



Astrodienst Ephemeris Tables for the year 1513

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 1513

geocentric

JANUARY 1513 JC

00:00 UT

Day	Sid.t	☉	☾	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 19 8	20°31'741	11°11'59	15°34'41	8°47'47	24°11'11	28°18'9	12°11'43	14°17'7	12°22'29	24°17'10	3°18'6	3°13'38	8°27'24	16°17'16	S 1
S 2	7 23 4	21°18'47	23°49'49	17°19'10	10°2'2	24°54'28	28°18'18	12°47'14	14°8'12	12°31'24	24°12'3	3°1'35	3°35'8	8°31'16	16°22'2	S 2
M 3	7 27 1	22°19'53	5°17'38	18°57'11	11°17'25	25°38'28	28°28'12	12°51'14	14°9'12	12°33'24	24°14'2	2°54'3	3°32'8	8°38'16	16°28'3	M 3
T 4	7 30 57	23°20'59	17°30'20	20°36'12	12°32'26	26°21'28	28°37'12	12°54'14	14°10'12	12°35'24	24°16'2	2°44'3	3°29'8	8°44'16	16°34'4	T 4
W 5	7 34 54	24°22'04	29°28'22	22°16'13	13°47'27	27°4'28	28°47'12	12°58'14	14°11'12	12°37'24	24°18'2	2°31'3	3°25'8	8°51'16	16°40'5	W 5
T 6	7 38 51	25°23'09	11°33'33	23°56'15	2'27'47	27°47'28	28°57'13	13°2'14	14°13'12	12°40'24	24°20'2	2°18'3	3°22'8	8°58'16	16°46'6	T 6
F 7	7 42 47	26°24'13	23°48'25	25°37'16	16°17'28	28°30'29	29°7'13	13°5'14	14°14'12	12°42'24	24°22'2	2°5'3	3°19'9	9°4'16	16°52'7	F 7
S 8	7 46 44	27°25'16	6°12'27	17°32'17	17°32'29	29°13'29	29°18'13	13°9'14	14°15'12	12°44'24	24°24'1	1°53'3	3°16'9	9°11'16	16°58'8	S 8
S 9	7 50 40	28°26'18	18°46'29	0'18'47	18°47'29	29°56'29	29°28'13	13°12'14	14°17'12	12°46'24	24°26'1	1°44'3	3°13'9	9°18'17	17°4'9	S 9
M10	7 54 37	29°27'19	1°31'0	0°43'20	20°2'0	0°39'29	29°38'13	13°16'14	14°18'12	12°48'24	24°28'1	1°37'3	3°10'9	9°25'17	17°10'10	M10
T 11	7 58 33	0°28'20	14°26'2	21°17'1	21°17'1	1°22'29	29°49'13	13°19'14	14°19'12	12°51'24	24°30'1	1°33'3	3°6'9	9°31'17	17°16'11	T 11
W12	8 2 30	1°29'18	27°33'4	10°10'22	2°5'29	29°59'13	22°13°22	14°21'12	12°53'24	24°32'1	1°D31	3°3'9	3°38'17	17°21'12	W12	
T 13	8 6 26	2°30'16	10°15'53	5°55'23	2°48'0	0°10'13	25°13°25	14°22'12	12°55'24	24°34'1	1°32'3	3°0'9	3°45'17	17°27'13	T 13	
F 14	8 10 23	3°31'13	24°28'7	25°1'3	3°30'0	21°13°28	14°24'12	12°57'24	24°35'1	1°32'3	2°57'9	3°51'17	3°33'14	17°33'15	F 14	
S 15	8 14 20	4°32'08	8°18'9	25°16'26	4°13'0	32°13°31	14°25'13	13°0'24	14°25'13	13°0'24	24°37'1	1°R33	2°54'9	9°58'17	17°38'15	S 15
S 16	8 18 16	5°33'02	22°26'11	11°11'27	30°4'5	43°13°34	14°27'13	2'24'4	24°39'1	1°31'2	2°51'10	5°17°44	10°5'17	17°44'16	S 16	
M17	8 22 13	6°33'54	6°11'49	12°58'28	4°53'9	55°13°36	14°29'13	4'24'4	24°41'1	1°28'2	2°47'10	11°17°49	10°11'17	17°49'16	M17	
T 18	8 26 9	7°34'45	21°25'14	14°45'29	6°22'1	6°13°39	14°31'13	7'24'4	24°43'1	1°22'2	2°44'10	18°17°54	10°18'17	17°54'18	T 18	
W19	8 30 6	8°35'35	6°8'8	16°32'1	11°14'7	5°1'13	13°41'14	32°13°9	24°44'1	1°14'2	2°41'10	25°18°0	10°25'18	18°0'19	W19	
T 20	8 34 2	9°36'23	20°52'18	19°2'2	7°47'1	29°13°44	14°34'13	11'24'4	24°46'1	6°2'3	2°38'10	32°18°5	10°32'18	18°5'20	T 20	
F 21	8 37 59	10°37'10	5°12'29	20°7'3	3°44'8	30°14°46	14°36'13	13'24'4	24°48'0	57'2'4	2°35'10	38°18°10	10°38'18	18°10'21	F 21	
S 22	8 41 55	11°37'56	19°50'21	54°4'5	9°13'1	52°13°48	14°38'13	16'24'4	24°49'0	50'2'4	2°31'10	45°18°15	10°45'18	18°15'22	S 22	
S 23	8 45 52	12°38'40	3°11'51	23°41'6	13°9°55	2°4'13	50°14°40	18'13'2	24°51'0	45°2'4	2°28'10	52°18°20	10°52'18	18°20'23	S 23	
M24	8 49 49	13°39'23	17°28'25	28°7'27	10°38'2	16°13°52	14°42'13	20'24'4	24°53'0	42°2'4	2°25'10	58°18°25	10°58'18	18°25'24	M24	
T 25	8 53 45	14°40'05	0°13'29	27°14'8	11°21'2	28°13°54	14°44'13	22'24'4	24°54'0	0°D41	2°22'11	5°18°30	11°5'18	18°30'25	T 25	
W26	8 57 42	15°40'45	13°26'28	59°9°56	12°3'2	40°13°56	14°46'13	25'24'4	24°56'0	0°42'2	2°19'11	12°18°35	11°12'18	18°35'26	W26	
T 27	9 1 38	16°41'25	25°53'0	11°10'12	46°2°52	58°13°58	14°48'13	27'24'4	24°57'0	0°43'2	2°16'11	19°18°39	11°19'18	18°39'27	T 27	
F 28	9 5 35	17°42'03	8°11'4	2°24'12	25°13°28	3°4'13	59°14°50	29'13'2	24°59'0	0°45'2	2°12'11	25°18°44	11°25'18	18°44'28	F 28	
S 29	9 9 31	18°42'41	20°2'4	3°13°39	14°11'3	16°14°1	53°13°32	25°0'0	0°R45	2°9'11	1°32'18	49°18°49	11°32'18	18°49'29	S 29	
S 30	9 13 28	19°43'17	1°17'55	5°40'14	53°14°53	329°14°2	55°13°34	25°2'0	0°44'2	6°11°39	18°53'30	53°18°53	11°39'18	18°53'30	S 30	
M31	9 17 24	20°43'51	13°17'46	7°13'16	11°7'15	36°14°53	41°13°36	25°3'2	0°41'2	3°11°45	18°58'31	58°18°58	11°45'18	18°58'31	M31	

