2	2°22	1° 4	12°19	0°41	W23
T 24	22 44 46	9°25'10	0°03' 4	22°44	25°43	24°42	1°20	16°44	28°51	1°19	8° 3	2°02'23	1° 1	12°26	0°44	T 24
F 25	22 48 43	10°23'31	12° 0	24°15	26°42	24°45	1°13	16°50	28°54	1°21	8° 5	2°22	0°58	12°32	0°47	F 25
S 26	22 52 40	11°21'54	23°50	25°50	27°42	24°47	1° 5	16°57	28°57	1°23	8° 7	2°20	0°55	12°39	0°50	S 26
S 27	22 56 36	12°20'19	5°05'39	27°29	28°41	24°49	0°57	17° 3	29° 0	1°25	8° 8	2°16	0°52	12°46	0°53	S 27
M28	23 0 33	13°18'45	17°29	29°10	29°39	24°04'49	0°50	17°10	29° 2	1°27	8°10	2° 8	0°48	12°52	0°56	M28
T 29	23 4 29	14°17'13	29°23	0°05'55	0°05'37	24°48	0°42	17°16	29° 5	1°29	8°11	1°58	0°45	12°59	0°59	T 29
W30	23 8 26	15°15'43	11°05'24	2°41	1°35	24°47	0°35	17°22	29° 8	1°32	8°13	1°46	0°42	13° 6	1° 2	W30
T 31	23 12 22	16°04'15	23°05'33	4°05'30	2°05'32	24°05'45	0°05'27	17°05'29	29°05'11	1°05'34	8°02'14	1°03'33	0°03'39	13°05'12	1°05 5	T 31

Delta T = 06m25s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1452

geocentric

SEPTEMBER 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	23 16 19	17 ¹⁷ 12'48	5 ⁵ 50	6 ¹⁷ 19	3 ¹¹ 28	24 ⁰ R41	0 ⁰ R20	17 ¹⁷ 36	29 ²⁹ 14	1 ¹ 36	8 ⁸ 16	1 ⁰ R20	0 ⁰ 36	13 ¹³ 19	1 ¹ 57	F 1
S 2	23 20 15	18 ¹⁸ 11'24	18 ¹⁸ 17	8 ⁸ 9	4 ⁴ 25	24 ²⁴ 37	0 ⁰ X13	17 ¹⁷ 42	29 ²⁹ 16	1 ¹ 38	8 ⁸ 17	1 ⁰ 38	0 ⁰ 33	13 ¹³ 26	1 ¹ 10	S 2
S 3	23 24 12	19 ¹⁹ 10'02	0 ⁰ 54	10 ¹⁰ 0	5 ⁵ 21	24 ²⁴ 32	0 ⁰ 6	17 ¹⁷ 49	29 ²⁹ 19	1 ¹ 40	8 ⁸ 19	0 ⁰ 58	0 ⁰ 29	13 ¹³ 32	1 ¹ 12	S 3
M 4	23 28 9	20 ²⁰ 8'42	13 ¹³ 43	11 ¹¹ 52	6 ⁶ 16	24 ²⁴ 27	29 ²⁹ 59	17 ¹⁷ 55	29 ²⁹ 22	1 ¹ 43	8 ⁸ 20	0 ⁰ 51	0 ⁰ 26	13 ¹³ 39	1 ¹ 15	M 4
T 5	23 32 5	21 ²¹ 7'25	26 ²⁶ 44	13 ¹³ 43	7 ⁷ 11	24 ²⁴ 20	29 ²⁹ 52	18 ¹⁸ 2	29 ²⁹ 24	1 ¹ 45	8 ⁸ 21	0 ⁰ 47	0 ⁰ 23	13 ¹³ 46	1 ¹ 17	T 5
W 6	23 36 2	22 ²² 6'09	10 ¹⁰ II 0	15 ¹⁵ 35	8 ⁸ 5	24 ²⁴ 12	29 ²⁹ 45	18 ¹⁸ 9	29 ²⁹ 27	1 ¹ 47	8 ⁸ 23	0 ⁰ 45	0 ⁰ 20	13 ¹³ 52	1 ¹ 19	W 6
T 7	23 39 58	23 ²³ 4'57	23 ²³ 34	17 ¹⁷ 26	8 ⁸ 59	24 ²⁴ 4	29 ²⁹ 38	18 ¹⁸ 16	29 ²⁹ 30	1 ¹ 49	8 ⁸ 24	0 ⁰ 44	0 ⁰ 17	13 ¹³ 59	1 ¹ 22	T 7
F 8	23 43 55	24 ²⁴ 3'46	7 ⁷ 26	19 ¹⁹ 16	9 ⁹ 52	23 ²³ 55	29 ²⁹ 32	18 ¹⁸ 22	29 ²⁹ 32	1 ¹ 51	8 ⁸ 26	0 ⁰ 44	0 ⁰ 13	14 ¹⁴ 6	1 ¹ 24	F 8
