



Astrodienst Ephemeris Tables for the year 1491

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 1491

geocentric

JANUARY 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 16 30	19°38'03	16°29	25°40	6°17	11°17	26°R 5	28°312	19°339	25°252	1°55	10°R27	9°11	13°13	23°57	S 1
S 2	7 20 27	20°39'09	29°36	26°34	7°21	11° 7	26°B 3	28°19	19°43	25°54	1°56	10°R23	9° 8	13°20	23°58	S 2
M 3	7 24 23	21°40'14	12°59	27°31	8°25	11°R 7	26° 1	28°26	19°46	25°56	1°57	10°21	9° 5	13°26	23°58	M 3
T 4	7 28 20	22°41'19	26°38	28°31	9°29	11° 7	25°59	28°33	19°50	25°58	1°58	10°D20	9° 1	13°33	23°59	T 4
W 5	7 32 16	23°42'24	10°36	29°34	10°33	11° 5	25°58	28°40	19°53	26° 0	1°59	10°21	8°58	13°40	23°59	W 5
T 6	7 36 13	24°43'28	24°51	0°340	11°36	11° 3	25°57	28°47	19°57	26° 2	1°59	10°23	8°55	13°46	24° 0	T 6
F 7	7 40 9	25°44'32	9°24	1°48	12°39	11° 0	25°56	28°54	20° 1	26° 4	2° 0	10°R23	8°52	13°53	24° 1	F 7
S 8	7 44 6	26°45'35	24° 9	2°58	13°41	10°56	25°55	29° 1	20° 4	26° 6	2° 1	10°23	8°49	14° 0	24° 1	S 8
S 9	7 48 2	27°46'38	9°3	4°10	14°43	10°52	25°54	29° 9	20° 8	26° 8	2° 1	10°20	8°45	14° 6	24° 2	S 9
M10	7 51 59	28°47'40	23°54	5°24	15°45	10°47	25°54	29°16	20°11	26°10	2° 2	10°14	8°42	14°13	24° 3	M10
T 11	7 55 56	29°48'41	8°38	6°39	16°46	10°40	25°D54	29°23	20°15	26°12	2° 2	10° 7	8°39	14°20	24° 4	T 11
W12	7 59 52	0°49'41	23° 5	7°56	17°47	10°33	25°54	29°30	20°18	26°14	2° 3	9°59	8°36	14°26	24° 5	W12
T 13	8 3 49	1°50'39	7°10	9°15	18°48	10°26	25°54	29°37	20°22	26°16	2° 3	9°50	8°33	14°33	24° 6	T 13
F 14	8 7 45	2°51'37	20°48	10°34	19°48	10°17	25°54	29°44	20°25	26°18	2° 4	9°42	8°30	14°39	24° 7	F 14
S 15	8 11 42	3°52'33	3°Y59	11°55	20°47	10° 8	25°55	29°51	20°29	26°20	2° 4	9°36	8°26	14°46	24° 9	S 15
S 16	8 15 38	4°53'28	16°44	13°17	21°46	9°58	25°56	29°59	20°32	26°22	2° 5	9°32	8°23	14°53	24°10	S 16
M17	8 19 35	5°54'22	29° 8	14°40	22°45	9°47	25°57	0°6	20°36	26°24	2° 5	9°30	8°20	14°59	24°11	M17
T 18	8 23 31	6°55'14	11°14	16° 4	23°43	9°35	25°58	0°13	20°39	26°26	2° 5	9°D29	8°17	15° 6	24°12	T 18
W19	8 27 28	7°56'05	23° 8	17°29	24°41	9°23	25°59	0°20	20°42	26°28	2° 5	9°30	8°14	15°13	24°14	W19
T 20	8 31 25	8°56'54	4°156	18°55	25°38	9°10	26° 1	0°27	20°46	26°29	2° 6	9°R31	8°11	15°19	24°15	T 20
F 21	8 35 21	9°57'42	16°42	20°22	26°34	8°56	26° 3	0°34	20°49	26°31	2° 6	9°31	8° 7	15°26	24°17	F 21
S 22	8 39 18	10°58'28	28°32	21°50	27°30	8°41	26° 5	0°41	20°53	26°33	2° 6	9°29	8° 4	15°33	24°19	S 22
S 23	8 43 14	11°59'13	10°30	23°19	28°25	8°26	26° 7	0°48	20°56	26°35	2° 6	9°24	8° 1	15°39	24°20	S 23
M24	8 47 11	12°59'57	22°38	24°49	29°20	8°10	26°10	0°55	20°59	26°36	2° 6	9°17	7°58	15°46	24°22	M24
T 25	8 51 7	14° 0'39	4°152	26°19	0°Y14	7°53	26°12	1° 2	21° 3	26°38	2° 6	9° 7	7°55	15°53	24°24	T 25
W26	8 55 4	15° 1'19	17°32	27°51	1° 7	7°36	26°15	1° 9	21° 6	26°40	2°R 6	8°56	7°51	15°59	24°25	W26
T 27	8 59 0	16° 1'58	0°20	29°23	2° 0	7°17	26°18	1°16	21° 9	26°41	2° 6	8°43	7°48	16° 6	24°27	T 27
F 28	9 2 57	17° 2'36	13°21	0°56	2°51	6°59	26°21	1°23	21°13	26°43	2° 6	8°31	7°45	16°13	24°29	F 28
S 29	9 6 54	18° 3'12	26°33	2°30	3°43	6°40	26°25	1°30	21°16	26°45	2° 6	8°21	7°42	16°19	24°31	S 29
S 30	9 10 50	19° 3'47	9°57	4° 5	4°33	6°20	26°28	1°37	21°19	26°46	2° 6	8°13	7°39	16°26	24°33	S 30
M31	9 14 47	20°4'21	23°53	5°41	5°Y22	5°59	26°B32	1°44	21°22	26°48	2°R 6	8°7	7°36	16°32	24°Y35	M31

Delta T = 05m10s

Julian Calendar 1 Jan. 1491 == Greg. Calendar 10 Jan. 1491

FEBRUARY 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	9 18 43	21°45'4	7°14	7°17	6°Y11	5°R38	26°B36	1°51	21°26	26°49	2°R 5	8°R 5	7°32	16°39	24°Y37	T 1
W 2	9 22 40	22° 5'25	21° 8	8°55	6°58	5°17	26°40	1°58	21°29	26°51	2°R 5	8°D 4	7°29	16°46	24°40	W 2
T 3	9 26 36	23° 5'55	5°11	10°33	7°45	4°55	26°44	2° 5	21°32	26°52	2° 5	8°R 4	7°26	16°52	24°42	T 3
F 4	9 30 33	24° 6'24	19°24	12°13	8°31	4°33	26°49	2°12	21°35	26°54	2° 5	8°R 4	7°23	16°59	24°44	F 4
S 5	9 34 29	25° 6'52	3°345	13°53	9°16	4°11	26°54	2°18	21°38	26°55	2° 4	8° 2	7°20	17° 6	24°46	S 5
S 6	9 38 26	26° 7'18	18°11	15°34	10° 0	3°48	26°58	2°25	21°41	26°56	2° 4	7°57	7°16	17°12	24°49	S 6
M 7	9 42 23	27° 7'42	2°38	17°17	10°43	3°25	27° 3	2°32	21°44	26°58	2° 3	7°49	7°13	17°19	24°51	M 7
T 8	9 46 19	28° 8'05	17° 0	19° 0	11°24	3° 1	27° 9	2°39	21°47	26°59	2° 3	7°39	7°10	17°26	24°54	T 8
W 9	9 50 16	29° 8'27	1°11	20°44	12° 5	2°38	27°14	2°45	21°50	27° 0	2° 2	7°27	7° 7	17°32	24°56	W 9
T 10	9 54 12	0°8'46	15° 5	22°29	12°44	2°14	27°19	2°52	21°53	27° 2	2° 2	7°14	7° 4	17°39	24°59	T 10
F 11	9 58 9	1° 9'04	28°37	24°15	13°22	1°50	27°25	2°59	21°56	27° 3	2° 1	7° 2	7° 1	17°46	25° 1	F 11
S 12	10 2 5	2° 9'19	11°Y47	26° 3	13°59	1°26	27°31	3° 5	21°59	27° 4	2° 1	6°52	6°57	17°52	25° 4	S 12
S 13	10 6 2	3° 9'33	24°33	27°51	14°34	1° 2	27°37	3°12	22° 2	27° 5	2° 0	6°45	6°54	17°59	25° 7	S 13
M14	10 9 58	4° 9'45	6°58	29°40	15° 9	0°39	27°43	3°18	22° 5	27° 6	2° 0	6°40	6°51	18° 5	25° 9	M14
T 15	10 13 55	5° 9'54	19° 7	1°30	15°41	0°15	27°50	3°25	22° 8	27° 8	1°59	6°38	6°48	18°12	25°12	T 15
W16	10 17 52	6°10'02	1°11	3°22	16°12	29°51	27°56	3°31	22°11	27° 9	1°58	6°37	6°45	18°19	25°15	W16
T 17	10 21 48	7°10'07	12°51	5°14	16°42	29°28	28° 3	3°37	22°13	27°10	1°57	6°37	6°42	18°25	25°18	T 17
F 18	10 25 45	8°10'11	24°39	7° 7	17°10	29° 5	28°10	3°44	22°16	27°11	1°57	6°36	6°38	18°32	25°21	F 18
S 19	10 29 41	9°10'12	6°31	9° 2	17°36	28°42	28°17	3°50	22°19	27°12	1°56	6°34	6°35	18°39	25°24	S 19
S 20	10 33 38	10°10'11	18°32	10°57	18° 0	28°20	28°24	3°56	22°21	27°13	1°55	6°29	6°32	18°45	25°27	S 20
M21	10 37 34	11°10'08	0°46	12°53	18°23	27°57	28°31	4° 2	22°24	27°14	1°54	6°22	6°29	18°52	25°30	M21
T 22	10 41 31	12°10'02	13°17	14°49	18°43	27°36	28°39	4° 9	22°27	27°15	1°53	6°12	6°26	18°59	25°33	T 22
W23	10 45 27	13° 9'55	26° 6	16°47	19° 2	27°14	28°46	4°15	22°29	27°16	1°52	6° 0	6°22	19° 5	25°36	W23
T 24	10 49 24	14° 9'45	9°12	18°45	19°19	26°53	28°54	4°21	22°32	27°16	1°51	5°47	6°19	19°12	25°39	T 24
F 25	10 53 21	15° 9'34	22°35	20°43	19°33	26°33	29° 2	4°27	22°34	27°17	1°50	5°34	6°16	19°19	25°42	F 25
S 26	10 57 17	16° 9'20	6°13	22°42	19°46	26°13	29°10	4°33	22°37	27°18	1°49	5°23	6°13	19°25	25°45	S 26
S 27	11 1 14	17° 9'05	20° 1	24°41	19°56	25°54	29°18	4°39	22°39	27°19	1°48	5°14	6°10	19°32	25°49	S 27
M28	11 5 10	18°8'48	3°57	26°39	20°Y 4	25°35	29°B26	4°44	22°41	27°21	1°47	5°7	6°7	19°39	25°Y52	M28