Delta T = 262.95 sec

Julian Calendar 1 Jan. 1513 == Greg. Calendar 11 Jan. 1513

FEBRUARY 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	9 21 21	21°44'25	25°17'40	8°11'43	17°11'22	16°18'18	3°17'54	14°11'5	15°17'0	13°38'25	25°15'5	0°R37	2°11'0	11°17'52	19°17'2	T 1
W 2	9 25 18	22°44'57	7°34'10	10°8'18	18°36'17	0'6	4°6'14	6°15°2	13°41'25	6°1	0°31'1	56°11°59	1°56'19	19°6'6	W 2	
T 3	9 29 14	23°45'28	19°53'10	11°28'19	50°17°43	4°19	14°7'15	4°15°4	13°43'25	7°0	24°1°53	12°6'19	1°53'12	19°10'10	T 3	
F 4	9 33 11	24°45'57	2°17'12	12°42'21	4'18	25°4°32	14°8'15	7°13°45	25°9'0	17°1°50	12°12'19	15°19°15	1°50'12	19°15'14	F 4	
S 5	9 37 7	25°46'25	14°55'13	50°13°50	22°18'19	7°19	4°44'14	8°15°9	13°47'25	10°0	11°1°47	12°19'19	1°47'12	19°19'19	S 5	
S 6	9 41 4	26°46'51	27°47'14	14°51'23	32°19°50	4°57	14°9'15	12°13°50	25°11'0	6°0	1°44'12	26°19°23	1°44'12	19°23'6	S 6	
M 7	9 45 0	27°47'15	10°11'52	15°44'24	46°20°32	5°10	14°10'15	14°13°52	25°12'0	3°1	1°41'12	32°19°27	1°41'12	19°27'7	M 7	
T 8	9 48 57	28°47'38	24°11'16	29°26°0	21°14'5	23°14°10	15°17'13	54°25°14	0°D 2	1°37'12	39°19°30	2°8'19	1°37'12	19°30'8	T 8	
W 9	9 52 53	29°47'59	7°14'17	5°27°14	21°56'5	36°14°10	15°20'13	56°25°15	0°2'1	1°34'12	46°19°34	3°9'19	1°34'12	19°34'9	W 9	
T 10	9 56 50	0°11'48	18°12'21	17°32'28	28°28'22	38°5°50	14°11'15	22°13°59	25°16'0	3°1	1°31'12	53°19°38	1°31'12	19°38'10	T 10	
F 11	10 0 46	1°48'35	5°12'17	17°49'29	41°23°20	6°3	14°11'15	25°14°1	25°17'0	4°1	1°28'12	59°19°41	1°28'12	19°41'11	F 11	
S 12	10 4 43	2°48'49	19°11'17	17°R57	0°15'55	24°3	6°16'14	11°R11	15°28'14	3°2	1°25'13	6°19°45	1°25'13	19°45'12	S 12	
S 13	10 8 40	3°49'02	3°11'17	17°55'17	5°9	24°45'6	29°4°2	14°11'15	30°14°5	25°19'0	1°22'13	13°19°48	1°22'13	19°48'13	S 13	
M14	10 12 36	4°49'13	17°30'17	44°17°44	3°22	25°27'6	43°14°11	15°33'14	7°25°20	0°6	1°18'13	13°19°52	1°18'13	19°52'14	M14	
T 15	10 16 33	5°49'21	1°16'46	17°23'4	36°26°9	6°56'7	10°14°10	15°36'14	9°25°21	0°4	1°15'13	13°26'19	1°15'13	19°55'15	T 15	
W16	10 20 29	6°49'28	16°3'16	54°16°54	5°50	26°51'7	10°14°10	15°39'14	12°25°22	0°1	1°12'13	13°33'19	1°12'13	19°58'16	W16	
T 17	10 24 26	7°49'32	0°17'16	17°16'7	3°27°32	7°23	14°10'15	42°14°14	25°23'2	11°58	1°9'13	40°20°1	1°9'13	20°1'17	T 17	
F 18	10 28 22	8°49'34	14°24'15	34°8°16	28°14'7	37°14°9	15°45'14	16°25°24	29°55'1	6°13	1°6'13	46°20°4	1°6'13	20°4'18	F 18	
S 19	10 32 19	9°49'34	28°19'14	45°9°30	28°56'7	50°14°8	15°47'14	18°25°25	29°53'1	2°13	1°2'13	53°20°7	1°2'13	20°7'19	S 19	
S 20	10 36 15	10°49'33	12°11'0	13°51'10	43°29°38	8°4	14°8'15	50°14°20	25°26'2	51°0	0°59'14	5°20°10	0°59'14	20°10'20	S 20	
M21	10 40 12	11°49'29	25°22'12	54°11°56	11°56'0	8°18	14°7'15	53°14°22	25°27'2	D50	0°56'14	7°20°13	0°56'14	20°13'21	M21	
T 22	10 44 9	12°49'23	8°12'25	11°55'13	9°1'1	8°31	14°6'15	56°14°24	25°28'2	50°0	0°53'14	13°20°15	0°53'14	20°15'22	T 22	
W23	10 48 5	13°49'15	21°9'10	55°10°55	14°23'1	43°8°45	14°5'15	59°14°26	25°29'2	51°0	0°50'14	14°20'18	0°50'14	20°18'18	W23	
T 24	10 52 2	14°49'06	3°11'36	9°57'15	36°2°25	8°59	14°4'16	2°14°28	25°29'2	52°0	0°47'14	14°27'20	0°47'14	20°20'24	T 24	
F 25	10 55 58	15°48'55	15°49'9	1°16°49	3°6	9°13	14°2'16	5°14°30	25°30'2	54°0	0°43'14	14°33'20	0°43'14	20°23'25	F 25	
S 26	10 59 55	16°48'42	27°50'8	7°18°2	3°48	9°27	14°1'16	9°14°32	25°31'2	55°0	0°40'14	14°40'20	0°40'14	20°25'26	S 26	
S 27	11 3 51	17°48'28	9°14'5	7°18'19	19°14	4°30	9°41	13°59'16	16°12'14	34°25	29°55	0°37'14	14°47'20	20°27'27	S 27	
M28	11 7 48	18°48'12	21°17'37	6°13'4	20°17'27	5°11	9°15'13	15°16°15	14°36'2	57°32	29°R56	0°34'14	14°54'20	20°29'28	M28	

Delta T = 262.76 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1513

geocentric

MARCH 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	11 11 44	19°47'54	3°33	5°R55	21°Y40	5°853	10°Y 9	13°R56	16°Y18	14°38	25°33	29°R55	0°31	15°7	20°31	T 1
W 2	11 15 41	20°47'34	15°35	5°H21	22°53	6°34	10°23	13°M55	16°21	14°40	25°33	29°M54	0°28	15°7	20°33	W 2
T 3	11 19 38	21°47'12	27°49	4°54	24° 5	7°15	10°37	13°53	16°24	14°42	25°34	29°53	0°24	15°14	20°35	T 3
F 4	11 23 34	22°46'49	10°18	4°33	25°18	7°57	10°51	13°51	16°27	14°44	25°34	29°52	0°21	15°20	20°37	F 4
S 5	11 27 31	23°46'24	23° 4	4°18	26°30	8°38	11° 5	13°49	16°31	14°46	25°35	29°51	0°18	15°27	20°38	S 5
S 6	11 31 27	24°45'57	6°H 9	4° 9	27°43	9°20	11°20	13°47	16°34	14°48	25°35	29°51	0°15	15°34	20°40	S 6
M 7	11 35 24	25°45'28	19°34	4°D 6	28°55	10° 1	11°34	13°44	16°37	14°50	25°35	29°51	0°12	15°41	20°41	M 7
T 8	11 39 20	26°44'56	3°Y16	4° 9	0°8 8	10°42	11°48	13°42	16°40	14°51	25°36	29°D50	0° 8	15°47	20°42	T 8
W 9	11 43 17	27°44'23	17°13	4°18	1°20	11°23	12° 2	13°40	16°44	14°53	25°36	29°51	0° 5	15°54	20°44	W 9
T 10	11 47 13	28°43'48	1°22	4°32	2°32	12° 5	12°17	13°37	16°47	14°55	25°36	29°51	0° 2	16° 1	20°45	T 10
F 11	11 51 10	29°43'10	15°38	4°51	3°44	12°46	12°31	13°35	16°50	14°57	25°37	29°R51	29°M59	16° 7	20°46	F 11
S 12	11 55 6	0°Y42'30	29°58	5°15	4°56	13°27	12°45	13°32	16°54	14°58	25°37	29°51	29°56	16°14	20°47	S 12
S 13	11 59 3	1°41'48	14°II18	5°44	6° 8	14° 8	13° 0	13°29	16°57	15° 0	25°37	29°51	29°53	16°21	20°48	S 13
M14	12 3 0	2°41'04	28°33	6°17	7°20	14°49	13°14	13°27	17° 0	15° 2	25°37	29°D51	29°49	16°28	20°48	M14
T 15	12 6 56	3°40'17	12°342	6°54	8°32	15°30	13°28	13°24	17° 4	15° 4	25°37	29°51	29°46	16°34	20°49	T 15
W16	12 10 53	4°39'28	26°43	7°35	9°43	16°11	13°43	13°21	17° 7	15° 5	25°38	29°51	29°43	16°41	20°50	W16
T 17	12 14 49	5°38'36	10°Ω33	8°20	10°55	16°52	13°57	13°18	17°11	15° 7	25°38	29°51	29°40	16°48	20°50	T 17
F 18	12 18 46	6°37'42	24°13	9° 8	12° 6	17°33	14°11	13°15	17°14	15° 8	25°38	29°52	29°37	16°54	20°51	F 18
S 19	12 22 42	7°36'46	7°M40	9°59	13°18	18°14	14°26	13°12	17°17	15°10	25°R38	29°53	29°33	17° 1	20°51	S 19
S 20	12 26 39	8°35'47	20°54	10°54	14°29	18°55	14°40	13° 8	17°21	15°11	25°38	29°53	29°30	17° 8	20°51	S 20
M21	12 30 35	9°34'46	3°354	11°51	15°40	19°36	14°55	13° 5	17°24	15°13	25°38	29°R53	29°27	17°15	20°R51	M21
T 22	12 34 32	10°33'44	16°41	12°52	16°51	20°16	15° 9	13° 2	17°28	15°15	25°37	29°53	29°24	17°21	20°51	T 22
W23	12 38 29	11°32'39	29°14	13°55	18° 2	20°57	15°24	12°58	17°31	15°16	25°37	29°52	29°21	17°28	20°51	W23
T 24	12 42 25	12°31'32	11°M35	15° 0	19°13	21°38	15°38	12°55	17°34	15°17	25°37	29°50	29°18	17°35	20°51	T 24
F 25	12 46 22	13°30'24	23°44	16° 9	20°24	22°18	15°53	12°51	17°38	15°19	25°37	29°48	29°14	17°41	20°50	F 25
S 26	12 50 18	14°29'13	5°M45	17°19	21°35	22°59	16° 7	12°47	17°41	15°20	25°37	29°46	29°11	17°48	20°50	S 26
S 27	12 54 15	15°28'01	17°39	18°32	22°46	23°40	16°22	12°44	17°45	15°22	25°37	29°44	29° 8	17°55	20°50	S 27
M28	12 58 11	16°26'47	29°32	19°47	23°56	24°20	16°36	12°40	17°48	15°23	25°36	29°42	29° 5	18° 2	20°49	M28
T 29	13 2 8	17°25'32	11°327	21° 4	25° 7	25° 1	16°50	12°36	17°52	15°24	25°36	29°42	29° 2	18° 8	20°48	T 29
W30	13 6 4	18°24'14	23°28	22°23	26°17	25°41	17° 5	12°32	17°55	15°26	25°36	29°D42	28°59	18°15	20°48	W30
T 31	13 10 1	19°Y22'55	5°341	23°H44	27°827	26°822	17°Y19	12°M28	17°Y59	15°327	25°35	29°M42	28°M55	18°22	20°47	T 31