S 9	23 47 51	25 ²⁵ 2'38	21 ²¹ 37	21 ²¹ 6	10 ¹⁰ 44	23 ²³ 45	29 ²⁹ 25	18 ¹⁸ 29	29 ²⁹ 35	1 ¹ 54	8 ⁸ 27	0 ⁰ 43	0 ⁰ 10	14 ¹⁴ 12	1 ¹ 26	S 9
S 10	23 51 48	26 ²⁶ 1'32	6 ⁶ 12	22 ²² 56	11 ¹¹ 36	23 ²³ 34	29 ²⁹ 19	18 ¹⁸ 36	29 ²⁹ 37	1 ¹ 56	8 ⁸ 28	0 ⁰ 40	0 ⁰ 7	14 ¹⁴ 19	1 ¹ 28	S 10
M 11	23 55 44	27 ²⁷ 0'28	20 ²⁰ 53	24 ²⁴ 45	12 ¹² 28	23 ²³ 22	29 ²⁹ 13	18 ¹⁸ 43	29 ²⁹ 39	1 ¹ 58	8 ⁸ 30	0 ⁰ 34	0 ⁰ 4	14 ¹⁴ 26	1 ¹ 30	M 11
T 12	23 59 41	27 ²⁷ 59'26	5 ⁵ 17	26 ²⁶ 33	13 ¹³ 18	23 ²³ 9	29 ²⁹ 7	18 ¹⁸ 50	29 ²⁹ 42	2 ² 0	8 ⁸ 31	0 ⁰ 26	0 ⁰ 1	14 ¹⁴ 33	1 ¹ 31	T 12
W 13	0 3 37	28 ²⁸ 58'27	20 ²⁰ 44	28 ²⁸ 20	14 ¹⁴ 8	22 ²² 56	29 ²⁹ 1	18 ¹⁸ 57	29 ²⁹ 44	2 ² 2	8 ⁸ 32	0 ⁰ 15	29 ²⁹ 58	14 ¹⁴ 39	1 ¹ 33	W 13
T 14	0 7 34	29 ²⁹ 57'29	5 ⁵ 32	0 ⁰ 12	14 ¹⁴ 57	22 ²² 42	28 ²⁸ 55	19 ¹⁹ 4	29 ²⁹ 46	2 ² 5	8 ⁸ 33	0 ⁰ 3	29 ²⁹ 54	14 ¹⁴ 46	1 ¹ 35	T 14
F 15	0 11 31	0 ⁰ 56'34	20 ²⁰ 3	1 ¹ 53	15 ¹⁵ 46	22 ²² 28	28 ²⁸ 50	19 ¹⁹ 11	29 ²⁹ 48	2 ² 7	8 ⁸ 35	29 ²⁹ 52	29 ²⁹ 51	14 ¹⁴ 53	1 ¹ 36	F 15
S 16	0 15 27	1 ¹ 55'40	4 ⁴ 11	3 ³ 38	16 ¹⁶ 34	22 ²² 12	28 ²⁸ 44	19 ¹⁹ 18	29 ²⁹ 51	2 ² 9	8 ⁸ 36	29 ²⁹ 42	29 ²⁹ 48	14 ¹⁴ 59	1 ¹ 38	S 16
S 17	0 19 24	2 ² 54'49	17 ¹⁷ 52	5 ⁵ 22	17 ¹⁷ 21	21 ²¹ 57	28 ²⁸ 39	19 ¹⁹ 25	29 ²⁹ 53	2 ² 11	8 ⁸ 37	29 ²⁹ 34	29 ²⁹ 45	15 ¹⁵ 6	1 ¹ 39	S 17
M 18	0 23 20	3 ³ 53'59	1 ¹ 57	7 ⁷ 5	18 ¹⁸ 7	21 ²¹ 40	28 ²⁸ 34	19 ¹⁹ 32	29 ²⁹ 55	2 ² 14	8 ⁸ 38	29 ²⁹ 30	29 ²⁹ 42	15 ¹⁵ 13	1 ¹ 41	M 18
T 19	0 27 17	4 ⁴ 53'12	13 ¹³ 52	8 ⁸ 48	18 ¹⁸ 52	21 ²¹ 23	28 ²⁸ 29	19 ¹⁹ 39	29 ²⁹ 57	2 ² 16	8 ⁸ 39	29 ²⁹ 27	29 ²⁹ 39	15 ¹⁵ 19	1 ¹ 42	T 19
W 20	0 31 13	5 ⁵ 52'26	26 ²⁶ 17	10 ¹⁰ 30	19 ¹⁹ 36	21 ²¹ 6	28 ²⁸ 24	19 ¹⁹ 46	29 ²⁹ 59	2 ² 18	8 ⁸ 40	29 ²⁹ D27	29 ²⁹ 35	15 ¹⁵ 26	1 ¹ 43	W 20
T 21	0 35 10	6 ⁶ 51'42	8 ⁸ 26	12 ¹² 10	20 ²⁰ 20	20 ²⁰ 48	28 ²⁸ 19	19 ¹⁹ 53	0 ⁰ 1	2 ² 20	8 ⁸ 42	29 ²⁹ R27	29 ²⁹ 32	15 ¹⁵ 33	1 ¹ 44	T 21
F 22	0 39 6	7 ⁷ 50'59	20 ²⁰ 22	13 ¹³ 51	21 ²¹ 2	20 ²⁰ 30	28 ²⁸ 15	20 ²⁰ 0	0 ⁰ 3	2 ² 23	8 ⁸ 43	29 ²⁹ 26	29 ²⁹ 29	15 ¹⁵ 39	1 ¹ 45	F 22
S 23	0 43 3	8 ⁸ 50'19	2 ² 12	15 ¹⁵ 30	21 ²¹ 43	20 ²⁰ 11	28 ²⁸ 11	20 ²⁰ 8	0 ⁰ 5	2 ² 25	8 ⁸ 44	29 ²⁹ 24	29 ²⁹ 26	15 ¹⁵ 46	1 ¹ 46	S 23