Delta T = 05m10s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1491

geocentric

MARCH 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	11 9 7	19°8'29"	17°18'59"	28°37'37"	20°10'10"	25°17'17"	29°35'35"	4°50'50"	22°44'44"	27°20'20"	1°46'46"	5°5'5"	6°3'3"	19°45'45"	25°55'55"	T 1
W 2	11 13 3	20°8'08"	2°3'3"	0°34'34"	20°13'13"	24°59'59"	29°43'43"	4°56'56"	22°46'46"	27°21'21"	1°45'45"	5°D 4	6°0'0"	19°52'52"	25°58'58"	W 2
T 3	11 17 0	21°7'46"	16°8'8"	2°30'30"	20°14'14"	24°42'42"	29°52'52"	5°2'2"	22°48'48"	27°21'21"	1°44'44"	5°R 4	5°57'57"	19°59'59"	26°2'2"	T 3
F 4	11 20 56	22°7'22"	0°3'14"	4°25'25"	20°13'13"	24°26'26"	0°11'11"	5°7'7"	22°51'51"	27°22'22"	1°43'43"	5°3'3"	5°54'54"	20°5'5"	26°5'5"	F 4
S 5	11 24 53	23°6'56"	14°20'20"	6°18'18"	20°9'9"	24°11'11"	0°9'9"	5°13'13"	22°53'53"	27°23'23"	1°41'41"	5°2'2"	5°51'51"	20°12'12"	26°8'8"	S 5
S 6	11 28 50	24°6'28"	28°25'25"	8°8'8"	20°3'3"	23°56'56"	0°19'19"	5°18'18"	22°55'55"	27°23'23"	1°40'40"	4°58'58"	5°48'48"	20°18'18"	26°12'12"	S 6
M 7	11 32 46	25°5'59"	12°26'26"	9°56'56"	19°54'54"	23°42'42"	0°28'28"	5°24'24"	22°57'57"	27°24'24"	1°39'39"	4°51'51"	5°44'44"	20°25'25"	26°15'15"	M 7
T 8	11 36 43	26°5'28"	26°20'20"	11°40'40"	19°43'43"	23°28'28"	0°37'37"	5°29'29"	22°59'59"	27°24'24"	1°38'38"	4°42'42"	5°41'41"	20°32'32"	26°19'19"	T 8
W 9	11 40 39	27°4'54"	10°3'5"	13°21'21"	19°29'29"	23°16'16"	0°46'46"	5°35'35"	23°1'1"	27°24'24"	1°36'36"	4°31'31"	5°38'38"	20°38'38"	26°22'22"	W 9
T 10	11 44 36	28°4'19"	23°3'6"	14°57'57"	19°13'13"	23°4'4"	0°56'56"	5°40'40"	23°3'3"	27°25'25"	1°35'35"	4°20'20"	5°35'35"	20°45'45"	26°26'26"	T 10
F 11	11 48 32	29°3'42"	6°3'51"	16°30'30"	18°55'55"	22°53'53"	1°6'6"	5°45'45"	23°5'5"	27°25'25"	1°34'34"	4°9'9"	5°32'32"	20°52'52"	26°29'29"	F 11
S 12	11 52 29	0°3'02"	19°48'48"	17°57'57"	18°34'34"	22°43'43"	1°15'15"	5°50'50"	23°7'7"	27°25'25"	1°32'32"	4°0'0"	5°28'28"	20°58'58"	26°33'33"	S 12
S 13	11 56 25	1°2'21"	2°26'26"	19°19'19"	18°10'10"	22°33'33"	1°25'25"	5°55'55"	23°9'9"	27°26'26"	1°31'31"	3°53'53"	5°25'25"	21°5'5"	26°37'37"	S 13
M14	12 0 22	2°1'37"	14°48'48"	20°36'36"	17°45'45"	22°25'25"	1°35'35"	6°0'0"	23°10'10"	27°26'26"	1°30'30"	3°48'48"	5°22'22"	21°12'12"	26°40'40"	M14
T 15	12 4 18	3°0'51"	26°54'54"	21°47'47"	17°18'18"	22°17'17"	1°45'45"	6°5'5"	23°12'12"	27°26'26"	1°28'28"	3°46'46"	5°19'19"	21°18'18"	26°44'44"	T 15
W16	12 8 15	4°0'03"	8°11'50"	22°51'51"	16°48'48"	22°10'10"	1°55'55"	6°10'10"	23°14'14"	27°26'26"	1°27'27"	3°D 46	5°16'16"	21°25'25"	26°48'48"	W16
T 17	12 12 12	4°59'13"	20°40'40"	23°50'50"	16°17'17"	22°3'3"	2°6'6"	6°15'15"	23°16'16"	27°27'27"	1°25'25"	3°47'47"	5°13'13"	21°32'32"	26°51'51"	T 17
F 18	12 16 8	5°58'20"	2°28'28"	24°42'42"	15°44'44"	21°58'58"	2°16'16"	6°20'20"	23°17'17"	27°27'27"	1°24'24"	3°R 48	5°9'9"	21°38'38"	26°55'55"	F 18
S 19	12 20 5	6°57'25"	14°21'21"	25°27'27"	15°10'10"	21°53'53"	2°27'27"	6°24'24"	23°19'19"	27°27'27"	1°22'22"	3°48'48"	5°6'6"	21°45'45"	26°59'59"	S 19
S 20	12 24 1	7°56'27"	26°23'23"	26°5'5"	14°35'35"	21°49'49"	2°37'37"	6°29'29"	23°20'20"	27°27'27"	1°21'21"	3°46'46"	5°3'3"	21°52'52"	27°2'2"	S 20
M21	12 27 58	8°55'28"	8°40'40"	26°37'37"	13°58'58"	21°46'46"	2°48'48"	6°33'33"	23°22'22"	27°27'27"	1°19'19"	3°42'42"	5°0'0"	21°58'58"	27°6'6"	M21
T 22	12 31 54	9°54'26"	21°15'15"	27°2'2"	13°21'21"	21°44'44"	2°59'59"	6°38'38"	23°23'23"	27°27'27"	1°18'18"	3°35'35"	4°57'57"	22°5'5"	27°10'10"	T 22
W23	12 35 51	10°53'21"	4°11'11"	27°19'19"	12°43'43"	21°42'42"	3°9'9"	6°42'42"	23°25'25"	27°27'27"	1°16'16"	3°28'28"	4°53'53"	22°12'12"	27°14'14"	W23
T 24	12 39 47	11°52'14"	17°29'29"	27°30'30"	12°5'5"	21°41'41"	3°20'20"	6°47'47"	23°26'26"	27°27'27"	1°15'15"	3°19'19"	4°50'50"	22°18'18"	27°18'18"	T 24
F 25	12 43 44	12°51'06"	1°10'10"	27°R 35	11°27'27"	21°D 41	3°31'31"	6°51'51"	23°27'27"	27°27'27"	1°13'13"	3°10'10"	4°47'47"	22°25'25"	27°21'21"	F 25
S 26	12 47 41	13°49'55"	15°9'9"	27°32'32"	10°50'50"	21°42'42"	3°43'43"	6°55'55"	23°28'28"	27°26'26"	1°11'11"	3°3'3"	4°44'44"	22°31'31"	27°25'25"	S 26
S 27	12 51 37	14°48'42"	29°22'22"	27°24'24"	10°12'12"	21°43'43"	3°54'54"	6°59'59"	23°30'30"	27°26'26"	1°10'10"	2°57'57"	4°41'41"	22°38'38"	27°29'29"	S 27
M28	12 55 34	15°47'27"	13°14'55"	27°10'10"	9°36'36"	21°45'45"	4°5'5"	7°3'3"	23°31'31"	27°26'26"	1°8'8"	2°53'53"	4°38'38"	22°45'45"	27°33'33"	M28
T 29	12 59 30	16°46'11"	28°11'11"	26°50'50"	9°1'1"	21°48'48"	4°17'17"	7°7'7"	23°32'32"	27°26'26"	1°7'7"	2°D 51	4°34'34"	22°51'51"	27°37'37"	T 29
W30	13 3 27	17°44'52"	12°3'37"	26°25'25"	8°26'26"	21°51'51"	4°28'28"	7°11'11"	23°33'33"	27°26'26"	1°5'5"	2°52'52"	4°31'31"	22°58'58"	27°41'41"	W30
T 31	13 7 23	18°43'33"	26°3'58"	25°3'55"	7°3'53"	21°55'55"	4°11'11"	7°15'15"	23°34'34"	27°25'25"	1°11'11"	2°3'3"	4°28'28"	23°11'11"	27°45'45"	T 31