Delta T = 262.59 sec

Julian Calendar 1 March 1513 == Greg. Calendar 11 March 1513

APRIL 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	13 13 58	20°Y21'34	18°39	25°H 7	28°838	27°8 2	17°Y34	12°R24	18°Y 2	15°38	25°R35	29°M44	28°M52	18°29	20°R46	F 1
S 2	13 17 54	21°20'12	0°H57	26°32	29°48	27°43	17°48	12°M20	18° 5	15°29	25°35	29°45	28°49	18°35	20°45	S 2
S 3	13 21 51	22°18'47	14° 7	27°59	0°II58	28°23	18° 3	12°16	18° 9	15°30	25°34	29°46	28°46	18°42	20°44	S 3
M 4	13 25 47	23°17'21	27°42	29°27	2° 7	29° 3	18°17	12°12	18°12	15°31	25°34	29°R47	28°43	18°49	20°43	M 4
T 5	13 29 44	24°15'53	11°Y40	0°Y58	3°17	29°44	18°32	12° 8	18°16	15°33	25°33	29°47	28°39	18°55	20°41	T 5
W 6	13 33 40	25°14'23	26° 0	2°30	4°27	0°II24	18°46	12° 4	18°19	15°34	25°33	29°45	28°36	19° 2	20°40	W 6
T 7	13 37 37	26°12'52	10°835	4° 4	5°36	1° 4	19° 0	12° 0	18°23	15°35	25°32	29°42	28°33	19° 9	20°38	T 7
F 8	13 41 33	27°11'18	25°20	5°40	6°46	1°45	19°15	11°55	18°26	15°36	25°31	29°39	28°30	19°16	20°37	F 8
S 9	13 45 30	28° 9'43	10°II 6	7°17	7°55	2°25	19°29	11°51	18°29	15°37	25°31	29°35	28°27	19°22	20°35	S 9
S 10	13 49 26	29° 8'05	24°47	8°57	9° 4	3° 5	19°43	11°47	18°33	15°38	25°30	29°31	28°24	19°29	20°33	S 10
M11	13 53 23	0°8 6'25	9°317	10°38	10°13	3°45	19°58	11°42	18°36	15°39	25°29	29°28	28°20	19°36	20°32	M11
T 12	13 57 20	1° 4'44	23°31	12°21	11°22	4°25	20°12	11°38	18°40	15°40	25°29	29°27	28°17	19°42	20°30	T 12
W13	14 1 16	2° 3'00	7°Ω28	14° 5	12°31	5° 5	20°26	11°34	18°43	15°40	25°28	29°D27	28°14	19°49	20°28	W13
T 14	14 5 13	3° 1'14	21° 6	15°52	13°39	5°45	20°41	11°29	18°46	15°41	25°27	29°R28	28°11	19°56	20°26	T 14
F 15	14 9 9	3°59'25	4°M27	17°40	14°48	6°25	20°55	11°25	18°50	15°42	25°26	29°29	28° 8	20° 3	20°24	F 15
S 16	14 13 6	4°57'35	17°33	19°30	15°56	7° 5	21° 9	11°20	18°53	15°43	25°26	29°31	28° 4	20° 9	20°21	S 16
S 17	14 17 2	5°55'43	0°325	21°21	17° 4	7°45	21°23	11°16	18°56	15°44	25°25	29°R31	28° 1	20°16	20°19	S 17
M18	14 20 59	6°53'49	13° 4	23°15	18°12	8°25	21°38	11°11	19° 0	15°44	25°24	29°30	27°58	20°23	20°17	M18
T 19	14 24 55	7°51'53	25°33	25°10	19°20	9° 5	21°52	11° 7	19° 3	15°45	25°23	29°28	27°55	20°30	20°14	T 19
W20	14 28 52	8°49'55	7°M52	27° 7	20°28	9°45	22° 6	11° 2	19° 6	15°46	25°22	29°23	27°52	20°36	20°12	W20
T 21	14 32 49	9°47'56	20° 2	29° 6	21°35	10°25	22°20	10°58	19°10	15°46	25°21	29°17	27°49	20°43	20° 9	T 21
F 22	14 36 45	10°45'55	2°M 5	1°8 7	22°43	11° 5	22°34	10°53	19°13	15°47	25°20	29° 9	27°45	20°50	20° 6	F 22
S 23	14 40 42	11°43'53	14° 2	3° 9	23°50	11°44	22°48	10°49	19°16	15°47	25°19	29° 1	27°42	20°56	20° 4	S 23
S 24	14 44 38	12°41'49	25°56	5°12	24°57	12°24	23° 2	10°44	19°19	15°48	25°18	28°54	27°39	21° 3	20° 1	S 24
M25	14 48 35	13°39'44	7°348	7°18	26° 4	13° 4	23°16	10°40	19°23	15°48	25°17	28°47	27°36	21°10	19°58	M25
T 26	14 52 31	14°37'37	19°42	9°24	27°11	13°43	23°30	10°35	19°26	15°49	25°16	28°42	27°33	21°17	19°55	T 26
W27	14 56 28	15°35'30	1°342	11°32	28°17	14°23	23°44	10°31	19°29	15°49	25°15	28°39	27°30	21°23	19°52	W27
T 28	15 0 24	16°33'21	13°52	13°41	29°23	15° 3	23°58	10°26	19°32	15°50	25°14	28°D38	27°26	21°30	19°49	T 28
F 29	15 4 21	17°31'10	26°17	15°51	0°30	15°42	24°12	10°22	19°35	15°50	25°13	28°38	27°23	21°37	19°46	F 29
S 30	15 8 18	18°28'59	9°H 1	18°8 2	1°35	16°II22	24°Y26	10°M17	19°Y38	15°350	25°12	28°M40	27°M20	21°43	19°43	S 30

Delta T = 262.40 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1513

geocentric

MAY 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 12 14	19°8'26"46	22°8'9"	20°8'13"	2°54'1"	17°11'1"	24°17'39"	10°R13	19°17'41"	15°55'50"	25°R10	28°R41	27°17'17"	21°57'50"	19°R39	S 1
M 2	15 16 11	20°24'32"	5°17'44"	22°24'4"	3°47'7"	17°41'24"	24°53'10"	10°11'9"	19°45'15"	15°51'25"	25°R9	28°17'40"	27°14'27"	21°57'19"	19°33'36"	M 2
T 3	15 20 7	21°22'17"	19°47'17"	24°36'45"	4°52'18"	18°21'25"	25°7'10"	10°4'19"	19°48'15"	15°51'25"	25°8'28"	28°39'27"	27°10'22"	22°4'19"	19°33'36"	T 3
W 4	15 24 4	22°20'01"	4°8'17"	26°47'55"	5°57'19"	19°0'25"	25°20'10"	10°0'19"	19°51'15"	15°51'25"	25°7'28"	28°35'27"	27°7'22"	22°10'19"	19°29'W 4	
T 5	15 28 0	23°17'43"	19°8'28"	28°57'7"	7°2'19"	19°39'25"	25°34'9"	9°56'19"	19°54'15"	15°51'25"	25°5'28"	28°28'27"	27°4'22"	22°17'19"	19°26'T 5	
F 6	15 31 57	24°15'24"	4°11'13"	1°11'6"	8°7'20"	20°19'25"	25°47'9"	9°51'19"	19°57'15"	15°51'25"	25°4'28"	28°21'27"	27°1'22"	22°24'19"	19°22'F 6	
S 7	15 35 53	25°13'04"	19°22'31"	3°15'9"	9°11'20"	20°58'26"	26°1'9"	9°47'20"	20°0'15"	15°52'25"	25°3'28"	28°12'26"	26°58'22"	22°31'19"	19°19'S 7	
S 8	15 39 50	26°10'43"	4°52'26"	5°22'10"	10°16'21"	21°38'26"	26°14'9"	9°43'20"	20°3'15"	15°52'25"	25°2'28"	28°4'26"	26°55'22"	22°37'19"	19°15'S 8	
M 9	15 43 47	27°8'20"	19°14'7"	11°20'22"	11°20'22"	22°17'26"	26°28'9"	9°39'20"	20°5'15"	15°R52	25°0'27"	27°58'26"	26°51'22"	22°44'19"	19°12'M 9	
T 10	15 47 43	28°5'56"	3°14'40"	9°30'12"	12°24'22"	22°56'26"	26°41'9"	9°34'20"	20°8'15"	15°52'24"	24°59'27"	27°53'26"	26°48'22"	22°51'19"	19°8'T 10	
W 11	15 51 40	29°3'30"	17°43'11"	13°32'13"	13°27'23"	23°36'26"	26°54'9"	9°30'20"	20°11'15"	15°52'24"	24°58'27"	27°51'26"	26°45'22"	22°57'19"	19°4'W 11	
T 12	15 55 36	0°11'03"	1°11'20"	13°31'14"	14°30'24"	24°15'27"	27°8'9"	9°26'20"	20°14'15"	15°51'24"	24°56'27"	27°D50	26°42'23"	23°4'19"	19°0'T 12	
F 13	15 59 33	0°58'34"	14°35'15"	15°28'15"	15°33'24"	24°54'27"	27°21'9"	9°22'20"	20°17'15"	15°51'24"	24°55'27"	27°51'26"	26°39'23"	23°11'18"	18°57'F 13	
S 14	16 3 29	1°56'04"	27°29'17"	17°23'16"	16°36'25"	25°33'27"	27°34'9"	9°18'20"	20°20'15"	15°51'24"	24°54'27"	27°R51	26°36'23"	23°18'18"	18°53'S 14	
S 15	16 7 26	2°53'32"	10°14'7"	19°15'17"	17°38'26"	26°13'27"	27°47'9"	9°14'20"	20°22'15"	15°51'24"	24°52'27"	27°50'26"	26°32'23"	23°24'18"	18°49'S 15	
M 16	16 11 22	3°50'59"	22°32'21"	21°4'18"	18°40'26"	26°52'28"	28°0'9"	9°10'20"	20°25'15"	15°51'24"	24°51'27"	27°48'26"	26°29'23"	23°31'18"	18°45'M 16	
T 17	16 15 19	4°48'25"	4°14'46"	22°51'19"	19°42'27"	27°31'28"	28°13'9"	9°6'20"	20°28'15"	15°51'24"	24°49'27"	27°42'26"	26°26'23"	23°38'18"	18°41'T 17	
W 18	16 19 16	5°45'50"	16°53'24"	24°35'20"	20°44'28"	10°28'28"	9°3'20"	20°30'15"	15°50'24"	15°50'24"	24°48'27"	27°34'26"	26°23'23"	23°45'18"	18°37'W 18	
T 19	16 23 12	6°43'14"	28°54'26"	16°16'21"	21°45'28"	28°49'28"	28°39'8"	9°59'20"	20°33'15"	15°50'24"	24°46'27"	27°24'26"	26°20'23"	23°51'18"	18°33'T 19	
F 20	16 27 9	7°40'37"	10°51'27"	27°55'22"	22°46'29"	29°28'28"	28°51'8"	8°55'20"	20°36'15"	15°50'24"	24°45'27"	27°12'26"	26°16'23"	23°58'18"	18°29'F 20	
S 21	16 31 5	8°37'59"	22°45'29"	29°31'23"	23°46'05"	0°57'29"	29°4'8"	8°52'20"	20°38'15"	15°49'24"	24°44'26"	26°59'26"	26°13'24"	24°5'18"	18°25'S 21	
S 22	16 35 2	9°35'21"	4°37'15"	4°4'24"	24°46'04"	0°46'29"	29°17'8"	8°48'20"	20°41'15"	15°49'24"	24°42'26"	26°47'26"	26°10'24"	24°11'18"	18°21'S 22	
M 23	16 38 58	10°32'41"	16°30'23"	25°46'12"	1°25'29"	29°29'12"	8°45'20"	8°45'20"	20°43'15"	15°49'24"	24°41'26"	26°36'26"	26°7'24"	24°18'18"	18°17'M 23	
T 24	16 42 55	11°30'01"	28°25'41"	4°1'26"	26°45'24"	2°4'29"	29°42'29"	8°41'20"	20°46'15"	15°48'24"	24°39'26"	26°27'26"	26°4'24"	24°25'18"	18°13'T 24	
W 25	16 46 51	12°27'20"	10°56'26"	5°26'27"	27°44'24"	2°43'29"	29°54'29"	8°38'20"	20°48'15"	15°48'24"	24°38'26"	26°20'26"	26°1'24"	24°32'18"	18°9'W 25	
T 26	16 50 48	13°24'39"	22°36'6"	6°47'28"	28°43'32"	3°22'08"	0°8'6"	8°34'20"	20°51'15"	15°47'24"	24°36'26"	26°16'25"	25°57'24"	24°38'18"	18°5'T 26	
F 27	16 54 45	14°21'57"	4°59'8"	8°6'29"	29°41'41"	4°1'01"	0°19'01"	8°31'20"	20°53'15"	15°47'24"	24°35'26"	26°15'25"	25°54'24"	24°45'18"	18°1'F 27	
S 28	16 58 41	15°19'15"	17°40'9"	9°22'08"	0°12'39"	4°40'03"	0°31'8"	8°28'20"	20°55'15"	15°46'24"	24°33'26"	26°D14	25°51'24"	24°52'17"	17°56'S 28	
S 29	17 2 38	16°16'33"	0°14'10"	10°34'13"	1°36'51"	5°19'04"	0°43'8"	8°25'20"	20°58'15"	15°45'24"	24°32'26"	26°R14	25°48'24"	24°58'17"	17°52'S 29	
M 30	17 6 34	17°13'50"	14°13'11"	11°44'23"	2°33'55"	5°58'05"	0°55'8"	8°22'21"	21°0'15"	15°45'24"	24°30'26"	26°14'25"	25°45'25"	25°5'17"	17°48'M 30	
T 31	17 10 31	18°11'06"	28°11'28"	12°50'12"	36'29"	6°37'18"	1°8'7"	8°19'21"	21°15"	15°44'24"	24°28'26"	26°11'25"	25°42'25"	25°12'17"	17°44'T 31	