S 24	0 47 0	9 ⁹ 49'40	14 ¹⁴ 2	17 ¹⁷ 8	22 ²² 24	19 ¹⁹ 52	28 ²⁸ 6	20 ²⁰ 15	0 ⁰ 6	2 ² 27	8 ⁸ 45	29 ²⁹ 20	29 ²⁹ 23	15 ¹⁵ 53	1 ¹ 47	S 24
M 25	0 50 56	10 ¹⁰ 49'03	25 ²⁵ 54	18 ¹⁸ 46	23 ²³ 3	19 ¹⁹ 33	28 ²⁸ 2	20 ²⁰ 22	0 ⁰ 8	2 ² 29	8 ⁸ 46	29 ²⁹ 12	29 ²⁹ 19	15 ¹⁵ 59	1 ¹ 47	M 25
T 26	0 54 53	11 ¹¹ 48'28	7 ⁷ 53	20 ²⁰ 23	23 ²³ 41	19 ¹⁹ 13	27 ²⁷ 59	20 ²⁰ 29	0 ⁰ 10	2 ² 31	8 ⁸ 47	29 ²⁹ 3	29 ²⁹ 16	16 ¹⁶ 6	1 ¹ 48	T 26
W 27	0 58 49	12 ¹² 47'55	20 ²⁰ 2	22 ²² 0	24 ²⁴ 18	18 ¹⁸ 54	27 ²⁷ 55	20 ²⁰ 36	0 ⁰ 11	2 ² 34	8 ⁸ 48	28 ²⁸ 51	29 ²⁹ 13	16 ¹⁶ 13	1 ¹ 48	W 27
T 28	1 2 46	13 ¹³ 47'23	2 ² 33	23 ²³ 36	24 ²⁴ 53	18 ¹⁸ 34	27 ²⁷ 52	20 ²⁰ 43	0 ⁰ 13	2 ² 36	8 ⁸ 49	28 ²⁸ 38	29 ²⁹ 10	16 ¹⁶ 19	1 ¹ 49	T 28
F 29	1 6 42	14 ¹⁴ 46'54	14 ¹⁴ 55	25 ²⁵ 11	25 ²⁵ 27	18 ¹⁸ 14	27 ²⁷ 49	20 ²⁰ 51	0 ⁰ 15	2 ² 38	8 ⁸ 49	28 ²⁸ 25	29 ²⁹ 7	16 ¹⁶ 26	1 ¹ 49	F 29
S 30	1 10 39	15 ¹⁵ 46'27	27 ²⁷ 39	26 ²⁶ 45	26 ²⁶ 10	17 ¹⁷ 55	27 ²⁷ 46	20 ²⁰ 58	0 ⁰ 16	2 ² 40	8 ⁸ 50	28 ²⁸ 12	29 ²⁹ 4	16 ¹⁶ 33	1 ¹ 50	S 30

Delta T = 06m25s

Julian Calendar 1 Sept. 1452 == Greg. Calendar 10 Sept. 1452

OCTOBER 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day	
S 1	1 14 35	16 ¹⁶ 46'02	10 ¹⁰ 35	28 ²⁸ 19	26 ²⁶ 13	17°R35	27°R43	21 ²¹ 12	0°18	2°42	8°51	28°R 3	29° 0	16°40	1°50	S 1	
M 2	1 18 32	17°45'39	23°42	29°52	27° 1	17°Y15	27°40	21°12	0°19	2°45	8°52	27°55	28°57	16°46	1°50	M 2	
T 3	1 22 29	18°45'18	7 ⁷ II 0	1 ¹ 11.25	27°30	16°56	27°38	21°20	0°20	2°47	8°53	27°51	28°54	16°53	1°R50	T 3	
W 4	1 26 25	19°45'00	20°28	2°57	27°56	16°36	27°36	21°27	0°22	2°49	8°54	27°49	28°51	17° 0	1°50	W 4	
T 5	1 30 22	20°44'44	4 ⁴ 28	8°28	4°28	28°22	16°17	27°34	21°34	0°23	2°51	8°54	27°D49	28°48	17° 6	1°50	T 5
F 6	1 34 18	21°44'30	17°59	5°59	28°45	15°59	27°32	21°41	0°24	2°53	8°55	27°R50	28°44	17°13	1°49	F 6	
S 7	1 38 15	22°44'18	2°12	7°29	29° 7	15°40	27°30	21°49	0°25	2°55	8°56	27°49	28°41	17°20	1°49	S 7	
S 8	1 42 11	23°44'09	16°16	8°59	29°26	15°22	27°29	21°56	0°26	2°58	8°56	27°47	28°38	17°26	1°49	S 8	
M 9	1 46 8	24°44'02	0 ⁰ 17	10°28	29°44	15° 4	27°28	22° 3	0°28	3° 0	8°57	27°43	28°35	17°33	1°48	M 9	