Delta T = 05m10s

Julian Calendar 1 March 1491 == Greg. Calendar 10 March 1491

APRIL 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	13 11 20	19°42'11"	11°3'11"	25°R22	7°R22	22°0'0"	4°11'51"	7°18'18"	23°35'35"	27°R25	1°R 2	2°3'54"	4°2'25"	23°11'11"	27°48'48"	F 1
S 2	13 15 16	20°40'48"	25°16'16"	24°3'45"	6°3'53"	22°6'6"	5°3'3"	7°22'22"	23°36'36"	27°25'25"	1°11'11"	2°R54	4°22'22"	23°18'18"	27°52'52"	S 2
S 3	13 19 13	21°39'23"	9°10'10"	24°6'6"	6°25'25"	22°12'12"	5°15'15"	7°25'25"	23°37'37"	27°24'24"	0°58'58"	2°53'53"	4°19'19"	23°25'25"	27°56'56"	S 3
M 4	13 23 10	22°37'56"	22°53'53"	23°25'25"	6°0'0"	22°19'19"	5°27'27"	7°29'29"	23°37'37"	27°24'24"	0°57'57"	2°50'50"	4°15'15"	23°31'31"	28°0'0"	M 4
T 5	13 27 6	23°36'28"	6°3'24"	22°43'43"	5°36'36"	22°26'26"	5°38'38"	7°32'32"	23°38'38"	27°23'23"	0°55'55"	2°45'45"	4°12'12"	23°38'38"	28°4'4"	T 5
W 6	13 31 3	24°34'57"	19°44'44"	22°1'1"	5°15'15"	22°34'34"	5°50'50"	7°35'35"	23°39'39"	27°23'23"	0°53'53"	2°39'39"	4°9'9"	23°45'45"	28°8'8"	W 6
T 7	13 34 59	25°33'26"	2°3'50"	21°20'20"	4°56'56"	22°43'43"	6°2'2"	7°38'38"	23°39'39"	27°22'22"	0°52'52"	2°32'32"	4°6'6"	23°51'51"	28°12'12"	T 7
F 8	13 38 56	26°31'52"	15°42'42"	20°40'40"	4°40'40"	22°52'52"	6°15'15"	7°42'42"	23°40'40"	27°22'22"	0°50'50"	2°26'26"	4°3'3"	23°58'58"	28°16'16"	F 8
S 9	13 42 52	27°30'17"	28°20'20"	20°1'1"	4°26'26"	23°2'2"	6°27'27"	7°45'45"	23°41'41"	27°21'21"	0°48'48"	2°21'21"	3°59'59"	24°5'5"	28°20'20"	S 9
S 10	13 46 49	28°28'39"	10°3'45"	19°26'26"	4°15'15"	23°12'12"	6°39'39"	7°47'47"	23°41'41"	27°20'20"	0°47'47"	2°18'18"	3°56'56"	24°11'11"	28°24'24"	S 10
M11	13 50 45	29°27'00"	22°57'57"	18°54'54"	4°5'5"	23°23'23"	6°51'51"	7°50'50"	23°42'42"	27°20'20"	0°45'45"	2°16'16"	3°53'53"	24°18'18"	28°28'28"	M11
T 12	13 54 42	0°25'19"	4°11'58"	18°25'25"	3°59'59"	23°35'35"	7°4'4"	7°53'53"	23°42'42"	27°19'19"	0°43'43"	2°D15	3°50'50"	24°25'25"	28°32'32"	T 12
W13	13 58 38	1°23'36"	16°52'52"	18°0'0"	3°54'54"	23°47'47"	7°16'16"	7°56'56"	23°42'42"	27°18'18"	0°42'42"	2°16'16"	3°47'47"	24°31'31"	28°35'35"	W13
T 14	14 2 35	2°21'52"	28°40'40"	17°39'39"	3°D53	24°0'0"	7°29'29"	7°58'58"	23°43'43"	27°18'18"	0°40'40"	2°18'18"	3°44'44"	24°38'38"	28°39'39"	T 14
F 15	14 6 32	3°20'05"	10°29'29"	17°23'23"	3°53'53"	24°13'13"	7°41'41"	8°1'1"	23°43'43"	27°17'17"	0°38'38"	2°20'20"	3°40'40"	24°45'45"	28°43'43"	F 15
S 16	14 10 28	4°18'16"	22°21'21"	17°12'12"	3°56'56"	24°26'26"	7°54'54"	8°3'3"	23°43'43"	27°16'16"	0°36'36"	2°21'21"	3°37'37"	24°51'51"	28°47'47"	S 16
S 17	14 14 25	5°16'25"	4°12'3"	17°5'5"	4°1'1"	24°41'41"	8°7'7"	8°5'5"	23°43'43"	27°15'15"	0°35'35"	2°R22	3°34'34"	24°58'58"	28°51'51"	S 17
M18	14 18 21	6°14'32"	16°39'39"	17°D 3	4°8'8"	24°55'55"	8°19'19"	8°7'7"	23°43'43"	27°15'15"	0°33'33"	2°21'21"	3°31'31"	25°4'4"	28°55'55"	M18
T 19	14 22 18	7°12'37"	29°13'13"	17°6'6"	4°18'18"	25°11'11"	8°32'32"	8°9'9"	23°R43	27°14'14"	0°31'31"	2°19'19"	3°28'28"	25°11'11"	28°59'59"	T 19
W20	14 26 14	8°10'40"	12°11'9"	17°14'14"	4°29'29"	25°26'26"	8°45'45"	8°11'11"	23°43'43"	27°13'13"	0°30'30"	2°17'17"	3°25'25"	25°18'18"	29°3'3"	W20
T 21	14 30 11	9°8'41"	25°30'30"	17°26'26"	4°43'43"	25°42'42"	8°58'58"	8°13'13"	23°43'43"	27°12'12"	0°28'28"	2°14'14"	3°21'21"	25°24'24"	29°7'7"	T 21
F 22	14 34 7	10°6'41"	9°17'17"	17°43'43"	4°58'58"	25°59'59"	9°11'11"	8°15'15"	23°43'43"	27°11'11"	0°26'26"	2°11'11"	3°18'18"	25°31'31"	29°11'11"	F 22
S 23	14 38 4	11°4'38"	23°27'27"	18°4'4"	5°16'16"	26°16'16"	9°24'24"	8°17'17"	23°43'43"	27°10'10"	0°25'25"	2°8'8"	3°15'15"	25°38'38"	29°15'15"	S 23
S 24	14 42 1	12°2'34"	7°11'57"	18°30'30"	5°35'35"	26°34'34"	9°37'37"	8°18'18"	23°43'43"	27°9'9"	0°23'23"	2°6'6"	3°12'12"	25°44'44"	29°18'18"	S 24
M25	14 45 57	13°0'28"	22°41'41"	19°0'0"	5°57'57"	26°51'51"	9°50'50"	8°20'20"	23°43'43"	27°8'8"	0°21'21"	2°5'5"	3°9'9"	25°51'51"	29°22'22"	M25
T 26	14 49 54	13°58'21"	7°3'33"	19°34'34"	6°20'20"	27°10'10"	10°3'3"	8°21'21"	23°42'42"	27°7'7"	0°20'20"	2°D 4	3°5'5"	25°58'58"	29°26'26"	T 26
W27	14 53 50	14°56'13"	22°23'23"	20°11'11"	6°45'45"	27°28'28"	10°16'16"	8°23'23"	23°42'42"	27°6'6"	0°18'18"	2°5'5"	3°2'2"	26°4'4"	29°30'30"	W27
T 28	14 57 47	15°54'03"	7°3'6"	20°53'7"	7°11'27"	27°48'10"	10°29'29"	8°24'24"	23°41'27"	27°5'17"	0°17'2'6"	2°59'26"	26°11'29"	29°34'28"	T 28	
F 29	15 1 43	16°51'52"	21°37'21"	21°38'7"	7°39'28"	28°7'10"	10°42'8"	8°25'23"	23°41'27"	27°4'15"	0°15'2'7"	2°56'26"	26°18'29"	29°38'38"	F 29	
S 30	15 5 40	17°49'40"	5°55'22"	22°37'8"	8°37'28"	28°12'10"	10°11'56"	8°26'23"	23°34'27"	27°3'10"	0°11'13"	2°3'8"	2°53'26"	29°11'24"	S 30	

ASTRODIENST EPHEMERIS for the year 1491

geocentric

MAY 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 9 36	18♂47'27	19♂46	23♂20	8♂39	28♂47	11♂9	8♂27	23♂40	27♂1	0♂12	2♂8	2♂50	26♂31	29♂45	S 1
M 2	15 13 33	19°45'12	3♂23	24°15	9°12	29°8	11°22	8°28	23♂39	27♂0	0♂10	2♂8	2°46	26°38	29°49	M 2
T 3	15 17 30	20°42'57	16°42	25°14	9°46	29°29	11°35	8°28	23°39	26°59	0°9	2°7	2°43	26°44	29°53	T 3
W 4	15 21 26	21°40'40	29°43	26°16	10°21	29°50	11°49	8°29	23°38	26°58	0°7	2°6	2°40	26°51	29°56	W 4
T 5	15 25 23	22°38'22	12♂29	27°21	10°57	0♂12	12°2	8°30	23°37	26°56	0°6	2°5	2°37	26°58	0♂0	T 5
F 6	15 29 19	23°36'03	25°1	28°29	11°34	0°34	12°16	8°30	23°37	26°55	0°4	2°3	2°34	27°4	0°4	F 6
S 7	15 33 16	24°33'43	7♂22	29°40	12°13	0°56	12°29	8°30	23°36	26°54	0°2	2°3	2°30	27°11	0°7	S 7
S 8	15 37 12	25°31'21	19°31	0♂53	12°53	1°19	12°43	8°31	23°35	26°53	0°1	2°2	2°27	27°18	0°11	S 8
M 9	15 41 9	26°28'59	1♂32	2°9	13°33	1°42	12°56	8°31	23°34	26°51	29♂59	2°D 2	2°24	27°24	0°15	M 9
T 10	15 45 5	27°26'35	13°27	3°28	14°15	2°6	13°10	8°R31	23°33	26°50	29°58	2°2	2°21	27°31	0°18	T 10
W11	15 49 2	28°24'10	25°17	4°50	14°58	2°29	13°23	8°31	23°32	26°48	29°57	2°2	2°18	27°38	0°22	W11
T 12	15 52 59	29°21'44	7♂5	6°14	15°42	2°53	13°37	8°31	23°31	26°47	29°55	2°3	2°15	27°44	0°25	T 12
F 13	15 56 55	0♂19'17	18°54	7°41	16°26	3°18	13°51	8°30	23°30	26°46	29°54	2°3	2°11	27°51	0°29	F 13
S 14	16 0 52	1°16'48	0♂47	9°10	17°12	3°42	14°4	8°30	23°29	26°44	29°52	2°3	2°8	27°58	0°33	S 14
S 15	16 4 48	2°14'18	12°49	10°42	17°58	4°7	14°18	8°30	23°28	26°43	29°51	2°R 3	2°5	28°4	0°36	S 15
M16	16 8 45	3°11'46	25°4	12°17	18°45	4°32	14°31	8°29	23°26	26°41	29°50	2°3	2°2	28°11	0°40	M16
T 17	16 12 41	4°9'14	7♂35	13°53	19°33	4°58	14°45	8°28	23°25	26°40	29°48	2°D 3	1°59	28°18	0°43	T 17
W18	16 16 38	5°6'40	20°28	15°33	20°21	5°23	14°59	8°28	23°24	26°39	29°47	2°3	1°56	28°24	0°46	W18
T 19	16 20 34	6°4'04	3♂44	17°15	21°11	5°49	15°13	8°27	23°22	26°37	29°46	2°3	1°52	28°31	0°50	T 19
F 20	16 24 31	7°1'28	17°27	18°59	22°1	6°16	15°26	8°26	23°21	26°36	29°45	2°4	1°49	28°38	0°53	F 20
S 21	16 28 28	7°58'50	1♂36	20°46	22°51	6°42	15°40	8°25	23°20	26°34	29°43	2°4	1°46	28°44	0°56	S 21
S 22	16 32 24	8°56'12	16°10	22°35	23°42	7°9	15°54	8°24	23°18	26°33	29°42	2°5	1°43	28°51	1°0	S 22
M23	16 36 21	9°53'32	1♂3	24°27	24°34	7°36	16°7	8°23	23°17	26°31	29°41	2°R 5	1°40	28°58	1°3	M23
T 24	16 40 17	10°50'52	16°8	26°21	25°27	8°3	16°21	8°21	23°15	26°29	29°40	2°5	1°36	29°4	1°6	T 24
W25	16 44 14	11°48'11	1♂18	28°17	26°20	8°30	16°35	8°20	23°13	26°28	29°39	2°4	1°33	29°11	1°9	W25
T 26	16 48 10	12°45'29	16°21	0♂15	27°14	8°58	16°49	8°19	23°12	26°26	29°37	2°3	1°30	29°18	1°13	T 26
F 27	16 52 7	13°42'47	1♂11	2°16	28°8	9°26	17°3	8°17	23°10	26°25	29°36	2°2	1°27	29°24	1°16	F 27
S 28	16 56 4	14°40'04	15°40	4°19	29°3	9°54	17°16	8°15	23°9	26°23	29°35	2°0	1°24	29°31	1°19	S 28
S 29	17 0 0	15°37'21	29°45	6°23	29°58	10°22	17°30	8°14	23°7	26°22	29°34	1°59	1°21	29°37	1°22	S 29
M30	17 3 57	16°34'38	13♂25	8°30	0♂54	10°51	17°44	8°12	23°5	26°20	29°33	1°D59	1°17	29°44	1°25	M30
T 31	17 7 53	17♂31'54	26♂40	10♂37	1♂50	11♂20	17♂58	8♂10	23♂3	26♂18	29♂32	1♂59	1♂14	29♂51	1♂28	T 31