Delta T = 262.21 sec

Julian Calendar 1 May 1513 == Greg. Calendar 11 May 1513

JUNE 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	17 14 27	19Ⅱ 8'23	12Ⅲ38	13Ⅴ53	4Ⅱ25	7Ⅴ16	1Ⅲ19	8°R16	21Ⅱ 4	15°R43	24°R27	26°R 5	25Ⅲ38	25Ⅴ19	17°R40	W 1
T 2	17 18 24	20° 5'39	27°30	14°53	5°21	7°54	1°31	8Ⅲ13	21° 6	15Ⅴ43	24Ⅴ25	25Ⅲ58	25°35	25°25	17Ⅴ36	T 2
F 3	17 22 20	21° 2'55	12Ⅱ41	15°49	6°16	8°33	1°42	8°11	21° 9	15°42	24°24	25°48	25°32	25°32	17°32	F 3
S 4	17 26 17	22° 0'11	28° 0	16°42	7°10	9°12	1°54	8° 8	21°11	15°41	24°22	25°37	25°29	25°39	17°28	S 4
S 5	17 30 14	22°57'26	13Ⅴ16	17°32	8° 4	9°51	2° 6	8° 5	21°13	15°40	24°21	25°27	25°26	25°46	17°24	S 5
M 6	17 34 10	23°54'40	28°17	18°17	8°57	10°30	2°17	8° 3	21°15	15°40	24°19	25°18	25°22	25°52	17°19	M 6
T 7	17 38 7	24°51'54	12Ⅱ57	18°59	9°50	11° 8	2°29	8° 1	21°17	15°39	24°18	25°11	25°19	25°59	17°15	T 7
W 8	17 42 3	25°49'07	27° 9	19°37	10°42	11°47	2°40	7°58	21°18	15°38	24°16	25° 7	25°16	26° 6	17°11	W 8
T 9	17 46 0	26°46'20	10Ⅲ52	20°11	11°34	12°26	2°51	7°56	21°20	15°37	24°15	25° 6	25°13	26°12	17° 7	T 9
F 10	17 49 56	27°43'32	24° 9	20°40	12°24	13° 4	3° 2	7°54	21°22	15°36	24°13	25° 5	25°10	26°19	17° 3	F 10
S 11	17 53 53	28°40'44	7Ⅴ 1	21° 6	13°14	13°43	3°13	7°52	21°24	15°35	24°11	25° 5	25° 7	26°26	16°59	S 11
S 12	17 57 49	29°37'55	19°34	21°27	14° 4	14°22	3°24	7°50	21°26	15°34	24°10	25° 4	25° 3	26°33	16°55	S 12
M13	18 1 46	0Ⅲ35'05	1Ⅲ52	21°44	14°53	15° 0	3°35	7°48	21°27	15°33	24° 8	25° 1	25° 0	26°39	16°51	M13
T 14	18 5 43	1°32'16	13°59	21°56	15°40	15°39	3°45	7°46	21°29	15°32	24° 7	24°56	24°57	26°46	16°48	T 14
W15	18 9 39	2°29'26	25°59	22° 3	16°28	16°17	3°56	7°45	21°31	15°31	24° 5	24°47	24°54	26°53	16°44	W15
T 16	18 13 36	3°26'35	7Ⅴ54	22°R 6	17°14	16°56	4° 6	7°43	21°32	15°30	24° 4	24°36	24°51	27° 0	16°40	T 16
F 17	18 17 32	4°23'45	19°47	22° 4	17°59	17°35	4°17	7°42	21°34	15°29	24° 2	24°24	24°48	27° 6	16°36	F 17
S 18	18 21 29	5°20'55	1Ⅲ40	21°58	18°44	18°13	4°27	7°40	21°35	15°28	24° 1	24°10	24°44	27°13	16°32	S 18
S 19	18 25 25	6°18'04	13°33	21°46	19°27	18°52	4°37	7°39	21°37	15°26	23°59	23°57	24°41	27°20	16°29	S 19
M20	18 29 22	7°15'14	25°30	21°31	20°10	19°30	4°47	7°38	21°38	15°25	23°58	23°45	24°38	27°26	16°25	M20
T 21	18 33 18	8°12'24	7Ⅴ30	21°11	20°52	20° 9	4°57	7°37	21°39	15°24	23°56	23°36	24°35	27°33	16°21	T 21
W22	18 37 15	9° 9'34	19°37	20°47	21°32	20°47	5° 7	7°35	21°41	15°23	23°55	23°29	24°32	27°40	16°18	W22
T 23	18 41 12	10° 6'44	1Ⅴ52	20°20	22°12	21°26	5°17	7°35	21°42	15°22	23°53	23°25	24°28	27°47	16°14	T 23
F 24	18 45 8	11° 3'55	14°19	19°49	22°50	22° 4	5°27	7°34	21°43	15°20	23°52	23°23	24°25	27°53	16°11	F 24
S 25	18 49 5	12° 1'06	27° 1	19°15	23°28	22°43	5°36	7°33	21°44	15°19	23°50	23°D22	24°22	28° 0	16° 7	S 25
S 26	18 53 1	12°58'18	10Ⅱ 3	18°39	24° 4	23°21	5°45	7°32	21°45	15°18	23°49	23°R23	24°19	28° 7	16° 4	S 26
M27	18 56 58	13°55'30	23°27	18° 1	24°38	24° 0	5°55	7°32	21°47	15°16	23°47	23°22	24°16	28°13	16° 0	M27
T 28	19 0 54	14°52'43	7Ⅲ18	17°22	25°12	24°38	6° 4	7°31	21°48	15°15	23°46	23°21	24°13	28°20	15°57	T 28
W29	19 4 51	15°49'56	21°34	16°42	25°44	25°16	6°13	7°31	21°49	15°14	23°45	23°16	24° 9	28°27	15°54	W29
T 30	19 8 47	16°47'11	6Ⅱ16	16Ⅴ 3	26Ⅱ15	25Ⅴ55	6Ⅲ22	7Ⅲ31	21Ⅱ49	15Ⅴ12	23Ⅴ43	23Ⅲ10	24Ⅲ 6	28Ⅴ34	15Ⅴ51	T 30