T 10	1 50 4	25°43'57	15°10	11°56	0 ⁰ 27	14°47	27°27	22°10	0°29	3° 2	8°58	27°36	28°32	17°40	1°47	T 10	
W 11	1 54 1	26°43'54	29°41	13°24	0°14	14°30	27°26	22°18	0°29	3° 4	8°58	27°27	28°29	17°46	1°47	W 11	
T 12	1 57 58	27°43'54	14° 6	14°51	0°26	14°14	27°25	22°25	0°30	3° 6	8°59	27°17	28°25	17°53	1°46	T 12	
F 13	2 1 54	28°43'55	28°18	16°18	0°36	13°58	27°25	22°32	0°31	3° 8	8°59	27° 7	28°22	18° 0	1°45	F 13	
S 14	2 5 51	29°43'58	12 ¹² 13	17°44	0°44	13°43	27°D25	22°39	0°32	3°10	9° 0	26°59	28°19	18° 6	1°44	S 14	
S 15	2 9 47	0 ⁰ 14'44	25°46	19° 9	0°49	13°28	27°25	22°46	0°33	3°12	9° 1	26°52	28°16	18°13	1°43	S 15	
M 16	2 13 44	1°44'11	8°2°56	20°33	0°52	13°15	27°25	22°54	0°33	3°14	9° 1	26°48	28°13	18°20	1°42	M 16	
T 17	2 17 40	2°44'19	21°43	21°57	0°R53	13° 1	27°25	23° 1	0°34	3°16	9° 1	26°D47	28°10	18°27	1°41	T 17	
W 18	2 21 37	3°44'30	4°3°10	23°20	0°51	12°49	27°26	23° 8	0°35	3°18	9° 2	26°47	28° 6	18°33	1°40	W 18	
T 19	2 25 33	4°44'42	16°20	24°42	0°47	12°37	27°27	23°15	0°35	3°20	9° 2	26°48	28° 3	18°40	1°38	T 19	
F 20	2 29 30	5°44'55	28°18	26° 3	0°40	12°27	27°28	23°22	0°36	3°22	9° 3	26°49	28° 0	18°47	1°37	F 20	
S 21	2 33 27	6°45'10	10°3°10	27°23	0°31	12°16	27°29	23°29	0°36	3°24	9° 3	26°R49	27°57	18°53	1°35	S 21	
S 22	2 37 23	7°45'26	22° 0	28°42	0°20	12° 7	27°31	23°37	0°36	3°26	9° 3	26°48	27°54	19° 0	1°34	S 22	
M 23	2 41 20	8°45'44	3°3°55	29°59	0° 6	11°59	27°32	23°44	0°37	3°28	9° 3	26°44	27°50	19° 7	1°32	M 23	
T 24	2 45 16	9°46'04	15°57	1°2°16	29 ²⁹ 11.50	11°51	27°34	23°51	0°37	3°30	9° 4	26°39	27°47	19°13	1°30	T 24	
W 25	2 49 13	10°46'24	28°11	2°30	29°31	11°44	27°36	23°58	0°37	3°32	9° 4	26°32	27°44	19°20	1°28	W 25	
T 26	2 53 9	11°46'47	10°Y40	3°43	29°10	11°38	27°38	24° 5	0°37	3°33	9° 4	26°24	27°41	19°27	1°26	T 26	
F 27	2 57 6	12°47'11	23°25	4°53	28°47	11°32	27°41	24°12	0°37	3°35	9° 4	26°16	27°38	19°33	1°24	F 27	
S 28	3 1 2	13°47'36	6°8°27	6° 2	28°22	11°28	27°44	24°19	0°R37	3°37	9° 4	26° 8	27°35	19°40	1°22	S 28	
S 29	3 4 59	14°48'03	19°44	7° 8	27°54	11°24	27°46	24°26	0°37	3°39	9° 4	26° 2	27°31	19°47	1°20	S 29	