Delta T = 05m10s

Julian Calendar 1 May 1491 == Greg. Calendar 10 May 1491

JUNE 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	17 11 50	18♂29'10	9♂33	12♂47	2♂46	11♂49	18♂11	8°R 8	23°R 1	26°R17	29°R31	2♂0	1♂11	29♂57	1♂31	W 1
T 2	17 15 46	19°26'25	22°8	14°57	3°43	12°18	18°25	8°6	23°0	26°15	29°30	2°1	1°8	0♂4	1°34	T 2
F 3	17 19 43	20°23'41	4♂27	17°7	4°41	12°47	18°39	8°3	22°58	26°14	29°29	2°3	1°5	0°11	1°37	F 3
S 4	17 23 39	21°20'56	16°34	19°19	5°39	13°17	18°53	8°1	22°56	26°12	29°29	2°4	1°2	0°17	1°40	S 4
S 5	17 27 36	22°18'11	28°32	21°30	6°37	13°47	19°7	7°59	22°54	26°10	29°28	2°R 5	0°58	0°24	1°43	S 5
M 6	17 31 33	23°15'25	10♂25	23°42	7°36	14°17	19°20	7°56	22°52	26°9	29°27	2°4	0°55	0°31	1°45	M 6
T 7	17 35 29	24°12'40	22°14	25°53	8°35	14°47	19°34	7°54	22°50	26°7	29°26	2°3	0°52	0°37	1°48	T 7
W 8	17 39 26	25°9'54	4♂2	28°4	9°34	15°17	19°48	7°51	22°48	26°6	29°25	2°1	0°49	0°44	1°51	W 8
T 9	17 43 22	26°7'07	15°51	0♂14	10°34	15°48	20°2	7°49	22°46	26°4	29°25	1°57	0°46	0°51	1°53	T 9
F 10	17 47 19	27°4'21	27°44	2°22	11°34	16°19	20°15	7°46	22°44	26°2	29°24	1°53	0°42	0°57	1°56	F 10
S 11	17 51 15	28°1'33	9♂41	4°30	12°34	16°50	20°29	7°43	22°42	26°1	29°23	1°49	0°39	1°4	1°59	S 11
S 12	17 55 12	28°58'46	21°47	6°36	13°35	17°21	20°43	7°40	22°40	25°59	29°23	1°45	0°36	1°11	2°1	S 12
M13	17 59 8	29°55'58	4♂7	8°41	14°36	17°52	20°56	7°37	22°37	25°57	29°22	1°42	0°33	1°17	2°4	M13
T 14	18 3 5	0♂53'09	16°36	10°44	15°37	18°24	21°10	7°34	22°35	25°56	29°21	1°40	0°30	1°24	2°6	T 14
W15	18 7 2	1°50'21	29°25	12°45	16°39	18°55	21°24	7°31	22°33	25°54	29°21	1°D39	0°27	1°31	2°9	W15
T 16	18 10 58	2°47'32	12♂35	14°44	17°40	19°27	21°37	7°28	22°31	25°53	29°20	1°39	0°23	1°37	2°11	T 16
F 17	18 14 55	3°44'42	26°9	16°42	18°42	19°59	21°51	7°24	22°29	25°51	29°20	1°40	0°20	1°44	2°13	F 17
S 18	18 18 51	4°41'52	10♂9	18°37	19°45	20°31	22°4	7°21	22°26	25°49	29°19	1°42	0°17	1°51	2°16	S 18
S 19	18 22 48	5°39'02	24°35	20°31	20°47	21°3	22°18	7°18	22°24	25°48	29°19	1°R43	0°14	1°57	2°18	S 19
M20	18 26 44	6°36'12	9♂23	22°23	21°50	21°36	22°32	7°14	22°22	25°46	29°19	1°43	0°11	2°4	2°20	M20
T 21	18 30 41	7°33'22	24°28	24°12	22°53	22°9	22°45	7°11	22°20	25°45	29°18	1°41	0°8	2°11	2°22	T 21
W22	18 34 37	8°30'32	9♂42	26°0	23°57	22°41	22°59	7°7	22°17	25°43	29°18	1°38	0°4	2°17	2°24	W22
T 23	18 38 34	9°27'43	24°55	27°45	25°0	23°14	23°12	7°3	22°15	25°42	29°18	1°33	0°1	2°24	2°26	T 23
F 24	18 42 31	10°24'53	9♂56	29°29	26°4	23°47	23°25	7°0	22°13	25°40	29°17	1°28	29♂58	2°31	2°28	F 24
S 25	18 46 27	11°22'04	24°38	1♂11	27°8	24°21	23°39	6°56	22°10	25°38	29°17	1°22	29°55	2°37	2°30	S 25
S 26	18 50 24	12°19'15	8♂54	2°50	28°12	24°54	23°52	6°52	22°8	25°37	29°17	1°17	29°52	2°44	2°32	S 26
M27	18 54 20	13°16'26	22°41	4°28	29°17	25°27	24°6	6°48	22°6	25°35	29°17	1°14	29°48	2°51	2°34	M27
T 28	18 58 17	14°13'38	6♂0	6°4	0♂12	26°1	24°19	6°44	22°3	25°34	29°17	1°12	29°45	2°57	2°36	T 28
W29	19 2 13	15°10'51	18°52	7°37	1°26	26°35	24°32	6°40	22°1	25°32	29°17	1°D12	29°42	3°4	2°37	W29
T 30	19 6 10	16°8'05	1♂23	9♂9	2♂31	27♂9	24♂45	6♂36	21♂58	25♂31	29♂16	1♂12	29♂39	3♂11	2♂39	T 30