Delta T = 262.02 sec

ASTRODIENST EPHEMERIS for the year 1513

geocentric

JULY 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	19 12 44	17°44'26	21°11'17	15°R24	26°45	26°33	6°30	7°R30	21°V50	15°R11	23°R42	23°R 2	24° 3	28°40	15°R47	F 1
S 2	19 16 41	18°41'41	6°29	14°47	27°13	27°12	6°39	7°D30	21°51	15° 9	23°40	22°53	24° 0	28°47	15°44	S 2
S 3	19 20 37	19°38'57	21°42	14°11	27°39	27°50	6°47	7°M30	21°52	15° 8	23°39	22°43	23°57	28°54	15°41	S 3
M 4	19 24 34	20°36'14	6°45	13°39	28° 4	28°28	6°56	7°30	21°53	15° 7	23°38	22°36	23°54	29° 1	15°38	M 4
T 5	19 28 30	21°33'31	21°29	13°10	28°27	29° 7	7° 4	7°31	21°53	15° 5	23°36	22°30	23°50	29° 7	15°35	T 5
W 6	19 32 27	22°30'48	5°47	12°45	28°49	29°45	7°12	7°31	21°54	15° 4	23°35	22°27	23°47	29°14	15°33	W 6
T 7	19 36 23	23°28'05	19°37	12°25	29° 8	0°23	7°20	7°31	21°55	15° 2	23°34	22°D26	23°44	29°21	15°30	T 7
F 8	19 40 20	24°25'23	2°59	12° 9	29°26	1° 2	7°28	7°32	21°55	15° 1	23°33	22°26	23°41	29°27	15°27	F 8
S 9	19 44 17	25°22'42	15°55	11°59	29°42	1°40	7°36	7°33	21°56	14°59	23°31	22°27	23°38	29°34	15°25	S 9
S 10	19 48 13	26°20'01	28°30	11°D54	29°56	2°18	7°43	7°33	21°56	14°58	23°30	22°R27	23°34	29°41	15°22	S 10
M 11	19 52 10	27°17'20	10°47	11°55	0° 8	2°57	7°50	7°34	21°57	14°56	23°29	22°26	23°31	29°48	15°20	M 11
T 12	19 56 6	28°14'40	22°53	12° 2	0°18	3°35	7°58	7°35	21°57	14°55	23°28	22°23	23°28	29°54	15°17	T 12
W 13	20 0 3	29°12'00	4°50	12°16	0°25	4°13	8° 5	7°36	21°57	14°53	23°26	22°18	23°25	0° 1	15°15	W 13
T 14	20 3 59	0° 9'21	16°43	12°35	0°31	4°51	8°12	7°37	21°57	14°52	23°25	22°11	23°22	0° 8	15°13	T 14
F 15	20 7 56	1° 6'43	28°35	13° 1	0°34	5°30	8°18	7°38	21°58	14°50	23°24	22° 2	23°19	0°15	15°10	F 15
S 16	20 11 52	2° 4'05	10°29	13°32	0°R35	6° 8	8°25	7°40	21°58	14°48	23°23	21°53	23°15	0°21	15° 8	S 16
S 17	20 15 49	3° 1'28	22°27	14°11	0°34	6°46	8°31	7°41	21°58	14°47	23°22	21°43	23°12	0°28	15° 6	S 17
M 18	20 19 46	3°58'52	4°30	14°55	0°30	7°25	8°38	7°42	21°58	14°45	23°21	21°35	23° 9	0°35	15° 4	M 18
T 19	20 23 42	4°56'17	16°39	15°46	0°24	8° 3	8°44	7°44	21°R58	14°44	23°20	21°29	23° 6	0°41	15° 3	T 19
W 20	20 27 39	5°53'43	28°57	16°42	0°15	8°41	8°50	7°46	21°58	14°42	23°19	21°24	23° 3	0°48	15° 1	W 20
T 21	20 31 35	6°51'11	11°25	17°45	0° 4	9°19	8°56	7°47	21°58	14°40	23°18	21°22	22°59	0°55	14°59	T 21
F 22	20 35 32	7°48'39	24° 3	18°53	29°51	9°57	9° 1	7°49	21°58	14°39	23°17	21°D21	22°56	1° 2	14°57	F 22
S 23	20 39 28	8°46'08	6°56	20° 7	29°36	10°36	9° 7	7°51	21°57	14°37	23°16	21°22	22°53	1° 8	14°56	S 23
S 24	20 43 25	9°43'39	20° 4	21°26	29°18	11°14	9°12	7°53	21°57	14°35	23°15	21°24	22°50	1°15	14°54	S 24
M 25	20 47 21	10°41'12	3°30	22°50	28°58	11°52	9°17	7°55	21°57	14°34	23°14	21°25	22°47	1°22	14°53	M 25
T 26	20 51 18	11°38'46	17°16	24°20	28°35	12°30	9°22	7°58	21°57	14°32	23°13	21°R25	22°44	1°28	14°52	T 26
W 27	20 55 14	12°36'21	1°23	25°54	28°11	13° 9	9°27	8° 0	21°56	14°31	23°12	21°23	22°40	1°35	14°51	W 27
T 28	20 59 11	13°33'58	15°49	27°32	27°44	13°47	9°32	8° 2	21°56	14°29	23°11	21°20	22°37	1°42	14°50	T 28
F 29	21 3 8	14°31'37	0°31	29°14	27°16	14°25	9°36	8° 5	21°55	14°27	23°10	21°16	22°34	1°49	14°48	F 29
S 30	21 7 4	15°29'17	15°23	1° 0	26°46	15° 3	9°41	8° 7	21°55	14°26	23°10	21°11	22°31	1°55	14°48	S 30
S 31	21 11 1	16°26'58	0°18	2°49	26°14	15°41	9°45	8°10	21°V54	14°24	23° 9	21° 6	22°28	2° 2	14°47	S 31

Delta T = 261.84 sec

Julian Calendar 1 July 1513 == Greg. Calendar 11 July 1513

AUGUST 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	21 14 57	17°24'41	15° 7	4°40	25°R41	16°20	9°49	8°13	21°R54	14°R22	23°R 8	21°R 2	22°25	2° 9	14°R46	M 1
T 2	21 18 54	18°22'25	29°42	6°34	25° 7	16°58	9°52	8°16	21°V53	14°21	23° 7	20°59	22°21	2°16	14°45	T 2
W 3	21 22 50	19°20'11	13°57	8°30	24°32	17°36	9°56	8°19	21°52	14°19	23° 7	20°57	22°18	2°22	14°45	W 3
T 4	21 26 47	20°17'57	27°47	10°27	23°56	18°14	9°59	8°22	21°51	14°18	23° 6	20°D57	22°15	2°29	14°44	T 4
F 5	21 30 43	21°15'45	11°12	12°26	23°19	18°52	10° 2	8°25	21°51	14°16	23° 5	20°58	22°12	2°36	14°44	F 5
S 6	21 34 40	22°13'35	24°12	14°25	22°42	19°31	10° 5	8°28	21°50	14°14	23° 5	21° 0	22° 9	2°42	14°44	S 6
S 7	21 38 37	23°11'25	6°15	16°25	22° 5	20° 9	10° 8	8°31	21°49	14°13	23° 4	21° 1	22° 5	2°49	14°43	S 7
M 8	21 42 33	24° 9'17	19°11	18°25	21°28	20°47	10°11	8°35	21°48	14°11	23° 4	21°R 2	22° 2	2°56	14°43	M 8
T 9	21 46 30	25° 7'10	1°17	20°25	20°51	21°25	10°13	8°38	21°47	14° 9	23° 3	21° 2	21°59	3° 3	14°D43	T 9
W 10	21 50 26	26° 5'04	13°15	22°25	20°15	22° 3	10°15	8°42	21°46	14° 8	23° 3	21° 1	21°56	3° 9	14°43	W 10
T 11	21 54 23	27° 2'59	25° 8	24°24	19°39	22°42	10°17	8°45	21°45	14° 6	23° 2	20°59	21°53	3°16	14°43	T 11
F 12	21 58 19	28° 0'56	7° 1	26°22	19° 5	23°20	10°19	8°49	21°44	14° 5	23° 2	20°56	21°50	3°23	14°44	F 12
S 13	22 2 16	28°58'55	18°58	28°20	18°32	23°58	10°21	8°53	21°42	14° 3	23° 1	20°52	21°46	3°29	14°44	S 13
S 14	22 6 12	29°56'55	1° 0	0°17	18° 0	24°36	10°22	8°57	21°41	14° 2	23° 1	20°49	21°43	3°36	14°44	S 14
M 15	22 10 9	0°54'56	13°11	2°13	17°30	25°14	10°24	9° 0	21°40	14° 0	23° 0	20°46	21°40	3°43	14°45	M 15
T 16	22 14 6	1°52'59	25°33	4° 7	17° 2	25°52	10°25	9° 5	21°39	13°58	23° 0	20°43	21°37	3°50	14°45	T 16
W 17	22 18 2	2°51'03	8° 6	6° 1	16°36	26°31	10°26	9° 9	21°37	13°57	23° 0	20°42	21°34	3°56	14°46	W 17
T 18	22 21 59	3°49'09	20°52	7°54	16°12	27° 9	10°26	9°13	21°36	13°55	23° 0	20°D41	21°31	4° 3	14°47	T 18
F 19	22 25 55	4°47'17	3°V50	9°45	15°50	27°47	10°27	9°17	21°35	13°54	22°59	20°42	21°27	4°10	14°48	F 19
S 20	22 29 52	5°45'27	17° 2	11°35	15°30	28°25	10°27	9°21	21°33	13°52	22°59	20°43	21°24	4°16	14°49	S 20
S 21	22 33 48	6°43'39	0°26	13°24	15°12	29° 3	10°R27	9°26	21°32	13°51	22°59	20°44	21°21	4°23	14°50	S 21
M 22	22 37 45	7°41'53	14° 4	15°12	14°57	29°42	10°27	9°30	21°30	13°49	22°59	20°45	21°18	4°30	14°51	M 22
T 23	22 41 41	8°40'09	27°56	16°59	14°44	0°20	10°27	9°35	21°29	13°48	22°59	20°46	21°15	4°37	14°52	T 23
W 24	22 45 38	9°38'27	11°59	18°45	14°34	0°58	10°26	9°39	21°27	13°47	22°59	20°R46	21°11	4°43	14°54	W 24
T 25	22 49 35	10°36'48	26°14	20°29	14°26	1°36	10°25	9°44	21°25	13°45	22°59	20°46	21° 8	4°50	14°55	T 25
F 26	22 53 31	11°35'10	10°37	22°12	14°21	2°14	10°24	9°49	21°24	13°44	22°D59	20°45	21° 5	4°57	14°56	F 26
S 27	22 57 28	12°33'35	25° 5	23°55	14°18	2°53	10°23	9°54	21°22	13°42	22°59	20°44	21° 2	5° 4	14°58	S 27
S 28	23 1 24	13°32'02	9°23	25°36	14°D17	3°31	10°22	9°58	21°20	13°41	22°59	20°43	20°59	5°10	15° 0	S 28
M 29	23 5 21	14°30'31	23°55	27°16	14°19	4° 9	10°20	10° 3	21°18	13°40	22°59	20°42	20°56	5°17	15° 2	M 29
T 30	23 9 17	15°29'02	8°10	28°55	14°23	4°47	10°19	10° 8	21°16	13°38	22°59	20°42	20°52	5°24	15° 3	T 30
W 31	23 13 14	16°27'34	22° 8	0°32	14°29	5°26	10°17	10°14	21°V15	13°37	22°59	20°D42	20°49	5°30	15° 5	W 31