M 30	3 8 55	15°48'32	3°II15	8°11	27°25	11°21	27°49	24°33	0°37	3°41	9° 5	25°58	27°28	19°54	1°18	M 30	
T 31	3 12 52	16°14'03	16°II58	9°2°11	26 ²⁶ 11.54	11°Y19	27°3°53	24°40	0°137	3°42	9° 5	25°5°56	27°2°25	20°3°0	1°3°15	T 31	

ASTRODIENST EPHEMERIS for the year 1452
geocentric

NOVEMBER 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	3 16 49	17 ¹¹ 49'35	0 ⁰ 50	10 ²⁷ 7	26 ⁰ R22	11 ⁰ R18	27 ²⁸ 56	24 ²⁴ 46	0 ⁰ R37	3 ³ 44	9 ⁰ R 5	25 ⁰ D55	27 ²⁷ 22	20 ²⁰ 7	1 ⁰ R13	W 1
T 2	3 20 45	18 ⁰ 50'09	14 ⁰ 49	10 ⁰ 59	25 ⁰ M49	11 ⁰ D17	28 ⁰ 0	24 ⁰ 53	0 ⁰ Q36	3 ⁰ 46	9 ⁰ Q 5	25 ⁰ 56	27 ⁰ 19	20 ⁰ 14	1 ⁰ Q10	T 2
F 3	3 24 42	19 ⁰ 50'45	28 ⁰ 53	11 ⁰ 46	25 ⁰ 14	11 ⁰ Y18	28 ⁰ 4	25 ⁰ 0	0 ⁰ 36	3 ⁰ 48	9 ⁰ 5	25 ⁰ 58	27 ⁰ 16	20 ⁰ 20	1 ⁰ 8	F 3
S 4	3 28 38	20 ⁰ 51'22	13 ⁰ Q 0	12 ⁰ 28	24 ⁰ 39	11 ⁰ 19	28 ⁰ 8	25 ⁰ 7	0 ⁰ 36	3 ⁰ 49	9 ⁰ 4	25 ⁰ 59	27 ⁰ 12	20 ⁰ 27	1 ⁰ 5	S 4
S 5	3 32 35	21 ⁰ 52'01	27 ⁰ 10	13 ⁰ 4	24 ⁰ 3	11 ⁰ 21	28 ⁰ 12	25 ⁰ 14	0 ⁰ 35	3 ⁰ 51	9 ⁰ 4	25 ⁰ R59	27 ⁰ 9	20 ⁰ 34	1 ⁰ 3	S 5
M 6	3 36 31	22 ⁰ 52'42	11 ⁰ M19	13 ⁰ 33	23 ⁰ 26	11 ⁰ 23	28 ⁰ 16	25 ⁰ 20	0 ⁰ 35	3 ⁰ 53	9 ⁰ 4	25 ⁰ 58	27 ⁰ 6	20 ⁰ 40	1 ⁰ 0	M 6
T 7	3 40 28	23 ⁰ 53'25	25 ⁰ 27	13 ⁰ 55	22 ⁰ 50	11 ⁰ 27	28 ⁰ 21	25 ⁰ 27	0 ⁰ 34	3 ⁰ 54	9 ⁰ 4	25 ⁰ 55	27 ⁰ 3	20 ⁰ 47	0 ⁰ 57	T 7
W 8	3 44 25	24 ⁰ 54'09	9 ⁰ Q30	14 ⁰ 9	22 ⁰ 14	11 ⁰ 31	28 ⁰ 26	25 ⁰ 34	0 ⁰ 34	3 ⁰ 56	9 ⁰ 4	25 ⁰ 51	27 ⁰ 0	20 ⁰ 54	0 ⁰ 54	W 8
T 9	3 48 21	25 ⁰ 54'55	23 ⁰ 26	14 ⁰ R13	21 ⁰ 38	11 ⁰ 36	28 ⁰ 30	25 ⁰ 40	0 ⁰ 33	3 ⁰ 57	9 ⁰ 4	25 ⁰ 46	26 ⁰ 56	21 ⁰ 1	0 ⁰ 51	T 9
F 10	3 52 18	26 ⁰ 55'42	7 ⁰ M11	14 ⁰ 8	21 ⁰ 3	11 ⁰ 42	28 ⁰ 36	25 ⁰ 47	0 ⁰ 32	3 ⁰ 59	9 ⁰ 3	25 ⁰ 41	26 ⁰ 53	21 ⁰ 7	0 ⁰ 48	F 10
S 11	3 56 14	27 ⁰ 56'31	20 ⁰ 42	13 ⁰ 53	20 ⁰ 28	11 ⁰ 48	28 ⁰ 41	25 ⁰ 53	0 ⁰ 32	4 ⁰ 0	9 ⁰ 3	25 ⁰ 37	26 ⁰ 50	21 ⁰ 14	0 ⁰ 45	S 11
S 12	4 0 11	28 ⁰ 57'21	3 ⁰ Q57	13 ⁰ 27	19 ⁰ 55	11 ⁰ 55	28 ⁰ 46	26 ⁰ 0	0 ⁰ 31	4 ⁰ 2	9 ⁰ 3	25 ⁰ 34	26 ⁰ 47	21 ⁰ 21	0 ⁰ 42	S 12
M13	4 4 7	29 ⁰ 58'12	16 ⁰ 54	12 ⁰ 49	19 ⁰ 23	12 ⁰ 3	28 ⁰ 52	26 ⁰ 6	0 ⁰ 30	4 ⁰ 3	9 ⁰ 3	25 ⁰ 33	26 ⁰ 44	21 ⁰ 27	0 ⁰ 39	M13
T 14	4 8 4	0 ⁰ 59'05	29 ⁰ 33	12 ⁰ 1	18 ⁰ 53	12 ⁰ 11	28 ⁰ 58	26 ⁰ 13	0 ⁰ 29	4 ⁰ 5	9 ⁰ 2	25 ⁰ D32	26 ⁰ 41	21 ⁰ 34	0 ⁰ 36	T 14