Delta T = 05m09s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1491

geocentric

JULY 1491 JC

00:00 UT

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

Delta T = 05m09s

Julian Calendar 1 July 1491 == Greg. Calendar 10 July 1491

AUGUST 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	21 12 20	16♌45'37	27♏56	3°R37	8♌34	16♏21	1♌24	4°R17	20°R44	24°R52	29♏33	28°R59	27♏57	6♌44	3°R 4	M 1
T 2	21 16 16	17°43'21	9♌44	3♏13	9°43	16°59	1°36	4♏12	20♌42	24♏51	29°34	28♏53	27°54	6°51	3♌ 4	T 2
W 3	21 20 13	18°41'06	21°37	2°43	10°53	17°37	1°47	4° 8	20°40	24°51	29°35	28°44	27°51	6°58	3° 4	W 3
T 4	21 24 9	19°38'53	3♌38	2° 8	12° 3	18°16	1°58	4° 4	20°38	24°50	29°36	28°33	27°48	7° 4	3° 3	T 4
F 5	21 28 6	20°36'41	15°47	1°29	13°13	18°54	2° 9	4° 0	20°36	24°49	29°37	28°20	27°45	7°11	3° 3	F 5
S 6	21 32 2	21°34'31	28° 6	0°45	14°23	19°32	2°20	3°56	20°34	24°48	29°38	28° 7	27°41	7°18	3° 3	S 6
S 7	21 35 59	22°32'22	10♏36	29♌57	15°33	20°10	2°31	3°51	20°32	24°48	29°40	27°54	27°38	7°24	3° 2	S 7
M 8	21 39 56	23°30'14	23°16	29° 6	16°44	20°49	2°42	3°47	20°30	24°47	29°41	27°42	27°35	7°31	3° 2	M 8
T 9	21 43 52	24°28'08	6♌ 8	28°13	17°54	21°28	2°53	3°43	20°29	24°46	29°42	27°33	27°32	7°38	3° 1	T 9
W10	21 47 49	25°26'03	19°11	27°18	19° 5	22° 6	3° 4	3°39	20°27	24°46	29°43	27°27	27°29	7°44	3° 0	W10
T 11	21 51 45	26°24'00	2♏27	26°23	20°15	22°45	3°14	3°35	20°25	24°45	29°45	27°23	27°25	7°51	3° 0	T 11
F 12	21 55 42	27°21'58	15°57	25°30	21°26	23°24	3°25	3°31	20°23	24°45	29°46	27°22	27°22	7°58	2°59	F 12
S 13	21 59 38	28°19'57	29°42	24°38	22°37	24° 3	3°35	3°28	20°21	24°44	29°47	27°22	27°19	8° 4	2°58	S 13
S 14	22 3 35	29°17'57	13♏44	23°50	23°48	24°42	3°46	3°24	20°20	24°44	29°49	27°22	27°16	8°11	2°57	S 14
M15	22 7 31	0♏15'59	28° 2	23° 5	24°59	25°22	3°56	3°20	20°18	24°43	29°50	27°20	27°13	8°18	2°56	M15
T 16	22 11 28	1°14'03	12♌34	22°27	26°10	26° 1	4° 6	3°16	20°16	24°43	29°52	27°16	27°10	8°24	2°55	T 16
W17	22 15 25	2°12'07	27°16	21°54	27°21	26°40	4°16	3°13	20°15	24°42	29°53	27° 9	27° 6	8°31	2°54	W17
T 18	22 19 21	3°10'14	12♏ 3	21°29	28°32	27°20	4°26	3° 9	20°13	24°42	29°55	27° 0	27° 3	8°38	2°53	T 18
F 19	22 23 18	4° 8'21	26°46	21°11	29°43	27°59	4°36	3° 6	20°12	24°42	29°56	26°49	27° 0	8°45	2°52	F 19
S 20	22 27 14	5° 6'31	11♏17	21° 2	0°55	28°39	4°46	3° 2	20°10	24°42	29°58	26°37	26°57	8°51	2°51	S 20
S 21	22 31 11	6° 4'42	25°30	21°D 1	2° 6	29°19	4°55	2°59	20° 9	24°41	29°59	26°27	26°54	8°58	2°50	S 21
M22	22 35 7	7° 2'55	9♏19	21° 9	3°18	29°59	5° 5	2°55	20° 7	24°41	0♏ 1	26°18	26°51	9° 5	2°48	M22
T 23	22 39 4	8° 1'10	22°41	21°26	4°29	0♏39	5°14	2°52	20° 6	24°41	0° 3	26°12	26°47	9°11	2°47	T 23
W24	22 43 0	8°59'27	5♌38	21°52	5°41	1°19	5°23	2°49	20° 5	24°41	0° 5	26° 8	26°44	9°18	2°46	W24
T 25	22 46 57	9°57'46	18°12	22°26	6°53	1°59	5°33	2°46	20° 3	24°41	0° 6	26° 7	26°41	9°25	2°44	T 25
F 26	22 50 54	10°56'07	0♏27	23° 9	8° 5	2°39	5°42	2°43	20° 2	24°40	0° 8	26°D 6	26°38	9°31	2°43	F 26
S 27	22 54 50	11°54'31	12°28	24° 0	9°17	3°19	5°51	2°40	20° 1	24°40	0°10	26°R 7	26°35	9°38	2°41	S 27
S 28	22 58 47	12°52'56	24°20	24°58	10°29	4° 0	5°59	2°37	20° 0	24°40	0°12	26° 6	26°31	9°45	2°39	S 28
M29	23 2 43	13°51'24	6♌10	26° 4	11°41	4°40	6° 8	2°34	19°59	24°D40	0°13	26° 4	26°28	9°51	2°38	M29
T 30	23 6 40	14°49'54	18° 1	27°16	12°53	5°21	6°17	2°32	19°58	24°40	0°15	25°59	26°25	9°58	2°36	T 30
W31	23 10 36	15♏48'26	29♌58	28♌35	14♌ 6	6♏ 2	6♌25	2♏29	19♌57	24♏40	0♏17	25♏52	26♏22	10♌ 5	2♌34	W31

ASTRODIENST EPHEMERIS for the year 1491
geocentric

SEPTEMBER 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	23 14 33	16♐47'00	12♏ 5	29♏59	15♏18	6♐42	6♏34	2°R26	19°R56	24♐41	0♐19	25°R42	26♐19	10♏11	2°R32	T 1
F 2	23 18 29	17°45'36	24°24	1♐27	16°31	7°23	6°42	2♐24	19°R55	24°41	0°21	25♐31	26°16	10°18	2♏31	F 2
S 3	23 22 26	18°44'14	6♐56	3° 0	17°43	8° 4	6°50	2°21	19°54	24°41	0°23	25°19	26°12	10°25	2°29	S 3
S 4	23 26 22	19°42'54	19°43	4°37	18°56	8°45	6°58	2°19	19°53	24°41	0°25	25° 7	26° 9	10°31	2°27	S 4
M 5	23 30 19	20°41'36	2♐43	6°16	20° 9	9°27	7° 5	2°17	19°52	24°41	0°27	24°57	26° 6	10°38	2°25	M 5
T 6	23 34 16	21°40'20	15°56	7°59	21°21	10° 8	7°13	2°15	19°51	24°42	0°29	24°49	26° 3	10°45	2°23	T 6
W 7	23 38 12	22°39'06	29°20	9°43	22°34	10°49	7°21	2°13	19°51	24°42	0°31	24°44	26° 0	10°51	2°21	W 7
T 8	23 42 9	23°37'54	12♐54	11°29	23°47	11°30	7°28	2°11	19°50	24°42	0°33	24°41	25°57	10°58	2°18	T 8
F 9	23 46 5	24°36'44	26°37	13°16	25° 0	12°12	7°35	2° 9	19°49	24°42	0°35	24°D41	25°53	11° 5	2°16	F 9
S 10	23 50 2	25°35'35	10♐29	15° 4	26°13	12°54	7°42	2° 7	19°49	24°43	0°37	24°41	25°50	11°12	2°14	S 10
S 11	23 53 58	26°34'28	24°30	16°53	27°26	13°35	7°49	2° 5	19°48	24°43	0°39	24°R42	25°47	11°18	2°12	S 11
M12	23 57 55	27°33'23	8♏38	18°42	28°39	14°17	7°56	2° 4	19°48	24°44	0°41	24°41	25°44	11°25	2° 9	M12
T 13	0 1 51	28°32'20	22°54	20°31	29°53	14°59	8° 3	2° 2	19°48	24°44	0°43	24°39	25°41	11°32	2° 7	T 13
W14	0 5 48	29°31'18	7♐14	22°20	1♐ 6	15°41	8° 9	2° 1	19°47	24°45	0°45	24°34	25°37	11°38	2° 5	W14
T 15	0 9 45	0♐30'18	21°35	24° 9	2°19	16°23	8°15	2° 0	19°47	24°45	0°47	24°27	25°34	11°45	2° 2	T 15
F 16	0 13 41	1°29'20	5♐51	25°57	3°33	17° 5	8°21	1°58	19°47	24°46	0°50	24°19	25°31	11°52	2° 0	F 16
S 17	0 17 38	2°28'23	19°59	27°46	4°46	17°47	8°27	1°57	19°46	24°47	0°52	24°10	25°28	11°58	1°57	S 17
S 18	0 21 34	3°27'29	3♐51	29°33	6° 0	18°29	8°33	1°56	19°46	24°47	0°54	24° 2	25°25	12° 5	1°55	S 18
M19	0 25 31	4°26'37	17°25	1♐20	7°13	19°11	8°39	1°55	19°46	24°48	0°56	23°56	25°22	12°12	1°52	M19
T 20	0 29 27	5°25'47	0♐38	3° 6	8°27	19°54	8°45	1°54	19°46	24°49	0°58	23°51	25°18	12°18	1°50	T 20
W21	0 33 24	6°24'59	13°30	4°52	9°41	20°36	8°50	1°54	19°D46	24°49	1° 1	23°48	25°15	12°25	1°47	W21
T 22	0 37 20	7°24'13	26° 3	6°37	10°54	21°19	8°55	1°53	19°46	24°50	1° 3	23°D48	25°12	12°32	1°44	T 22
F 23	0 41 17	8°23'30	8♐18	8°21	12° 8	22° 1	9° 0	1°53	19°46	24°51	1° 5	23°49	25° 9	12°38	1°42	F 23
S 24	0 45 14	9°22'49	20°20	10° 5	13°22	22°44	9° 5	1°52	19°46	24°52	1° 8	23°50	25° 6	12°45	1°39	S 24
S 25	0 49 10	10°22'11	2♐14	11°48	14°36	23°27	9°10	1°52	19°47	24°53	1°10	23°51	25° 2	12°52	1°36	S 25
M26	0 53 7	11°21'34	14° 4	13°30	15°50	24°10	9°14	1°52	19°47	24°54	1°12	23°R52	24°59	12°59	1°34	M26
T 27	0 57 3	12°21'00	25°56	15°11	17° 4	24°53	9°19	1°51	19°47	24°55	1°14	23°51	24°56	13° 5	1°31	T 27
W28	1 1 0	13°20'29	7♐55	16°52	18°18	25°36	9°23	1°D51	19°47	24°56	1°17	23°48	24°53	13°12	1°28	W28
T 29	1 4 56	14°19'59	20° 6	18°32	19°32	26°19	9°27	1°52	19°48	24°57	1°19	23°43	24°50	13°19	1°25	T 29
F 30	1 8 53	15♐19'32	2♐30	20♐11	20♐46	27♐ 2	9♐31	1♐52	19°R48	24°58	1♐21	23♐37	24♐47	13°25	1°R22	F 30