Delta T = 261.65 sec

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1513
geocentric

SEPTEMBER 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	23 17 10	17 ^h 26'09	5 ^h 49	2 ^h 9	14 ^h 37	6 ^h 4	10 ^h 15	10 ^h 19	21 ^h 13	13 ^h 36	22 ^h 59	20 ^h 42	20 ^h 46	5 ^h 37	15 ^h 7	T 1
F 2	23 21 7	18 ^h 24'45	19 ^h 9	3 ^h 45	14 ^h 48	6 ^h 42	10 ^h 12	10 ^h 24	21 ^h 11	13 ^h 34	22 ^h 59	20 ^h 42	20 ^h 43	5 ^h 44	15 ^h 9	F 2
S 3	23 25 4	19 ^h 23'24	2 ^h 8	5 ^h 20	15 ^h 1	7 ^h 20	10 ^h 10	10 ^h 29	21 ^h 9	13 ^h 33	23 ^h 0	20 ^h 42	20 ^h 40	5 ^h 51	15 ^h 12	S 3
S 4	23 29 0	20 ^h 22'04	14 ^h 47	6 ^h 54	15 ^h 15	7 ^h 59	10 ^h 7	10 ^h 34	21 ^h 7	13 ^h 32	23 ^h 0	20 ^h R42	20 ^h 36	5 ^h 57	15 ^h 14	S 4
M 5	23 32 57	21 ^h 20'46	27 ^h 9	8 ^h 26	15 ^h 32	8 ^h 37	10 ^h 4	10 ^h 40	21 ^h 5	13 ^h 31	23 ^h 0	20 ^h 42	20 ^h 33	6 ^h 4	15 ^h 16	M 5
T 6	23 36 53	22 ^h 19'29	9 ^h 18	9 ^h 58	15 ^h 51	9 ^h 15	10 ^h 1	10 ^h 45	21 ^h 3	13 ^h 29	23 ^h 1	20 ^h 42	20 ^h 30	6 ^h 11	15 ^h 19	T 6
W 7	23 40 50	23 ^h 18'15	21 ^h 16	11 ^h 29	16 ^h 11	9 ^h 53	9 ^h 58	10 ^h 51	21 ^h 1	13 ^h 28	23 ^h 1	20 ^h D42	20 ^h 27	6 ^h 17	15 ^h 21	W 7
T 8	23 44 46	24 ^h 17'02	3 ^h 10	12 ^h 59	16 ^h 34	10 ^h 32	9 ^h 54	10 ^h 56	20 ^h 59	13 ^h 27	23 ^h 1	20 ^h 42	20 ^h 24	6 ^h 24	15 ^h 24	T 8
F 9	23 48 43	25 ^h 15'51	15 ^h 3	14 ^h 27	16 ^h 58	11 ^h 10	9 ^h 50	11 ^h 2	20 ^h 57	13 ^h 26	23 ^h 2	20 ^h 43	20 ^h 21	6 ^h 31	15 ^h 27	F 9
S 10	23 52 39	26 ^h 14'42	27 ^h 1	15 ^h 55	17 ^h 24	11 ^h 48	9 ^h 46	11 ^h 8	20 ^h 54	13 ^h 25	23 ^h 2	20 ^h 43	20 ^h 17	6 ^h 38	15 ^h 29	S 10
S 11	23 56 36	27 ^h 13'34	9 ^h 6	17 ^h 22	17 ^h 51	12 ^h 27	9 ^h 42	11 ^h 13	20 ^h 52	13 ^h 24	23 ^h 3	20 ^h 44	20 ^h 14	6 ^h 44	15 ^h 32	S 11
M 12	0 0 32	28 ^h 12'29	21 ^h 23	18 ^h 48	18 ^h 20	13 ^h 5	9 ^h 38	11 ^h 19	20 ^h 50	13 ^h 23	23 ^h 3	20 ^h 44	20 ^h 11	6 ^h 51	15 ^h 35	M 12
T 13	0 4 29	29 ^h 11'25	3 ^h 55	20 ^h 13	18 ^h 51	13 ^h 43	9 ^h 34	11 ^h 25	20 ^h 48	13 ^h 22	23 ^h 4	20 ^h 45	20 ^h 8	6 ^h 58	15 ^h 38	T 13
W 14	0 8 26	0 ^h 10'23	16 ^h 44	21 ^h 36	19 ^h 23	14 ^h 21	9 ^h 29	11 ^h 31	20 ^h 46	13 ^h 21	23 ^h 4	20 ^h R45	20 ^h 5	7 ^h 4	15 ^h 41	W 14
T 15	0 12 22	1 ^h 9'23	29 ^h 49	22 ^h 59	19 ^h 56	15 ^h 0	9 ^h 24	11 ^h 37	20 ^h 43	13 ^h 20	23 ^h 5	20 ^h 45	20 ^h 2	7 ^h 11	15 ^h 45	T 15
F 16	0 16 19	2 ^h 8'25	13 ^h 11	24 ^h 20	20 ^h 31	15 ^h 38	9 ^h 19	11 ^h 43	20 ^h 41	13 ^h 19	23 ^h 6	20 ^h 45	19 ^h 58	7 ^h 18	15 ^h 48	F 16
S 17	0 20 15	3 ^h 7'29	26 ^h 49	25 ^h 41	21 ^h 7	16 ^h 16	9 ^h 14	11 ^h 49	20 ^h 39	13 ^h 18	23 ^h 6	20 ^h 43	19 ^h 55	7 ^h 25	15 ^h 51	S 17
S 18	0 24 12	4 ^h 6'36	10 ^h 40	27 ^h 0	21 ^h 45	16 ^h 55	9 ^h 9	11 ^h 55	20 ^h 36	13 ^h 17	23 ^h 7	20 ^h 42	19 ^h 52	7 ^h 31	15 ^h 55	S 18
M 19	0 28 8	5 ^h 5'44	24 ^h 41	28 ^h 18	22 ^h 23	17 ^h 33	9 ^h 4	12 ^h 1	20 ^h 34	13 ^h 16	23 ^h 8	20 ^h 40	19 ^h 49	7 ^h 38	15 ^h 58	M 19
T 20	0 32 5	6 ^h 4'55	8 ^h 49	29 ^h 34	23 ^h 3	18 ^h 11	8 ^h 58	12 ^h 7	20 ^h 32	13 ^h 15	23 ^h 9	20 ^h 38	19 ^h 46	7 ^h 45	16 ^h 2	T 20
W 21	0 36 1	7 ^h 4'09	23 ^h 0	0 ^h 49	23 ^h 44	18 ^h 50	8 ^h 52	12 ^h 14	20 ^h 29	13 ^h 15	23 ^h 9	20 ^h 37	19 ^h 42	7 ^h 51	16 ^h 5	W 21
T 22	0 39 58	8 ^h 3'25	7 ^h 13	2 ^h 3	24 ^h 26	19 ^h 28	8 ^h 46	12 ^h 20	20 ^h 27	13 ^h 14	23 ^h 10	20 ^h D37	19 ^h 39	7 ^h 58	16 ^h 9	T 22
F 23	0 43 55	9 ^h 2'43	21 ^h 25	3 ^h 15	25 ^h 10	20 ^h 7	8 ^h 40	12 ^h 26	20 ^h 25	13 ^h 13	23 ^h 11	20 ^h 37	19 ^h 36	8 ^h 5	16 ^h 13	F 23
S 24	0 47 51	10 ^h 2'04	5 ^h 13	4 ^h 25	25 ^h 54	20 ^h 45	8 ^h 34	12 ^h 33	20 ^h 22	13 ^h 12	23 ^h 12	20 ^h 38	19 ^h 33	8 ^h 12	16 ^h 17	S 24
S 25	0 51 48	11 ^h 1'27	19 ^h 35	5 ^h 33	26 ^h 39	21 ^h 23	8 ^h 28	12 ^h 39	20 ^h 20	13 ^h 12	23 ^h 13	20 ^h 39	19 ^h 30	8 ^h 18	16 ^h 21	S 25
M 26	0 55 44	12 ^h 0'52	3 ^h 30	6 ^h 40	27 ^h 25	22 ^h 2	8 ^h 21	12 ^h 45	20 ^h 17	13 ^h 11	23 ^h 14	20 ^h 41	19 ^h 27	8 ^h 25	16 ^h 25	M 26
T 27	0 59 41	13 ^h 0'19	17 ^h 16	7 ^h 44	28 ^h 13	22 ^h 40	8 ^h 14	12 ^h 52	20 ^h 15	13 ^h 10	23 ^h 15	20 ^h R41	19 ^h 23	8 ^h 32	16 ^h 29	T 27
W 28	1 3 37	13 ^h 59'49	0 ^h 50	8 ^h 46	29 ^h 1	23 ^h 19	8 ^h 8	12 ^h 58	20 ^h 13	13 ^h 10	23 ^h 16	20 ^h 41	19 ^h 20	8 ^h 38	16 ^h 33	W 28
T 29	1 7 34	14 ^h 59'21	14 ^h 11	9 ^h 45	29 ^h 49	23 ^h 57	8 ^h 1	13 ^h 5	20 ^h 10	13 ^h 9	23 ^h 17	20 ^h 40	19 ^h 17	8 ^h 45	16 ^h 37	T 29
F 30	1 11 30	15 ^h 58'54	27 ^h 17	10 ^h 41	0 ^h 39	24 ^h 35	7 ^h 54	13 ^h 12	20 ^h Y 8	13 ^h 9	23 ^h 18	20 ^h 37	19 ^h 14	8 ^h 52	16 ^h 42	F 30