W15	4 12 0	1 ⁰ 59'58	11 ⁰ Q57	11 ⁰ 3	18 ⁰ 24	12 ⁰ 21	29 ⁰ 4	26 ⁰ 19	0 ⁰ 28	4 ⁰ 6	9 ⁰ 2	25 ⁰ 33	26 ⁰ 37	21 ⁰ 41	0 ⁰ 32	W15
T 16	4 15 57	3 ⁰ 0'53	24 ⁰ 6	9 ⁰ 55	17 ⁰ 58	12 ⁰ 31	29 ⁰ 10	26 ⁰ 25	0 ⁰ 27	4 ⁰ 7	9 ⁰ 1	25 ⁰ 35	26 ⁰ 34	21 ⁰ 47	0 ⁰ 29	T 16
F 17	4 19 54	4 ⁰ 1'48	6 ⁰ Q 5	8 ⁰ 40	17 ⁰ 33	12 ⁰ 41	29 ⁰ 16	26 ⁰ 32	0 ⁰ 26	4 ⁰ 9	9 ⁰ 1	25 ⁰ 37	26 ⁰ 31	21 ⁰ 54	0 ⁰ 25	F 17
S 18	4 23 50	5 ⁰ 2'44	17 ⁰ 57	7 ⁰ 20	17 ⁰ 10	12 ⁰ 52	29 ⁰ 23	26 ⁰ 38	0 ⁰ 25	4 ⁰ 10	9 ⁰ 1	25 ⁰ 38	26 ⁰ 28	22 ⁰ 1	0 ⁰ 22	S 18
S 19	4 27 47	6 ⁰ 3'41	29 ⁰ 48	5 ⁰ 58	16 ⁰ 50	13 ⁰ 4	29 ⁰ 30	26 ⁰ 44	0 ⁰ 24	4 ⁰ 11	9 ⁰ 0	25 ⁰ 39	26 ⁰ 25	22 ⁰ 8	0 ⁰ 18	S 19
M20	4 31 43	7 ⁰ 4'38	11 ⁰ Q42	4 ⁰ 35	16 ⁰ 32	13 ⁰ 17	29 ⁰ 37	26 ⁰ 50	0 ⁰ 23	4 ⁰ 13	9 ⁰ 0	25 ⁰ R39	26 ⁰ 22	22 ⁰ 14	0 ⁰ 15	M20
T 21	4 35 40	8 ⁰ 5'36	23 ⁰ 44	3 ⁰ 16	16 ⁰ 16	13 ⁰ 30	29 ⁰ 44	26 ⁰ 56	0 ⁰ 21	4 ⁰ 14	8 ⁰ 59	25 ⁰ 38	26 ⁰ 18	22 ⁰ 21	0 ⁰ 11	T 21
W22	4 39 36	9 ⁰ 6'35	5 ⁰ Y58	2 ⁰ 2	16 ⁰ 2	13 ⁰ 43	29 ⁰ 51	27 ⁰ 2	0 ⁰ 20	4 ⁰ 15	8 ⁰ 58	25 ⁰ 37	26 ⁰ 15	22 ⁰ 28	0 ⁰ 8	W22
T 23	4 43 33	10 ⁰ 7'35	18 ⁰ 29	0 ⁰ 55	15 ⁰ 52	13 ⁰ 57	29 ⁰ 58	27 ⁰ 8	0 ⁰ 19	4 ⁰ 16	8 ⁰ 58	25 ⁰ 35	26 ⁰ 12	22 ⁰ 34	0 ⁰ 4	T 23
F 24	4 47 29	11 ⁰ 8'35	1 ⁰ Q19	29 ⁰ M59	15 ⁰ 43	14 ⁰ 12	0 ⁰ Q 6	27 ⁰ 14	0 ⁰ 17	4 ⁰ 17	8 ⁰ 57	25 ⁰ 32	26 ⁰ 9	22 ⁰ 41	0 ⁰ 0	F 24
S 25	4 51 26	12 ⁰ 9'36	14 ⁰ 31	29 ⁰ 12	15 ⁰ 37	14 ⁰ 28	0 ⁰ 13	27 ⁰ 20	0 ⁰ 16	4 ⁰ 18	8 ⁰ 57	25 ⁰ 30	26 ⁰ 6	22 ⁰ 48	29 ⁰ II56	S 25
S 26	4 55 23	13 ⁰ 10'38	28 ⁰ 4	28 ⁰ 37	15 ⁰ 34	14 ⁰ 43	0 ⁰ 21	27 ⁰ 26	0 ⁰ 14	4 ⁰ 19	8 ⁰ 56	25 ⁰ 29	26 ⁰ 2	22 ⁰ 54	29 ⁰ 53	S 26
M27	4 59 19	14 ⁰ 11'40	11 ⁰ II56	28 ⁰ 13	15 ⁰ D33	15 ⁰ 0	0 ⁰ 29	27 ⁰ 31	0 ⁰ 13	4 ⁰ 20	8 ⁰ 55	25 ⁰ 28	25 ⁰ 59	23 ⁰ 1	29 ⁰ 49	M27
T 28	5 3 16	15 ⁰ 12'43	26 ⁰ 5	28 ⁰ 0	15 ⁰ 34	15 ⁰ 17	0 ⁰ 37	27 ⁰ 37	0 ⁰ 11	4 ⁰ 21	8 ⁰ 54	25 ⁰ D28	25 ⁰ 56	23 ⁰ 8	29 ⁰ 45	T 28
W29	5 7 12	16 ⁰ 13'47	10 ⁰ Q26	27 ⁰ D58	15 ⁰ 38	15 ⁰ 34	0 ⁰ 45	27 ⁰ 43	0 ⁰ 9	4 ⁰ 22	8 ⁰ 54	25 ⁰ 28	25 ⁰ 53	23 ⁰ 15	29 ⁰ 41	W29
T 30	5 11 9	17 ⁰ 14'51	24 ⁰ Q54	28 ⁰ M 5	15 ⁰ M45	15 ⁰ Y52	0 ⁰ Q54	27 ⁰ Q48	0 ⁰ Q 8	4 ⁰ Q23	8 ⁰ Q53	25 ⁰ Y29	25 ⁰ Y50	23 ⁰ Q21	29 ⁰ II37	T 30

Delta T = 06m24s