Delta T = 05m09s

Julian Calendar 1 Sept. 1491 == Greg. Calendar 10 Sept. 1491

OCTOBER 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	1 12 49	16♐19'07	15♐13	21♐49	22♐ 1	27♐45	9♐34	1♐52	19°R49	24°59	1♐24	23°R31	24♐43	13♐32	1°R19	S 1
S 2	1 16 46	17°18'44	28°13	23°27	23°15	28°28	9°38	1°52	19°49	25° 0	1°26	23♐24	24°40	13°39	1°R17	S 2
M 3	1 20 42	18°18'24	11♐32	25° 4	24°29	29°12	9°41	1°53	19°50	25° 1	1°29	23°19	24°37	13°45	1°14	M 3
T 4	1 24 39	19°18'05	25° 7	26°41	25°44	29°55	9°44	1°53	19°51	25° 2	1°31	23°14	24°34	13°52	1°11	T 4
W 5	1 28 36	20°17'48	8♐56	28°17	26°58	0♐39	9°47	1°54	19°51	25° 3	1°33	23°12	24°31	13°59	1° 8	W 5
T 6	1 32 32	21°17'34	22°56	29°52	28°13	1°22	9°50	1°55	19°52	25° 4	1°36	23°D11	24°28	14° 5	1° 5	T 6
F 7	1 36 29	22°17'21	7♐ 4	1♐27	29°27	2° 6	9°52	1°56	19°53	25° 6	1°38	23°12	24°24	14°12	1° 2	F 7
S 8	1 40 25	23°17'10	21°15	3° 2	0♐42	2°50	9°54	1°57	19°54	25° 7	1°41	23°13	24°21	14°19	0°59	S 8
S 9	1 44 22	24°17'01	5♏28	4°35	1°56	3°34	9°56	1°58	19°55	25° 8	1°43	23°15	24°18	14°25	0°56	S 9
M10	1 48 18	25°16'54	19°41	6° 9	3°11	4°18	9°58	1°59	19°56	25°10	1°45	23°R15	24°15	14°32	0°53	M10
T 11	1 52 15	26°16'48	3♐50	7°41	4°25	5° 2	10° 0	2° 0	19°57	25°11	1°48	23°15	24°12	14°39	0°50	T 11
W12	1 56 11	27°16'43	17°55	9°13	5°40	5°46	10° 2	2° 2	19°58	25°12	1°50	23°14	24° 8	14°46	0°47	W12
T 13	2 0 8	28°16'41	1♐53	10°45	6°55	6°30	10° 3	2° 3	19°59	25°14	1°53	23°12	24° 5	14°52	0°44	T 13
F 14	2 4 5	29°16'39	15°42	12°16	8° 9	7°14	10° 4	2° 5	20° 0	25°15	1°55	23° 8	24° 2	14°59	0°41	F 14
S 15	2 8 1	0♐16'40	29°21	13°47	9°24	7°58	10° 5	2° 7	20° 1	25°17	1°58	23° 5	23°59	15° 6	0°38	S 15
S 16	2 11 58	1°16'42	12♐46	15°17	10°39	8°42	10° 6	2° 8	20° 2	25°18	2° 0	23° 1	23°56	15°12	0°35	S 16
M17	2 15 54	2°16'46	25°58	16°47	11°54	9°27	10° 6	2°10	20° 4	25°20	2° 2	22°59	23°53	15°19	0°32	M17
T 18	2 19 51	3°16'53	8♐53	18°16	13° 9	10°11	10° 7	2°12	20° 5	25°21	2° 5	22°57	23°49	15°26	0°29	T 18
W19	2 23 47	4°17'00	21°33	19°45	14°24	10°56	10°R 7	2°14	20° 6	25°23	2° 7	22°D56	23°46	15°32	0°26	W19
T 20	2 27 44	5°17'10	3♐58	21°13	15°38	11°40	10° 7	2°17	20° 8	25°24	2°10	22°57	23°43	15°39	0°23	T 20
F 21	2 31 40	6°17'22	16°10	22°40	16°53	12°25	10° 7	2°19	20° 9	25°26	2°12	22°58	23°40	15°46	0°20	F 21
S 22	2 35 37	7°17'36	28°11	24° 8	18° 8	13°10	10° 6	2°21	20°11	25°28	2°15	22°59	23°37	15°52	0°17	S 22
S 23	2 39 34	8°17'52	10♐ 4	25°34	19°23	13°54	10° 6	2°24	20°13	25°29	2°17	23° 1	23°34	15°59	0°14	S 23
M24	2 43 30	9°18'10	21°55	27° 0	20°38	14°39	10° 5	2°26	20°14	25°31	2°19	23° 2	23°30	16° 6	0°11	M24
T 25	2 47 27	10°18'29	3♐47	28°25	21°54	15°24	10° 4	2°29	20°16	25°33	2°22	23° 3	23°27	16°13	0° 8	T 25
W26	2 51 23	11°18'51	15°45	29°50	23° 9	16° 9	10° 3	2°32	20°18	25°34	2°24	23°R 3	23°24	16°19	0° 5	W26
T 27	2 55 20	12°19'15	27°54	1♐14	24°24	16°54	10° 1	2°34	20°19	25°36	2°27	23° 2	23°21	16°26	0° 2	T 27
F 28	2 59 16	13°19'40	10♐19	2°36	25°39	17°39	9°59	2°37	20°21	25°38	2°29	23° 1	23°18	16°33	29°Y59	F 28
S 29	3 3 13	14°20'08	23° 2	3°58	26°54	18°24	9°58	2°40	20°23	25°40	2°31	23° 0	23°14	16°39	29°56	S 29
S 30	3 7 9	15°20'37	6♐ 8	5°19	28° 9	19° 9	9°56	2°44	20°25	25°42	2°34	22°59	23°11	16°46	29°53	S 30
M31	3 11 6	16♐21'08	19♐36	6♐39	29♐24	19♐54	9♐53	2♐47	20°R27	25°43	2♐36	22♐58	23♐ 8	16°53	29°Y50	M31