Delta T = 261.46 sec

Julian Calendar 1 Sept. 1513 == Greg. Calendar 11 Sept. 1513

OCTOBER 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	1 15 27	16 ^h 58'30	10 ^h 18	11 ^h 35	1 ^h 29	25 ^h 14	7 ^h R47	13 ^h 18	20 ^h R 5	13 ^h R 8	23 ^h 19	20 ^h R33	19 ^h 11	8 ^h 59	16 ^h 46	S 1
S 2	1 19 23	17 ^h 58'08	22 ^h 42	12 ^h 24	2 ^h 21	25 ^h 52	7 ^h 40	13 ^h 25	20 ^h Y 3	13 ^h 8	23 ^h 20	20 ^h 28	19 ^h 7	9 ^h 5	16 ^h 50	S 2
M 3	1 23 20	18 ^h 57'48	5 ^h 12	13 ^h 10	3 ^h 13	26 ^h 31	7 ^h 32	13 ^h 31	20 ^h 0	13 ^h 7	23 ^h 21	20 ^h 23	19 ^h 4	9 ^h 12	16 ^h 55	M 3
T 4	1 27 17	19 ^h 57'29	17 ^h 10	13 ^h 52	4 ^h 5	27 ^h 9	7 ^h 25	13 ^h 38	19 ^h 58	13 ^h 7	23 ^h 23	20 ^h 19	19 ^h 1	9 ^h 19	17 ^h 0	T 4
W 5	1 31 13	20 ^h 57'13	29 ^h 8	14 ^h 29	4 ^h 59	27 ^h 48	7 ^h 17	13 ^h 45	19 ^h 55	13 ^h 6	23 ^h 24	20 ^h 16	18 ^h 58	9 ^h 25	17 ^h 4	W 5
T 6	1 35 10	21 ^h 56'58	11 ^h 1	15 ^h 1	5 ^h 52	28 ^h 26	7 ^h 10	13 ^h 52	19 ^h 53	13 ^h 6	23 ^h 25	20 ^h 14	18 ^h 55	9 ^h 32	17 ^h 9	T 6
F 7	1 39 6	22 ^h 56'45	22 ^h 53	15 ^h 28	6 ^h 47	29 ^h 5	7 ^h 2	13 ^h 58	19 ^h 51	13 ^h 6	23 ^h 26	20 ^h D13	18 ^h 52	9 ^h 39	17 ^h 14	F 7
S 8	1 43 3	23 ^h 56'33	4 ^h 49	15 ^h 48	7 ^h 42	29 ^h 43	6 ^h 54	14 ^h 5	19 ^h 48	13 ^h 5	23 ^h 28	20 ^h 14	18 ^h 48	9 ^h 46	17 ^h 18	S 8
S 9	1 46 59	24 ^h 56'24	16 ^h 53	16 ^h 1	8 ^h 38	0 ^h 22	6 ^h 46	14 ^h 12	19 ^h 46	13 ^h 5	23 ^h 29	20 ^h 15	18 ^h 45	9 ^h 52	17 ^h 23	S 9
M10	1 50 56	25 ^h 56'16	29 ^h 12	16 ^h R 7	9 ^h 34	1 ^h 0	6 ^h 39	14 ^h 19	19 ^h 43	13 ^h 5	23 ^h 30	20 ^h 17	18 ^h 42	9 ^h 59	17 ^h 28	M10
T 11	1 54 52	26 ^h 56'09	11 ^h 48	16 ^h 5	10 ^h 31	1 ^h 39	6 ^h 31	14 ^h 26	19 ^h 41	13 ^h 5	23 ^h 32	20 ^h 18	18 ^h 39	10 ^h 6	17 ^h 33	T 11
W12	1 58 49	27 ^h 56'05	24 ^h 45	15 ^h 55	11 ^h 29	2 ^h 17	6 ^h 23	14 ^h 33	19 ^h 38	13 ^h 5	23 ^h 33	20 ^h R18	18 ^h 36	10 ^h 12	17 ^h 38	W12
T 13	2 2 46	28 ^h 56'02	8 ^h Y 5	15 ^h 35	12 ^h 27	2 ^h 56	6 ^h 15	14 ^h 40	19 ^h 36	13 ^h 4	23 ^h 35	20 ^h 17	18 ^h 33	10 ^h 19	17 ^h 43	T 13
F 14	2 6 42	29 ^h 56'01	21 ^h 48	15 ^h 6	13 ^h 25	3 ^h 34	6 ^h 7	14 ^h 47	19 ^h 34	13 ^h 4	23 ^h 36	20 ^h 14	18 ^h 29	10 ^h 26	17 ^h 49	F 14
S 15	2 10 39	0 ^h 56'02	5 ^h 52	14 ^h 28	14 ^h 24	4 ^h 13	5 ^h 59	14 ^h 54	19 ^h 31	13 ^h 4	23 ^h 37	20 ^h 8	18 ^h 26	10 ^h 33	17 ^h 54	S 15
S 16	2 14 35	1 ^h 56'05	20 ^h 11	13 ^h 41	15 ^h 24	4 ^h 51	5 ^h 50	15 ^h 1	19 ^h 29	13 ^h D 4	23 ^h 39	20 ^h 2	18 ^h 23	10 ^h 39	17 ^h 59	S 16
M17	2 18 32	2 ^h 56'10	4 ^h 42	12 ^h 44	16 ^h 24	5 ^h 30	5 ^h 42	15 ^h 8	19 ^h 26	13 ^h 4	23 ^h 40	19 ^h 55	18 ^h 20	10 ^h 46	18 ^h 4	M17
T 18	2 22 28	3 ^h 56'17	19 ^h 16	11 ^h 40	17 ^h 24	6 ^h 9	5 ^h 34	15 ^h 15	19 ^h 24	13 ^h 4	23 ^h 42	19 ^h 49	18 ^h 17	10 ^h 53	18 ^h 10	T 18
W19	2 26 25	4 ^h 56'26	3 ^h 54	10 ^h 29	18 ^h 25	6 ^h 47	5 ^h 26	15 ^h 22	19 ^h 22	13 ^h 5	23 ^h 44	19 ^h 43	18 ^h 13	10 ^h 59	18 ^h 15	W19
T 20	2 30 21	5 ^h 56'37	18 ^h 11	9 ^h 13	19 ^h 26	7 ^h 26	5 ^h 18	15 ^h 29	19 ^h 19	13 ^h 5	23 ^h 45	19 ^h 40	18 ^h 10	11 ^h 6	18 ^h 21	T 20
F 21	2 34 18	6 ^h 56'50	2 ^h 42	7 ^h 55	20 ^h 28	8 ^h 5	5 ^h 10	15 ^h 36	19 ^h 17	13 ^h 5	23 ^h 47	19 ^h D38	18 ^h 7	11 ^h 13	18 ^h 26	F 21
S 22	2 38 15	7 ^h 57'06	16 ^h 23	6 ^h 36	21 ^h 30	8 ^h 43	5 ^h 1	15 ^h 43	19 ^h 15	13 ^h 5	23 ^h 48	19 ^h 39	18 ^h 4	11 ^h 20	18 ^h 32	S 22
S 23	2 42 11	8 ^h 57'23	0 ^h 9	5 ^h 19	22 ^h 33	9 ^h 22	4 ^h 53	15 ^h 50	19 ^h 12	13 ^h 5	23 ^h 50	19 ^h 40	18 ^h 1	11 ^h 26	18 ^h 37	S 23
M24	2 46 8	9 ^h 57'42	13 ^h 42	4 ^h 7	23 ^h 35	10 ^h 1	4 ^h 45	15 ^h 57	19 ^h 10	13 ^h 5	23 ^h 52	19 ^h R41	17 ^h 58	11 ^h 33	18 ^h 43	M24
T 25	2 50 4	10 ^h 58'04	27 ^h 3	3 ^h 1	24 ^h 39	10 ^h 39	4 ^h 37	16 ^h 4	19 ^h 8	13 ^h 6	23 ^h 53	19 ^h 41	17 ^h 54	11 ^h 40	18 ^h 49	T 25
W26	2 54 1	11 ^h 58'27	10 ^h 13	2 ^h 5	25 ^h 42	11 ^h 18	4 ^h 29	16 ^h 11	19 ^h 6	13 ^h 6	23 ^h 55	19 ^h 39	17 ^h 51	11 ^h 46	18 ^h 54	W26
T 27	2 57 57	12 ^h 58'52	23 ^h 11	1 ^h 19	26 ^h 46	11 ^h 57	4 ^h 21	16 ^h 19	19 ^h 4	13 ^h 6	23 ^h 57	19 ^h 34	17 ^h 48	11 ^h 53	19 ^h 0	T 27
F 28	3 1 54	13 ^h 59'19	5 ^h 15	0 ^h 44	27 ^h 50	12 ^h 35	4 ^h 13	16 ^h 26	19 ^h 1	13 ^h 7	23 ^h 59	19 ^h 27	17 ^h 45	12 ^h 0	19 ^h 6	F 28
S 29	3 5 50	14 ^h 59'48	18 ^h 33	0 ^h 21	28 ^h 55	13 ^h 14	4 ^h 5	16 ^h 33	18 ^h 59	13 ^h 7	24 ^h 0	19 ^h 17	17 ^h 42	12 ^h 7	19 ^h 12	S 29
S 30	3 9 47	16 ^h 0'18	0 ^h 58	0 ^h 9	29 ^h 59	13 ^h 53	3 ^h 57	16 ^h 40	18 ^h 57	13 ^h 8	24 ^h 2	19 ^h 6	17 ^h 39	12 ^h 13	19 ^h 18	S 30
M31	3 13 44	17 ^h 0'50	13 ^h 11	0 ^h D 9	1 ^h 5	14 ^h 31	3 ^h 50	16 ^h 47	18 ^h Y55	13 ^h 8	24 ^h 4	18 ^h Y55	17 ^h 35	12 ^h 20	19 ^h 24	M31