Julian Calendar 1 Nov. 1452 == Greg. Calendar 10 Nov. 1452

DECEMBER 1452 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	5 15 5	18 ⁰ 15'57	9 ⁰ Q24	28 ⁰ M21	15 ⁰ M53	16 ⁰ Y10	1 ⁰ Q 2	27 ⁰ Q54	0 ⁰ R 6	4 ⁰ Q24	8 ⁰ R52	25 ⁰ Y29	25 ⁰ Y47	23 ⁰ Q28	29 ⁰ R33	F 1
S 2	5 19 2	19 ⁰ 17'03	23 ⁰ 50	28 ⁰ 46	16 ⁰ 4	16 ⁰ 29	1 ⁰ 11	27 ⁰ 59	0 ⁰ Q 4	4 ⁰ 25	8 ⁰ Q51	25 ⁰ 30	25 ⁰ 43	23 ⁰ 35	29 ⁰ II29	S 2
S 3	5 22 58	20 ⁰ 18'10	8 ⁰ M 9	29 ⁰ 18	16 ⁰ 17	16 ⁰ 48	1 ⁰ 20	28 ⁰ 4	0 ⁰ 3	4 ⁰ 26	8 ⁰ 51	25 ⁰ 30	25 ⁰ 40	23 ⁰ 41	29 ⁰ 25	S 3
M 4	5 26 55	21 ⁰ 19'18	22 ⁰ 18	29 ⁰ 56	16 ⁰ 33	17 ⁰ 8	1 ⁰ 29	28 ⁰ 10	0 ⁰ 1	4 ⁰ 27	8 ⁰ 50	25 ⁰ R30	25 ⁰ 37	23 ⁰ 48	29 ⁰ 21	M 4
T 5	5 30 52	22 ⁰ 20'26	6 ⁰ Q15	0 ⁰ Q41	16 ⁰ 50	17 ⁰ 28	1 ⁰ 38	28 ⁰ 15	29 ⁰ Q59	4 ⁰ 28	8 ⁰ 49	25 ⁰ 30	25 ⁰ 34	23 ⁰ 55	29 ⁰ 17	T 5
W 6	5 34 48	23 ⁰ 21'35	19 ⁰ 59	1 ⁰ 31	17 ⁰ 9	17 ⁰ 49	1 ⁰ 47	28 ⁰ 20	29 ⁰ 57	4 ⁰ 28	8 ⁰ 48	25 ⁰ 30	25 ⁰ 31	24 ⁰ 1	29 ⁰ 13	W 6
T 7	5 38 45	24 ⁰ 22'45	3 ⁰ M30	2 ⁰ 25	17 ⁰ 31	18 ⁰ 10	1 ⁰ 57	28 ⁰ 25	29 ⁰ 55	4 ⁰ 29	8 ⁰ 47	25 ⁰ 30	25 ⁰ 28	24 ⁰ 8	29 ⁰ 9	T 7
F 8	5 42 41	25 ⁰ 23'56	16 ⁰ 48	3 ⁰ 24	17 ⁰ 54	18 ⁰ 31	2 ⁰ 6	28 ⁰ 30	29 ⁰ 53	4 ⁰ 30	8 ⁰ 46	25 ⁰ D30	25 ⁰ 24	24 ⁰ 15	29 ⁰ 5	F 8
S 9	5 46 38	26 ⁰ 25'07	29 ⁰ 52	4 ⁰ 26	18 ⁰ 19	18 ⁰ 53	2 ⁰ 16	28 ⁰ 35	29 ⁰ 51	4 ⁰ 30	8 ⁰ 45	25 ⁰ 30	25 ⁰ 21	24 ⁰ 22	29 ⁰ 1	S 9
S 10	5 50 34	27 ⁰ 26'18	12 ⁰ Q43	5 ⁰ 31	18 ⁰ 46	19 ⁰ 15	2 ⁰ 25	28 ⁰ 40	29 ⁰ 49	4 ⁰ 31	8 ⁰ 44	25 ⁰ 30	25 ⁰ 18	24 ⁰ 28	28 ⁰ 57	S 10
M11	5 54 31	28 ⁰ 27'30	25 ⁰ 21	6 ⁰ 40	19 ⁰ 14	19 ⁰ 37	2 ⁰ 35	28 ⁰ 45	29 ⁰ 47	4 ⁰ 32	8 ⁰ 43	25 ⁰ R30	25 ⁰ 15	24 ⁰ 35	28 ⁰ 53	M11
T 12	5 58 27	29 ⁰ 28'42	7 ⁰ Q47	7 ⁰ 50	19 ⁰ 44	20 ⁰ 0	2 ⁰ 45	28 ⁰ 50	29 ⁰ 45	4 ⁰ 32	8 ⁰ 42	25 ⁰ 30	25 ⁰ 12	24 ⁰ 42	28 ⁰ 49	T 12
W13	6 2 24	0 ⁰ 29'54	20 ⁰ 2	9 ⁰ 3	20 ⁰ 16	20 ⁰ 23	2 ⁰ 55	28 ⁰ 54	29 ⁰ 43	4 ⁰ 33	8 ⁰ 41	25 ⁰ 30	25 ⁰ 8	24 ⁰ 48	28 ⁰ 45	W13
T 14	6 6 21	1 ⁰ 31'07	2 ⁰ Q 7	10 ⁰ 18	20 ⁰ 49	20 ⁰ 47	3 ⁰ 6	28 ⁰ 59	29 ⁰ 40	4 ⁰ 33	8 ⁰ 40	25 ⁰ 29	25 ⁰ 5	24 ⁰ 55	28 ⁰ 41	T 14
F 15	6 10 17	2 ⁰ 32'19	14 ⁰ 4	11 ⁰ 34	21 ⁰ 24	21 ⁰ 11	3 ⁰ 16	29 ⁰ 3	29 ⁰ 38	4 ⁰ 34	8 ⁰ 39	25 ⁰ 28	25 ⁰ 2	25 ⁰ 2	28 ⁰ 36	F 15