Delta T = 05m09s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1491

geocentric

NOVEMBER 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	3 15 3	17 ¹¹ 21'41	3 ¹¹ 27	7 ¹¹ 58	0 ¹¹ 40	20 ¹¹ 40	9 ¹¹ 51	2 ¹¹ 50	20 ¹¹ 29	25 ¹¹ 45	2 ¹¹ 39	22 ¹¹ R58	23 ¹¹ 5	16 ¹¹ 59	29 ¹¹ R47	T 1
W 2	3 18 59	18 ¹¹ 22'16	17 ¹¹ 38	9 ¹¹ 15	1 ¹¹ 55	21 ¹¹ 25	9 ¹¹ 58	2 ¹¹ 53	20 ¹¹ 31	25 ¹¹ 47	2 ¹¹ 41	22 ¹¹ D57	23 ¹¹ 2	17 ¹¹ 6	29 ¹¹ Y45	W 2
T 3	3 22 56	19 ¹¹ 22'52	2 ¹¹ 5	10 ¹¹ 30	3 ¹¹ 10	22 ¹¹ 11	9 ¹¹ 45	2 ¹¹ 57	20 ¹¹ 33	25 ¹¹ 49	2 ¹¹ 43	22 ¹¹ M57	22 ¹¹ 59	17 ¹¹ 13	29 ¹¹ 42	T 3
F 4	3 26 52	20 ¹¹ 23'30	16 ¹¹ 41	11 ¹¹ 44	4 ¹¹ 25	22 ¹¹ 56	9 ¹¹ 42	3 ¹¹ 1	20 ¹¹ 35	25 ¹¹ 51	2 ¹¹ 46	22 ¹¹ 57	22 ¹¹ 55	17 ¹¹ 20	29 ¹¹ 39	F 4
S 5	3 30 49	21 ¹¹ 24'09	1 ¹¹ 21	12 ¹¹ 55	5 ¹¹ 41	23 ¹¹ 42	9 ¹¹ 39	3 ¹¹ 4	20 ¹¹ 37	25 ¹¹ 53	2 ¹¹ 48	22 ¹¹ 58	22 ¹¹ 52	17 ¹¹ 26	29 ¹¹ 36	S 5
S 6	3 34 45	22 ¹¹ 24'49	15 ¹¹ 58	14 ¹¹ 5	6 ¹¹ 56	24 ¹¹ 27	9 ¹¹ 36	3 ¹¹ 8	20 ¹¹ 40	25 ¹¹ 55	2 ¹¹ 50	22 ¹¹ 58	22 ¹¹ 49	17 ¹¹ 33	29 ¹¹ 34	S 6
M 7	3 38 42	23 ¹¹ 25'30	0 ¹¹ 27	15 ¹¹ 11	8 ¹¹ 11	25 ¹¹ 13	9 ¹¹ 32	3 ¹¹ 12	20 ¹¹ 42	25 ¹¹ 57	2 ¹¹ 53	22 ¹¹ R58	22 ¹¹ 46	17 ¹¹ 40	29 ¹¹ 31	M 7
T 8	3 42 38	24 ¹¹ 26'13	14 ¹¹ 43	16 ¹¹ 14	9 ¹¹ 27	25 ¹¹ 59	9 ¹¹ 28	3 ¹¹ 16	20 ¹¹ 44	25 ¹¹ 59	2 ¹¹ 55	22 ¹¹ 58	22 ¹¹ 43	17 ¹¹ 46	29 ¹¹ 28	T 8
W 9	3 46 35	25 ¹¹ 26'56	28 ¹¹ 45	17 ¹¹ 14	10 ¹¹ 42	26 ¹¹ 44	9 ¹¹ 24	3 ¹¹ 20	20 ¹¹ 46	26 ¹¹ 1	2 ¹¹ 57	22 ¹¹ D58	22 ¹¹ 39	17 ¹¹ 53	29 ¹¹ 26	W 9
T 10	3 50 32	26 ¹¹ 27'41	12 ¹¹ 31	18 ¹¹ 10	11 ¹¹ 57	27 ¹¹ 30	9 ¹¹ 20	3 ¹¹ 24	20 ¹¹ 49	26 ¹¹ 3	3 ¹¹ 0	22 ¹¹ 58	22 ¹¹ 36	18 ¹¹ 0	29 ¹¹ 23	T 10
F 11	3 54 28	27 ¹¹ 28'26	26 ¹¹ 2	19 ¹¹ 1	13 ¹¹ 13	28 ¹¹ 16	9 ¹¹ 16	3 ¹¹ 28	20 ¹¹ 51	26 ¹¹ 5	3 ¹¹ 2	22 ¹¹ 58	22 ¹¹ 33	18 ¹¹ 6	29 ¹¹ 20	F 11
S 12	3 58 25	28 ¹¹ 29'13	9 ¹¹ Y17	19 ¹¹ 47	14 ¹¹ 28	29 ¹¹ 2	9 ¹¹ 11	3 ¹¹ 32	20 ¹¹ 54	26 ¹¹ 7	3 ¹¹ 4	22 ¹¹ 59	22 ¹¹ 30	18 ¹¹ 13	29 ¹¹ 18	S 12
S 13	4 2 21	29 ¹¹ 30'00	22 ¹¹ 18	20 ¹¹ 27	15 ¹¹ 43	29 ¹¹ 48	9 ¹¹ 7	3 ¹¹ 36	20 ¹¹ 56	26 ¹¹ 9	3 ¹¹ 6	22 ¹¹ 59	22 ¹¹ 27	18 ¹¹ 20	29 ¹¹ 15	S 13
M14	4 6 18	0 ¹¹ 30'49	5 ¹¹ 5	21 ¹¹ 0	16 ¹¹ 59	0 ¹¹ 34	9 ¹¹ 2	3 ¹¹ 41	20 ¹¹ 59	26 ¹¹ 11	3 ¹¹ 9	23 ¹¹ 0	22 ¹¹ 24	18 ¹¹ 26	29 ¹¹ 13	M14
T 15	4 10 14	1 ¹¹ 31'38	17 ¹¹ 40	21 ¹¹ 27	18 ¹¹ 14	1 ¹¹ 20	8 ¹¹ 57	3 ¹¹ 45	21 ¹¹ 1	26 ¹¹ 13	3 ¹¹ 11	23 ¹¹ R 0	22 ¹¹ 20	18 ¹¹ 33	29 ¹¹ 10	T 15
W16	4 14 11	2 ¹¹ 32'29	0 ¹¹ II 4	21 ¹¹ 44	19 ¹¹ 30	2 ¹¹ 6	8 ¹¹ 52	3 ¹¹ 50	21 ¹¹ 4	26 ¹¹ 15	3 ¹¹ 13	23 ¹¹ 0	22 ¹¹ 17	18 ¹¹ 40	29 ¹¹ 8	W16
T 17	4 18 7	3 ¹¹ 33'21	12 ¹¹ 17	21 ¹¹ R53	20 ¹¹ 45	2 ¹¹ 52	8 ¹¹ 46	3 ¹¹ 55	21 ¹¹ 6	26 ¹¹ 17	3 ¹¹ 15	23 ¹¹ 0	22 ¹¹ 14	18 ¹¹ 47	29 ¹¹ 6	T 17
F 18	4 22 4	4 ¹¹ 34'14	24 ¹¹ 22	21 ¹¹ 52	22 ¹¹ 0	3 ¹¹ 38	8 ¹¹ 41	3 ¹¹ 59	21 ¹¹ 9	26 ¹¹ 20	3 ¹¹ 17	22 ¹¹ 58	22 ¹¹ 11	18 ¹¹ 53	29 ¹¹ 3	F 18
S 19	4 26 1	5 ¹¹ 35'09	6 ¹¹ 219	21 ¹¹ 41	23 ¹¹ 16	4 ¹¹ 24	8 ¹¹ 35	4 ¹¹ 4	21 ¹¹ 12	26 ¹¹ 22	3 ¹¹ 19	22 ¹¹ 57	22 ¹¹ 8	19 ¹¹ 0	29 ¹¹ 1	S 19
S 20	4 29 57	6 ¹¹ 36'04	18 ¹¹ 12	21 ¹¹ 18	24 ¹¹ 31	5 ¹¹ 11	8 ¹¹ 29	4 ¹¹ 9	21 ¹¹ 15	26 ¹¹ 24	3 ¹¹ 22	22 ¹¹ 55	22 ¹¹ 5	19 ¹¹ 7	28 ¹¹ 59	S 20
M21	4 33 54	7 ¹¹ 37'01	0 ¹¹ 2	20 ¹¹ 44	25 ¹¹ 47	5 ¹¹ 57	8 ¹¹ 24	4 ¹¹ 14	21 ¹¹ 17	26 ¹¹ 26	3 ¹¹ 24	22 ¹¹ 52	22 ¹¹ 1	19 ¹¹ 13	28 ¹¹ 57	M21
T 22	4 37 50	8 ¹¹ 37'59	11 ¹¹ 54	19 ¹¹ 59	27 ¹¹ 2	6 ¹¹ 43	8 ¹¹ 17	4 ¹¹ 19	21 ¹¹ 20	26 ¹¹ 28	3 ¹¹ 26	22 ¹¹ 50	21 ¹¹ 58	19 ¹¹ 20	28 ¹¹ 54	T 22
W23	4 41 47	9 ¹¹ 38'58	23 ¹¹ 50	19 ¹¹ 3	28 ¹¹ 18	7 ¹¹ 30	8 ¹¹ 11	4 ¹¹ 24	21 ¹¹ 23	26 ¹¹ 30	3 ¹¹ 28	22 ¹¹ 49	21 ¹¹ 55	19 ¹¹ 27	28 ¹¹ 52	W23
T 24	4 45 43	10 ¹¹ 39'58	5 ¹¹ Y56	17 ¹¹ 58	29 ¹¹ 33	8 ¹¹ 16	8 ¹¹ 5	4 ¹¹ 29	21 ¹¹ 26	26 ¹¹ 33	3 ¹¹ 30	22 ¹¹ D48	21 ¹¹ 52	19 ¹¹ 34	28 ¹¹ 50	T 24
F 25	4 49 40	11 ¹¹ 40'59	18 ¹¹ 16	16 ¹¹ 45	0 ¹¹ Y49	9 ¹¹ 3	7 ¹¹ 58	4 ¹¹ 34	21 ¹¹ 29	26 ¹¹ 35	3 ¹¹ 32	22 ¹¹ 48	21 ¹¹ 49	19 ¹¹ 40	28 ¹¹ 48	F 25
S 26	4 53 36	12 ¹¹ 42'01	0 ¹¹ 254	15 ¹¹ 25	2 ¹¹ 4	9 ¹¹ 49	7 ¹¹ 52	4 ¹¹ 39	21 ¹¹ 32	26 ¹¹ 37	3 ¹¹ 34	22 ¹¹ 49	21 ¹¹ 45	19 ¹¹ 47	28 ¹¹ 46	S 26
S 27	4 57 33	13 ¹¹ 43'04	13 ¹¹ 55	14 ¹¹ 3	3 ¹¹ 20	10 ¹¹ 36	7 ¹¹ 45	4 ¹¹ 45	21 ¹¹ 35	26 ¹¹ 39	3 ¹¹ 36	22 ¹¹ 50	21 ¹¹ 42	19 ¹¹ 54	28 ¹¹ 44	S 27
M28	5 1 30	14 ¹¹ 44'09	27 ¹¹ 21	12 ¹¹ 40	4 ¹¹ 35	11 ¹¹ 22	7 ¹¹ 38	4 ¹¹ 50	21 ¹¹ 38	26 ¹¹ 41	3 ¹¹ 38	22 ¹¹ 52	21 ¹¹ 39	20 ¹¹ 0	28 ¹¹ 42	M28
T 29	5 5 26	15 ¹¹ 45'14	11 ¹¹ M14	11 ¹¹ 20	5 ¹¹ 51	12 ¹¹ 9	7 ¹¹ 31	4 ¹¹ 56	21 ¹¹ 41	26 ¹¹ 44	3 ¹¹ 40	22 ¹¹ 53	21 ¹¹ 36	20 ¹¹ 7	28 ¹¹ 41	T 29
W30	5 9 23	16 ¹¹ 46'20	25 ¹¹ M34	10 ¹¹ 4	7 ¹¹ 6	12 ¹¹ 56	7 ¹¹ 24	5 ¹¹ 1	21 ¹¹ 44	26 ¹¹ 46	3 ¹¹ M42	22 ¹¹ R53	21 ¹¹ M33	20 ¹¹ 214	28 ¹¹ Y39	W30