ASTRODIENST EPHEMERIS for the year 1513

geocentric

NOVEMBER 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	3 17 40	18♌ 1'23	25♊ 15	0♌ 19	2♌ 10	15♌ 10	3°R42	16♌ 54	18°R53	13° 9	24♊ 6	18°R44	17♏ 32	12♏ 27	19♊ 30	T 1
W 2	3 21 37	19° 1'58	7♏ 11	0°40	3°16	15°49	3♏ 34	17° 1	18°Y51	13° 9	24° 8	18♏ 35	17°29	12°33	19°36	W 2
T 3	3 25 33	20° 2'34	19° 2	1°10	4°21	16°28	3°27	17° 8	18°49	13°10	24°10	18°27	17°26	12°40	19°42	T 3
F 4	3 29 30	21° 3'12	0♏ 51	1°48	5°28	17° 6	3°19	17°16	18°47	13°11	24°12	18°23	17°23	12°47	19°48	F 4
S 5	3 33 26	22° 3'50	12°44	2°34	6°34	17°45	3°12	17°23	18°45	13°11	24°13	18°20	17°19	12°54	19°54	S 5
S 6	3 37 23	23° 4'30	24°45	3°26	7°41	18°24	3° 5	17°30	18°43	13°12	24°15	18°D20	17°16	13° 0	20° 0	S 6
M 7	3 41 19	24° 5'11	6♏ 59	4°24	8°48	19° 3	2°58	17°37	18°41	13°13	24°17	18°20	17°13	13° 7	20° 6	M 7
T 8	3 45 16	25° 5'53	19°32	5°27	9°55	19°42	2°51	17°44	18°39	13°13	24°19	18°R21	17°10	13°14	20°12	T 8
W 9	3 49 13	26° 6'36	2°Y29	6°34	11° 2	20°20	2°44	17°51	18°38	13°14	24°21	18°20	17° 7	13°20	20°19	W 9
T 10	3 53 9	27° 7'20	15°53	7°45	12°10	20°59	2°37	17°58	18°36	13°15	24°23	18°17	17° 4	13°27	20°25	T 10
F 11	3 57 6	28° 8'05	29°45	8°59	13°17	21°38	2°30	18° 5	18°34	13°16	24°25	18°11	17° 0	13°34	20°31	F 11
S 12	4 1 2	29° 8'51	14♏ 4	10°16	14°25	22°17	2°24	18°12	18°32	13°17	24°27	18° 3	16°57	13°40	20°38	S 12
S 13	4 4 59	0♊ 9'39	28°45	11°35	15°34	22°56	2°17	18°19	18°31	13°18	24°29	17°52	16°54	13°47	20°44	S 13
M14	4 8 55	1°10'28	13♏ 41	12°57	16°42	23°35	2°11	18°26	18°29	13°19	24°31	17°41	16°51	13°54	20°50	M14
T 15	4 12 52	2°11'18	28°43	14°20	17°51	24°13	2° 5	18°33	18°28	13°20	24°33	17°30	16°48	14° 1	20°57	T 15
W16	4 16 48	3°12'09	13♏ 41	15°44	18°59	24°52	1°59	18°40	18°26	13°21	24°35	17°21	16°44	14° 7	21° 3	W16
T 17	4 20 45	4°13'02	28°25	17°10	20° 8	25°31	1°53	18°47	18°25	13°22	24°37	17°14	16°41	14°14	21° 9	T 17
F 18	4 24 42	5°13'56	12♏ 52	18°37	21°18	26°10	1°48	18°54	18°23	13°23	24°40	17°10	16°38	14°21	21°16	F 18
S 19	4 28 38	6°14'52	26°57	20° 5	22°27	26°49	1°42	19° 1	18°22	13°24	24°42	17° 9	16°35	14°27	21°22	S 19
S 20	4 32 35	7°15'48	10♏ 40	21°33	23°36	27°28	1°37	19° 8	18°20	13°25	24°44	17° 9	16°32	14°34	21°29	S 20
M21	4 36 31	8°16'46	24° 4	23° 2	24°46	28° 7	1°32	19°15	18°19	13°26	24°46	17° 8	16°29	14°41	21°35	M21
T 22	4 40 28	9°17'46	7♏ 10	24°32	25°56	28°46	1°27	19°22	18°18	13°27	24°48	17° 7	16°25	14°48	21°42	T 22
W23	4 44 24	10°18'46	20° 2	26° 2	27° 6	29°25	1°22	19°29	18°16	13°29	24°50	17° 4	16°22	14°54	21°48	W23
T 24	4 48 21	11°19'48	2♏ 41	27°32	28°16	0♏ 4	1°18	19°35	18°15	13°30	24°52	16°57	16°19	15° 1	21°55	T 24
F 25	4 52 17	12°20'50	15°10	29° 3	29°26	0°43	1°13	19°42	18°14	13°31	24°54	16°47	16°16	15° 8	22° 1	F 25
S 26	4 56 14	13°21'54	27°30	0♊ 34	0♏ 37	1°22	1° 9	19°49	18°13	13°33	24°57	16°35	16°13	15°14	22° 8	S 26
S 27	5 0 11	14°22'58	9♊ 41	2° 6	1°47	2° 1	1° 5	19°56	18°12	13°34	24°59	16°20	16°10	15°21	22°15	S 27
M28	5 4 7	15°24'03	21°46	3°38	2°58	2°40	1° 1	20° 2	18°11	13°35	25° 1	16° 5	16° 6	15°28	22°21	M28
T 29	5 8 4	16°25'09	3♏ 44	5° 9	4° 8	3°19	0°58	20° 9	18°10	13°37	25° 3	15°51	16° 3	15°34	22°28	T 29
W30	5 12 0	17♊ 26'16	15♏ 36	6♊ 42	5♏ 19	3♏ 58	0♏ 54	20♏ 16	18°Y 9	13° 38	25♊ 5	15♏ 38	16♏ 0	15♏ 41	22♊ 34	W30

Delta T = 261.08 sec

Julian Calendar 1 Nov. 1513 == Greg. Calendar 11 Nov. 1513

DECEMBER 1513 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	5 15 57	18♊ 27'23	27♏ 26	8♊ 14	6♏ 30	4♏ 37	0°R51	20♏ 22	18°R 8	13° 40	25♊ 7	15°R27	15♏ 57	15♏ 48	22♊ 41	T 1
F 2	5 19 53	19°28'30	9♏ 14	9°46	7°41	5°16	0♏ 48	20°29	18°Y 7	13°41	25°10	15°R20	15°54	15°55	22°47	F 2
S 3	5 23 50	20°29'38	21° 6	11°19	8°53	5°55	0°45	20°35	18° 6	13°43	25°12	15°15	15°50	16° 1	22°54	S 3
S 4	5 27 46	21°30'46	3♏ 4	12°52	10° 4	6°34	0°42	20°42	18° 6	13°44	25°14	15°13	15°47	16° 8	23° 1	S 4
M 5	5 31 43	22°31'54	15°14	14°25	11°15	7°13	0°40	20°48	18° 5	13°46	25°16	15°13	15°44	16°15	23° 7	M 5
T 6	5 35 40	23°33'03	27°42	15°58	12°27	7°52	0°38	20°55	18° 4	13°47	25°18	15°13	15°41	16°21	23°14	T 6
W 7	5 39 36	24°34'11	10°Y32	17°31	13°38	8°31	0°36	21° 1	18° 4	13°49	25°20	15°12	15°38	16°28	23°20	W 7
T 8	5 43 33	25°35'20	23°49	19° 5	14°50	9°10	0°34	21° 7	18° 3	13°51	25°23	15° 9	15°35	16°35	23°27	T 8
F 9	5 47 29	26°36'29	7♏ 37	20°39	16° 2	9°49	0°32	21°14	18° 3	13°52	25°25	15° 4	15°31	16°42	23°34	F 9
S 10	5 51 26	27°37'38	21°55	22°13	17°14	10°28	0°31	21°20	18° 2	13°54	25°27	14°56	15°28	16°48	23°40	S 10
S 11	5 55 22	28°38'46	6♏ 41	23°47	18°26	11° 8	0°29	21°26	18° 2	13°56	25°29	14°46	15°25	16°55	23°47	S 11
M12	5 59 19	29°39'56	21°47	25°22	19°38	11°47	0°28	21°32	18° 2	13°57	25°31	14°34	15°22	17° 2	23°53	M12
T 13	6 3 15	0♏ 41'05	7♏ 5	26°57	20°50	12°26	0°28	21°38	18° 1	13°59	25°34	14°23	15°19	17° 8	24° 0	T 13
W14	6 7 12	1°42'14	22°22	28°32	22° 2	13° 5	0°27	21°44	18° 1	14° 1	25°36	14°14	15°16	17°15	24° 6	W14
T 15	6 11 9	2°43'24	7♏ 28	0♏ 7	23°14	13°44	0°27	21°50	18° 1	14° 3	25°38	14° 7	15°12	17°22	24°13	T 15
F 16	6 15 5	3°44'34	22°14	1°43	24°27	14°23	0°D26	21°56	18° 1	14° 5	25°40	14° 2	15° 9	17°28	24°19	F 16
S 17	6 19 2	4°45'44	6♏ 35	3°19	25°39	15° 2	0°27	22° 2	18° 1	14° 7	25°42	14° 1	15° 6	17°35	24°26	S 17
S 18	6 22 58	5°46'54	20°29	4°56	26°52	15°41	0°27	22° 8	18°D 1	14° 8	25°44	14°D 1	15° 3	17°42	24°32	S 18
M19	6 26 55	6°48'05	3♏ 57	6°32	28° 4	16°21	0°27	22°14	18° 1	14°10	25°47	14°R 1	15° 0	17°49	24°39	M19
T 20	6 30 51	7°49'15	17° 1	8°10	29°17	17° 0	0°28	22°19	18° 1	14°12	25°49	14° 1	14°56	17°55	24°45	T 20
W21	6 34 48	8°50'26	29°46	9°47	0♊ 29	17°39	0°29	22°25	18° 1	14°14	25°51	13°58	14°53	18° 2	24°52	W21
T 22	6 38 44	9°51'37	12♏ 16	11°25	1°42	18°18	0°30	22°31	18° 1	14°16	25°53	13°54	14°50	18° 9	24°58	T 22
F 23	6 42 41	10°52'48	24°33	13° 4	2°55	18°57	0°31	22°36	18° 1	14°18	25°55	13°46	14°47	18°15	25° 5	F 23
S 24	6 46 38	11°53'59	6♊ 41	14°42	4° 8	19°37	0°33	22°42	18° 2	14°20	25°57	13°36	14°44	18°22	25°11	S 24
S 25	6 50 34	12°55'10	18°42	16°22	5°21	20°16	0°34	22°47	18° 2	14°22	25°59	13°25	14°41	18°29	25°17	S 25
M26	6 54 31	13°56'21	0♏ 38	18° 1	6°34	20°55	0°36	22°52	18° 3	14°24	26° 2	13°12	14°37	18°35	25°24	M26
T 27	6 58 27	14°57'32	12°31	19°41	7°47	21°34	0°38	22°58	18° 3	14°26	26° 4	13° 0	14°34	18°42	25°30	T 27
W28	7 2 24	15°58'42	24°22	21°22	9° 0	22°13	0°41	23° 3	18° 3	14°28	26° 6	12°50	14°31	18°49	25°36	W28
T 29	7 6 20	16°59'52	6♏ 11	23° 3	10°13	22°53	0°43	23° 8	18° 4	14°30	26° 8	12°41	14°28	18°56	25°43	T 29
F 30	7 10 17	18° 1'01	18° 3	24°44	11°26	23°32	0°46	23°13	18° 5	14°32	26°10	12°35	14°25	19° 2	25°49	F 30
S 31	7 14 14	19♏ 2'09	29♏ 57	26♏ 25	12♊ 39	24♏ 11	0♏ 49	23♏ 18	18°Y 5	14° 34	26♊ 12	12♏ 32	14♏ 22	19♏ 9	25♊ 55	S 31

Delta T = 260.90 sec

Julian Calendar