S 16	6 14 14	3 ⁰ 33'31	25 ⁰ 56	12 ⁰ 52	22 ⁰ 0	21 ⁰ 35	3 ⁰ 27	29 ⁰ 8	29 ⁰ 36	4 ⁰ 34	8 ⁰ 38	25 ⁰ 27	24 ⁰ 59	25 ⁰ 8	28 ⁰ 32	S 16
S 17	6 18 10	4 ⁰ 34'42	7 ⁰ Q46	14 ⁰ 12	22 ⁰ 37	22 ⁰ 0	3 ⁰ 37	29 ⁰ 12	29 ⁰ 34	4 ⁰ 34	8 ⁰ 37	25 ⁰ 26	24 ⁰ 56	25 ⁰ 15	28 ⁰ 28	S 17
M18	6 22 7	5 ⁰ 35'54	19 ⁰ 39	15 ⁰ 32	23 ⁰ 16	22 ⁰ 25	3 ⁰ 48	29 ⁰ 16	29 ⁰ 31	4 ⁰ 35	8 ⁰ 36	25 ⁰ 25	24 ⁰ 53	25 ⁰ 22	28 ⁰ 24	M18
T 19	6 26 3	6 ⁰ 37'05	1 ⁰ Y38	16 ⁰ 54	23 ⁰ 55	22 ⁰ 50	3 ⁰ 59	29 ⁰ 20	29 ⁰ 29	4 ⁰ 35	8 ⁰ 34	25 ⁰ D24	24 ⁰ 49	25 ⁰ 29	28 ⁰ 20	T 19
W20	6 30 0	7 ⁰ 38'15	13 ⁰ 48	18 ⁰ 17	24 ⁰ 36	23 ⁰ 16	4 ⁰ 10	29 ⁰ 24	29 ⁰ 27	4 ⁰ 35	8 ⁰ 33	25 ⁰ 24	24 ⁰ 46	25 ⁰ 35	28 ⁰ 16	W20
T 21	6 33 56	8 ⁰ 39'26	26 ⁰ 15	19 ⁰ 41	25 ⁰ 18	23 ⁰ 41	4 ⁰ 21	29 ⁰ 28	29 ⁰ 24	4 ⁰ 36	8 ⁰ 32	25 ⁰ 25	24 ⁰ 43	25 ⁰ 42	28 ⁰ 12	T 21
F 22	6 37 53	9 ⁰ 40'36	9 ⁰ Q 2	21 ⁰ 5	26 ⁰ 2	24 ⁰ 7	4 ⁰ 32	29 ⁰ 32	29 ⁰ 22	4 ⁰ 36	8 ⁰ 31	25 ⁰ 26	24 ⁰ 40	25 ⁰ 49	28 ⁰ 8	F 22
S 23	6 41 50	10 ⁰ 41'45	22 ⁰ 12	22 ⁰ 31	26 ⁰ 46	24 ⁰ 34	4 ⁰ 43	29 ⁰ 36	29 ⁰ 19	4 ⁰ 36	8 ⁰ 30	25 ⁰ 27	24 ⁰ 37	25 ⁰ 55	28 ⁰ 4	S 23
S 24	6 45 46	11 ⁰ 42'54	5 ⁰ II48	23 ⁰ 57	27 ⁰ 31	25 ⁰ 0	4 ⁰ 55	29 ⁰ 40	29 ⁰ 17	4 ⁰ 36	8 ⁰ 28	25 ⁰ 29	24 ⁰ 34	26 ⁰ 2	28 ⁰ 0	S 24
M25	6 49 43	12 ⁰ 44'03	19 ⁰ 50	25 ⁰ 24	28 ⁰ 18	25 ⁰ 27	5 ⁰ 6	29 ⁰ 44	29 ⁰ 14	4 ⁰ 36	8 ⁰ 27	25 ⁰ R29	24 ⁰ 30	26 ⁰ 9	27 ⁰ 56	M25
T 26	6 53 39	13 ⁰ 45'11	4 ⁰ Q15	26 ⁰ 51	29 ⁰ 5	25 ⁰ 54	5 ⁰ 18	29 ⁰ 47	29 ⁰ 12	4 ⁰ 36	8 ⁰ 26	25 ⁰ 29	24 ⁰ 27	26 ⁰ 16	27 ⁰ 52	T 26
W27	6 57 36	14 ⁰ 46'18	19 ⁰ 0	28 ⁰ 19	29 ⁰ 53	26 ⁰ 22	5 ⁰ 29	29 ⁰ 51	29 ⁰ 9	4 ⁰ 36	8 ⁰ 25	25 ⁰ 28	24 ⁰ 24	26 ⁰ 22	27 ⁰ 49	W27
T 28	7 1 32	15 ⁰ 47'26	3 ⁰ Q55	29 ⁰ 48	0 ⁰ Q42	26 ⁰ 49	5 ⁰ 41	29 ⁰ 54	29 ⁰ 7	4 ⁰ R36	8 ⁰ 23	25 ⁰ 26	24 ⁰ 21	26 ⁰ 29	27 ⁰ 45	T 28
F 29	7 5 29	16 ⁰ 48'32	18 ⁰ 54	1 ⁰ Q17	1 ⁰ 32	27 ⁰ 17	5 ⁰ 53	29 ⁰ 57	29 ⁰ 4	4 ⁰ 36	8 ⁰ 22	25 ⁰ 23	24 ⁰ 18	26 ⁰ 36	27 ⁰ 41	F 29
S 30	7 9 26	17 ⁰ 49'39	3 ⁰ M47	2 ⁰ 47	2 ⁰ 22	27 ⁰ 45	6 ⁰ 5	0 ⁰ M 0	29 ⁰ 2	4 ⁰ 36	8 ⁰ 21	25 ⁰ 20	24 ⁰ 14	26 ⁰ 42	27 ⁰ 37	S 30
S 31	7 13 22	18 ⁰ 50'45	18 ⁰ M27	4 ⁰ Q18	3 ⁰ Y14	28 ⁰ Y13	6 ⁰ Y17	0 ⁰ M 4	28 ⁰ Q59	4 ⁰ Q36	8 ⁰ Q19	25 ⁰ Y17	24 ⁰ Y11	26 ⁰ Q49	27 ⁰ II33	S 31