Delta T = 05m08s

Julian Calendar 1 Nov. 1491 == Greg. Calendar 10 Nov. 1491

DECEMBER 1491 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	5 13 19	17 ¹¹ 47'28	10 ¹¹ Y16	8 ¹¹ R56	8 ¹¹ Y22	13 ¹¹ 342	7 ¹¹ R17	5 ¹¹ 7	21 ¹¹ 347	26 ¹¹ Y48	3 ¹¹ M44	22 ¹¹ R53	21 ¹¹ M30	20 ¹¹ 220	28 ¹¹ R37	T 1
F 2	5 17 16	18 ¹¹ 48'35	25 ¹¹ 14	7 ¹¹ Y56	9 ¹¹ 37	14 ¹¹ 29	7 ¹¹ 29	5 ¹¹ 12	21 ¹¹ 50	26 ¹¹ 50	3 ¹¹ 46	22 ¹¹ M50	21 ¹¹ 26	20 ¹¹ 27	28 ¹¹ Y35	F 2
S 3	5 21 12	19 ¹¹ 49'44	10 ¹¹ 320	7 ¹¹ 7	10 ¹¹ 53	15 ¹¹ 16	7 ¹¹ 2	5 ¹¹ 18	21 ¹¹ 53	26 ¹¹ 53	3 ¹¹ 47	22 ¹¹ 47	21 ¹¹ 23	20 ¹¹ 34	28 ¹¹ Y34	S 3
S 4	5 25 9	20 ¹¹ 50'52	25 ¹¹ 24	6 ¹¹ 28	12 ¹¹ 8	16 ¹¹ 3	6 ¹¹ 54	5 ¹¹ 24	21 ¹¹ 56	26 ¹¹ 55	3 ¹¹ 49	22 ¹¹ 43	21 ¹¹ 20	20 ¹¹ 41	28 ¹¹ 32	S 4
M 5	5 29 5	21 ¹¹ 52'02	10 ¹¹ 317	6 ¹¹ 0	13 ¹¹ 24	16 ¹¹ 49	6 ¹¹ 47	5 ¹¹ 30	21 ¹¹ 59	26 ¹¹ 57	3 ¹¹ 51	22 ¹¹ 39	21 ¹¹ 17	20 ¹¹ 47	28 ¹¹ 31	M 5
T 6	5 33 2	22 ¹¹ 53'11	24 ¹¹ 52	5 ¹¹ 43	14 ¹¹ 39	17 ¹¹ 36	6 ¹¹ 39	5 ¹¹ 36	22 ¹¹ 2	27 ¹¹ 0	3 ¹¹ 53	22 ¹¹ 35	21 ¹¹ 14	20 ¹¹ 54	28 ¹¹ 29	T 6
W 7	5 36 59	23 ¹¹ 54'20	9 ¹¹ Y 4	5 ¹¹ D37	15 ¹¹ 55	18 ¹¹ 23	6 ¹¹ 31	5 ¹¹ 41	22 ¹¹ 6	27 ¹¹ 2	3 ¹¹ 55	22 ¹¹ 33	21 ¹¹ 11	21 ¹¹ 1	28 ¹¹ 28	W 7
T 8	5 40 55	24 ¹¹ 55'29	22 ¹¹ 52	5 ¹¹ 40	17 ¹¹ 10	19 ¹¹ 10	6 ¹¹ 24	5 ¹¹ 47	22 ¹¹ 9	27 ¹¹ 4	3 ¹¹ 56	22 ¹¹ D32	21 ¹¹ 7	21 ¹¹ 7	28 ¹¹ 26	T 8
F 9	5 44 52	25 ¹¹ 56'39	6 ¹¹ Y16	5 ¹¹ 52	18 ¹¹ 26	19 ¹¹ 57	6 ¹¹ 16	5 ¹¹ 53	22 ¹¹ 12	27 ¹¹ 6	3 ¹¹ 58	22 ¹¹ 32	21 ¹¹ 4	21 ¹¹ 14	28 ¹¹ 25	F 9
S 10	5 48 48	26 ¹¹ 57'48	19 ¹¹ 20	6 ¹¹ 13	19 ¹¹ 41	20 ¹¹ 44	6 ¹¹ 8	6 ¹¹ 0	22 ¹¹ 15	27 ¹¹ 9	4 ¹¹ 0	22 ¹¹ 34	21 ¹¹ 1	21 ¹¹ 21	28 ¹¹ 24	S 10
S 11	5 52 45	27 ¹¹ 58'57	2 ¹¹ 4	6 ¹¹ 40	20 ¹¹ 57	21 ¹¹ 31	6 ¹¹ 0	6 ¹¹ 6	22 ¹¹ 19	27 ¹¹ 11	4 ¹¹ 1	22 ¹¹ 35	20 ¹¹ 58	21 ¹¹ 27	28 ¹¹ 23	S 11
M12	5 56 41	29 ¹¹ 0'07	14 ¹¹ 34	7 ¹¹ 15	22 ¹¹ 12	22 ¹¹ 18	5 ¹¹ 52	6 ¹¹ 12	22 ¹¹ 22	27 ¹¹ 13	4 ¹¹ 3	22 ¹¹ 37	20 ¹¹ 55	21 ¹¹ 34	28 ¹¹ 22	M12
T 13	6 0 38	0 ¹¹ 3 1'16	26 ¹¹ 52	7 ¹¹ 56	23 ¹¹ 28	23 ¹¹ 5	5 ¹¹ 44	6 ¹¹ 18	22 ¹¹ 25	27 ¹¹ 15	4 ¹¹ 5	22 ¹¹ R37	20 ¹¹ 51	21 ¹¹ 41	28 ¹¹ 21	T 13
W14	6 4 34	1 ¹¹ 2'26	9 ¹¹ II 0	8 ¹¹ 42	24 ¹¹ 43	23 ¹¹ 52	5 ¹¹ 36	6 ¹¹ 24	22 ¹¹ 29	27 ¹¹ 18	4 ¹¹ 6	22 ¹¹ 35	20 ¹¹ 48	21 ¹¹ 48	28 ¹¹ 20	W14
T 15	6 8 31	2 ¹¹ 3'35	21 ¹¹ 2	9 ¹¹ 33	25 ¹¹ 59	24 ¹¹ 39	5 ¹¹ 28	6 ¹¹ 31	22 ¹¹ 32	27 ¹¹ 20	4 ¹¹ 8	22 ¹¹ 32	20 ¹¹ 45	21 ¹¹ 54	28 ¹¹ 19	T 15
F 16	6 12 28	3 ¹¹ 4'45	2 ¹¹ 59	10 ¹¹ 28	27 ¹¹ 14	25 ¹¹ 27	5 ¹¹ 20	6 ¹¹ 37	22 ¹¹ 35	27 ¹¹ 22	4 ¹¹ 9	22 ¹¹ 26	20 ¹¹ 42	22 ¹¹ 1	28 ¹¹ 18	F 16
S 17	6 16 24	4 ¹¹ 5'55	14 ¹¹ 53	11 ¹¹ 26	28 ¹¹ 30	26 ¹¹ 14	5 ¹¹ 11	6 ¹¹ 44	22 ¹¹ 39	27 ¹¹ 24	4 ¹¹ 11	22 ¹¹ 19	20 ¹¹ 39	22 ¹¹ 8	28 ¹¹ 17	S 17
S 18	6 20 21	5 ¹¹ 7'04	26 ¹¹ 44	12 ¹¹ 29	29 ¹¹ 45	27 ¹¹ 1	5 ¹¹ 3	6 ¹¹ 50	22 ¹¹ 42	27 ¹¹ 27	4 ¹¹ 12	22 ¹¹ 11	20 ¹¹ 36	22 ¹¹ 14	28 ¹¹ 16	S 18
M19	6 24 17	6 ¹¹ 8'14	8 ¹¹ 36	13 ¹¹ 34	1 ¹¹ 3 1	27 ¹¹ 48	4 ¹¹ 55	6 ¹¹ 56	22 ¹¹ 45	27 ¹¹ 29	4 ¹¹ 14	22 ¹¹ 2	20 ¹¹ 32	22 ¹¹ 21	28 ¹¹ 15	M19
T 20	6 28 14	7 ¹¹ 9'24	20 ¹¹ 29	14 ¹¹ 41	2 ¹¹ 16	28 ¹¹ 35	4 ¹¹ 47	7 ¹¹ 3	22 ¹¹ 49	27 ¹¹ 31	4 ¹¹ 15	21 ¹¹ 53	20 ¹¹ 29	22 ¹¹ 28	28 ¹¹ 15	T 20
W21	6 32 10	8 ¹¹ 10'33	2 ¹¹ 27	15 ¹¹ 52	3 ¹¹ 32	29 ¹¹ 23	4 ¹¹ 39	7 ¹¹ 10	22 ¹¹ 52	27 ¹¹ 33	4 ¹¹ 16	21 ¹¹ 46	20 ¹¹ 26	22 ¹¹ 35	28 ¹¹ 14	W21
T 22	6 36 7	9 ¹¹ 11'43	14 ¹¹ 32	17 ¹¹ 4	4 ¹¹ 47	0 ¹¹ 310	4 ¹¹ 31	7 ¹¹ 16	22 ¹¹ 56	27 ¹¹ 36	4 ¹¹ 18	21 ¹¹ 41	20 ¹¹ 23	22 ¹¹ 41	28 ¹¹ 14	T 22
F 23	6 40 4	10 ¹¹ 12'53	26 ¹¹ 49	18 ¹¹ 18	6 ¹¹ 3	0 ¹¹ 57	4 ¹¹ 23	7 ¹¹ 23	22 ¹¹ 59	27 ¹¹ 38	4 ¹¹ 19	21 ¹¹ 38	20 ¹¹ 20	22 ¹¹ 48	28 ¹¹ 13	F 23
S 24	6 44 0	11 ¹¹ 14'03	9 ¹¹ 22	19 ¹¹ 34	7 ¹¹ 18	1 ¹¹ 44	4 ¹¹ 15	7 ¹¹ 30	23 ¹¹ 3	27 ¹¹ 40	4 ¹¹ 20	21 ¹¹ D36	20 ¹¹ 17	22 ¹¹ 55	28 ¹¹ 13	S 24
S 25	6 47 57	12 ¹¹ 15'13	22 ¹¹ 14	20 ¹¹ 51	8 ¹¹ 34	2 ¹¹ 32	4 ¹¹ 7	7 ¹¹ 36	23 ¹¹ 6	27 ¹¹ 42	4 ¹¹ 21	21 ¹¹ 37	20 ¹¹ 13	23 ¹¹ 1	28 ¹¹ 13	S 25
M26	6 51 53	13 ¹¹ 16'23	5 ¹¹ M31	22 ¹¹ 10	9 ¹¹ 49	3 ¹¹ 19	3 ¹¹ 59	7 ¹¹ 43	23 ¹¹ 10	27 ¹¹ 45	4 ¹¹ 23	21 ¹¹ 38	20 ¹¹ 10	23 ¹¹ 8	28 ¹¹ 12	M26
T 27	6 55 50	14 ¹¹ 17'33	19 ¹¹ 14	23 ¹¹ 30	11 ¹¹ 5	4 ¹¹ 6	3 ¹¹ 51	7 ¹¹ 50	23 ¹¹ 13	27 ¹¹ 47	4 ¹¹ 24	21 ¹¹ R39	20 ¹¹ 7	23 ¹¹ 15	28 ¹¹ 12	T 27
W28	6 59 46	15 ¹¹ 18'43	3 ¹¹ Y27	24 ¹¹ 51	12 ¹¹ 20	4 ¹¹ 54	3 ¹¹ 43	7 ¹¹ 57	23 ¹¹ 17	27 ¹¹ 49	4 ¹¹ 25	21 ¹¹ 38	20 ¹¹ 4	23 ¹¹ 21	28 ¹¹ 12	W28
T 29	7 3 43	16 ¹¹ 19'52	18 ¹¹ 6	26 ¹¹ 13	13 ¹¹ 36	5 ¹¹ 41	3 ¹¹ 35	8 ¹¹ 3	23 ¹¹ 20	27 ¹¹ 51	4 ¹¹ 26	21 ¹¹ 35	20 ¹¹ 1	23 ¹¹ 28	28 ¹¹ 12	T 29
F 30	7 7 39	17 ¹¹ 21'02	3 ¹¹ Y 9	27 ¹¹ 36	14 ¹¹ 51	6 ¹¹ 29	3 ¹¹ 28	8 ¹¹ 10	23 ¹¹ 24	27 ¹¹ 53	4 ¹¹ 27	21 ¹¹ 30	19 ¹¹ 57	23 ¹¹ 35	28 ¹¹ D12	F 30
S 31	7 11 36	18 ¹¹ 22'11	18 ¹¹ 325	29 ¹¹ Y 0	16 ¹¹ 3 6	7 ¹¹ 316	3 ¹¹ 20	8 ¹¹ 17	23 ¹¹ 27	27 ¹¹ Y56	4 ¹¹ M28	21 ¹¹ M23	19 ¹¹ M54	23 ¹¹ 342	28 ¹¹ Y12	S 31